CITY OF PHILADELPHIA

Office of Innovation and Technology
On behalf of
Philadelphia Water Department

REQUEST FOR INFORMATION

FOR

Citywide Planimetric Data and Maintenance

8/21/2023

Deadline for questions, requests for clarification, or requests for additional information	8/28/2023 before 5:00 PM (Local Philadelphia Time)
City Responds to Questions	9/4/2023
Responses to RFI Due	9/11/2023 before 5:00 PM (Local Philadelphia Time)

JAMES F. KENNEY, Mayor
Randy Hayman, Commissioner, Philadelphia Water Department
Sandra Carter, Interim CIO, Office of Innovation and Technology

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PWD Planimetric RFI
REQUEST FOR INFORMATION

I.   RESPONSE CALENDAR

Post Request for Information	8/21/2023
Deadline for questions, requests for clarification, or requests for additional information (Henry.Bernberg@phila.gov and Gayle.Ruggeri@phila.gov)	8/28/2023 before 5:00 PM (Local Philadelphia Time)
City Responds to Questions (http://www.phila.gov/rfp)	9/4/2023
Responses to RFI Due (Henry.Bernberg@phila.gov and Gayle.Ruggeri@phila.gov)	9/11/2023 before 5:00 PM (Local Philadelphia Time)

II.   PURPOSE OF REQUEST FOR INFORMATION

All properties in the City of Philadelphia are assessed a monthly stormwater charge. This fee recovers the cost the City incurs for managing stormwater. The amount charged for stormwater on a monthly basis depends on the type of property as well as the gross and impervious area. One of the key datasets to ensure the stormwater fee is accurate for each property is citywide planimetric data classifying all landcover in the city limits. This dataset was last updated in 2015. The City and PWD are now exploring options to acquire new citywide planimetric data in order to run the parcel-based stormwater billing program more efficiently. The City, through its Office of Innovation and Technology (OIT), has issued this Request for Information (RFI) to solicit statements of interest, capabilities, Rough Order of Magnitude (ROM) cost estimates, and estimated completion time from all Respondents interested in, and capable of, providing this data.

Respondents are asked to provide OIT with information regarding their available products and solutions, subject to the following guidelines:

- Identify only products or solutions that can generate a dataset meeting the criteria set out in section VI of this RFI.
- Any software or model-based solutions should provide consistent results when provided with new imagery.
- Describe the methodology used to produce the dataset.

Respondents may, in the City's discretion, be invited to engage in discussions with the City's project team and/or demonstrate their products, services and solutions.

No contract will be awarded pursuant to this RFI. Anyone who does not respond to this RFI is not precluded from responding to any future solicitation issued by the City. The City intends to procure software for this project as soon as reasonably possible, in accordance with the City's procurement laws and practices for software purchases, which may include, but are not limited to, the use of existing City contracts or certified cooperative purchase agreements. Respondents will not be bound by the ROM cost estimates provided in their responses to this RFI in a future procurement. The City also reserves the right to not procure any software.

III. RFI CONTACT INFORMATION FOR QUESTIONS, REQUESTS FOR CLARIFICATION

All questions (see RFI Question Template Exhibit) and requests for clarification concerning this RFI must be in writing and submitted via email no later than 5:00 pm, Local Philadelphia Time, on 8/28/2023 to:

Henry Bernberg	Gayle Ruggeri
Stormwater Billing Supervisor	Director, RFX & DocuSign Services
Philadelphia Water Department	Office of Innovation and Technology
Henry.Bernberg@phila.gov	Gayle.Ruggeri@phila.gov

Responses to questions and requests for additional information shall be at the sole discretion of the City. Any additional information and/or responses to questions will be posted only on the City's website at http://www.phila.gov/rfp ("Additional Opportunities"). No additional information and/or responses to questions will be sent by email. Nothing in this RFI shall create an obligation on the City to respond to a Respondent submitting a response.

The City may, in its sole discretion, issue addenda to this RFI containing responses to questions, clarifications of the RFI, revisions to the RFI or any other matters that the City deems appropriate. Addenda, if any, will be posted on the City's website at https://www.phila.gov/rfp/additional opportunities. It is the Respondent's responsibility to monitor the Additional Opportunities site for Addenda and to comply with any new information.

Oral responses made by any City employee or agent of the City in response to questions or requests for information or clarification related to this RFI are not binding and shall not in any way be considered as a commitment by the City.

