MASTER SERVICES AGREEMENT

THIS MASTER SERVICES AGREEMENT ("Agreement") is made between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado (the "City" or "Customer") and Aurigo Software Technologies, Inc, a Delaware Corporation registered to do business in Colorado, whose address is 12515-7 Research Blvd, Suite 300, Austin, TX 78759 ("Contractor" or "Aurigo"), individually a "Party" and jointly "the Parties."

RECITALS

WHEREAS, the City is desirous of engaging a hosted third-party solution provider to aid the City in the implementation and continual support of a Project Management Information System supporting the Department of Transportation and Infrastructure and the Contractor has agreed to provide the hosted solution, services and other deliverables under the terms and conditions as set out below; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City and Contractor incorporate the recitals set forth above agree as follows:

1. **DEFINITIONS**. Whenever used herein, any schedules, exhibits, order forms, or addenda to this Agreement, the following terms shall have the meanings assigned below unless otherwise defined therein. Other capitalized terms used in this Agreement are defined in the context in which they are used.

1.1. "**Acceptance**" means the Deliverable demonstrates to the City's reasonable satisfaction that the Deliverable conforms to and operates in all material respects according to the Acceptance Criteria, and if required, has successfully completed Acceptance Testing in all material respects, and for Deliverables not requiring Acceptance Testing that the Deliverable reasonably conforms in all material respects to the Acceptance Criteria or the City's requirements.

1.2. "**Acceptance Certificate**" means a written instrument by which the City promptly notifies Contractor that a Deliverable has been Accepted or Accepted with exceptions, and

Acceptance Criteria have been met or waived, in whole or in part.

1.3. "**Acceptance Criteria**" means functionality and performance requirements determined by the City and set forth on the Order Form for the applicable Product or Service, based upon the Specifications, which must be satisfied prior to the City's Acceptance of a Deliverable, or the System. The City and Contractor shall agree upon written Acceptance Criteria in the Order Form for the applicable Product or Service.

1.4. "**Acceptance Date**" means the date on which the City issues an Acceptance Certificate for the System or a Deliverable.

1.5. "**Acceptance Test**" means the evaluation and testing method, procedures, or both, that are set forth in the Order Form for the applicable Product or Service and are used to determine whether or not the System or a Deliverable requiring Acceptance Testing performs in accordance with the Acceptance Criteria.

1.6. **"City Data"** means all information, whether in oral or written (including electronic) form, created by or in any way originating with the City and all information that is the output of any computer processing, or other electronic manipulation, of any information that was created by or in any way originating with the City, in the course of using and configuring the Services provided under this Agreement, and includes all records relating to the City's use of Contractor Services. City Data also includes Confidential Information disclosed to Contractor.

1.7. "**Confidential Information**" means all records or data that is disclosed in written, graphic or machine recognizable form and is marked, designated, labeled or identified at the time of disclosure as being confidential or its equivalent, or, if the information is in verbal form, it is identified as confidential or proprietary at the time of disclosure and is confirmed in writing within thirty (30) Calendar Days of the disclosure and is not subject to disclosure under CORA. Confidential Information shall include, but is not limited to, PII, PHI, PCI, federal or state tax information ("Tax Information"), Criminal Justice Information (CJI), personnel records, financial, statistical, personnel, human resources data or Personally Identifiable Information and/or Personal Information as described in the C.R.S 24-73-101, *et seq*; attorney/client privileged communications; information which is exempt per federal laws (including but not limited to copyright or HIPPA), all of which is not subject to disclosure under CORA. Confidential Information does not include information which: (a)

is public or becomes public through no breach of the confidentiality obligations herein; (b) is disclosed by the party that has received Confidential Information (the "Receiving Party") with the prior written approval of the other party; (c) was known by the Receiving Party at the time of disclosure; (d) was developed independently by the Receiving Party without use of the Confidential Information; (e) becomes known to the Receiving Party from a source other than the disclosing party through lawful means; (f) is disclosed by the disclosing party to others without confidentiality obligations; or (g) is required by law to be disclosed.

1.8. **"CORA"** means the Colorado Open Records Act, §§ 24-72-200.1, *et seq*., C.R.S.

1.9. **"Data Incident"** means any accidental or deliberate event that results in or constitutes an imminent threat of the unauthorized access, loss, disclosure, modification, disruption, or destruction of any communications or information resources of the City. Data Incidents include, without limitation (i) successful attempts to gain unauthorized access to a City system or the City information regardless of where such information is located under the Contractor's control; (ii) unwanted disruption or denial of service; (iii) the unauthorized use of a City system for the processing or storage of data; or. It shall also include any actual or reasonably suspected unauthorized access to or acquisition of computerized City Data that compromises the security, confidentiality, or integrity of City Data, or the ability of the City to access City Data.

1.10. **"Deliverable"** means the Products or Services or documents or tangible work products described in an Order Form to be provided to the City by Contractor or the outcome to be achieved or output to be provided, in the form of a tangible object or software that is produced as a result of Contractor's work that is intended to be delivered to the City by Contractor under this Agreement.

1.11. **"Documentation"** means, collectively: (a) all materials published or otherwise made available to the City by Contractor that relate to the functional, operational and/or performance capabilities of the Services; (b) all user, operator, system administration, technical, support and other manuals and all other materials published or otherwise made available by Contractor, including marketing materials that describe the functional, operational and/or performance capabilities of the Services; (c) any Requests for Information and/or Requests for Proposals (or documents of similar effect) issued by the City, and the responses thereto from Contractor, and any document which purports to update or revise any

of the foregoing; and (d) the results of any Contractor "Use Cases Presentation," "Proof of Concept" or similar type presentations or tests provided by Contractor to the City or as required to be produced by Contractor subject to the terms of this Agreement.

1.12. **"Downtime"** means any period of time of any duration that the Services are not made available by Contractor to the City for any reason, including scheduled maintenance or Enhancements.

1.13. **"Effective Date"** means the date on which this Agreement is fully approved and signed by the City as shown on the Signature Page for this Agreement. The Effective Date for Services may be set out in an Order Form or similar exhibit.

1.14. **"Enhancements"** means any improvements, modifications, upgrades, updates, fixes, revisions and/or expansions to the Services that Contractor may develop or acquire and incorporate into its standard version of the Services or which Contractor has elected to make generally available to its customers.

1.15. **"Equipmen**t" means any hardware, machinery, device, tool, computer, computer component, computer system, including add-ons, or peripherals of tangible form together with the necessary supplies for upkeep and maintenance, and other apparatus, to be provided to the City by Contractor under this Agreement.

1.16. **"Erro**r" means any defect, problem, condition, bug, or other partial or complete inability of a Product to operate in accordance with the applicable Specifications.

1.17. **"Intellectual Property Rights"** includes without limitation all right, title, and interest in and to all (a) Patent and all filed, pending, or potential applications for Patent, including any reissue, reexamination, division, continuation, or continuation in part applications throughout the world now or hereafter filed; (b) trade secret rights and equivalent rights arising under the common law, state law, and federal law; (c) copyrights, other literary property or authors rights, whether or not protected by copyright or as a mask work, under common law, state law, and federal law; and (d) proprietary indicia, trademarks, trade names, symbols, logos, and/or brand names under common law, state law, and federal law and (e) license and data rights arising under the common law, state law, and federal law.

1.18. **"Order Form"** means a quote in the form attached hereto as an exhibit, setting forth certain Products and/or Services to be provided pursuant to this Agreement. Any reference to an "Order Form" in this Agreement includes Products and/or Services purchased by

the City pursuant to Contractor's online ordering process. An Order Form can also be a statement of work or scope of work if attached to this Agreement.

1.19. **"PCI"** means payment card information including any data related to credit card holders' names, credit card numbers, or other credit card information as may be protected by state or federal law.

1.20. **"PII"** means personally identifiable information including, without limitation, any information maintained by the City about an individual that can be used to distinguish or trace an individual's identity, such as name in combination with social security number, date and place of birth, mother's maiden name, or biometric records. PII includes, but is not limited to, all information defined as personally identifiable information in §§ 24-72-501 and 24-73-101, C.R.S.

1.21. **"PHI"** means any protected health information, including, without limitation any information whether oral or recorded in any form or medium: (i) that relates to the past, present, or future physical or mental condition of an individual; the provision of health care to an individual; or the past, present, or future payment for the provision of health care to an individual; and (ii) that identifies the individual or with respect to which there is a reasonable basis to believe the information can be used to identify the individual. PHI includes, but is not limited to, any information defined as Individually Identifiable Health Information by the federal Health Insurance Portability and Accountability Act. If this Agreement involves the transmission of PHI a separate Business Associates Agreement will become a part of this Agreement.

1.22. "**Product(s)**" means software, Equipment, and supplies delivered, or to be delivered, pursuant to an Order Form.

1.23. **"Protected Information"** includes, but is not limited to, personally-identifiable information, student records, protected health information, criminal justice information or individual financial information and other data defined under § 24-72-101 *et seq.*, and personal information that is subject to local, state or federal statute, regulatory oversight or industry standard restricting the use and disclosure of such information. The loss of such Protected Information would constitute a direct damage to the City.

1.24. **"RFP Response"** means any proposal submitted by Contractor to City in response to City's Request for Proposal ("RFP") titled Project Management Information System (PMIS)

and Implementation, Request for Proposal No. 11024, Issued on January 28, 2020.

1.25. **"Service(s)"** "Service" means Aurigo Masterworks Cloud online services (including pre-release services and Add-on Services) and software, including any updates, upgrades, support, and content (e.g., audio and visual information, documents) contained or made available to Customer by Aurigo in the course of using the Service. Aurigo may change the Service at any time and for any reason without notice.

1.26. **"Service Level Agreement(s)"** mean the provisions set forth on Exhibit E attached hereto, which are incorporated into this Agreement by this reference.

1.27. **"Specifications"** means the most current cumulative statement of capabilities, functionality, and performance requirements for the Products or Services as set out in the Acceptance Criteria, Order Forms, Documentation, Contractor's representations, Contractor's proposal, and the City's Request for Proposals.

1.28. **"Subcontractor"** means any third party engaged by Contractor to aid in performance of the work or the Service. Contractor shall provide to the City upon request a list of Subcontractors providing material services to the Service.

1.29. **"System"** means the operational combination of all Products and Services to be provided by Contractor to the City under this Agreement.

1.30. **"Third Party"** means persons, corporations and entities other than Contractor, the City or any of their employees, contractors or agents.

1.31. **"Third-Party Host"** means the entity where the physical location of the server(s) of the Contractor's software resides.

1.32. **SEE AURIGO SUBSCRIPTION SERVICE EXHIBIT E FOR ADDITIONAL DEFINITIONS.**

2. RIGHTS AND LICENSE IN AND TO DATA

2.1. The Parties agree that as between them, all rights in and to City Data shall remain the exclusive property of the City, and Contractor has a limited, nonexclusive license to access and use City Data as provided in this Agreement solely for the purpose of performing its obligations hereunder.

2.2. All City Data created and/or processed by the Service is and shall remain the property of the City and shall in no way become attached to the Service, nor shall Contractor have any rights

in or to the City Data without the express written permission of the City and may not include Protected Information.

2.3. This Agreement does not give a party any rights, implied or otherwise, to the other's data, content, or intellectual property, except as expressly stated in the Agreement.

2.4. The City retains the right to use the Service to access and retrieve data stored on Contractor's Service infrastructure, subject to any mutually-agreed upon license rights and restrictions, at any time during the term of this Agreement at its sole discretion.

3. **DATA PRIVACY**

3.1. Contractor will use City Data only for the purpose of fulfilling its duties under this Agreement and for the City's sole benefit and will not share City Data with or disclose it to any Third Party without the prior written consent of the City , unless otherwise required by law, in which case Contractor will notify City in accordance with Section 5 of this Contract. By way of illustration and not of limitation, Contractor will not use City Data for Contractor's own benefit and, in particular, will not share City Data with third parties, whether through automated or human means, except as specifically and expressly required by law or authorized in writing by the City.

3.2. Contractor will provide access to City Data only to those Contractor employees, contractors and Subcontractors ("Contractor Staff") who need to access City Data to fulfill Contractor's obligations under this Agreement. Contractor will ensure that, prior to being granted access to City Data, Contractor Staff who perform work under this Agreement have all undergone and passed criminal background screenings; have successfully completed annual instruction of a nature sufficient to enable them to effectively comply with all data protection provisions of this Agreement; and possess all qualifications appropriate to the nature of the employees' duties and the sensitivity of City Data they will be handling.

3.3. If Contractor receives Protected Information of a Colorado resident under this Agreement, Contractor shall implement and maintain reasonable written security procedures and practices that are appropriate to the nature of the personal identifying information and the nature and size of Contractor's business and its operations. Unless Contractor agrees to provide its own security protections for the information it discloses to a third-party service provider, Contractor shall perform due diligence of all its third-party service providers to ensure they have implemented and maintain reasonable security procedures and practices that are

appropriate to the nature of the personal identifying information disclosed and reasonably designed to help protect the personal identifying information subject to this Agreement from unauthorized access, use, modification, disclosure, or destruction. Contractor and its applicable third-party service providers that maintain electronic or paper documents that contain Protected Information under this Agreement shall develop a written policy (or follow an industry standard that requires development of a written policy) for the destruction of such records by shredding, erasing, or otherwise modifying the Protected Information to make it unreadable or indecipherable when the records are no longer needed.

3.4. Contractor may provide City Data to its agents, employees, assigns, and Subcontractors as necessary to perform the work under this Agreement, but shall restrict access to Confidential Information to those agents, employees, assigns, and Subcontractors who require access to perform their obligations under this Agreement. Contractor shall ensure all such agents, employees, assigns, and Subcontractors sign, or have signed, agreements containing nondisclosure provisions at least as protective as those in this Agreement, and that the nondisclosure provisions are in force at all times the agent, employee, assign, or Subcontractor has access to any Confidential Information. Contractor shall provide copies of those signed nondisclosure provisions to the City upon execution of the nondisclosure provisions if requested by the City.

4. DATA SECURITY AND INTEGRITY

4.1. All facilities, whether Contractor hosted or Third-Party Hosted, used to store and process City Data will implement and maintain administrative, physical, technical, and procedural safeguards and best practices at a level sufficient to provide the requested Service availability and to secure City Data from unauthorized access, destruction, use, modification, or disclosure appropriate for City Data. Such measures, when applicable due to the presence of Protected Information, include, but are not limited to, all applicable laws, rules, policies, publications, and guidelines including, without limitation: the Colorado Consumer Protection Act, if applicable. Contractor shall submit to the Manager, within fifteen (15) days of the Manager's written request, copies of Contractor's policies and procedures to maintain the confidentiality of protected information to which Contractor has access, and if applicable.

4.2. Contractor warrants that all City Data will be encrypted in transmission (including via web interface) and in storage by a mutually agreed upon National Institute of Standards and Technology (NIST) approved strong encryption method and standard.

4.3. Contractor shall use industry-standard and up-to-date security tools, technologies and procedures including, but not limited to anti-virus and anti-malware protections and intrusion detection and reporting in providing Services under this Agreement. Contractor shall ensure that any underlying or integrated software employed by the Service is updated on a regular basis and does not pose a threat to the security of the Service.

4.4. Contractor shall, and shall cause its Subcontractors, to do all of the following:

    4.4.1. Provide physical and logical protection for all hardware, software, applications, and data that meets or exceeds industry standards and the requirements of this Agreement.

    4.4.2. Maintain network, system, and application security, which includes, but is not limited to, network firewalls, intrusion detection (host and network), annual security testing, and improvements or enhancements consistent with evolving industry standards.

    4.4.3. Comply with applicable State and federal rules and regulations related to overall security, privacy, confidentiality, integrity, availability, and auditing.

    4.4.4. Provide that security is not compromised by unauthorized access to workspaces, computers, networks, software, databases, or other physical or electronic environments.

    4.4.5. Promptly report all Data Incidents, including Data Incidents that do not result in unauthorized disclosure or loss of data integrity.

    4.4.6. Comply with all rules, policies, procedures, and standards issued by the City's Technology Services Security Section.

    4.4.7. Subject to Contractor's reasonable access security requirements and upon reasonable prior notice, Contractor shall provide the City with an audit of access and use of City Data, and evaluating logical security control effectiveness. If the City requires audit to be conducted by a 3rd Party, the City agrees to pay for the cost of such audit. The cost of the audit will need to be pre-approved by a City representative.

    4.4.8. Contractor shall perform current background checks in a form reasonably acceptable to the City on all of its respective employees and agents performing

services or having access to City Data provided under this Agreement, including any Subcontractors or the employees of Subcontractors. A background check performed within 30 days prior to the date such employee or agent begins performance or obtains access to City Data shall be deemed to be current.

4.4.9.   Contractor will provide notice to the security and compliance representative for the City indicating that background checks have been performed. Such notice will inform the City of any action taken in response to such background checks, including any decisions not to take action in response to negative information revealed by a background check.

4.5. If applicable, Contractor shall use, hold, and maintain Confidential and Protected Information in compliance with all applicable laws and regulations only in facilities located within the United States, and shall maintain a secure environment that ensures confidentiality of all Confidential and Protected Information.

4.6. Prior to the Effective Date of this Agreement, Contractor, will at its expense conduct or have conducted the following, and thereafter, Contractor will at its expense conduct or have conducted the following at least once per year, and immediately after any actual or reasonably suspected Data Incident:

4.6.1.   A SSAE 16/SOC 2 or other mutually agreed upon audit of Contractor's security policies, procedures and controls;

4.6.2.   A quarterly external and internal vulnerability scan of Contractor's systems and facilities, to include public facing websites, that are used in any way to deliver Services under this Agreement. The report must include the vulnerability, age and remediation plan for all issues identified as critical or high;

4.6.3.   A formal penetration test, performed by a process and qualified personnel of Contractor's systems and facilities that are used in any way to deliver Services under this Agreement.

4.7. Contractor will provide the City the reports or other documentation resulting from the above audits, certifications, scans and tests within fifteen (15) business days of Contractor's receipt of such results.

4.8. Based on the results and recommendations of the above audits, certifications, scans and tests, Contractor will, within thirty (30) calendar days of receipt of such results, promptly modify

its security measures to meet its obligations under this Agreement and provide the City with written evidence of remediation.

4.9. The City may require, at its expense, that Contractor perform additional audits and tests, the results of which will be provided to the City within fifteen (15) business days of Contractor's receipt of such results.

4.10. Contractor shall protect data against deterioration or degradation of data quality and authenticity, including, but not limited to annual Third Party data integrity audits. Contractor will provide the City the results of the above audits.

5. **RESPONSE TO LEGAL ORDERS, DEMANDS OR REQUESTS FOR DATA**

5.1. Except as otherwise expressly prohibited by law, Contractor will:

    5.1.1. If required by a court of competent jurisdiction or an administrative body to disclose City Data, Contractor will notify the City in writing immediately upon receiving notice of such requirement and prior to any such disclosure;

    5.1.2. Consult with the City regarding its response;

    5.1.3. Cooperate with the City's reasonable requests in connection with efforts by City to intervene and quash or modify the legal order, demand or request; and

    5.1.4. Upon request, provide the City with a copy of its response.

5.2. If the City receives a subpoena, warrant, or other legal order, demand or request seeking data maintained by Contractor, the City will promptly provide a copy to Contractor. Contractor will supply the City with copies of data required for the City to respond within forty-eight (48) hours after receipt of copy from the City and will cooperate with the City's reasonable requests in connection with its response.

6. **DATA INCIDENT RESPONSE**

6.1. Contractor shall maintain documented policies and procedures for Data Incident and breach reporting, notification, and mitigation. If Contractor becomes aware of any Data Incident, it shall notify the City immediately and cooperate with the City regarding recovery, remediation, and the necessity to involve law enforcement, as determined by the City. If there is a Data Incident impacting residents of Colorado, Contractor shall cooperate with the City to satisfy notification requirements as currently defined in either federal, state, or local law. Unless Contractor can establish that neither Contractor nor any of its agents, employees, assigns or Subcontractors are the cause or source of the Data Incident, Contractor shall be responsible

for the cost of notifying each person who may have been impacted by the Data Incident as required by law. After a Data Incident, Contractor shall take steps to reduce the risk of incurring a similar type of Data Incident in the future as directed by the City, which may include, but is not limited to, developing and implementing a remediation plan that is approved by the City at no additional cost to the City.

6.2. Contractor shall report, either orally or in writing, to the City any Data Incident involving City Data, or circumstances that could have resulted in unauthorized access to or disclosure or use of City Data, not authorized by this Agreement or in writing by the City, including any reasonable belief that an unauthorized individual has accessed City Data. Contractor shall make the report to the City immediately upon discovery of the unauthorized disclosure, but in no event more than forty-eight (48) hours after Contractor reasonably believes there has been such unauthorized use or disclosure. Oral reports by Contractor regarding Data Incidents will be reduced to writing and supplied to the City as soon as reasonably practicable, but in no event more than forty-eight (48) hours after oral report.

6.3. Immediately upon becoming aware of any such Data Incident, Contractor shall fully investigate the circumstances, extent and causes of the Data Incident, and report the results to the City and continue to keep the City informed daily of the progress of its investigation until the issue has been effectively resolved.

6.4. Contractor's report discussed herein shall identify: (i) the nature of the unauthorized use or disclosure, (ii) the data used or disclosed, (iii) who made the unauthorized use or received the unauthorized disclosure (if known), (iv) what Contractor has done or shall do to mitigate any deleterious effect of the unauthorized use or disclosure, and (v) what corrective action Contractor has taken or shall take to prevent future similar unauthorized use or disclosure.

6.5. Within five (5) calendar days of the date Contractor becomes aware of any such Data Incident, Contractor shall have completed implementation of corrective actions to remedy the Data Incident, restore the City's access to the Services as directed by the City, and prevent further similar unauthorized use or disclosure.

6.6. Contractor, at its expense, shall cooperate fully with the City's investigation of and response to any such Data Incident.

6.7. Except as otherwise required by law, Contractor will not disclose or otherwise provide notice of the incident directly to any person, regulatory agencies, or other entities, without prior written permission from the City.

6.8. Notwithstanding any other provision of this Agreement, and in addition to any other remedies available to the City under law or equity, Contractor will promptly reimburse the City in full for all costs incurred by the City in any investigation, remediation or litigation resulting from any such Data Incident, including but not limited to providing notification to Third Parties whose data were compromised and to regulatory bodies, law-enforcement agencies or other entities as required by law or contract; establishing and monitoring call center(s), and credit monitoring and/or identity restoration services to assist each person impacted by a Data Incident in such a fashion that, in the City's sole discretion, could lead to identity theft; and the payment of legal fees and expenses, audit costs, fines and penalties, and other fees imposed by regulatory agencies, courts of law, or contracting partners as a result of the Data Incident.

7. DATA RETENTION AND DISPOSAL

7.1. Using appropriate and reliable storage media, Contractor will regularly backup data and retain such backup copies consistent with the City's data retention policies.

7.2. At the City's election, Contractor will either securely destroy or transmit to the City repository any backup copies of City Data. Contractor will supply the City a certificate indicating the records disposed of, the date disposed of, and the method of disposition used.

7.3. Contractor will immediately preserve the state of the data at the time of the request and place a "hold" on data destruction or disposal under its usual records retention policies of records that include data, in response to an oral or written request from the City indicating that those records may be relevant to litigation that the City reasonably anticipates. Oral requests by the City for a hold on record destruction will be reduced to writing and supplied to Contractor for its records as soon as reasonably practicable under the circumstances. The City will promptly coordinate with Contractor regarding the preservation and disposition of these records. Contractor shall continue to preserve the records until further notice by the City.

8. DATA TRANSFER UPON TERMINATION OR EXPIRATION

8.1. Upon expiration or earlier termination of this Agreement or any Services provided in this Agreement, Contractor shall accomplish a complete transition of the Services from Contractor to the City or any replacement provider designated solely by the City without any interruption

of or adverse impact on the Services or any other services provided by third parties in this Agreement. Contractor shall cooperate fully with the City or such replacement provider and promptly take all steps required to assist in effecting a complete transition of the Services designated by the City. All services related to such transition shall be performed at no additional cost beyond what would be paid for the Services in this Agreement. Contractor shall extend the Agreement monthly if additional time is required beyond the termination of the Agreement, if necessary, to effectuate the transition and the City shall pay a proration of the subscription fee.

8.2. Upon the expiration or termination of this Agreement, Contractor shall return City Data provided to Contractor in a common and readily usable format if requested by the City or destroy City Data and certify to the City that it has done so, as directed by the City. If Contractor is prevented by law or regulation from returning or destroying Confidential Information, Contractor warrants it will guarantee the confidentiality of, and cease to use, such Confidential Information. To the extent that Contractor is requested to perform any services beyond the return of the City's Data in connection with termination assistance, the same shall be performed pursuant to a written statement of work under this Agreement and paid for by the City, applying Contractor's then-current rates for daily/hourly work, as the case may be.

9. **CHANGES TO SERVICE**. Any changes to the Service or this Agreement must be executed via a written modification, and must be agreed to by the Parties to reflect Changes in the Agreement terms and/or Scope of Services that are within the scope of the Agreement. If the Parties cannot agree, City may unilaterally, or by agreement with Contractor, issue a Change Order (CO) directing Contractor to proceed with a Change in the Work. The City shall either contain a Not to Exceed (NTE) amount to set the maximum limit that may be expended by the Contractor under the CO or a fixed amount (lump sum) that is a fair and equitable adjustment to the Total Contract Price. When the Contractor's compensation for a Change and the required adjustments, if any, to the Total Contract Price and/or Schedule have been determined, a contract modification or Change Order will be issued.

10. **COMPLIANCE WITH APPLICABLE LAWS AND CITY POLICIES**.

10.1   Contractor will comply with all applicable laws in performing the Services under this Agreement. Any Contractor personnel visiting the City's facilities will comply with all

applicable City policies regarding access to, use of, and conduct within such facilities. The City will provide copies of such policies to Contractor upon request.

10.2 **ADA Website Compliance:**

a. Compliance and Testing. All Contractor managed or operated public-facing digital experiences (e.g., websites and webpages) must be compliant with Section 508 of the Rehabilitation Act of 1973 and the WCAG 2.0 Level AA guidelines (collectively, "Guidelines"). Prior to launching to the public, Contractor shall test all public-facing digital experiences, both manually and in an automated fashion, as applicable, to confirm and maintain compliance with the Guidelines, and then subsequently, no more than once per each term year thereafter. Such manual and automated testing may only be performed by a third party vendor approved by the Department of Justice. The City has a list of approved third party vendors. The City does not warrant the work of any third party vendor. All testing under this section shall be performed by third party vendors at the Contractor's expense.

b. Validation, Review and Remediation. Contractor will notify City when its digital experience is ready for City review and validation. City will then validate, prior to launch and each term year thereafter, to confirm that the digital experience is compliant with the Guidelines. Manual testing of the Contractor's digital experience will be verified by City with approved vendors and individuals of varying disabilities which shall include individuals who are blind, deaf or hard of hearing, and who have mobility or dexterity limitations. Upon completion of all testing, a review will be performed by the City's web accessibility coordinator to confirm completion of all accessibility requirements. In the event that any deficiencies are discovered in the Contractor's digital experience, City will promptly notify Contractor, and Contractor will remediate prior to launch. A digital experience will not launch until all deficiencies are remediated. All digital experiences must include a statement on the site that the experience is accessible, will maintain accessibility, and will provide a mechanism for users to submit feedback about accessibility issues.

c. In the event that the digital experience fails compliance at any time, Contractor shall bring the digital experience into compliance within ninety (90) days, which may be extended by mutual written agreement of the Parties. Failure to bring the digital experience

into compliance for any reason within such time, except as may be mutually extended by the written agreement of the parties, shall be a breach of this Agreement.

