



A460, DIGITAL BUILDING DATA CAPTURE, AUTHORITYWIDE

ADDENDA & RESPONSES TO QUESTIONS March 29, 2024

The attention of consultants submitting proposals for the RFQ is called to the following Addenda & Responses to Questions to the subject RFQ. The items set forth herein, whether of omission, addition, substitution, or clarifications are all to be included in and form a part of the proposal submitted.

Addenda:

Please substitute:

EVENT	DATE/TIME
Solicitation: Release Date and Supplemental Package Available	Wednesday March 20, 2024
Consultant Briefing	Friday March 29, 2024 Zoom @9am
Deadline for submission of written questions	Monday April 1, 2024 at 12:00PM (noon)
Official answers published (Estimated)	Friday April 8, 2024
Solicitation: Close Date / Submission Deadline	Thursday May 2, 2024 at 12:00PM (noon)

With:

EVENT	DATE/TIME
Solicitation: Release Date and Supplemental Package Available	Wednesday March 20, 2024
Consultant Briefing	Friday March 29, 2024 Zoom @9am
Deadline for submission of written questions	Thursday April 4, 2024 at 12:00PM (noon)
Official answers published (Estimated)	Thursday April 11, 2024
Solicitation: Close Date / Submission Deadline	Thursday May 2, 2024 at 12:00PM (noon)

Responses to Questions:

1. **The RFQ document states Questions are due April 1, 2024, however at the bidder's conference this morning, it was stated that Questions are due April 4th. Please confirm April 4th is the actual due date.** *The correct dates are Deadline for submission of written questions is Thursday April 4, 2024, and for Official answers published (Estimated) Thursday April 11, 2024.*
2. **One of the tasks calls for 360-degree photogrammetry – is this to be collected by 360 cameras or drone?** *We are looking for the best approach as defined by the proposing team.*
3. **Are the standards easily accessible?** *they can be sent though an email request or found here: <https://www.massport.com/business/capital-improvements/important-documents>*
4. **Can you define overall scope in terms of acreage and sq footage?** *Once a team is selected, we will negotiate building priorities – how many can be done with a given budget – approach is key along with quals.*
5. **Is the deliverable just Architectural scans/models?** *Yes*
6. **Is there an expectation of field validation?** *QA will be critical – field is possible – should be weighed against approach and budget.*
7. **Is it a workorder based program?** *Yes*
8. **Questions about DE&I?** *It is a M/WBE requirement but workforce development in the primes program is very important as well. Just noting a % is not really enough. What will subs do on the project, % allocation and workforce development program from the prime are important as well.*
9. **Question about selection criteria?** *be deliberate in you response to each one of the criteria.*
10. **Do M/WBEs have to be registered with the state at time of proposal submission?** *yes*
11. **Does MPA have ACC?** *yes, we are in the pilot stages of implementing ACC.*
12. **How many teams will be selected?** *RFQ says one but MPA reserves the right to select additional if equally qualified.*
13. **Was there a formal feasibility study done to develop scope in RFQ?** *there was an informal in-house study done by MPA*
14. **What is your CMMS platform?** *Maximo*
15. **Where can we access/download CAD & GIS standards?**
<https://www.massport.com/business/capital-improvements/important-documents>
16. **Are there any State business registration or licensing requirements for bidders?** *M/WBE need to be registered with state.*
17. **Which versions of Revit/ESRI are deliverables required in?** *Revit 2024 and ESRI 11.1 or latest version.*
18. **What File format(s) are point cloud data files required to be in?** *raw format and recap files*
19. **Is all Scan-To-Bim restricted to only visible architectural data or is mechanical/electrical required?** *It is restricted to Architectural data; however, we will expect random tile removal to capture true volume.*
20. **Does MassDOT require cloud hosting of 3D Models/photogrammetry or Digital Twins by the contractor?** *Massport is not part of MASSDOT. Massport does not require Hosting by the consultant.*

