- Items 48 and 49 – Heavy Desilt/Water Jetting and CCTV of Existing Drainage Pipe: The unit price for this item shall be full compensation on a per linear foot basis for all labor, equipment, and materials required to clean and televise the existing stormwater pipe within the project limits. This item includes, but is not limited to, initial field investigation to identify site conditions or access issues requiring special arrangements and/or City notification/coordination; system dewatering using plugs and hoses as needed along with necessary maintenance of traffic and safety precautions where the hoses cross streets or driveways; cleaning to remove foreign material from the sewer lines for clear viewing of the interior surface of the pipe during video inspection and to restore the sewer to near original carrying capacity; video documentation of the location and extent of displaced joints, cracks or breaks in pipe, and other defects that may permit groundwater infiltration and/or ingress of soil from around the exterior of pipe; and, submittal of video in digital format to the City. Payment shall be made at the unit price at the conclusion of cleaning/televising and after video is reviewed and accepted by the City. Measurement for payment for cleaning/televising of drainage pipe will be based upon the number of linear feet of such pipe as determined by measurement along the centerline of the pipe in place, not including through structures. The Contractor shall notify and provide documentation acceptable to the City in the event that contaminated materials are suspected within the pipe.

F. Utility Relocation

- Items 50 through 53 – Offset Existing Water Main with Necessary Fittings: The unit price for this item shall be full compensation on a per linear foot basis for all labor, equipment, and material required to furnish, transport, store and install DIP (cement lined), HDPE, and or PVC, potable water main with the necessary fittings as indicated on the drawings or otherwise directed by the CITY or ENGINEER and described herein for which payment is not provided under other bid items. This item includes the cost of furnishing and installation of pipe, fittings, and restraints. This item includes, but is not limited to, locating, verifying, and protecting existing utilities, saw cutting, removing, and disposing existing paving, curbs, gutters, and sidewalks, excavating (including rock), dewatering, installing temporary sheeting and shoring, removing and disposing of all materials (including unsuitable), removing and disposing of plants, bushes, shrubs, roots, installing temporary bypass and/or providing flow diversion, installing the new pipe along with all restrained joints, tracer wire installation, joint material, and pipe bedding material, backfilling and compacting fill material, placing structural asphalt, temporary pavement markings and striping, pipe flushing, pipe pigging, main disinfection, testing, and surveying and removing and disposing of existing potable water main, wastewater mains, as well as other miscellaneous pipe. This item shall include cost of connecting to existing main, post restraining existing main as needed per City requirements, coordination and shut down of existing water mains, cutting, removal, and disposal of existing piping, and construction of the connection including all required pipe accessories not included in other bid items. Measurement for payment shall be the linear feet of pipe actually installed as determined by measurement along the horizontal centerline of the pipe in place, through all fittings and valves, in accordance with the requirements of the Contract Documents. For partial payment, the schedule shall be as follows:

1. - 75% of the unit price for pipeline installed, backfilled, and compacted to grade including pavement restoration up to and including the first lift of asphalt.

2- 100% of the unit price upon completion of all testing and temporary restoration.

- Item 54 – Restraint Existing Water Main: The unit price for this item shall be full compensation on a per linear foot basis for all labor, equipment, and material required to excavate and restrain the existing water main piping as shown on the drawings, along with restoration as described herein for which payment is not provided under other bid items. This item includes, but is not limited to, locating, verifying, and protecting existing utilities, saw cutting, removing, and disposing existing paving, curbs, gutters, and sidewalks, excavating (including rock), dewatering, installing temporary sheeting and shoring, removing and disposing of all materials (including unsuitable), removing and disposing of plants, bushes, shrubs, roots, installing temporary bypass and/or providing flow diversion, installing new pipe restraints, joint material, pipe bedding, backfilling and compacting fill material, furnish, placing, and compacting base material, applying tack coat, applying all structural asphalt courses to match existing grade, providing temporary pavement markings and striping, pipe flushing, all testing, including post-construction testing, appurtenance items, and all associated restoration work. Measurement and payment shall be the linear feet of pipe actually restrained as determined by measurement along the horizontal centerline of the existing pipe in accordance with the requirements of the Contract Documents.

- Items 55 through 58 – Furnish and Install Gate Valve: The unit price for this item shall be full compensation on a per each basis for all labor, equipment, and material required to furnish, transport, store and install the restrained joint gate valves shown on the drawings. This item includes, but is not limited to, locating, verifying, and protecting existing utilities, saw cutting, removing, and disposing existing paving, curbs, gutters, and sidewalks, excavating (including rock), dewatering, installing temporary sheeting and shoring, removing and disposing of all materials (including unsuitable), removing and disposing of plants, bushes, shrubs, roots, installing temporary bypass and/or providing flow diversion or provisions to avoid service interruption, coordination and shut down of existing mains, cutting removal and disposal of existing piping, furnishing and installing valve boxes, valve box extensions, operating nut extensions, restraining devices, concrete collars, and any other items required for a complete and satisfactory installation. This item does NOT include installation of gate valves already paid for under other bid items.

- Items 59 through 62 – Furnish and Install Temporary Line Stop: The unit price for this item shall be per unit basis for all labor and equipment required for temporary line stop type valves used for isolating sections of existing water mains and sewer mains, including tapping, saddles, fittings, supporting existing utilities and pressure testing. Line Stops included in this item must have the capability to bypass the flow with connection pipe between each other. Material to connect and operate the bypass from one Line Stop to another is included in this item.

- Item 63 – Replace Existing Water Services (Single and/or Double): The unit price for this item shall be full compensation for all labor, equipment, and materials to

replace an existing water service connection (single services and double services) to be paid on a per unit basis. This item includes, but is not limited to, locating, verifying, and protecting existing utilities, saw cutting, removing, and disposing existing paving, curbs, gutters, and sidewalks, excavating (including rock), dewatering, installing temporary sheeting and shoring, removing and disposing of all materials (including unsuitable), removing and disposing of plants, bushes, shrubs, roots, installing temporary bypass and/or providing flow diversion or provisions to avoid service interruption, reconnection to water main, new water meter box, tapping saddle and valve, corporation stop, service tubing, casing (for long side services), repair clamps, splicing, plugs, plugging existing corporation at main, pipe preparation; removal and disposing of existing water services, as well as other miscellaneous pipe materials; backfilling and compacting fill material, furnish, placing, and compacting base material, applying tack coat, applying all structural asphalt courses to match existing grade, providing temporary pavement markings and striping, pipe flushing, all testing, including post-construction testing, appurtenance items, and all associated restoration work. This item will be used for existing water services that must be relocated in order to facilitate the proposed stormwater improvements or existing water services that fail due to no fault of the Contractor. It will be the Contractor's responsibility to replace, at no additional cost to the City, existing water services damaged or broken due to lack of reasonable care during construction of the proposed improvements. Payment for this item will be made only as directed by the Engineer.

- Item 64 – Replace Existing Sewer Laterals (Single and/or Double): The unit price for this item shall be full compensation for all labor, equipment, and materials to replace an existing sanitary sewer lateral (single service and double services) to be paid on a per unit basis. This item includes, but is not limited to, maintenance of existing service, locating, verifying, and protecting existing utilities, saw cutting, removing, and disposing existing paving, curbs, gutters, and sidewalks, excavating (including rock), dewatering, installing temporary sheeting and shoring, removing and disposing of all materials (including unsuitable), removing and disposing of plants, bushes, shrubs, roots, installing temporary bypass and/or providing flow diversion or provisions to avoid service interruption, backfill, and compaction, removal and disposal of existing pipe and fittings; installation of piping, fittings, reconnection to main and house service; backfilling and compacting fill material, furnish, placing, and compacting base material, applying tack coat, applying all structural asphalt courses to match existing grade, providing temporary pavement markings and striping, pipe flushing, all testing, including post-construction testing, appurtenance items, and all associated restoration work. This item will be used for replacement of existing sanitary sewer laterals that are in conflict with proposed storm drain installation or existing sanitary sewer laterals that fail due to no fault of the Contractor. It will be the Contractor's responsibility to replace, at no additional cost to the City, existing sanitary sewer laterals damaged or broken due to lack of reasonable care during construction of the proposed improvements. Payment for this item will be made only as directed by the Engineer.

- Item 65 – Remove and Replace Fire Hydrant Assembly: Measurement for payment to furnish and install fire hydrant assembly will be based upon actual quantity, each, of such named fire hydrants furnished and installed including the

removal and disposal of the existing hydrant (up to the existing operating valve that is to be closed and abandoned), as indicated on the drawings or otherwise directed by the CITY or ENGINEER, all in accordance with the requirements of the Contract Documents. Location of new hydrant may differ from the removed hydrant. Payment for furnishing and installing fire hydrant assembly will be made at the unit price each, named in the Bid Schedule, as shown on the drawings and as described herein for which payment is not provided under other bid items and which price shall constitute full compensation for the fire hydrant assembly installation including but not limited to locating, verifying, and protecting existing utilities, saw cutting, removing, and disposing existing paving, curbs, gutters, and sidewalks, excavating (including rock), dewatering, installing temporary sheeting and shoring, removing and disposing of all materials (including unsuitable), removing and disposing of plants, bushes, shrubs, roots, installing temporary bypass and/or providing flow diversion; coordination and shut down of existing water mains; cutting, removal, and disposal of existing piping; installation of fire hydrant, valve, valve box, valve box extensions, operating nut extensions, concrete pad, restraining devices, risers, bends, backfilling and compacting fill material, furnish, placing, and compacting base material, applying tack coat, applying all structural asphalt courses to match existing grade, providing temporary pavement markings and striping, pipe flushing, all testing, including post-construction testing, appurtenance items, all associated restoration work, and any other items required for a complete and satisfactory installation.

G. Paving and Restoration

- Item 66 – Mill Existing Asphalt (Up to 2-inch in Depth) and Resurface Asphalt (Minimum 1-inch SP 9.5): Measurement for payment for milling existing asphalt and resurfacing will be based upon the number of square yards of such materials actually milled and resurfaced in accordance with the requirements of the Contract Documents. Payment for milling and resurfacing existing asphalt will be made at the unit price per square yard up to 2-inch depth, which price shall constitute full compensation for milling, hauling off and disposing of the milled material, resurfacing, and for any other appurtenant items needed for milling and resurfacing asphalt for which separate payment is not specifically included in the Bid Schedule. Payment shall include milling up to 2-inches of depth and a minimum of 1-inch thick Superpave Asphalt (SP-9.5).

- Item 67 – Furnish and Install Speed Hump: Measurement for furnishing and installing speed humps will be based upon the actual number, each, of speed humps installed all in accordance with the requirements of the Contract Documents. Payment for furnishing and installing speed humps will be made at the unit price, each, named in the Bid Schedule, which price shall constitute full compensation for the completed installation of the speed humps including but not limited to all required materials, placement of asphalt and/or concrete and/or pavers to required height and curbing.

- Items 68 through 71 – Restoration of Driveways/Parking Areas: Measurement for payment for restoration of driveways/parking areas will be based upon the actual number of square yards of such driveways/parking areas restored as shown in the Drawings, all in accordance with the requirements of the Contract Documents. Payment for restoration of driveways/parking areas will be made at

the unit price per square yard named in the Bid Schedule, which price shall constitute full compensation for completing said work, including but not limited to all limerock, earthwork, compacting, subgrade, reconstruction of the driveway/parking area to the same depth and material as the existing one, furnishing and setting for expansion joint material, disposal of excess material, and the appurtenant items, such as mailboxes, for which separate payment is not specifically included in the Bid Schedule. No payment will be made for restoration of driveways outside the limits shown on the drawings or not approved in writing by the Engineer.

Restoration of Driveways/Parking Areas (Asphalt):
Asphalt to be minimum 1.5-inch thickness, SP-9.5 asphalt, and 6-inch limerock base with compacted 6-inch subgrade.

Restoration of Driveways (Concrete, Stamped Concrete, or Textured Concrete):
Concrete to be minimum 6-inch thickness with 12-inch compacted subgrade.

Restoration of Driveways (Pavers or Brick):
Pavers to match existing shape and color as closely as possible with 1-inch sand bed and 12-inch compacted subgrade.

Restoration of Driveways/Parking Areas (Gravel):
Gravel Driveway to be minimum 3-inch thick of ¾-inch crushed rock with 4-inch stabilized subgrade.

- Item 72: Clearing and Grading Swales: Measurement for payment for clearing and grading swale and or private property will be based upon the number of square yards of swale or private property actually cleared and graded all in accordance with the requirements of the Contract Documents. Payment for clearing and grading will be made at the unit price per square yard of clearing and grading named in the Bid Schedule which price shall constitute full compensation, including earthwork, importing of fill material, removal and disposal of excess material including but not limited to brush, bollards, and protection of trees to remain.

- Items 73 and 74 – Furnish and Install Concrete Sidewalk: Measurement for payment for furnishing and installing sidewalks will be based upon the actual number of square yards of such sidewalks constructed as shown in the drawings, all in accordance with the requirements of the Contract Documents. Payment for furnishing and installing sidewalks will be made at the unit price per square yard named in the Bid Schedule, which price shall constitute full compensation for completing said work, including all earthwork, compaction and stabilization of limerock base, subgrade, construction of the sidewalk, furnishing and setting for expansion joint material, backfilling of sidewalk, disposal of excess material, handrail where protection is needed, and the appurtenant items for which separate payment is not specifically included in the Bid Schedule. This item does NOT include replacement of sidewalk already paid for under other bid items. Use of this bid item for payment shall be subject to approval from Engineer.

- Item 75 – Construct Type "E", Type "F", or Type "RA" Curb complete with Drop Curb, Shoulder Gutter, and 4-inch Curb Pad: Measurement for payment for

furnishing and installing curb, drop curb, shoulder gutter and Curb pad will be based upon the number of linear feet of such Type "E", Type "F", or Type "RA" Curb complete with Drop Curb, Shoulder Gutter, and 4" Curb Pad actually constructed as determined by measurement along the centerline of the curb in place, and as shown on the drawings, all in accordance with the requirements of the Contract Documents. Payment for furnishing and installing curb and/or gutter will be made at the unit price per linear foot of curb and/or gutter named in the Bid Schedule, which shall constitute full compensation for complete installation including grading, placing 4" limerock pad, forming, saw cutting of pavement and cleanup of all areas disturbed by this construction. This item does NOT include replacement of curb and/or gutter already paid for under other bid items. Use of this bid item for payment shall be subject to approval from Engineer.

- Item 76 – Construct Type "A", Type "B", or Type "D" Curb complete with 4-inch Curb Pad: Measurement for payment for furnishing and installing curb, drop curb, shoulder gutter and Curb pad will be based upon the number of linear feet of such Type "A", Type "B", or Type "D" Curb complete with 4" Curb Pad actually constructed as determined by measurement along the centerline of the curb in place, and as shown on the drawings, all in accordance with the requirements of the Contract Documents. Payment for furnishing and installing curb and/or gutter will be made at the unit price per linear foot of curb and/or gutter named in the Bid Schedule, which shall constitute full compensation for complete installation including grading, placing 4" limerock pad, forming, saw cutting of pavement and cleanup of all areas disturbed by this construction. This item does NOT include replacement of curb and/or gutter already paid for under other bid items. Use of this bid item for payment shall be subject to approval from Engineer.

- Item 77 – Modify Existing Gutter Behind Landscape Island: Measurement for payment for Modify Existing Gutter Behind Landscape Island will be based upon the number of linear feet actual modification as determined by measurement along the centerline of such gutter, and as shown on the drawings, all in accordance with the requirements of the Contract Documents. Payment for modifying existing gutter behind landscape island will be made at the unit price per linear foot of gutter named in the Bid Schedule, which shall constitute full compensation for removal of existing concrete curb and gutters, leveling the existing gutter with new concrete, complete installation of new curb including grading, placing, forming, saw cutting of pavement and curb, smooth concrete finish at connection to existing site features, and cleanup of all areas disturbed by this construction. This item does NOT include replacement of curb and/or gutter already paid for under other bid items. Use of this bid item for payment shall be subject to approval from Engineer.

- Item 78 - Furnish and Install Pavement Markings and Signage: Measurement for payment for furnishing and installing pavement markings and signage will be based on a lump sum which shall represent full compensation for all labor and material required to furnish and install pavement markings and signage, all in accordance with the Contract Documents. This item includes, but it is not limited to removing of existing pavement markings and signage, providing new pavement markings and signage, reflective pavement markers (RPM), thermoplastic messages, symbols, and/or turn arrows, relocating or adjusting existing signs or signals, and all appurtenant items, and associated incidental

restoration work. Payment shall be at the lump sum unit price named in the Bid Schedule, which price shall constitute full compensation for the work of the complete installation. This item includes all work not defined in other bid items.

- Item 79 – Remove and Reinstall Mailboxes, Signs, and Lamps: The per unit price for this bid item shall be full compensation for all labor, equipment, and materials to remove and reinstall existing mailboxes, street signs, and lamp post throughout the project area. This item does NOT include removal and re-installation of mailboxes, signs, and lamps paid for under other bid items. Use of this bid item for payment shall be subject to approval from Engineer.

H. Landscaping

- Item 80 – Furnish and Install Tree Protection (Existing Trees): The lump sum price for this bid item shall be full compensation for protection of existing trees and landscaping, including all aspects of protection, trimming, pruning, fertilizing, and watering, furnished in accordance with Contract Documents. This item also includes the preparation and submittal of a tree disposition and landscape plan as well as the process for submitting and gaining approval of this plan.

- Items 81 through 90 – Furnish and Install Trees and Plants: The unit price for this bid item shall be full compensation per each for all labor, equipment, and materials to furnish and install trees and plants in accordance with the Contract Documents. This item shall include, but is not limited to, excavation (including rock), backfilling, guy stakes, protection, compaction, grading, topsoil, watering, fertilizing, disposal offsite of suitable or unsuitable materials, and all other appurtenances required for complete installation. Trees shall be guyed and protected as required. Trees shall be warranted for one year after substantial completion issuance.

- Item 91 – Furnish and Install Sod: The unit price for this item shall be full compensation on a per square yard basis for all labor, equipment, and materials required to furnish and install St. Augustine Floratam sod in accordance with the Contract Documents. This item includes excavation, backfilling, compaction, grading, top soil, sod, watering, fertilizing, disposal offsite of suitable or unsuitable materials, and all other appurtenances required for a complete installation.

- Items 92 and 93 – Remove and Dispose of Existing Trees: The unit price for this bid item shall be full compensation per each for all labor, equipment, and materials to remove and dispose of existing trees. Removal and disposal of trees shall include procuring the services of a Licensed Landscape Architect or Certified Arborist, obtaining of appropriate tree removal permits, spading of tree, root pruning, backfill and the removal and disposal of all vegetative matter associated with the removal as required by the Contract Documents or directed by the Engineer. Contractor shall stake ROW limits a minimum of two weeks in advance of construction to coordinate with adjacent property Owners and possible conflicting utilities.

- Item 94 – Furnish and Install Vegetation Root Barrier: The unit price for this item shall be full compensation on a linear foot basis for all labor, equipment, and materials required to furnish and install a vegetation root barrier in accordance

with the requirements of the Contract Documents.

- Item 95 – Existing Tree Canopy Trimming: Measurement for payment to trim existing tree will be based upon the actual number, each, of trees trimmed. Trimming of trees shall include obtaining appropriate permits and the removal and disposal of all trimmed tree limbs/material associated with the trimming of trees as required by the contract documents or directed by the ENGINEER. Tree trimming shall be performed under the supervision of an ISA Certified and Licensed Arborist. This pay item is for the trimming of trees with overhanging limbs that conflict with the installation of proposed improvements and is at the discretion of the Engineer and City.

- Item 96 – Existing Tree Root Pruning: The unit price for this item shall be full compensation on a linear foot basis for all labor, equipment, and materials required for trees that get their roots pruned. This item shall include obtaining appropriate permits and the removal and disposal of all the material associated with the pruning of the tree roots required by the contract documents or directed by the ENGINEER. Root pruning shall be performed under the supervision of an ISA Certified and Licensed Arborist.

1.04 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

A. Payment will not be made for following:

1. Loading, hauling, and disposing of rejected material.
2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.
3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.
4. Material not unloaded from transporting vehicle.
5. Defective Work not accepted by City.
6. Material remaining on hand after completion of Work.

1.05 PARTIAL PAYMENT FOR STORED MATERIALS AND EQUIPMENT

A. Partial Payment: Payment for stored materials and equipment shall only be made with submittal of “paid” receipts. No partial payments will be made for materials and equipment delivered or stored unless Shop Drawing or preliminary operation and maintenance manuals are acceptable to Engineer.

B. Final Payment: Will be made only for products incorporated in Work; remaining products, for which partial payments have been made, shall revert to Contractor unless otherwise agreed, and partial payments made for those items will be deducted from final payment.

1.06 ALLOWANCES

A. The allowances shall be used only at the discretion of and as ordered by the City.

B. Any portion of these allowances that remain after all authorized payments have been made will be withheld from contract payments and will remain with the City.

C. Allowance Accounts

1. Permits, License, and Fees Allowance: The allowance account for this item shall be full compensation for all permits, licenses, and fees required of the Contractor from the various agencies having jurisdiction over the construction of the project. The allowance shown is an estimate of the fees required. Payment will be based on the actual permit, license or fee paid directly to the agency, documented by paid receipts, and specifically excluding any labor, markups, overhead and profit, administration, or other costs involved in obtaining the permits, licenses, or fees. Fees specifically excluded from this allowance include, but are not limited to, re-inspection fees and expired permit fees. Any portion of this fund remaining after all authorized payments have been made will be withheld from contract payment and will remain with the City of Fort Lauderdale.

2. Undefined Conditions Allowance: The allowance account for this item shall include work associated with undefined conditions or conflicts developing from undefined conditions including, but not limited to, removal, relocation and replacement of gas, cable, telephone, and fiber optic utilities in conflict with proposed utilities, structures, or work during construction. All work authorized for payment shall be authorized in writing by the City. Amount to be paid per undefined conditions or conflicts shall be negotiated or agreed to by both parties.

3. Contaminated Soil and/or Groundwater Services: The allowance account for this item shall be full compensation for all labor, equipment, material, and work required for the sampling, testing, removal, treatment, and discharge of contaminated groundwater or contaminated sediments as required by all applicable regulatory agencies. This item includes, but is not limited to, preparing a sampling plan, collecting and preserving samples, performing laboratory analyses, preparing reports, dewatering and necessary bypass pumping and/or diverting flow, providing and operating treatment units, discharging treated groundwater, and all other work required to complete this task in conformance with applicable regulatory requirements. Any portion of this fund remaining after all authorized payments have been made will be withheld from contract payment and will remain with the City of Fort Lauderdale.

4. FPL: The allowance account for this item shall be full compensation for all fees associated with obtaining electrical power from FPL. Payment will be based on the actual fee paid directly to the agency, documented by paid receipts, and specifically excluding any labor, markups, overhead and profit, administration, or other costs involved in payment of the fees. This allowance account shall also include additional work required by the Contractor for accommodating FPL service requirements not shown on the Contract Documents. All work shall be authorized for payment in writing by the City. Amount to be paid shall be negotiated or agreed to by both parties. Any portion of this fund remaining after all authorized payments have been made will be withheld from contract payment and will remain with the City of Fort Lauderdale.

5. Emergency Pumping During Storm Event: The allowance account for this item shall be full compensation for installation, operation, maintenance, and removal of the bypass pumps during Emergency Flood protection events. This item will be used at the discretion of the City and within the vicinity of the project site. Payment will be based on the actual costs paid to the equipment rental company with a fixed 10% markup for Contractor's overhead and profit. Any other costs associated with this item

shall be negotiated and agreed to by both parties. Any portion of the funds remaining after all authorized payments have been made will be withheld from the contract payment and will remain with the City of Fort Lauderdale.

PART 2 -- PRODUCTS

(NOT USED)

PART 3 -- EXECUTION

(NOT USED)

- END OF SECTION -

SECTION 01070 ABBREVIATIONS

PART 1 - GENERAL

1.1 THE REQUIREMENT

A. Wherever in these specifications references are made to the standards, specifications, or other published data of the various national, regional, or local organizations, such organizations may be referred to by their acronym or abbreviation only. As a guide to the user of these specifications, the following acronyms or abbreviations which may appear in these specifications shall have the meanings indicated herein.

1.2 ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AAMA | Architectural Aluminum Manufacturer's Association |
| AASHTO | American Association of the State Highway and Transportation Official |
| ACI | American Concrete Institute |
| ACOE | Army Corps of Engineers |
| ACPA | American Concrete Pipe Association |
| AFBMA | Anti-Friction Bearing Manufacturer's Association, Inc. |
| AGMA | American Gear Manufacturer's Association |
| AHGDA | American Hot Dip Galvanizers Association |
| AI | The Asphalt Institute |
| AIA | American Institute of Architects |
| AISC | American Institute of Steel Construction |
| AISI | American Iron and Steel Institute |
| AITC | American Institute of Timber Construction |
| AMCA | Air Moving and Conditioning Association |
| ANSI | American National Standards Institute, Inc. |
| APA | American Plywood Association |
| API | American Petroleum Institute |
| APHA | American Public Health Association |
| APWA | American Public Works Association |
| ASA | Acoustical Society of America |
| ASAE | American Society of Agriculture Engineers |
| ASCE | American Society of Civil Engineers |
| ASHRAE | American Society of Heating, Refrigerating, and Air-Conditioning Engineers |
| ASLE | American Society of Lubricating Engineers |
| ASME | American Society of Mechanical Engineers |
| ASMM | Architectural Sheet Metal Manual |
| ASSE | American Society of Sanitary Engineers |
| ASTM | American Society for Testing and Materials |
| AWPA | American Wood Preservers Association |
| AWPI | American Wood Preservers Institute |
| AWS | American Welding Society |
| AWWA | American Water Works Association |
| BCRED | Broward County Resilient Environmental Department |

| | |
|---|---|
| BCHD | Broward County Health Department |
| BHMA | Builders Hardware Manufacturer's Association |
| CMA | Concrete Masonry Association |
| CRSI | Concrete Reinforcing Steel Institute |
| DIPRA | Ductile Iron Pipe Research Association |
| EIA | Electronic Industries Association |
| EPA | Environmental Protection Agency |
| ETL | Electrical Test Laboratories |
| FBC | Florida Building Code |
| FDEP | Florida Department of Environmental Protection |
| FDOT | Florida Department of Transportation |
| FS | Federal Specifications |
| IEEE | Institute of Electrical and Electronics Engineers |
| IES | Illuminating Engineering Society |
| IPCEA | Insulated Power Cable Engineers Association |
| ISA | Instrument Systems and Automation |
| ISO | International Organization for Standardization |
| MBMA | Metal Building Manufacturers Association |
| MMA | Monorail Manufacturers Association |
| MTI | Marine Testing Institute |
| NAAM | National Association of Architectural Metal Manufacturers |
| NACE | National Association of Corrosion Engineers |
| NBS | National Bureau of Standards |
| NEC | National Electrical Code |
| NEMA | National Electrical Manufacturer's Association |
| NFPA | National Fire Protection Association |
| NIOSH | National Institute of Occupational Safety and Health |
| NIST | National Institute of Standards and Testing |
| NRCA | National Roofing Contractors Association |
| NSF | National Science Foundation |
| OSHA | Occupational Safety and Health Administration |
| PCA | Portland Cement Association |
| SMACCNA | Sheet Metal and Air Conditioning Contractors National Association |
| SSPC | Society for Protective Coatings |
| SSPWC | Standard Specifications for Public Works Construction |
| SFWMD | South Florida Water Management District |
| UL | Underwriters Laboratories, Inc. |

PART 2 -- PRODUCTS

(NOT USED)

PART 3 – EXECUTION

(NOT USED)

- END OF SECTION -

# SECTION 01090 REFERENCE STANDARD

## PART 1 – GENERAL

### 1.01 THE REQUIREMENT

A. Titles of Sections and Paragraphs: Captions accompanying specification sections and paragraphs are for convenience of reference only, and do not form a part of the Specifications.

B. Applicable Publications: Whenever in these Specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date of the opening of bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the Drawings shall be waived because of any provision of, or omission from, said standards or requirements.

C. Specialists, Assignments: In certain instances, Specification text requires (or implies) that specific work is to be assigned to specialists or expert entities, who must be engaged for the performance of that work. Such assignments shall be recognized as special requirements over which the Contractor has no choice or option. These requirements shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the Work; also they are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of work is recognized as "expert" for the indicated construction processes or operations. Nevertheless, the final responsibility for fulfillment of the entire set of contract requirements remains with the Contractor.

### 1.02 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. Without limiting the generality of other requirements of the specifications, all work specified herein shall conform to or exceed the requirements of all applicable codes.

B. References herein to "Building Code" shall mean the Florida Building Code (FBC) Broward Edition. The latest edition of the code as approved and used by the local agency as of the date of the opening of bids, as adopted by the agency having jurisdiction, shall apply to the Work herein, including all addenda, modifications, amendments, or other lawful changes thereto.

C. In case of conflict between codes, reference standards, Drawings and the other Contract Documents, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the Engineer for clarification and directions prior to ordering or providing any materials or labor. The Contractor shall follow the most stringent requirements.

D. Applicable Standard Specifications: The Contractor shall construct the Work specified herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and Specifications listed herein.

E. References herein to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

F. References herein to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

PART 1 – PRODUCTS

(NOT USED)

PART 2 – EXECUTION

(NOT USED)

- END OF SECTION -

# SECTION 01200 PROJECT MEETINGS

## PART 1 - GENERAL

### 1.01 PRECONSTRUCTION CONFERENCE

A. A preconstruction conference will be held after award of contract and prior to the Notice to Proceed. The Engineer shall prepare and distribute the meeting agenda and shall preside at the meeting. The Engineer shall record and distribute minutes of the proceedings and decisions.

B. A separate preconstruction meeting may be required on site with the Department of Sustainable Development – Engineering.

C. The Contractor shall provide a Project Superintendent and a dedicated Project Manager specific to this project as a supervisor to oversee proper performance of the Work. The Project Manager shall attend all meetings and have the authority to make decisions on behalf of the General Contractor. The Project Manager shall be responsible for all coordination, document handling, submittal review and processing, quality control, and project scheduling. The Project Manager, once approved by the City and the Engineer shall not be replaced without prior consent by the City and Engineer.