11. <u>WARRANTIES, REPRESENTATIONS AND COVENANTS</u>. Contractor represents and warrants that:

11.1.   The Service will conform to applicable specifications, and operate and produce results substantially in accordance with the Documentation and the Exhibits attached hereto, and will be free from deficiencies and defects in materials, workmanship, design and/or performance during the Term of this Agreement;

11.2.   All technology related services will be performed by qualified personnel in a professional and workmanlike manner, consistent with industry standards;

11.3.   Contractor has the requisite ownership, rights and licenses to perform its obligations under this Agreement fully as contemplated hereby and to grant to the City all rights with respect to the software and Services free and clear from all liens, adverse claims, encumbrances and interests of any Third Party;

11.4.   There are no pending or threatened lawsuits, claims, disputes or actions: (i) alleging that any software or service infringes, violates or misappropriates any Third-Party rights; or (ii) adversely affecting any software, service or supplier's ability to perform its obligations hereunder;

11.5.   The Service will not violate, infringe, or misappropriate any patent, copyright, trademark, trade secret, or other intellectual property or proprietary right of any Third Party;

11.6.   The software and Services will contain no malicious or disabling code that is intended to damage, destroy or destructively alter software, hardware, systems or data. Contractor's obligations for breach of the Services warranty shall be limited to using its best efforts, at its own expense, to correct or replace that portion of the Services which fails to conform to such warranty, and, if Contractor is unable to correct any breach in the Services Warranty by the date which is sixty (60) calendar days after the City provides notice of such breach, the City may, in its sole discretion, either extend the time for Contractor to cure the breach or terminate this Agreement and receive a full refund of all amounts paid to Contractor under this Agreement.

11.7.   Disabling Code Warranty. Contractor represents, warrants and agrees that the Services do not contain and the City will not receive from Contractor any virus, worm, trap door, back door, timer, clock, counter or other limiting routine, instruction or design, or other malicious, illicit or similar unrequested code, including surveillance software or routines which may, or is designed to, permit access by any person, or on its own, to erase, or otherwise harm or modify any City system or Data (a "Disabling Code"). In the event a Disabling Code is identified, Contractor shall take all steps necessary, at no additional cost to the City, to: (a) restore and/or reconstruct all City Data lost by the City as a result of Disabling Code; (b) furnish to City a corrected version of the Services without the presence of Disabling Codes; and, (c) as needed, re-implement the Services at no additional cost to the City. This warranty shall remain in full force and effect as long as this Agreement remains in effect.

11.8.   Third-Party Warranties and Indemnities. Contractor will assign to the City all Third-Party warranties and indemnities that Contractor receives in connection with any products provided to the City.   To the extent that Contractor is not permitted to assign any warranties or indemnities through to the City, Contractor agrees to specifically identify and enforce those warranties and indemnities on behalf of the City to the extent Contractor is permitted to do so under the terms of the applicable Third Party agreements.

11.9.   Contractor warrants it has complied and shall comply with all applicable federal, state, and local laws and regulations of its domicile and wherever performance occurs during the term of this Agreement.

11.10.   Delivery of Products shall not be construed to represent Acceptance nor shall Delivery of Products relieve Contractor from its responsibility under any representation or warranty. If the City makes a payment for a Product prior to Acceptance, the payment does not grant a waiver of any representation or warranty by Contractor.

11.11.   **Limited Operational Warranties:**

11.11.1.   this limited warranty applies only during the Term, including any renewals (the "Warranty Period");

11.11.2.   any implied warranties, guarantees, or conditions not able to be disclaimed as a matter of law will last only during the Warranty Period;

11.11.3.   This limited warranty does not cover problems caused by accident, abuse or use of the Services in a manner inconsistent with this Agreement, or resulting from events beyond Aurigo's reasonable control;

11.11.4.   this limited warranty does not apply to problems caused by the failure to meet minimum system requirements; and

11.11.5.   this limited warranty does not apply to downtime or other interruption in access to the Services, or any other performance metrics that are addressed in an applicable SLA.

11.12. **Remedies for breach of limited o p e r a t i o n a l warranty.** If Customer notifies Aurigo within the Warranty Period that a Service does not meet the limited warranty, then Aurigo will either a) correct any breach in the Services Warranty by the date which is sixty (60) calendar days after the City provides notice of such breach, or 2) the City may, in its sole discretion, either extend the time for Contractor to cure the breach or terminate this Agreement and receive a full refund of all amounts paid to Contractor under this Agreement. These are Customer's only remedies for breach of the limited warranty unless other remedies are required to be provided under applicable law.

11.13. **DISCLAIMER OF OTHER WARRANTIES.** OTHER THAN THIS LIMITED WARRANTY, AURIGO PROVIDES NO OTHER EXPRESS OR IMPLIED WARRANTIES. AURIGO DISCLAIMS ANY IMPLIED REPRESENTATIONS, WARRANTIES OR CONDITIONS, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, TITLE OR NON-INFRINGEMENT. THESE DISCLAIMERS WILL APPLY UNLESS OTHERWISE REQUIRED BY APPLICABLE LAW.

12. <u>CONFIDENTIALITY</u>

12.1.   Contractor shall keep confidential, and cause all Subcontractors to keep confidential, all City Data, unless the City Data is publicly available. Contractor shall not, without prior written approval of the City, use, publish, copy, disclose to any third party, or permit the use by any third party of any City Data, except as otherwise stated in this Agreement, permitted by law, or approved in writing by the City. Contractor shall provide for the security of all Confidential Information in accordance with all applicable laws, rules, policies, publications, and guidelines.

12.2.   The Receiving Party agrees to exercise the same degree of care and protection with respect to the Confidential Information that it exercises with respect to its own similar Confidential Information and not to directly or indirectly provide, disclose, copy, distribute, republish or otherwise allow any Third Party to have access to any Confidential Information without prior written permission from the disclosing party. However, (a) either party may disclose Confidential Information to its employees and authorized agents who have a need to know; (b) either party may disclose Confidential Information if so required to perform any obligations under this Agreement; and (c) either party may disclose Confidential Information if so required by law (including court order or subpoena). Nothing in this Agreement shall in any way limit the ability of City to comply with any laws or legal process concerning disclosures by public entities. Contractor acknowledges that any responses, materials, correspondence, documents or other information provided to the City are subject to applicable state and federal law, including the Colorado Open Records Act, and that the release of Confidential Information in compliance with those acts or any other law will not constitute a breach or threatened breach of this Agreement.

12.3.   The Receiving Party will inform its employees and officers of the obligations under this Agreement, and all requirements and obligations of the Receiving Party under this Agreement shall survive the expiration or earlier termination of this Agreement. The Receiving Party shall not disclose City Data or Confidential Information to Subcontractors unless such Subcontractors are bound by non-disclosure and confidentiality provisions at least as strict as those contained in this Agreement.

13. COLORADO OPEN RECORDS ACT. The Parties understand that all the material provided or produced under this Agreement, including items marked Proprietary or Confidential, may be subject to the Colorado Open Records Act., § 24-72-201, *et seq*., C.R.S. In the event of a request to the City for disclosure of such information, the City shall advise Contractor of such request in order to give Contractor the opportunity to object to the disclosure of any of its documents which it marked as proprietary or confidential material. In the event of the filing of a lawsuit to compel such disclosure, the City will tender all such material to the court for judicial determination of the issue of disclosure and Contractor agrees to intervene in such lawsuit to protect and assert its claims of privilege against disclosure of such material or waive the same. Contractor further agrees to defend, indemnify and save and hold harmless the City,

its officers, agents and employees, from any claim, damages, expense, loss or costs arising out of Contractor's intervention to protect and assert its claim of privilege against disclosure under this Article including but not limited to, prompt reimbursement to the City of all reasonable attorney fees, costs and damages that the City may incur directly or may be ordered to pay by such court.

14. <u>SOFTWARE AS A SERVICE, SUPPORT AND SERVICES TO BE PERFORMED</u>

14.1.   Contractor, under the general direction of, and in coordination with, the City's Chief Information Officer or other designated supervisory personnel (the "Manager") agrees to provide the Services listed above and as set out in Exhibits A, B, C, D, and E and perform the technology related services described on attached Exhibit A (the "Statement of Work" or "SOW"). The Services, when fully accepted, shall conform to the functionality matrix set out as Exhibit D, from the RFP Response. The Parties acknowledge that Contractor and the City may work to further define the SOW, in which case that work product ("Follow-Up SOW") will become a part of this Agreement by incorporation. If the Follow-Up SOW materially alters the attached SOW the Parties agree to amend this Agreement in writing.

14.2.   As the Manager directs, Contractor shall diligently undertake, perform, and complete all of the technology related services and produce all the deliverables set forth on Exhibit A to the City's satisfaction.

14.3.   Contractor is ready, willing, and able to provide the technology related services and the Services required by this Agreement.

14.4.   Contractor shall faithfully perform the technology related services in accordance with the standards of care, skill, training, diligence, and judgment provided by highly competent individuals performing services of a similar nature to those described in the Agreement and in accordance with the terms of the Agreement.

14.5.   User ID Credentials. Internal corporate or customer (tenant) user account credentials shall be restricted as per the following, ensuring appropriate identity, entitlement, and access management and in accordance with established policies and procedures:

14.5.1. Identity trust verification and service-to-service application (API) and information processing interoperability (e.g., SSO and Federation);

14.5.2. Account credential lifecycle management from instantiation through revocation;

14.5.3. Account credential and/or identity store minimization or re-use when feasible; and

14.5.4. Adherence to industry acceptable and/or regulatory compliant authentication, authorization, and accounting (AAA) rules (e.g., strong/multi-factor, expire able, non-shared authentication secrets).

14.6. Vendor Supported Releases. Contractor shall maintain the currency all third-party software used in the development and execution or use of the Service including, but not limited to: all code libraries, frameworks, components, and other products (e.g., Java JRE, code signing certificates, .NET, jQuery plugins, etc.), whether commercial, free, open-source, or closed-source; with third-party vendor approved and supported releases.

14.7. Identity Management. The City's Identity and Access Management (IdM) system is an integrated infrastructure solution that enables many of the City's services and online resources to operate more efficiently, effectively, economically and securely. All new and proposed applications must utilize the authentication and authorization functions and components of the IdM. Strong authentication is required for privileged accounts or accounts with access to sensitive information. This technical requirement applies to all solutions, regardless to where the application is hosted.

15. GRANT OF LICENSE; RESTRICTIONS

15.1 **General.** Aurigo grants Customer a License to the Services ordered by Customer, subject to Customer's obligation to pay for the Services and any rights and limitations described in this Agreement. This License is non-exclusive, non-perpetual, and is not transferable. The ability to use Services may be affected by minimum system requirements or other factors. Aurigo reserves all rights not expressly granted.

15.2 **Ownership.** Each Party shall retain ownership of its Intellectual Property and any derivative dork produced using its Intellectual Property. All Work Product provided to the Customer under this Agreement that is not based on the Intellectual Property of Aurigo (including its Derivative Work) is assigned to the Customer upon acceptance of each Deliverable by the Customer.

15.3 **Client Software.** Customer may need to install Client Software to access and use the Service. Mobile client software for iOS and Android are available subject to Users being licensed to access the Aurigo Masterworks Cloud online service. Customer may make copies of the Client Software solely to support the use of Service for its Users. Copies must be true and complete copies (including copyright and trademark notices) and be made from an

Aurigo approved media or a network source. Customer agrees to use reasonable efforts to make its employees, agents, and other individuals that it allows to use the Client Software aware that Client Software is licensed from Aurigo and subject to the terms of this Agreement. Additional rights and restrictions for the Client Software may accompany the provision of such Client Software, and Customer agrees to abide by all such additional rights and restrictions.

15.4 **Authorized Users.** Only those individuals who Customer designates as authorized Users may use and access the Service. Only Users who have administrator privileges may add additional authorized Users to the Service up to and including the total number of User Licenses purchased during the Term. User Licenses cannot be shared or used by more than one individual authorized User and cannot be reassigned to a new User to replace a current authorized User who has terminated employment or otherwise changed job status or function and no longer uses the Service. However, a User who has administrator privileges may delete an authorized User from the Service and add a new authorized User to the Service to replace the former authorized User.

15.5 **Limitations on use.** Customer shall not reverse engineer, decompile or disassemble the Service or Client Software, except where applicable law permits it despite this limitation. Customer shall not rent, lease, lend, resell, or provide hosting services to or for any third parties which use the Service or Client Software.

15.6 Customer may terminate a Subscription or reduce the number of User Licenses at any time during the Term for its convenience. Customer must pay for any professional services performed on behalf of the Customer and for any use of the Service by the Customer prior to the termination effective date.

16. DELIVERY AND ACCEPTANCE

16.1. Right to Perform Acceptance Testing. Prior to accepting Deliverables, the City shall have the right to perform Acceptance Testing to evaluate the Deliverable(s) to ensure they meet Acceptance Criteria, if any, set forth on the applicable Order Form or Statement of Work. Contractor shall cooperate with the City in the development of Acceptance Criteria that shall be codified in the applicable Order Form or Statement of Work that will set forth the location, date, and other specifications of the Acceptance Testing, if any. Acceptance Testing may

occur in one or more phases, depending on the integration of contingent products, scalability, performance tuning or other measurable features or milestones.

16.2.   After an Acceptance Test and if at any time the Service does not conform, the City will notify Contractor in writing within thirty (30) days and will specify in reasonable detail the identified failures and possible reasons for failure. Contractor will, at its expense, repair or replace the nonconforming product within fifteen (15) days after receipt of the City's notice of deficiency.

16.3.   If the City issues an Acceptance Certificate for an "Acceptance with Exception(s)" the City will list the exception(s) and the date for Contractor's correction of the Error(s). If Error(s) are corrected by the listed date(s) the City agrees to commence further Acceptance Testing of the Deliverable or affected portion(s). If the Deliverable passes the Acceptance Tests, the City will issue an Acceptance Certificate.

16.4.   If a Deliverable fails a second or subsequent Acceptance Test (or in the event of a single Acceptance Test, the Acceptance Test) in no event shall there be an increase to the original price agreed to by the Parties for the Deliverable.

16.5.   The foregoing procedure will be repeated until the City accepts or finally rejects the Deliverable, in whole or part, in its sole discretion. In the event that the Service does not perform to the City's satisfaction, the City reserves the right to repudiate acceptance. If the City finally rejects the Service, or repudiates acceptance of it, Contractor will refund to the City all fees paid, if any, by the City with respect to the Service.

16.6.   If the City is not satisfied with Contractor's performance of the technology related services described in the Statement of Work, the City will so notify Contractor within thirty (30) days after Contractor's performance thereof. Contractor will, at its own expense, re-perform the service within fifteen (15) days after receipt of City's notice of deficiency. The foregoing procedure will be repeated until City accepts or finally rejects the technology related service in its sole discretion. If City finally rejects any technology related service, Contractor will refund to City all fees paid by City with respect to such technology related service.

16.7.   Contractor warrants that during the term of this Agreement that the Service and any associated components will not materially diminish during the subscription Term.

17. **<u>TERM</u>**. The term of the Agreement is from January 15, 2021 through January 15, 2026 (the "Term"). The Parties agree that the Agreement may be renewed for an additional five (5) year

term upon the same terms and conditions with an increase in no more than three percent (3%) of the annual cost for the renewal term. At the end of the initial Term the Parties shall adjust the pricing based upon the City's actual or anticipated usage.

18. **COMPENSATION AND PAYMENT**

18.1.   Fee: The fee for the Services and technology related services is described in the attached Exhibit B (the "Fee").   The Fee shall be paid pursuant to the City's Prompt Payment Ordinance and in accordance with any payment milestones in Exhibits A and B.

18.2.   Reimbursement Expenses: The fees specified above include all expenses, and no other expenses shall be separately reimbursed or incurred hereunder for the provision of the Service(s).

18.3.   Invoicing: Contractor must submit an invoice which shall include the City contract number, clear identification of the deliverable that has been completed, and other information reasonably requested by the City. Payment on all uncontested amounts shall be made in accordance with the City's Prompt Payment Ordinance.

18.4.   Maximum Agreement Liability:

18.4.1. Notwithstanding any other provision of the Agreement, the City's maximum payment obligation will not exceed **THREE MILLION NINE-HUNDRED AND NINETY-FIVE THOUSAND FOUR HUNDRED AND FORTY TWO DOLLARS** ($3,995,442) (the "Maximum Agreement Amount"). The City is not obligated to execute an Agreement or any amendments for any further services, including any services performed by Contractor beyond that specifically described in the attached Exhibits. Any services performed beyond those in the attached Exhibits are performed at Contractor's risk and without authorization under the Agreement.

18.4.2. The City's payment obligation, whether direct or contingent, extends only to funds appropriated annually by the Denver City Council, paid into the Treasury of the City, and encumbered for the purpose of the Agreement. The City does not by the Agreement irrevocably pledge present cash reserves for payment or performance in future fiscal years. The Agreement does not and is not intended to create a multiple-fiscal year direct or indirect debt or financial obligation of the City.

If funds are not available for continued performance for any fiscal period of this Agreement succeeding the first fiscal period, this Agreement shall be canceled at the option of the parties as of the beginning of the fiscal year for which funds were not appropriated or otherwise made available; provided, however, that this will not affect either the City's rights or the Contractor's rights under any termination clause in this Agreement. The effect of termination of the Contract hereunder will be to discharge both the Contractor and the City from future performance of the Agreement, but not from their rights and obligations existing at the time of termination. The Contractor shall be reimbursed for the reasonable value of professional services performed and accepted. The City shall notify the Contractor as soon as it has knowledge that funds may not be available for the continuation of this Agreement for each succeeding fiscal period beyond the first.

19. **STATUS OF CONTRACTOR**. Contractor is an independent contractor retained to perform professional or technical services for limited periods of time. Neither Contractor nor any of its employees are employees or officers of the City under Chapter 18 of the Denver Revised Municipal Code, or for any purpose whatsoever.

20. **TERMINATION**

20.1.   Customer may cancel or suspend Customer's use of the Service, or a portion thereof, at any time if Aurigo violates the terms of this Agreement. If Customer wishes to cancel or suspend its use of the Service due to an alleged breach of the Agreement by Aurigo, Customer must provide Aurigo with a written thirty (30) day notice of termination that defines the alleged breach. If Aurigo can cure the breach within the thirty (30) day notice period, the Customer's notice of termination will become void. The Agreement shall terminate at the end of the thirty (30) day notice period if Aurigo cannot cure the breach to the satisfaction of the Customer. Customer must pay for any professional services performed on behalf of the Customer and for any use of the Service by the Customer prior to the termination effective date.

The City has the right to terminate the Agreement without cause upon sixty (60) days prior notice to the Contractor. It is understood by the parties that a sixty (60) day notice period is required to allow the Contractor to wind down the Services being provided to the City and for the Contractor to prepare for the migration of the City's data off of the System. Any fees paid by City are non-refundable in the event of termination without cause. However, nothing gives

Contractor the right to perform services under the Agreement beyond the time when its services become unsatisfactory to the Manager.

20.2. Notwithstanding the preceding paragraph, the City may terminate the Agreement if Contractor or any of its officers or employees are convicted, plead nolo contendere, enter into a formal agreement in which they admit guilt, enter a plea of guilty or otherwise admit culpability to criminal offenses of bribery, kick backs, collusive bidding, bid-rigging, antitrust, fraud, undue influence, theft, racketeering, extortion or any offense of a similar nature in connection with Contractor's business. Termination for the reasons stated in this paragraph is effective upon receipt of notice.

20.3. **Termination by Aurigo.** Aurigo may cancel or suspend Customer's use of the Service or a portion thereof at any time if a) Customer violates the terms of this Agreement, or b) Aurigo believes that Customer's use of the Service represents a direct or indirect threat to the function or integrity of Aurigo's network or anyone else's use of the Service, or c) if Aurigo is otherwise required by law to do so. Upon notification by Aurigo of any such cancellation or suspension, Customer's right to use the Service will stop immediately.

20.4. Effect of termination. Upon termination or cancellation of the Service by either Party for any reason, Aurigo will delete Customer's Content permanently from its servers. Notwithstanding the foregoing, Aurigo will keep Customer's Content on Aurigo's servers for ninety (90) days before it is permanently deleted from Aurigo's servers. Customer is solely responsible for taking the necessary steps to back up its Content and for ensuring it maintains its primary means of business.

20.5. **Waiver of rights and obligations.** To the extent necessary to implement the termination of this Agreement, each Party waives any right and obligation under any applicable law or regulation to request or obtain the intervention of the courts to terminate this Agreement.

21. <u>**EXAMINATION OF RECORDS AND AUDITS**</u>. Any authorized agent of the City, including the City Auditor or his or her representative, has the right to access, and the right to examine, copy and retain copies, at City's election in paper or electronic form, any pertinent books, documents, papers and records related to Contractor's performance pursuant to this Agreement, provision of any goods or services to the City, and any other transactions related to this Agreement. Contractor shall cooperate with City representatives and City representatives shall be granted access to the foregoing documents and information during

reasonable business hours and until the latter of three (3) years after the final payment under the Agreement or expiration of the applicable statute of limitations. When conducting an audit of this Agreement, the City Auditor shall be subject to government auditing standards issued by the United States Government Accountability Office by the Comptroller General of the United States, including with respect to disclosure of information acquired during the course of an audit. No examination of records and audits pursuant to this paragraph shall require Contractor to make disclosures in violation of state or federal privacy laws. Contractor shall at all times comply with D.R.M.C. 20-276.

22. **WHEN RIGHTS AND REMEDIES NOT WAIVED**. In no event shall any action by either Party hereunder constitute or be construed to be a waiver by the other Party of any breach of covenant or default which may then exist on the part of the Party alleged to be in breach, and the non-breaching Party's action or inaction when any such breach or default shall exist shall not impair or prejudice any right or remedy available to that Party with respect to such breach or default; and no assent, expressed or implied, to any breach of any one or more covenants, provisions or conditions of the Agreement shall be deemed or taken to be a waiver of any other breach.

23. **INSURANCE**

23.1.   General Conditions: Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period, and for three (3) years after termination of the Agreement. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-" VIII or better. Each policy shall contain a valid provision or endorsement requiring notification to the City in the event any of the required policies is canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the City contract number listed on the signature page of this Agreement. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, contractor shall provide written notice of cancellation, non-

renewal and any reduction in coverage to the parties identified in the Notices section by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s) and referencing the City's contract number. If any policy is in excess of a deductible or self-insured retention, the City must be notified by Contractor. Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of Contractor. Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

23.2.   Proof of Insurance: Contractor shall provide a copy of this Agreement to its insurance agent or broker. Contractor may not commence services or work relating to the Agreement prior to placement of coverages required under this Agreement. Contractor certifies that the certificate of insurance attached as Exhibit C, preferably an ACORD certificate, complies with all insurance requirements of this Agreement. The City requests that the City's contract number be referenced on the Certificate. The City's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of the City's rights or remedies under this Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.

23.3.   Additional Insureds: For Commercial General Liability, Auto Liability and Excess Liability/Umbrella (if required), Contractor and Subcontractor's insurer(s) shall include the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured.

23.4.   Waiver of Subrogation: For all coverages required under this Agreement, Contractor's insurer shall waive subrogation rights against the City.

23.5.   Subcontractors and Subconsultants: All Subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of Contractor. Contractor shall include all such Subcontractors as additional insured under its policies (with the exception of Workers' Compensation) or shall ensure that all such Subcontractors and subconsultants maintain the

required coverages.   Contractor agrees to provide proof of insurance for all such Subcontractors and subconsultants upon request by the City.

23.6.   Workers' Compensation/Employer's Liability Insurance: Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of $100,000 per occurrence for each bodily injury claim, $100,000 per occurrence for each bodily injury caused by disease claim, and $500,000 aggregate for all bodily injuries caused by disease claims. Contractor expressly represents to the City, as a material representation upon which the City is relying in entering into this Agreement, that none of Contractor's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall effect such rejection during any part of the term of this Agreement, and that any such rejections previously effected, have been revoked as of the date Contractor executes this Agreement.

23.7.   Commercial General Liability: Contractor shall maintain a Commercial General Liability insurance policy with limits of $1,000,000 for each occurrence, $1,000,000 for each personal and advertising injury claim, $2,000,000 products and completed operations aggregate, and $2,000,000 policy aggregate.

23.8.   Business Automobile Liability: Contractor shall maintain Business Automobile Liability with limits of $1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement.

23.9.   Technology Errors & Omissions: Contractor shall maintain Technology Errors and Omissions insurance including cyber liability, network security, privacy liability and product failure coverage with limits of $1,000,000 per occurrence and $1,000,000 policy aggregate.

23.10. Additional Provisions:

23.10.1.   For Commercial General Liability, the policy must provide the following:

23.10.1.1.   That this Agreement is an Insured contract under the policy;

23.10.1.2.   Defense costs are outside the limits of liability;

23.10.1.3.   A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and

23.10.1.4.   A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by the City.

23.10.2.   For claims-made coverage:

23.10.2.1.   The retroactive date must be on or before the Agreement date or the first date when any goods or services were provided to the City, whichever is earlier.

23.10.2.2.   Contractor shall advise the City in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.

24. **DEFENSE AND INDEMNIFICATION**

24.1. Contractor hereby agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or relating to the work performed under this Agreement ("Claims"), unless such Claims have been specifically determined by the trier of fact to be the sole negligence or willful misconduct of the City. This indemnity shall be interpreted in the broadest possible manner to indemnify City for any acts or omissions of Contractor or its subcontractors either passive or active, irrespective of fault, including City's concurrent negligence whether active or passive, except for the sole negligence or willful misconduct of City.

24.2. Contractor's duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether Claimant has filed suit on the Claim. Contractor's duty to defend and indemnify City shall arise even if City is the only party sued by claimant and/or claimant alleges that City's negligence or willful misconduct was the sole cause of claimant's damages.

24.3. Contractor will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy.

24.4.   Insurance coverage requirements specified in this Agreement shall in no way lessen or limit the liability of Contractor under the terms of this indemnification obligation. Contractor shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.

24.5.   This defense and indemnification obligation shall survive the expiration or termination of this Agreement.

24.6.   INTELLECTUAL PROPERTY INFRINGEMENT INDEMNIFICATION

    24.6.1. Contractor shall indemnify, save, and hold harmless the City, against any and all costs, expenses, claims, damages, liabilities, and other amounts (including attorneys' fees and costs) incurred by the City in relation to any claim that any Deliverable, Service, software, or work product provided by Contractor under this Agreement (collectively, "IP Deliverables"), or the use thereof, infringes a patent, copyright, trademark, trade secret, or any other intellectual property right.

    24.6.2. Aurigo will defend Customer against any claims made by an unaffiliated third party that any Service or Client Software infringes that party's patent, copyright, or trademark or makes intentional unlawful use of its trade secret or undisclosed information. Aurigo will also pay the amount of any resulting adverse final judgment, or settlement to which Aurigo consents. This Section provides Customer's exclusive remedy for these claims.