21. **Can you provide the cad/bim standards?** <https://www.massport.com/business/capital-improvements/important-documents>
22. **Approximate number of sq ft?** *Once a team is selected, we will negotiate building priorities – how many can be done with a given budget – approach is key along with quals.*
23. **Approximate number of buildings?** *Approximately 250 Buildings, once a team is selected, we will negotiate building priorities – how many can be done with a given budget – approach is key along with quals.*
24. **Approximate # of floors/building?** *Once a team is selected, we will negotiate building priorities – how many can be done with a given budget – approach is key along with quals.*
25. **What format would you want the pointclouds in?** *raw format and recap files*
26. **What are the badge qualifications you require?** *We have several properties that require state and federal badging. Example Logan Requires SIDA Badging.*
27. **What are your current/latest BIM Standards?** <https://www.massport.com/business/capital-improvements/important-documents>
28. **Is there an expectation that the consultant maintains asset data in the operations phase? Or is the goal solely to collect data for the Operations team to use during this phase?** *We are looking for the point clouds to collect whatever is visible. However we are only asking for Architectural Data to be converted to a LOD200 Architectural Model. During this Project we expect the consultant to develop a Maintenance process and maintain the models, CAD Files, and GIS.*
29. **For GIS/ CIM - confirming that "CIM" refers to the use of ESRI Cartographic Information Model?** *Civil Information Model.*
30. **Does Massport already subscribe to a specific software for viewing 360 photogrammetry? (e.g. Cintoo, Matterport, NavVis).** *Not at this time.*
31. **Does Massport have Autodesk BIM360/ACC licenses? What is the method of receiving and maintaining Revi Models?** *Yes we have ACC. But are in the Pilot phase of ACC. The method will be decided by consultant and Massport during negotiation of each Work Order. We expect each Consulting team to have this as part of your approach.*
32. **What is the purpose of calculating and collecting the building Volume data? Any specific formats for this?** *We have several reasons for needing this data, but Net Zero Initiative is the primary reason. We want this data to be added to our GIS as an Attribute and in spreadsheet form.*
33. **Does Massport have an ArcGIS licenses? What is the method of receiving and maintaining ESRI data?** *Yes Massport has an ESRI Enterprise License Agreement. All consultants should have their own ESRI licensing. In your approach, we anticipate your team to discuss best practices for receiving and maintaining. During Work Order discussions we will define with consultant based off of recommendations.*
34. **Does Massport have a project Revit template that needs to be used for project setup?** *We do not have a template at this time. We have family sheets for our cover sheet and title blocks along with submission requirements`*
35. **Will existing architectural drawings be available to set up grid and level datums.** *We will be able to provide existing data when possible, and MPA Survey Control.*

36. **What are the model elements desired representation? As-built or design intent?** *Asbuilt condition at LOD200*
37. **Do wall and slab deviations need to be shown?** *Yes*
38. **What assests will need to be tagged?** *We will determine if any assets need to be tagged during negotiation of each work order, – approach is key along with quals.*
39. **Since they are allowing SLAM to be used on the interior scanning, will they tolerances that will be greater then typical terrestrial scanning (greater then 1/4”).** *We are aware of the tolerance from SLAM being 1/2”. Which is acceptable for most areas. Terrestrial scanning for the exterior and main areas with-in the building to bring external control inside should be used.*
40. **What type of viewer for the photography will they accept – A webhosted virtual tour?** *We are looking for the best approach. We will work with Consultant to determine best practice during Work Order negotiations.*
41. **What are the vertical datums for each site? Is it one datum or do they need to adhere to a municipality’s local datum?** *We only use NAVD88 for vertical datum*
42. **Are rooms pre-assigned with numbers? Who will approve the final number list?** *We have implemented the room numbering standard in the Terminals at Logan and approximately at 4 other buildings in other locations. The consultant will be responsible for implementing the room numbering standard with Massport review/approval.*
43. **Will vendor be responsible for numbering spaces that are not numbered?** *The consultant will be responsible for numbering spaces only digitally. Nothing in the field.*
44. **What kind of 360 Photogrammetry specifications are required? Image resolution? Final resting place?** *We do not have any 360 Photogrammetry specifications. We will discuss our options at the Work Order negotiations. We plan to store all data on a Massport server.*
45. **What are the standards for area calculation? FICM? BOMA? Other?** *We will be using a form of BOMA Standards, not yet decided.*
46. **What is the preferred records management system? ACC? Other?** *We are in pilot phase of ACC and plan on utilizing our ACC.*
47. **Do room numbers need to match room in Maximo?** *No, as we will be implementing the NEW room numbering standard.*
48. **Are volumetric calculations need for each room? Each Floor? By Facility?** *For each room, floor, building, and Facility*
49. **Does Massport have an existing definition of what a facility/floor is?** *No, we will expect the consultant to develop this as part of the workflow process.*
50. **What is the preferred 'system of record' for a facility’s design files? AutoCAD? Revit? GIS?** *The Revit Model will be our system of record for spatial data, and will be the primary source data for CAD and GIS.*
51. **Does the migration from RVT to DWG/GIS need to be bi-directional?** *This should be part of your Approach.*
52. **Does Massport use an enterprise system space management?** *Massport is using ESRI as our space management tool.*
53. **Are there additional documents other than the RFQ that provide Massport’s expected accuracy of the collected spatial data?** *The RFQ*
54. **Item 8 states “Catalogue of space/room assets”, does this mean tabular or spatially?** *This will*

be negotiated during each work order.