1. The Project Manager and Project Superintendent shall be direct employees of the Prime Contractor.

2. The Project Manager and Project Superintendent shall fluently speak, read and write in English.

D. Attendance:

1. City
2. Engineer
3. Program Manager
4. Contractor’s Project Manager
5. Contractor’s Project Superintendent
6. Major Subcontractors

E. Minimum Agenda:

1. Tentative construction and submittal schedules
2. Critical work sequencing
3. Designation of responsible personnel
4. Processing of Field Decisions and Change Orders
5. Adequacy of distribution of Contract Documents
6. Submittal of Shop Drawings and samples
7. Procedures for maintaining record documents
8. Use of site and City's requirements
9. Major equipment deliveries and priorities
10. Safety and first aid procedures
11. Security procedures
12. Housekeeping procedures
13. Processing of Partial Payment Requests
14. General regard for community relations

1.02 PRELIMINARY CPM SCHEDULE REVIEW MEETING

A. The Contractor shall participate in a Preliminary CPM Schedule Review Meeting in accordance with the requirements of Section 01300.

1.03 PROGRESS MEETINGS

A. Progress meetings will be held bi-weekly at the Field Office during the performance of the work of this Contract. Additional meetings may be called as progress of work dictates. Day and time of progress meetings will be scheduled at the Preconstruction Meeting.

B. Engineer will prepare and distribute agenda, preside at meetings and record minutes of proceedings and decisions. Engineer will distribute copies of minutes to participants.

C. Attendance:

1. City
2. Engineer
3. Program Manager
4. Contractor's Project Manager
5. Contractor's Project Superintendent
6. Subcontractors, as pertinent to the agenda

D. Minimum Agenda:

1. Review and approve minutes of previous meetings.
2. Review progress of Work since last meeting.
3. Review proposed 30-60 day construction schedule.
4. Note and identify problems which impede planned progress.
5. Develop corrective measures and procedures to regain planned schedule.
6. Revise construction schedule as indicated and plan progress during next work period.
7. Maintaining of quality and work standards.
8. Complete other current business.
9. Schedule next progress meeting.

1.04 NEIGHBORHOOD ASSOCIATION MEETINGS

A. The Contractor shall attend meetings with the local Neighborhood Associations and other stakeholders as requested by the City. Contractor shall be prepared to provide information on construction schedule, scope of work, impacts to local residents, and other coordination items. Meetings shall be held quarterly throughout the duration of construction.

1.05 PRE-CONCRETE CONFERENCE

A. A pre-concrete conference shall be held at the Pump Station site prior to the start of the concrete construction schedule. The pre-concrete conference shall be in accordance with the requirements of Section 03300 of the Contract Documents.

1.06 BROWARD COUNTY TRAFFIC ENGINEERING SCHOOL SAFETY COORDINATOR

A. Thirty (30) days prior to the commencement of construction, the Contractor shall notify the "School Safety Coordinator" at Broward County Traffic Engineering Division to set up a pre-

work meeting.

1.07 OTHER MEETINGS

A. The Contractor shall attend and participate in other meetings as required during execution of the Work. These meetings may include, but are not limited to, the following:

1. Meetings requested by regulatory agencies having jurisdiction over the project

2. Meetings with utility entities for coordination purposes throughout the construction period.

3. Meetings with other stakeholders including City officials, residents, and businesses

4. Coordination meetings with other Contractors conducting work at the site

PART 2 - PRODUCTS

(NOT USED)

PART 3 - EXECUTION

(NOT USED)

- END OF SECTION -

# SECTION 01300 SUBMITTALS

## PART 1 – GENERAL

### 1.01 THE REQUIREMENT

A. This section specifies the means of all submittals. All submittals, whether their final destination is to the City, Engineer, or other representatives of the City, shall be directed through the Engineer. A general summary of the types of submittals and the number of copies required is as follows:

| Copies to Engineer | Type of Submittal |
|---|---|
| E | Progress Schedule |
| E | Construction Schedule |
| E | Schedule of Payment Items |
| 4 + E | Progress Payment Applications |
| E | AIS Compliance Tracking Log |
| 3 + E | Shop Drawings |
| 2 + E | Warranties |
| E | Audio Visual Preconstruction Record |
| E | Project Photographs |
| 2 + E | Certificates of Compliance |
| 2* | Product Samples |
| 3 + E | Operation and Maintenance Manual |
| 3 + E | Record Drawings |
| E | As Built GIS Database |
| 2 + E | Elevation Certificates for New Structures – Certified by Surveyor licensed in the State of Florida |

*E = Electronic submittal in pdf format.*
** Unless otherwise required in the specific Section where requested.*

B. All submittals shall also be submitted to Engineer electronically.

### 1.02 SUBMITTAL PROCEDURES

A. The Contractor shall transmit each submittal with a form acceptable to the Engineer, clearly identifying the project Contractor, the enclosed material and other pertinent information specified in other parts of this section. Identify variations from Contract Documents and

Product or system limitations which may be detrimental to successful performance of the completed Work.

B. Revise and resubmit submittals as required, identify all changes made since previous submittals. Resubmittals shall be noted as such.

C. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

D. All electronic submittals shall be digitally submitted to the Engineer through the construction project management system Procore (www.procore.com). All submittals shall be numbered, labeled and dated. See the attached Procore Guidelines at the end of this specification section for additional information.

1.03 CONSTRUCTION PROGRESS SCHEDULE

A. The Contractor shall have the capability of preparing and utilizing the specified construction progress scheduling techniques. A statement of capability shall be submitted in writing to the Engineer with the issuance of the Notice-to-Proceed by the City and will verify that either the Contractor's organization has in-house capability qualified to use the technique or that the Contractor employs a consultant who is so qualified. Capability shall be verified by description of the construction projects to which the Contractor or its consultant has successfully applied the scheduling technique and which were controlled throughout the duration of the project by means of systematic use and updating of the construction progress schedule, the network analysis and associated reports. The submittal shall include the name of the individual on the Contractor's staff who will be responsible for the construction progress schedule, and associated reports and for providing the required updating information of same. The Contractor shall submit its proposed progress (baseline) schedule to the Engineer for review and comment in accordance with the Contract Documents. The Engineer shall have the authority to determine acceptability/correctness of the schedule logic and activity interrelationships. The use of extraneous, nonworking activities and activities which add restraints to the construction schedule shall not be accepted. Baseline schedules that do not meet their contract completion dates shall not be accepted.

B. The Contractor’s progress schedule (baseline and monthly updates) shall be computer generated and resource loaded. Each computer-generated construction progress schedule and associated report shall include the following tabulations: a list of activities in numerical order, a list of activity precedence, schedules sequenced by Early Start Date, Total Float, and Late Start Date. Each schedule, and report shall include the following minimum items:

1. Activity Numbers
2. Estimated Duration
3. Activity Description
4. Early Start Date (Calendar Dated)
5. Early Finish Date (Calendar Dated)

6. Latest Allowable Start Date (Calendar Dated)
7. Latest Allowable Finish Date (Calendar Dated)
8. Status (whether critical)
9. Total Float and Free Float
10. Resource Plots

C. In addition, each construction progress schedule, network analysis and report shall be prefaced with the following summary data:

1. Contract Name and Number
2. Contractor's Name
3. Contract Duration and Float
4. Contract Schedule with critical path.
5. The Effective or Starting Date of The Schedule (the date indicated in the Notice-to-Proceed)

D. The workday to calendar date correlation shall be based on an 8-hour day and 40-hour week with adequate allowance for holidays, adverse weather and all other special requirements of the Work. Normal work hours are Monday through Friday, 7:30 am to 4:30 pm.

E. If the Contractor desires to make changes in its method of operating which affect the construction progress schedule and related items, the Contractor shall notify the Engineer in writing stating what changes are proposed and the reason for the change. If the Engineer accepts these changes, in writing, the Contractor shall revise and submit, without additional cost to the City, all of the affected portions of the construction progress schedule, and associated reports. The construction progress schedule and related items shall be adjusted by the Contractor only after prior acceptance, in writing by the Engineer. Adjustments may consist of changing portions of the activity sequence, activity durations, division of activities, or other adjustments as may be required. The addition of extraneous, nonworking activities and activities which add restraints to the construction progress schedule shall not be accepted.

F. Except where earlier completions are specified, schedule dates which show completion of all Work prior to the contract completion date shall, in no event, be the basis for claim for delay against the City by the Contractor.

G. Construction progress schedules and related items which contain activities showing negative float or which extend beyond the contract completion date will be accepted only upon the condition that the Contractor will comply with recovery schedule requirements as specified in paragraph H. below.

H. Whenever it becomes apparent from the current construction progress schedule and associated reports that delays to the critical path have resulted and the contract completion date will not be met, or when so directed by the Engineer, the Contractor shall

take some or all of the following actions at no additional cost to the City. They shall submit to the Engineer for approval, a written statement of the steps they intend to take to remove or arrest the delay to the critical path in the current construction progress schedule, including a computer generated schedule revision to reflect proposed actions

1. Increase construction personnel in such quantities and crafts as will substantially eliminate the backlog of work.

2. Increase the number of working hours per shift, shifts per day, working days per week, the amount of construction equipment, or any combination of the foregoing, sufficiently to substantially eliminate the backlog of work.

3. Reschedule activities to achieve maximum practical concurrence of accomplishment of activities, and comply with the revised schedule.

I. When so requested by the Engineer, should the Contractor fail to submit a written statement of the steps they intend to take or should fail to take such steps as reviewed and accepted in writing by the Engineer, the Engineer may direct the Contractor to increase the level of effort in personnel (trades), equipment and work schedule (overtime, weekend and holiday work, etc.) to be employed by the Contractor in order to remove or arrest the delay to the critical path in the current construction progress schedule, and the Contractor shall promptly provide such level of effort at no additional cost to the City.

J. If the completion of any activity, whether or not critical, falls more than 100 percent behind its previously scheduled and accepted duration, the Contractor shall submit to the Engineer for approval a schedule adjustment showing each such activity divided into two activities reflecting completed versus uncompleted work.

K. Shop drawings which are not approved on the first submittal or within the time scheduled, and equipment which does not pass the specified tests and certifications shall be immediately rescheduled.

L. The contract time will be adjusted only in accordance with the General Requirements and other portions of the Contract Documents as may be applicable. If the Engineer finds that the Contractor is entitled to any extension of the contract completion date, the Engineer's determination as to the total number of days extension shall be based upon the current construction progress schedule and on all data relevant to the extension. Such data shall be included in the next updating of the schedule and related items. Actual delays in activities which, according to the construction progress schedule, do not affect any contract completion date will not be the basis for a change therein.

M. From time to time it may be necessary for the contract schedule of completion time to be adjusted by the City in accordance with the General Requirements and other portions of the Contract Documents as may be applicable. Under such conditions, the Engineer will direct the Contractor to reschedule the Work or contract completion time to reflect the changed conditions, and the Contractor shall revise the construction progress schedule and related items accordingly, at no additional cost to the City.

N. Available float time may be used by the City through the City's Engineer.

O. The City controls the float time and, therefore, without obligation to extend either the overall completion date or any intermediate completion dates, the City may initiate changes that absorb float time only. City initiated changes that affect the critical path on the network diagram shall be the sole grounds for extending the completion dates. Contractor initiated changes that encroach on the float time may be accomplished only with the City's concurrence. Such changes, however, shall give way to City initiated changes competing for the same float time.

P. To the extent that the construction project schedule, or associated report or any revision thereof shows anything not jointly agreed upon or fails to show anything jointly agreed upon, it shall not be deemed to have been accepted by the Engineer. Failure to include on a schedule any element of Work required for the performance of this Contract shall not excuse the Contractor from completing all Work required within any applicable completion date, notwithstanding the review of the schedule by the Engineer.

Q. Review and acceptance of the construction progress schedule, and related reports, by the Engineer is advisory only and shall not relieve the Contractor of the responsibility for accomplishing the Work within the contract completion date. Omissions and errors in the construction progress schedule, and related reports shall not excuse performance less than that required by the Contract and in no way make the Engineer an insurer of the Contractor's success or liable for time or cost overruns flowing from any shortcomings in the construction progress schedule, and related reports.

R. The Contractor shall present and discuss the proposed schedule at the preconstruction conference.

S. The construction progress schedule shall be based upon the precedence diagramming method of scheduling and shall be prepared in the form of a horizontal bar chart showing in detail the proposed sequence of the Work and identifying all construction activities included but not limited to yard piping, all structures and treatment units and all related Work specified herein to be performed under the Contract. The schedule shall be time scaled, identifying the first day of each week, with the estimated date of starting and completion of each stage of the Work in order to complete the project within the contract time. The project critical path shall be clearly identified in color or by other means acceptable to the Engineer.

T. The progress schedule shall be plotted on 22 inch by 34 inch and 11 inch by 17 inch paper and shall be revised and updated monthly, depicting progress through the last day of the current month and scheduled progress through completion. Up to date hard copies of the schedule shall be submitted along with the application for monthly progress payments for the same period.

U. The construction progress schedule shall be developed and maintained using Primavera and Primavision software as manufactured by Primavera Systems, Inc., or equal.

V. The Contractor shall produce a 3-week Look Ahead Schedule for construction meetings on a bi-weekly basis or as determined by City.

1.04 SCHEDULE OF PAYMENT ITEMS

A. The Contractor shall submit a Schedule of Payment Items for review in accordance with the Contract Documents. The schedule shall contain the installed value of the component parts of Work for the purpose of making progress payments during the construction period and shall directly correlate on an item by item basis (unless otherwise accepted by the Engineer) to each individual activity detailed in the construction progress schedule. The sum of all scheduled items shall equal the total value of the Contract. Reference section entitled “Measurement and Payment” for further details.

B. The Contractor shall expand or modify the above schedule and materials listing as required by the Engineer's initial or subsequent reviews.

C. Monthly payment applications shall be accompanied by an updated AIS Compliance Tracking Log.

1.05 PROGRESS PAYMENT APPLICATIONS

A. Applications for payments shall be made to the Engineer for review in accordance with the Contract Documents.

1.06 AMERICAN IRON AND STEEL (AIS) COMPLIANCE DOCUMENTS

A. The Contractor shall provide manufacturer’s certification verifying that materials used in the execution of the project are produced in compliance with AIS requirements for all applicable materials. Certifications shall include the following information:

1. Statement of compliance with AIS requirements
2. Location of manufacturing process, including melting, refining, forming, rolling, and fabricating.
3. Signature of an authorized representative from the manufacturer.

B. The Contractor shall retain copies of invoices, mill test reports, or shipping records verifying the materials are of domestic origin. These documents shall be provided upon request.

C. If the Contractor intends to seek a waiver in accordance with WIFIA Statute 33 U.S.C. Section 3914, the Contractor is responsible for submitting a formal waiver request with all required supporting documentation. No materials shall be used or installed until the waiver has been reviewed and approved by the Engineer and the funding agency.

D. The Contractor shall maintain a tracking log for all AIS-covered materials incorporated into the project. This document shall be submitted with monthly payment applications and upon

request by the Engineer to demonstrate compliance with the AIS requirement. The document shall include, at a minimum, the following:

1. Submittal Number
2. Material Description
3. Manufacturer Name and Contact Information
4. Manufacturing Location
5. Date of Delivery
6. Date of Installation

An example AIS Compliance Tracking Log is provided as a reference at the end of this section.

1.07 SHOP DRAWINGS

A. The Contractor shall submit electronic copies of shop drawings in Adobe Portable Document Format (PDF) format for review by all general, civil, mechanical, structural, architectural, electrical and instrumentation related improvements, including details, piping layout and appurtenances, wiring, color selection charts, materials and equipment fabricated especially for this Contract, and materials and equipment for which such Drawings are specified or specifically requested by the Engineer.

B. Within one week of shop drawing approval (Furnish as Submitted or Furnish as Corrected), Contractor shall provide three (3) color hard copies of each shop drawing. Contractor may be required to submit certain sheets in large format to ensure all portions of shop drawing are legible. Engineer shall distribute electronic and hard copies to the City.

C. Shop drawings shall show the principal dimensions, weight, structural and operating features, space required, clearances, type and/or brand of finish or shop coat, grease fittings, etc., depending on the subject of the Drawings.

D. When so specified, or if considered by the Engineer to be acceptable, the manufacturer's specifications, catalog data, descriptive matter, illustrations, etc. may be submitted for review in place of shop drawings. In such case, the requirements shall be as specified for shop drawings, insofar as applicable.

E. Time delays caused by rejection of submittals are not cause for extra charges to the City or time extensions.

F. Requirements: The Contractor shall be responsible for the prompt submittal of all shop drawings so that there shall be no delay to the Work due to the absence of such drawings. Electronic copies of all shop drawings shall be submitted as directed by the Engineer during the preconstruction meeting. Shop drawings shall be submitted as a single,

complete, and searchable image format document in PDF format with bookmarks for shop drawings consisting of multiple sections and/or more than 20 pages total.

G. All shop drawings shall be submitted to the Engineer through the Contractor. Each shop drawing shall be individually submitted. The Contractor is responsible for obtaining shop drawings from subcontractors and returning reviewed shop drawings to them. All Drawings shall be clearly marked with the name of the project, City, Contractor, specification section number and building, equipment, or structure to which the drawing applies. Drawings shall be suitably numbered stamped and signed by the Contractor. Each shop drawing shall be accompanied by a transmittal form listing the information identified above.

H. All submissions shall be dated and properly referenced to the specifications section and Contract Drawing number. The submittal number shall match the following submittal numbering system (or an equivalent system as approved by the Engineer):

Submittal Numbering System

1. Package ID: The package number will reflect the CSI (specification) section number as it appears in the specifications.

2. Subgroup ID: The submittal number will include the CSI number followed by the submittal number and a sequential letter indicating resubmittal number.

Example:

| **Package** | **Submittal** | **Description** |
|---|---|---|
| 03300 | 03300-001 | Concrete Admixture A, First Submittal |
| | 03300-001A | Concrete Admixture A, Second Submittal |
| | 03300-001B | Concrete Admixture A, Third Submittal |
| | 03300-002 | Concrete Admixture B, First Submittal |

I. Product Data: Where manufacturer's publications in the form of catalogs, brochures, illustrations, or other data sheets are submitted in lieu of prepared shop drawings, such submission shall specifically indicate the particular item offered. Identification of such items and relative pertinent information shall be made with indelible ink. Submissions showing only general information will not be accepted.

J. Product data shall include materials of construction, dimensions, performance characteristics, capacities, wiring diagrams, piping and controls, etc.

K. Warranties:

1. When warranties are called for, a sample of the warranty shall be submitted with the shop drawings. The sample warranty shall be the same form that will be used for the actual warranty. Actual warranties shall be originals and notarized.

2. Warranties specified for products shall be in addition to, and run concurrent with, Contractor's general warranty and guarantee and requirements for the required correction period. Disclaimers and limitations in specific product warranties do not limit Contractor's general warranty and guarantee.

3. Product manufacturer's warranty is preprinted written warranty published by product manufacturer and specifically endorsed by product manufacturer to Owner.

4. Equipment and material shall be guaranteed to be free from defects in workmanship, design, and/or materials for a period of one (1) year unless otherwise specified in the individual Specification Section for a Special Warranty.

5. Warranty period shall start on the date of the particular equipment and material is determined to be substantially complete by the Engineer, which includes requirements for start-up certification and specified elsewhere in the Contract Documents.

6. Warranty requirements may be added to or modified in the individual Specification Sections. Special warranty is written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by product manufacturer's warranty or to provide increased rights to Owner.

7. Special warranty information, if any, will be located in the Specification Section for that product.

8. Requirements for Special Warranties: Provide written special warranty document that contains appropriate terms and identification, ready for execution by product manufacturer and Owner. Submit draft warranty with submittals required for product.

9. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed by product manufacturer and other parties as appropriate.

10. Specified Form: When specified forms are included in the Contract Documents, prepare written document, properly executed by product manufacturer and Owner, using appropriate form.

11. Refer to Specifications for content and requirements for submitting special warranties.

12. Submit product manufacturer's warranties and special warranties as submittals.

L. CONTRACTOR's Review: Only submittals which have been checked and corrected should be submitted to the Contractor by its subcontractors and vendors. Prior to submitting shop drawings to the Engineer, the Contractor shall check thoroughly all such shop drawings to satisfy itself that the subject matter thereof conforms to the Drawings

and Specifications in all respects. Shop drawings which are correct shall be marked with the date, checker's name and indications of the Contractor's approval, and then shall be submitted to the Engineer. Other shop drawings submitted to the Engineer will be returned to the Contractor unreviewed.

M. CONTRACTOR's Responsibility: The Engineer's review of shop drawings will be general and shall not relieve the Contractor of the responsibility for details of design, dimensions, etc., necessary for proper fitting and construction of the Work required by the Contract and for achieving the specified performance.

N. CONTRACTOR's Modifications: For submissions containing departures from the Contract Documents, the Contractor shall include proper explanation in their letter of transmittal. Should the Contractor submit for review equipment that requires modifications to the structures, piping, layout, etc. detailed on the Drawings, or specified, Contractor shall also submit for review details of the proposed modifications. If such equipment and modifications are accepted, the Contractor, at no additional cost to the City, shall do all Work necessary to make such modifications.

O. Substitutions: Whenever a particular brand or make of material, equipment, or other item is specified, or is indicated on the Drawings, it is for the purpose of establishing a standard of quality, design, and type desired and to supplement the detailed specifications. Any other brand or make which is equivalent to that specified or indicated may be offered as a substitute subject to the following provisions:

1. The Contractor shall submit for each proposed substitution sufficient details, complete descriptive literature, and performance data together with samples of the materials, where feasible, to enable the Engineer to determine if the proposed substitution is equal, in all respects including, but not limited to, quality, performance, ease of maintenance, availability of spare parts, and experience record.

2. The Contractor shall submit certified tests, where applicable, by an independent laboratory attesting that the proposed substitution is equal.

3. A list of installations where the proposed substitution is equal. Such listing shall cover a minimum of the previous three years and will furnish project names and contact phone numbers.

4. Where the acceptance of a substitution requires excessive review by the Engineer, revision or redesign of any part of the Work, all such additional review costs, revisions and redesign, and all new drawings and details required therefore, shall be at the Contractor's expense.

5. In all cases the Engineer shall be the sole judge as to whether a proposed substitution is to be accepted. The Contractor shall abide by the Engineer's decision when proposed substitute items are judged to be unacceptable and shall in such

instances furnish the item as specified. No substitute items shall be used in the Work without written acceptance of the Engineer.

6. Acceptance of any proposed substitution shall in no way release the Contractor from any of the provisions of the Contract Documents.

7. The City may require, at Contractor's expense, a special performance guarantee or other surety with respect to any substitute.

P. Complete Submittals: Each submittal shall be complete in all aspects incorporating all information and data required to evaluate the products' compliance with the Contract Documents. Partial or incomplete submissions shall be returned to the Contractor without review.

Q. Engineer's Review: The Engineer will review and return by email the reviewed shop drawings within 15 calendar days of receipt of such shop drawings. Reviewed shop drawings will be returned to the Contractor by email and marked with the appropriate box checked either "FURNISH AS SUBMITTED", "FURNISH AS CORRECTED" or "REVISE AND RESUBMIT".

R. Work Prior to Review: No material or equipment shall be purchased, fabricated especially for this Contract, or delivered to the project site until the required shop drawings have been submitted, processed, reviewed by the Engineer and marked either "FURNISH AS SUBMITTED" or "FURNISH AS CORRECTED". All materials and Work involved in the construction shall be as represented by said shop drawings.

S. The Contractor shall not proceed with any portion of the Work (such as the construction of foundations) for which the design and details are dependent upon the design and details of equipment for which submittal review has not been completed.

1.08 CERTIFICATES

A. Four copies of certificates of compliance and test reports shall be submitted for requested items to the Engineer prior to request for payment.

1.09 PRODUCT SAMPLES

A. Contractor shall furnish for review all product samples as required by the Contract Documents or requested by the Engineer to determine compliance with the specifications.

B. Samples shall be of sufficient size or quantity to clearly illustrate the quality, type, range of color, finish or texture and shall be properly labeled to show complete project identification, the nature of the material, trade name of manufacturer and location of the Work where the material represented by the sample will be used.

C. Samples shall be checked by the Contractor for conformance to the Contract Documents before being submitted to the Engineer and shall bear the Contractor's stamp certifying

that they have been so checked. Transportation charges on samples submitted to the Engineer shall be prepaid by the Contractor.

D. The Engineer's review will be for compliance with the Contract Documents, and its comments will be transmitted to the Contractor with reasonable promptness.

E. Acceptable samples will establish the standards by which the completed Work will be judged.

1.10 OPERATION AND MAINTENANCE MANUALS

A. Requirements for Operations and Maintenance Manuals shall be in accordance with Section 01430

1.11 RECORD DRAWINGS

A. Requirements for record drawings shall be in accordance with Section 01320.

1.12 AS BUILT GIS DATABASE

A. Requirements for the As-Guild GIS Database updates shall be in accordance with Section 01320.

1.13 ELEVATION CERTIFICATES (FOR NEW BUILDINGS AND CONCRETE STRUCTURES)

A. Two copies of Elevation Certificates for each new building or concrete structure, certified by a registered surveyor, shall be submitted to the Engineer prior to the request for certificate of completion / certificate of occupancy from the City of Fort Lauderdale Building Department.

1.14 AUDIO-VISUAL PRECONSTRUCTION RECORD

A. General: Prior to commencing work, the Contractor shall have a continuous color audio-video recording taken of the entire Project, including adjacent work areas, plant site and all other areas that will be disturbed by the Contractor’s operations, to serve as a record of preconstruction conditions. No construction shall begin prior to review and acceptance of the recordings covering the respective, affected construction area by the Engineer. The Engineer shall have the authority to reject all or any portion of the recording not conforming to the specifications and order that it be redone at no additional charge. The Contractor shall reschedule unacceptable coverage within five days after being notified. The Engineer shall designate those areas, if any, to be omitted from or added to the audio-video coverage. Recordings shall not be performed more than 90 days prior to construction in any area. Recording format shall be MP4 audio-video, minimum 1280 x 720 resolution, and playable using Windows Media Player. CDs and/or DVDs will not be accepted. All flash drives and written records shall become property of the City.

B. Services: The Contractor shall engage the services of a professional electrographer. The color recording shall be prepared by a responsible commercial firm known to be skilled

and regularly engaged in the business of preconstruction color audio-video documentation. The electrographer shall furnish to the Engineer a list of all equipment to be used for the audio-video recording, i.e., manufacturer's name, model number, specifications and other pertinent information. Additional information to be furnished by the electrographer is the names and addresses of two references that the electrographer has performed color audio-video recordings for on projects of a similar nature within the last twelve months.

C. Equipment: All equipment, accessories, materials and labor to perform this service shall be furnished by the Contractor.

1. The total audio-video system shall reproduce bright, sharp, clear pictures with accurate colors and shall be free from distortion, tearing, rolls or any other form of imperfection. The audio portion of the recording shall reproduce the commentary of the camera operator with proper volume and clarity, and be free from distortion and interruptions.

2. When conventional wheeled vehicles are used, the distance from the camera lens to the ground shall not be less than twelve feet. In some instances, audio-video coverage may be required in areas not accessible by conventional wheeled vehicles. Such coverage shall be obtained by walking or special conveyance acceptable to the Engineer.

E. Recorded Information - Audio: Each recording shall begin with the current date, project name and municipality and be followed by the general location; i.e., process structure, or area, viewing side and direction of progress. The audio track shall consist of an original live recording. The recording shall contain the narrative commentary of the electrographer, recorded simultaneously with the electrographer fixed elevation video record of the zone of influence of construction.

F. Recorded Information - Video: All video recordings must, by electronic means, display continuously and simultaneously, generated with the actual recording, transparent digital information to include the date and time of recording. The date information shall contain the month, day and year. The time information shall contain the hours, minutes, and seconds. Additional information shall be displayed periodically. Such information shall include, but not be limited to, project name, process structure or area, and the viewing side. This transparent information shall appear on the extreme upper left hand third of the screen.

G. Conditions for Recording: All recording shall be done during times of good visibility. No recording shall be done during precipitation, mist or fog. The recording shall only be done when sufficient sunlight is present to properly illuminate the subjects of recordings and to produce bright, sharp video recordings of those subjects.

H. Video Coverage: Video coverage shall include all surface features located within the zone of influence of construction supported by appropriate audio coverage. Such coverage shall include, but not be limited to, existing driveways, sidewalks, curbs, pavement, landscaping, fences, signs and interior and exterior of existing structures affected by the work and the exteriors of structures adjacent to the work, and any other on-site area that will be occupied or impacted by the Contractor or any of their subcontractors or suppliers within the area covered.

## 1.15 PROJECT PHOTOGRAPHS

A. The Contractor shall engage and pay for the services of a photographer for ground level progress pictures each month during the course of the construction activities. The photographer's periodic visits and work shall be coordinated with the City. A total of 25 progress photographs in electronic format of completed work is required each month. A photograph (picture) shall be defined as one image. Meta data shall include the following information:

1. Location
2. Name/number of structure
3. Photo Number
4. Date photgraph was taken
5. Description
6. Name of photographer
7. Owner's witness

B. Digital images of each photograph shall be submitted electronically to the Engineer with the Contractor's monthly estimate.

## 1.16 DRONE VIDEOS

A. The Contractor shall capture high-resolution aerial video footage, and photos, of representative construction progress using Unmanned Aerial Vehicles (UAVs). Data collected is for documenting the progress of construction and shall be solely owned by the City.

B. The Contractor shall retain a qualified UAV operator with a minimum of 3 years of experience in aerial video documentation. The UAV operator shall be cerfified and compliant with all applicable regulations.