    24.6.3. **What Customer must do:** Customer must notify Aurigo promptly in writing of any infringement claim and give Aurigo control over its defense or settlement with assistance from Customer. Aurigo will work collaboratively with Customer's designated representative to process the claim. Customer designated representative must provide Aurigo with reasonable assistance in defending the claim. Aurigo will reimburse Customer for reasonable out of pocket expenses that it incurs in providing that assistance.

    24.6.4. **Limitations on defense obligation.** Aurigo's obligations will not apply to the extent that the claim or award is based on:

- Customer's use of the Service or Client Software after Aurigo notifies Customer to discontinue its use due to a third party claim;
- Customer's combination of the Service or any related Client Software with a non-Aurigo product, data or business process;

- damages attributable to the value of the use of a non-Aurigo product, data or business process;
- Customer's use of Aurigo's trademark(s) without express written consent to do so; or
- any trade secret or undisclosed information claim, where Customer acquires the trade secret or undisclosed information (1) through improper means; (2) under circumstances giving rise to a duty to maintain its secrecy or limit its use; or (3) from a person (other than Aurigo) who owed to the party asserting the claim a duty to maintain the secrecy or limit the use of the trade secret or undisclosed information.
- Customer will reimburse Aurigo for any costs or damages that result from any of the above actions.

24.6.5 **Specific rights and remedies in case of infringement**.

- If Aurigo receives information concerning an infringement claim related to a Service or Client Software, Aurigo may, at its expense and without obligation to do so: (1) procure for Customer the right to continue to use the allegedly infringing Service and/or Client Software, (2) modify the Service and/or Client Software, or (3) replace the Service and/or Client Software with a functional equivalent, to make it non-infringing, in which case Customer will immediately stop using the allegedly infringing Service and/or Client Software after receiving notice from Aurigo.
- If, as a result of an infringement claim, Customer's use of a Service or Client Software is enjoined by a court of competent jurisdiction, Aurigo will, at its option, either: (1) procure the right to continue its use; (2) replace it with a functional equivalent; (3) modify it to make it non-infringing; or (4) terminate the License for the infringing Service and/or related Client Software and refund any amounts paid in advance by Customer for unused Services.

25.   <u>LIMITATION OF LIABILITY:</u>

25.1   Except as otherwise provided in this Section, to the extent permitted by applicable law, the liability of Aurigo and Aurigo's contractors to Customer arising under this Agreement is limited to direct damages up to three times the annual subscription fee. These limitations apply regardless of whether the liability is based on breach of contract, tort (including negligence), strict liability, breach of warranties, or any other legal theory. However, these monetary limitations will not apply to:

- Aurigo's obligations under the Section titled "Defense of infringement and misappropriation claims";
- Customer's use of Aurigo's trademark(s) without express written consent to do so;
- liability for damages awarded by a court of final adjudication for Aurigo's or its employees' or agents' gross negligence or willful misconduct;
- liabilities arising out of any breach by Aurigo of its obligations under the Section entitled "Confidentiality"; or
- liability for personal injury or death caused by Aurigo's negligence or that of its employees or agents or for fraudulent misrepresentation.
- All indemnification obligations.

25.2 EXCLUSION OF CERTAIN DAMAGES**.** To the extent permitted by applicable law, whatever the legal basis for the claim, neither Party, nor any of its affiliates or suppliers, will be liable for any indirect damages (including, without limitation, consequential, special or incidental damages, damages for lost profits or revenues, business interruption, or loss of business information) arising in connection with this agreement, even if advised of the possibility of such damages or if such possibility was reasonably foreseeable. However, this exclusion does not apply to either Party's liability to the other for violation of its confidentiality obligations or the other Party's intellectual property rights.

26. **COLORADO GOVERNMENTAL IMMUNITY ACT**. The Parties hereto understand and agree that the City is relying upon, and has not waived, the monetary limitations and all other rights, immunities and protection provided by the Colorado Governmental Act, § 24-10-101, *et seq*., C.R.S. (2003).

27. **TAXES, CHARGES AND PENALTIES**. The City shall not be liable for the payment of taxes, late charges or penalties of any nature other than the compensation stated herein, except for any additional amounts which the City may be required to pay under D.R.M.C. § 20-107 to § 20-115.

28. **ASSIGNMENT; SUBCONTRACTING**. Contractor shall not voluntarily or involuntarily assign any of its rights or obligations, or subcontract performance obligations, under this Agreement without obtaining the Manager's prior written consent. Any assignment or subcontracting without such consent will be ineffective and void and shall be cause for termination of this Agreement by the City. The Manager has sole and absolute discretion whether to consent to any assignment or subcontracting, or to terminate the Agreement because

of unauthorized assignment or subcontracting. In the event of any subcontracting or unauthorized assignment: (i) Contractor shall remain responsible to the City; and (ii) no contractual relationship shall be created between the City and any sub-consultant, Subcontractor or assign.

29. **NO THIRD-PARTY BENEFICIARY**. Enforcement of the terms of the Agreement and all rights of action relating to enforcement are strictly reserved to the Parties. Nothing contained in the Agreement gives or allows any claim or right of action to any third person or entity. Any person or entity other than the City or Contractor receiving services or benefits pursuant to the Agreement is an incidental beneficiary only.

30. **NO AUTHORITY TO BIND CITY TO CONTRACTS**. Contractor lacks any authority to bind the City on any contractual matters. Final approval of all contractual matters that purport to obligate the City must be executed by the City in accordance with the City's Charter and the Denver Revised Municipal Code.

31. **AGREEMENT AS COMPLETE INTEGRATION-AMENDMENTS**. Except for the functional requirements provided in response to a request for proposal and/or any subsequent enhancement of the SOW or other implementation documentation that may be developed after execution of this Agreement, the Agreement is the complete integration of all understandings between the Parties as to the subject matter of the Agreement. No prior, contemporaneous or subsequent addition, deletion, or other modification has any force or effect, unless embodied in the Agreement in writing. No oral representation by any officer or employee of the City at variance with the terms of the Agreement or any written amendment to the Agreement will have any force or effect or bind the City.

32. **SEVERABILITY**. Except for the provisions of the Agreement requiring appropriation of funds and limiting the total amount payable by the City, if a court of competent jurisdiction finds any provision of the Agreement or any portion of it to be invalid, illegal, or unenforceable, the validity of the remaining portions or provisions will not be affected, if the intent of the Parties can be fulfilled.

33. **CONFLICT OF INTEREST**

33.1. No employee of the City shall have any personal or beneficial interest in the services or property described in the Agreement. Contractor shall not hire, or contract for services with,

any employee or officer of the City that would be in violation of the City's Code of Ethics, D.R.M.C. § 2-51, *et seq*. or the Charter §§ 1.2.8, 1.2.9, and 1.2.12.

33.2.   Contractor shall not engage in any transaction, activity or conduct that would result in a conflict of interest under the Agreement. Contractor represents that it has disclosed any and all current or potential conflicts of interest. A conflict of interest shall include transactions, activities or conduct that would affect the judgment, actions or work of Contractor by placing Contractor's own interests, or the interests of any party with whom Contractor has a contractual arrangement, in conflict with those of the City. The City, in its sole discretion, will determine the existence of a conflict of interest and may terminate the Agreement in the event it determines a conflict exists, after it has given Contractor written notice describing the conflict.

34. **NOTICES**. All notices required by the terms of the Agreement must be hand delivered, sent by overnight courier service, mailed by certified mail, return receipt requested, or mailed via United States mail, postage prepaid, if to Contractor at the address first above written, and if to the City at:

> Chief Information Officer or Designee
> 201 West Colfax Avenue, Dept. 301
> Denver, Colorado 80202
>
> With a copy of any such notice to:
>
> Denver City Attorney's Office
> 1437 Bannock St., Room 353
> Denver, Colorado 80202

Notices hand delivered or sent by overnight courier are effective upon delivery. Notices sent by certified mail are effective upon receipt. Notices sent by mail are effective upon deposit with the U.S. Postal Service. The Parties may designate substitute addresses where or persons to whom notices are to be mailed or delivered. However, these substitutions will not become effective until actual receipt of written notification.

35. **DISPUTES**. All disputes between the City and Contractor arising out of or regarding the Agreement will be resolved by administrative hearing pursuant to the procedure established by D.R.M.C. § 56-106(b)-(f) , which may then be appealed by either party. For the purposes of

that administrative procedure, the City official rendering a final determination shall be the Manager as defined in this Agreement.

36. **GOVERNING LAW; VENUE**. The Agreement will be construed and enforced in accordance with applicable federal law, the laws of the State of Colorado, and the Charter, Revised Municipal Code, ordinances, regulations and Executive Orders of the City and County of Denver, which are expressly incorporated into the Agreement. Unless otherwise specified, any reference to statutes, laws, regulations, charter or code provisions, ordinances, executive orders, or related memoranda, includes amendments or supplements to same. Venue for any legal action relating to the Agreement will be in the District Court of the State of Colorado, Second Judicial District. Contractor shall perform or cause to be performed all services in full compliance with all applicable laws, rules, regulations and codes of the United States, the State of Colorado; and with the Charter, ordinances, rules, regulations and Executive Orders of the City and County of Denver.

37. **NO DISCRIMINATION IN EMPLOYMENT**. In connection with the performance of work under this contract, Contractor may not refuse to hire, discharge, promote or demote, or discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability. Contractor shall insert the foregoing provision in all subcontracts.

38. **USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS**. Contractor shall cooperate and comply with the provisions of Executive Order 94 and Attachment A thereto concerning the use, possession or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City barring Contractor from City facilities or participating in City operations.

39. **LEGAL AUTHORITY**. Contractor represents and warrants that it possesses the legal authority, pursuant to any proper, appropriate and official motion, resolution or action passed or taken, to enter into the Agreement. Each person signing and executing the Agreement on behalf of Contractor represents and warrants that he has been fully authorized by Contractor to execute the Agreement on behalf of Contractor and to validly and legally bind Contractor to all the terms, performances and provisions of the Agreement. The City shall have the right, in its sole discretion, to either temporarily suspend or permanently terminate the Agreement if

there is a dispute as to the legal authority of either Contractor or the person signing the Agreement to enter into the Agreement.

40. **NO CONSTRUCTION AGAINST DRAFTING PARTY**. The Parties and their respective counsel have had the opportunity to review the Agreement, and the Agreement will not be construed against any party merely because any provisions of the Agreement were prepared by a particular party.

41. **ORDER OF PRECEDENCE**. In the event of any conflicts between the language of the Agreement and the exhibits, the language of the Agreement controls.

42. **SURVIVAL OF CERTAIN PROVISIONS.** The terms of the Agreement and any exhibits and attachments that by reasonable implication contemplate continued performance, rights, or compliance beyond expiration or termination of the Agreement survive the Agreement and will continue to be enforceable. Without limiting the generality of this provision, Contractor's obligations to provide insurance and to indemnify the City will survive for a period equal to any and all relevant statutes of limitation, plus the time necessary to fully resolve any claims, matters, or actions begun within that period.

43. **INUREMENT**. The rights and obligations of the Parties herein set forth shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns permitted under this Agreement.

44. **TIME IS OF THE ESSENCE**. The Contractor shall adhere to all terms, conditions, and requirements of this Agreement, that specify a time for performance and completion of the Services.

45. **FORCE MAJEURE**. Neither party shall be responsible for failure to fulfill its obligations hereunder or liable for damages resulting from delay in performance as a result of war, fire, strike, riot or insurrection, natural disaster, unreasonable delay of carriers, governmental order or regulation, complete or partial shutdown of plant, unreasonable unavailability of equipment or software from suppliers, default of a Subcontractor or vendor (if such default arises out of causes beyond their reasonable control), the actions or omissions of the other party or its officers, directors, employees, agents, Contractors or elected officials and/or other substantially similar occurrences beyond the party's reasonable control ("Excusable Delay") herein. In the event of any such Excusable Delay, time for performance shall be extended for a period of time as may be reasonably necessary to compensate for such delay.

46. **PARAGRAPH HEADINGS**. The captions and headings set forth herein are for convenience of reference only and shall not be construed to define or limit the terms and provisions hereof.

47. **CITY EXECUTION OF AGREEMENT**. This Agreement is expressly subject to and shall not be or become effective or binding on the City until it has been fully executed by all signatories of the City and County of Denver.

48. **COUNTERPARTS OF THIS AGREEMENT**. This Agreement may be executed in counterparts, each of which shall be deemed to be an original of this Agreement.

49. **ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS**. Contractor consents to the use of electronic signatures by the City. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the City in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

50. **ADVERTISING AND PUBLIC DISCLOSURE**. Contractor shall not include any reference to the Agreement or to services performed pursuant to the Agreement in any of Contractor's advertising or public relations materials without first obtaining the written approval of the Manager. Any oral presentation or written materials related to services performed under the Agreement will be limited to services that have been accepted by the City. Contractor shall notify the Manager in advance of the date and time of any presentation. Nothing in this provision precludes the transmittal of any information to City officials.

51. **COMPLIANCE FOR IN-SCOPE SERVICES**. Contractor covenants and agrees to comply with all information security and privacy obligations imposed by any federal, state, or local statute or regulation, or by any industry standards or guidelines, as applicable based on the classification of the data relevant to Contractor's performance under the Agreement. Contractor further agrees to exercise reasonable due diligence to ensure that all of its service providers, agents, business partners, contractors, Subcontractors and any person or entity that may have access to City Data under this Agreement maintain compliance with and comply in full with the terms and conditions set out in this Section. Notwithstanding Force Majeure, the

respective processing, handling, and security standards and guidelines referenced by this section may be revised or changed from time to time or City Data may be utilized within the Services that change the compliance requirements. If compliance requirements change, Contractor and the City shall collaborate in good faith and use all reasonable efforts to become or remain compliant as necessary under this section. If compliance is required or statutory and no reasonable efforts are available, the City at its discretion may terminate the agreement for cause.

52. **ON-LINE AGREEMENT DISCLAIMER**. Notwithstanding anything to the contrary herein, the City shall not be subject to any provision included in any terms, conditions, or agreements appearing on Contractor's or a Subcontractor's website or any provision incorporated into any click-through or online agreements related to the work unless that provision is specifically referenced in this Agreement.

53. **PROHIBITED TERMS**. Any term included in this Agreement that requires the City to indemnify or hold Contractor harmless; requires the City to agree to binding arbitration; limits Contractor's liability for damages resulting from death, bodily injury, or damage to tangible property; or that conflicts with this provision in any way shall be void ab initio. Nothing in this Agreement shall be construed as a waiver of any provision of § 24-106-109 C.R.S.

54. **ON-CALL SERVICES**. This Agreement or the SOW may contain hourly or daily rates and Contractor and the Manager may enter into work orders for ongoing services. The City may authorize specific assignments for Contractor by placing a written work order signed by the Manager and Contractor (the "Order") describing in sufficient details the services and/or deliverables at the rates provided or as a flat rate. Contractor agrees that during the term of this Agreement it shall fully coordinate its provision of the services with any person or firm under contract with the City doing work or providing services which affect Contractor's services. Contractor shall faithfully perform the work in accordance with the standards of care, skill, training, diligence and judgment provided by highly competent individuals and entities that perform services of a similar nature to those described in this Agreement. Contractor represents and warrants that all services will be performed by qualified personnel in a professional and workmanlike manner, consistent with industry standards; all services will conform to applicable specifications and as attached to the Order, if any; and, it has the requisite ownership, rights and licenses to perform its obligations under this Agreement fully

as contemplated hereby and to grant to the City all rights with respect to any software and services free and clear from any and all liens, adverse claims, encumbrances and interests of any third party.

ATTACHED EXHIBITS

EXHIBIT A - STATEMENT OF WORK

EXHIBIT B – PRICING MATRIX

EXHIBIT C – INTEGRATION MATRIX

EXHIBIT D-FUNCTIONALITY MATRIX

EXHIBIT E- SOFTWARE SUBSCRIPTION SERVICE

EXHIBIT F- CERTIFICATE OF INSURANCE

Contract Control Number: TECHS-202057178-00
Contractor Name: AURIGO SOFTWARE TECHNOLOGIES INC

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at
Denver, Colorado as of:

SEAL   **CITY AND COUNTY OF DENVER:**

ATTEST: By:

                                        _____

_____

APPROVED AS TO FORM: **REGISTERED AND COUNTERSIGNED:**

Attorney for the City and County of Denver

By: By:

_____   _____

                                        By:

                                        _____

Contract Control Number: TECHS-202057178-00
Contractor Name: AURIGO SOFTWARE TECHNOLOGIES INC

By: *Balaji Sreenivasan*
     DocuSigned by:
     6F951EB911CB4B5...

Name: Balaji Sreenivasan
     (please print)

Title: CEO
     (please print)

ATTEST: [if required]

By: _____

Name: _____
     (please print)

Title: _____
     (please print)

Exhibit A - Statement of Work for RFP No. 11024: Project Management Information System (PMIS) and Implementation

Date: January 15, 2021

Attention:

Dave Dahl
City and County of Denver
210 West Colfax Ave
3rd Floor
Denver, CO 80202
Phone: (720) 913-5454
Email: david.dahl@denvergov.org

Aurigo Contact

Balaji Sreenivasan
Chief Executive Officer
Aurigo Software Technologies Inc.
12515 Research Blvd.
Building 7, Suite 300
Austin, TX 78759
Phone: (512) 212-4999
Email: proposals@aurigo.com

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Table of Contents

1 Introduction

The purpose of this **Exhibit 1 – Statement of Work** document is to compile key delivered documents and content into one (1) document for ease of reference. The order of the content has been requested by The City and County of Denver (the "CCD").

2 Overview and Business Objectives

Aurigo shall provide a Commercial-Off-The-Shelf ("COTS") software solution and professional services for designing, configuring, and implementing a Project Management Information System ("PMIS") for the City and County of Denver (the "CCD").

Based on the Request for Proposal No. 11024 solicitation results, the CCD has selected Aurigo Masterworks Cloud ("Masterworks"). Aurigo shall implement the Masterworks solution in accordance with the scope outlined in this Scope of Work ("SOW"),

The following documents are incorporated. Where there is conflict or gap between or among these documents, the controlling document will be resolved in the following order of precedence (first listed being the precedent):

i.	Applicable federal, state and local statutes, laws and regulations;
ii.	This Contract
iii.	All attachments to this Contract, including SOW, pricing, management, and technical specification agreements
iv.	Requirements Traceability Matrix (RTM)
v.	Integration Requirements Matrix (IRM)
vi.	Licensing and maintenance agreements
vii.	RFP issued by the City
viii.	Aurigo proposal response

2.1 Goals of the PMIS

ID	Goal	Business and Project Objectives
1	Standardization	Employ industry best practices, business processes, and standardized reporting to realign the way the City does business.
2	Increased Efficiencies	Provide staff with more accurate and accessible data to optimize day-to-day responsibilities. Move the City from a data-aware organization to a data-driven organization.
3	Security	Deploy software with industry standard security and support so that City data are secured and supported when needed. Make sure the needs of the City departments are supported by technology services and the partner vendor.

4	Auditability	Ability to provide transparency and accountability on actions throughout the system in order to provide reassurances of data and the insights provided by it.
5	Industry Standard Solution	Evolve from a reporting system to an industry-standard robust PMIS.
6	Integration	Create integrations to connect data between new PMIS and existing City systems. Standardize the City's Project Delivery Workflows, Business Processes, and Reporting.
7	Security	Secure the City Data and Supported Environment.
8	Auditability	Transparently report on the capital investments of the City to all relevant stakeholders with efficiency and accuracy.

2.2 In-Scope Project Activities

To achieve the goals set forth above, the following activities are in-scope for delivery by Aurigo:

(a) Providing project leadership, project management, business engagement administration, and Aurigo team governance for business process mapping and requirements elaboration, design and specifications, solution configuration, testing, and training;

(b) Producing design specifications that meet the functional and non-functional requirements as described in this SOW, Section 2.

(c) Performing iterative configurations of the system using an Agile methodology to deliver the functionality as outlined in this SOW Section 2.

(d) Performing Unit testing, performance testing and penetration security testing System Integration Testing ("SIT") to ensure the configured functionality works in accordance with the documented functional and non-functional requirements;

(e) Supporting the User Acceptance Testing ("UAT") to measure end-user acceptance of configured functionality based on defined criteria, scripts, and test cases;

(f) Performing migration of project data from in-scope systems listed in

(g) Table 1 - CCD System Inventory, Integration and Data Migration Plan. The CCD is responsible for providing data definitions for existing systems and clean data in an agreed-upon format. Aurigo is responsible for transforming the data and importing it into the Masterworks solution. Data loads and associated frequencies will be determined during interface assessment meetings during the elaboration phase of the project and will be mutually agreed upon by Aurigo and the CCD;

(h) Reviewing the CCD's current business processes to identify reengineering opportunities for improvements based on the project scope and the capabilities of the core Masterworks solution;

(i) Developing training content, as defined in Section 3.1.5 **Error! Reference source not found.**, to support the adoption of the PMIS;

(j) Supporting the deployment of the PMIS into production (i.e., "Go-Live").

(k) Post Go-Live support

2.3 Out-of-Scope

The following activities are out of scope; however, the CCD may request Aurigo to perform these activities based on mutual agreement of the impacts to cost and schedule;

(a) Manual import or data entry of legacy data;

(b) Customized enhancements to the core Masterworks product;

(c) Changes to the Aurigo Connected Methodology ("ACM"), Aurigo's project delivery model, unless changes are mutually agreed upon between the CCD and Aurigo, and a Change Order is processed and approved to reflect schedule or cost impacts.

3 Summary of SOW Delivery Approach

Aurigo Connected Methods (ACM) is Aurigo's proprietary methodology that it uses to deliver and support the project for its customers. Aurigo Connected Methods is Aurigo's full lifecycle methodology for planning, delivering, maintaining, and managing Aurigo Masterworks Cloud. ACM serves as a vehicle for continuous improvement, evolving based on best practices from leading-edge
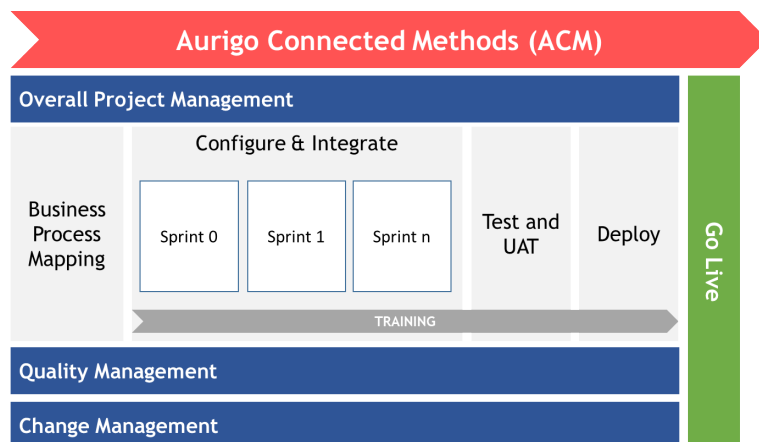
implementation experience and ongoing research and development. ACM equips Aurigo consultants with the tools and techniques they need to deliver comprehensive, full life-cycle solutions. ACM adopts many of the principles and best practices of the Agile philosophy, while

retaining the structure and project management oversight required for success. Many of the most valuable Agile Principles are reflected in the ACM methodology, including:

- Delivering working software frequently
- Providing continuous attention to technical excellence and good design
- Valuing customer collaboration
- Regularly identifying risks and developing mitigation plans
- Performing integration and regression testing
- Integrating earlier

Aurigo proposes a hybrid method of delivering services to the City. Key Aurigo personnel may travel onsite in accordance with Section 8.3. Other Aurigo personnel who perform tasks to deliver the City's solution will work from Aurigo's offices. They will be directly managed by the Aurigo Project Manager.

Aurigo's proposed Project Plan depends upon the City's cooperation in following the agreed-upon project plan. Aurigo's implementation plan is based on years of implementing projects similar to PMIS. If, during the elaboration phase of the project, the Customer decides that the methods Aurigo is proposing to use do not meet the Customer's expectations, this will result in a change in the proposed project and could increase the costs of implementing the project.

ACM defines the following project phases for a successful deployment. If an overall deployment is divided into separate production releases, then phases 2 through 7 are independently repeated for each release.

Project Delivery Phases		
Phase 1	Project Planning	Develop project plans, prepare for phase 2, and hold kickoff meeting with all stakeholders.
Phase 2	Business Process Mapping (BPM) and Business Requirement Elaboration (BRE)	Create the functional specification RACI. Conduct business workshops with SME's to elaborate on the business requirements. Approved Functional specifications to be used in phase 3.
Phase 3	Solution Configuration	Configure Masterworks Cloud to meet the requirements in the Requirements Traceability Matrix and per approved Functional and Technical Specifications
Phase 4	Solution Testing	The solution testing phase incorporates a set of testing that will include the following: • System Integration Testing • Performance Testing • Penetration Security Testing • Failover Testing • User Acceptance Testing
Phase 5	Training	Plan, Design, Develop, Deliver and support Training activities for PMIS implementation. Training delivery comprises System Administration training and End User Training

Project Delivery Phases		
		delivered using a 'Train-the-Trainer' (TTT) approach, with Aurigo delivering the first class and City trainers delivering the rest.
Phase 6	Production Release (Go-Live)	Masterworks Cloud production system is available for the Customer's use.
Phase 7	Project Closeout and Transition to Support	Closeout deliverable requirements, final invoices. Signoff final system acceptance form. Transition the Customer to production support.

Each of the above-mentioned phases are detailed below:

Project Planning

The project planning phase typically starts 4-6 weeks after the contract execution. During the project planning phase, Aurigo will work with the designated members of the customer's team to plan the overall approach to the project. This phase also develops the overall governance approach for the project, the testing approach, the training approach, etc. that will be used to guide the team throughout the project. This phase of the project is part of Aurigo's hybrid agile approach defined above. It provides many traditional aspects of project management that are required by customer organizations. All processes that will be used throughout the project are defined at this time. Please see above for our expectations for how an implementation project will be run. Any exceptions to how Aurigo runs its implementation projects might require change orders and potentially increased costs.

Deliverables

- Process documents that will be used to govern the project
  - o Requirements Traceability Matrix
  - o Project schedule
  - o Change Control plan
  - o Setup Project SharePoint

Business Process Mapping

During the business process mapping phase, Aurigo will work with designated members of the Customer team (the SMEs) to further refine the needs and requirements specified in the scope of services. The customer and Aurigo may jointly decide to modify and re-engineer some of the existing processes followed by the customer, based on better functionality and ease-of-use features available in the Aurigo Masterworks Cloud solution and/or the industry best practices proposed by Aurigo consultants. As mentioned above, this phase of the project is part of the hybrid agile approach that Aurigo utilizes to deliver projects to its customers. In a pure agile environment, there would be no independent BPM phase. To ensure that the requirements are well understood, and to reduce risks to the project, Aurigo will elaborate approximately 70% of the requirements upfront before the configuration process commences. Part of the business process mapping will include how existing processes are configured in Masterworks Cloud for our customers.