If a Respondent finds any inconsistency or ambiguity in the RFI or an addendum to the RFI issued by the City, the Respondent is requested to notify the City in writing by the above deadline for questions and requests for information or clarification.

IV. ABOUT THE CITY OF PHILADEPHIA AND OIT

The City of Philadelphia is the largest city in the Commonwealth of Pennsylvania and the sixth-most populous city in the United States with over 1.5 million residents. Additionally, due to its rich historic and cultural heritage, the region is visited by more than 40 million people each year.

Philadelphia is located in the southeastern section of Pennsylvania and the coterminous city/county covers 143 square miles. The City is bordered by the following counties: Bucks, Montgomery and Delaware in Pennsylvania, and Burlington, Camden and Gloucester in New Jersey.

As an operating department of the City, OIT provides technology and telecommunication services to the City, its employees, and the community. There are over 25,000 city employees in Philadelphia.

V. RESERVED

VI. ANTICIPATED SOLUTION REQUIREMENTS

The proposed solution should include the following functionality:

- Planimetric data for the entire area of the City of Philadelphia, an area of approximately 143 square miles.
  - City boundaries are available here: https://opendataphilly.org/datasets/city-limits/
- Data should be a single polygon dataset in either ESRI shapefile or Geodatabase format.
- Data should be continuous for the entire city limits without any gaps or overlaps.
  - Data will be based on high resolution orthorectified imagery (to be provided by City).
- Data should be in NAD 1983 StatePlane Pennsylvania South FIPS 3702 projection.
- Land cover types should be coded using a list of pre-defined categories (see attached sample list and collection criteria for examples).
- An ongoing maintenance plan for the planimetric data to account for changes on an annual or biennial schedule using new imagery provided by the city.
  - Updated planimetric data should meet all the same criteria as the original dataset.
  - Only areas that have changed between imagery captures should be updated.
  - Areas of change should be highlighted.

Please see attached Exhibit A:
Sample Feature List and Collection Criteria for Possible 2024 Planimetrics Capture

VII. SUBMISSION GUIDELINES

The City expects each Respondent to include in their response to this RFI the following items in the order listed:

Company Overview:
Include company name, physical address, phone number, fax number, and web address, a brief description of the company, its services, business size (total revenue and number of employees), and point(s) of contact, including name, address, phone and email address. Note the company's operations including the number of years the company has been supporting this solution; location of company's headquarters and all other office locations; and three years of financial data to ensure company stability.

If applicable, please describe any subcontractors or partners with which you have worked. Resumes need not be included.

Experience:
Describe your company/organization's relevant experience (and that of partners, when applicable) with producing planimetric data. Identify your experience with clients of similar size and scope to the City of Philadelphia, including client name, engagement title, description of engagement, the solution implemented and the methodology used, cost, the start and completion dates of the project, as well as, the name, address and telephone number of a contact person.

Product Solution:
Identify one or more planimetric production methods that meet the City's requirements. A major goal of this RFI is to provide Respondent with an opportunity to inform PWD and OIT about their respective data extraction methodology.

Maintenance Model:
Provide the anticipated ongoing data update and maintenance services including methodology for providing updated planimetric data on an annual or biennial timeline and for correction errors discovered during product review. Outline the services in your support model including available service level agreements.

Pricing/Licensing Model:
Include a general pricing model and costs for the planimetric data based upon the information provided in this RFI. This pricing should include the estimated cost for an initial deliverable, ongoing updates, and any other associated costs. Respondents will not be bound by any cost estimates included in responses to this RFI.

VIII. USE OF RESPONSES

Responses to this RFI may be used by OIT to inform a contract request for planimetric data. Responses may also be used to assist OIT in gathering information for planning purposes, and for purposes of identifying sufficient resources for an implementation initiative.

The City does not intend to announce any further actions taken pursuant to this RFI. If any such announcements are made, at the sole discretion of the City, those announcements will be posted with the original RFI. In some cases, at the City's sole discretion, the City may issue an RFP. The City will notify Respondents to this RFI if an RFP is posted on the City's website.

The City will notify you if additional information is required in order to evaluate your response to this RFI. Absent such follow up from the City, we respectfully request that respondents refrain from requesting additional information on the status of this RFI. In order to protect the integrity of the City procurement process, City personnel will not respond to requests for additional information on the status or outcome of this RFI, other than as described above.