C. The data produced shall include:

1. UAV videos monthly (minimum 4k resolution, 30 fps, MP4 or MOV format)
2. 12 digital photos monthly (14 MP, JPEG format, geotagged and time stamped)
3. Digital photos shall be submitted with the monthly pay application

## PART 2 – PRODUCTS

(NOT USED)

## PART 3 – EXECUTION

(NOT USED)

**EQUIPMENT LUBRICATION SCHEDULE**

EQUIPMENT ITEM:

EQUIPMENT ID NO.:

EQUIPMENT LOCATION:

EQUIPMENT MANUFACTURER:

ADDRESS:

PHONE:

SERVICE REPRESENTATIVE:

ADDRESS:

PHONE:

MAINTENANCE REQUIREMENTS:

| Maintenance Operation | Frequency Running Time / Calendar | Lubricant | Description / Type / Special Tools |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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NOTE: Use additional sheets as required

| **EQUIPMENT MAINTENANCE SCHEDULE** | | | |
|---|---|---|---|
| EQUIPMENT ITEM: | | | |
| EQUIPMENT ID NO.: | | | |
| EQUIPMENT LOCATION: | | | |
| EQUIPMENT MANUFACTURER: | | | |
| ADDRESS: | | | |
| PHONE: | | | |
| SERVICE REPRESENTATIVE: | | | |
| ADDRESS: | | | |
| PHONE: | | | |
| MAINTENANCE REQUIREMENTS: | | | |
| Maintenance Operation | Frequency Running Time / Calendar | Lubricant | Description / Type / Special Tools |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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NOTE: Use additional sheets as required.

| **AMERICAN IRON AND STEEL (AIS) COMPLIANCE TRACKING LOG** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | Submittal No. | Material | Manufacturer | Manufacturing Location | Contact Information | Delivery Date | Installation Date |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |

- END OF SECTION -

# SECTION 01312 FIELD ENGINEERING

## PART 1 - GENERAL

### 1.01 REQUIREMENTS

A. Contractor shall provide and pay for field Engineering and Survey services required for the project.

B. Identify existing control points and property line corner stakes indicated on the Drawings, as required.

### 1.02 QUALIFICATIONS OF SURVEYOR

A. Qualified Registered Professional Surveyor & Mapper, acceptable to the City and the Engineer.

### 1.03 SURVEY REFERENCE POINTS

A. Location and elevation of benchmarks are shown on the Drawings. Identify basic horizontal and vertical control points for the construction project including:

B. Permanent coordinate reference points with horizontal and vertical control, located and staked as shown on the plans.

C. Contractor's Responsibilities:

1. Provide survey and layout required to layout the Work.
2. Check and establish exact location of existing facilities prior to construction of new facilities and any connections thereto.
3. In event of discrepancy in data or benchmarks, request clarification before proceeding with Work.
4. Retain professional land surveyor or civil engineer registered in state of Florida who shall perform or supervise engineering surveying necessary for construction staking and layout.
5. Maintain complete accurate log of survey Work as it progresses as a Record Document.
6. On request of City, submit documentation.
7. Provide competent employee(s), tools, stakes, and other equipment and materials as City may require to:
8. Establish control points, lines, and easement boundaries
9. Check layout, survey, and measurement Work performed by others.
10. Measure quantities for payment purposes.

D. The Contractor shall locate and protect control points prior to starting site construction work and preserve all permanent reference points during construction.

1. Make no changes or relocations without prior written notice to City.
2. Report to Engineer when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
3. Contractor's surveyor shall replace project control points which may be lost or destroyed. Replacements shall be established based on original survey control.

E. Contractor shall be responsible for performing survey and preparing As-Built drawings for all other portions of the work in accordance with Section 01320 – Project Record Documents.

1.04 PROJECT SURVEY REQUIREMENTS

A. Contractor's surveyor shall establish a minimum of two permanent benchmarks on site, referenced to data established by survey control points.

B. Contractor shall establish lines and levels, locate and lay out, prepare a Horizontal and Vertical Control Plan for the purpose of construction staking by instrumentation and similar appropriate means:

1. Stakes for grading and fill placement.
2. Controlling lines and levels as required.

C. From time to time, verify layouts by same methods.

D. Horizontal and vertical control plan shall be made available to City in AutoCAD Civil 3D 2019 format or most current release.

E. Any plan released to the Contractor via electronic media is for as-built use only. They have not been geometrically calculated by a Surveyor. This applies to all aspects of the plans including, but not limited to, right-of-way, road utilities and drainage.

1.05 RECORDS

A. Maintain a complete, accurate log of all control and survey work as it progresses.

B. On completion of construction work, prepare a certified survey showing all dimensions, locations and elevations of project.

1.06 SUBMITTALS

A. Submit name and address of Professional Surveyor & Mapper and Professional Engineer to City and Engineer.

B. On request of City or Engineer, submit documentation to verify accuracy of field engineering work.

C. Submit certificate signed by Registered Engineer or Professional Surveyor & Mapper certifying that elevation and locations of work are in conformance, or non-conformance, with Contract Documents.

PART 2 – PRODUCTS

(NOT USED)

PART 3 – EXECUTION

(NOT USED)

- END OF SECTION

# SECTION 01320 PROJECT RECORD DOCUMENTS

## PART 1 – GENERAL

### 1.01 SUMMARY

A. Section includes:

1. Requirements for recording changes to record documents.

2. Requirements for electronic files furnished by Engineer.

B. Contractor shall maintain and submit to Engineer with record documents in accordance with the Specifications and General Conditions.

### 1.02 ADMINISTRATIVE REQUIREMENTS

A. Maintenance of Record Documents:

1. The following record documents shall be maintained in the Contractor's field office:

a. Drawings, Specifications, and Addenda.

b. Shop Drawings, Samples, and other Contractor submittals, including records of test results, approved or accepted as applicable, by Engineer.

c. Change Orders, Work Change Directives, Field Orders, photographic documentation, survey data, and all other documents pertinent to the Work.

2. Update record documents on a monthly basis, minimum.

3. Provide files and racks for proper storage and easy access to record documents.

4. Make record documents available for inspection upon request of Engineer or Owner.

5. Do not use record documents for purpose other than serving as Project record. Do not remove record documents from Contractor's field office without Engineer's approval.

B. Submittal of Record Documents:

1. Submit to Engineer the following record documents: Drawings and survey.

2. The Contractor shall submit an electronic set of progress As-Built Drawings with each application for payment. These Drawings shall accurately depict the Work completed and for which payment is being requested.

3. Prior to readiness for final payment, submit to Engineer one copy of final record documents. Submit complete record documents.

4. Submit record documents with transmittal letter on contractor letterhead complying with letter of transmittal requirements in Section 01300 Submittals

5. Record documents submittal shall include certification, with original signature of official authorized to execute legal agreements on behalf of Contractor.

C. Electronic Files Furnished by Engineer:

1. CADD files will be furnished by Engineer upon the following conditions:

a. Contractor shall submit to Engineer a letter on Contractor letterhead requesting CADD files and providing specific definition(s) or description(s) of how files will be used, and specific description of benefits to Owner (including credit proposal, if applicable) if the request is granted.

b. Contractor shall execute Engineer's standard agreement for release of electronic files and shall abide by all provisions of the agreement for release of electronic files.

c. Layering system incorporated in CADD files shall be maintained as transmitted by Engineer. CADD files transmitted by Engineer containing cross-referenced files shall not be bound by Contractor. Drawing cross-references and paths shall be maintained. If Contractor alters layers or cross-reference files, Contractor shall restore all layers and cross-references prior to submitting record documents to Engineer.

d. Contractor's as-builts shall comply with City CADD Specifications, provided in 01320 Supplement 1.

D. As Built Drawings and CADD files must be submitted to the Engineer for approval. Upon written approval provided by the Engineer, As-Built Drawings and CADD files shall be submitted to the City for review and approval. Approval must be obtained by City Project Manager and Stormwater Operations. In addition, CADD files must be approved for compliance with City Standards. Substantial Completion shall not be issued until all approvals are obtained from the Engineer and the City.

1.03 SUBMITTALS

A. Closeout Submittals: Provide record documentation as specified in this Section.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

## 3.01 GENERAL REQUIREMENTS

A. At the start of the Project, label each record document to be submitted as, “PROJECT RECORD” using legible, printed letters. Letters on record copy of the Drawings shall be two inches high.

B. Keep record documents current. Make entries on record documents within two working days of receipt of information required to record the change.

C. Do not permanently conceal the Work until required information has been recorded.

D. Accuracy of record documents shall be such that future searches for items shown on the record documents may rely reasonably on information obtained from Engineer-accepted record documents.

E. Marking of Entries:

1. Use erasable, colored pencils (not ink or indelible pencil) for marking changes, revisions, additions, and deletions to record documents.

2. Clearly describe the change by graphic line and make notations as required. Use straight-edge to mark straight lines. Writing shall be legible and sufficiently dark to allow scanning of record documents into legible electronic files.

3. Date all entries on record documents.

4. Call attention to changes by drawing a “cloud” around the change(s) indicated.

5. Mark initial revisions in red. In the event of overlapping changes, use different colors for subsequent changes.

## 3.02 RECORDING CHANGES TO DRAWINGS

A. Record changes on copy of the Drawings. Submittal of Contractor-originated or -produced drawings as a substitute for recording changes on the Drawings is unacceptable.

B. Record changes on plans, sections, schematics, and details as required for clarity, making reference dimensions and elevations (to Project datum) for complete record documentation.

C. Record actual construction including:

1. Depths of various elements of foundation relative to Project datum.

2. Field changes of dimensions, arrangements, and details.

3. Changes made in accordance with Change Orders, Work Change Directives, and Field Orders.

4. Changes in details on the Drawings. Submit additional details prepared by Contractor when required to document changes.

3.03 RECORDING CHANGES FOR SCHEMATIC LAYOUTS

A. In some cases, on the Drawings, arrangements of conduits, circuits, piping, ducts, and similar items are shown schematically and are not intended to portray physical layout. For such cases, the final physical arrangement shall be determined by Contractor subject to acceptance by Engineer.

B. Record on record documents all revisions to schematics on Drawings, including: piping schematics, ducting schematics, process and instrumentation diagrams, control and circuitry diagrams, electrical one-line diagrams, motor control center layouts, and other schematics when included in the Contract. Record actual locations of equipment, lighting fixtures, in-place grounding system, and other pertinent data.

C. When dimensioned plans and dimensioned sections on the Drawings show the Work schematically, indicate on the record documents, by dimensions accurate to within one inch in the field, centerline location of items of Work such as conduit, piping, ducts, and similar items

1. Clearly identify the Work item by accurate notations such as “cast iron drain”, “rigid electrical conduit”, “copper waterline”, and similar descriptions.

2. Show by symbol or note the vertical location of Work item; for example, “embedded in slab”, “under slab”, “in ceiling plenum”, “exposed”, and similar designations. For piping not embedded, also provide elevation dimension relative to Project datum.

3. Descriptions shall be sufficiently detailed to be related to Specifications.

D. Engineer may furnish written waiver of requirements relative to schematic layouts shown on plans and sections when, in Engineer’s judgment, dimensioned layouts of Work shown schematically will serve no useful purpose. Do not rely on waiver(s) being issued.

3.04 REQUIREMENTS FOR SUPPLEMENTAL DRAWINGS

A. In some cases, drawings produced during construction by Engineer or Contractor supplement the Drawings and shall be included with record documents submitted by Contractor. Supplemental record drawings shall include drawings provided with Change Orders, Work Change Directives, and Field Orders and that cannot be incorporated into the Drawings due to space limitations.

B. Supplemental drawings provided with record drawings shall be integrated with the Drawings and include necessary cross-references between drawings. Supplemental record drawings shall be on sheets the same size as the Drawings.

C. When supplemental drawings developed by Contractor using computer-aided drafting/design (CADD) software are to be included in record drawings, submit electronic files for such drawings in AutoCAD (latest version) as part of record drawing submittal.

3.05 RECORDING CHANGES TO SPECIFICATIONS AND ADDENDA

A. Mark each Section to record:

1. Manufacturer, trade name, catalog number, and Supplier of each product and item of equipment actually provided.

2. Changes made by Addendum, Change Orders, Work Change Directives, and Field Orders.

3.06 AS-BUILT AND RECORD DRAWINGS

A. The term ‘AS-BUILT DRAWING’ refers to drawings signed and sealed by a Florida registered surveyor and mapper (PSM) provided by the Contractor. As-built information will be provided to the Engineer of Record who will prepare or have prepared record drawings based on as-built information provided by the PSM and from information provided by the Engineer’s staff.

B. The as-built drawings cover sheet will be signed, sealed and dated by the PSM. The cover sheet will include the PSM’s name, business name, PSM number, address and telephone number and contain the following statement:

C. “I hereby certify that the as-built location information of the potable water, reclaimed water, wastewater and drainage facilities shown on these drawings conforms to the minimum technical standards for land surveying in the State of Florida, Chapter 5J-17.050(10)(i) (Florida Administrative Code), as adopted by the Department of Agriculture and Consumer Services, Board of Professional Surveyors and Mappers, and that said as-builts are true and correct to the best of our knowledge and belief.”

D. As-builts will contain the information on the design drawings, plus the following additional requirements:

1. As-builts are to document changes between the design and construction. All information that is incorrect due to changes during construction will be corrected. Incorrect or no longer relevant information will be struck through. Any facilities constructed in a horizontal or vertical location materially different (one-tenth foot horizontal, one-tenth foot vertical) than the design location will have their design location struck through and will be redrafted at the constructed location. Design drawing dimensioning to water and wastewater facilities will be corrected as necessary.

2. Drawings will be a complete set including cover sheet, index (if one was included in the approved design drawings) and any other sheets included in the approved design set. Standard detail sheets are not necessary.

3. Comply with the following:

   a. “SPECIFICATIONS FOR DIGITAL AS-BUILT SUBMISSION FOR WATER, WASTEWATER AND STORMWATER IMPROVEMENTS” provided in 01320 Supplement 2a.

   b. “SPECIFICATIONS FOR DIGITAL AS-BUILT SUBMISSION STORMWATER MANAGEMENT IMPROVEMENTS PROGRAM” provided in 01320 Supplement 2b.

E. The Contractor shall maintain full size (24"x36") field drawings to reflect the "as-built" items of work as the work progresses. Upon completion of the work, the Contractor shall prepare a record set of "AS-BUILT" drawings on full-size, reproducible material and an electronic file in .DWG format (AutoCAD, latest Version). One set of full-size design drawings on reproducible material will be furnished to the Contractor by the City. An electronic file of the design drawings will be furnished to the Contractor by the design Engineer at no additional cost (for as-built purposes only). No additional payment will be made for those "as-built" drawings.

F. The cost of maintaining record changes, and preparation of the “as-built” drawings shall be included in the unit prices bid for the affected items. Upon completion of the work, the Contractor shall furnish the City the reproducible “as-built” drawings and electronic files. The completed “as-built” drawings shall be approved by the City at least 48 hours prior to final inspection of the work. The Final Inspection will not be conducted unless the approved “as-built” drawings are in the possession of the City.

G. The completed “as-built” drawings shall be certified by a Professional Surveyor and Mapper registered in the State of Florida. This certification shall consist of the surveyor's embossed seal bearing the registration number, the surveyor's signature and date on each sheet of the drawing set. In addition, the key sheet, cover sheet or first sheet of the plans set shall list the business address and telephone number of the surveyor. The final as-builts shall also be submitted using state plane coordinates.

H. Vertical Datum: NAVD 1988 for vertical.

I. Horizontal Datum: NAD '83 with '90 adjustment for horizontal.

J. Representative items of work that should be shown on the record drawings as verified, changed or added are shown below:

1. Plans:

   a. Structure types, location with grade of rim and flow-line elevations.

b. Sewer type, length, size and elevations.

c. Utility type, length, size and elevation in conflict structures.

d. All maintenance access structures, valves and hydrants within right-of-way.

e. Spot (critical) elevations at plateaued intersections. (P.C., P.T., and midpoint of all intersections, etc.)

f. Sewer laterals shall be stationed between maintenance access structures.

g. All swales, whether newly constructed, restored, or modified as part of the project. Plans shall reflect the as-built conditions of the swales.

2. Pavement Marking and Signing Plans: Sign location where installed if different from plans.

3. Water and Sewer Plans: Location (horizontal and vertical) of all pipelines, structures, fittings, services, valves and appurtenances, and water main / sanitary sewer pipe crossings.

K. The term 'RECORD DRAWING' refers to the final drawing set signed and sealed by the Engineer of Record. The Engineer of Record will prepare or have prepared record drawings based on as-built information provided by a PSM and from information provided by the Engineer's staff. The Engineer of Record shall retain the signed and sealed 'as-built' drawings provided by the PSM with the other project records for possible review by CITY upon request. Record drawings shall meet the requirements of the Contract Documents.

L. "As-Built" and record drawings shall include the following contents at a minimum.

1. The amount of information required on as-built and record drawings will require the drawing author to organize its presentation in order to make the drawings readable. On occasion, it may be necessary to put water and wastewater information on separate sheets, and/or use a table to show coordinate information.

2. Show the location of easements used by the water and wastewater facilities.

3. Indicate pipe joint locations where water and wastewater or reclaimed water piping crosses.

4. Indicate the length of gravity wastewater piping and actual slope between manhole centers.

5. Show all abandoned in place facilities including the extent and method of abandonment.

6. Show elevations to the nearest tenth of a foot for:

    a. Top of pipe for water mains, force mains and reclaimed water mains at vertical deflection points and every 200 feet along straight runs.

    b. Top of pipe of water or wastewater facilities where they cross all other facilities (drainage, telephone, cable TV, electric, etc.)

7. Show elevations to the nearest one hundredth of a foot for:

    a. Manholes (MH) rims.

    b. Inverts of every gravity wastewater pipe and force main connections to MH.

    c. Lift station top of slab, bottom of wet well, influent pipe invert and control set points.

8. Coordinates will be provided for City maintained facilities, including:

    a. Water mains, force mains and reclaimed water mains at deflection points and every 200 feet along straight runs.

    b. The center of each MH, fitting, valve, blow off, hydrant, water meter box, wastewater cleanout, lift station wetwell, double detector check or other non-pipe water or wastewater facility.

    c. The location of each connection to existing facilities.

    d. The corners (vertices) of all easements being granted to the City as a part of the project.

    e. Other locations designated by City.

9. Show the changed location of any non-water/wastewater features so they are at the visually correct location relative to City maintained facilities.

10. Photos:

    a. Drawings shall include color photographs of all connections to existing City infrastructure as well as all critical utility crossings and where specifically required on the design drawings.

    b. The pictures will be taken with a GPS camera that automatically geotags the picture.

    c. A maximum of six photographs per sheet is acceptable.

    d. Each photograph shall have a minimum size of 8”x10”.

e. Photographs shall have a density of 8.0 megapixel or greater.

f. Photographs shall normally be taken from a point between four feet (4’) and six feet (6’) above the subject infrastructure and shall show good detail in both shadow and sunlit areas.

g. Include a measuring device in the photo for scale and where applicable to indicate the depth or separation of the utilities. A symbol (i.e., an arrow) is to be used in the plan views indicating the location and direction of view for each photograph submitted. The symbol must include the photograph number.

h. A caption under each photograph shall include the following information:

1) Photograph number

2) Photograph description

3) Date of photograph

4) Location and direction of view (for example 201 NW 34 Street looking North)

5) State plane coordinates

6) All photographs included in the drawings will also be provided to City in JPEG format. Individual photo files will be named using the same photograph number contained in the drawings.

11. The size and material of the piping shall be verified by the survey crew at the time of as-built.

12. As-builts of all drainage lines shall include the following information:

a. Rims, inverts, length of piping between structures, length of exfiltration trench, and weir elevations if applicable.

b. The size and material of the piping shall be verified by the survey crew at the time of as-built.

13. As-builts for the edge of pavement and sidewalk locations shall include horizontal locations and shall indicate all deviations from the design plans.

14. All rock as-builts for parking lot, roadways and swales areas shall consist of the following:

a. Rock elevations at all high and low points, and at enough intermediate points to confirm slope consistency and every 50' for roadways.

b. Rock as-builts shall be taken at all locations where there is a finish grade elevation shown on the design plans.

c. All catch basin and maintenance access structure rim elevations shall be shown.

d. Elevations around island areas will also be required.

e. As-builts shall be taken on all paved and unpaved swales prior to placement of asphalt and/or topsoil/sod, at enough intermediate points to confirm slope consistency and conformance to the plan details.

f. Note: Rock as-builts required prior to paving. City shall review rock as-builts within five days of receipt.

15. Lake and canal bank as-builts shall include a key sheet of the lake for the location of cross sections. Lake and canal bank cross sections shall be plotted at a minimum of every 100 lf, unless otherwise specified. As-builts shall consist of the location and elevation of the top of bank, edge of water and the deep cut line, with the distance between each shown on the drawing.

16. Retention area as-built elevations shall be taken at the bottom of the retention area and at the top of bank. If there are contours indicated on the design plans, then they shall be as-built as well.

17. If a change is made via field order or deviation to any structure, pipeline, etc., a new location shall be noted on the as-builts. The City may request additional as-built information to verify horizontal or vertical locations

## 3.07 CADD SPECIFICATIONS

A. “As-Built” drawings prepared by Contractor shall comply with the requirements in the document titled "CITY OF FORT LAUDERDALE PUBLIC WORKS ENGINEERING & ARCHITECTURAL DEPARTMENT CADD SPECIFICATIONS FOR PROJECT DRAWINGS” provided in 01320 Supplement 1.

B. Obtain the latest version of the CADD Specifications from the City at the following link:

https://www.fortlauderdale.gov/government/departments-i-z/public-works/engineering-division/cadd-standards

## 3.08 AS BUILT GIS DATABASE REQUIREMENTS

A. The Contractor shall submit updates to the City’s GIS database cataloging the constructed stormwater infrastructure and other modified service, including potable water mains, water services, water meters, fire hydrants, backflow preventers, hose bibbs, sanitary sewer force mains, gravity mains, sewer laterals, manholes, cleanouts, and valves. Updates shall

be in accordance with the City's latest geodatabase and corresponding Geodatabase Data Dictionary.

B. The Geodatabase Data Dictionary is provided as an attachment to this specification in 01320 Supplement 3. It is provided in PDF format. The City will provide the Geodatabase Data Dictionary in Excel format following contract award. The Contractor shall coordinate with the City to obtain the Geodatabase Data Dictionary in Excel format.

C. Contractor shall enter location and attribute information collected from survey field work and final As-Built Drawings into a City issued geodatabase template. The City shall provide a template in Microsoft Excel format to be used for data entry. This template will adhere to the City's geodatabase schema for feature classes, related tables, and domain tables. The asset types to be collected and delivered shall include, but not be limited to, the following assets:

1. Exfiltration trenches
2. Gravity mains
3. Pressurized mains
4. Stormwater network structures (inlets, catch basins, control structures, water quality devices, manholes, pump station(s), or pipe ends)
5. Control valves, check valves, inline valves, and/or tidal valves
6. Outfalls
7. Concrete structures associated with the pump station(s) (mechanical screens and/or trash racks, intake structures, wet well, discharge structure, energy dissipator, electrical equipment platforms)
8. Pump station fencing system
9. Control panels
10. Fuel tank
11. Emergency generator
12. Level instrumentation
13. Piping contained within the pump station
14. Submersible pumps
15. SCADA equipment

16. ATS
17. Transformer
18. Uninterruptible power supply units (UPS)
19. HVAC
20. Soft starters
21. Manatee grates

D. Attribute types shall be coordinated with the City and shall adhere to the requirements of the City's Geodatabase Data Dictionary.

E. Submittal of the draft As-Built GIS Database shall be done electronically. The Engineer will review the Excel file for completeness. The City shall provide written comments on the submittal. The Contractor shall provide a written response for each comment. The Contractor shall make revisions to the Excel file and submit both the responses to the comments and the revised database file for review by the Engineer and the City. Should further modifications of GIS database file be required, the Contractor shall make these modifications at no additional cost to the City.

END OF SECTION

# 01320 Supplement 1

# CITY OF FORT LAUDERDALE PUBLIC WORKS ENGINEERING & ARCHITECTURAL DEPARTMENT CADD SPECIFICATIONS FOR PROJECT DRAWINGS

# CITY OF FORT LAUDERDALE PUBLIC WORKS ENGINEERING & ARCHITECTURAL DEPARTMENT CADD SPECIFICATIONS FOR PROJECT DRAWINGS

# CITY OF FORT LAUDERDALE

**OCTOBER 2015**

*THIS DOCUMENT WAS PREPARED IN THE CITY OF FORT LAUDERDALE ENGINEERING& ARCHITECTURAL DEPARTMENT BY THE CADD STANDARDS COMMITTEE*

*THIS DOCUMENT MAY BE DOWNLOADED FROM HTTP://WWW.FORTLAUDERDALE.GOV/ENGINEERING/INDEX.HTM*

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## 1. PURPOSE

The Engineering division provides engineering, architectural, landscaping and project management services; and has put together a set of drafting standards to be used in all computer-aided drawings. The intent is to standardize the way electronic drawing files are produced and to make all drawing files regardless of who produced them, familiar in look and content to all the production staff in the division.

Consultants are encouraged to familiarize themselves with recent existing City project files prior to commencing a project for the City of Fort Lauderdale, in order to achieve true conformity with the way drawing files are to be produced. Below are some of the criteria, **which must be followed**. This document may not cover all circumstances; therefore it is up to the consultant to secure the pertinent information to any situation that may arise in a particular case that is not covered here. All files submitted to the City shall be free of passwords or any other impediment to their free use. The City of Fort Lauderdale's Engineering Division reserves the right to direct a consultant as to the desired manner to proceed when a situation is not addressed here.

## 2. VERSION

**2.1.** All drawings shall be produced in an AutoCAD® based product and saved in AutoCAD® 2013 format. Software included but, not limited to:

***2.1.1.*** AutoCAD
***2.1.2.*** AutoCAD LT
***2.1.3.*** AutoCAD Civil 3D
***2.1.4.*** AutoCAD Map 3D
***2.1.5.*** Revit

**Please see CADD Coordinator prior to creating drawings with software not listed.**

**2.2.** Drawing files submitted will be 100% AutoCAD (dwg) format and 100% editable.

**2.3.** The current version of AutoCAD at the time these standards are established is AutoCAD 2016. These standards can only address those issues pertaining to that version of AutoCAD. If a new version of AutoCAD is released prior to revising these standards, projects shall still be submitted in AutoCAD 2013. Once the City upgrades to the newer version of AutoCAD, that version shall be the official version and at the time the City shall determine if submittals in earlier versions are acceptable. All drawing files in a project shall be saved in the same version of AutoCAD.

## 3. COVER SHEETS AND TITLE BLOCKS

**3.1.** The City's title block/sheet border symbol shall be used on all drawings except the cover sheet. No modifications shall be made except for values of the attributes present in the block.

**3.2.** All projects shall have a cover sheet. For the cover sheet, consultants shall use the City's cover sheet symbol. Consultants shall not make any modifications to the city's cover sheet, including renaming the block. The cover sheet shall be inserted at an XYZ scale of 1; and plotted with a final size of 36"X24" at scale 1:1, in PAPERSPACE.

**3.3.** The standard title block/sheet border shall be inserted in "paper space" and shall be inserted at an XYZ scale of 1. The viewports can be zoomed to produce the desired final scale within the viewport and will be plotted with a final size of 36X24 at scale 1:1.

**3.4.** All projects will be made to plot in a standard ARCH D 36" X 24" sheet. The City's standard title block/sheet border SHALL NOT be inserted with dissimilar 'x' and 'y' scales in order to plot in a final size other than the standard.

## 4. SCALES

**4.1.** All drawing plan-views and horizontal scale of profiles and cross-sections will be drawn in scale 1:1 in model space, and drawing accuracy shall be 0.01' or better. That is, on a 'DIST' inquiry between consecutive 100-foot stations on a baseline, the result should be 100.00'.

**4.2.** Details will be drawn 1:1 and then scaled in a paper space window. Certain details need to be drawn with different horizontal and vertical scales for clarity (e.g. typical roadway cross- section). There are however very few instances where it is not practical to draw details to any scale e.g. where drawings are intended to be diagrammatic or schematic; and for those instances only, a scale will not be required. Such drawings will be noted "NOT TO SCALE" or "NO SCALE".

**4.3.** Plots for projects will be produced at a scale commonly used by the engineering/architectural profession; (e.g. 1" = 20', 1" = 30', 1/4"= 1', etc). Following are examples of unacceptable scales: 1" = 27', 1"=70', etc.

**4.4.** Vertical scale for cross-sections and profiles will be drawn to a scale in the same ratio as the final plotted product i.e.: if the final plot is horizontal 1"= 20', and the vertical 1"= 2', then the vertical scale is 10 times that of the horizontal.

**4.5.** Drawing files that are not scale relevant, like index sheet, notes and schedules, shall fill the scale attribute box with the notation "N/A". The notation "NTS or "NOT TO SCALE shall be left to those drawing files that are scalable, but are shown in a scale not measurable with a typical engineering or architectural scale, like details, schematics, etc.

## 5. EXTERNAL REFERENCES

**5.1.** Projects shall make use of external reference files (x-refs) to separate different disciplines and sub-consultants or design teams involved.

- ***5.1.1.*** X-ref files shall be limited to one per discipline. There shall be no more than one consultant's work into a single x-ref file i.e.: no design shall be placed directly on a survey file, or electrical design on an architectural file, etc.
  - ***5.1.1.1.*** Within each discipline, all entities shall be drawn in the same file: line work, text, notes, dimensions, leaders, etc. shall all be placed in the same file and space (MODELSPACE). Exception: Revision clouds.
- ***5.1.2.*** In engineering projects, all civil work (demolition, concrete, asphalt, pavers) may be placed in one x-ref per discipline, per consultant, per building (if project is multi building), or at the discretion of the project manager may be further segregated into several x-refs.
- ***5.1.3.*** Larger projects that involve multiple buildings and/or sites may make use of more than 1 x-ref per discipline upon approval of x-ref list by the city.
- ***5.1.4.*** Details, general notes, logos, etc. SHALL not be x-referenced.
- ***5.1.5.*** If during the course of a project design a consultant decides to make use of x-ref for anything other than background support, the final product shall not contain x-ref and layer names with x-ref file name prefixes will not be accepted.

**5.2.** Survey information shall be in its own x-ref's (see **Base Drawing** section in these standards).

- ***5.2.1.*** The base drawing shall be x-referenced into all x-refs drawings.
- ***5.2.2.*** There shall be no duplicate base information. Footprints to be used as a base for design shall not be duplicated. Example: Two or more footprints of a building drawn side by side in an x-ref.

**5.3.** Underground utilities (more than one in a project) may be placed in a single x-ref, or each in its own.

- ***5.3.1.*** In underground utilities where a profile is needed, the area shall be in the same x-ref as the plan view for the profiled area.

**5.4.** Architectural projects shall also be segregated by specialty.

**5.5.** Electrical, mechanical, foundation, plumbing, roof, etc. shall be either in its own x-ref file, or grouped by sub-consultant, or design group at the discretion of the project manager.

**5.6.** X-ref files shall have no paths. Project drawing files, which contain x- refs with paths, will not be accepted. Consultants will have to strip all paths from x-refs, or initially x-ref with no paths.

**5.7.** If an x-ref is "bound" it shall be "insert" and not "bind" type of x-ref thereby no extraneous layer names are created.

**5.8.** Profiles shall be drawn in the same file as the plan view and all entities of a profile shall remain together in the same file. Line work, grid, all text, notes, leaders, etc. shall be all together.

## 6. BASE DRAWING

**6.1.** The base survey shall be made of 4 base files:

- *#####SURV.DWG*
- *#####BSLN.DWG*
- *#####TOPO.DWG*
- *#####UTIL.DWG*

*The «#'s" are place-holders for the project number. If utility markings are gathered at a later date from the original survey, then this information can be added to the «#####UTIL.DWG"*

***6.1.1.*** The #####SURV.DWG" file shall be the main file and the others shall be XREFED into it. This shall contain any notes which are not location sensitive, and may be moved modified, rotated to accommodate clearer design drawings.