Deliverables

- Functional Specifications and RACI documents which will be used for tracking purposes until the requirements are delivered
- Process diagram(s) on how existing business process will tie into Masterworks Cloud
- Any additional Functional Specification documents that further detail each requirement

Solution Configuration

The Solution Configuration phase is intended for Aurigo to configure and/or develop and then deploy the new products/features specified in the final set of requirements elaborated during the Business Process Mapping workshops. During this phase, Aurigo will configure the software to meet the needs and processes documented in functional and technical specifications.

Aurigo delivers its solutions iteratively throughout this phase. Our normal iteration cadence is 3 weeks. At the beginning of each iteration, Aurigo will identify the requirements that will be delivered, configure the solution, and deliver an updated software environment for the Customer to access. The intent of the iteration is not to do a final system acceptance or testing. Rather, the goal is to garner feedback on the features and identify any gaps in the delivered capabilities to the intended needs as documented in functional and technical specifications. If new requirements are identified during an iteration, the potential changes to the scope of the project will be openly discussed with the customer and, if necessary, will be taken through a change control process.

Aurigo will continue to iterate through the solution configuration phase until all the requirements outlined in the scope of services are delivered satisfactorily to the customer.

Deliverables

- The developed and tested software configurations
- Integration components for integrating Masterworks with the customer's external systems
- Detailed test instructions that can be executed by the customer

Solution Testing

The solution testing phase of the project will be performed by the customer to assess the delivered solution before moving it into production.

During UAT, the customer will review all solution deliverables submitted by Aurigo. The testing should provide end-to-end business scenario testing from an end user perspective. The goal of UAT is to verify that the business processes defined during the BPM phase of the project, plus the requirements documented in approved functional or technical specifications, correctly convey what the customer expects from the solution. Any deviations from the defined requirements found at this stage will trigger a change control process.

Integrations with the City's existing third-party systems and to-be-determined third-party systems will also be rigorously tested jointly by the City and Aurigo at this point of the project. It is Aurigo's goal to develop a seamless Enterprise experience for the City as the City moves forward with its new PMIS Solution.

Data migration will also be tested during this period with a copy of the data to be migrated in order to determine not only the success of all data migrated to PMIS, but also determine any

edge cases are handled appropriately. Data migration will be finalized and performed immediately before system go-live to ensure the most up-to-date data is brought over from the current system into PMIS.

Deliverables

- Test results will showcase all test scenarios were run to completion along with the results. Testing includes:

- System Integration Testing
- Performance Testing
- Penetration Security Testing
- Failover Testing
- User Acceptance Testing

Overall Deliverables for all Testing Activities

- Work with the customer to answer questions and provide clarifications and assistance
- Resolve outstanding software issues
- Rework required capabilities, if needed, including integrations, forms configuration, workflow specifications, and report requirements

Training

Aurigo understands that training is not just about imparting how-to instructions in a classroom type setting and handing out user manuals. It is also about helping customers manage the change from an existing process to a fully automated newer environment. Training approach Aurigo uses to train its customers is geared toward meeting the customer's specific needs and it incorporates the best practices learned while delivering the Aurigo Masterworks Cloud solution.

Training Methodology

Aurigo proposes using its standard training methodology as detailed below. The training approach is adjusted per customer to align with Section 2. Aurigo's training approach ensures a well-trained workforce supported by a strong training program.

Stage 1 - Analysis – Aurigo performs a high-level learning needs analysis to carefully understand the City's training needs.   This is used to finalize the course curriculum and to ensure alignment to the overall project goals.

Stage 2 - Training Design – The instructional strategies are identified during the training design phase. Aurigo's existing training templates will be utilized for the development of the training material.

Stage 3 - Training Development (Training Material) – During this phase, the actual training content is developed. Aurigo typically develops training materials by leveraging the existing Aurigo standard training material and incorporating any adjustments to meet the City's

solution. Training material includes PowerPoint presentation slides and a training manual (instructions for hands-on activity). System documentation Manuals/User procedures referred to as "End User Manual" and "System Administration Manual" (in the form of online help) will also be developed during this phase and will be made available to trainees as reference material.

Stage 4 - Training Deployment & Delivery – During this phase, key planning and training delivery activities are conducted. It includes finalizing training facilities, performing logistics, and identifying the trainers and participants. Training participants' calendars are reserved by sending out training invites in advance to ensure maximum participation. All classroom training is typically delivered out of the City's primary office of operation for the project.

Training Approach

Aurigo will use Aurigo's standard training approach as defined above to address the City's training needs. Aurigo's proposal, has been provided in under Training, Section 3.1.5. of this document.

Quality Assurance

The quality management approach for the implementation of the PMIS will ensure quality is planned to assess the process and product quality. The project will use project quality measurement reports as a tool to communicate any quality risks or issues that arise.

The following quality management approach elements are included in this approach:

- **Quality Planning** – Includes quality standards, identification of quality metrics, creating quality checklists, and conducting problem remediation activities.
- **Quality Assurance (QA)** – Used to manage and deliver the project's product or service effectively and that the quality requirements are fulfilled. To ensure quality, an iterative quality process will be used throughout the project lifecycle.
- **Quality Control (QC)** – Focused on the products and deliverables of the project. It is the process of monitoring project deliverables to verify that the deliverables are of acceptable quality, complete, and correct; and includes the inspection, analysis, and actions required to ensure quality output.
- Tools and software used to support quality management include but are not limited to:
  - Software Quality Tools
    - Microsoft Office Tools (Project, Word, Excel, SharePoint, and PowerPoint)
    - VSTS – Visual Studio Team System
      - Solution creation, development, and management
      - Test Management Repository
  - Project Management Tools (not limited to)
    - Project Schedule
    - Project Site
      - Project Calendar
      - Action Items
      - Feedback Log
      - Risk Register

- • Issue Log
- • Decision Log
- • RTM
- **Problem reporting and resolution plan** – The project SharePoint site will be used to contain the reporting data and the reports produced as part of quality activities and reviews. The records will be maintained through the implementation lifecycle of the project.

3.1 Project Stages / Phases

Aurigo has defined the phases and deliverables for each phase below:

3.1.1 Planning

The Project Planning Phase is when Aurigo and the CCD set up the project foundation for success. There are two primary threads of activities during this phase. The first thread involves the Aurigo and CCD Project Managers collaborating on how the project will be managed. The second thread involves Aurigo analyzing the CCD's requirements and preparing for the Business Process Mapping phase. Project Planning phase deliverables include:

3.1.1.13.1.1.2.1 Kick-Off Presentation

3.1.1.23.1.1.2.2 Project Management Plan and sub-plans

3.1.1.33.1.1.2.3 Project

3.1.1.43.1.1.2.4 Project Site Setup

3.1.1.53.1.1.2.5 PMIS Team Overview on ACM, Project Management Tools, and Agile Methodology

3.1.1.63.1.1.3.1 Requirements Traceability Matrix

3.1.1.73.1.1.3.2 Business Process Mapping Workshops Plan

Descriptions, details, frequency, and acceptance criteria for each deliverable are below.

3.1.1.1 **Software Development Lifecycle ("SDLC") Methodology**

(a) Aurigo Connect Methodology ("ACM") Overview for All Delivery Phases

(b) Aurigo shall leverage its highly collaborative and comprehensive methodology and approach to design, configure, test, and implement the PMIS. ACM includes Aurigo Connected Methods Toolkits and Delivery Architectures. Aurigo Connect Methodology (ACM) is:

1. A proven set of processes, deliverables, and techniques that enable Aurigo teams to define and deliver projects;
2. A comprehensive collection of methods that supports deployment of the Aurigo Masterworks solution;

3. Focused on fundamentals such as requirements management, testing, training, quality assurance, and project management.

(c) Each software development deliverable phase will include at minimum the following activity performed by Aurigo:

1. Project Planning
2. Business Process Mapping - Further elaboration of the CCD's functional requirements
3. Solution Configuration - Configure the software to meet the CCD's functional and non-functional requirements as described in Section 2
4. Solution Testing - Aurigo conducts required system testing and the CCD performs user acceptance testing on the delivered solution
5. Training - Train-the-Trainer and System Administrator training for final deployment as described in Section 2
6. End-User Deployment - Roll out of the solution to end-users
7. Go-Live - Full deployment for the CCD

3.1.1.2 Project Management Deliverables – Completed during Project Planning Phase

3.1.1.2.1 Kick-Off Presentation

(a) Description

This deliverable is a presentation to familiarize all project team members with the project and ensure there is a baseline level of understanding between the CCD and Aurigo. The presentation includes the following topics:

1. Project Overview
2. Goals & Objectives
3. Project Milestone Schedule (high level)
4. Processes, Tools, and Delivery Methodology
5. Deliverables
6. Project Team, Roles & Responsibilities
7. Keys to Success
8. Next Steps

(b) Frequency

1. The deliverable is due 60 calendar days after contract execution
2. The kickoff presentation material shall be provided to the CCD three business days before delivering the presentation so that the CCD may review it, provide guidance on the content, and request revisions if necessary.
3. Due to the COVID pandemic, the Aurigo Project Manager and Business Analyst anticipate making the presentation remotely using Zoom or MS Teams.

3.1.1.2.2 Project Management Plan

(a) Description

The Project Management Plan shall cover the following areas at a minimum:

1. Project Overview - Describes the project scope, assumptions, and constraints.
2. Project Organization - Describes the project structure, stakeholders, roles, and responsibilities.
3. Project Schedule Management - Describes the tools, techniques, work activities, and processes for maintaining and reporting on the project schedule throughout the project lifecycle. This will be included in the PMP.
4. Risk and Issue Management - Describes the risk and issue management process and how this integrates with processes established by the CCD. Risk Management plan will be a separate sub-plan.
5. Communication Management Plan - Protocols for communicating status including sample status report, meeting schedule, and agenda. Establishes a consistent method for communication planning, management, methods, and activities needed to ensure timely and appropriate collection, generation, dissemination, storage, and disposition of project information. The Communication Management Plan shall detail the varying levels and needs of the project's stakeholders for information regarding the project, status, accomplishments, impact on stakeholders, etc. The Communication Management Plan shall define the communication vehicles, target stakeholders, scope, and frequency of the project's communications vehicles. This will be a separate sub-plan.
6. Documents Management Plan - Describes the approach that will be used to managing the documents and project artifacts collected by and created by the project team. This will be included in the PMP.
7. Requirements Management Plan - Describes the approach used to manage business and system requirements throughout the lifecycle of the project. This will be included in the PMP.
8. Change Management Plan – Describes the approach used to manage any changes identified throughout the implementation phase.
9. Quality Management Plan - Establishes a consistent method and definition of activities, resources, and standards needed to manage product and service performance. Includes the approach to measuring and reporting project performance (e.g., service level requirements) and the assessment, measurement, monitoring, and reporting of the required product and/or service performance outcomes. Quality Management plan will be a separate sub-plan. This plan should also address:

   i. Strategies and processes to promote quality.
   ii. Procedures to periodically measure and report quality performance to the CCD.
   iii. The controls that are used within the project to assure quality and consistency.

(b) Frequency

1. The deliverable is due 60 calendar days after contract execution.

2. Aurigo Project Manager anticipated to travel onsite one or two times, with prior approval from the CCD Project Manager (subject to change due to CoVID travel restrictions and travel criteria in Section 8.3)

(c) Acceptance Criteria

1. Aurigo shall provide and maintain the Project Management Plan, which must include all identified minimum criteria.
2. Aurigo shall validate with the City that methodologies and details are aligned with the CCD's expectations.
3. Aurigo shall implement a sustainability plan to maintain the Project Management Plan.
4. The CCD shall review and approve the final documents. Aurigo will update the plan based on review comments from the CCD. Several iterations may be required before a final version is available.

3.1.1.2.3   Project Schedule

(a) Description

The Project Schedule includes a schedule of tasks, dependencies, timeframes, deliverables, and demands on project resources. The plan shall be in Microsoft Project and include:

1. A milestone calendar schedule, provided in Excel, showing the high level phases from Project Planning to Go-Live
2. A project schedule to include tasks, durations, dependencies, and resources
3. A detailed schedule for key activities including project tasks, deliverables. The detailed schedule will include at a minimum the following:

      i.   A logical sequence of tasks and deliverables
     ii.   A clear narrative definition of each task and deliverable
    iii.   A specific target completion date for each task and deliverable
     iv.   Resource loading
      v.   Task and deliverable relationships and dependencies
     vi.   Identification of the critical path for the work plan to allow the determination of impacts of any schedule slippage.
    vii.   All tasks associated with the delivery of the solution, including the tasks assigned to the CCD.

(b) Frequency

1. The deliverable is due 60 calendar days after contract execution.
2. Change control process will be required for formal approval of changed baseline dates.

(c) Acceptance Criteria
1. The CCD, with support from Aurigo, shall provide and maintain the Project Schedule that includes for the full program:

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      i.   Milestones to be achieved;
     ii.   Deliverables;
    iii.   Activities performed by the CCD and Aurigo;
    iv.   Critical path;
     v.   Dependencies

2. Aurigo shall ensure the plan is aligned with this agreement to successfully deliver the project.
3. The CCD, with support from Aurigo, shall implement a sustainability plan to update, maintain, and report on the Project Plan.
4. The CCD shall review and approve the baselined project schedule. Several iterations may be required before a final version is available.

3.1.1.2.4   Project Site Setup

(a) Description

CCD will set up a SharePoint project site (the "Project Site").

1. The Project Site will track and manage the following but not limited to:

     vi.   Project Documentation
    vii.   Requirements Traceability Matrix (RTM)
   viii.   Decision Register
     ix.   Risk Log
     x.   Issue Log
     xi.   Action Items Log
    xii.   Feedback Log: All customer feedback is captured in a single log, the Feedback Log. Feedback is categorized as either bug, clarification, solution change request, product change request, or enhancement. Once categorized, the feedback is managed and dispositioned accordingly.

2. CCD will provide all Aurigo project team members access to the Project Site at all times
3. CCD and Aurigo will work together during the Planning phase to finalize the Project Site design.
4. CCD will work with Aurigo to ensure Sharepoint Lists, Libraries, Views, Metadata, Pages, the Project Site, is configured so that Aurigo can properly capture and manage information to manage the project effectively.
5. At a minimum, CCD will upload and adopt Aurigo's RTM and Feedback Log SharePoint List Templates as-is.

(b) Frequency - The deliverable is due 45 calendar days after contract execution.

3.1.1.2.5   PMIS Team Overview on ACM, Project Management Tools, and Agile Methodology

(a) Description

Aurigo shall provide initial overview for the CCD before starting the assessment and design activities for the Masterworks system. The overview session is intended to help educate the CCD on Aurigo's SDLC methodology ACM, tools that will be used to manage the project, and the agile methodology being used to configure and review the system.

(b) Frequency

1. The deliverable is due 60 calendar days after contract execution.
2. Overview to be provided by Aurigo Project Manager and Business Analyst
3. Overview to be provided virtually after the Kick-off meeting (due to CoVID travel restrictions)

3.1.1.3   Business Analysis Deliverables

3.1.1.3.1   Requirements Traceability Matrix ("RTM") Setup and Analysis

(a) Description

1. Aurigo Business Analysts will load all the CCD's requirements into the Project Site's Requirements Traceability Matrix. The RTM will represent 100% of the requirements that Aurigo must fulfill to close the project.
2. No additional requirements will go in the RTM without an approved Change Order.
3. The Aurigo Business Analysts and several Aurigo cross-functional experts will hold internal meetings to analyze all the CCD's functional and non-functional requirements to:

   i.   Identify and log elaboration questions to be asked during the Business Process Mapping workshops.
   ii.   Start mapping the requirements to Masterworks.
   iii.   Develop the Business Process Mapping workshop agendas.

(b) Frequency

The deliverable is due 90 calendar days after contract execution.

(c) Acceptance Criteria

The CCD will validate that all functional and non-functional requirements are logged in the RTM and are reflective of the entire scope of services to be delivered per the contract.

3.1.1.3.2   Business Process Mapping Workshops Plan

(a) Description

1. The CCD must provide Aurigo with functional requirements, non-functional requirements, and report examples.

2. Aurigo will conduct Business Process Mapping & Elaboration workshops to gain additional information and clarification around the CCD's requirements.
3. Additional information could include as-is business processes, the CCD's business roles, and elaboration on requirements.
4. Aurigo staff will analyze the CCD's requirements and develop a proposed plan for workshops, including what subject matter experts need to attend, how long the workshops should be, when the workshops should take place, and what the agendas will be.
5. The CCD will be responsible for scheduling the required workshops with the appropriate subject matter experts.

(b) Frequency

1. The deliverable is due no later than 60 calendar days after contract execution
2. Aurigo will deliver the plan as soon as possible so that the CCD has at least 4 weeks' notice before the workshops begin
3. Workshops typically are 6 hours per day for 4 or 5 days and involve multiple SMEs. Participants vary from day-to-day and even within a day. The agendas will determine who needs to attend. If travel restrictions are lifted, the CCD would prefer to have the workshops hosted at the City's location. Otherwise, these business workshop sessions will be conducted virtually due to CoVID travel restrictions.

(c) Acceptance Criteria

1. Complete Business Process Mapping Workshop plan and agendas
2. The CCD shall review and approve the Workshop plan. Aurigo will update the plan based on review comments from the CCD. Several iterations may be required before a final version is available.

3.1.1.3.3   Requirement Traceability Matrix Review Meetings

(a) Description

1. Aurigo will hold Requirement Traceability meetings where Aurigo and the CCD will review and update the status of requirements until all requirements are closed
2. At the beginning of a project, some requirements are met with out-of-the-box functionality and can be demonstrated, confirmed, and closed immediately.
3. If Aurigo determines some requirements can be demonstrated and closed, an RTM review meeting will be scheduled with the CCD

(b) Frequency

RTM review meetings setup is due 90 calendar days after contract execution

(c) Acceptance Criteria

RTM review Meeting scheduled and the City agrees on the status for each requirement

3.1.1.4   **Project Management Deliverables – Ongoing**

3.1.1.4.1   Project Schedule Updates

(a) Description

Aurigo will monitoring and report the project progress.

(b) Frequency

1. Project Schedule updated weekly to reflect changes and actual progress.
2. Change control process will be required for any changes to the baselined dates.

3.1.1.4.2   Risk and Issue Management

(a) Description

Aurigo shall identify, escalate, analyze, and manage risks that jeopardize achieving milestones including:

1. Prioritize (based on probability and impact);
2. Develop risk mitigation and remediation strategies.

(b) Frequency

1. Risks and Issues will be logged in the project site as they come up
2. Risks and Issues will be reviewed by the project team at the weekly project status meetings
3. Top risks will be documented in weekly status reports

3.1.1.4.3   Requirements Traceability Matrix (RTM) Updates

(a) Description

Aurigo will log and track each functional and non-functional requirement in the project RTM:

1. Progress traceability from requirement to specification to sprint to test cases will be tracked
2. Each requirement will have a status tracking it from Open to final disposition.
3. Requirement dispositions include either:
     a. **Accepted**: Meaning the requirement has been completed and accepted by CCD
     b. **Cancelled**: Meaning CCD decided the requirement is no longer applicable, for whatever reason, and is cancelling the requirement. Aurigo will take no action on Cancelled requirements.

    c. **Future Release**: Meaning these requirements were marked as coming in Future Releases of Masterworks in the RFP response. These requirements are not expected to be delivered during this project implementation. However, Aurigo will coordinate with CCD to deliver these requirements, at no additional cost, post project closeout, when the features become available.

Disposition of all requirements represents that Aurigo has concluded all actions on the requirement to CCD's satisfaction and the project can move to Closeout.

(b) Frequency

1. RTM will be updated on regular basis as progress towards meeting requirements is made
2. At a minimum, Aurigo and the CCD will hold RTM review meetings after each phase (i.e., Project Planning, Business Process Mapping, etc.).
3. RTM review meetings can also be held at logical milestones as agreed upon by Aurigo and the CCD. For example, Aurigo could schedule an RTM review meeting with the CCD to update requirement status in the RTM after an interface, business process, or testing is complete.

3.1.1.4.4   Weekly Status Meeting and Reporting

(a) Description

Aurigo is responsible for communicating a weekly status of project progress, risks, issues, and Change Orders. The Weekly Status Report shall include:

1. Status of project health (scope, budget, schedule)
2. Status of work completed against the Project Work Schedule
3. Actual/projected Project schedule dates versus baseline Project schedule milestone dates
4. Projected completion dates compared to approved baseline key dates
5. Recovery plan for all work activities not tracking to the approved schedule
6. Key activities completed or milestones achieved
7. Key Activities Planned for the next reporting period
8. The CCD's responsibilities for the next reporting period
9. Status on escalated risks and issues (including schedule and budget), requiring collaborative resolution
10. Disposition of escalated or critical issues and risks
11. Status on change control requests
12. Important decisions made and still need to be answered
13. Record and status on action items

(b) Acceptance criteria

1. The CCD shall conduct weekly program status meetings to discuss items in the Aurigo Weekly Project Status Report.
2. The CCD shall facilitate such meetings and both the CCD and Aurigo will provide the necessary supporting documents for effective communication and discussion.

3. The CCD Project Manager, and Aurigo Project Manager, will review and agree on all project status reports. If there is a discrepancy between the project managers, the Status Report will clearly call that out.

3.1.2 Business Process Mapping

The primary deliverables of the Business Process Mapping phase are Functional Specifications (FS) that are approved by the CCD and contain all the details required to fully configure Masterworks to meet the CCD's requirements. To produce approved Functional Specifications, Aurigo requires Business Process Mapping workshops to gain additional information on each requirement, map out the FS's required to configure the system, and identify business owners and subject matter experts (SME's) for each FS so that the project team knows who approves each FS. The Business Process Mapping phase deliverables include:

(a) 3.1.2.1 Business Process Mapping Workshops
(b) 3.1.2.2 Functional and Technical Specification RACI
(c) 3.1.2.3 Functional Specifications
(d) 3.1.2.4 Technical Integration and Data Migration Specifications

Descriptions, details, frequency, and acceptance criteria for each deliverable are below.

3.1.2.1 Business Process Mapping Workshops

(a) Description

1. Aurigo shall facilitate workshops with the CCD subject matter experts. The purpose of these workshops is to:
   a. validate and elaborate the solution requirements as described in Section 2
   b. Analyze existing as-is business processes from the perspective of understanding the key gaps and bottlenecks in these processes to inform to-be process design
2. Information from these sessions shall help Aurigo produce:

   i. Validated and elaborated functional and non-functional requirements, including security requirements and enterprise security policies.
   ii. This may include the addition, modification, and deletion of requirements as deemed appropriate by the CCD staff.
   iii. Additional requirements (if any) that will be logged in the Change Request log. The CCD can review the SME's change requests and determine if they want Aurigo to provide a cost and schedule estimate as the first step in determining if a Change Order is required. In the alternative, the Change Request will be deferred, possibly for later consideration in this project or for a future system enhancement project.
   iv. Draft to-be designs, via Functional Specifications, which are based on industry best practice and leverage the capabilities of the selected PMIS software

      v.   Microsoft Visio diagrams, included in Functional Specification, and supporting narrative text in Microsoft Word

      vi.   Input of all formal requirements into the requirements traceability matrix where the solution requirements are maintained and managed throughout the life of the project using the processes and tools established in the Requirements Management Plan.

(b) Frequency

1. Workshops duration and frequency will be determined in the Project Planning Phase.
2. Typical workshops duration spans 3 to 6 weeks, depending on SME availability.

(c) Acceptance Criteria

1. Workshop plan is defined and executed
2. Workshop detailed Meeting minutes and Workshop summary
3. Reference document loaded into SharePoint
4. Updated Requirements Traceability Matrix
5. Updated Risk and Issues Log
6. If-applicable, update Change Request Log

3.1.2.2   **Functional and Technical Specification RACI**

(a) Description

1. Aurigo with provide a Functional Specification RACI listing all the FS's planned along with a RACI grid for the CCD to denote who will have the authority to approve the FS and the SME's that will review the FS.
2. For example, an FS for GIS integration may only need to go to the GIS SME's for review and approval. This process allows for FS's to be reviewed and approved by the appropriate CCD representatives quickly.

(b) Frequency

1. Created at the end of the Business Process Mapping workshops
2. Updated with the status of each FS as they are being drafted, reviewed, and approved.

(c) Acceptance Criteria

Functional Specification RACI filled in.

3.1.2.3   **Functional Specifications**

(a) Description

The functional specification (FS) documents expand upon the solution architecture by defining the detailed mechanisms and approaches to implement the technical and functional requirements of the PMIS. The FS shall include, but is not limited to, the following:

1. The user experience design to ensure a compelling user experience for different user groups (e.g., screen mockups)
2. Detailed workflow design and workflow/process flow diagram(s)
3. Application configuration specifications
4. Business rules
5. Roles and related permissions
6. Email Notifications
7. Data Dictionary
8. Requirements Traceability that depicts the mapping of functional, non-functional, and interface requirements to the specifications.

Once Functional Specifications are drafted, Aurigo will:

9. Plan and facilitate to-be design sessions with key stakeholders from various departments to review and validate the proposed to-be designs in the Functional Specifications.
10. Update and finalize the to-be designs based on stakeholder input

(b) Frequency

To be determined after Business Process Mapping Workshops

(c) Acceptance Criteria

Approved Functional Specifications to be used to configure Masterworks to meet the CCD's requirements. Aurigo will update the FS based on review comments from CCD. Several iterations may be required before final versions are available.

3.1.2.4 Technical Integration and Data Migration Specifications

(a) Description

1. These specifications document the requirements for integration and data migration. The specifications will be jointly developed by the CCD and Aurigo. They will identify:
    i.   source to target data mapping
    ii.   data validation rules
    iii. data transformation requirements
    iv.   security requirements
    v.   bulk data load processes
    vi.   interface methods

vii. Exception process handling (e.g., the CCD will identify source, Aurigo shall identify target)

2. Data Dictionary for target - The target data dictionary should be in the same format as the source data dictionary.

(b) Frequency

One specification per integration and data migration as listed in

Table 1 - CCD System Inventory, Integration and Data Migration Plan

(c) Acceptance Criteria

Approved Technical Specifications. Aurigo will update the Technical Specifications based on review comments from CCD. Several iterations may be required before final versions are available.

3.1.3 Solution Configuration

The Solution Configuration phase is when Aurigo configures Masterworks to meet the CCD's functional and non-functional requirements documented in the RTM and further detailed in the specifications. Aurigo delivers the solutions iteratively throughout this phase. Our normal iteration cadence is 3 weeks. At the beginning of each iteration, Aurigo will identify the requirements that will be delivered, configure the solution, and deliver an updated software environment for the CCD to review during a Sprint Review meeting. The intent of the iteration is not to do final system acceptance or testing but to verify the solution is meeting requirements as documented in the RTM and specifications.   If any updates are warranted, e.g., a bug identified or missed requirement, they will be documented in the Sprint Feedback Log and planned for delivery in future iterations. If a new scope item is identified during an iteration, it will be logged in the Change Request Log and follow the agreed Change Management process. Aurigo will continue to iterate through the solution configuration phase until all requirements are delivered satisfactorily to the CCD.

The Configuration Phase deliverables include:

(a) Configured Solution
(b) Sprint Feedback Logs
(c) Updated Change Request Log (if-applicable)

Descriptions, details, frequency, and acceptance criteria for each deliverable are below.