IX. HOW TO SUBMIT RESPONSES

Respondents should submit their responses electronically (hard copies are unacceptable) in MS Word or Adobe PDF format, as a single document (see note below), to:

Henry Bernberg   Gayle Ruggeri@phila.gov
Stormwater Billing Supervisor   Director RFX and DocuSign Services
Philadelphia Water Department   Office of Innovation and Technology
Henry.Bernberg@phila.gov   Gayle.Ruggeri@phila.gov

Responses are due 9/11/2023 before 5:00 pm, Local Philadelphia Time.

Note: Response document(s) are limited to 15 MB; if necessary, please submit multiple files or zip/compress the file(s)

X. CONFIDENTIALITY AND PUBLIC DISCLOSURE

Respondents shall treat all information obtained from the City which is not generally available to the public as confidential and/or proprietary to the City. Respondents shall exercise all reasonable precautions to prevent any information derived from such sources from being disclosed to any other person. No other party, including any Respondent, is intended to be granted any rights hereunder.

XI. RIGHTS AND OPTIONS RESERVED

In addition to the rights reserved elsewhere in this RFI, the City reserves and may, in its sole discretion, exercise any or more of the following rights and options with respect to this RFI if the City determines that doing so is in the best interest of the City:

1. Decline to consider any response to this RFI ("response"); cancel the RFI at any time; elect to proceed or not to proceed with discussions or presentations regarding its subject matter with any Respondent and with firms that do not respond to the RFI; to reissue the RFI or to issue a new RFI (with the same, similar or different terms);

2. Select a COTS package from a vendor that does not respond to this RFI, or elect not to proceed with any procurement;

3. Waive, for any response, any defect, deficiency or failure to comply with the RFI if, in the City's sole judgment, such defect is not material to the response;

4. Extend the Submission Date/Time and/or to supplement, amend, substitute or otherwise modify the RFI at any time prior to the Submission Date/Time, by posting notice thereof on the City web page(s) where the RFI is posted;

5. Require, permit or reject amendments (including, without limitation, submitting information omitted), modifications, clarifying information, and/or corrections to responses by some or all Respondents at any time before or after the Submission Date/Time;

6. Require, request or permit, in discussion with any Respondent, any information relating to the subject matter of this RFI that the City deems appropriate, whether it was described in the response to this RFI;

7. Discontinue, at any time determined by the City, discussions with any Respondent or all Respondents regarding the subject matter of this RFI, and/or initiate discussions with any other Respondent or with vendors that did not respond to the RFI;

8. To conduct such investigations with respect to the financial, technical, and other qualifications of the Respondent as the City, in its sole discretion, deems necessary or appropriate;

9. Do any of the foregoing without notice to Respondents or others, except such notice as the City, in its sole discretion, may elect to post on the City web page(s) where this RFI is posted.

This RFI and the process described are proprietary to the City and are for exclusive benefit of the City. Upon submission, responses to this RFI shall become the property of the City, which shall have unrestricted use thereof.

XII. PUBLIC DISCLOSURE

By submitting a response to this RFI, Respondent acknowledges and agrees i) that the City is a "local agency" under and subject to the Pennsylvania Right-to-Know Law (the "Act"), 65 P.S. §§ 67.101-67.3104, as the Act may be amended from time to time; and ii) responses may be subject to public disclosure under the Act. In the event the City receives a request under the Act for information that a Respondent has marked as confidential, the City will use reasonable efforts to consult with Respondent regarding the response and, to the extent reasonably practicable, will give Respondent the opportunity to identify information that Respondent believes to be confidential proprietary information, a trade secret, or otherwise exempt from access under Section 708 of the Act.

Notwithstanding anything to the contrary contained in this RFI, nothing in this RFI shall supersede, modify, or diminish in any respect whatsoever any of the City's rights, obligations, and defenses under the Act, nor will the City be held liable for any disclosure of records, including information that the City determines in its sole discretion is a public record and/or information required to be disclosed under the Act.

RFI Question Template Exhibit

Question Number	RFI Section # *(If applicable)*	Respondent Name:
		Question(s)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Exhibit A

Sample Feature List and

Collection Criteria for Possible

2024 Planimetrics Capture

Sample Feature List and Collection Criteria for Possible 2024 Planimetrics Capture

	FCODE	File Geodatabase delivered using ArcGIS 10.8	Feature Type (P)oint, (L)ine, (S)urface	Definition
BUILDINGS				
Building Outlines (Footprints)	1810	Buildings	Polygon	Definition: Vendor will capture building footprints and develop a unique ID for each building. Vendor will use party walls for the purpose of splitting building where there are row homes, twins and other similar situations and will create individual building polygons, but will done in two phases:
Building Decks	1811	Decks	Polygon	Definition: License and Inspections (L&I) and the Office of Property Assessment (OPA) requested that Building Decks are captured when Buildings are captured.