***6.1.2.*** The ####BSLN.DWG shall contain the baselines of survey, including stationing and descriptions of points set, the lot and block, boundaries and relevant information. All survey markers, found or set.

***6.1.3.*** The ####TOPO.DWG shall contain all topography, elevations and other field collected information, not related to horizontal survey control. All survey benchmarks, descriptions and elevations shall be included in this file. Above ground evidence of utilities and any directly measured utility information, such as inverts and pipe sizes shall be included in this file.

***6.1.4.*** The ####UTIL.DWG shall contain the field location of paint marks, stakes or other utility markings, which indicate the presence of an approximate location of underground utilities. Test holes or borings shall also be included. Any other inferred or extrapolated locations shall also be placed in this file.

***6.1.5.*** Any issues not clearly covered in this paragraph shall be referred to the city surveyor for clarification prior to the commencement of any survey work.

**6.2.** Topographical surveys in AutoCAD format shall not be cut or disseminated into several files in order to create individual sheets.

**6.3.** Topographic survey files shall not have parts deleted because proposed project does not cover those portions. In that case open a paper space window that will show just the portion of survey needed or use XCLIP.

**6.4.** Topographic surveys SHALL NOT BE MOVED SPATIALLY within the drawing file, nor shall the consultant or city staff, change the coordinate system to anything other than what was received from survey, UNDER ANY CIRCUMSTANCE. If a consultant furnished the survey it shall be in 'WCS' and the survey shall have the north at 12 o'clock.

**6.5.** Files of topographic survey shall only have topographic information. These files shall be x-referenced into a new file where the proposed project will be designed.

**6.6.** The base topographical survey file shall be produced in several files, x-referenced, one within the other. This will make possible to make adjustments to some aspects of the file without the possibility of making changes to the more critical parts of the survey. The following paragraph is a description of what each file holds and a procedural explanation on how to create such a file. It is not intended directly to the designer, but to the survey personnel responsible for creating the survey base file.

**6.7.** In projects that use a base drawing other than a survey, like an architectural project of plant facility, all disciplines shall make use of a common base drawing, inserted as an x-ref. If there is an update then it is simple to update drawings from all disciplines. No design group shall take the base drawing and modify it in any manner. Through the use of x-referencing, all permitted changes (layer color, line type, etc.) can be accomplished.

## 7. UNITS

**7.1.** Engineering projects shall use:

***7.1.1.*** Decimal as linear units at all times.

***7.1.2.*** Angular units shall be surveyor (bearings) units.

***7.1.3.*** Angles shall be measured counter-clockwise and 0 shall be to the east.

**7.2.** Architectural projects shall use:

***7.2.1.*** Architectural units.

***7.2.2.*** Angular units shall be degrees, minutes, seconds.

***7.2.3.*** Angles shall be measured counterclockwise and 0 shall be to the right (east).

***7.2.4.*** 1" grid, and entities snap to the grid.

**7.3.** Dimensions shall:

***7.3.1.*** Have a scale factor of 1

***7.3.1.1.*** The scale factor may be changed to 12 or 1/12 when integrating engineering and architectural line work; example site plans, or architectural details displayed in an engineering drawing with decimal units.

***7.3.1.2.*** The scale factor can also be changed to 1/10 in profiles that are drawn 10 times larger vertically than horizontally. Accuracy for plan view design in water, sewer, storm and site electrical projects can be 0.1'.

***7.3.2.*** Precision of 0.01' for decimal units and 1/8 for architectural units, with the default value displayed.

## 8. SYMBOLS & ENTITIES

**8.1.** *Blocks will be issued* with the most common symbols used in City projects. From time to time these symbols will be revised and/or new symbols will be added. If for any reason there is a need to create a block either for local use or to keep for future projects, that block shall comply with all City CAD standards.

**8.2.** Standard issue symbols shall NOT be exploded, renamed or changed in any way. Objects that are repeated throughout and/or that are depicted in an exaggerated scale for clarity (fire hydrants, power poles, catch basins, street lamps, etc.) shall be represented by a symbol. If a symbol CAN be used it SHALL be used.

**8.3.** Whenever possible, make use of the City's standard symbols and blocks. If a new symbol or block is created, it shall be submitted to the City for approval. Approved symbols and blocks will be made part of the City's symbols library, royalty free. North arrows, graphical scales, logos, location maps and other similar symbols shall be inserted as blocks and left unexploded.

**8.4.** Consultants may insert their company logo or identification information in the form of a block (symbol) and left unexploded. This block can be placed in all sheets including the cover sheet within the drawing area of each sheet.

**8.5.** Dimensions shall be associative at all times and left at their default value, and shall NOT be exploded.

**8.6.** Hatch patterns shall NOT be exploded. Hatch patterns and closed polylines forming the hatch boundary shall be the only entities permitted on hatch layers.

## 9. PAPERSPACE

**9.1.** Paper space shall be used for title block/sheet border and viewports. No other entities shall be placed there, especially notes that describe parts of model space entities (notes with a leader). Exceptions: logos, captions, legends, general notes and revision clouds.

**9.2.** Title block/sheet borders or cover sheets shall NOT be x-refed.

**9.3.** All drawing entities will be confined within the sheet border. Extents of the drawing files shall be to the edge of title block/sheet border. Multiple layouts are permitted, however only one sheet border per layout is allowed.

## 10. COLORS AND LINE WEIGHTS

**10.1.** The City will provide a line weight chart (CTB) to be used.

**10.2.** Submitted drawings shall make use of one of the city's templates, which have the "Layout'' page setup, configured with the city's configuration files (PC3, CTB and PMP).

**10.3.** All entities shall be located in their appropriate layer, and have a color and line type "BYLAYER". The ONLY exception to this rule is a Utility XREF drawing (e.g.: 10272XREFUTIL) where the color of the layers continues to be "BYLAYER", but different line types may be used in the same layer to identify different utility types and sizes.

**10.4.** Colors are not fixed to layers; they are dependent on the discipline. When entities for a particular discipline need to be displayed in drawing files for other disciplines, colors may be setup differently in

order for features to stand out. E.g. Survey drawings will show survey features solid and stand-out. The same survey features will look dimmed in landscape drawings.

**10.5.** The project manager shall be the final judge of the plotted appearance of the drawings. Consultant shall furnish a printed copy of all drawing files using the City's line weight chart (CTB) file for color approval by the City.

**10.6.** There are certain entities which make use of custom line types, and that rely on the line type to be identified. If the line type is changed, then the entity loses its identity. Examples are fences: they can make use of a custom line type that identifies them. These entities can be placed in a layer with a different line type and the identity of the fence is preserved. For these cases, it is permissible to make these entities non- ByLayer. There are other examples in electrical drawings.

## 11. FONTS

**11.1.** Since fonts are not carried with the drawing files and depends on the computer that is running AutoCAD to find and use these font files. No third party or proprietary fonts shall be used. Drawing files shall not make use of SHAPE files.

**11.2.** It is possible to automatically substitute fonts not found in the AutoCAD path. The City may (at their discretion) substitute odd fonts with ROMANS.SHX.

## 12. LAYERS

**12.1.** The engineer or technician working on the project must determine what color to use from the "LINE WEIGHTS AND GREY SCALE CHART" supplied by the City, in order to get the desired effect, and the City will give the final approval.

**12.2.** The list of layer names used in all City of Fort Lauderdale projects are set up in “Layer Manager” of the template drawing and, includes layer filters by discipline.

**12.3.** The City of Fort Lauderdale Engineering Division adheres for the most part (but not totally) to the CAD Layer Guidelines and has adopted the long format; it has up to 16 alphanumeric characters, and is divided in fields or groups.

X-XXXX-XXXX-XXXX

Above is an example of the format, also known as the 1-4-4-4.

**12.4.** The City will provide a list of layer names to be used. If there is a project for which there are no layer names (which pertain to that discipline), the consultant shall provide a list of proposed layer names based on the layer guidelines, for the City's approval, prior to their use. Once approved by the City, those layer names will become part of the City's list of layer names for all projects thereon or until revised.

**12.5.** No layer names, other than those in the City's layer name list, will be present in drawing files. Exceptions are those layer names automatically created by AutoCAD; "0", "DEFPOINTS", "ASHADE".

**12.6.** Layering:

***12.6.1.*** All text, labels, mtext, etc. that is placed in paper space shall be in layers: #-SHBD-TEXT and/or #-SHBD-NOTE;

***12.6.2.*** Consultants' logo shall be placed in layer #-SHBD-LOGO;

***12.6.3.*** Viewports shall be placed in layer: #-SHBD-VPRT;

***12.6.4.*** General line work in paper space like lines to separate areas or viewports, etc. shall be placed in layer: #-SHBD.

***12.6.5.*** All general text shall be placed in a single layer, unless there is a justification for the contrary.

***12.6.6.*** North arrows and graphic scales shall be placed in layer: #-SHBD-NARW.

***12.6.7.*** Leaders shall be placed in a "TEXT" or "NOTE" layer together with the accompanying text.

**12.7.** Layer names that duplicate the discipline and the major group shall not be used. Examples are: E-ELEC, D-DEMO, H-HVAC, 1-INST, F-FIRE, Q-EQPM.

**12.8.** Details, sections elevations, do not in general need layer management. Since there is seldom layer manipulation (on, off), the minor group names that distinguish line weight were created. The City uses the discipline, major group designating the object to draw (DETL, SECT, ELEV, etc) and then the minor group designating the line weight. The minor group names are: XFIN, FINE, MEDM, HEVY AND XHEV.

## 13. GENERAL ISSUES BEFORE SUBMITTAL

**13.1.** Complete drawing set (DWG) shall be submitted no later than the 60% project submittal for design review and fully compliant with the City's CAD standards' drawing set shall be submitted prior to submittal to the building department for permit. All drawing files shall have all tabs (layouts)zoomed to EXTENTS, prior to any submittal to the City, whether it is the final or a working submittal; XREF drawing files shall be saved with the model tab active and zoomed to EXTENTS. All other drawing files shall be saved with the first paper space layout tab active. All final files shall be fully purged prior to submittal. All files shall be saved and submitted with the current layer set to "0".

**13.2.** Consultants shall obtain a file number for the project and make sure that the appropriate information is completed in the title block. File numbers can be obtained from the Project Engineer.

**13.3.** Consultants shall fill in total number of sheets in the tile block, prior to final submittal of drawing files.

**13.4.** Consultants shall submit a hardcopy (bond, 36" X 24"), DWG and PDF files of the project drawings together with any submittal in electronic format (CD, etc), when making partial and final submittal of drawing files. Prior to all submittals, consultants shall coordinate with the City's file room as to the method of creating PDF files, which will make prints satisfactory to the City. All files submitted to the City shall be free of passwords or any other impediment to their free use. PDFs shall be combined into a single file. Sheets shall be oriented landscape with the title block to the right of the screen, arranged in the order that they are to be printed and the set assembled matching the drawing index order. The PDF binder shall contain bookmarks for all of the sheets, displaying the name of each plot file as described in paragraph 70.

**13.5.** DWG AutoCAD files shall not be compressed using zip or rar or any other compression scheme when submitting files in an optical media (CD, DVD).

**13.6.** Submittals via FTP sites are not official submittals; and optical media (CD, DVD)is required.

**13.7.** When a project is assigned to a consultant who utilizes the collaboration of other sub-consultants, said prime-consultant shall be responsible for all submittals of drawing files and plot files. Said submittals shall be in the form of a single media (1 CD/DVD) to include the entire project.

## 14. MISCELLANEOUS

**14.1.** "MTEXT" (multiline text) shall be used in all cases where more than one line of text occurs and where leaders are used.

**14.2.** These standards are a detailed description of aspects in the creation of drawing files within Engineering. It is by no means the complete description of all the methods used, and it is the consultant's responsibility to alert the City of any point or situation which is not described in these specifications, and which should be addressed. Also if a consultant, after reading these standards and prior to commencing any drafting work, feels that there are points or items in these standards which are not logical, or are onerous to abide by, they should notify the City's Engineering Division at their earliest convenience and their views will be open to discussion.

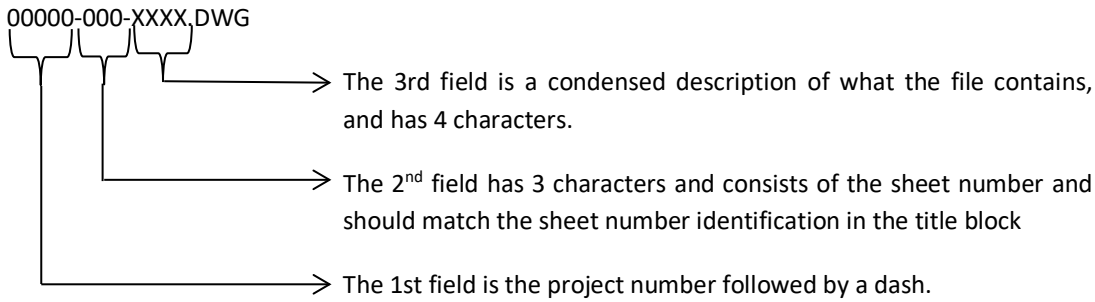
**14.3.** This document does not address layer colors or line weights. The consultant shall coordinate with the City's project manager on how these items are treated.

## 15. DWG FILE NAMES

**15.1.** All drawing files shall conform to the City of Fort Lauderdale's file naming convention, as described in the following pages. The names shall be accurate to reflect the desired information as per the naming convention. All file names shall be CAPITALIZED.

**15.2.** The City of Fort Lauderdale Engineering Division has adopted the following file naming convention for project drawings:

***15.2.1.*** The format for single layout drawing files looks like this:




***15.2.2.*** The first field represents the project number.

***15.2.3.*** The second field represents the sheet number and reflects the sheet number as shown in the title block. If sheet numbers have dashes or dots, they shall be stripped: example for C-11, use C11. Drawing sheets shall not be numbered using the ConDoc system (i.e. A1.01, A1.02, A2.01, A2.02).

**15.3.** The third field is a 4-letter description of what the project drawing file depicts. There is a list of descriptions used in previous projects. Consultant shall check the list prior to creating a new description. The City will need to approve descriptions prior to their use.

**15.4.** This proposed 3-field format is only for files that contain final drawing with 1 title block/sheet border.

**15.5.** Examples for this naming format are the following:

- **09585-001-WATR.DWG**
- **10256-021-SEWR.DWG**
- **10855-M10-HVAC.DWG**
- **10325-A01-PLAN.DWG**

**15.6.** A drawing index should appear on the cover sheet. If there are too many sheets in the set of drawings to fit on the cover sheet, a separate index sheet or sheets shall be included immediately following the cover sheet. When index sheets are utilized the drawing file name shall be 00000-001-INDX.DWG. The first five digits shall be the project number and the next three digits shall be (001), (002), etc. An example is:

- **10325-001-INDX.DWG indicating the first index sheet.**
- **10325-002-INDX.DWG indicating the second index sheet.**

**15.7.** X-ref files will have a slightly different format. It will have 3 fields, and will look like this: **OOOOOXREFXXXX.DWG**

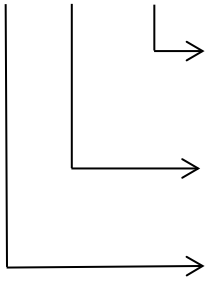
***15.7.1.*** The 1st field (5 characters) will be the project number; the second field shall be the word XREF". The third field shall be a 4-character description for the file or discipline found in the file. This convention is valid for all XREFS except for the survey XREFS. These shall remain as received by the survey department.

***15.7.2.*** Sheets shall be numbered in a sequential manner and there shall not be any voids in the numbering for any given discipline. All numbering shall start with "1", regardless of the numbering system used, except for the cover sheet which is "0". Example: 1,2,3,4, or A01, A02, A03, BUT NEVER A01, A02, A05.

**15.8.** The Cover Sheet will follow this drawing naming convention with one small exception. The drawing files will contain additional characters denoting the total number of sheets in a project set, including all disciplines.

**15.9.** The total number of sheets shall NOT include the cover sheet.

**15.10.** The format for the coversheet drawing files looks like this:
**00000-000-000COVR.DWG**



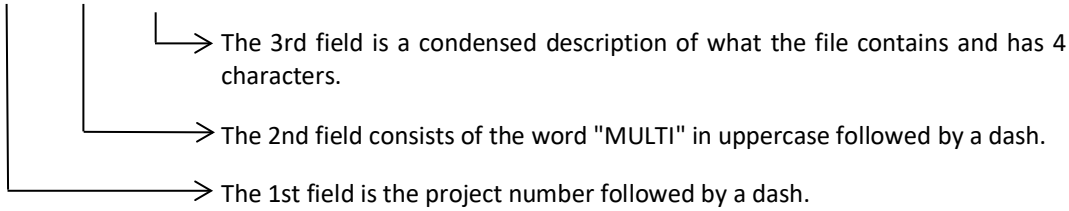
The 3rd field is 7 characters, the first three numerals denoting the total number of sheets in the full set, followed by (COVR) indicating that this is the cover sheet.

The 2nd field consists of three zeros (000)followed by a dash and the total number of sheets for the project without the cover.

The 1st field is the project number followed by a dash.

**15.10** For drawing files that contain multiple layouts, the files shall be named as follows:

**00000-MULTI-XXXX.DWG**




Examples for this naming format are the following:

- **XXXXX-MULTI-DETL.DWG: detail sheets.**
- **XXXXX-MULTI-ELEC.DWG: Electrical sheets.**

**15.11.** Layout Tab names shall be named with the sheet number and an optional description for the sheet content.

**15.12.** Additional drawing descriptive information may be placed in comments section of the file "properties" of the drawing file. Access this by right- clicking the file and selecting properties then the "summary" tab.

**15.13.** Names for sheet description to be used as the third field for file names:

| | |
|---|---|
| BSRV | Boundary Surveys |
| COVR | Cover Sheets |
| DEMO | Demolition |
| DETL | Details |
| ELEV | Elevations |
| EQPM | Equipment |
| FLOR | Floor Plans |
| GRAD | Paving and grading |
| INST | Instrumentation |
| IRRG | Irrigation |
| KMAP | Key map |
| LEGN | Legend, symbols and schedule sheets |
| LITE | Lighting plans |
| MOTP | Maintenance of traffic plans |
| NAID | Navigational Aids |
| NOTE | General Notes |
| PILE | Piles |
| PLAN | Plan and profile sheets |
| PLNT | Plant material |
| PLUM | Plumbing |
| POWR | Power |
| RISR | Riser diagrams |
| RNWY | Runway |
| ROAD | Roadway projects incl. Widening, narrowing, special projects |
| SECT | Cross Sections |
| SSWR | Sanitary sewer lines |
| SGNL | Signalization |
| SIGN | Sign project files |
| SITE | Site-plans |
| STRM | Storm water (drainage) |
| STRP | Pavement Striping |
| TSRV | Topographic Surveys |
| TXWY | Taxiway |
| WALK | Sidewalk project file (asphalt or concrete or other) |
| WATR | Potable water lines |

## 16. PDF FILE NAMES

Note: Project Manager: Please refer to Memo No. 11-06 for the new procedure for submitting electronic drawings and documents to the Plans Room. The date format YYYYMMDD shall be used when needed.

XXXXX <- Project number
PERMIT <- Sub Folder

**16.1.** **Permit drawing PDF naming:**

***16.1.1.*** XXXXX-DRC-BINDER-date.PDF
XXXXX-P&Z-BINDER-date.PDF
XXXXX-PERMIT-BINDER-date.PDF

**16.2.** **Bid drawing PDF naming:**

***16.2.1.*** XXXXX-BID-SPEC-date.PDF
XXXXX-BID PLANS-BINDER-date.PDF
XXXXX-BID ADDENDUM1-SPEC-date.PDF
XXXXX-BID ADDENDUM1-BINDER-date.PDF
File as many addendums as needed

**16.3.** **Final Permit Construction plan naming:**

***16.3.1.*** XXXXX-CONSTRUCTION-BINDER-date.PDF
XXXXX-REV1-CONSTRUCTION-BINDER-date.PDF
*File as many revisions as needed*
XXXXX-FIELD CHANGE-BINDER-date.PDF
*File as many changes as needed*

**16.4.** **AS BUILT –SETS**

XXXXX-ASBUILT-BINDER-date.PDF

**16.5.** **DRAWING-SETS**

File all the CADD drawings

**16.6.** **ARCHIVES**

File all project files from the Z: drive (Project manager to coordinate with CAD Manager)

## 17. STANDARDS SPECIFIC TO ARCHITECTURAL PROJECTS

**17.1.** Drawings scales are to be as follows:

***17.1.1.*** LTScale=1

***17.1.2.*** PSLTScale=1=on

***17.1.3.*** Precision=1/8"

**17.2.** Snap Grid settings:

***17.2.1.*** 1/16"=1'-0" scale to 3/8"=1'-0" scale drawings to be drawn with a maximum snap of 1".

***17.2.2.*** 1/2"=1'-0" scale to 3"=1'-0" scale drawings to be drawn with a maximum snap of 1/8".

***17.2.3.*** All drawings shall be created with SNAP ON.

**17.3.** Dimensions:

***17.3.1.*** Associative DIMASSOC=1.

***17.3.2.*** Dimensions shall not be forced without prior approval from the CAD Administrator.

***17.3.3.*** Dimstyles have been established in the "CFLSTDARCH2007.dwt" file. Dimstyles are to be used as defined and are not to be modified under any circumstances.

***17.3.4.*** Dimension Round-off:

***17.3.4.1.*** 3/8" scale and less round off to 1/2"

***17.3.4.2.*** 1/2" scale to 3" scale round off to 1/8"

***17.3.4.3.*** Fractions to be diagonal stacked when used in conjunction with a whole number (i.e. 3") and not stacked when used as a stand-alone fraction (3/4"). The text sizes of diagonal stacked fractions are to be 75%. The text sizes of non-stacked fractions are to be 100%.

**17.4.** Drawings sheets shall be:

***17.4.1.*** Numbered sequentially using the traditional numbering system (i.e. A-1, A-2, A-3).

***17.4.2.*** Drawing sheets shall not be numbered using the ConDoc system (i.e. A1.01, A1.02, A2.01, A2.02). This applies to all engineering disciplines within a set of drawings.

**17.5.** Text heights – see next page:

## ARCHITECTURAL AND LANDSCAPING TEXT FONTS AND HEIGHTS

| DRAWING SCALE | TEXT HEIGHT | | | | | DIMSTYLE |
|---|---|---|---|---|---|---|
| | Notes (Romans) | Room Names (Romans) | Small Title's (Swis721BT) | Large Title's (Swis721BT) | Title Polyline | |
| 1/16" | 16" | 24" | 48" | 64" | 8" | ARCH 192 |
| 3/32" | 10 2/3" | 16" | 32" | 42 2/3" | 5 1/3" | ARCH 128 |
| 1/8" | 8" | 12" | 24" | 32" | 4" | ARCH 96 |
| 3/16" | 5 1/3" | 8" | 16" | 21 1/3" | 2 2/3" | ARCH 64 |
| 1/4" | 4" | 6" | 12" | 16" | 2" | ARCH 48 |
| 3/8" | 2 2/3" | 4" | 8" | 10 2/3" | 1 1/3" | ARCH 32 |
| 1/2" | 2" | 3" | 6" | 8" | 1" | ARCH 24 |
| 3/4" | 1 1/3" | 2" | 4" | 5 1/3" | 2/3" | ARCH 16 |
| 1" | 1" | 1 1/2" | 3" | 4" | 1/2" | ARCH 12 |
| 1 1/2" | 2/3" | 1" | 2" | 2 2/3" | 1/3" | ARCH 8 |
| 3" | 1/3" | 1/2" | 1" | 1 1/3" | 1/6" | ARCH 4 |
| Paper Space | 1/12" | 1/8" | 1/4" | 1/3" | 1/24" | ARCH 1 |

| DRAWING SCALE | TEXT HEIGHT | | | | | DIMSTYLE |
|---|---|---|---|---|---|---|
| | Notes (Romans) | Room Names (Romans) | Small Title's (Swis721BT) | Large Title's (Swis721BT) | Title Polyline | |
| 1"=10' | 10" | 15" | 30" | 40" | 5" | ARCH 120 |
| 1"=20' | 20" | 30" | 60" | 80" | 10" | ARCH 240 |
| 1"=30' | 30" | 45" | 90" | 120" | 25" | ARCH 360 |
| 1"=40' | 40" | 60" | 120" | 160" | 20" | ARCH 480 |
| 1"=50' | 50" | 75" | 150" | 200" | 25" | ARCH 600 |
| 1"=60' | 60" | 90" | 180" | 240" | 30" | ARCH 720 |
| Paper Space | 1/12" | 1/8" | 1/4" | 1/3" | 1/24" | ARCH 1 |

# 01320 Supplement 2a

# SPECIFICATIONS FOR DIGITAL AS-BUILT SUBMISSION FOR WATER, WASTEWATER AND STORMWATER IMPROVEMENTS

# SPECIFICATIONS FOR DIGITAL AS-BUILT SUBMISSION
# FOR WATER, WASTEWATER AND STORMWATER IMPROVEMENTS

## COORDINATE SYSTEM

All coordinates shall be in the "NAD 83 State Plane Florida East FIPS 0901 Feet" coordinate system. All elevations shall be based on NAVD88. The benchmark used to establish vertical control will be provided.

## AS-BUILT RECORD DRAWING CONTENTS

Show elevations to the nearest hundredth of a foot for:

a. Top of pipe for water mains, force mains and reclaimed water mains at vertical deflection points and every 200 feet along straight runs

b. For new water mains, finish grade elevation above pipe, minimum horizontal clearance, and top/bottom of pipe to demonstrate proper clearance with respect to other facilities (parallel or crossing), in accordance with 62-555.314 F.A.C.

c. For new sewer mains, finish grade elevation above pipe, minimum horizontal clearance, and top/bottom of pipe to demonstrate proper clearance with respect to water lines (parallel or crossing), in accordance with 62-604.400 F.A.C.

d. Manhole rims, grate elevations and flowline elevations for inlets

e. Inverts of all pipe connections to manholes

f. Lift station top of slab, bottom of wet well, influent pipe invert and control set points

## ADDITIONAL DRAWING REQUIREMENTS

- Sample points for water disinfection need to be clearly shown and correspond to the bacteriological report
- Indicate demarcation point between facilities owned by CITY versus private ownership
- As-built needs to be superimposed on the approved permit design drawing with actual field information provided alongside the design information (crossed/ hatched out)

## CAD REQUIREMENTS

The CAD drawing will have separate layers for new or adjusted, existing, and abandoned facilities including:

- Water lines
- Valves
- Fire Hydrants
- Water Services
- Meters
- Gravity Sewer Lines
- Sanitary Manholes
- Force Main
- Lift Stations
- Sewer Laterals
- Drainage Lines
- Drainage Structures

All CAD line work shall be drawn as outlined below:

- Line work shall be snapped to end features
- Line work shall be continuous starting at one feature and ending at another feature.
- Water and Force main line work will start and stop at fittings but be continuous through pipe deflections, lateral and service connections
- Gravity and Drainage line work will start and stop at structures but be continuous through laterals. There will be no duplicate lines representing one feature

CAD format submissions shall be using AutoCAD/AutoCAD Civil 3D 2010 or later. Please send as an AutoCAD "e-transmit" including all XREF's, Image files, Plot Styles, and Text Styles.

# 01320 Supplement 2b

# SPECIFICATIONS FOR DIGITAL AS-BUILT SUBMISSION STORMWATER MANAGEMENT IMPROVEMENTS PROGRAM

**CITY OF FORT LAUDERDALE**
**SPECIFICATIONS FOR DIGITAL AS-BUILT SUBMISSION**
**STORMWATER MANAGEMENT IMPROVEMENTS PROGRAM**

This checklist presents the document control processes for survey as-built drawings and Geographic Information System (GIS) recording required by the City of Fort Lauderdale's Public Works Department, Stormwater Engineering Division (SED). These requirements apply to contractors performing work under contract for the City's Stormwater Management Improvements Program and involves additions to, or modifications of, the City's stormwater infrastructure and ancillary facilities affected by the work. This work may include the design and installation of new drainage systems, water mains, sanitary sewers, pressurized pipes, structures, laterals and water service lines.

Instructions: The Professional Land Surveyor and Mapper must fill out this form and check the boxes for the items required to submit the plans. This list is intended to be submitted as a statement or affirmation regarding the items listed. This checklist is required to be signed.

First submittal includes one (1) electronic copy set of as-builts. Deficiencies will be indicated in the electronic copy which will be returned to the Contractor for necessary corrective action.