3.1.3.1   **Configured Solution**

(a) Description

Aurigo delivers the solution in iterations so that users can validate functionality as the project progresses and provide feedback.

(b) Frequency

Sprints delivered every 3 weeks

(c) Acceptance Criteria

    1. Sprint reviewed by SME's and City's project team
    2. The CCD provides feedback and determines whether the Sprint is complete.

3.1.3.2 Sprint Feedback Logs

(a) Description

1. Each iteration of the solution is called a Sprint
2. Each sprint is reviewed by the CCD to verify it is being configured per specifications
3. User feedback is logged in the Sprint Feedback log
4. Feedback can be logged by Aurigo or the CCD
5. Feedback is analyzed and then classified by the Aurigo Business Analyst as either a bug, clarification, product enhancement request, solution change request, or scope change
6. Classifications are defined as follows:

    i. **Bug** - Solution configuration is not functioning per approved specifications or out-of-the-box functions
    ii. **Clarification** – A response from Aurigo to the CCD is required to close the clarification feedback.
    iii. **Product Enhancement Request** - Feedback requesting changes/enhancements to the Masterworks product. Product enhancement changes cannot be made by Professional Services. However, feedback will be passed onto the Product Development Team and logged into the Aurigo Masterworks Idea Portal for consideration in the Aurigo Product Roadmap.
    iv. **Solution Change Request** - the CCD requests Aurigo to change a previously approved solution configuration specification. Solution Change Requests will be logged in the Change Request Log (see Section 3.1.3.2.1) and tracked to its approved closure
    v. **Scope Change** - the CCD requests a scope change. The new requirement is not part of the original scope of work. Scope change requests will be logged in the Change Request Log (see Section 3.1.3.2.1) and tracked to its approved closure.

7. All feedback is captured, analyzed, and tracked to closure

(b) Frequency

Updated after the Sprint Review sessions with the CCD

(c) Acceptance Criteria

Feedback logged, analyzed and disposition planned.

3.1.3.2.1 Updated Change Request Log (if-applicable)

(a) Description

1. During sprint reviews, SME's have a chance to touch and interact with Masterworks
2. At times, users request new features or functions that were not part of the original scope of the project
3. All change requests will be captured for review in the Change Request Log
4. Aurigo and the CCD will review change requests and the CCD can decide if any further action, such as requesting a cost and schedule estimate, is warranted or if the change request will be deferred.

(b) Frequency

If-applicable - updated after the Sprint Review sessions with the CCD

(c) Acceptance Criteria

Change request logged, analyzed, and disposition planned.

3.1.3.3 Integration and Data Migration Services

An Aurigo System Integration Specialist will work with the CCD's SMEs during the Business Process Mapping phase of the project to develop the functional and technical requirements for integrating Aurigo Masterworks Cloud with the CCD's external systems. Web Service based Application Programming Interfaces (APIs) will be utilized to integrate seamlessly with the CCD's existing IT infrastructure. The Web Service based APIs that can be consumed by any application and use industry-standard protocols such as SOAP, XML, and HTTP. Aurigo will perform System Integration Testing as part of the delivery lifecycle. As part of SIT, the delivered solution is subjected to an isolated testing environment with test versions of all systems that have integrations. The SIT provides point to point testing of every interface that has been developed as part of the release.   The scenarios that will be run are geared to testing data boundaries, conversion, validation rules, etc. The key deliverable of the SIT testing is a SIT Test Result report that will highlight what test scenarios were run to completion and the results of each test case. Aurigo uses the ETVX (Entry Criteria, Task, Validation and Exit Criteria) strategy for integration testing.

An Aurigo Data Migration Specialist will work with the CCD's SMEs during the Business Process Mapping phase of the project to develop a plan for migrating the CCD's project data and documents out of their existing system(s). A variety of methods can be used to import the project data into the Masterworks database, including Excel export/import, FTP integration, and the Aurigo Masterworks Migration Tool. The CCD will be responsible for identifying the data they want to extract from existing systems, scrubbing the data if needed, and then placing the data into file(s) that are formatted for easy unload into Masterworks' MS SQL database. A series of tests will be conducted throughout the Solution Configuration phase of the project to ensure the data can be successfully uploaded into Masterworks. A full data migration will be performed prior to the solution going live.

Table 1 provides an inventory of the CCD systems within the scope of the PMIS project, either as targets for replacement with the migration of data from the external system into Masterworks, or an interface between the external system and Masterworks. The IRM provides additional details about the integrations.

The system integrations listed on Table 1 are being included at a fixed fee price as detailed in the Pricing Matrix. Prior to the completion of Business Process Mapping, CCD and Aurigo may mutually decide to remove an integration from the IRM and replace it with an integration that is similar in Integration services effort.

Aurigo has also included 1,200 hours of data migration services for this project. Any additional Integration & Data Migration services required will be billed as T&M on a monthly basis and per the Rate Card listed in the Pricing Matrix.

Table 1 - CCD System Inventory, Integration and Data Migration Plan

No.	System Name	Strategy	Assumptions
1	CIS (current project management system)	Data Migration & System Replacement with Masterworks	Project related information will be migrated - Project Attributes, Project status, Financial information for all active (including: On-Hold and Closeout) and proposed projects identified by the City.
2	Workday	Interface	1 interface (High) - Project and contract financial information will be integrated. Invoices/Payments made project, subproject, contract, phase or task (WBS elements) will be imported. Users will be able to drill down to invoices made against any element. Validations will be done for data look up.
3	ArcGIS	Interface	Base integration is already available OOB. Estimates have been considered assuming 3 additional layers. This will also including write back to ArcGIS servers from Masterworks.
4	Primavera P6	Interface	Scheduling information (Baseline) will flow from Primavera to Masterworks. Schedule tasks will be validated on data import. This will be a one-way integration. Primavera Integration API will be used to pull data from Primavera.
5	Questica	Interface	Budget data will be integrated from Questica to Masterworks. Questica Integration System will be used to receive information from Questica, This will be a one way integration.

No.	System Name	Strategy	Assumptions
6	Textura	Interface	Prime or sub-contract and Owner invoice information will be imported from Textura to Masterworks. Textura Payment Management restful APIs will be used to import data in Json format. This will be a one-way integration.
7	Salesforce	Interface	Information pertaining to Contractors, sub-contractors, consultants and consulting firm reviews / feedbacks to be integrated. Salesforce Lightning platform restful APIs will be used for this integration.
8	Enterprise Asset Management System (TBD)	Interface	
9	SSO (Microsoft Azure & Duo MFA)	Interface	Masterworks integrates with Microsoft Azure AD OOB enabling single sign on for Denver employees. Aurigo uses a proprietary platform capability called Aurigo Identity Services to configure this integration.
10	Sail Point	Interface	Aurigo will integrate Masterworks with Sailpoint using RestAPIs. Update intervals between Sailpoint and Masterworks can be configured based on need. Users, User groups, permissions and access levels can be imported from Sailpoint.

3.1.4 Solution Testing

The CCD's solution will go through multiple rounds of testing as part of quality assurance and quality controls before moving into production. Aurigo performs:

(a) Developer Unit Testing
(b) Quality Certification Testing
(c) Full System Regression Testing
(d) Smoke Testing
(e) System Integration Testing (SIT)
(f) Failover Testing
(g) User Acceptance Testing (UAT)
(h) Performance Testing

(i) Penetration Security Testing

The first four rounds of testing are done by Aurigo before deploying the system to the CCD for testing. The CCD will perform System Integration Testing and User Acceptance Testing (UAT). The Solution Testing phase concludes with the CCD's approval to move the system to production. The Solution Testing Phase deliverables include:

(a) System Integration Testing (SIT) Environment and Results
(b) Performance Testing Results
(c) Penetration Testing Results
(d) User Acceptance Testing (UAT) Environment and Results
(e) Failover Test Results

Descriptions, details, frequency, and acceptance criteria for each deliverable are below.

3.1.4.1 System Integration Testing (SIT) Environment and Results

(a) Description

1. This phase of testing puts the delivered solution into an isolated testing environment with test versions of all systems that have integrations.
2. The overall testing provides point to point testing of every interface that has been developed as part of the release.
3. The scenarios that will be run are geared to testing data boundaries, conversion, validation rules, etc.
4. the CCD will need to provide access to their applicable business system test environments so that integrations between Masterworks and business system, in scope for integrations, can be tested.

(b) Frequency

After integration and data migration are configured

(c) Acceptance Criteria

1. Test are run to completion and passed
2. No severity 1 or severity 2 bugs remain unresolved
3. Test Cases and Test results are provided to and accepted by CCD

3.1.4.2 Performance Testing Results

(a) Description

1. The performance tests the system from a performance and scalability perspective.
2. It ensures that all integrations, and configurations, function at predicted user loads, with predicted data sets.

3. This testing is critical to ensure that the system will operate normally in a production environment with a full user load accessing the system.

(b) Frequency

After integration and data migration are configured

(c) Acceptance Criteria

Test results are provided to the CCD, meet the CCD's non-functional requirements and accepted by the CCD.

3.1.4.3   Penetration Testing Results

(a) Description

1. Penetration testing ensures the system is not vulnerable to attacks by third parties.
2. Aurigo regularly runs penetration testing on its platform, but this phase of the project ensures that the delivered solution has no known open security holes.
3. During this penetration security testing, Aurigo performs testing that includes tests for the OWASP top 10 security flaws for web-based applications

(b) Frequency

Once, after integration and data migration are configured

(c) Acceptance Criteria

Test results are provided to the CCD and accepted by the CCD.

3.1.4.4   User Acceptance Testing (UAT) Environment and Results

(a) Description

1. In this testing phase, the CCD will review all solution deliverables submitted by Aurigo.
2. Aurigo will work with the CCD to support UAT
3. Testing should provide end-to-end business scenario testing
4. The goal of UAT is to verify that all functional and non-functional requirements have been met and configured to the CCD's approved specifications.

(b) Frequency

Once, after solution configuration and testing is complete

(c) Acceptance Criteria

1. Test Cases and Test results are run to completion and passed

2. No severity 1 or severity 2 bugs remain unresolved
3. An agreed upon code freeze has been implemented and any necessary regression testing/smoke testing has been performed successfully
4. The CCD approves the system for production release

3.1.5 Training

Training

Aurigo recognizes the need for solid end user training to support effective solution adoption. Aurigo's training approach provides a framework using effective methods and best practices for initial and sustainable training. To ensure successful solution adoption and to prepare the end users for the new solution, Aurigo will leverage the Aurigo Training approach described in this section.

Training for the PMIS project will comprise of three distinct training efforts:

- City staff and consultants who are part of the core project team (Hands-on Start-up Training)
- City staff and consultants who will use the PMIS solution (End-User Training)
- City Technology Staff who will maintain and operate the system following the post-production support period (System Administrator Training)

These training efforts are collectively divided into key delivery areas which are further described in the subsections below:

- Initial core project team training on the PMIS components
- Training development
- Training delivery
- Training logistics
- Training environments
- Training data sets (data sets to be provided by the City)
- Post-training responsibilities

Training Plan

Aurigo understands that the training needs are different for every organization. Aurigo will prepare and submit to the City a detailed Training Plan during the Configuration phase of the implementation. The Training Plan comprises a comprehensive description of the trainings, training approach & methodology for training development and delivery. The Training Plan will include:

- Training Team Roles & Responsibilities (Aurigo and City)
- Training Scope
- Training Development and Delivery Methodology

- Training Materials and Documentation
- Training Environment
- Training Logistics
- Training Schedule (timeline)
- Post-Training Activities

Training Development

All training material development will leverage the existing Aurigo standard training content as the base. Aurigo will work with the City Business Analyst (BA), Subject Matter Experts (SMEs), and other identified stakeholders to align training materials with the City's solution. It will be the City's responsibility to make available the required BA and SME time to participate in the development, review, and approvals processes. Aurigo will maintain the training materials to reflect system changes until Final System Acceptance.

The following training work products will be developed:

I. Prepare for City a high-level training needs analysis which will be addressed in the Training Plan under the Training Development section. Training needs analysis will be completed based on the three-target audiences noted above. The analysis will highlight the business processes that have been implemented in the PMIS, identify key system capabilities / functionalities for which the target audience will need PMIS training. This information will be extracted from the FSD produced from the BPM process. The City will be responsible to review and approve the analysis. Identifying the desired level of knowledge or skills the learners will achieve will be defined as learning objectives in the Training Design Document.

II. Deliver for City review and approval a comprehensive Training approach which will be part of the Training Plan.

III. Deliver for City review Training Design documents comprising the Curriculum and Course Designs as described in the training plan. While the training plan will discuss the approach for the curriculum and course development, the actual design documents will reside outside the training plan. The Training Design Document includes:

- Curriculum design with a high level curriculum outline for each of the three target audience
- Individual course design with estimates for course lengths, timing and a process-to-course mapping. The course design will provide a high-level outline of the content coverage.

IV. Conduct train-the-trainer session to prepare the City and/or consultant staff to teach each end-user training course.

V. Develop training courseware as per the curriculum and course design, for the three identified target audience groups. Training materials for the courseware includes:

  o Microsoft PowerPoint presentation slide deck aligned with the training course.
  o Participant Guide (detailed instructions for hands-on exercise) in PDF/word format aligned with the Training course.

VI. Identify training scenarios within the PMIS solution which are identified in the FSD use-cases, and applicable to City Contracts and the City employees to support training

VII. Develop end-user training materials to support the successful training of existing City staff, the training of future City employees, City consultants supporting delivery of City projects, and external stakeholders into the new PMIS, including:
- Formal training materials for City end-users will be developed for instructor-led training (ILT) delivery.
- ILT material includes targeted presentation slides for each course, participant guide for hands-on practice aligned with each of the course, and robust training environment for practice.
- Additional following types of system documentation will be developed.
  - End user manuals will be available as online help and accessible from within the PMIS solution
  - System administrator manual will be available as online help and accessible from within the PMIS solution

VIII. Revise training materials based on experiences and feedback surveys to enhance and streamline ongoing training materials. Note: Material revisions will be jointly discussed with and approved by the City.

IX. Established procedures for ensuring the training materials are accurate and maintained to reflect any system changes.

X. Effectively transition responsibility for managing and maintaining training materials to City staff and the provision of any required knowledge transfer at least three (3) months prior to the end of the one-year production support period.

Training Delivery

Training delivery is a collaborative effort between Aurigo and the City.

Aurigo will be primarily responsible for delivering the following requisite trainings:

- Core Team Training (Hands-on Start-up Training)
- End-User training (Train-the-Trainer – first class of each type)
- System Administrator Training

Aurigo will be responsible to deliver first class of each course, and then support the City for the delivery of remaining classes. Aurigo understands the need to support the City during the end user training delivery by the City. Aurigo will be available to provide technical support throughout the End-User training led by City trainers.

- Aurigo will provide offline/remote support by ensuring availability of the training environments. Aurigo will continue to maintain the Training environment used for the end user (TTT) session for City trainers and learners to use during training delivery
- Aurigo will provide remote support to City trainers with any issues and training related questions and clarifications.
- Aurigo will update the training materials until final acceptance of Aurigo Masterworks solution.
- Aurigo assumes that City will leverage the end-user training material provided during Train-the-Trainer; no new material will be provided for this training.

The City will be responsible for following trainings:

- End-User Training (remaining users): City will be responsible to plan, manage and deliver End-User training to the remaining end users after Aurigo has delivered the first class of End-User training to the City Trainers via the Train-the-Trainer (TTT) approach.

Here is a brief description of all Aurigo delivered training. Aurigo assumes all training will be delivered at City's main central office or virtually due to COVID travel restrictions. Training detail for each course is provided in the Response for Proposal response.

Training	Users	Trainer	Course Duration	Delivery Method
Core Team Training (Hands-on Start-up Training)	25	Aurigo	3 days / 24 hrs	Instructor-Led Training (ILT) - Classroom
UAT Support Training	25	Aurigo	2.5 days / 20 hrs	Instructor-Led Training (ILT) - Classroom
End-User Training (Train-the-Trainer)	30	Aurigo	5 days / 40 hrs	Instructor-Led Training (ILT) – Classroom, delivered as TTT to City trainers
System Administrator Training	5	Aurigo	2 days / 16 hrs	Instructor-Led Training (ILT) - Classroom

Additional End-User (Train the Trainer) Training courses can be added at the sole discretion of the City. Pricing for the optional Training Course in listed in the Pricing Matrix.

Training Delivery Logistics:

For all the trainings listed above, the City has the responsibility of arranging for training facilities, scheduling training classes, and managing/tracking training enrolment and completion. The City project team is responsible for printing and distribution of all training materials using soft and/or hard "master" copies provided by Aurigo. In support of training delivery, the Aurigo project team will:
- Provide an end-user training program that is scalable to the number and frequency of users and processes to be supported by the PMIS solution
- Design training feedback surveys for end-user training. The City will be responsible for implementing the designed evaluation tool measuring the learner's perception on the effectiveness of training.
- Provide a plan for tracking and reporting on training attendance. Tracking and reporting attendance for the courses will be managed by the City.
- Develop an approach for delivering communication of any training updates to the City trainers.
  - Establish a plan to manage the escalation of questions from training sessions and the timely communication of answers back out to the trainers. The City trainers will be responsible for relaying the information to the trainees

Training Environments

Training environments, sufficient to support the overall training effort, will be designed, implemented, and managed. The following activities/outputs will be accomplished:

- Aurigo will provide two Training Environments, one for training delivery (Training Environment) and one for post-training practice (Training Practice Environment).
- The Training Environment will be used to deliver the End User (TTT) by Aurigo and End User Training by City. A single environment will be configured for all training deliveries.
- The Training Environment will be reset periodically to maintain a clean environment for new set of learners on request from City.
- The Training Environment will be maintained from there on, with appropriate updates post UAT for bug fixes and post Go-Live.
- The Training Practice Environment will be the copy of the fully configured Training Environment and will be available for learners to practice after completion of their courses. This practice environment will not be reset for data but will be maintained for updates.
- Aurigo will set-up requisite generic users for End-User Training (workstations, network connectivity and training rooms to be provided by the City)
- Aurigo will ensure that training environments are operationally in line with the training strategy

Training Data Sets

Aurigo will establish and maintain sample data sets within the Training environment that will support training delivery. Aurigo typically uses sample data for use during training. If City expects realistic data to be used in training environment, it will be the City's responsibility to provide sample data sets to Aurigo. Aurigo proposes to leverage data generated during the UAT for setting up Training data if City is not able to provide realistic sample data.

- Aurigo will setup and maintain a sample data set in the training environment. The source of the data set may be one of the following or as mutually agreed upon between Aurigo and City in the Training Plan:
  - A common set of user IDs will be configured into the Training Environment, prior to class. Participants will be assigned one of the pre-configured user IDs during the class.
  - A common set of sample projects for viewing, navigation, and reporting purposes will be configured. These projects will act as reference examples for all trainer and users for demonstration of functionality.
  - Data developed during the UAT will be leveraged for setting up training data in the Training Environment.
  - Alternately, if City expect realistic data in the training environment, City will provide the sample data.
- Aurigo will comply with any data masking requirements, if real data is provided to Aurigo for data setup. However, as a best practice, Aurigo recommends to not use any real data or sensitive data that may require data masking. However, Aurigo will mask data for typical fields such as passwords.

- Aurigo will provide a high-level documentation of the outline and approach taken for data setup in the Training environment; this will be part of the Training Plan.

Post Training

After end user training has completed, the following activities will occur:
- Revision of all training materials in a final form, providing revisions do not alter the approved training design
- Transition of the materials to on-going operations status and hand-off materials for maintenance and update of the materials as appropriate to reflect any system upgrades or enhancements, until Final Acceptance
- Establishment of the procedures and documentation for ensuring that the training team is informed of all updates to production after go-live and the training environments are included on the relevant migration paths
- Facilitation of a post-training analysis three (3) months after training has been completed to gather and document lessons learned and update communication and training plans accordingly.

3.1.6 Organizational Change Management (OCM)

Aurigo will implement and maintain an OCM approach that is geared to engagement with the City staff and consultant resources who manage and deliver the City's projects. In addition, OCM activities shall address any changes that the PMIS project will have in terms of impacts on external stakeholders who will utilize the integrated external systems (for example, City contractors who will use functions of the new system).

Aurigo will provide an integrated and experienced Organizational Change Management (OCM) management lead for the project duration to address the business transformation resulting from the implementation of Aurigo's technology. Both internal and external stakeholders of the City will be included in our scope of services.

The overall approach shall be a comprehensive one that includes readiness assessment, communications, and training activities.

3.1.6.1 **Organizational Change Management (OCM) Plan**

(a) Description
   1. Aurigo will create a OCM Plan with the following components:
      a. Stakeholder Communications
      b. Organizational Readiness

(b) Frequency

   Aurigo will deliver to the City a draft OCM plan within 90 days after receipt of contract approval. The City must review and return the plan with any comments or concerns to Aurigo no later than 30 days after it receives it and Aurigo will provide a final plan to the City not later than 15 days after receipt of comments. Aurigo can propose revisions to the plan, as necessary, at the beginning of each major project phase.

(c) Acceptance Criteria

OCM Plan approved by CCD. Aurigo will update the plan based on review comments from CCD. Several iterations may be required before a final version is available. Revisions to the OCM Plan will require approval by the CCD.

3.1.6.2 Communication Support

(a) Description
1. Expectation management is essential to help ensure the various internal and external user constituencies are prepared for and understand go-live capabilities and the timeline for future improvements.
2. Communication is a critical success factor for any project involving change. A Communication Plan will be established which defines the approach to communication and the criteria for defining the tactical communication activities/events. These activities include:
   a. Maintenance and update of PMIS Project Communication Plan and facilitation of any meetings necessary to keep the communications plan up-to-date
   b. Creation of communication materials as per the Communications Plan with content approved by the City
   c. Development of presentations and materials for the use of the City in meetings with internal and external stakeholders
   d. Development of messages to help key staff, sponsors and supporters influence behaviors and alignment throughout the organizational groups affected by the project
   e. Support City OCM leads with specific communication activities, workshops, employee forums and external stakeholder forums to build awareness and create support for the project
   f. Support City OCM leads with the communication to all project participants and an up-to-date view of the status, progress, objectives and success criteria for the overall project
   g. Creation of communications to prepare City stakeholders who will be affected by the project
   h. Creation of communications which lead to the preparation of impacted outside groups and third-parties who will be affected in the way they operate due to the project
   i. Creation of targeted communications and awareness aids to facilitate activities identified to effectively manage changes associated with the implementation
   j. Provision of insight into success stories and highlighting milestones achieved coinciding with go-live and early experiences with the project's implementation
   k. Development and execution of a communications approach and plan for after go-live
   l. Support City as necessary with appropriate content to be used by the City in developing marketing materials and global communications
3. Communication Channels and Activities

      a. The PMIS change team will research and identify how to best reach the audience (channels) and then in what format the communication will take place (activities):

      b. Communication channels may include one or more methods listed below:
   - a. SME/Process Owner Network
   - b. Face-to-face briefing by managers
   - c. Team meetings
   - d. Management meetings / briefings
   - e. City Intranet
   - f. Electronic Newsletters
   - g. Workshops
   - h. Email
   - i. Presentations
   - j. Chat or conference forums

      c. Activities, events, and/or materials that may be used for selected channels may include one or more methods listed below:
   - a. Lunch-and-Learn Sessions
   - b. Team Meetings
   - c. Leader Briefings
   - d. Presentations

(b) Frequency

As defined in the approved Communication Plan

(c) Acceptance Criteria

Communication Support provided as agreed in the approved Communication Plan

3.1.6.3 Enterprise Readiness Plan and Readiness Assessment

(a) Description
1. Aurigo will prepare an enterprise readiness plan. The enterprise readiness plan shall:
   - a. Provide best practices related to change management in terms of transition to production operations
   - b. Provide subject matter expertise, including but not limited to examples of similar experiences and efforts, key success factors to these experiences, and risk mitigation strategies
   - c. Provide tools and templates to expedite and facilitate the Go-live efforts from an OCM perspective
   - d. Propose the appropriate team to support the City and external stakeholder readiness as part of initial implementation and any subsequent deployment phase(s) for PMIS
   - e. Assess the City's overall readiness to operate the PMIS system and associated business processes

      f. Based on the readiness assessment, propose a course of action to make sure the City is ready for Go-Live

(b) Frequency

At least 90 calendar days prior to the scheduled Go-Live of the PMIS.

(c) Acceptance Criteria

Communication Support provided as agreed in the approved Communication Plan

3.1.6.4 Change Gap Analysis

(a) Description
1. OCM Lead will work with Aurigo Business Analysts and collaborate with the City to perform the following Change Gap Analysis:
   a. Identify any changes to business processes as a result of the transition to the new PMIS system.
   b. This information will be extracted from the Functional Specification Documents (FSD) and other collaborative sessions with the City OCM team.
   c. Identify any affected City staff positions/roles and provide recommendations to City in terms of any workforce implications
   d. When a change in business process is identified or proposed, Aurigo should propose business process reengineering as well as OCM support to communicate those changes.

(b) Frequency

As defined in the approved project plan

(c) Acceptance Criteria

Approved Change Gap Analysis

3.1.7 End-User Deployment and Go-Live

During this phase, planning for production deployment/go-live. The primary activity is deployment readiness, communication planning, and post-deployment smoke testing.

3.1.7.1 Deployment Plan

(a) Description

1. Strategy for deployment of the solution to production
2. Contingency and rollback plan if deployment is unsuccessful
3. Smoke test plan that includes steps to verify the deployed solution is functioning correctly in the production environment
4. Criteria for approving production deployment (Go / No Go Decision)

5. Anticipated downtime with user impact during deployment
6. User and service desk communication plan
7. Final deployment approval steps
8. Estimate of duration of deployment activities, required resources, and skills necessary of required resources

(b) Frequency

Once for production release

(c) Acceptance Criteria

1. Deployment Plan review and acceptance by the CCD required prior to production release
2. Deployment Plan review and acceptance by the CCD required prior to Go / No Go Decision Meeting. Aurigo will update the plan based on review comments from CCD. Several iterations may be required before a final version is available.

3.1.7.2 Post Go-Live Support Plan

(a) Description

1. Aurigo will create and deliver a post Go-Live support plan. Aurigo will obtain City approval of this plan no later than 30 days before the first scheduled Go-Live date. The post Go-Live support plan will:
   a. Identify the tasks and roles required to support the application during the Go-Live and post Go-Live periods.
   b. Outline the escalation prioritization, and incident resolution process.
   c. Identify City staff who will be assigned to the support roles and where they are located.
   d. Set qualifications and performance standards for City personnel who perform the support roles.
   e. Appoint a contact person that the key City users must consult when escalating issues.