Sample Feature List and Collection Criteria for Possible 2024 Planimetrics Capture

Party Walls	1820	Party Walls	Line	Definition: Vendor will capture Party Walls dividing ownership of buildings. Capture Method: Vendor will deliver a building polygon layer that contains the party wall cut included in it. Vendor will utilize Building Footprint provided by Vendor as baseline. Linear walls (defined wall separating housing units on row house building configuration) will be extracted. Imagery must support collection, line will not be inferred. Vendor will use the following base imagery or data layers to determine party walls (however, AccuPlus Ortho will be the primary source): 　i. AccuPlus 3" Orthophotography 　ii. PWD Parcels 　iii. Oblique Imagery 　iv. Address Based Data Vendor will use all tools at their disposal, including oblique imagery and street level imagery. Temporary access to these hosted solutions will be provided by City. Vendor will populate a field in Party Walls with either "Ortho" (captured from "Year" Ortho) or "Other" (captured via other sources of data such as DOR Parcels, Oblique Imagery, etc.)
IMPERVIOUS SURFACES				

				Definition: The impervious surface layer will be delivered as one layer with designated FCODE and there will be no overlapping features. Vendor will capture Building Footprints, Decks, Partwalls and Building Heights. Vendor will capture all other impervious Surface features.
Tanks	1830	Tanks	Polygon	Definition: Compile the visible tanks from imagery.
Travelway	1000	Travelway	Line, Polygon	Definition: Compile the visible edges of pavement, edges of unpaved roads, and drivable roadways as interpreted from the imagery, including in parks, up to the edge of traffic flow islands. Capture Method: Will use Street Centerline for reference, but include Private roads as 1000.
Medians	1010	Medians	Line, Polygon	Definition: Compile the visible edges of pavement and/or edges of curb interface as interpre[...] imagery. A paved, planted, or landscaped strip in the center of a highway that separates lanes of traffic going in opposite directions. Capture Method: Will capture features > or = 4ft in width. Code as 1010 if concrete. Code as 9999 if Natural Surface/Vegetated.
Shoulder	1020	Shoulder	Line, Polygon	Definition: The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles for emergency use, and for lateral support of the base and surface courses. Capture Method: Compile at the visible edges of pavement and/or edges of travelway interface as interpreted from the imagery.

Sample Feature List and Collection Criteria for Possible 2024 Planimetrics Capture

Travelway Bridge	1200	Travelway Bridge	Line, Polygon	Definition: A structure carrying a road across a river, ravine, road, railroad, or other obstacle. Capture Method: Compile feature to represent the surface of the actual bridge deck as interpreted from the imagery. Capture will include an attribute for each polygon. The attribute will include a Max Height and an Average Height for single polygon bridge with different elevations across the bridge.
Railroad Bridge	1210	Railroad Bridge	Line, Polygon	Definition: A structure carrying railroad across a river, ravine, road, railroad, or other obstacle. Capture Method: Compile feature to represent the surface of the actual bridge deck as interpreted from the imagery.
Pedestrian Bridge	1220	Pedestrian Bridge	Line, Polygon	Definition: Bridge designed for foot traffic, cyclists, animal traffic. Most cases to allow pedestrians to cross over transportation travelways and rivers/canals. Capture Method: Compile feature to represent the surface of the actual bridge deck as interpreted from the imagery. If connected to building, inlcude in Building Footprint (code as 1810). Meaning, where there are two buildings, keep two buildings separate. Code pedestrian bridge as a building polygon.
Parking	2200	Parking	Polygon	Definition: Space in which automobile is stored. Parking can be along travelways or in dedicated lots or blocks. Capture Method: Compile the visible edges of pavement and travelway intersection as interpreted from the imagery
Sidewalks	2210	Sidewalks	Polygon	Definition: A hard-surfaced path for pedestrians, commonly alongside streets or connecting street to building structures. Capture Method: Compile the visible edges of pavement and travelway intersection as interpreted from the imagery

Sample Feature List and Collection Criteria for Possible 2024 Planimetrics Capture