As-builts shall contain the following:

| | |
|---|---|
| | As-built drawings shall be a complete set including cover sheet, index, and any other sheets except detail sheets, superimposed on the approved permit design drawing with actual field information provided alongside the design information (crossed out/struck through). |
| | All as-built information shall be denoted by bold print. |
| | Note "AS-BUILT" in large bold letters on every sheet |
| | Note and provide applicable scales, plans, cross sections, details, north arrow, and locations/elevations of all benchmarks and sources on all sheets |
| | Profile as-built drawings are required on projects where profiles were part of the approved design plans. |
| | Clearly identify names and width of streets, public rights of way, and property boundary lines. |
| | Show locations of all easements and note size around all utilities. |
| | The cover sheet for as-built drawings shall be signed, sealed, and dated by the PSM and shall include the City's Project Number, the PSM's name, business name, PSM number, address, and telephone number plus the following statement: |
| | **"AS-BUILT DRAWING"**<br>"I hereby certify that the as-built location information of the potable water, reclaimed water, wastewater and drainage facilities shown on these drawings conforms to the minimum technical standards for land surveying in the State of Florida, Chapter 5J-17.050(10)(i) (Florida Administrative Code), as adopted by the Department of Agriculture and Consumer |

| | |
|---|---|
| | Services, Board of Professional Surveyors and Mappers, and that said as-builts are true and correct to the best of our knowledge and belief." |
| | All coordinates shall be in the "NAD 83 State Plane Florida East FIPS 0901 Feet" coordinate system. All elevations shall be based on NAVD88. The benchmark used to establish vertical control will be provided. |
| | Indicate demarcation point between facilities owned by City versus private ownership. |
| | Privately owned facilities shall be shown with the same level of detail as City facilities. |
| **State plane coordinates shall be provided for all public and private facilities as applicable, including but not limited to:** | |
| | • All Drainage structures – Inlets and Manholes |
| | • Control Structures |
| | • Headwalls |
| | • Conflict Structures |
| | • All valves – Isolation, Tapping, Hydrant, Blow-Off, Air Release, Control, and the center of Double Detector Check Assemblies |
| | • Hydrant nut |
| | • All pipe fittings, including tapping sleeves, wyes, and material adapters |
| | • Line stops |
| | • Center of lift station wet well and valve pit |
| | • Significant pipe deflections |
| | • Water service meter boxes |
| | • Sewer service cleanouts |
| | • Sewer maintenance access structures |
| | • Master meters |
| | • Water storage tanks |
| | • Wells |
| | • Connection(s) to existing or private facilities |
| | • Corners (vertices) of easements granted to the City as part of the project |
| | • Top of pipe locations every 200 feet along a straight run of pipe |
| | • Beginning and end points of casing pipe |
| | • Beginning and end points of pipe lining |
| | • Private and existing facilities in relation to the project, including air valves, hydrants, meters, pump or grinder stations, storage tanks, backflow preventers, clean outs, maintenance access structures, and wells. |

| | |
|---|---|
| **Show elevations to the nearest one hundredth of a foot for paving and grading items including but not limited to:** | |
| | • Finished floors as applicable |
| | • High and low points at edges of pavement, crowns of road and critical new locations, e.g. points of curvature, points of tangency, and midpoints of all intersections. |
| | • Curbs, gutters, sidewalks, and driveways |
| | • Swales at enough intermediate points to confirm slope consistency and conformance to the plans and details. |
| **Show elevations and dimensions to the nearest one hundredth of a foot for all drainage improvements including but not limited to:** | |
| | • Drainage structures with rim, invert, and bottom-of-inside-of-structure |
| | • Drainage pipe types, sizes, lengths, inverts and slopes |
| | • Control Structure rims and inverts with weirs and bleeders |
| | • Exfiltration trenches including lengths, widths, heights and elevations |
| | • Headwalls including inverts and tops-of-headwall |
| | • Pollution retardant baffles |
| | • All approved cross sections |
| | • Lakes and canal tops of bank, edges of water, and deep cut lines (minimum of 100 ft on center unless otherwise specified) |
| | • Retention/detention areas taken at tops of bank and toes of slope |
| **Show elevations and dimensions to the nearest one hundredth of a foot for all water and sewer improvements including but not limited to:** | |
| | • Conflict structure rims and inverts |
| | • For new water mains, finish grade elevation above pipe, minimum horizontal clearance, and top/bottom of pipe to demonstrate proper clearance with respect to other facilities (parallel or crossing), in accordance with 62-555.314 F.A.C. |
| | • Tops and bottoms of water mains and reclaimed water pipe elevations every 200 feet along straight runs and their types, sizes, and lengths. |
| | • Top of valves, fittings, and service saddles |
| | • Meter sizes and meter boxes |
| | • Blow offs |
| | • Fire hydrants |
| | • Double detector check valves and back flow preventers |
| | • Sanitary sewer manhole rims and inverts |
| | • Gravity sanitary sewer pipe types, sizes, inverts, lengths, and slopes between manholes |

| | |
|---|---|
| | • For new sewer mains, finish grade elevation above pipe, minimum horizontal clearance, and top/bottom of pipe to demonstrate proper clearance with respect to water lines (parallel or crossing), in accordance with 62-604.400 F.A.C. |
| | • Tops and bottoms of force main elevations every 200 feet along straight runs and their sizes, types, and lengths. |
| | • Wyes on sanitary sewer gravity mains |
| | • Wastewater cleanout sizes and materials |
| | • Lift station wet well top slabs, rims, influent and effluent pipe inverts, bottom-of-inside-of-structure, valve boxes, and control set points. |
| | • At all vertical deflection points |
| | Provide as-built utility crossings information directly above proposed crossing. |
| | Show all abandoned-in-place pipes including the extent and method of abandonment, e.g. grouting. |
| | Sample points for water disinfection need to be clearly shown on the as-builts and correspond to the bacteriological report. |
| **Submit GIS file updating the City's GIS database cataloging the constructed infrastructure. The file shall meet the following requirements:** | |
| | Update in accordance with the City's latest geodatabase and corresponding Geodatabase Data Dictionary |
| | Enter location and attribute information collected from survey field work and final As-Built Drawings into a City issued geodatabase template *(The City shall provide a template in Microsoft Excel format to be used for data entry).* |
| | Adhere to the City's geodatabase schema for feature classes, related tables, and domain tables. |
| **The asset types to be collected and delivered shall include, but not limited to, the following assets:** | |
| | • Control valves |
| | • Exfiltration trenches |
| | • Gravity mains |
| | • Pressurized mains |
| | • Inlets |
| | • Manholes |
| | • Network structures (including pump stations or pipe ends) |
| | • Inline valves |
| | • Outfalls |
| **Provide Paving and Marking as-builts for the following:** | |

| | |
|---|---|
| | • Signing and Striping locations where installed different from plans |
| **Cad Requirements:** | |
| **The CAD drawing will have separate layers for new or adjusted, existing, and abandoned facilities including:** | |
| | • Water lines |
| | • Valves |
| | • Fire Hydrants |
| | • Water Services |
| | • Meters |
| | • Gravity Sewer Lines |
| | • Sanitary Manholes |
| | • Force Main |
| | • Lift Stations |
| | • Sewer Laterals |
| | • Drainage Lines |
| | • Drainage Structures |
| **All CAD line work shall be drawn as outlined below:** | |
| | • Line work shall be snapped to end features |
| | • Line work shall be continuous starting at one feature and ending at another feature. |
| | • Water and Force main line work will start and stop at fittings but be continuous through pipe deflections, lateral and service connections. |
| | • Gravity and Drainage line work will start and stop at structures but be continuous through laterals. |
| | • There will be no duplicate lines representing one feature. |
| | • CAD format submissions shall be using AutoCAD/AutoCAD Civil 3D 2010 or later. |
| | • Once approved by the Engineer, send final to City as an AutoCAD “e-transmit” including all XREF’s, Image files, Plot Styles, and Text Styles. |

# 01320 Supplement 3 - Geodatabase Data Dictionary

**Geodatabase Documentation**

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**Date:** Tuesday, January 14, 2025
**Time:** 8:59:24 AM

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**Summary Information and Links**

3 Feature Datasets and 41 Feature Classes
No Topology Datasets
No Geometric Networks
No Rasters
60 Tables (Object Classes)
60 Relationship Classes
100 Domains

---

**Feature Datasets and Child Classes**

Sewer - Feature Dataset

ssBend - Simple
ssCleanOut - Simple
ssControlValve - Simple
ssEmergencyOverflow - Simple
ssFitting - Simple
ssGravityMain - Simple
ssLateralLine - Simple
ssManhole - Simple
ssNetworkStructure - Simple
ssPressurizedMain - Simple
ssPumpStation - Simple
ssServiceConnection - Simple
ssSystemValve - Simple

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Stormwater - Feature Dataset

swControlValve - Simple
swDischargePoint - Simple
swDrainageWell - Simple
swExfiltrationTrench - Simple
swGravityMain - Simple
swInlet - Simple
swManhole - Simple
swNetworkStructure - Simple
swPollutionControlDevice - Simple
swPollutionControlStructure - Simple
swPond - Simple
swPumpStation - Simple
swUnknownPoint - Simple
swWeirStructure - Simple

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Water - Feature Dataset

wControlValve - Simple
wCurbStopValve - Simple
wFitting - Simple
wHydrant - Simple
wLateralLine - Simple
wMeterBox - Simple
wPressurizedMain - Simple
wPump - Simple
wRepairClamp - Simple
wServiceConnection - Simple
wServiceLocation - Simple
wStructure - Simple
wSystemValve - Simple
wTestStation - Simple

---

**Rasters**

---

**Workspace-Level Tables and Feature Classes**

sspsAlarm - Table
sspsBuilding - Table
sspsCamera - Table
sspsChemicalSystem - Table
sspsCivil - Table
sspsCommunicationEquipment - Table
sspsControlPanel - Table
sspsDebrisScreen - Table
sspsDryWell - Table
sspsFencing - Table
sspsFlowMeter - Table
sspsFuelTank - Table
sspsGenerator - Table
sspsLevelInstrument - Table
sspsMiscInstrument - Table
sspsPiping - Table
sspsPressureInstrument - Table
sspsPump - Table
sspsPumpStationARV - Table
sspsPumpStationValve - Table
sspsSCADAEquipment - Table
sspsScrubber - Table
sspsTransferSwitch - Table
sspsTransformer - Table
sspsUPS - Table
sspsValveVault - Table
sspsVentilation - Table
sspsVFD - Table
sspsWatQualityPanel - Table
sspsWetWell - Table
swpsAlarm - Table
swpsBuilding - Table
swpsCamera - Table
swpsChemicalSystem - Table
swpsCivil - Table
swpsCommunicationEquipment - Table
swpsControlPanel - Table
swpsDebrisScreen - Table
swpsDryWell - Table
swpsFencing - Table
swpsFlowMeter - Table
swpsFuelTank - Table
swpsGenerator - Table
swpsLevelInstrument - Table
swpsMiscInstrument - Table
swpsPiping - Table
swpsPressureInstrument - Table
swpsPump - Table
swpsPumpStationARV - Table
swpsPumpStationValve - Table
swpsSCADAEquipment - Table
swpsScrubber - Table
swpsTransferSwitch - Table
swpsTransformer - Table
swpsUPS - Table
swpsValveVault - Table
swpsVentilation - Table
swpsVFD - Table
swpsWatQualityPanel - Table
swpsWetWell - Table

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**Relationship Classes**

sspsAlarmTossPumpStation

sspsBuildingTossPumpStation
sspsCameraTossPumpStation
sspsChemicalSystemTossPumpStation
sspsCivilTossPumpStation
sspsCommunicationEquipmentTossPumpStation
sspsControlPanelTossPumpStation
sspsDebrisScreenTossPumpStation
sspsDryWellTossPumpStation
sspsFencingTossPumpStation
sspsFlowMeterTossPumpStation
sspsFuelTankTossPumpStation
sspsGeneratorTossPumpStation
sspsLevelInstrumentTossPumpStation
sspsMiscInstrumentTossPumpStation
sspsPipingTossPumpStation
sspsPressureInstrumentTossPumpStation
sspsPumpStationARVTossPumpStation
sspsPumpStationValveTossPumpStation
sspsPumpTossPumpStation
sspsSCADAEquipmentTossPumpStation
sspsScrubberTossPumpStation
sspsTransferSwitchTossPumpStation
sspsTransformerTossPumpStation
sspsUPSTossPumpStation
sspsValveVaultTossPumpStation
sspsVentilationTossPumpStation
sspsVFDTossPumpStation
sspsWatQualityPanelTossPumpStation
sspsWetWellTossPumpStation
swpsAlarmToswPumpStation
swpsBuildingToswPumpStation
swpsCameraToswPumpStation
swpsChemicalSystemToswPumpStation
swpsCivilToswPumpStation
swpsCommunicationEquipmentToswPumpStation
swpsControlPanelToswPumpStation
swpsDebrisScreenToswPumpStation
swpsDryWellToswPumpStation
swpsFencingToswPumpStation
swpsFlowMeterToswPumpStation
swpsFuelTankToswPumpStation
swpsGeneratorToswPumpStation
swpsLevelInstrumentToswPumpStation
swpsMiscInstrumentToswPumpStation
swpsPipingToswPumpStation
swpsPressureInstrumentToswPumpStation
swpsPumpStationARVToswPumpStation
swpsPumpStationValveToswPumpStation
swpsPumpToswPumpStation
swpsSCADAEquipmentToswPumpStation
swpsScrubberToswPumpStation
swpsTransferSwitchToswPumpStation
swpsTransformerToswPumpStation
swpsUPSToswPumpStation
swpsValveVaultToswPumpStation
swpsVentilationToswPumpStation
swpsVFDToswPumpStation
swpsWatQualityPanelToswPumpStation
swpsWetWellToswPumpStation

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**Domains**

AncillaryRoleDomain
AssetManager
AssetOwner
BackflowDeviceType
BackflowInspectionStatus
BooleanDomain
BooleanSymbolValue
ControlSetRef
Datum

DC_METHOD
Direction
EasementStatus
EasementType
EnabledDomain
HorizontalAlignment
InventoryClass
LastEditor
piAccessDiameter
piAccessType
piActiveStatus
piCleanoutTypes
piConditionIIMM
piConditionPACP
piControlValveType
piDischargePointType
piFittingType
piInletTypes
piLiningMethod
piManholeCoverShape
piManholeCoverType
piManholeType
piPipeDiameter
piPipeMaterial
piPipeShape
piSystemValveType
piValveTurnDirection
piValveTurnDirection
piValveUse
PSVerticalSystem
ServiceProviderAgency
SeverityIndicator
ssNetworkStructureType
ssPumpStationType
ssValveUse
ssWaterType
swBottomType
swConflictType
swIllicitConnectionStatus
swManufacturer
swNetworkStructureType
swOpenPosition
swOutfallLocation
swPipeDirection
swPipeType
swPollControlDeviceType
swPollControlStructureType
swPondType
swWeirShape
swWeirType
swWellAccessShape
ValueMethod
vertAlarmType
vertBearingType
vertCommunicationEquipment
vertCurrentState
vertElectricalPhase
vertElementFunction
vertExternalCoating
vertFenceType
vertFlowInstrumentType
vertFlowUnits
vertImpellerMaterial
vertInstrumentCommProtocol
vertInstrumentVoltage
vertLevelInstrumentType
vertLevelUnits
vertNEMARating
vertNormalOperatingPosition
vertPanelMaterial
vertPowerSource
vertPressureInstrumentType
vertPressureUnits

vertPSSCADAEquipmentType
vertPSValveFunction
vertPumpMode
vertPumpType
vertTankMaterial
vertValveControl
vertVoltage
wDimension
wLateralType
wLongShort
wManufacturer
wMaterial
wPumpType
wServicePointType
wShape
wStructureType
wWaterType
YesNo

---

### Sewer - FeatureDataset

**Name** Sewer
**Description** Sewer

---

### ssBend - FeatureClass

**Name** ssBend
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss Bends
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Bends in sanitary sewer.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns | AssetOwner | 1 | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | the asset | | | | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| INLETDIAM | Double | 8 | Inlet Diameter | Diameter of pump inlet | piPipeDiameter | | true | | |
| DISCHDIAM | Double | 8 | Discharge Diameter | Diameter of pump discharge | piPipeDiameter | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BENDANGLE | String | 3 | Angle | Angle | | | true | | |
| BENDRADIUS | String | 3 | Radius | Radius | | | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | 0 | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| SIZENOTES | String | 10 | Size Notes | Comments or notes relevant to the size of asset | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### ssCleanOut - FeatureClass

**Name** ssCleanOut
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss Clean Outs
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Sanitary sewer cleanout access points.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| DEVICETYPE | String | 30 | Device Type | The type of backflow device reported | piCleanoutTypes | Cleanout | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be | piConditionPACP | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | calculated within a Cityworks Inspection and updated from there to GIS. | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| ACCESSDIAM | Double | 8 | Access Diameter | Diameter of the access opening | piAccessDiameter | | true | | |
| ACCESSMAT | String | 20 | Access Material | The material used to construct the access cover | piPipeMaterial | | true | | |
| ACCESSTYPE | String | 20 | Access Type | Method for accessing the opening | piAccessType | Cover | true | | |
| INTDEPTH | Double | 8 | Interior Depth | Interior Depth | | | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | 0 | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| SIZENOTES | String | 10 | Size Notes | Comments or notes relevant to the size of asset | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

**ssControlValve - FeatureClass**

| | |
|---|---|
| **Name** | ssControlValve |
| **ShapeType** | Point |
| **FeatureType** | Simple |
| **AliasName** | ss Control Valves |
| **HasM** | false |
| **HasZ** | false |
| **HasAttachments** | false |
| **Description** | Sanitary sewer network valves that have a flow control mechanism. |

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| VALVETYPE | String | 30 | Valve Type | Type of control valve | piControlValveType | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | 0 | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### ssEmergencyOverflow - FeatureClass

**Name** ssEmergencyOverflow
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss Emergency Overflows
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Sanitary sewer emergency overflow locations.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| DISCHRGTYP | String | 50 | Discharge Type | The type of discharge | piDischargePointType | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | asset management analysis. | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| AVGDISCH | String | 10 | Average Discharge | Average Discharge | | | true | | |
| DISCHID | String | 20 | Discharge Identifier | Discharge Identifier | | | true | | |
| PEAKDISCH | String | 10 | Peak Discharge | Peak Discharge | | | true | | |
| PERMIT | String | 30 | Permitted | A flag used to indicate whether the discharge point is permitted | YesNo | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PERMITID | String | 20 | Permit Identifier | Unique permit identifier | | | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | 0 | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### ssFitting - FeatureClass

**Name** ssFitting
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss Fittings
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Sanitary sewer network features that connect segments of pipe.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FITTINGTYPE | String | 50 | Fitting Type | The type of fitting | piFittingType | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | 0 | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| SIZENOTES | String | 10 | Size Notes | Comments or notes relevant to the size of asset | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### ssGravityMain - FeatureClass

**Name** ssGravityMain
**ShapeType** Polyline
**FeatureType** Simple
**AliasName** ss Gravity Mains
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Sanitary gravity sewer conveyance pipes.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (FEATURE_ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| FROMMH | String | 20 | From Manhole | The unique idendentifier of the From Manhole (upstream manhole) | | | true | | |
| TOMH | String | 20 | To Manhole | The unique idendentifier of the To Manhole (downstream manhole) | | | true | | |
| WATERTYPE | String | 30 | Water Type | Identifies the type of water in the pipe | ssWaterType | | true | | |
| MAINSHAPE | String | 50 | Main Shape | The shape of the main | piPipeShape | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| MATERIAL | String | 20 | Pipe Material | The construction material of the asset | piPipeMaterial | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| UPELEV | Double | 8 | Upstream Elevation | The upstream invert elevation of the pipe | | | true | | |
| DOWNELEV | Double | 8 | Downstream Elevation | The downstream invert elevation of the pipe | | | true | | |
| SLOPE | Double | 8 | Slope | The slope of the pipe. | | | true | | |
| SUMFLOW | Double | 8 | Flow Summary | The sum of flow | | | true | | |
| LINED | String | 3 | Lined | Indicates if the asset is lined | YesNo | | true | | |
| LINEDYEAR | String | 4 | Year Lined | The year the asset was last lined | | | true | | |
| LINERTYPE | String | 20 | Liner Type | The method used to line the pipe | piLiningMethod | | true | | |
| SEWERBOOKSHEET | String | 8 | Sewer Book Sheet | Sewer book sheet number containing asset | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### ssLateralLine - FeatureClass

**Name** ssLateralLine
**ShapeType** Polyline
**FeatureType** Simple
**AliasName** ss Lateral Lines
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Sanitary sewer lateral pipes.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| WATERTYPE | String | 30 | Water Type | Identifies the type of water in the pipe | ssWaterType | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| MATERIAL | String | 20 | Pipe Material | The construction material of the asset | piPipeMaterial | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| LINED | String | 3 | Lined | Indicates if the asset is lined | YesNo | | true | | |
| LINEDYEAR | String | 4 | Year Lined | The year the asset was last lined | | | true | | |
| LINERTYPE | String | 30 | Liner Type | The method used to line the pipe | piLiningMethod | | true | | |
| DISTANCE | Integer | 4 | Distance | Distance that the lateral extends from the gravity main | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | to the asset | | | | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |

---

### ssManhole - FeatureClass

**Name** ssManhole
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss Manholes
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Manhole features may connect two or more pipes and control the flow of water in the network through pipe elevations.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| MHTYPE | String | 15 | Manhole Type | The type of manhole | piManholeType | | true | | |
| WATERTYPE | String | 30 | Water Type | Identifies the type of water in the pipe | ssWaterType | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | copied to Cityworks work order Location Details field when attached to a work order. | | | | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| CVTYPE | String | 20 | Cover Type | The type of manhole cover | piManholeCoverType | | true | | |
| WALLMAT | String | 25 | Wall Material | The material used to construct the manhole wall | piPipeMaterial | | true | | |
| CUTDEPTH | Double | 8 | Pavement Cut Depth | Pavement cut depth | | | true | | |
| LINED | String | 3 | Lined | Indicates if the asset is lined | YesNo | | true | | |
| LINEDYEAR | String | 4 | Year Lined | The year the asset was last lined | | | true | | |
| SUMFLOW | Double | 8 | Flow Summary | The sum of flow | | | true | | |
| FLOWDIR | String | 25 | Flow Direction | Defines the direction of flow using geometric | Direction | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | flow direction values | | | | | |
| RIMELEV | Double | 8 | Rim Elevation | The elevation of the manhole rim | | | true | | |
| HIGHELEV | Double | 8 | High Pipe Elevation | High pipe elevation inside manhole | | | true | | |
| DEPTH | Double | 8 | Depth | The depth of the manhole | | | true | | |
| BOTTOMELEV | Double | 8 | Bottom of Structure Elevation | The bottom of structure elevation of the manhole | | | true | | |
| INVERT1ELEV | Double | 8 | Invert1 Elevation | The invert elevation | | | true | | |
| INVERT1DIR | String | 50 | Invert 1 Direction | Invert 1 Direction | Direction | | true | | |
| INVERT1SIZE | Double | 8 | Invert 1 Size | Invert 1 Size | piPipeDiameter | | true | | |
| INVERT1MAT | String | 50 | Invert1 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT2ELEV | Double | 8 | Invert2 Elevation | The invert elevation | | | true | | |
| INVERT2DIR | String | 50 | Invert 2 Direction | Invert 2 Direction | Direction | | true | | |
| INVERT2SIZE | Double | 8 | Invert 2 Size | Invert 2 Size | piPipeDiameter | | true | | |
| INVERT2MAT | String | 50 | Invert2 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT3ELEV | Double | 8 | Invert 3 Elevation | The invert elevation | | | true | | |
| INVERT3DIR | String | 50 | Invert 3 Direction | Invert 3 Direction | Direction | | true | | |
| INVERT3SIZE | Double | 8 | Invert 3 Size | Invert 3 Size | piPipeDiameter | | true | | |
| INVERT3MAT | String | 50 | Invert 3 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT4ELEV | Double | 8 | Invert 4 Elevation | The invert elevation | | | true | | |
| INVERT4DIR | String | 50 | Invert 4 Direction | Invert 4 Direction | Direction | | true | | |
| INVERT4SIZE | Double | 8 | Invert 4 Size | Invert 4 Size | piPipeDiameter | | true | | |
| INVERT4MAT | String | 50 | Invert 4 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT5ELEV | Double | 8 | Invert 5 Elevation | The invert elevation | | | true | | |
| INVERT5DIR | String | 50 | Invert 5 Direction | Invert 5 Direction | Direction | | true | | |
| INVERT5SIZE | Double | 8 | Invert 5 Size | Invert 5 Size | piPipeDiameter | | true | | |
| INVERT5MAT | String | 50 | Invert 5 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT6ELEV | Double | 8 | Invert 6 Elevation | The invert elevation | | | true | | |
| INVERT6DIR | String | 50 | Invert 6 Direction | Invert 6 Direction | Direction | | true | | |
| INVERT6SIZE | Double | 8 | Invert 6 Size | Invert 6 Size | piPipeDiameter | | true | | |
| INVERT6MAT | String | 50 | Invert 6 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### ssNetworkStructure - FeatureClass

**Name** ssNetworkStructure
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss Network Structures
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Sanitary sewer network structures such as pump stations or pipe ends.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| STRUCTTYPE | String | 30 | Structure Type | The type of structure | ssNetworkStructureType | | true | | |
| NAME | String | 100 | Name | The name of the asset or structure | | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | asset management analysis. | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| OPDATE | Date | 8 | Operational Date | Date the facility was put into service | | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| BOTTOMELEV | Double | 8 | Bottom of Structure Elevation | The bottom of structure elevation of the manhole | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PIPELEV | Double | 8 | Top of Pipe Elevation | The elevation of the top of the pipe within the network structure | | | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | 0 | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### ssPressurizedMain - FeatureClass

**Name** ssPressurizedMain
**ShapeType** Polyline
**FeatureType** Simple
**AliasName** ss Pressurized Mains
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Pressurized sanitary sewer mains.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (FEATURE_ID) | Former asset identifier. To be | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | moved to a related table. | | | | | |
| FROMSTRUC | String | 20 | From Structure | The unique identifier from the upstream structure | | | true | | |
| TOSTRUC | String | 20 | To Structure | The unique identifier from the downstream structure | | | true | | |
| WATERTYPE | String | 30 | Water Type | Identifies the type of water in the pipe | ssWaterType | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| MATERIAL | String | 20 | Pipe Material | The construction material of the asset | piPipeMaterial | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | analysis and repair/replace decisions. | | | | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Number, or Improvement Number under which the asset was installed | | | | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| LINED | String | 3 | Lined | Indicates if the asset is lined | YesNo | | true | | |
| LINEDYEAR | String | 4 | Year Lined | The year the asset was last lined | | | true | | |
| LINERTYPE | String | 20 | Liner Type | The method used to line the pipe | piLiningMethod | | true | | |
| CASING | String | 5 | Casing | Identifies whether the asset is enclosed in casing | YesNo | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |

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### ssPumpStation - FeatureClass

**Name** ssPumpStation
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss Pump Stations
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Sanitary sewer pump stations.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| NAME | String | 100 | Name | The name of the asset or structure | | | true | | |
| PSTYPE | String | 30 | Pump Station Type | Pump Station Type | ssPumpStationType | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | repair/replace decisions. | | | | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | asset | | | | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| OPDATE | Date | 8 | Operational Date | Date the facility was put into service | | | true | | |
| CPSETA | String | 50 | Control Point A | Control Point A | ControlSetRef | | true | | |
| CPSETB | String | 50 | Control Point B | Control Point B | ControlSetRef | | true | | |
| CPSETC | String | 50 | Control Point C | Control Point C | ControlSetRef | | true | | |
| CPSETD | String | 50 | Control Point D | Control Point D | ControlSetRef | | true | | |
| CPAXCOORD | Double | 8 | Control Point A X Coord | Control Point A X Coord | | | true | | |
| CPAYCOORD | Double | 8 | Control Point A Y Coord | Control Point A Y Coord | | | true | | |
| CPAZCOORD | Double | 8 | Control Point A Z Coord | Control Point A Z Coord | | | true | | |
| CPBXCOORD | Double | 8 | Control Point B X Coord | Control Point B X Coord | | | true | | |
| CPBYCOORD | Double | 8 | Control Point B Y Coord | Control Point B Y Coord | | | true | | |
| CPBZCOORD | Double | 8 | Control Point B Z Coord | Control Point B Z Coord | | | true | | |
| CPCXCOORD | Double | 8 | Control Point C X Coord | Control Point C X Coord | | | true | | |
| CPCYCOORD | Double | 8 | Control Point C Y Coord | Control Point C Y Coord | | | true | | |
| CPCZCOORD | Double | 8 | Control Point C Z Coord | Control Point C Z Coord | | | true | | |
| CPDXCOORD | Double | 8 | Control Point D X Coord | Control Point D X Coord | | | true | | |
| CPDYCOORD | Double | 8 | Control Point D Y Coord | Control Point D Y Coord | | | true | | |
| CPDZCOORD | Double | 8 | Control Point D Z Coord | Control Point D Z Coord | | | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | 0 | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| POINT_X | Double | 8 | POINT_X | POINT_X | | | true | | |
| POINT_Y | Double | 8 | POINT_Y | POINT_Y | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### ssServiceConnection - FeatureClass

**Name** ssServiceConnection
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss Service Connections
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** A point of service at the end of a lateral where sanitary sewer service is connected.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| FACILITYNAME | String | 100 | Facility Name | The name of the facility | | | true | | |
| LARGEMETER | SmallInteger | 2 | Large Meter Flag | Large Meter Flag | BooleanDomain | 0 | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| SUMFLOW | Double | 8 | Flow Summary | The sum of flow | | | true | | |
| ACCOUNTID | String | 20 | Account ID | Utility billing account identifier | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LOCATIONID | String | 20 | Location Identifier | Location Identifier | | | true | | |
| CRITICAL | SmallInteger | 2 | Critical Customer | Flag to indicate if this is a critical customer | BooleanDomain | 0 | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### ssSystemValve - FeatureClass

**Name** ssSystemValve
**ShapeType** Point
**FeatureType** Simple
**AliasName** ss System Valves
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Sanitary sewer network valves used to isolate mains for maintenance and repair.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| VALVETYPE | String | 50 | Valve Type | Type of control valve | piSystemValveType | | true | | |
| VALVEUSE | Integer | 4 | Valve Use | Indicates the use purpose of valve | ssValveUse | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| ACTIVESTATUS | String | 20 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Maintained By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| PROJECTNUM | String | 32 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 32 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 32 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| INMH | String | 5 | In Manhole | Indicates if the asset is located inside a manhole | YesNo | | true | | |
| BYPASSVALVE | SmallInteger | 2 | Bypass Valve? | Identifies whether the asset is a bypass valve | BooleanDomain | 0 | true | | |
| CLOCKTOCLOSE | SmallInteger | 2 | Clockwise To Close | Clockwise To Close | BooleanDomain | 1 | true | | |
| NORMALLYOPEN | SmallInteger | 2 | Normally Open? | Identifies whether the asset is normally open | BooleanDomain | 1 | true | | |
| TURNSTOCLOSE | Integer | 4 | Turns to Close | The number of turns required to close the asset | | | true | | |
| OPERABLE | SmallInteger | 2 | Operable | Indicates if the asset is operable | BooleanDomain | 1 | true | | |
| CURROPEN | SmallInteger | 2 | Currently Open? | Identifies whether the asset is currently open | BooleanDomain | 1 | true | | |
| XYCONVERTED | String | 5 | X, Y Converted | X, Y Converted | YesNo | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| TOPNUTELEV | Double | 8 | Top Nut Elevation | The elevation of the top nut | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | AncillaryRoleDomain | 0 | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | EnabledDomain | 1 | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 200 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### Stormwater - FeatureDataset

**Name** Stormwater
**Description** Dataset containing the City of Fort Lauderdale's stormwater infrastructure geodata
**Tags** Ft. lauderdale, Stormwater

### swControlValve - FeatureClass

**Name** swControlValve
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Control Valves
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Stormwater network valves that have a flow control mechanism.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| VALVETYPE | String | 30 | Valve Type | Type of control valve | piControlValveType | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | attached to a work order. | | | | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | swManufacturer | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties are tied to serial numbers for Tidal Valves. | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| TOPELEV | Double | 8 | Top Elevation | The Top Invert Elevation | | | true | | |
| BOTTOMELEV | Double | 8 | Bottom Elevation | The Bottom Invert Elevation | | | true | | |
| ORIENTATION | String | 20 | Directional Orientation | The cardinal direction of flow | Direction | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### swDischargePoint - FeatureClass