(b) Frequency

Once for production release

(c) Acceptance Criteria

Post Go-Live Support Plan review and acceptance by the CCD required prior to production release

3.1.7.3 Project Closeout, Final Acceptance and Transition to Support

(a) Description

1. This is the final phase to close out the project and transition the CCD to Aurigo Support
2. Project closeout includes:
    i. Contract Closeout.
        - Verification all expected deliverables have been received
        - Verification all requirements have been met and closed
    ii. Project Financial Closeout - Verify final Professional Services project invoice has been processed
    iii. Transition the CCD to Aurigo Support
        - Introduce the CCD to Support personnel
        - Review SLA
        - Train the CCD System Administrator on how to log, monitor, and review production issues in the Aurigo Customer Support Portal
    iv. Obtain Final Acceptance sign-off from the CCD

(b) Frequency

1. One Contract and RTM final review meeting
2. One Project Closeout and Transition to Support meeting (includes Customer Support Portal training)

(c) Acceptance Criteria

1. RTM line items closed
2. Participate in lessons learned
3. The CCD Final Acceptance sign-off
4. Final Professional Services invoice processed
5. Transition to Aurigo Production Support
6. All final deliverables updated, cataloged, and delivered to the City in final form

4 Architecture and Integration

4.1 Proposed Architecture

A deployment diagram describes the hardware and software components utilized in the implementation of the solutions along with their relationships. The diagram should provide, at the very least, clear understanding of the integration points, software and hardware components, and how they support the proposed solution.

The content should:

- Clearly communicate the types of protocols utilized
- Help identify capacity, performance, availability and security capabilities and vulnerabilities
- Provide a clear view of the hardware and software communications components of the solution

Aurigo Masterworks Cloud is a cloud-based solution hosted on Amazon's AWS infrastructure, which includes an Elastic Load Balancer, web server(s), database server(s), and SSRS services. Amazon has the most flexible, scalable platform available and will allow PMCS to scale to the demands of the CCD's users. Please see the below physical network infrastructure diagram.
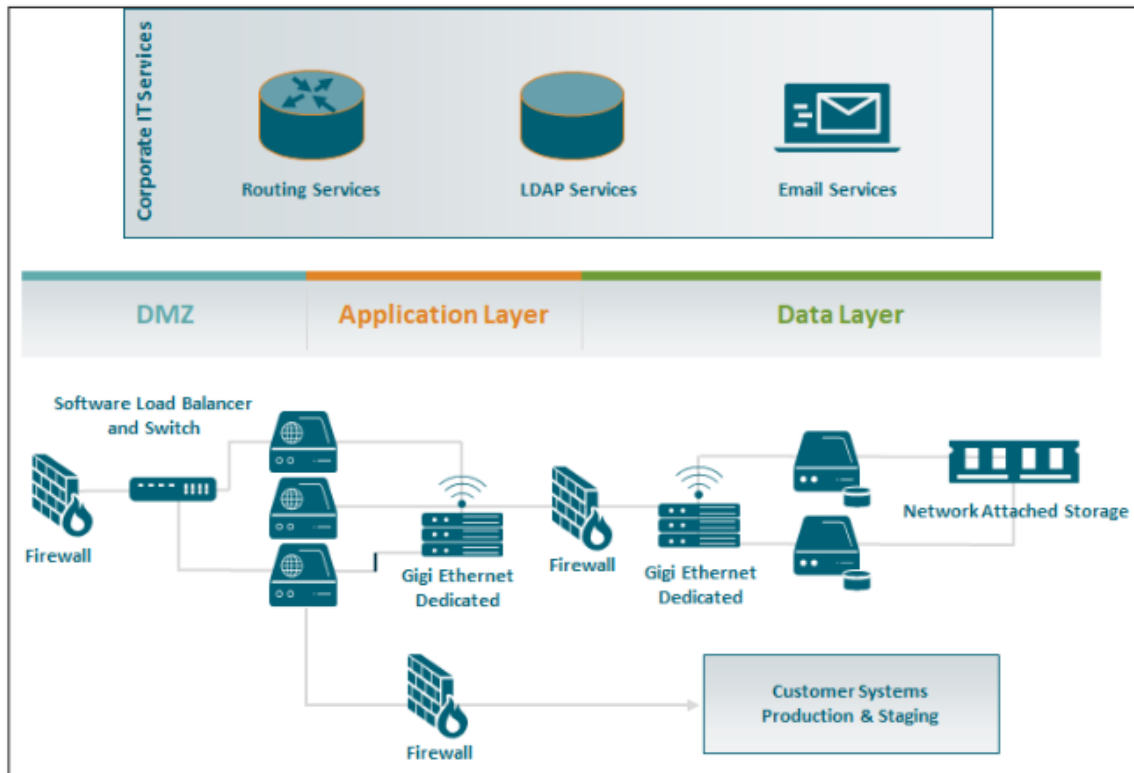
When a user accesses Masterworks using the Masterworks URL, their request will hit the AWS Elastic Load Balancer (ELB) first over PORT 80 and 443. We configure all traffic that is sent to PORT 80 to be sent to PORT 443 by default. The ELB routes the traffic to the web server over PORT 80. The web server calls database server over PORT 1433. The web server also talks to the report services (SSRS) over PORT 80.

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Please see the below Hosting Architecture diagram for details. In addition, all the servers will have SMTP relay service, IDS (Intrusion Detection System), IPS (Intrusion Prevention System), New Relic (Application and Infrastructure monitoring agents), AWS EC2 configuration agent – To handle patch management using AWS SSM (Systems and Security Manager) installed/configured on them as standard.
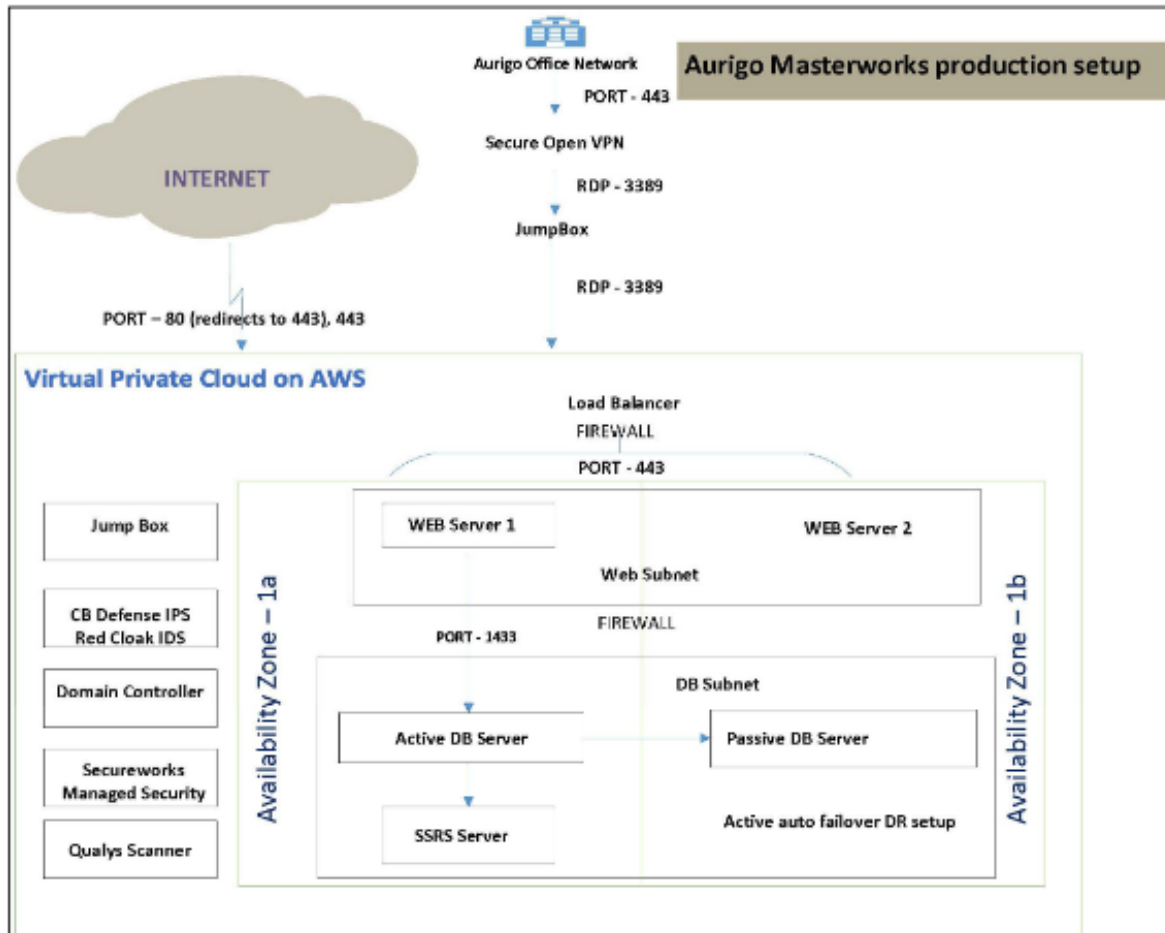
4.2 Integrations & Data Migrations

An Aurigo System Integration Specialist will work with the CCD's SMEs during the Business Process Mapping phase of the project to develop the functional and technical requirements for integrating Aurigo Masterworks Cloud with the CCD's external systems. Web Service based Application Programming Interfaces (APIs) will be utilized to integrate seamlessly with the CCD's existing IT infrastructure. The Web Service based APIs that can be consumed by any application and use industry-standard protocols such as SOAP, XML, and HTTP. Aurigo will perform System Integration Testing as part of the delivery lifecycle. As part of SIT, the delivered solution is subjected to an isolated testing environment with test versions of all systems that have integrations. The SIT provides point to point testing of every interface that has been developed as part of the release. The scenarios that will be run are geared to testing data boundaries, conversion,

validation rules, etc. The key deliverable of the SIT testing is a SIT Test Result report that will highlight what test scenarios were run to completion and the results of each test case.   Aurigo uses the ETVX (Entry Criteria, Task, Validation and Exit Criteria) strategy for integration testing.

An Aurigo Data Migration Specialist will work with the CCD's SMEs during the Business Process Mapping phase of the project to develop a plan for migrating the CCD's project data and documents out of their existing system(s). A variety of methods can be used to import the project data into the Masterworks database, including Excel export/import, FTP integration, and the Aurigo Masterworks Migration Tool. The CCD will be responsible for identifying the data they want to extract from existing systems, scrubbing the data if needed, and then placing the data into file(s) that are formatted for easy unload into Masterworks' MS SQL database. A series of tests will be conducted throughout the Solution Configuration phase of the project to ensure the data can be successfully uploaded into Masterworks. A full data migration will be performed prior to the solution going live.

Table 1 (CCD System Inventory, Integration and Data Migration Plan in section 3.1.3.3.) provides an inventory of the CCD systems within the scope of the PMIS project, either as targets for replacement with the migration of data from the external system into Masterworks, or an interface between the external system and Masterworks

Data Migration services will be completed per Section 3.1.3.3. See Table 2 - CCD System Inventory, Integration and Data Migration Plan in section 3.1.3.3 for details.

5 Functional Scope

The functional scope will be defined in Phase 2 (Business Process Mapping) of the implementation. During the business process mapping phase, Aurigo will work with designated members of the CCD team (the SMEs) to further refine the needs and requirements specified in the scope of services. The customer and Aurigo may jointly decide to modify and re-engineer some of the existing processes followed by the customer, based on better functionality and ease-of-use features available in the Aurigo Masterworks Cloud solution and/or the industry best practices proposed by Aurigo consultants. As mentioned above, this phase of the project is part of the hybrid agile approach that Aurigo utilizes to deliver projects to its customers. In a pure agile environment, there would be no independent BPM phase. To ensure that the requirements are well understood, and to reduce risks to the project, Aurigo will elaborate approximately 70% of the requirements upfront before the configuration process commences. Part of the business process mapping will include how existing processes are configured in Masterworks Cloud for our customers.

The scope will include capabilities defined in the response to the RTM. The requirements will be documented and approved in the following deliverables before development will begin:

- Functional Specifications and RACI documents which will be used for tracking purposes until the requirements are delivered
- Process diagram(s) on how existing business process will tie into Masterworks Cloud
- Any additional Functional Specification documents that further detail each requirement

6 Project Teams & Project Governance

6.1 Vendor Project Team

As part of Aurigo Connected Methods (ACM) methodology, Aurigo will be continuously engaging and involving CCD personnel across all the phases of the project life cycle. Aurigo's core team involved in the discovery process will require stakeholders from both the CCD and Aurigo teams. Detailed below are the Aurigo personnel and their responsibilities.

Role	Responsibilities
Business Analyst	➢ Work with BO, SME and customer BA in documenting detailed requirement specification. ➢ Participate in the TO-BE Process and Business Process Mapping. ➢ Analyze and suggest changes to TO-BE process as per industry standards. ➢ Analyze and map business process to the solution. ➢ Suggest changes to the TO-BE process to provide an optimized and efficient solution. ➢ Create specifications detailing the business requirements, use cases, business rules and validations.
Project Manager	➢ First point of contact for the City on project deliverables. ➢ Maintain project status reports for project team, sponsor, stakeholders, and management. ➢ Discusses delivery schedule between the City and Aurigo and commits to schedule. ➢ Defines and plans project milestones, executes project to meet milestones. ➢ In conjunction with the City PM, manage project scope, schedule, deliverables, issues, and risks. ➢ Ensures adherence to ACM, i.e. established project standards, processes, and procedures. ➢ Communicates and updates the City PM, Sponsor, and Account Executives on current and emerging risk.
Executive Sponsor	➢ Provides strategic direction to the Steering Committee ➢ Ensures project resources
Account Management / Account Executive	➢ Ensures the continuation of healthy customer relationships by making sure that agreements between both parties are fair and to the satisfaction of all. ➢ Proactively assesses, clarifies, and validates customer needs on an ongoing basis. ➢ Acts as second point of escalation, after the Aurigo PM. ➢ Communicates and updates Executive sponsors on upcoming opportunities and/or current or emerging project risks.
Solution/Technical Architect	➢ Responsible for ensuring project compliance with solution architectural and implementation best practices and standards. ➢ Establishes best practices for the implementation of functional and non-functional requirements ➢ Establishes and enforces compliance with agreed on technical architecture ➢ Provides architectural guidance to achieve application performance

Training Lead	➢ Responsible for developing the training plan and implementation of best practices and standards to support training delivery ➢ Ensures Training content and collateral meets the City's needs ➢ Creates overall training design and approach ➢ Works with the documentation team for all training collaterals ➢ Works with the configuration team to setup the training environments ➢ Participates in training delivery ➢ Reviews training feedback and incorporates changes, as required
Content Writer	➢ Responsible for Training material development for end user and system administrator training ➢ Responsible to ensure all material is aligned with the PMIS system as configured. ➢ Responsible for Online help content development
OCM Lead	➢ Accountable for organizational change management related to the Masterworks PMIS solution implementation ➢ Responsible for the development of communication and organizational change management methodology, plans, and techniques. ➢ Responsible for Enterprise Readiness Plan and Readiness Assessment impact ➢ Responsible for Change gap analysis
Configuration Team	➢ Manages the sprint planning, sprint readiness and sprint deliverables ➢ Responsible for application set up and solution configuration as per business requirements. ➢ Releases sprint commit and sprint exit reports for each sprint to Aurigo PM ➢ Ensures adequate resources are assigned to project tasks ➢ Ensures adherence to the established project standards, processes, procedures, and stage gate reviews ➢ Closely synchronizes with Aurigo PM on risks and issues as early as possible

6.2 Customer Project Team

Aurigo suggests that the CCD's project team be assembled to ensure the best possible outcome for the City through the project implementation process. Having the input and direction from key City stakeholders throughout the project delivery lifecycle ensures the system will be best configured to suit the CCD's needs. In our experience implementing Masterworks with public agencies similar to the CCD, we have found that following Aurigo Connected Methods and creating this project team leads to consistently positive outcomes for our customers.

What we've provided below is an estimate based on our experience and the requirements similar to what is specified in the RFP. Before starting the implementation, Aurigo will create a project management plan, which will have more specifics regarding the time commitment and responsibilities needed from the CCD project team.

CCD Role	Responsibilities	Estimated Hours
Executive Sponsor,	Oversight and decision making.	Executives shall be available for

Project Sponsor, or Business Owner	• *Accountable for establishing overall project scope, goals, and objectives.* • *Chairs the project steering committee, providing strategic direction to the Steering Committee.* • *Ensure adequate project funding and resources.* • *Review and provide final approval as needed on scope, schedule, or budget change requests.* • *Final decision maker on escalated critical issues not resolved by project and steering team.*	scheduled Executive meetings, Steering Committee and/or project sponsor meetings throughout the project. *Executive Sponsor/Project Sponsor will be required once a month for approximately an hour.* *Aurigo suggests dedicating the City's Business Owners for 10% of the time during the project.*
Project Manager	Managing the City's portion of the project: providing access to key business stakeholders when appropriate; managing the availability, assignment, and participation of all relevant City resources in accordance with the project schedule and the project plan; scheduling the relevant implementation workshops; providing a productive work environment for the project team, including meeting room facilities for all relevant meetings and workshops. • *Manages project scope, schedule, vendor deliverables, issues, and risks throughout the project delivery lifecycle.* • *Coordinating with various teams to ensure smooth project delivery.* • *Point of contact for the Aurigo team.* • *Responsible for conducting project status meetings along with the Aurigo PM and reporting on project status.*	Needs to be dedicated full time to the project. Estimated project duration is 9-10 months. *The commitment of the PM is integral to the success of the project.* *Aurigo suggests the City's PM be dedicated; however, having the PM dedicated for 50% of the time during the project is adequate.*
Business Analyst(s)	Provide day-to-day input into the design, business usage, and other business processes of the current and future PMIS. • *Key liaison from the business core team to the implementation team.* • *Capture, document, track, and analyze business requirements.*	Needs to be dedicated full time to the project. Estimated project duration is 9-10 months.

	• *Lead testing and functional sign-off with business stakeholders.* • *Gather and provide Aurigo BA with City's as-is process/data/business workflow diagrams* • *Assist the Aurigo BA to develop the to-be process/data/business workflow diagrams.* • *Work closely with Aurigo Business Analyst to ensure requirements are delivered.*	*Aurigo suggests the City's business analyst be dedicated; however, having the business analyst dedicated for 50% of the time during the project is adequate.*
Subject Matter Experts (SME's)	Provide deep-dive input into the design, business usage, and other business processes of the current and future PMIS. • *Responsible for driving decision-making for assigned process area(s).* • *Actively participate and effectively communicate in business process mapping sessions.* • *Influence decisions on to-be business processes.* • *Communicate emerging risks to project sponsor and/or project manager.*	A Solution Architect and Subject Matter Experts shall be available for scheduled solution design meetings as applicable for the project. *Aurigo suggests dedicating the City's SME for 15% of the time during the project.* *Based on the scope of the required interfaces and data migration, Aurigo suggests having a solution architect available on an as-needed basis; however, assigning a solution architect is not necessary for this project.*
Technical application deployment and external system interface support (IT)	Identifying and testing interfaces with systems to be integrated into Aurigo Masterworks, system administrator training on Aurigo Masterworks. • *Responsible for contributing to technical specifications related to the City systems for integrations, interfaces, data migrations, etc.* • *In coordination with Business Analyst, develop and test integrations, interfaces, and perform data migrations per the approved technical spec.*	Data Migration and Integration Leads shall be available for scheduled system interfaces meetings as applicable for the project. Trainer(s) shall be available for Aurigo Masterworks Solution and System Administrator

		training as planned in the project schedule. *Based on our understanding of the required interfaces and data migration scope, Aurigo suggests dedicating the City's necessary technical resources for 5% of the time during the project.*
QA Lead Role	Lead the Quality Assurance testing activities for the City. • *Responsible for developing a test plan / strategy.* • *Responsible for developing test cases and UAT scripts.* • *Test software configurations, rules, edits and workflows.* • *Test system integrations.* • *Test data migration.* • *Participate in joint testing with Aurigo.* • *Document and manage defects in Azure DevOps* • *Provide test results to the project team.*	

6.3 Project Governance

The following exhibit depicts a draft organization chart identifying the proposed project team positions and reporting relationships. The project team organization adopts Aurigo's three-tiered governance structure and lays a foundation for better communication, reporting, and escalation. The organization chart will be finalized during the Phase 1 Project Planning, with final approval by the City PM.
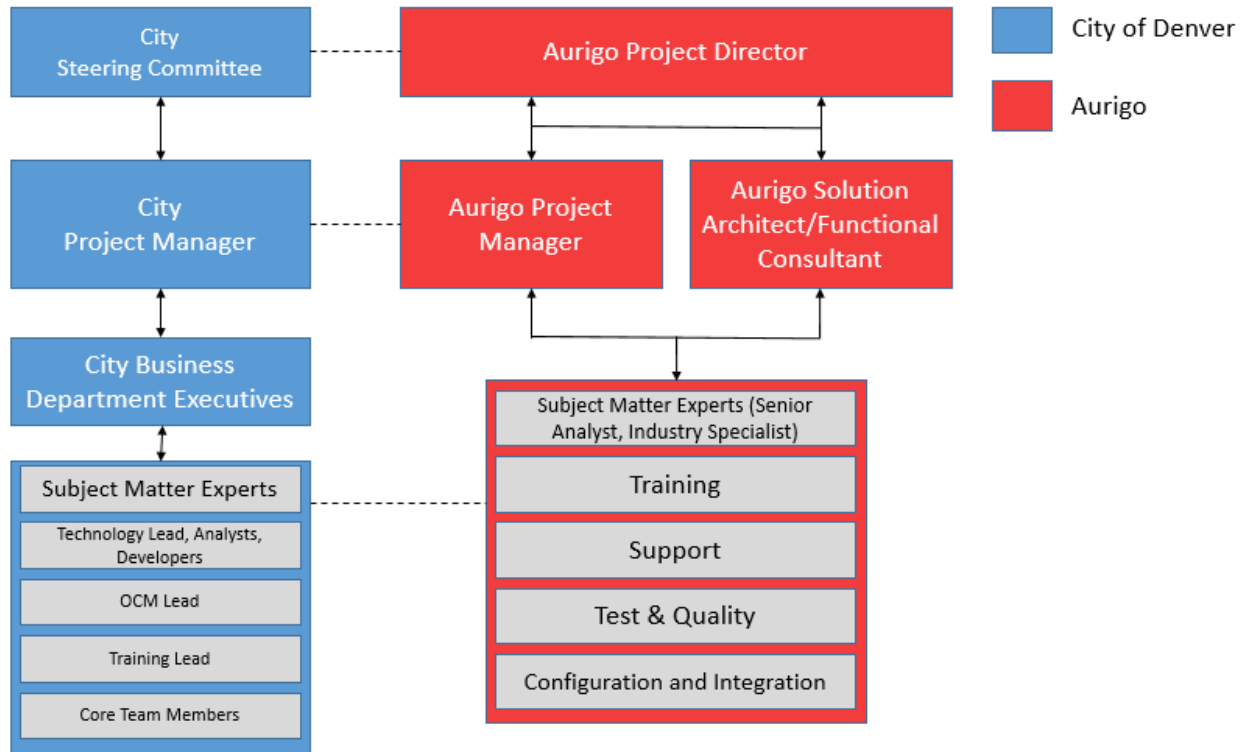
Through the project organization structure described above, Aurigo will be able to provide effective lines of communication to all the City stakeholders, as well as clear paths for escalation of both delivery and commercial issues. These types of communication channels will be instrumental for the successful delivery of this project by the agreed deadlines.

The personnel detailed below will be needed for the successful implementation of the solution at the City. Aurigo will need continuous access to the personnel below to deliver the project successfully. The City is responsible for scheduling and providing access to key personnel throughout the life of the project.

The City will need to contribute one or more of the following resources for oversight and decision-making:

- Executive Sponsor
- Project Sponsor
- Business Owner

The City will need to provide the following resources for day-to-day input into the design, business usage, and technical interfaces:

- Project Manager
- Business Analyst(s)
- Design Team – City's subject matter experts ("SMEs")
- Technical application deployment and external system interface support (IT)

The City will have primary responsibility for the availability of each City resource during project delivery when required. In addition, Aurigo will need City staff assistance to address one or more of these additional responsibilities listed below:

- Provide access to key business stakeholders when appropriate
- Help with coordinating training with external contractors who will be given access to the solution
- Manage the availability, assignment, and participation of all relevant City resources, in accordance with the project schedule and the project plan
- Ensure scheduling of the relevant implementation workshops
- Provide a productive work environment for the project team, including meeting room facilities for all relevant meetings and workshops

7 Assumptions, Contacts & Location

7.1 General SOW Assumptions

The scope of the SOW is based upon the RFP response as it relates to functionality requirements and pricing.

7.2 Location of Professional Services and Key Contact

Due to the COVID-19 pandemic, we anticipate the implementation will occur mainly online utilizing meeting services (e.g., Zoom, MS Teams) and some onsite meetings. We will coordinate this with the CCD based upon the timing and public health mandates. The Aurigo implementation will be located from Aurigo offices, or remote from their home offices based upon public health mandates.

The Aurigo Project Manager is based in the United States and full contact information will be provided upon contract execution.

8 Project Terms

8.1 Implementation Milestones and Deliverables

For the agreed upon Services, below is the payment milestones schedule for the project.

Aurigo shall invoice for each milestone upon acceptance by the City.

Project Services Payment Milestones

	Phase 1 - Project Initiation & Planning	$	221,419	Invoice Frequency		Cost
6	Project Initiation Complete	$	90,000	On Completion & Acceptance	$	90,000
7	Project Kick-off Complete	$	50,000	On Completion & Acceptance	$	50,000
8	Project Management Plan (PMP)	$	10,000	On Completion & Acceptance	$	10,000
9	Communication Management Plan	$	10,000	On Completion & Acceptance	$	10,000
10	Risk Management Plan	$	10,000	On Completion & Acceptance	$	10,000
11	Quality Management Plan	$	10,000	On Completion & Acceptance	$	10,000
12	Change Control Process Plan	$	10,000	On Completion & Acceptance	$	10,000
13	Baselined Project Schedule	$	31,419	On Completion & Acceptance	$	31,419

	Phase 2 - Business Process Mapping (BPM)	$	199,527	Invoice Frequency		Cost
14	Business Process Mapping Plan Complete	$	30,000	On Completion & Acceptance	$	30,000
15	Business Process Mapping Sessions 50% Complete	$	40,000	On Completion & Acceptance	$	40,000
16	Business Process Mapping Sessions 100% Complete	$	40,000	On Completion & Acceptance	$	40,000
17	Specifications 50% Complete	$	40,000	On Completion & Acceptance	$	40,000
18	Specifications 100% Complete	$	49,527	On Completion & Acceptance	$	49,527

	Phase 3 - Solution Configuration	$	562,000	Invoice Frequency		Cost
19	Environment Setup (Dev, QA, SIT)	$	85,000	On Completion & Acceptance	$	85,000
20	Solution Configuration 20% Complete	$	95,000	On Completion & Acceptance	$	95,000
21	Solution Configuration 40% Complete	$	95,000	On Completion & Acceptance	$	95,000
22	Solution Configuration 60% Complete	$	95,000	On Completion & Acceptance	$	95,000
23	Solution Configuration 80% Complete	$	95,000	On Completion & Acceptance	$	95,000
24	Solution Configuration 100% Complete	$	97,000	On Completion & Acceptance	$	97,000

	Phase 4 - Solution Testing	$	110,000	Invoice Frequency		Cost
25	Performance Testing	$	25,000	On Completion & Acceptance	$	25,000
26	Security Testing	$	25,000	On Completion & Acceptance	$	25,000
27	SIT Complete	$	30,000	On Completion & Acceptance	$	30,000
28	UAT Complete	$	30,000	On Completion & Acceptance	$	30,000

	Phase 5 - Training	$	90,000	Invoice Frequency		Cost
29	Training Manuals 50% Complete	$	30,000	On Completion & Acceptance		30,000
30	Training Manuals 100% Complete	$	30,000	On Completion & Acceptance		30,000
31	Training Delivery (Train the Trainer) Complete	$	30,000	On Completion & Acceptance		30,000

	Phase 6 - Production Release (Go Live)	$	57,000	Invoice Frequency		Cost
32	Production Release Complete	$	57,000	On Completion & Acceptance		57,000

	Phase 7 - Project Closeout and Transition to Support	$	99,060	Invoice Frequency		Cost
33	Final System Acceptance Complete	$	50,000	On Completion & Acceptance		50,000
34	Handoff to Production Support Complete	$	49,060	On Completion & Acceptance		49,060

	Travel Costs (On Actuals)	$	-	Invoice Frequency		Cost
35	Travel Costs (On actuals)			On Approval		

Services Total (excluding Travel) $ 1,339,006

Note:
Aurigo has included 1,200 hours of integration and data migration services for this project.