- 55. Relative to the RFQ Scope of work primary task number (5) “Perform survey to tie in to existing Massport control and vertical benchmarks”, number (12) “Perform collection and processing of geospatial data”, and number (18) “Point Cloud data geolocated with survey control points”, does the project fall directly under the supervision of a Massachusetts Professional Land Surveyor? *should have a PLS on team to oversee any control survey needed to register point clouds to our datums.***
- 56. What specific format and standards should the conversion from Revit to Esri GIS Indoors adhere to? *We are currently working with our GIS Consultants on developing this standard. And will provide the standard during Work Order negotiations.***
- 57. Are there any particular attributes or data layers MassPort requires for the GIS Indoor models? *Once a team is selected, we will negotiate priorities – how many can be done with a given budget – approach is key along with quals.***
- 58. Could you provide a detailed list of all attribute data that MassPort expects to be collected? *Once a team is selected, we will negotiate priorities – how many can be done with a given budget***
- 59. Are there any specific guidelines or data goverances for how attribute data should be structured or formatted? *We will work with the selected consultant and our current GIS On Call Consultants to develop data goverances.***
- 60. What level of detail is required for the cataloging of space/room assets? *This is just Architectural data being collected. The level will be decided during each work order negotiation.***
- 61. How should these assets be documented, and in what format? *This is just Architectural data being collected. The level will be decided during each work order negotiation.***
- 62. Can MassPort provide an example or guidelines for the room numbering standards to be used? *Yes we can provide***
- 63. How should discrepancies or conflicts in existing room numbering be addressed? *We expect the consultant to review and make recommendations and massport staff will review and approve.***
- 64. Is there a specific format in which volume data should be reported? *GIS and Excel.***
- 65. Can MassPort provide any use cases for which the volume data will be used for, as an example? *Example Net Zero Initiative.***
- 66. Are there existing discrepancies in the current numbering system that need to be addressed during this task? *There may be and again, We expect the consultant to review and make recommendations and massport staff will review and approve***
- 67. Are there existing documentation and/or data governance standards that should be followed to update and standardize the room numbering across all platforms? *The Room Numbering Standard document.***
- 68. What challenges or considerations has MassPort previously encountered and should be taken into account when migrating BIM data to GIS? *We look to the consultants to provide us with a process that will be more automated and seamless.***

- 69. Are there specific data integrity or validation processes MassPort wants to be implemented?**
The selected consultant will work with Massports GIS Oncall Consultant and VDC Oncall Consultants to develop and implement processes.
- 70. Can MassPort provide detailed documentation of these standards for compliance verification?**
We are in the process of writing new BIM guides and standards and are leaning towards ISO19650 and utilizing ACC as not only a delivery method but also as a centralized hub for enterprise level models
- 71. Are there any known gaps in the current standards that the consultant should be aware of?**
Our current standards for BIM are dated and therefore some of the practices mentioned in them may no longer apply today. MPA wants to track model data but has not started yet. We do not have an official data standard for BIM models in place at this time.
- 72. What are MassPort's expectations for the frequency and methodology of data updates?**
Will be negotiated during each work order.
- 73. Can MassPort provide examples of challenges or issues with keeping data current in the past?**
We will be looking at each consultants approach on how they would maintain the data.
- 74. Thank you for providing the BIM Guidelines on the Important Documents webpage. Would you share your GIS Guidelines and Control-Point Documentation?**
GIS Guide lines are here: <https://www.massport.com/business/capital-improvements/important-documents>. We expect the selected consultant to work with our Survey Manager in developing control point documentation.
- 75. What framework (i.e., SDSFIE) is the Authority's GIS Standard based on?**
ESRI spatial Data Standard
- 76. Roughly, how many sqft of interior space and acres of exterior land are you looking to digitize?**
Once a team is selected, we will negotiate building priorities – how many can be done with a given budget – approach is key along with quals.
- 77. Please explain Evaluation Criteria 3 & 4 since the purpose of this procurement is for modeling structures in place and not for doing design and construction.**
These are our standard criteria. We expect the consultants to provide us with how they will use these criteria in their approach.
- 78. As a follow-up question to the previous one submitted, since they are different, please clarify whether the evaluation criteria from the RFQ document or the evaluation criteria from the Consultant Briefing meeting will be used in the evaluation.**
Please utilize the one from RFQ document.