**Name** swDischargePoint
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Discharge Points
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Stormwater discharge points.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| DISCHRGTYP | String | 50 | Discharge Type | The type of stormwater discharge | piDischargePointType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| GRATE | String | 3 | Grate? | Identifies whether the outfall has a grate | YesNo | | true | | |
| OUTFALLLOC | String | 15 | Outfall Location | Location of the outfall relative to its connected drainage asset | swOutfallLocation | | true | | |
| DISCHID | String | 20 | Discharge Identifier | Discharge Identifier | | | true | | |
| AVGDISCH | String | 10 | Average Discharge | Average Discharge | | | true | | |
| PEAKDISCH | String | 10 | Peak Discharge | Peak Discharge | | | true | | |
| PERMIT | String | 30 | Permitted | A flag used to indicate whether the discharge point is permitted | YesNo | | true | | |
| PERMITID | String | 20 | Permit Identifier | Unique permit identifier | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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**swDrainageWell - FeatureClass**

| | |
|---|---|
| **Name** | swDrainageWell |
| **ShapeType** | Point |

**FeatureType** Simple
**AliasName** sw Drainage Wells
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Stormwater drainage wells.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| DISCHRGTYP | String | 50 | Discharge Type | The type of stormwater discharge | piDischargePointType | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | (high risk) and is used to prioritize investments. | | | | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| DISCHID | String | 20 | Discharge Identifier | Discharge Identifier | | | true | | |
| AVGDISCH | String | 10 | Average Discharge | Average Discharge | | | true | | |
| PEAKDISCH | String | 10 | Peak Discharge | Peak Discharge | | | true | | |
| PERMIT | String | 30 | Permitted | A flag used to indicate whether the discharge point is permitted | YesNo | | true | | |
| PERMITID | String | 20 | Permit Identifier | Unique permit identifier | | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| TOPCASEELEV | Double | 8 | Top Casing Elevation | The top of casing elevation | | | true | | |
| SOLIDDEPTH | Double | 8 | Solid Pipe Depth | The solid pipe depth of the well | | | true | | |
| PERFDEPTH | Double | 8 | Perforated Depth | The perforated pipe depth of the well | | | true | | |
| BOTTOMDEPTH | Double | 8 | Bottom Depth | The bottom elevation of the well | | | true | | |
| STRUCTWIDTH | Double | 8 | Structure Width | The width of the well structure | | | true | | |
| STRUCTLENGTH | Double | 8 | Structure Length | The length of the well structure | | | true | | |
| STRUCTDEPTH | Double | 8 | Structure Depth | The depth of the well structure | | | true | | |
| RECCHAMWIDTH | Double | 8 | Receiving Chamber Width | The width of the receiving chamber of the well | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WELLCHAMWIDTH | Double | 8 | Well Chamber Width | The width of the well chamber | | | true | | |
| WELLCHAMDIAM | Double | 8 | Well Chamber Diameter | The diameter of the well chamber | | | true | | |
| ACCESSRECSHAPE | String | 20 | Receiving Access Shape | The shape of the receiving chamber access point | swWellAccessShape | | true | | |
| ACCESSRECDIAM | Double | 8 | Receiving Chamber Diameter | The diameter of the receiving chamber for circular access points | | | true | | |
| ACCESSRECWIDTH | Double | 8 | Receiving Access Width | The width of the receiving chamber access point | | | true | | |
| ACCESSRECLENGTH | Double | 8 | Receiving Access Length | The length of the receiving chamber access point | | | true | | |
| ACCESSWELLSHAPE | String | 20 | Well Access Shape | The shape of the receiving chamber access point | swWellAccessShape | | true | | |
| ACCESSCHAMDIAM | Double | 8 | Well Chamber Diameter | The diameter of the receiving chamber for circular access points | | | true | | |
| ACCESSWELLWIDTH | Double | 8 | Well Access Width | The width of the receiving chamber access point | | | true | | |
| ACCESSWELLLENGTH | Double | 8 | Well Access Length | The length of the receiving chamber access point | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

**swExfiltrationTrench - FeatureClass**

**Name** swExfiltrationTrench
**ShapeType** Polygon

**FeatureType** Simple
**AliasName** sw Exfiltration Trenches
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** A stormwater exfiltration trench, also known as french drains. These typically collect water from manholes, inlets and into the ground.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | pink on the Cityworks work order. | | | | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| BEDMATERIAL | String | 50 | Bed Material | The material on the bed of the trench | | | true | | |
| LENGTH | Double | 8 | Length | The length of the trench | | | true | | |
| DEPTH | Double | 8 | Depth | The depth of the trench | | | true | | |
| WIDTH | Double | 8 | Width | The widith of the trench | | | true | | |
| VOLUME | Double | 8 | Volume | The volume of the trench | | | true | | |
| BOTTOMELEV | Double | 8 | Invert Elevation | The bottom elevation | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

**Name** swGravityMain
**ShapeType** Polyline
**FeatureType** Simple
**AliasName** sw Gravity Mains
**HasM** true
**HasZ** false
**HasAttachments** false
**Description** swGravityMain

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| FROMMH | String | 20 | From Manhole | The unique idendentifier of the From Manhole (upstream manhole) | | | true | | |
| TOMH | String | 20 | To Manhole | The unique idendentifier of the To Manhole (downstream manhole) | | | true | | |
| PIPETYPE | String | 50 | Pipe Type | The type of pipe | swPipeType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| MATERIAL | String | 20 | Material | The construction material of the asset | piPipeMaterial | | true | | |
| MAINSHAPE | String | 50 | Main Shape | The shape of the main | piPipeShape | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| WIDTH | Double | 8 | Width | The width of the asset | piPipeDiameter | | true | | |
| UPELEV | Double | 8 | Upstream Elevation | The upstream invert elevation of the pipe | | | true | | |
| DOWNELEV | Double | 8 | Downstream Elevation | The downstream invert elevation of the pipe | | | true | | |
| SLOPE | Double | 8 | Slope | The slope of the pipe. | | | true | | |
| BAFFLE | String | 3 | Baffle? | Identifies whether a baffle is associated with the pipe | YesNo | | true | | |
| SUMFLOW | Double | 8 | Flow Summary | The sum of flow | | | true | | |
| LINEDYEAR | String | 4 | Year Lined | The year the pipe was last lined | | | true | | |
| LINERTYPE | String | 20 | Liner Type | The method used to line the pipe | piLiningMethod | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### swInlet - FeatureClass

**Name** swInlet
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Inlets
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Stormwater inlets typically found along the side or roads or in drainage swales.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| INLETTYPE | String | 50 | Inlet Type | The type of stormwater inlet | piInletTypes | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | relied upon for asset management analysis. | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| FDOTTYPE | String | 50 | FDOT Type | The Florida Department of Transporation manhole structure type | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MANUFACTYPE | String | 50 | Manufacturer Type | The manufacturer model type of the manhole structure | | | true | | |
| CVTYPE | String | 50 | Cover Type | The type of stormwater manhole cover | piManholeCoverType | | true | | |
| ACCESSTYPE | String | 20 | Access Type | Method for accessing the opening | piAccessType | Grate | true | | |
| ACCESSDIAM | Double | 8 | Access Diameter | Access diameter for the inlet | piAccessDiameter | | true | | |
| ACCESSMAT | String | 20 | Access Material | The material used to construct the access cover | piPipeMaterial | | true | | |
| RIMELEV | Double | 8 | Rim Elevation | The elevation of the inlet rim | | | true | | |
| BOTTOMELEV | Double | 8 | Bottom Elevation | The elevation of the bottom of the inlet. | | | true | | |
| INLETLENGTH | SmallInteger | 2 | Inlet Length | The length of the inlet | | | true | | |
| INLETWIDTH | SmallInteger | 2 | Inlet Width | The width of the inlet | | | true | | |
| INLETDEPTH | SmallInteger | 2 | Inlet Height | The depth of the inlet | | | true | | |
| INVERT1ELEV | Double | 8 | Invert1 Elevation | The invert elevation | | | true | | |
| INVERT1MAT | String | 20 | Invert1 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT1SHAPE | String | 50 | Invert1 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT1DIAM | Double | 8 | Invert1 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT1WIDTH | Double | 8 | Invert1 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT1UPPIPE | String | 20 | Invert 1 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT1DWNPIPE | String | 20 | Invert 1 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT2ELEV | Double | 8 | Invert2 Elevation | The invert elevation | | | true | | |
| INVERT2MAT | String | 20 | Invert2 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT2SHAPE | String | 50 | Invert2 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT2DIAM | Double | 8 | Invert2 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT2WIDTH | Double | 8 | Invert2 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT2UPPIPE | String | 20 | Invert 2 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT2DWNPIPE | String | 20 | Invert 2 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT3ELEV | Double | 8 | Invert 3 Elevation | The invert elevation | | | true | | |
| INVERT3MAT | String | 20 | Invert 3 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT3SHAPE | String | 50 | Invert 3 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT3DIAM | Double | 8 | Invert 3 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT3WIDTH | Double | 8 | Invert 3 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT3UPPIPE | String | 20 | Invert 3 Up Pipe | The unique identifier of the upstream pipe | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| INVERT3DWNPIPE | String | 20 | Invert 3 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT4ELEV | Double | 8 | Invert 4 Elevation | The invert elevation | | | true | | |
| INVERT4MAT | String | 20 | Invert 4 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT4SHAPE | String | 50 | Invert 4 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT4DIAM | Double | 8 | Invert 4 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT4WIDTH | Double | 8 | Invert 4 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT4UPPIPE | String | 20 | Invert 4 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT4DWNPIPE | String | 20 | Invert 4 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT5ELEV | Double | 8 | Invert 5 Elevation | The invert elevation | | | true | | |
| INVERT5MAT | String | 20 | Invert 5 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT5SHAPE | String | 50 | Invert 5 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT5DIAM | Double | 8 | Invert 5 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT5WIDTH | Double | 8 | Invert 5 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT5UPPIPE | String | 20 | Invert 5 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT5DWNPIPE | String | 20 | Invert 5 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT6ELEV | Double | 8 | Invert 6 Elevation | The invert elevation | | | true | | |
| INVERT6MAT | String | 20 | Invert 6 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT6SHAPE | String | 50 | Invert 6 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT6DIAM | Double | 8 | Invert 6 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT6WIDTH | Double | 8 | Invert 6 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT6UPPIPE | String | 20 | Invert 6 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT6DWNPIPE | String | 20 | Invert 6 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| ILLICIT | String | 10 | Illicit Connection | Indicates whether the structure has a potential illicit connection. | YesNo | | true | | |
| ILLICITSTATUS | String | 20 | Illicit Connection Status | Indicates the status of the drainage connection. | swIllicitConnectionStatus | | true | | |
| CONFLICTBOX | String | 10 | Conflict Box | Indicates whether the structure is a conflict box. | YesNo | | true | | |
| CONFLICTDESCRIP | String | 50 | Conflict Description | Indicates the different types of conflicts found inside the structure. | swConflictType | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| BOTTOMTYPE | String | 10 | Bottom Type | Indicates whether the bottom of the structure is open(permeable) or closed (non-permeable) | swBottomType | | true | | |
| NUMOFBAFFLE | SmallInteger | 2 | Number of Baffles | Identifies the number of baffles | | | true | | |
| SUMPHEIGHT | Double | 8 | Sump Height | Identifies the height of the sump in inches | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INVERT1DIR | String | 2 | Invert1 Pipe Direction | INVERT1DIR | swPipeDirection | | true | | |
| INVERT2DIR | String | 2 | Invert2 Pipe Direction | INVERT2DIR | swPipeDirection | | true | | |
| INVERT3DIR | String | 2 | Invert3 Pipe Direction | INVERT3DIR | swPipeDirection | | true | | |
| INVERT4DIR | String | 2 | Invert4 Pipe Direction | INVERT4DIR | swPipeDirection | | true | | |
| INVERT5DIR | String | 2 | Invert5 Pipe Direction | INVERT5DIR | swPipeDirection | | true | | |
| INVERT6DIR | String | 2 | Invert6 Pipe Direction | INVERT6DIR | swPipeDirection | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### swManhole - FeatureClass

**Name** swManhole
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Manholes
**HasM** false
**HasZ** false
**HasAttachments** false

**Description** Manhole features connect two or more pipes and control the flow of water in the network through pipe elevations. Manhole invert elevations are stored on the pipes, instead of the manholes themselves.

**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| MHTYPE | String | 15 | Manhole Type | The type of manhole | piManholeType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the | | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | Cityworks work order. | | | | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection | The date the asset was most recently | | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| | | | Date | inspected | | | | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTYPE | String | 50 | Manufacturer Type | The manufacturer model type of the manhole structure | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| CVSHAPE | String | 50 | Cover Shape | The shape of the manhole cover | piManholeCoverShape | | true | | |
| CVTYPE | String | 50 | Cover Type | The type of stormwater manhole cover | piManholeCoverType | | true | | |
| FDOTTYPE | String | 50 | FDOT Type | The Florida Department of Transporation manhole structure type | | | true | | |
| WALLMAT | String | 25 | Wall Material | The material used to construct the manhole wall | piPipeMaterial | | true | | |
| HAZCONDITION | String | 10 | Manhole Condition | The condition of the asset | | | true | | |
| CUTDEPTH | Double | 8 | Pavement Cut Depth | Pavement cut depth | | | true | | |
| LINED | String | 3 | Lined | Indicates if the manhole is lined | YesNo | | true | | |
| SUMFLOW | Double | 8 | Flow Summary | The sum of flow | | | true | | |
| FLOWDIR | String | 25 | Flow Direction | Defines the direction of flow using geometric flow direction values | Direction | | true | | |
| RIMELEV | Double | 8 | Rim Elevation | The elevation of the manhole rim | | | true | | |
| HIGHELEV | Double | 8 | High Pipe Elevation | High pipe elevation inside manhole | | | true | | |
| BOTTOMELEV | Double | 8 | Bottom Elevation | The bottom elevation of the manhole | | | true | | |
| INVERT1ELEV | Double | 8 | Invert1 Elevation | The invert elevation | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| INVERT1MAT | String | 20 | Invert1 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT1SHAPE | String | 50 | Invert1 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT1DIAM | Double | 8 | Invert1 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT1WIDTH | Double | 8 | Invert1 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT1UPPIPE | String | 20 | Invert 1 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT1DWNPIPE | String | 20 | Invert 1 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT2ELEV | Double | 8 | Invert2 Elevation | The invert elevation | | | true | | |
| INVERT2MAT | String | 20 | Invert2 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT2SHAPE | String | 50 | Invert2 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT2DIAM | Double | 8 | Invert2 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT2WIDTH | Double | 8 | Invert2 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT2UPPIPE | String | 20 | Invert 2 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT2DWNPIPE | String | 20 | Invert 2 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT3ELEV | Double | 8 | Invert 3 Elevation | The invert elevation | | | true | | |
| INVERT3MAT | String | 20 | Invert 3 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT3SHAPE | String | 50 | Invert 3 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT3DIAM | Double | 8 | Invert 3 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT3WIDTH | Double | 8 | Invert 3 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT3UPPIPE | String | 20 | Invert 3 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT3DWNPIPE | String | 20 | Invert 3 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT4ELEV | Double | 8 | Invert 4 Elevation | The invert elevation | | | true | | |
| INVERT4MAT | String | 20 | Invert 4 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT4SHAPE | String | 50 | Invert 4 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT4DIAM | Double | 8 | Invert 4 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT4WIDTH | Double | 8 | Invert 4 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT4UPPIPE | String | 20 | Invert 4 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT4DWNPIPE | String | 20 | Invert 4 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT5ELEV | Double | 8 | Invert 5 Elevation | The invert elevation | | | true | | |
| INVERT5MAT | String | 20 | Invert 5 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT5SHAPE | String | 50 | Invert 5 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| INVERT5DIAM | Double | 8 | Invert 5 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT5WIDTH | Double | 8 | Invert 5 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT5UPPIPE | String | 20 | Invert 5 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT5DWNPIPE | String | 20 | Invert 5 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| INVERT6ELEV | Double | 8 | Invert 6 Elevation | The invert elevation | | | true | | |
| INVERT6MAT | String | 20 | Invert 6 Pipe Material | The construction material of the invert pipe | piPipeMaterial | | true | | |
| INVERT6SHAPE | String | 50 | Invert 6 Pipe Shape | The shape of the invert pipe | piPipeShape | | true | | |
| INVERT6DIAM | Double | 8 | Invert 6 Pipe Diameter | The diameter of the invert pipe | piPipeDiameter | | true | | |
| INVERT6WIDTH | Double | 8 | Invert 6 Pipe Width | The width of the invert pipe | piPipeDiameter | | true | | |
| INVERT6UPPIPE | String | 20 | Invert 6 Up Pipe | The unique identifier of the upstream pipe | | | true | | |
| INVERT6DWNPIPE | String | 20 | Invert 6 Down Pipe | The unique identifier of the downstream pipe | | | true | | |
| WEIRPRESENT | String | 10 | Weir Present? | Identifies whether there is a weir present | YesNo | | true | | |
| CONFLICTBOX | String | 10 | Conflict Box | Indicates whether the structure is a conflict box. | YesNo | | true | | |
| CONFLICTDESCRIP | String | 50 | Conflict Description | Indicates the different types of conflicts found inside the structure. | swConflictType | | true | | |
| BOTTOMTYPE | String | 10 | Bottom Type | Indicates whether the bottom of the structure is open(permeable) or closed (non-permeable) | swBottomType | | true | | |
| NUMOFBAFFLE | SmallInteger | 2 | Number of Baffles | Identifies the number of baffles | | | true | | |
| SUMPHEIGHT | Double | 8 | Sump Height | Identifies the height of the sump in inches | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INVERT1DIR | String | 2 | Invert1 Pipe Direction | INVERT1DIR | swPipeDirection | | true | | |
| INVERT2DIR | String | 2 | Invert2 Pipe Direction | INVERT2DIR | swPipeDirection | | true | | |
| INVERT3DIR | String | 2 | Invert3 Pipe Direction | INVERT3DIR | swPipeDirection | | true | | |
| INVERT4DIR | String | 2 | Invert4 Pipe Direction | INVERT4DIR | swPipeDirection | | true | | |
| INVERT5DIR | String | 2 | Invert5 Pipe Direction | INVERT5DIR | swPipeDirection | | true | | |
| INVERT6DIR | String | 2 | Invert6 Pipe Direction | INVERT6DIR | swPipeDirection | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### swNetworkStructure - FeatureClass

**Name** swNetworkStructure
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Network Structures
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Stormwater network structures such as pump stations or pipe ends.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| STRUCTTYPE | String | 30 | Structure Type | Type of network structure | swNetworkStructureType | Endpoint | true | | |
| NAME | String | 20 | Name | The name of the structure | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Service Request or Work Order Number | | | | | |
| OPDATE | Date | 8 | Operational Date | Date the facility was put into service | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### swPollutionControlDevice - FeatureClass

**Name** swPollutionControlDevice
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Pollution Control Devices
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Baffles are a form of stormwater pollution control devices.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| TYPE | String | 30 | Device Type | The type of pollution control device | swPollControlDeviceType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, | piActiveStatus | Active | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | not in use or removed from the ground | | | | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | (Cityworks, Qalert, etc) | | | | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| OPENPOSITION | String | 20 | Opening Position | The opening position | swOpenPosition | | true | | |
| TOPELEV | Double | 8 | Top Elevation | The Top Invert Elevation | | | true | | |
| BOTTOMELEV | Double | 8 | Bottom Elevation | The Bottom Invert Elevation | | | true | | |
| STRUCTID | String | 20 | Structure ID | The unique identifier of the associated structure as a string. Structure could be a Pollution Control Structure, a manhole, an inlet or a drainage well chamber. | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

**swPollutionControlStructure - FeatureClass**

**Name** swPollutionControlStructure

**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Pollution Control Structures
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Stormwater pollution control devices such as baffles and vortexes. They allow sediments and pollution to settle out of the stormwater runnoff.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| STRUCTTYPE | String | 50 | Device Type | The type of pollution control structure | swPollControlStructureType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | swManufacturer | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties are tied to serial numbers for Tidal Valves. | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| NUMOFWEIR | SmallInteger | 2 | Number of Weirs | The number of weirs | | | true | | |
| NUMOFCHAM | SmallInteger | 2 | Number of Chambers | The number of chambers | | | true | | |
| NUMOFBAFFLE | SmallInteger | 2 | Number of Baffles | Identifies the number of baffles | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### swPond - FeatureClass

**Name** swPond
**ShapeType** Polygon
**FeatureType** Simple
**AliasName** sw Ponds
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Stormwater detention and retention features, sometimes referred to as stormwater ponds.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| PONDTYPE | String | 20 | Pond Type | The type of stormwater pond | swPondType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | from the sevice life. It will be heavily relied upon for asset management analysis. | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | true | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| BEDMATERIAL | String | 50 | Bed Material | The material on the bed of the retention area | piPipeMaterial | | true | | |
| BNKMATERIAL | String | 50 | Bank Material | The material on the bank of the retention area | piPipeMaterial | | true | | |
| VOLUME | Double | 8 | Volume | The volume of detention area | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DEPTH | Double | 8 | Depth | The depth of the retention area | | | true | | |
| TOPAREA | Double | 8 | Top Area | The top area | | | true | | |
| BOTTOMELEV | Double | 8 | Invert Elevation | The bottom elevation | | | true | | |
| BOTTOMAREA | Double | 8 | Bottom Area | The bottom area | | | true | | |
| OUTFLWELEV | Double | 8 | Outflow Elevation | Outflow elevation | | | true | | |
| WATERELEV | Double | 8 | Water Elevation | The water elevation | | | true | | |
| TOPBANKELV | Double | 8 | Top of Bank Elevation | The Top of bank elevation | | | true | | |
| BOTTOMBANKELEV | Double | 8 | Bottom of Bank Elevation | The bottom of bank elevation | | | true | | |
| SIDESLOPE | Double | 8 | Slope | The slope on the side of the retention area | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### swPumpStation - FeatureClass

**Name** swPumpStation
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Pump Stations
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Stormwater pump stations (formerly included in the swNetworkStructure feature class).

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| NAME | String | 20 | Name | The name of the structure | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | assessment. Can be updated from Cityworks Inspection to the GIS. | | | | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Service Request or Work Order Number | | | | | |
| OPDATE | Date | 8 | Operational Date | Date the facility was put into service | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network as either a source or a sink | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### swUnknownPoint - FeatureClass

**Name** swUnknownPoint
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Unknown Points
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Assets believed to be stormwater points where the asset type, and/or owner information are not clearly known
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | -99 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | -99 | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### swWeirStructure - FeatureClass

**Name** swWeirStructure
**ShapeType** Point
**FeatureType** Simple
**AliasName** sw Weir Structures

**HasM** true
**HasZ** false
**HasAttachments** false
**Description** Walls used to alter the flow of water, prevent flooding, and measure discharge.
**Tags** Stormwater

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| WEIRTYPE | String | 50 | Weir Type | The type of weir | swWeirType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Cityworks work order. | | | | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | piConditionPACP | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CRITICAL | String | 5 | Critical Asset? | Indicates whether Public Works staff has identified the asset as a Critical Asset in the stormwater system. | YesNo | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Survey Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| WMATERIAL | String | 50 | Material | The material used to construct the weir | piPipeMaterial | | true | | |
| WEIRSHAPE | String | 50 | Shape | The shape of the weir | swWeirShape | | true | | |
| LENGTH | Double | 8 | Length | The length of the weir | | | true | | |
| ORIFICE | String | 5 | Orifice? | Indicates whether the weir has an orifice | YesNo | | true | | |
| NUMNOTCH | Integer | 4 | Number of Notches | The number of notches on the weir | | | true | | |
| WINGWALL | String | 5 | Wing Walls? | Indicates whether the weir has wing walls | YesNo | | true | | |
| SKIMMER | String | 5 | Skimmer? | Indicates whether the weir has a skimmer | YesNo | | true | | |
| RISE | Double | 8 | Rise | The top of the weir elevation | | | true | | |
| INVERTELEV | Double | 8 | Invert Elevation | The invert elevation | | | true | | |
| TOPCLIP | Double | 8 | Top Clip | The top elevation of the notch | | | true | | |
| BTMCLIP | Double | 8 | Bottom Clip | The bottom elevation of the notch | | | true | | |
| TOPWIDTH | Double | 8 | Top Width | The top width of the notch | | | true | | |
| BTMWIDTH | Double | 8 | Bottom Width | The bottom with of the notch | | | true | | |
| ORIENTATION | String | 20 | Directional Orientation | The cardinal direction of flow | Direction | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ANCILLARYROLE | SmallInteger | 2 | Ancillary Role | Identifies whether the asset participates in a geometric network | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | as either a source or a sink | | | | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### Water - FeatureDataset

**Name** Water
**Description** Dataset containing feature classes for the City of Fort Lauderdale's water distribution system
**Tags** Water Distribution

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### wControlValve - FeatureClass

**Name** wControlValve
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Control Valves
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water Network valves that have a control mechanism such as blowoff or relief
**Tags** WaterDistribution, Water Distribution, Water Valves

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| VALVETYPE | String | 30 | Valve Type | Type of control valve | piControlValveType | | true | | |
| WATERTYPE | String | 20 | Water Type | Identifies the type of water in the pipe | wWaterType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or | piActiveStatus | Active | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | removed from the ground | | | | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | wManufacturer | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties may be tied to the asset's serial number. | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | performing work on the asset (Cityworks, Qalert, etc) | | | | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| DEPTH | Double | 8 | Depth to Nut | The depth, in feet, to the top of the nut of the asset | | | true | | |
| INMANHOLE | String | 5 | In Manhole? | Identifies whether the asset is in a manhole | YesNo | | true | | |
| NORMALLYOPEN | String | 5 | Normally Open? | Identifies whether the asset is normally open | YesNo | | true | | |
| TURNDIRECTION | String | 20 | Turn Close Direction | The turn direction to close the asset, as in clockwise and counter clockwise | piValveTurnDirection | | true | | |
| TURNSTOCLOSE | SmallInteger | 2 | Turns to Close | The number of turns required to close the asset | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Associates will create. | | | | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### wCurbStopValve - FeatureClass

**Name** wCurbStopValve
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Curb Stop Valves
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water Network valves that control flow to a service connection
**Tags** WaterDistribution, Water Distribution, Water Valves

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| VALVETYPE | String | 50 | Valve Type | Type of control valve | piSystemValveType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | attached to a work order. | | | | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | wManufacturer | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties may be tied to the asset's serial number. | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| OPERABLE | SmallInteger | 2 | Operable | Identifies whether the asset can be operated | BooleanDomain | 1 | true | | |
| NORMALLYOPEN | SmallInteger | 2 | Normally Open | Flag to identify if the deveice is normally open | BooleanDomain | 1 | true | | |
| CURROPEN | SmallInteger | 2 | Currently Open | Flag to identify whether the device | BooleanDomain | 1 | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | is currently open | | | | | |
| TURNDIRECTION | String | 20 | Turn Close Direction | The turn direction to close the asset, as in clockwise and counter clockwise | piValveTurnDirection | | true | | |
| TURNSTOCLOSE | Integer | 4 | Turns to Close | The number of turns required to close the asset | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### wFitting - FeatureClass

**Name** wFitting
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Fittings
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water network features that connect segments of pipe.
**Tags** WaterDistribution, Water Distribution, Water Fittings

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| FITTINGTYPE | String | 50 | Fitting Type | The type of fitting | piFittingType | | true | | |
| WATERTYPE | String | 50 | Water Type | Identifies the type of water running through the pipes, such as Potable, Raw, Reuse, etc | wWaterType | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the fitting (applies only when the fitting does not use a reducer) | piPipeDiameter | | true | | |
| ANGLE | SmallInteger | 2 | Angle | The angle of the fitting when a bend is used (default of '0' when no bend is used) | | 0 | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | warranty, asset record will show up pink on the Cityworks work order. | | | | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | installed the asset | | | | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### wHydrant - FeatureClass

**Name** wHydrant
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Hydrants
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water network hydrants.
**Tags** WaterDistribution, Water Distribution, Fire Hydrants

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| STAMPEDID | String | 20 | Stamped ID | The ID the Fire Hydrant is currently stamped with | | | true | | |
| BLUECAP | String | 10 | Blue Cap? | Indicates if the hydrant has a blue cap | YesNo | | true | | |
| WATERTYPE | String | 20 | Water Type | The type of water | wWaterType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | attached to a work order. | | | | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | wManufacturer | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties may be tied to the asset's serial number. | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| AUTOFLUSHDEVICE | String | 10 | Auto Flushing Device | Identifies whether the hydrant has an Automated Flushing Device attached | YesNo | | true | | |
| OPERABLE | SmallInteger | 2 | Operable | Indicates if the asset can be operated | BooleanDomain | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TURNSTOCLOSE | Integer | 4 | Tuns to Close | Identifies the number of turns to close/shut off | | | true | | |
| TURNDIRECTION | String | 20 | Turn Close Direction | The turn direction to close the asset, as in clockwise and counter clockwise | piValveTurnDirection | | true | | |
| FLOW | Double | 8 | Flow Rate (GPM) | Flow rate in gallons/minute | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### wLateralLine - FeatureClass

**Name** wLateralLine
**ShapeType** Polyline
**FeatureType** Simple
**AliasName** w Service Line
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water service lines.
**Tags** WaterDistribution, Water Distribution, Mains

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | created database trigger | | | | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| MATERIAL | String | 20 | Material | The construction material of the asset | wMaterial | | true | | |
| LINETYPE | String | 20 | Line Type | The type of lateral line | wLateralType | | true | | |
| WATERTYPE | String | 20 | Water Type | Identifies the type of water in the pipe | wWaterType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Number under which the asset was installed | | | | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| LINEDYEAR | String | 4 | Year Lined | The year the pipe was last lined | | | true | | |
| LINERTYPE | String | 30 | Liner Type | The method used to line the pipe | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |

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**wMeterBox - FeatureClass**

| | |
|---|---|
| **Name** | wMeterBox |
| **ShapeType** | Point |
| **FeatureType** | Simple |
| **AliasName** | w Meter Box |
| **HasM** | false |
| **HasZ** | false |