8.1.1 Payment Milestone Acceptance Email Template

Hi <Customer Project Manager> ,

As reviewed, I have included the payment milestones for <Month, Year> for your approval.
I will send this to my Finance team to generate the invoice post your approval.

Payment Milestones	Quantity	Rate	Amount
<Payment Milestone Name>			<$>
Total			<$>

Regards,
<Aurigo Project Manager>

8.1.2 Final Acceptance and Close Out

The Acceptance Criteria for the Services for CCD provided by Aurigo are will be documented as part of the project life-cycle. A sample Project Acceptance and Sign-off form is attached on the following page.

Project Acceptance and Sign-Off

Project Name:	
This Document is Issued by:	
Project Start Date:	
Project End Date:	

The project outcome has been measured against its acceptance criteria and has been formally accepted on behalf of the <customer>.

Unless otherwise noted, the project may now be closed.

Additional Comments related to the <customer's> Acceptance:

Key Metrics Achieved:	
Key Lessons Learned (list, if any):	

Project Acceptance Sign-off

Role	Name	Date	Signature
Project Sponsor			
Project Manager			
Vendor Project Manager			

8.1.2.1 Close-Out Process

This is the final phase to close out the project and transition the CCD to Aurigo Support. Project closeout includes:

- Contract Closeout.
  - o Verification all expected deliverables have been received
  - o Verification all requirements have been met and closed
- Project Financial Closeout - Verify final Professional Services project invoice has been processed
- Transition the CCD to Aurigo Support
  - o Introduce the CCD to Support personnel
  - o Review SLA
  - o Train the CCD System Administrator on how to log, monitor, and review production issues in the Aurigo Customer Support Portal
- Obtain Final Acceptance sign-off from the CCD

The acceptance criteria for Project closeout are:

- RTM line items closed
- The CCD Final Acceptance sign-off
- Final Professional Services invoice processed
- Transition to Aurigo Production Support
- All final deliverables updated, cataloged, and delivered to the City in final form

8.2 Project Effort and Duration

A detailed project schedule will be developed jointly with CCD during the Planning Phase of the implementation. Below is the draft implementation plan with resources and durations:

Task Name	Duration
City & County of Denver - Project Schedule	245 days
Contract Execution	1 day
Project Planning	27 days
Business Process Mapping	86 days
Solution Configuration (Iterative Config & Reviews)	148 days
System Testing	48 days
User Acceptance Testing	35 days
Training	97 days
Go-Live	4 days
Project Closeout and Handover to Production Support	20 days

8.3 Travel and Expenses

Travel and expenses for the CCD implementation are defined based upon the following criteria and guidelines:

(a) Description

1. CCD Project Manager may request Aurigo travel onsite as long as there are no Aurigo travel restrictions in place.
2. Aurigo Project Manager to request travel authorization prior to any Aurigo staff traveling onsite as long as there are no Aurigo travel restrictions in place.
3. The CCD Project Manager to approve travel authorization prior to Aurigo staff booking travel.
4. In the interest of cost savings, travel authorization should be at least two weeks in advance.
5. Aurigo travel expenses to be invoiced monthly, with attached receipts, and reimbursed by the CCD
6. Aurigo will comply with the CCD's Travel Policies. Travel costs will be reimbursed based on actual costs limited by Federal Travel Regulations (FTR) and the CONUS rate for Colorado. The FTR breaks down meals and incidental expenses at its website: www.gsa.gov/mie. The first and last travel days are calculated at

seventy-five percent (75%). The lodging rate excludes taxes and fees. Taxes and fees are reimbursable. See this website for lodging in Colorado: http://www.gsa.gov/portal/category/100120

8.4 Removal of Aurigo Staff or Other Aurigo Representatives

The City will have the right at any time to require that Aurigo remove from interaction with the City any Aurigo representative who the City believes is detrimental to its working relationship with Aurigo. The City will provide Aurigo with 10 day written notice of its determination and provide the reason(s) it requests the removal(s). If the City indicates that a potential security violation exists, Aurigo will immediately remove such individual. Aurigo will not assign any person the City requested for removal to any other aspect of the PMIS implementation or ongoing operations in the present or the future without the City's explicit consent. In the event of a personnel change the City holds the right to interview and agree to assigning staff to the project. If the City deems that the replacement candidate is not suited for the project team for any reason it is expected that Aurigo find another suitable replacement and the start the process over with the new candidate. The City is requesting to review and confirm the BA and the PM candidates assigned to the project to ensure appropriate level of subject matter expertise, cultural fit and technical knowledge.

Appendix A – Project Change Control

Summary of Change Control & Assumptions

This Change Control Plan establishes how the project team will manage changes to scope, schedule, or budget in the implementation project. A change is a deviation from the agreed scope, schedule, or budget that, if it occurs, could have a positive or negative effect on the objectives of the project. The overall goal of the Change Control Plan is to ensure project success. The intended audience of this document is the project core team and project sponsors.

Purpose

As changes to scope, schedule, or budget arise during project execution, it is important to follow a disciplined change control process to ensure agreement on the following:

- Required adjustments to schedule and/or cost
- Business / Project impact
- Adherence to contractual requirements

The purpose of the Change Control Plan is to proactively manage changes to project scope, schedule, and cost as defined in the Project Management Plan (PMP). Change control does not mean changes are not allowed but instead ensures any actions needed are considered and agreed upon.

Cost of Getting it Right

It is the responsibility of all project team members to identify and escalate potential Change Requests through their project managers.
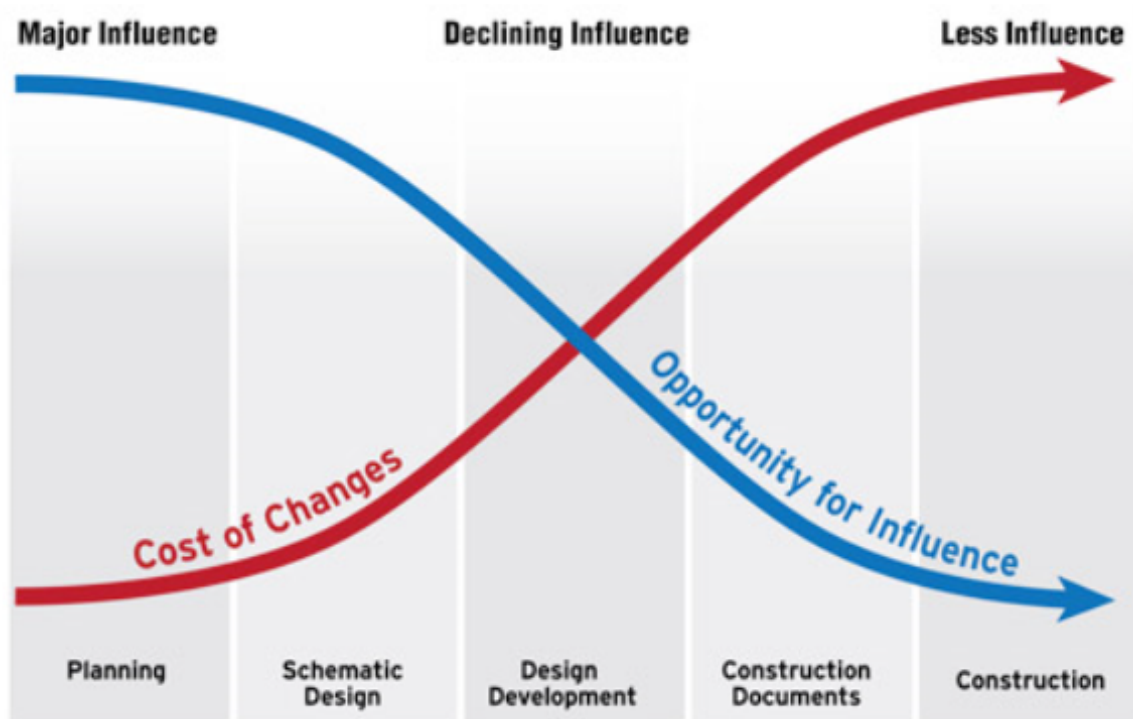
Figure 1 – Example of "Cost of Changes vs Opportunity for Influence" in a project's lifecycle

Project Change Control Procedure

Change Control Board

The Change Control Board (CCB) is a team of project stakeholders who make decisions regarding whether proposed Change Requests should be implemented. The CCB is made up of members of the Project Steering Committee. The CCB conducts negotiations through a series of review meetings to evaluate what would be involved in executing the proposed change and how it fits in the contracted scope of work.

There are three stages in a CCB negotiation:

(a) The CCB agrees on whether a Change Request is indeed a change:

      i.   If Yes, the change is not within the contracted scope of work and it will require a Change Order.

     ii.   If No, the change is within the contracted scope of work and a Change Order will not be required.

(b) Feasibility Analysis: The CCB identifies if the proposed Change Request is feasible and what level of effort would be required.

(c) Implementation Decision: The CCD determines whether to implement the change or defer to a later time

Change Order Document

A Change Order document is created after the CCB approves a Change Request and a determination is made on when to implement the change. The purpose of the Change Order document is:

(a) To clearly define the approved Change Request

(b) To clearly define the impacts to cost and schedule

(c) To document the CCD's approval to proceed with the making the change

Change Control Process

Aurigo or the CCD may initiate Change Requests whenever there is a perceived need for a change that will affect the contracted work, schedules, solution functionality, or cost.

Change Control Process

How it is done: Process
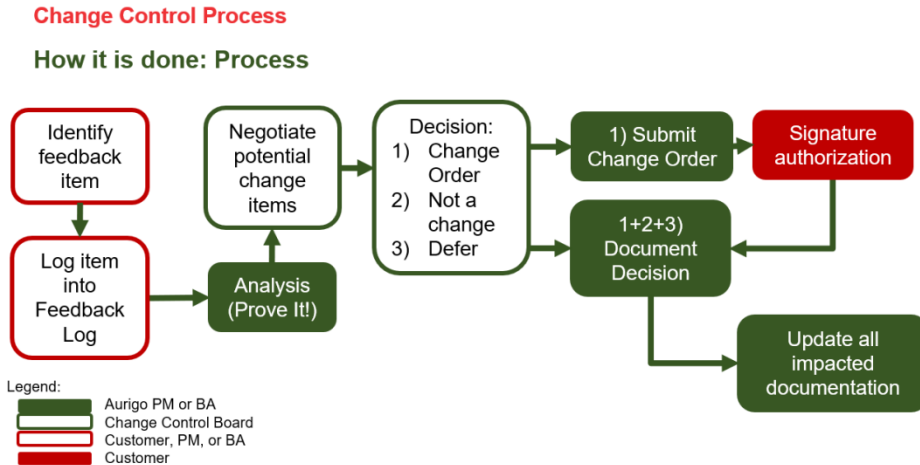
Figure 2 - Change Control Process

The process for initiating, reviewing and approving a Change Request is as below:

(a) Any potential need for change is escalated to the Project Managers and entered into the Feedback Log.
(b) The CCD and Aurigo Project Managers collaboratively review each change and determine if a Change Request is valid:

    i.   If Yes, the Change Request is ready for impact assessment.

    ii.   If No, the status of the Change Request is changed to "Deferred" and the reasons for the deferment are entered into the comments.

    iii.   The project core team will complete an impact assessment for the validated Change Request and will provide estimates for the amount of effort required to implement the change. Impact assessments, effort estimates, and all required information for validated Change Requests must be completed before a Change Control Board (CCB) review. The status of validated Change Requests is set to "Ready for Review".

(c) The CCB will review each "Ready to Review" Change Request and decide on how to proceed:

    i.   Approved – The status of the Change Request Item is set to "Approved" in the Feedback Log. The project managers will create a formal Change Order that needs to be signed by the Project Sponsor.

    ii.   Rejected – The status of the Change Request Item is set to "Rejected" in the Feedback Log. The associated section in the log is updated with appropriate comments for record-keeping purposes.

    iii.   Defer – The status of the Change Request Item is set to "Defer" in the feedback log. The associated section in the log is updated with appropriate comments for record-keeping purposes.

(d) Approved Change Requests (i.e., approved requirements) are added to the Requirements Traceability Matrix and the signed Change Order document number is included for reference.

(e) Any impacted project documents (project schedule, payment milestones, etc.) will be updated based on the details of the signed Change Order.

Note: Emergency change requests requiring immediate processing will follow the same process. However, the process will be expedited by the project managers.

Change Control Process Metrics

(a) Approved change requests will be tracked and managed in the "Feedback Log" that is located in the document share site maintained for the project.

(b) Any project team member can fill out a potential change request in the "Feedback Log".

(c) Project Managers are responsible for gathering details and reviewing each change request to ensure it is valid, complete, and ready for Change Control Board (CCB) review.

(d) A request for a change in services must be in writing. Both the CCD and Aurigo can request changes. Change Requests can include changes in project plans, scope, specifications, schedule, designs, requirements, service, software environment, or any other contracted work deliverable.

(e) Neither party is obligated to perform a task related to a change in schedule, scope, cost, or contractual obligation until both parties agree to the change in writing in an approved Change Order.

(f) An approved Change Order is required before any work associated with a Change Request will be performed.

Appendix B – Change Control Form

A Change Order document is created after the CCB approves a Change Request and a determination is made on when to implement the change. The purpose of the Change Order document is:

(d) To clearly define the approved Change Request
(e) To clearly define the impacts to cost and schedule
(f) To document the CCD's approval to proceed with the making the change

Aurigo will develop the Change Control Form as part of the implementation and review with CCD for approval.

Appendix C – Requirements Documents

Pricing Matrix

Attached to this Statement of Work is the most current version of the Pricing Matrix dated 11-30-2020.

RTM

Attached to this Statement of Work is the most current version of the completed Aurigo RTM Requirements.

IRM

Attached to this Statement of Work is the most current version of the completed Aurigo IRM Requirements.

Aurigo Pricing Matrix - Exhibit B

Component	Cost - Year 1	Year 2	Year 3	Year 4	Year 5	Vendor Explanation and Assumptions
Cloud/SaaS Solution						
Software	$ 298,284.00	$ 298,284.00	$ 298,284.00	$ 298,284.00	$ 298,284.00	Annual Subscription Fees are due at contract signing and every anniversary thereafter. Pricing specified is subject to change after contract expiration.
Silver Support/Maintenance	$ -	$ -	$ -	$ -	$ -	The Annual Subscription Fees include Aurigo's Silver Support Plan.
Optional Gold Support/Maintenance	$ 38,750.00	$ 38,750.00	$ 38,750.00	$ 38,750.00	$ 38,750.00	Aurigo's Gold Support Plan includes everything in the Silver Support Plan plus guaranteed availability of 99.7% and 250 solution support hours to be consumed in each subscription year.
Optional Platinum Support/Maintenance	$ 125,000.00	$ 125,000.00	$ 125,000.00	$ 125,000.00	$ 125,000.00	Aurigo's Platinum Support Plan includes everything in the Silver Support Plan plus guaranteed availability of 99.9% and 1,000 solution support hours to be consumed in each subscription year.
Licensing	$ -	$ -	$ -	$ -	$ -	Masterworks is sold on a named-user subscription basis and is not licensed to the City. **Annual Subscription Fees:** up to 1500 Named Users: $298,284 per year up to 2500 Named Users: $398,284 per year 100 Named User Add On: $30,000 per year
Support Hours as Defined in the SOW	$ -	$ -	$ -	$ -	$ -	The pricing includes Aurigo's Silver Support Plan
Subtotal	**$ 298,284.00**	**$ 298,284.00**	**$ 298,284.00**	**$ 298,284.00**	**$ 298,284.00**	

Vendor Pricing Matrix

Implementation Services							
Implementation Professional Services as Defined in the SOW	$ 467,909.80	$ 264,021.20	$ -	$ -	$ -	Based on the project plan as provided with the response. Any change to the schedule outside of the control of Aurigo may result in a change order.
Project Travel	$ -	$ -	$ -	$ -	$ -	Project Travel costs will be authorized and approved by the City as required.
Subtotal	**$ 467,909.80**	**$ 264,021.20**	$ -	$ -	$ -	
Optional Integrations / Migrations							
Workday Integration	$ 21,000.00		$ -	$ -	$ -	Fixed Fee
ArcGIS Integrations	$ 14,000.00		$ -	$ -	$ -	Fixed Fee
P6 Integration		$ 16,000.00	$ -	$ -	$ -	Fixed Fee
Asset Management Integration		$ 16,000.00	$ -	$ -	$ -	Fixed Fee
Questica Integration		$ 16,000.00	$ -	$ -	$ -	Fixed Fee
Textura Integration		$ 16,000.00	$ -	$ -	$ -	Fixed Fee
Salesforce Integration		$ 16,000.00	$ -	$ -	$ -	Fixed Fee
Sail Point		$ 10,000.00				Fixed Fee
SSO (Azure & MFA Duo)		$ 5,000.00	$ -	$ -	$ -	Fixed Fee
Data Migration from Current System	$ 40,000.00	$ 40,000.00	$ -	$ -	$ -	Given the unknown nature of the Data Migration scope, Aurigo has used its previous experience to arrive at the estimated 455 hour effort. Any additional Data Migration effort over the estimate will be billed on a T&M basis.
Subtotal	**$ 75,000.00**	**$ 135,000.00**	$ -	$ -	$ -	Any intergration not performed by Aurigo as part of the implemenation will not be charged.
Training							
Training Delivery	$ 86,537.50	$ 86,537.50	$ -	$ -	$ -	Cost proposal includes training design & development, and delivery as described in the Aurigo SOW.
Training Support	$ 7,000.00	$ 7,000.00	$ -	$ -	$ -	Cost proposal includes Training Support for the City as defined in the Aurigo SOW.
Subtotal	**$ 93,537.50**	**$ 93,537.50**	$ -	$ -	$ -	
Change Management							

Vendor Pricing Matrix

Change Management	$	24,927.00	$	24,927.00	$	-	$	-	$	-	
Business Process Reengineering	$	30,219.00	$	30,219.00	$	-	$	-	$	-	
Communications Support	$	24,927.00	$	24,927.00	$	-	$	-	$	-	
Enterprise Readiness and Change Gap	$	24,927.00	$	24,927.00	$	-	$	-	$	-	
Subtotal	$	105,000.00	$	105,000.00	$	-	$	-	$	-	Cost proposal includes Change Management services detailed in the SOW.
Grand Total	$	1,039,731.30	$	895,842.70	$	298,284.00	$	298,284.00	$	298,284.00	Years are assumed to be calendar years. The yearly estimates provided are based off of Aurigo's current understanding of the project schedule. As part of project initiation, a detailed schedule and payment milestone plan will be shared with the City and mutually agreed to.

Payment Milestones

Software Subscription	Year 1	Year 2	Year 3	Year 4	Year 5
Software Subscription Masterworks Users: 1,500 Users	$298,284	$298,284	$298,284	$298,284	$298,284

Software Subscription fees are due upon contract signing and every anniversary thereafter.

Vendor Pricing Matrix

PMIS Payment Milestone Schedule

Subscription Payment Milestones

		Annual Subscription Fees	$	1,491,420	Invoice Frequency	Year 1	Year 2	Year 3	Year 4	Year 5
	1	Year 1 - On Contract Execution	$	298,284	Annual	$ 298,284				
	2	Year 2	$	298,284	Annual		$ 298,284			
	3	Year 3	$	298,284	Annual			$ 298,284		
	4	Year 4	$	298,284	Annual				$ 298,284	
	5	Year 5	$	298,284	Annual					$ 298,284
					Subscriptions Sub-Total	$ 298,284	$ 298,284	$ 298,284	$ 298,284	$ 298,284

Project Services Payment Milestones

		Phase 1 - Project Initiation & Planning	$	221,419	Invoice Frequency	Cost
	6	Project Initiation Complete	$	90,000	On Completion & Acceptance	$ 90,000
	7	Project Kick-off Complete	$	50,000	On Completion & Acceptance	$ 50,000
	8	Project Management Plan (PMP	$	10,000	On Completion & Acceptance	$ 10,000
	9	Communication Management Pla	$	10,000	On Completion & Acceptance	$ 10,000
	10	Risk Management Plan	$	10,000	On Completion & Acceptance	$ 10,000
	11	Quality Management Plan	$	10,000	On Completion & Acceptance	$ 10,000
	12	Change Control Process Plan	$	10,000	On Completion & Acceptance	$ 10,000
	13	Baselined Project Schedule	$	31,419	On Completion & Acceptance	$ 31,419

		Phase 2 - Business Process Mapping (BPM)	$	199,527	Invoice Frequency	Cost
	14	Business Process Mapping Plan Complete	$	30,000	On Completion & Acceptance	$ 30,000
	15	Business Process Mapping Sessions 50% Complete	$	40,000	On Completion & Acceptance	$ 40,000
	16	Business Process Mapping Sessions 100% Complete	$	40,000	On Completion & Acceptance	$ 40,000
	17	Specifications 50% Complete	$	40,000	On Completion & Acceptance	$ 40,000
	18	Specifications 100% Complete	$	49,527	On Completion & Acceptance	$ 49,527

Vendor Pricing Matrix

		Phase 3 - Solution Configuration	$	562,000	Invoice Frequency	Cost	
	19	Environment Setup (Dev, QA, SIT)	$	85,000	On Completion & Acceptance	$	85,000
	20	Solution Configuration 20% Complete	$	95,000	On Completion & Acceptance	$	95,000
	21	Solution Configuration 40% Complete	$	95,000	On Completion & Acceptance	$	95,000
	22	Solution Configuration 60% Complete	$	95,000	On Completion & Acceptance	$	95,000
	23	Solution Configuration 80% Complete	$	95,000	On Completion & Acceptance	$	95,000
	24	Solution Configuration 100% Complete	$	97,000	On Completion & Acceptance	$	97,000

		Phase 4 - Solution Testing	$	110,000	Invoice Frequency	Cost	
	25	Performance Testing	$	25,000	On Completion & Acceptance	$	25,000
	26	Security Testing	$	25,000	On Completion & Acceptance	$	25,000
	27	SIT Complete	$	30,000	On Completion & Acceptance	$	30,000
	28	UAT Complete	$	30,000	On Completion & Acceptance	$	30,000

		Phase 5 - Training	$	90,000	Invoice Frequency	Cost
	29	Training Manuals 50% Complete	$	30,000	On Completion & Acceptance	30,000
	30	Training Manuals 100% Complete	$	30,000	On Completion & Acceptance	30,000
	31	Training Delivery (Train the Trainer) Complete	$	30,000	On Completion & Acceptance	30,000

		Phase 6 - Production Release (Go Live)	$	57,000	Invoice Frequency	Cost
	32	Production Release Complete	$	57,000	On Completion & Acceptance	57,000

		Phase 7 - Project Closeout and Transition to Support	$	99,060	Invoice Frequency	Cost
	33	Final System Acceptance Complete	$	50,000	On Completion & Acceptance	50,000
	34	Handoff to Production Support Complete	$	49,060	On Completion & Acceptance	49,060

		Travel Costs (On Actuals)	$	-	Invoice Frequency	Cost
	35	Travel Costs (On actuals)			On Approval	

Services Total (excluding Travel) $ 1,339,006

Note:

Vendor Pricing Matrix

Aurigo has included 1,200 hours of integration and data migration services for this project.

Optional Masterworks Products	GSA List Price: Materworks Ultimate ACV up to $500M
Right of Way and Land Management	$ 71,450.38
Federal Aid Reimbursement	$ 39,694.66
Materials Testing	$ 71,450.38
Public Access Portal	$ 78,000.00
Civil Rights and Labor Management	$ 30,167.94
Consultant Service Contracting	$ 30,167.94
Outdoor Advertising	$ 39,694.66
Permitting	$ 39,694.66
Claims Management	$ 39,694.66

Pricing Notes:

Aurigo agrees to provide the City with a minimum 5% discount off of the current GSA listed price.

Implementation Services required to implement the above products will be priced separately based on level of effort.