Asph/Conc Slabs	2220	Concrete_Slabs	Polygon	Definition: Paved surface in and around to a building, house, garage, pool apron, etc. Capture Method: Compile the visible edges of pavement and travelway intersection as interpreted from the imagery
Driveways	2230	Driveways	Polygon	Definition: Paved, usually all weather surface, leading from a street or other thoroughfare to a building, house, garage, etc. Capture Method: Will capture Driveways (should be drivable) > or = 6 ft wide. If < 6 ft wide, capture as Sidewalk
Alleys	2240	Alleys	Polygon	Definition: A narrow back street, usually an all weather surface used a passage, as through a continuous row of houses, permitting access from the street to backyards, garages, etc. Capture Method: Alleys should be a shared driveway or walkway in between blocks that do not have a street centerline feature. Will capture features > or = 4 ft wide. Do not merge alleys with sidewalks, driveways or travelways. If less than 4ft wide, ignore completely.
Parking Islands	2250	Parking_Islands	Polygon	Definition: Raised area in parking lot bordered by curbs used to control traffic. Capture Method: Will code as 2250 only if vegetated, else it is Parking and coded as 2200.
Inground Pools	2260	Inground_Pools	Polygon	Definition: Structure to hold water for recreational swimming or diving. Capture Method: Will capture inground pools only, no above ground pools.
Railroad Ballast	2310	Railroad_Ballast	Polygon	Definition: The trackbed upon which railroad ties are laid. It is packed between, below, and a used to bear the load from the railroad ties, to facilitate drainage of water, and also to keep that might interfere with the track structure. Capture Method: FCODE Change: Code as Gravel 2310.
COMPACTED EARTH	2300	Compacted_Earth	Polygon	Definition: Unpaved, dirt, bare earth; no vegetation
GRAVEL	2310	Gravel	Polygon	Definition: Unpaved crushed stone surface; no vegetation. Capture Method: Include Railroad Ballast in this feature.

Sample Feature List and Collection Criteria for Possible 2024 Planimetrics Capture

VEGETATED/NATURAL SURFACE	9999	Natural_Surface	Polygon	Definition: Vegetation or grassy earth surface
HYDROGRAPHY (COMBINE ALL AS 1500)		**Hydrography**		Definition: Hydrology should be included with the impervious surface layer. Will use the City provide Hydrology layer as a reference and will only capture polygons. If a line feature is in the 2004 impervious surface, that line feature will not transfer. Capture Method: All water features (Not Swimming Pool) be coded as 1500 and described as 'Water'. Will capture Bodies of Water (Streams and Rivers) features > or = 4 feet wide. No line features needed. Only polygons.
Lakes	1500		Polygon	Will capture Bodies of Water (Streams and Rivers) features > or = 4 feet wide.
Ponds	1500		Polygon	Will capture Bodies of Water (Streams and Rivers) features > or = 4 feet wide.
River	1500		Polygon	Definition: Major body of flowing water. A definite course or channel or series of diverging channels. A primary tributary of Hydrography network. Feature is collected at land /water interface. Capture Method: Will capture Bodies of Water (Streams and Rivers) features > or = 4 feet w
Streams > 15' wide	1500		Polygon	Definition: A primary tributary of Hydrography network. Body of flowing water >15' wide. Capture Method: Will capture Bodies of Water (Streams and Rivers) features > or = 4 feet wide.
Reservoirs	1500		Polygon	Definition: Manmade impoundments for water collection and storage Capture Method: All Reservoirs are covered. Need Hydro layer to identify and make sure they are coded as Hydro 1500
MARSH				
Marsh	2400	Marsh	Polygon	Definition: A tract of low wet land, often treeless and periodically inundated, generally characterized by a growth of grasses, sedges, cattails, and rushes. Capture Method: Will capture only as Poly, no line or point features.

Sample Feature List and Collection Criteria for Possible 2024 Planimetrics Capture

RAIL				
Railroad	1700	Rail	Line, Polygon	Definition: A track or set of tracks made of steel rails along which passenger and freight trains run. Capture Method: Will capture Polygon for Rail Right of Way.
Abandoned Railroad	1710	Abandoned_Rail	Line, Polygon	Definition: A track or set of tracks which are no longer in service. Collect the centerline of each railbed as interpreted from the imagery. Capture Method: Will capture Polygon for Rail Right of Way.
PARK and TREES				
Tree Canopy	3000	Trees	Polygon	Definition: The layer of leaves, branches, and stems of trees that cover the ground when viewed from above. Capture Method: Vendor will utilize 2008 Canopy and update to 2014 Leaf on Orthophotography.