**HasAttachments** false

**Description** The housing assembly for meters.

**Tags** WaterDistribution, Water Distribution, Service Location

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | | true | | |
| LOCATION | String | 200 | Location Description | Identifies the meter box location (area_served in Utility Billing database). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order (address in Utility Billing database) | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Cityworks work order. | | | | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | COF | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties may be tied to the asset's serial number. | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| LOCATIONNUM | String | 10 | Location Number | Identifies the location number for a unique to service address (location_no in Utility Billing database) | | | true | | |
| METERSEQUENCE | String | 10 | Meter Sequence | An innumerator for meters at a given service (meter_seq in Utility Billing database) | | | true | | |
| LIDMATERIAL | String | 20 | Lid Material | The material the housing lid is made of | wMaterial | | true | | |
| BOXMATERIAL | String | 20 | Box Material | The material the housing assembly is made of | wMaterial | | true | | |
| HOUSINGSHAPE | String | 10 | Housing Shape | The shape of the housing assembly | wShape | | true | | |
| DIMENSION | String | 20 | Housing Dimensions | The dimsions of the housing assembly | wDimension | | true | | |
| VAULT | String | 5 | Meter Vault? | Indicates if the housing assembly is a vault | YesNo | | true | | |
| MASTERMETER | String | 5 | Master Meter? | Indicates if the housing assembly contains a master meter | YesNo | | true | | |
| NUMOFMETER | SmallInteger | 2 | Number of Meters | The number of meters inside the housing assembly | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| INSTALLDATE | Date | 8 | INSTALLDATE | The date the asset was installed | | | true | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### wPressurizedMain - FeatureClass

**Name** wPressurizedMain
**ShapeType** Polyline
**FeatureType** Simple
**AliasName** w Mains
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water distribution mains.
**Tags** WaterDistribution, Water Distribution, Mains

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| MATERIAL | String | 20 | Material | The construction material of the asset | piPipeMaterial | | true | | |
| WATERTYPE | String | 20 | Water Type | Identifies the type of water in the pipe | wWaterType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset | | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | or group of assets are captured, may be the same as the Service Request or Work Order Number | | | | | |
| DEPTH | Double | 8 | Depth | Depth to the top of pipe (in feet) | | | true | | |
| CASING | String | 10 | Casing | Identifies whether the asset is enclosed in casing | YesNo | | true | | |
| TRANSMISS | String | 10 | Transmission System | Identifies whether the main is part of the transmission system, which is compromised of pipes with a diameter of 16 inches and above. | YesNo | | true | | |
| DEADEND | String | 5 | Dead End | Identifies whether the pipe is a dead end | YesNo | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |

### wPump - FeatureClass

**Name** wPump
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Pumps
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Pumps within the water network
**Tags** WaterDistribution, Water Distribution, Pumps

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| PUMPTYPE | String | 20 | Pump Type | The type of water pump | wPumpType | | true | | |
| NAME | String | 50 | Name | The name of the facility or location the pump is housed in | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Cityworks work order. | | | | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | wManufacturer | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties may be tied to the asset's serial number. | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ELEVATION | Double | 8 | Elevation | Elevation value for contour line | | | true | | |
| INLETDIAM | Double | 8 | Inlet Diameter | Diameter of pump inlet | piPipeDiameter | | true | | |
| DISCHDIAM | Double | 8 | Discharge Diameter | Diameter of pump discharge | piPipeDiameter | | true | | |
| RATEDFLOW | String | 20 | Rated Flow | The rated flow typically defined by manufacturer | | | true | | |
| RATEDPRESS | String | 20 | Rated Pressure | The rated pressure typically defined by manufacturer | | | true | | |
| DYNHEAD | String | 20 | Total Dynamic Head | Dynanmic Head | | | true | | |
| SHUTHEAD | Double | 8 | Shutoff Head | Shut off Head | | | true | | |
| DESHEAD | Double | 8 | Design Head | Design Head | | | true | | |
| MAXOPHEAD | Double | 8 | Max Operating Head | Maximum Operating Head | | | true | | |
| DESIGNGPM | Double | 8 | Design GPM | Design Gallons per minute | | | true | | |
| MAXOPDISC | Double | 8 | Max Operating Discharge | Maximum Operating Discharge flow | | | true | | |
| RPM | Double | 8 | RPM | The rate of rotation of the impellor in Revolutions per Minute | | | true | | |
| WEIGHT | Double | 8 | Weight | The weight of the pump in pounds | | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### wRepairClamp - FeatureClass

**Name** wRepairClamp
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Repair Clamps
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** A clamping device used to seal a crack in a pipe
**Tags** WaterDistribution, Water Distribution, Repair Clamps, Utilities, Assets

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| TYPE | String | 50 | Clamp Type | The type of repair clamp | | | true | | |
| DEPTH | Double | 8 | Depth | Depth of the asset measured to the top of pipe | | | true | | |
| LENGTH | Double | 8 | Length | Length of the clamping device | | | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | and updated from there to GIS. | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | wManufacturer | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties may be tied to the asset's serial number. | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | documents for the asset | | | | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### wServiceConnection - FeatureClass

**Name** wServiceConnection
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Service Connections
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** A point of service at the end of a lateral where water service is connected. It may be one meter or multiple meters with the same LocationID

**Tags** WaterDistribution, Water Distribution,Service Connections

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| LOCATIONNUM | Integer | 4 | Location Number | Utility billing location identifer | | | true | | |
| ACCOUNTID | String | 20 | Account ID | Utility billing account identifier | | | true | | |
| ACCOUNTNUM | Integer | 4 | Account Number | Utility billing unique account number | | | true | | |
| METSERVICE | String | 5 | Metered Service? | Identifies whether the service connection is metered | YesNo | | true | | |
| MASTERMETER | String | 3 | Master Meter? | Indicates if the service connection is a master meter. | YesNo | | true | | |
| SERVICTYPE | String | 20 | Service Type | The type of service connection | wServicePointType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | field when attached to a work order. | | | | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| CRITICAL | SmallInteger | 2 | Critical Customer | Flag to indicate if this is a critical customer | BooleanDomain | | true | | |
| MATERIAL | String | 20 | Pipe Material | Identifies the construction material of the pipe connection | piPipeMaterial | | true | | |
| LONGORSHORT | String | 5 | Long or Short | Whether the main is on the same side of street of meter (short side), if not then it is on the long side | wLongShort | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network. | BooleanDomain | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### wServiceLocation - FeatureClass

**Name** wServiceLocation
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Service Locations
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water Service location from Utility Billing database. Addresses are geocoded and placed at the centroid of the parcel or along the road centerline. Services include metered and unmetered fire services.
**Tags** WaterDistribution, Water Distribution, Service Location

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYID | String | 20 | Facility Identifier | A concatenation of two fields from Cayenta, LOCATIONNUM and SERVICESEQUENCE with a hyphen between them and with no spaces. | | | true | | |
| LOCATIONNUM | String | 10 | Location Number | Identifies the location number for a unique service address (location_no in Utility Billing database) | | | true | | |
| SERVICETYPE | String | 20 | Service Type | Identifies the type of service the location supplied (service_type_fdsc in Utility Billing database) | | | true | | |
| SERVICESEQUENCE | String | 10 | Service Sequence | An innumerator of services at a given location (service_seq in Utility Billing database) | | | true | | |
| METERNUM | String | 10 | Meter Billing Number | Unique number generated by Utility Billing database for each meter asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | (meter_no in Utility Billing database) | | | | | |
| METERSEQUENCE | String | 10 | Meter Sequence | An innumerator for meters at a given service (meter_seq in Utility Billing database) | | | true | | |
| DIAMETER | String | 10 | Diameter | Identifies the size of meter (meter_sz in Utility Billing database) | | | true | | |
| METERTYPE | String | 10 | Meter Type | Identifies specific meter types, diameter, and number of digits on odometer (meter_tp in Utility Billing database) | | | true | | |
| SETDATE | Date | 8 | Set Date | Identifies the date at which the meter was installed at service location (set_date in Utility Billing database) | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset (company_cd in Utility Billing database) | | | true | | |
| SERIALNUM | String | 30 | Meter Serial Number | The manufacturer assigned serial number of the asset. Warranties may be tied to the asset's serial number (serial_no in Utility Billing database) | | | true | | |
| LOCATIONCLASS | String | 10 | Location Class | Location Class | | | true | | |
| CYCLE | String | 10 | Cycle | A logical group of routes used mainly for billing purposes (cycle_cd in Utility Billing database) | | | true | | |
| ROUTE | String | 10 | Route | A route used for meter reading purposes (route_no in Utility Billing database) | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Active Status | | | true | | |
| LOCATION | String | 200 | Location Description | Identifies the meter box location (area_served in Utility Billing database). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order (address in Utility Billing database) | | | true | | |
| PARCELID | String | 30 | Parcel ID | Identifies Parcel ID of service location (parcel_id in Utility Billing database) | | | true | | |
| SYNCDATE | Date | 8 | Sync Date | The date of the most recent sync from the Utility Billing database | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### wStructure - FeatureClass

**Name** wStructure
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Structures
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water structures such as treatment plants, pump stations, and wells
**Tags** WaterDistribution, Water Distribution,Water Structures

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| NAME | String | 20 | Name | the name of the facility or location where the structure is housed | | | true | | |
| STRUCTTYPE | String | 30 | Structure Type | The teyp of water structure | wStructureType | | true | | |
| WATERTYPE | String | 20 | Water Type | Identifies the type of water in the pipe | wWaterType | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the | InventoryClass | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | geographic location of the asset | | | | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OPDATE | Date | 8 | Operational Date | Date when the facility was put into service | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### wSystemValve - FeatureClass

**Name** wSystemValve
**ShapeType** Point
**FeatureType** Simple
**AliasName** w System Valves
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water network valves used to isolate mains for maintenance and repair
**Tags** WaterDistribution, Water Distribution, System Valve

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | piPipeDiameter | | true | | |
| VALVETYPE | String | 50 | Valve Type | Type of control valve | piSystemValveType | | true | | |
| WATERTYPE | String | 20 | Water Type | Identifies the type of water in the pipe | wWaterType | | true | | |
| BYPASSVALVE | SmallInteger | 2 | Bypass Valve? | Identifies whether the asset is a bypass valve | BooleanDomain | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement of assets and project funding needs. | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| MANUFACTURER | String | 50 | Manufacturer | The manufacturer or brand of the asset | wManufacturer | | true | | |
| SERIALNUM | String | 30 | Serial Number | The manufacturer assigned serial number of the asset. Warranties may be tied to the asset's serial number. | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Number, or Improvement Number under which the asset was installed | | | | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| HDRFLAG | String | 5 | Hydrant Valve? | Identifies whether the asset is a hydrant valve | YesNo | | true | | |
| DEPTH | Double | 8 | Depth to Nut | The depth, in feet, to the top of the nut of the asset | | | true | | |
| NORMALLYOPEN | SmallInteger | 2 | Normally Open? | Identifies whether the asset is normally open | BooleanDomain | 1 | true | | |
| TURNDIRECTION | String | 20 | Turn Close Direction | The turn direction to close the asset, as in clockwise or counter clockwise | piValveTurnDirection | | true | | |
| TURNSTOCLOSE | Integer | 4 | Turns to Close | The number of turns required to close the asset | | | true | | |
| OPERABLE | SmallInteger | 2 | Operable | Identifies whether the valve or hydrant can be operated | BooleanDomain | 1 | true | | |
| CURROPEN | SmallInteger | 2 | Currently Open? | Identifies whether the asset is currently open | BooleanDomain | | true | | |
| ROTATION | Double | 8 | Rotation | Map symbol rotation value | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| MAINID | String | 20 | Facility ID of Main | Facility ID of the water main the system valve isolates flow from. This fields helps identity which main offset valves are connected to. | | | true | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

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### wTestStation - FeatureClass

**Name** wTestStation
**ShapeType** Point
**FeatureType** Simple
**AliasName** w Test Stations
**HasM** false
**HasZ** false
**HasAttachments** false
**Description** Water network test station locations
**Tags** WaterDistribution, Water Distribution, Test Stations

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility Identifier | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID (Unit ID) | Former asset identifier. To be moved to a related table. | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | piActiveStatus | Active | true | | |
| ACTIVEFLAG | SmallInteger | 2 | Active Flag | Identifies whether the feature is in use/active | BooleanDomain | 1 | true | | |
| NAME | String | 20 | Name | The name of the facility or location | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| INVCLASS | String | 20 | Inventory Class | The method used to establish the geographic location of the asset | InventoryClass | | true | | |
| COLLECTEDDATE | Date | 8 | GPS Collected Date | Date the feature was located by a surveyor | | | true | | |
| OWNEDBY | SmallInteger | 2 | Owned By | Indicates which organization owns the asset | AssetOwner | 1 | true | | |
| MAINTBY | SmallInteger | 2 | Managed By | Indicates which organization maintains the asset | AssetManager | 1 | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 200 | Location Description | Text description of the geographic location (e.g. 10' west of sidewalk along Broward Blvd). Value is copied to Cityworks work order Location Details field when attached to a work order. | | | true | | |
| ADDRESS | String | 50 | Closest Address | The address or closest address to the asset. Value is copied to Cityworks work order Address field when attached to a work order. | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis. | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order. | | | true | | |
| ASSETCOST | Double | 8 | Asset Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions. | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS. | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS. | | | true | | |
| SERVICELIFE | SmallInteger | 2 | Service Life | The expected number of years an asset is physically capable of continuing to operate. Used to anticipate retirement | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | of assets and project funding needs. | | | | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis. | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure. | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset. | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments. | | | true | | |
| LASTINSPECTDATE | Date | 8 | Last Inspection Date | The date the asset was most recently inspected | | | true | | |
| LASTMAINTDATE | Date | 8 | Last Maintenance Date | The date of the most recent maintenance activity | | | true | | |
| PROJECTNUM | String | 10 | City Project Number | The City's Project Number, DE Number, or Improvement Number under which the asset was installed | | | true | | |
| FILENUM | String | 10 | City File Number | The City's File Number used to store the as-built documents for the asset | | | true | | |
| WORKORDERNUM | String | 60 | City Work Order Number | The work order number for performing work on the asset (Cityworks, Qalert, etc) | | | true | | |
| SURVEYRPTNUM | String | 10 | Surveyor's Report Number | The City's Surveyor's Report Number under which the location of an asset or group of assets are captured, may be the same as the Service Request or Work Order Number | | | true | | |
| XCOORD | Double | 8 | X Coordinate | X-Coordinate of the asset (FL State Plane-East) | | | true | | |
| YCOORD | Double | 8 | Y Coordinate | Y-Coordinate of the asset (FL State Plane-East) | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ZCOORD | Double | 8 | Z Coordinate | Z-Coordinate of the asset | | | true | | |
| ENABLED | SmallInteger | 2 | Enabled Flag | Indicates if the asset is enabled within a geometric network | BooleanDomain | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | Created User | created_user | | | true | | |
| created_date | Date | 8 | Created Date | created_date | | | true | | |
| last_edited_user | String | 255 | Last Edited User | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | Last Edited Date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |
| DC_METHOD | String | 20 | DC Method | This field is for documenting the data collection method of the GIS from consultants. | DC_METHOD | | true | | |
| INVFIELDNOTES | String | 255 | Inventory Field Notes | This field is for general notes from the field. | | | true | | |
| INVGISNOTES | String | 255 | Inventory GIS Notes | This field is for general notes from the GIS and referring to the common issues document that Woolpert and Craven Thompson + Associates will create. | | | true | | |
| INSTALLEDBY | String | 50 | Installed By | Indicates which organization/entity installed the asset | | | true | | |
| VERTICALDATUM | String | 20 | Vertical Datum | Vertical Datum used for asset elevations | Datum | | true | | |

### sspsAlarm - Table

**Name** sspsAlarm
**AliasName** sspsAlarm
**HasAttachments** false
**Description** Alarm systems for a pump station.

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| ALARMTYPE | String | 50 | Alarm Type | The type or function of alarm, eg security, fire, or float level | vertAlarmType | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsBuilding - Table

**Name** sspsBuilding
**AliasName** sspsBuilding
**HasAttachments** false
**Description** Structure containing the pumps, generators, or other assets associated with a pump station

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | upon for asset management analysis | | | | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| BACKFLOWDIAM | Double | 8 | Backflow Diameter | The diameter of an onsite backflow unit | | | true | | |
| BUILDINGMATERIAL | String | 50 | Building Material | The primary construction material of a pump station building | | | true | | |
| ROOFTYPE | String | 50 | Roof Type | The style of roof construction of a building | | | true | | |
| FLOORELEVATION | Double | 8 | Finished Floor Elevation (Ft NAVD) | The finished floor elevation of a pump station building | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | relevant to the asset | | | | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsCamera - Table

**Name** sspsCamera
**AliasName** sspsCamera
**HasAttachments** false
**Description** Cameras and visual monitoring devices

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | the asset | | | | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| CAMERAFUNCTION | String | 255 | Camera Function | Describes function or purpose of camera | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsChemicalSystem - Table

**Name** sspsChemicalSystem
**AliasName** sspsChemicalSystem
**HasAttachments** false
**Description** For future chemical treatment of odor system

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | warranty, asset record will show up pink on the Cityworks work order | | | | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Inspection and updated from there to GIS | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| CHEMICALTYPE | String | 255 | Chemical Type | Describes the chemical odor control system | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsCivil - Table

**Name** sspsCivil
**AliasName** sspsCivil
**HasAttachments** false
**Description** Omnibus for site appearance and any other miscellaneous improvements for work order tracking purposes

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | created database trigger | | | | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsCommunicationEquipment - Table

**Name** sspsCommunicationEquipment
**AliasName** sspsCommunicationEquipment
**HasAttachments** false
**Description** Assets related to communicating between SCADA and/or other systems

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | the asset is associeted with | | | | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| COMMUNICATIONEQUIPMENT | String | 50 | Equipment Type | The type of communication equipment | vertCommunicationEquipment | | true | | |
| COMMUNICATIONMODE | String | 50 | Communication Mode | The manner in which a device communicates with other devices | vertInstrumentCommProtocol | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsControlPanel - Table

**Name** sspsControlPanel
**AliasName** sspsControlPanel
**HasAttachments** false
**Description** Control panels for pump station assets

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| EXTERNALVOLTAGESOURCE | String | 50 | External Voltage Source | Supply voltage of a control panel | | | true | | |
| ARCFLASHRATING | String | 20 | Arc Flash Rating | NFPA 70E arc flash rating | | | true | | |
| PURPOSE | String | 255 | Purpose | The function of a control panel | | | true | | |
| NEMAENCLOSURE | String | 1 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| CLASSDIVISIONGROUP | String | 100 | Class-Division-Group | Indicates Factory Mutual hazardous area classification | | | true | | |
| PANELMATERIAL | String | 100 | Panel Material | The material of a panel | vertPanelMaterial | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsDebrisScreen - Table

**Name** sspsDebrisScreen
**AliasName** sspsDebrisScreen
**HasAttachments** false
**Description** Screens to control debris entering the pump station

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| AUTOMATICSCREEN | SmallInteger | 2 | Automatic? | Indicates if a screen has automatic lift | | | true | | |
| SCREENSIZE | String | 50 | Screen Size | Screen dimensions | | | true | | |
| SCREENMATERIAL | String | 20 | Screen Material | The material of a debris screen | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsDryWell - Table

**Name** sspsDryWell
**AliasName** sspsDryWell
**HasAttachments** false
**Description** Underground structure to house pumps, piping, valves, and other appurtenant PS equipment. Not used at stations with submersible pumps

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | life. It will be heavily relied upon for asset management analysis | | | | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| DEPTHVES | Double | 8 | Depth (Ft) | Depth measured to the top of the holding structure | | | true | | |
| TOPELEVATION | Double | 8 | Top Elevation (Ft NAVD) | The elevation at the surface of the vault | | | true | | |
| BOTTOMELEVATION | Double | 8 | Bottom Elevation (Ft NAVD) | The lowest elevation of a well, vault, or fuel tank in ft NAVD datum | | | true | | |
| INFPIPEINV | Double | 8 | Influent Pipe Invert (Ft NAVD) | The invert elevation of the influent pipe in feet NAVD | | | true | | |
| INFPIPEDIAM | Double | 8 | Influent Pipe Diameter | The diameter of the influent pipe | | | true | | |
| EFFPIPEINV | Double | 8 | Effluent Pipe Invert | The invert elevation of the effluent pipe in feet NAVD | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EFFPIPEDIAM | Double | 8 | Effluent Pipe Diameter | The diameter of the effluent pipe | | | true | | |
| LIDSIZE | String | 100 | Lid Size and Shape | The size and shape of a well lid, eg 4'x4' square lid | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsFencing - Table

**Name** sspsFencing
**AliasName** sspsFencing
**HasAttachments** false
**Description** External fence surrounding pump station

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | management analysis | | | | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| FENCETYPE | String | 50 | Fence Type | The type of fence | vertFenceType | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsFlowMeter - Table

**Name** sspsFlowMeter
**AliasName** sspsFlowMeter
**HasAttachments** false
**Description** Metering devices within the pumpstation that determine rates, volumes, or other flow metrics

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | from the sevice life. It will be heavily relied upon for asset management analysis | | | | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| FLOWMETERTYPE | String | 50 | Flow Instrument Type | The type of flow instrument | vertFlowInstrumentType | | true | | |
| NEMAENCLOSURE | SmallInteger | 2 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| INSTVOLTAGE | String | 50 | Instrument Voltage | The voltage of an instrument | vertInstrumentVoltage | | true | | |
| RANGE | String | 50 | Range | The minimum and maximum flow capacities for a specific flow instrument | | | true | | |
| FLOWUNITS | String | 50 | Flow Units | The unit of measure for a flow device | vertFlowUnits | | true | | |
| SIZEOFMETER | Double | 8 | Flow Meter Diameter | The diameter of a flow meter | | | true | | |
| CLASSDIVISIONGROUP | String | 100 | Class-Division-Group | Indicates Factory Mutual hazardous area classification | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsFuelTank - Table

**Name** sspsFuelTank
**AliasName** sspsFuelTank
**HasAttachments** false
**Description** Installed tanks to reserve fuel for generator use

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | warranty, asset record will show up pink on the Cityworks work order | | | | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Inspection and updated from there to GIS | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| CAPACITYFUEL | Double | 8 | Capacity (Gal) | The capacity of a fuel tank in Gallons | | | true | | |
| TANKMATERIAL | String | 50 | Tank Material Type | The material a tank is primarily constructed of | vertTankMaterial | | true | | |
| DEPTHVES | Double | 8 | Depth (Ft) | Depth measured to the top of the holding structure | | | true | | |
| BOTTOMELEVATION | Double | 8 | Bottom Elevation (Ft NAVD) | The lowest elevation of a well, vault, or fuel tank in ft NAVD datum | | | true | | |
| LININGMATERIAL | String | 50 | Lining Material | The internal lining material of a fuel tank | | | true | | |
| REGULATORYID | String | 50 | Regulatory ID | Regulatory identification number or permit number | | | true | | |
| EXTERIORCOLOR | String | 50 | Exterior Color | The external color of a fuel tank | | | true | | |
| EXTERNALCOATING | String | 50 | Tank Exterior Coating | The external material of a fuel tank | | | true | | |
| CONFINEDSPACE | SmallInteger | 2 | Confined Space Entry? | To indicate if access is physically restrictive or constrained by space | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | staff, including surveyors, that are relevant to the asset | | | | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsGenerator - Table

**Name** sspsGenerator
**AliasName** sspsGenerator
**HasAttachments** false
**Description** Electrical Generator to continue essential functions of the pump station in the event of loss of power

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | asset | | | | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | repair/replace decisions | | | | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| OUTPUTPOWER | Double | 8 | Output (kW) | Electric power output of a generator | | | true | | |
| VOLTAGE | String | 50 | Voltage | The voltage of the asset | vertVoltage | | true | | |
| POWERPHASE | String | 50 | Power Phase | Power phasing configuration | vertElectricalPhase | | true | | |
| POWERSOURCE | String | 50 | Power Source | The power or fuel source the device draws from | vertPowerSource | | true | | |
| REGULATORYID | String | 50 | Regulatory ID | Regulatory identification number or permit number | | | true | | |
| BATTERIES | String | 20 | Batteries | Description of control or cranking battery type and size | | | true | | |
| FUELTYPE | String | 20 | Fuel Type | Type of fuel stored or consumed by the asset | | | true | | |
| HORSEPOWER | Double | 8 | Horsepower | The horsepower rating of the asset | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsLevelInstrument - Table

**Name** sspsLevelInstrument
**AliasName** sspsLevelInstrument
**HasAttachments** false
**Description** Devices for detecting and indicating the level of a surface

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | for backup and redundancy of the asset | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| LEVELINSTTYPE | String | 100 | Level Instrument Type | The type of level instrument | vertLevelInstrumentType | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| NEMAENCLOSURE | String | 1 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| RANGE | String | 50 | Range | The minimum and maximum flow capacities for a specific flow instrument | | | true | | |
| INSTVOLTAGE | String | 50 | Instrument Voltage | The voltage of an instrument | vertInstrumentVoltage | | true | | |
| LEVELUNITS | String | 50 | Level Units | Units of measure to provide the level of a vessel or container | vertLevelUnits | | true | | |
| CLASSDIVISIONGROUP | String | 100 | Class-Division-Group | Indicates Factory Mutual hazardous area classification | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsMiscInstrument - Table

**Name** sspsMiscInstrument
**AliasName** sspsMiscInstrument
**HasAttachments** false
**Description** Instruments, including Rain Gauges, that do not fit well into other instrumentation classes

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | failure will occur and is adjusted for backup and redundancy of the asset | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | management analysis | | | | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| RANGE | String | 100 | Range | The minimum and maximum flow capacities for a specific flow instrument | | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| ELEMENTFUNCTION | String | 50 | Element Function | The general function of a miscillaneous instrument | vertElementFunction | | true | | |
| NEMAENCLOSURE | SmallInteger | 2 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| INSTVOLTAGE | String | 50 | Instrument Voltage | The voltage of an instrument | vertInstrumentVoltage | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsPiping - Table

**Name** sspsPiping
**AliasName** sspsPiping
**HasAttachments** false
**Description** Piping contained within the pump station not otherwise represented by a GIS horizontal feature asset

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | created database trigger | | | | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PIPECONTENTS | String | 50 | Pipe Contents | Identifies the type of water in the pipe | | | true | | |
| DIAMETER | String | 50 | Diameter | The diameter of the asset | | | true | | |
| MATERIAL | String | 50 | Typical Material | The construction material of a pipe segment | | | true | | |
| TYPICALLININGMATERIAL | String | 50 | Typical Lining Material | Type of lining material inside of a pipe, if any | | | true | | |
| TYPICALEXTERNALCOATING | String | 50 | Typical External Coating | Type of external coating or surfacing of a pipe | vertExternalCoating | | true | | |
| TYPICALPSI | Double | 8 | Pressure Rating (PSI) | The normal pressure of a pipe segment | | | true | | |
| MICROREQUIRED | SmallInteger | 2 | Micro Required? | If microbiological testing is required | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | surveyors, that are relevant to the asset | | | | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsPressureInstrument - Table

**Name** sspsPressureInstrument
**AliasName** sspsPressureInstrument
**HasAttachments** false
**Description** Devices for detecting or measuring pressure

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | removed from the ground | | | | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | assessment. Can be updated from Cityworks Inspection to the GIS | | | | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PRESSINSTTYPE | String | 50 | Pressure Instrument Type | The type of pressure instrument | vertPressureInstrumentType | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| NEMAENCLOSURE | SmallInteger | 2 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| INSTVOLTAGE | String | 50 | Instrument Voltage | The voltage of an instrument | vertInstrumentVoltage | | true | | |
| RANGE | String | 50 | Range | The minimum and maximum flow capacities for a specific flow instrument | | | true | | |
| PRESSUREUNITS | String | 50 | Pressure Units | Indicates the units used to measure pressure | vertPressureUnits | | true | | |
| SIZEOFMETER | Double | 8 | Flow Meter Diameter | The diameter of a flow meter | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CLASSDIVISIONGROUP | String | 100 | Class-Division-Group | Indicates Factory Mutual hazardous area classification | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsPump - Table

**Name** sspsPump
**AliasName** sspsPump
**HasAttachments** false
**Description** Pumping units within pump stations

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PUMPTYPE | String | 50 | Pump Type | Wet-end configuration of pump | vertPumpType | | true | | |
| DESIGNCAPACITY | Double | 8 | DesignCapacity | The designed flow capacity of a pump | | | true | | |
| DESIGNHEAD | Double | 8 | Design Head (Ft) | The designed differential pressure across the pump measured in ft water column | | | true | | |
| SHUTOFFHEAD | Double | 8 | Shut-Off Head (Ft) | The amount of head a pump produces wherein the flow of effluent becomes zero | | | true | | |
| MAXCAPACITY | Double | 8 | Maximum Capacity | The maximum flow of a pump | | | true | | |
| HEADATMAXCAPACITY | Double | 8 | Head at Maximum Capacity (FT) | The amount of head at maximum flow | | | true | | |
| EFFICIENCYATDESIGNPOINT | Double | 8 | Efficiency at Design Point (%) | Pump design efficiency in percent | | | true | | |
| IMPELLERDIAMETER | Double | 8 | Impeller Diameter (In) | The diameter of the impeller of a pump | | | true | | |
| NUMBEROFIMPELLERS | SmallInteger | 2 | Number Of Impellers | The number of impellers a pump has | | | true | | |
| IMPELLERMATERIAL | String | 50 | Impeller Material | The material of the impeller of a | vertImpellerMaterial | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | pump | | | | | |
| BEARING | String | 50 | Bearing Type | The style of bearing used to reduce friction in a rotary unit | vertBearingType | | true | | |
| NUMBEROFSTAGES | SmallInteger | 2 | Number Of Stages | The number of stages a pump has | | | true | | |
| CENTERLINEELEVATION | Double | 8 | Centerline Elevation (Ft USGS) | Used to calculate hydraulic modeling and control elevation of a pump | | | true | | |
| VOLTAGE | String | 50 | Voltage | The voltage of the asset | vertVoltage | | true | | |
| BACKUPTYPE | String | 50 | Backup Type | The type of backup unit a pump has | | | true | | |
| PUMPMODE | String | 50 | Mode of Operation | The type of mechanical drive for the pump | vertPumpMode | | true | | |
| MAXSPEED | Integer | 4 | Maximum Speed (RPM) | Maximum rotational speed of a pump | | | true | | |
| VFD | SmallInteger | 2 | VFD? | Indicates if the drive of the pump is variable frequency | | | true | | |
| HORSEPOWER | SmallInteger | 2 | Horsepower | The horsepower rating of the asset | | | true | | |
| POWERPHASE | String | 50 | Power Phase | Power phasing configuration | vertElectricalPhase | | true | | |
| INFPIPEDIAM | Double | 8 | Influent Pipe Diameter | The diameter of the influent pipe | | | true | | |
| EFFPIPEDIAM | Double | 8 | Effluent Pipe Diameter | The diameter of the effluent pipe | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsPumpStationARV - Table

**Name** sspsPumpStationARV
**AliasName** sspsPumpStationARV
**HasAttachments** false
**Description** A valve within a pump station to allow air and/or vacuum to escape from pipes, not otherwise represented by a GIS horizonral feature asset

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | created database trigger | | | | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PIPEDIAMETER | Double | 8 | Pipe Diameter | The diameter of a pipe | | | true | | |
| INVAULT | String | 1 | In Vault? | Indicates if asset is contained within a valve vault | | | true | | |
| CURRENTSTATE | String | 50 | Current State | The operating position of a valve at last interaction | vertCurrentState | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | surveyors, that are relevant to the asset | | | | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsPumpStationValve - Table

**Name** sspsPumpStationValve
**AliasName** sspsPumpStationValve
**HasAttachments** false
**Description** Valve contained within the pump station not otherwise represented by a GIS horizontal feature asset

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | removed from the ground | | | | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | assessment. Can be updated from Cityworks Inspection to the GIS | | | | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| VALVETYPE | String | 50 | Valve Type | The type or mechanism by which a valve interacts with fluid | | | true | | |
| VALVEFUNCTION | String | 50 | Valve Function | The purpose or function of a valve | vertPSValveFunction | | true | | |
| VALVECONTROL | String | 50 | Valve Control | The manner in which a valve is manipulated | vertValveControl | | true | | |
| DIAMETER | Double | 8 | Diameter | The diameter of the asset | | | true | | |
| NORMALOPERATINGPOSITION | String | 50 | Normal Operating Position | Indicates the regular operating position of a valve | vertNormalOperatingPosition | | true | | |
| DIRECTIONTOOPEN | String | 50 | Open Direction | Direction of turn for valves in a utility system | | | true | | |
| MOTORIZED | SmallInteger | 2 | Motorized? | Indicates if a pump station valve is operated by motor or not | | | true | | |
| NUMTURNSOPEN | Double | 8 | Turns to Open | The number of turns a valve takes to open it | | | true | | |
| NUMTURNSCLOSE | Double | 8 | Turns to Close | The number of turns a valve takes to close it | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CURRENTSTATE | String | 50 | Current State | The operating position of a valve at last interaction | vertCurrentState | | true | | |
| INVAULT | String | 1 | In Vault? | Indicates if asset is contained within a valve vault | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsSCADAEquipment - Table

**Name** sspsSCADAEquipment
**AliasName** sspsSCADAEquipment
**HasAttachments** false
**Description** Omnibus asset covering SCADA systems, including PLC, I/O, Operator Interface Terminals, and network switches

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | May be calculated within a Cityworks Inspection and updated from there to GIS | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PSSCADAEQUIPMENTTYPE | String | 50 | SCADA Equipment Type | The specific type or function of a SCADA equiment for a pump station | vertPSSCADAEquipmentType | | true | | |
| OS | String | 50 | Operating System | Operating system for a unit of SCADA equipment | | | true | | |
| SOFTWARE | String | 255 | Software | Type of SCADA system component | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsScrubber - Table

**Name** sspsScrubber
**AliasName** sspsScrubber
**HasAttachments** false
**Description** Device to treat foul air extracted from wet well

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| SCRUBBERTYPE | String | 100 | Scrubber Type | The type of scrubber | | | true | | |
| MEDIA | String | 50 | Media | The media material by which a scrubber processes odor | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsTransferSwitch - Table

**Name** sspsTransferSwitch
**AliasName** sspsTransferSwitch
**HasAttachments** false
**Description** Automatic transfer switches to switch between electrical current sources

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | record will show up pink on the Cityworks work order | | | | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | updated from there to GIS | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| AUTOMATIC | SmallInteger | 2 | Automatic? | Whether or not a transfer switch is manually or automatically triggered | | | true | | |
| MAKEMODEL | String | 100 | Make and Model | The make and model of a switch | | | true | | |
| VOLTAGE | String | 50 | Voltage | The voltage of the asset | vertVoltage | | true | | |
| AMPS | Double | 8 | Amperage (Amps) | A measure of electrical current | | | true | | |
| NEMAENCLOSURE | SmallInteger | 2 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

**sspsTransformer - Table**

**Name** sspsTransformer
**AliasName** sspsTransformer
**HasAttachments** false
**Description** Device to convert one electrical current circuit to one or more electrical circuits with different currents and/or voltages

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | adjusted for backup and redundancy of the asset | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PRIMARYVOLTAGE | String | 50 | Primary Volts | The input voltage for a power transformer | vertVoltage | | true | | |
| SECONDARYVOLTAGE | String | 50 | Secondary Volts | Output voltage of a power transformer | vertVoltage | | true | | |
| KVARATING | Double | 8 | KVA Rating | Transformer kVA rating | | | true | | |
| SECONDARYAMPS | Integer | 4 | Secondary Amps | Output current of a power transformer | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsUPS - Table

**Name** sspsUPS
**AliasName** sspsUPS
**HasAttachments** false
**Description** Uninterruptible power supply units

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | warranty, asset record will show up pink on the Cityworks work order | | | | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Inspection and updated from there to GIS | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| VOLTAGE | String | 50 | Voltage | The voltage of the asset | vertVoltage | | true | | |
| WATTS | Integer | 4 | Watts | The maximum rated wattage | | | true | | |
| VOLTAMPERES | Integer | 4 | Volt-Ampere Rating | The maximum power in Volt-Amperes of the UPS unit | | | true | | |
| RUNTIME | String | 20 | Runtime at Total Connected Load | The expected uptime of the UPS at the total draw of the connected load | | | true | | |
| UPSPURPOSE | String | 255 | Purpose | A description of the purpose or system the UPS is supporting | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

**sspsValveVault - Table**

**Name** sspsValveVault
**AliasName** sspsValveVault
**HasAttachments** false
**Description** Sunken box containing valves by which individual pumps can be isolated from the force lines and other purposes

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | backup and redundancy of the asset | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset | PSVerticalSystem | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | is primarily associated with | | | | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| DEPTHVES | Double | 8 | Depth (Ft) | Depth measured to the top of the holding structure | | | true | | |
| TOPELEVATION | Double | 8 | Top Elevation (Ft NAVD) | The elevation at the surface of the vault | | | true | | |
| BOTTOMELEVATION | Double | 8 | Bottom Elevation (Ft NAVD) | The lowest elevation of a well, vault, or fuel tank in ft NAVD datum | | | true | | |
| INFPIPEINV | Double | 8 | Influent Pipe Invert (Ft NAVD) | The invert elevation of the influent pipe in feet NAVD | | | true | | |
| INFPIPEDIAM | Double | 8 | Influent Pipe Diameter | The diameter of the influent pipe | | | true | | |
| EFFPIPEINV | Double | 8 | Effluent Pipe Invert | The invert elevation of the effluent pipe in feet NAVD | | | true | | |
| EFFPIPEDIAM | Double | 8 | Effluent Pipe Diameter | The diameter of the effluent pipe | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsVentilation - Table

**Name** sspsVentilation
**AliasName** sspsVentilation
**HasAttachments** false
**Description** HVAC, fans and related appurtenances

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | name to a feature, eg "High Service Pump 13" | | | | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | management analysis | | | | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| EQUIPMENTTYPE | String | 100 | Equipment Type | The type of HVAC, blower, or other ventilation equipment | | | true | | |
| PROCESSCRITICAL | SmallInteger | 2 | Process Critical? | Indicates if the asset is essential to the main process or function of the system or if it is secondary | | | true | | |
| CAPACITYAIR | String | 50 | Capacity (Air) | The rated capacity of a blower or ventilation unit | | | true | | |
| VOLTAGE | String | 50 | Voltage | The voltage of the asset | vertVoltage | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | relevant to the asset | | | | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsVFD - Table

**Name** sspsVFD
**AliasName** sspsVFD
**HasAttachments** false
**Description** Adjustable speed motor for pumps or other applications

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Inspection to the GIS | | | | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| VOLTAGE | String | 50 | Voltage | The voltage of the asset | vertVoltage | | true | | |
| POWERPHASE | String | 50 | Power Phase | Power phasing configuration | vertElectricalPhase | | true | | |
| AMPS | Double | 8 | Amperage (Amps) | A measure of electrical current | | | true | | |
| HORSEPOWER | Double | 8 | Horsepower | The horsepower rating of the asset | | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

**sspsWatQualityPanel - Table**

**Name** sspsWatQualityPanel
**AliasName** sspsWatQualityPanel
**HasAttachments** false
**Description** Devices for analyzing potabable water quality parameters such as turbidity and chlorine residual

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | redundancy of the asset | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| WATQUALITYPANEL | String | 255 | Water Quality Control Panel Type | Type, make or other features of the water quality control panel | | | true | | |
| CHEMICALS | String | 255 | Chemicals | Analytical reagents used at water quality panel | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### sspsWetWell - Table

**Name** sspsWetWell
**AliasName** sspsWetWell
**HasAttachments** false
**Description** Well from which influent is collected and ultimately pumped out

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | location | | | | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Cityworks Inspection to the GIS | | | | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| DEPTHVES | Double | 8 | Depth (Ft) | Depth measured to the top of the holding structure | | | true | | |
| RIMELEVATION | Double | 8 | Rim Elevation (Ft NAVD) | The elevation of the top of the wet well (NAVD) | | | true | | |
| INVELEVATION | Double | 8 | Lowest Pipe Invert Elevation (Ft NAVD) | The elevation of the lowest influent pipe in a wet well (NAVD) | | | true | | |
| INFPIPEDIAM1 | Double | 8 | Lowest Influent Pipe Diameter | The diameter of the lowest influent pipe | | | true | | |
| INFPIPEINV2 | Double | 8 | Secondary Influent Pipe Invert | The elevation of the secondary influent pipe in a wet well in feet NAVD | | | true | | |
| INFPIPEDIAM2 | Double | 8 | Secondary Influent Pipe Diam | The diameter of the secondary influent pipe in a wetwell | | | true | | |
| EFFPIPEINV | Double | 8 | Effluent Pipe Invert | The invert elevation of the effluent pipe in feet NAVD | | | true | | |
| EFFPIPEDIAM | Double | 8 | Effluent Pipe Diameter | The diameter of the effluent pipe | | | true | | |
| PUMPELEVATION | Double | 8 | Pump Suction Elevation (Ft NAVD) | The suction elevation of the pump units within a wetwell (NAVD) | | | true | | |
| BOTTOMELEVATION | Double | 8 | Bottom Elevation (Ft NAVD) | The lowest elevation of a well, vault, or fuel tank in ft NAVD datum | | | true | | |
| VOLUME | Double | 8 | Structure Volume (Gal) | The volume of a structure | | | true | | |
| DIAMETERFT | Double | 8 | Diameter (Ft) | The diameter of the asset in Feet | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LIDSIZE | String | 100 | Lid Size and Shape | The size and shape of a well lid, eg 4'x4' square lid | | | true | | |
| COATING | SmallInteger | 2 | Coating? | Indicates if a wet well has been coated | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsAlarm - Table

**Name** swpsAlarm
**AliasName** swpsAlarm
**HasAttachments** false
**Description** Alarm systems for a pump station

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| ALARMTYPE | String | 50 | Alarm Type | The type or function of alarm, eg security, fire, or float level | vertAlarmType | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsBuilding - Table

**Name** swpsBuilding
**AliasName** swpsBuilding
**HasAttachments** false
**Description** Structure containing the pumps, generators, or other assets associated with a pump station

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | moved to a related table | | | | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | be updated from Cityworks Inspection to the GIS | | | | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| BACKFLOWDIAM | Double | 8 | Backflow Diameter | The diameter of an onsite backflow unit | | | true | | |
| BUILDINGMATERIAL | String | 50 | Building Material | The primary construction material of a pump station building | | | true | | |
| ROOFTYPE | String | 50 | Roof Type | The style of roof construction of a building | | | true | | |
| FLOORELEVATION | Double | 8 | Finished Floor Elevation (Ft NAVD) | The finished floor elevation of a pump station building | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsCamera - Table

**Name** swpsCamera
**AliasName** swpsCamera
**HasAttachments** false
**Description** Cameras and visual monitoring devices

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| CAMERAFUNCTION | String | 255 | Camera Function | Describes function or purpose of | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | camera | | | | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsChemicalSystem - Table

**Name** swpsChemicalSystem
**AliasName** swpsChemicalSystem
**HasAttachments** false
**Description** For future chemical treatment of odor system

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | management analysis and repair/replace decisions | | | | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| CHEMICALTYPE | String | 255 | Chemical Type | Describes the chemical odor control system | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

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### swpsCivil - Table

**Name** swpsCivil
**AliasName** swpsCivil
**HasAttachments** false
**Description** Omnibus for site appearance and any other miscellaneous improvements for work order tracking purposes

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | eg "High Service Pump 13" | | | | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsCommunicationEquipment - Table

**Name** swpsCommunicationEquipment
**AliasName** swpsCommunicationEquipment
**HasAttachments** false
**Description** Assets related to communicating between SCADA and/or other systems

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | "High Service Pump 13" | | | | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| COMMUNICATIONEQUIPMENT | String | 50 | Equipment Type | The type of communication equipment | vertCommunicationEquipment | | true | | |
| COMMUNICATIONMODE | String | 50 | Communication Mode | The manner in which a device | vertInstrumentCommProtocol | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | communicates with other devices | | | | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsControlPanel - Table

**Name** swpsControlPanel
**AliasName** swpsControlPanel
**HasAttachments** false
**Description** Control panels for pump station assets

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Cityworks Inspection to the GIS | | | | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| EXTERNALVOLTAGESOURCE | String | 50 | External Voltage Source | Supply voltage of a control panel | | | true | | |
| ARCFLASHRATING | String | 20 | Arc Flash Rating | NFPA 70E arc flash rating | | | true | | |
| PURPOSE | String | 255 | Purpose | The function of a control panel | | | true | | |
| NEMAENCLOSURE | String | 1 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| CLASSDIVISIONGROUP | String | 100 | Class-Division-Group | Indicates Factory Mutual hazardous area classification | | | true | | |
| PANELMATERIAL | String | 100 | Panel Material | The material of a panel | vertPanelMaterial | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

**swpsDebrisScreen - Table**

**Name** swpsDebrisScreen
**AliasName** swpsDebrisScreen

**HasAttachments** false

**Description** Screens to control debris entering the pump station

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | station the asset is associated with | | | | | |
| AUTOMATICSCREEN | SmallInteger | 2 | Automatic? | Indicates if a screen has automatic lift | | | true | | |
| SCREENSIZE | String | 50 | Screen Size | Screen dimensions | | | true | | |
| SCREENMATERIAL | String | 20 | Screen Material | The material of a debris screen | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsDryWell - Table

**Name** swpsDryWell
**AliasName** swpsDryWell
**HasAttachments** false
**Description** Underground structure to house pumps, piping, valves, and other appurtenant PS equipment. Not used at stations with submersible pumps

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | with associated object-class assets | | | | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| DEPTHVES | Double | 8 | Depth (Ft) | Depth measured to the top of the holding structure | | | true | | |
| TOPELEVATION | Double | 8 | Top Elevation (Ft NAVD) | The elevation at the surface of the vault | | | true | | |
| BOTTOMELEVATION | Double | 8 | Bottom Elevation (Ft NAVD) | The lowest elevation of a well, vault, or fuel tank in ft NAVD datum | | | true | | |
| INFPIPEINV | Double | 8 | Influent Pipe Invert (Ft NAVD) | The invert elevation of the influent pipe in feet NAVD | | | true | | |
| INFPIPEDIAM | Double | 8 | Influent Pipe Diameter | The diameter of the influent pipe | | | true | | |
| EFFPIPEINV | Double | 8 | Effluent Pipe Invert | The invert elevation of the effluent pipe in feet NAVD | | | true | | |
| EFFPIPEDIAM | Double | 8 | Effluent Pipe Diameter | The diameter of the effluent pipe | | | true | | |
| LIDSIZE | String | 100 | Lid Size and Shape | The size and shape of a well lid, eg 4'x4' square lid | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

**swpsFencing - Table**

**Name** swpsFencing
**AliasName** swpsFencing
**HasAttachments** false
**Description** External fence surrounding pump station

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | (high risk) and is used to prioritize investments | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| FENCETYPE | String | 50 | Fence Type | The type of fence | vertFenceType | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsFlowMeter - Table

**Name** swpsFlowMeter
**AliasName** swpsFlowMeter
**HasAttachments** false
**Description** Metering devices within the pumpstation that determine rates, volumes, or other flow metrics

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | updated from there to GIS | | | | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| FLOWMETERTYPE | String | 50 | Flow Instrument Type | The type of flow instrument | vertFlowInstrumentType | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| NEMAENCLOSURE | SmallInteger | 2 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| INSTVOLTAGE | String | 50 | Instrument Voltage | The voltage of an instrument | vertInstrumentVoltage | | true | | |
| RANGE | String | 50 | Range | The minimum and maximum flow capacities for a specific flow instrument | | | true | | |
| FLOWUNITS | String | 50 | Flow Units | The unit of measure for a flow device | vertFlowUnits | | true | | |
| SIZEOFMETER | Double | 8 | Flow Meter Diameter | The diameter of a flow meter | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CLASSDIVISIONGROUP | String | 100 | Class-Division-Group | Indicates Factory Mutual hazardous area classification | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsFuelTank - Table

**Name** swpsFuelTank
**AliasName** swpsFuelTank
**HasAttachments** false
**Description** Installed tanks to reserve fuel for generator use

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | removed from the ground | | | | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | will be used for asset management analysis and repair/replace decisions | | | | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| CAPACITYFUEL | Double | 8 | Capacity (Gal) | The capacity of a fuel tank in Gallons | | | true | | |
| TANKMATERIAL | String | 50 | Tank Material Type | The material a tank is primarily constructed of | vertTankMaterial | | true | | |
| DEPTHVES | Double | 8 | Depth (Ft) | Depth measured to the top of the holding structure | | | true | | |
| BOTTOMELEVATION | Double | 8 | Bottom Elevation (Ft NAVD) | The lowest elevation of a well, vault, or fuel tank in ft NAVD datum | | | true | | |
| LININGMATERIAL | String | 50 | Lining Material | The internal lining material of a fuel tank | | | true | | |
| REGULATORYID | String | 50 | Regulatory ID | Regulatory identification number or permit number | | | true | | |
| EXTERIORCOLOR | String | 50 | Exterior Color | The external color of a fuel tank | | | true | | |
| EXTERNALCOATING | String | 50 | Tank Exterior Coating | The external material of a fuel tank | | | true | | |
| CONFINEDSPACE | SmallInteger | 2 | Confined Space Entry? | To indicate if access is physically restrictive or constrained by space | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

**swpsGenerator - Table**

**Name** swpsGenerator
**AliasName** swpsGenerator
**HasAttachments** false
**Description** Electrical Generator to continue essential functions of the pump station in the event of loss of power

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | will occur and is adjusted for backup and redundancy of the asset | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| OUTPUTPOWER | Double | 8 | Output (kW) | Electric power output of a generator | | | true | | |
| VOLTAGE | String | 50 | Voltage | The voltage of the asset | vertVoltage | | true | | |
| POWERPHASE | String | 50 | Power Phase | Power phasing configuration | vertElectricalPhase | | true | | |
| POWERSOURCE | String | 50 | Power Source | The power or fuel source the device draws from | vertPowerSource | | true | | |
| REGULATORYID | String | 50 | Regulatory ID | Regulatory identification number or permit number | | | true | | |
| BATTERIES | String | 20 | Batteries | Description of control or cranking battery type and size | | | true | | |
| FUELTYPE | String | 20 | Fuel Type | Type of fuel stored or consumed by the asset | | | true | | |
| HORSEPOWER | Double | 8 | Horsepower | The horsepower rating of the asset | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsLevelInstrument - Table

**Name** swpsLevelInstrument
**AliasName** swpsLevelInstrument
**HasAttachments** false
**Description** Devices for detecting and indicating the level of a surface

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | prioritize investments | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| LEVELINSTTYPE | String | 100 | Level Instrument Type | The type of level instrument | vertLevelInstrumentType | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| NEMAENCLOSURE | String | 1 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| RANGE | String | 50 | Range | The minimum and maximum flow capacities for a specific flow instrument | | | true | | |
| INSTVOLTAGE | String | 50 | Instrument Voltage | The voltage of an instrument | vertInstrumentVoltage | | true | | |
| LEVELUNITS | String | 50 | Level Units | Units of measure to provide the level of a vessel or container | vertLevelUnits | | true | | |
| CLASSDIVISIONGROUP | String | 100 | Class-Division-Group | Indicates Factory Mutual hazardous area classification | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsMiscInstrument - Table

**Name** swpsMiscInstrument
**AliasName** swpsMiscInstrument
**HasAttachments** false
**Description** Instruments, including Rain Gauges, that do not fit well into other instrumentation classes

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | created database trigger | | | | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | is used to prioritize investments | | | | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| RANGE | String | 100 | Range | The minimum and maximum flow capacities for a specific flow instrument | | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| ELEMENTFUNCTION | String | 50 | Element Function | The general function of a miscillaneous instrument | vertElementFunction | | true | | |
| NEMAENCLOSURE | SmallInteger | 2 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| INSTVOLTAGE | String | 50 | Instrument Voltage | The voltage of an instrument | vertInstrumentVoltage | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

### swpsPiping - Table

**Name** swpsPiping
**AliasName** swpsPiping
**HasAttachments** false
**Description** Piping contained within the pump station not otherwise represented by a GIS horizontal feature asset

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | to a feature, eg "High Service Pump 13" | | | | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PIPECONTENTS | String | 50 | Pipe Contents | Identifies the type of water in the pipe | | | true | | |
| DIAMETER | String | 50 | Diameter | The diameter of the asset | | | true | | |
| MATERIAL | String | 50 | Typical Material | The construction material of a pipe segment | | | true | | |
| TYPICALLININGMATERIAL | String | 50 | Typical Lining Material | Type of lining material inside of a pipe, if any | | | true | | |
| TYPICALEXTERNALCOATING | String | 50 | Typical External Coating | Type of external coating or surfacing of a pipe | vertExternalCoating | | true | | |
| TYPICALPSI | Double | 8 | Pressure Rating (PSI) | The normal pressure of a pipe segment | | | true | | |
| MICROREQUIRED | SmallInteger | 2 | Micro Required? | If microbiological testing is required | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

**swpsPressureInstrument - Table**

**Name** swpsPressureInstrument
**AliasName** swpsPressureInstrument
**HasAttachments** false
**Description** Devices for detecting or measuring pressure

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and | | | true | | |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | repair/replace decisions | | | | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for future asset management analysis | | | true | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PRESSINSTTYPE | String | 50 | Pressure Instrument Type | The type of pressure instrument | vertPressureInstrumentType | | true | | |
| COMMUNICATIONPROTOCOL | String | 50 | Communication Protocol | The protocol in which a device communicates with a SCADA system or other network | vertInstrumentCommProtocol | | true | | |
| NEMAENCLOSURE | SmallInteger | 2 | In NEMA Enclosure? | Indicates if an asset is stored in a NEMA rated enclosure | | | true | | |
| NEMARATING | String | 100 | NEMA Rating | Indicates the NEMA rating of an asset | vertNEMARating | | true | | |
| INSTVOLTAGE | String | 50 | Instrument Voltage | The voltage of an instrument | vertInstrumentVoltage | | true | | |
| RANGE | String | 50 | Range | The minimum and maximum flow capacities for a specific flow instrument | | | true | | |
| PRESSUREUNITS | String | 50 | Pressure Units | Indicates the units used to measure pressure | vertPressureUnits | | true | | |
| SIZEOFMETER | Double | 8 | Flow Meter Diameter | The diameter of a flow meter | | | true | | |
| CLASSDIVISIONGROUP | String | 100 | Class-Division-Group | Indicates Factory Mutual hazardous area classification | | | true | | |
| FIELDNOTES | String | 255 | Field Notes | Comments or notes from field staff, including surveyors, that are relevant to the asset | | | true | | |
| NOTES | String | 255 | GIS Notes | GIS entry notes or comments relevant to the asset | | | true | | |
| created_user | String | 255 | created_user | created_user | | | true | | |
| created_date | Date | 8 | created_date | created_date | | | true | | |
| last_edited_user | String | 255 | last_edited_user | last_edited_user | | | true | | |
| last_edited_date | Date | 8 | last_edited_date | last_edited_date | | | true | | |
| GlobalID | GlobalID | 38 | GlobalID | GlobalID | | | false | | |

## swpsPump - Table

**Name** swpsPump
**AliasName** swpsPump
**HasAttachments** false
**Description** Pumping units within pump stations

| Field | DataType | Length | AliasName | Description | Domain | DefaultValue | IsNullable | Precision | Scale |
|---|---|---|---|---|---|---|---|---|---|
| FACILITYNUM | Integer | 4 | Facility Number | Locally asssigned numeric unique identifier populated by database admin created database trigger | | | true | | |
| FACILITYID | String | 20 | Facility ID | Locally asssigned alpha-numeric unique identifier populated by database admin created database trigger | | | true | | |
| LEGACYID | String | 20 | Legacy ID | Former asset identifier. To be moved to a related table | | | true | | |
| ASSETNAME | String | 100 | Asset Name | The common parlance reference name to a feature, eg "High Service Pump 13" | | | true | | |
| INSTALLDATE | Date | 8 | Install Date | The date the asset was installed | | | true | | |
| WARRANTYDATE | Date | 8 | Warranty Date | The date the warranty expires on the asset. If populated and asset is still under warranty, asset record will show up pink on the Cityworks work order | | | true | | |
| LOCATION | String | 100 | Location | A description of the asset's basic location | | | true | | |
| PARENTFACILITYID | String | 20 | Parent Facility ID | A field for cross-referencing assets with associated object-class assets | | | true | | |
| ACTIVESTATUS | String | 10 | Active Status | Identifies whether the asset is in use, not in use or removed from the ground | | | true | | |
| MANUFACTURER | String | 30 | Manufacturer | The manufacturer or brand of the asset | | | true | | |
| MODEL | String | 30 | Model Number | The model number of the asset | | | true | | |
| SERIAL | String | 30 | Serial Number | The serial Number of the asset | | | true | | |
| SCADATAG | String | 20 | SCADA Tag | The SCADA tag associated with the asset | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| POF | SmallInteger | 2 | Probability of Failure | Probability of Failure. Used in the BRE model to estimate the likelihood the predicted asset (or service) failure will occur and is adjusted for backup and redundancy of the asset | | | true | | |
| BRE | SmallInteger | 2 | Business Risk Exposure | Business Risk Exposure is a the product of probablity of failure (POF) and consequence of failure (COF). Values range from 1 (low risk) to 100 (high risk) and is used to prioritize investments | | | true | | |
| COF | SmallInteger | 2 | Consequence of Failure | The consequence of failure. Used in the BRE model as the impact due to asset failure | | | true | | |
| RUL | SmallInteger | 2 | Remaining Useful Life | The Remaining Useful Life of an asset calculated by subtracting the number of years since installation, from the sevice life. It will be heavily relied upon for asset management analysis | | | true | | |
| CONDITION | SmallInteger | 2 | Condition Rating | The condition rating of the asset. Used by Cityworks Analytics for condition analysis output. May be calculated within a Cityworks Inspection and updated from there to GIS | | | true | | |
| CONDITIONDATE | Date | 8 | Condition Date | The date of the last condition assessment. Can be updated from Cityworks Inspection to the GIS | | | true | | |
| REPLACEMENTCOST | Double | 8 | Replacement Cost | The total cost to replace the asset | | | true | | |
| ASSETCOST | Double | 8 | Initial Cost | The replacement cost of the asset. If populated, this will be used for asset management analysis and repair/replace decisions | | | true | | |
| PURCHASEDATE | Date | 8 | Purchase Date | The purchase date of the asset. Used for | | | true | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | future asset management analysis | | | | | |
| DATECALCULATED | Date | 8 | Date Calculated | Cityworks Operational Insights Requirement | | | true | | |
| PUMPSTATIONNAME | String | 100 | Pump Station Name | The name of the specific pump station the asset is associeted with | | | true | | |
| SYSTEMNAME | String | 50 | System Name | The name of the system the asset is primarily associated with | PSVerticalSystem | | true | | |
| PUMPSTATIONFACID | String | 50 | Pump Station Facility ID | The FACILITYID of the pump station the asset is associated with | | | true | | |
| PUMPTYPE | String | 50 | Pump Type | Wet-end configuration of pump | vertPumpType | | true | | |
| DESIGNCAPACITY | Double | 8 | DesignCapacity | The designed flow capacity of a pump | | | true | | |
| DESIGNHEAD | Double | 8 | Design Head (Ft) | The designed differential pressure across the pump measured in ft water column | | | true | | |
| SHUTOFFHEAD | Double | 8 | Shut-Off Head (Ft) | The amount of head a pump produces wherein the flow of effluent becomes zero | | | true | | |
| MAXCAPACITY | Double | 8 | Maximum Capacity | The maximum flow of a pump | | | true | | |
| HEADATMAXCAPACITY | Double | 8 | Head at Maximum Capacity (FT) | The amount of head at maximum flow | | | true | | |
| EFFICIENCYATDESIGNPOINT | Double | 8 | Efficiency at Design Point (%) | Pump design efficiency in percent | | | true | | |
| IMPELLERDIAMETER | Double | 8 | Impeller Diameter (In) | The diameter of the impeller of a pump | | | true | | |
| NUMBEROFIMPELLERS | SmallInteger | 2 | Number Of Impellers | The number of impellers a pump has | | | true | | |
| IMPELLERMATERIAL | String | 50 | Impeller Material | The material of the impeller of a pump | vertImpellerMaterial | | true | | |
| BEARING | String | 50 | Bearing Type | The style of bearing used to reduce friction in a rotary unit | vertBearingType | | true | | |
| NUMBEROFSTAGES | SmallInteger | 2 | Number Of Stages | The number of stages a pump has | | | true | | |
| CENTERLINEELEVATION | Double | 8 | Centerline Elevation (Ft USGS) | Used to calculate hydraulic modeling and control elevation of a pump | | | true | | |
| VOLTAGE | String | 50 | Voltage | The voltage of the asset | vertVoltage | | true | | |
| BACKUPTYPE | String | 50 | Backup Type | The type of backup unit a pump has | | | true | | |
| PUMPMODE | String | 50 | Mode of Operation | The type of mechanical drive | vertPumpMode | | true | | |