Aurigo Optional Services Rate Sheet	Per Hour
Project Manager	$250
Business Analyst	$200
Technical Analyst	$200
Development	$175
Solution Support (Silver)	$200
Solution Support (Gold)	$175
Solution Support (Platinum)	$155
End User Train-the-Trainer Course (30-trained) - Fixed Fee	$8,000

Integration Requirements

Exhibit C - IRM

ID	Transaction Type	Source	Integration Type	Target	Description	Candidate Integration Mechanism	Event/Trigger	Volume	Requirement Compliance	Requirement Compliance Description	Requirement Compliance Value	Product/Module	Vendor Response Comments
1	Financial Information	Workday	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	The solution integrates with Workday to obtain pending and approved invoice payments; support linking an invoice or payment to a project, subproject, phase, WBS element or deliverable; allowing authorized users to drill down into an invoice or payment. Any additional project attributes defined within the financial system like costs & expenditure.	Web Services / MuleSoft API / Workday API	Once every 24 hours	TBD	With Custom Programming	The solution can meet the requirement only by modifying the product's source code (changing or adding new code) to enable it to do what it was not originally able to do.	2	Contract Management	Aurigo Masterworks Cloud has a powerful RESTful API that can be used to integrate any software that supports API transactions with Masterworks. MuleSoft's ability to wrap client software in API capabilities will assist this integration.
1.1	Financial Information			PMIS will tie financial information from PRJ to WBS to project, ensuring all project financials are updated and accurate.									
1.2	Financial Information	Workday will provide financial information.											
2	Contract Information	Workday	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	Financial information for contracts.	Web Services / MuleSoft API / Workday API	Scheduled - TBD	TBD	With Custom Programming	The solution can meet the requirement only by modifying the product's source code (changing or adding new code) to enable it to do what it was not originally able to do.	2	Contract Management	Aurigo Masterworks Cloud has a powerful RESTful API that can be used to integrate any software that supports API transactions with Masterworks. MuleSoft's ability to wrap client software in API capabilities will assist this integration.
2.1	Contract Information			PMIS will import contract information.									
2.2	Contract Information	Workday will provide contract information.											
3	Geospatial Information	ArcGIS (Esri)	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	Providing geographical information on projects, creating maps of projects in the City, and analyzing mapping information.	Esri Web Service (Rest API)	Scheduled - TBD	TBD	Out-of-the-Box	The solution meets the requirement as is, "out-of-the-box" functionality with no configuration or custom programming/coding.	4	Contract Management	Aurigo Masterworks Cloud comes out of the box integrated with ESRI ArcGIS. The maps can be accessed, created and updated from within Masterworks and the data will be synced to the ArcGIS platform. Configurations are available to define base layer, feature layer, and GIS objects specific to various business processes.
3.1	Geospatial Information			Aurigo Masterworks Cloud will requests geometry/layer of project once it is initiated to see other projects in it's area or to geomap a project.									
3.2	Geospatial Information	System provides a geometry/layer of project, and shows other projects in the area.											
4	Geospatial Asset Information	ArcGIS (Esri)	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	Provide detailed information about the assets in a particular area within the PMIS.	Esri Web Service (Rest API)	Scheduled - TBD	TBD	Out-of-the-Box	The solution meets the requirement as is, "out-of-the-box" functionality with no configuration or custom programming/coding.	4	Contract Management	Aurigo Masterworks Cloud comes out of the box integrated with ESRI ArcGIS. The maps can be accessed, created and updated from within Masterworks and the data will be synced to the ArcGIS platform. Configurations are available to define base layer, feature layer, and GIS objects specific to various business processes.
4.1	Geospatial Information			Aurigo Masterworks Cloud will requests geometry/layer of an area on a map to obtain assets of the City in the area or for a project.									
4.2	Geospatial Information	System provides a geometry/layer of project, and shows the details of assets owned by the City in the specified area											
5	Geospatial and Financial Information	ArcGIS (Esri)	[Source] Invokes [Target]	Aurigo Masterworks Cloud Masterworks Cloud	Provide location and financial information on projects within the PMIS to be tied into GIS geometry.	Esri Web Service (Rest API)	Scheduled - TBD	TBD	Out-of-the-Box	The solution meets the requirement as is, "out-of-the-box" functionality with no configuration or custom programming/coding.	4	Contract Management	Aurigo Masterworks Cloud comes out of the box integrated with ESRI ArcGIS. The maps can be accessed, created and updated from within Masterworks and the data will be synced to the ArcGIS platform. Configurations are available to define base layer, feature layer, and GIS objects specific to various business processes.
5.1	Geospatial and Financial Information			Aurigo Masterworks Cloud provides location and financial information for projects									
5.2	Geospatial and Financial Information	Database information from PMIS is used to join tabular information into geometry.		Aurigo Masterworks Cloud									
6	Budget Information	Questica	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	Budgeting information for project planning	Web Service / Mulesoft API / or File	Scheduled - TBD	TBD	With Custom Programming	The solution can meet the requirement only by modifying the product's source code (changing or adding new code) to enable it to do what it was not originally able to do.	2	Capital Planning	Aurigo Masterworks Cloud has a powerful RESTful API that can be used to integrate any software that supports API transactions with Masterworks. MuleSoft's ability to wrap client software in API capabilities will assist this integration.
6.1	Budget Information	System generates budget information.											
6.2	Budget Information			Upload budget files to Aurigo Masterworks Cloud.									
7	Asset Information	Asset Management (TBD)	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	Utilized for capital planning, link assets created during a porject are imported into the asset management solution	TBD	Scheduled - TBD	TBD	With Custom Programming	The solution can meet the requirement only by modifying the product's source code (changing or adding new code) to enable it to do what it was not originally able to do.	2	Contract Management	Aurigo Masterworks Cloud has a powerful RESTful API that can be used to integrate any software that supports API transactions with Masterworks.
7.1	Asset Information												
7.2	Asset Information												
8	Scheduling Information	Primavera P6	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	Scheduling information, including a baseline vs. actual, and budgeting funds within the schedule.	Flat File / MuleSoft API	Scheduled - TBD	TBD	With Custom Programming	The solution can meet the requirement only by modifying the product's source code (changing or adding new code) to enable it to do what it was not originally able to do.	2	Capital Project Management	Aurigo Masterworks Cloud has a powerful RESTful API that can be used to integrate any software that supports API transactions with Masterworks. MuleSoft's ability to wrap client software in API capabilities may assist this integration.
8.1	Scheduling Information	Downloads scheduling file for project(s).											
8.2	Scheduling Information			Schedule information file is uploaded in order to keep a baseline vs. actual schedule for all projects.									
9	Payapp	Textura	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	Payapp information and processor.	Flat File / MuleSoft API	Scheduled - TBD	TBD	With Custom Programming	The solution can meet the requirement only by modifying the product's source code (changing or adding new code) to enable it to do what it was not originally able to do.	2	Contract Management	Aurigo Masterworks Cloud has a powerful RESTful API that can be used to integrate any software that supports API transactions with Masterworks. MuleSoft's ability to wrap client software in API capabilities will assist this integration. Alternatively, Masterworks can be configured to use a flat file for batch transactions.
9.1	Payapp	Generates Payapp information.											
9.2	Payapp			Information from Textura is consumed by Aurigo Masterworks Cloud.									
10	CRM	Salesforce	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	CRM	MuleSoft API / Salesforce API	Scheduled - TBD	TBD	With Custom Programming	The solution can meet the requirement only by modifying the product's source code (changing or adding new code) to enable it to do what it was not originally able to do.	2	Contract Management	Aurigo Masterworks Cloud has a powerful RESTful API that can be used to integrate any software that supports API transactions with Masterworks. MuleSoft's ability to wrap client software in API capabilities will assist this integration.
10.1	CRM	System generates contract information.											
10.2	CRM												

Integration Requirements

ID	Transaction Type	Source	Integration Type	Target	Description	Candidate Integration Mechanism	Event/Trigger	Volume	Requirement Compliance	Requirement Compliance Description	Requirement Compliance Value	Product/Module	Vendor Response Comments
11	User Accounts	Sailpoint	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	Employee data is stored in Sailpoint as an identity. Any joiner, leaver, or mover scenario in Sailpoint will create and modify accounts in Aurigo. Aurigo will require REST based web services for insert and updates of user accounts in Aurigo.	Sailpoint	Mover, joiner, leaver events in Sailpoint	TBD	With Custom Programming	The solution can meet the requirement only by modifying the product's source code (changing or adding new code) to enable it to do what it was not originally able to do.	2	Administration	Aurigo will integrate Masterworks with Sailpoint using RestAPIs. Update intervals between Sailpoint and Masterworks can be configured based on need. Users , User groups, permissions and access levels will be imported from Sailpoint
12	Single Sign On + MFA	Azure + DUO	[Source] Provides Data To [Target]	Aurigo Masterworks Cloud	SSO configuration for federated sign in for Denver employees with MFA enabled through DUO	SAML 2.0	Real-time	TBD	Out-of-the-Box	The solution meets the requirement as is, "out-of-the-box" functionality with no configuration or custom programming/coding.	4	Administration	Masterworks integrates with Microsoft Azure AD OOB enabling single sign on for Denver employees. Aurigo uses a proprietary platform capability called Aurigo Identity Services to achieve this integration

Exhibit D - RTM

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
1	**Functional**	**Change Management**	**Support post-contract award business process functionality to manage contract scope of work and manage change orders (including initiation, cost estimating, negotiations and approval tracking, project monitoring, closeout, etc.). This shall include required integration with the City's Procurement system, Jaggaer.**			
1.1	Functional	Change Management	The solution will track and report contractor change orders submissions.	**Out-of-the-Box**	Contract Management	Masterworks comes out-of-the-box with change order management and reporting.
1.2	Functional	Change Management	The solution will track and report field order change directives.	**Out-of-the-Box**	Contract Management	Masterworks comes out-of-the-box with change order management and reporting.
2	**Functional**	**Contract Compliance Monitoring**	**Provide contract compliance monitoring for MWBE/DBE commitments.**			
2.1	Functional	Contract Compliance Monitoring	The solution provides capability to monitor, manage track/report contracts issued in support of an ongoing program (i.e. a contract that is not specifically tied to one or more projects).	**Out-of-the-Box**	Contract Management	One of Masterworks' strengths is its contract and program management capabilities. The City will find managing and tracking contracts to be easier than ever with Aurigo Masterworks.
2.2	Functional	Contract Compliance Monitoring	The solution supports management of task order, Indefinite Quantity/Indefinite delivery and other retainer contracts.	**Out-of-the-Box**	Consultant Service Contracting	Masterworks provides the ability to set up and track various types of contracts and task orders.
2.3	Functional	Contract Compliance Monitoring	The solution supports the splitting of a contract across multiple projects, multiple funding sources/funding types.	**Out-of-the-Box**	Consultant Service Contracting	Masterworks provides the ability to split a contract across multiple projects, funding sources, and funding types. In addition, Masterworks also provides the ability to create and manage multiple contracts for a project.
2.4	Functional	Contract Compliance Monitoring	The solution integrates with Workday to obtain/report purchase order and contract information, including expenditures and encumbrances	**With Configuration**	Contract Management	Masterworks comes with pre-built APIs which can be used in conjunction with MuleSoft to exchange data between Workday and Masterworks.
2.5	Functional	Contract Compliance Monitoring	The solution integrates with Workday to verify, validate and populate contractor demographic information.	**With Configuration**	Contract Management	Masterworks pre-built APIs can used to pull data from external systems like Workday and workflows can be configured to perform any required validations to populate the data.
2.6	Functional	Contract Compliance Monitoring	The solution stores contract start and end date, notifying users upon expiration.	**Out-of-the-Box**	Contract Management	Masterworks contract management system has enhanced functionalities not only to store the contracted dates but also track every change. Workflows and dashboards can be configured to send notifications to users.
2.7	Functional	Contract Compliance Monitoring	The solution stores administrative and site notice to proceed date.	**Out-of-the-Box**	Contract Management	Masterworks provides functionalities to capture important contract milestone dates including administrative and site notice to proceed dates.
2.8	Functional	Contract Compliance Monitoring	The solution provides ability for an authorized user to set-up and maintain contract templates by contract type.	**Out-of-the-Box**	Contract Management	Masterwork provides the ability to setup and maintain various templates based on contract types.
2.9	Functional	Contract Compliance Monitoring	The solution provides the ability to set-up a contract either from a contract template or by copying an existing contract record and then modifying it as required.	**Out-of-the-Box**	Contract Management	Masterworks provides the ability to initiate a new contract from templates or by copying an existing contract and allow the users to modify them as needed
2.10	Functional	Contract Compliance Monitoring	The solution provides for assigning and updating the contract status from the various City-specific contract status values.	**Out-of-the-Box**	Contract Management	Masterworks provides the ability to assign and update the status of a contract. Aurigo will configure the City-specific values as part of the initial implementation. However, permissioned City users can change these values anytime.
2.11	Functional	Contract Compliance Monitoring	The solution supports encumbrance of funds for the total contract period, specific fiscal year and reflect this commitment against the project budget but not against the appropriate fiscal year appropriation line items.	**Out-of-the-Box**	Contract Management	Masterworks supports encumbrance of funds out of the box.
2.12	Functional	Contract Compliance Monitoring	The solution will track and report total contract expenditures to date, fiscal year to date, balance for the life of the contract, balance for the fiscal year	**Out-of-the-Box**	Contract Management	Masterworks tracks and reports on total contract expenditures over a user-defined range of timeframes.
2.13	Functional	Contract Compliance Monitoring	The solution provides the ability to indicate a threshold after which contract retainage is no longer withheld: a user defined total percentage complete for a contract, and of total contract value	**Out-of-the-Box**	Contract Management	Masterworks will allow the City to define thresholds for contract retainage.
2.14	Functional	Contract Compliance Monitoring	The solution integrates with Workday to provide information in order to allow the calculation and withholding of retainage at the time of entry of a payment request	**With Configuration**	Contract Management	Masterworks comes with pre-built APIs, which can be used to exchange data between Workday and Masterworks.
2.15	Functional	Contract Compliance Monitoring	The solution automatically generates a payment request based on an authorized user initiating a full or partial release of retainage	**Out-of-the-Box**	Contract Management	Masterworks handles payment requests based on retainage being released out of the box.
2.16	Functional	Contract Compliance Monitoring	The solution supports management of contract bonds by type and amount.	**With Configuration**	Contract Management	Masterworks supports management of contract bonds; City-specific bond types will be configured

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
2.17	Functional	Contract Compliance Monitoring	The solution supports the reporting of escrow activity for a period of time including: Amount by unique escrow identifier	With Configuration	Contract Management	Masterworks will be configured to track and report escrow activities. A new report will be configured to show all escrow activities for a period of time, including amounts by unique escrow identifiers.
2.18	Functional	Contract Compliance Monitoring	The solution allows authorized contractor representative to upload insurance certificate and other information and documentation for insurance requirements	Out-of-the-Box	Document Management	Masterworks document management capabilities provide the ability to upload documents and maintain insurance information.
2.19	Functional	Contract Compliance Monitoring	The solution stores documents and location of multiple contractor insurance carriers, policy numbers, policy expiration dates, insurance certificate dates and receipts	With Configuration	Document Management	Masterworks can be configured to store insurance policy information and report it at-a-glance.
2.20	Functional	Contract Compliance Monitoring	The solution will display a warning message and alert designated City user on the contract record if an insurance policy or insurance certificate has expired based on a user-defined interval and on date of expiration	Out-of-the-Box	Contract Management	Warning messages come out-of-the box in Masterworks. City-specific messages and conditions will be configured.
2.21	Functional	Contract Compliance Monitoring	The solution generates an email to the contractor, based on user-defined intervals and date of an expiration, for insurance policies or insurance certificates.	Out-of-the-Box	Contract Management	Masterworks platform comes with the ability for admin users to set up and maintain email templates as well as the ability to generate emails automatically. Aurigo will configure trigger points to generate these emails.
2.22	Functional	Contract Compliance Monitoring	The solution supports management track/reporting of contract contingency	Out-of-the-Box	Contract Management	Masterworks suports managing contract and project contingencies. City-specific reports need to be configured , if needed.
2.23	Functional	Contract Compliance Monitoring	The solution allows for the definition of one or more contract deliverables along with links to a specific project milestone or project WBS that it correlates to	Out-of-the-Box	Contract Management	Masterworks allows the definition of multiple contract deliverables, each with a link to the corresponding milestone or WBS.
2.24	Functional	Contract Compliance Monitoring	The solution stores a brief description and dollar value of each contract deliverable	Out-of-the-Box	Contract Management	This is accomplished using the Contract Items feature of Masterworks
2.25	Functional	Contract Compliance Monitoring	The solution generates a schedule of deliverables/schedule of values and monitor actuals contract payments and completion percentage against this schedule of values when information is updated, ensuring it doesn't exceed the total contract value	Out-of-the-Box	Contract Management	Masterworks powerful contract management system can be used to fulfill this requirement.
2.26	Functional	Contract Compliance Monitoring	The solution will track and report the percentage and amount paid (including partials) against each deliverable, ensuring it does not exceed the total value of the deliverable	Out-of-the-Box	Contract Management	Masterworks tracks payments made against deliverables, including partial payments, and ensures payments don't exceed the total deliverable value.
2.27	Functional	Contract Compliance Monitoring	The solution will capture and store contractor requests for information (RFI)	Out-of-the-Box	Contract Management	Masterworks supports RFIs out of the box as part of our comprehensive change management solution. Permissioned users can access the permissioned data any time. E.g., City can decide whether to display or hide discussions among the City staff on an RFI to the contractors
2.28	Functional	Contract Compliance Monitoring	The solution allows contractors to enter RFI via an Internet-based self-service capability	Out-of-the-Box	Contract Management	Masterworks supports RFIs out of the box as part of our comprehensive change management solution. Permissioned users can access the permissioned data any time. E.g., City can decide whether to display or hide discussions among the City staff on an RFI to the contractors
2.29	Functional	Contract Compliance Monitoring	The solution provides contractors the ability to review City's RFI responses via the Internet-based self-service capability with email notifications to alert when responses are available.	Out-of-the-Box	Contract Management	Contractors will be able to access Masterworks via the Internet to review the City's responses to RFIs. Contractors will also be able to receive email notifications.
2.30	Functional	Contract Compliance Monitoring	The solution will manage contract modification process including change requests, change orders, task order modifications, supplemental agreements, etc.	Out-of-the-Box	Contract Management	Masterworks manages all aspects of the change order process out of the box.
2.31	Functional	Contract Compliance Monitoring	The solution provides for capturing and documenting a proposed change including scope, budget impact, schedule impact and rationale	Out-of-the-Box	Contract Management	Masterworks provides the means for stakeholders to provide comprehensive documentation on a change and its effects to the contract.
2.32	Functional	Contract Compliance Monitoring	The solution allows contractors to enter their impact analysis, technical proposal and cost proposal in response to a proposed change order via an Internet-based self-service capability	Out-of-the-Box	Contract Management	Masterworks change management capabilities allow the contractors to enter their impact analysis and the price quote for a proposed change order.
2.33	Functional	Contract Compliance Monitoring	The solution supports grouping of multiple change orders into a supplemental agreement	With Configuration	Contract Management	Aurigo will configure a new form to support grouping multiple change orders.
2.34	Functional	Contract Compliance Monitoring	The solution supports linking of a change to applicable project or contract documents	Out-of-the-Box	Contract Management	Changes are linked to applicable project or contract documents as appropriate.
2.35	Functional	Contract Compliance Monitoring	The solution will display impact of proposed change on total contract budget, current fiscal year contract budget, available balance of contract contingency and overall budget(s)	Out-of-the-Box	Contract Management	Masterworks will be configured to display the impact of the proposed change.
2.36	Functional	Contract Compliance Monitoring	The solution allows a project manager or other authorized user to classify the likelihood of the proposed change as High, Medium or Low and then discount the potential value of the change based on City-defined business rules that are configurable within the system. The solution will display the undiscounted and discounted value of the change in any roll-ups to the project dashboard, etc.	With Configuration	Contract Management	Masterworks will be configured to allow authorized users to classify likelihood of proposed change orders and business rules can then be set up to discount the potential value of the change appropriately.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
2.37	Functional	Contract Compliance Monitoring	The solution will place approved contract change orders requiring a change to the total project budget or fiscal year project budget into a "hold status", removing it upon approval of project budget change.	With Configuration	Contract Management	Configurable with Change Order workflows.
2.38	Functional	Contract Compliance Monitoring	The solution generates project budget change request for approved contract change orders requiring a change to either the total project budget or the fiscal year project budget in order to be finalized and executed	With Configuration	Contract Management	Configurable with Change Order workflows.
2.39	Functional	Contract Compliance Monitoring	The solution provides contractor the ability to review final change documentation via the Internet-based self-service capability within the system that sends alerts and emails the final document to the contractor	Out-of-the-Box	Document Management	Masterworks will be configured to allow contractors to review final change documentation; contractors will be alerted and emailed the appropriate documentation when it is available.
2.40	Functional	Contract Compliance Monitoring	The solution supports tracking and reporting of subcontractor assignments	Out-of-the-Box	Contract Management	Masterworks provides the ability to manage approved subcontractors including assignment of work and completion of the assigned work.
2.41	Functional	Contract Compliance Monitoring	The solution stores approved subcontractors and work items being performed by subcontractors	Out-of-the-Box	Contract Management	Masterworks provides the ability to manage approved subcontractors including assignment of work and completion of the assigned work.
2.42	Functional	Contract Compliance Monitoring	The solution stores multiple project contacts including name, address, email, phone, etc. for each subcontractor	Out-of-the-Box	Contract Management	Masterworks provides the ability to capture all contacts for each contractor
2.43	Functional	Contract Compliance Monitoring	The solution integrates with the City DBE compliance system to verify and record the certification if they are Disadvantaged Business Enterprise (DBE) and/or Minority or Woman Owned Business (M/WBE) status	With Configuration	Contract Management	An interface will need to be configured using Masterworks API to integrate with the City DBE Compliance System and pull the data into Masterworks.
2.44	Functional	Contract Compliance Monitoring	The solution will monitor and report submission of required DBE reporting information by prime contractor and subcontractors	Out-of-the-Box	Contract Management	Masterworks provides the ability to set the DBE goals for a project and track them against the set goals
2.45	Functional	Contract Compliance Monitoring	The solution provides Internet-based portal for DBE, M/WBE subcontractors to record payments received from prime contractors	Out-of-the-Box	Contract Management	Masterworks provides the ability to manage approved subcontractors including assignment and completion of work, including payments from the prime contractor to the subcontractors
2.46	Functional	Contract Compliance Monitoring	The solution stores actual amounts paid by the prime contractor to DBE certified subcontractors	Out-of-the-Box	Contract Management	Masterworks provides the ability to manage approved subcontractors including assignment and completion of work, including payments from the prime contractor to subcontractors.
2.47	Functional	Contract Compliance Monitoring	The solution supports reporting of actual versus planned DBE subcontractor participation	Out-of-the-Box	Contract Management	Masterworks provides the ability to set the DBE goals for a project and track them against the set goals
2.48	Functional	Contract Compliance Monitoring	The solution provides for monitoring, identification and reporting of any compliance issues with certified contractor payrolls (Fair Labor Standards Act) based on the prevailing wage rates in the county where the work is being performed	With Configuration	Contract Management	Aurigo will configure the City's implementation of Masterworks to meet this requirement.
2.49	Functional	Contract Compliance Monitoring	The solution will store document wage rate interviews.	Out-of-the-Box	Contract Management	Masterworks provides the ability to capture the wage rate interviews. Information that are specific to the City can be configured if necessary
2.50	Functional	Contract Compliance Monitoring	The solution supports verification of interview results against certified payrolls	Out-of-the-Box	Contract Management	Masterworks provides the ability to capture the wage rate interviews as well as certified payroll. Workflows can be configured to perform verifications that are specific to the City
2.51	Functional	Contract Compliance Monitoring	The solution supports maintenance of prevailing wage rates by a periodic interface to the appropriate United States Department of Labor systems to electronically download prevailing wage rates by an authorized user.	With Configuration	Contract Management	Masterworks provides the ability to import the prevailing wage rates via excel and maintain them in the library. Masterworks APIs can be used to integrate with the appropriate United States Department of Labor systems to download the prevailing wage rates provided the labor system supports APIs.
2.52	Functional	Contract Compliance Monitoring	The solution provides capability for contractor to electronically submit certified payrolls by uploading a data file in a predefined format	Out-of-the-Box	Contract Management	Masterworks provides the ability to import payroll certificates via excel. Contractors can use this feature to submit their certified payrolls.
2.53	Functional	Contract Compliance Monitoring	The solution allows an authorized user to place a hold on a contractor's payments for a particular contract due to late or incomplete, issues/exceptions in a certified payroll reports	With Configuration	Contract Management	Masterworks provides the ability to perform business via workflow configuration. Workflow for approving the contractor payments can be configured to perform validation checks that are specific to the City
2.54	Functional	Contract Compliance Monitoring	The solution provides a validation check to prevent contractors from getting paid after the official contract end date with the ability for an authorized user to override	With Configuration	Contract Management	Masterworks provides the ability to perform business via workflow configuration. Workflow for approving the contractor payments can be configured to perform validation checks that are specific to the City
2.55	Functional	Contract Compliance Monitoring	The solution provides a flag based on a project type/contract type for an authorized user to indicate that all prerequisites have been met such as insurance, worker's compensation, etc.	With Configuration	Contract Management	Masterworks provides the ability to perform business via workflow configuration. Workflow can be configured to perform validation checks that are specific to the City

Requirements

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
2.56	Functional	Contract Compliance Monitoring	The solution provides a validation check based on project type/contract type to prevent contractors from getting paid until all prerequisites have been met with the ability for an authorized user to override	With Configuration	Contract Management	Masterworks provides the ability to perform business via workflow configuration. Workflow for approving the contractor payments can be configured to perform validation checks that are specific to the City
2.57	Functional	Contract Compliance Monitoring	The solution will display the location path(s) and provide the ability to link to applicable contract documents if the document is stored within PMIS or City Document Management system.	Out-of-the-Box	Document Management	Masterworks supports document linking out of the box.
2.58	Functional	Contract Compliance Monitoring	The solution provides the capability to document contractor performance either during the performance of a contract and/or at the end of the contract	Out-of-the-Box	Contract Management	Masterworks provides the ability to capture contractor performance at any stage of the contract.
2.59	Functional	Contract Compliance Monitoring	The solution will have a rules based engine to enforce policies, to prevent contracts being extended past project end dates and similar.	Out-of-the-Box	Contract Management	Masterworks comes with a workflow engine which can be used to configure specific business policies
2.60	Functional	Contract Compliance Monitoring	The solution will keep record of contracts by contract number associated with a project or phase of a project.	Out-of-the-Box	Contract Management	Masterworks tracks contracts associated with a project or project phase out of the box.
2.61	Functional	Contract Compliance Monitoring	The solution will keep record of unique contract numbers which are defined at the business unit level based on City-specific business units.	Out-of-the-Box	Contract Management	Contracts can be configured to have contract numbers automatically assigned based on business unit, or manually entered and conform to business rules.
2.62	Functional	Contract Compliance Monitoring	The solution will keep record of multiple contractors performing work on a single project.	Out-of-the-Box	Contract Management	Masterworks keeps records of every contractor performing work on a single project.
3	**Functional**	**Dashboarding and Reporting**	**Provide a one-stop source of project financial and schedule status for all of the City's projects with the capability to select projects by various criteria and then drill-down from the dashboard to more detailed information about a particular project. Allow users to create reports, automate reports and dashboards.**			
3.1	Functional	Dashboarding and Reporting	The solution will be able to report on volume and cost of contractor change orders coming in.	Out-of-the-Box	Contract Management	Reports can be configured to report on any data contained in Masterworks.
3.2	Functional	Dashboarding and Reporting	The solution will be able to report on volume and cost of City- Initiated change orders coming in.	Out-of-the-Box	Contract Management	Reports can be configured to report on any data contained in Masterworks.
3.3	Functional	Dashboarding and Reporting	The solution will be able to report on last action taken on the project	Out-of-the-Box	Contract Management	Reports can be configured to report on any data contained in Masterworks.
3.4	Functional	Dashboarding and Reporting	The solution will track and report spending geographically for reports; including by council district.	With Configuration	Contract Management	Reports can be configured to report on any data contained in Masterworks.
3.5	Functional	Dashboarding and Reporting	The solution will be able to report SPIs by project and portfolio, baseline, actual and estimate at completion.	Out-of-the-Box	Contract Management	Masterworks comes with numerous dashboards and reports.
3.6	Functional	Dashboarding and Reporting	The solution will be able to report on actual vs. pending costs, in order to understand financial progress.	Out-of-the-Box	Contract Management	Reports can be configured to report on any data contained in Masterworks.
3.7	Functional	Dashboarding and Reporting	The solution will allow reporting on real time financial information updates.	Out-of-the-Box	Contract Management	Reports can be configured to report on any data contained in Masterworks.
3.8	Functional	Dashboarding and Reporting	The solution has the ability to sort reports by predefined data fields.	Out-of-the-Box	Contract Management	Masterworks comes with numerous dashboards and reports. In addition to all the standard reports, users will be able to create their own reports using Masterworks simple to use Report Builder.
3.9	Functional	Dashboarding and Reporting	The solution will provide pre-defined reports that support day-to-day PMIS business functions that are automatically generated and distributed (pushed to the user) by the PMIS at a user defined time for publication	Out-of-the-Box	Contract Management	Masterworks provides the ability to subscribe to reports. Users can subscribe to any report and specify the frequency of the delivery (Hourly, Daily, Weekly, Monthly, etc.) and Masterworks will automatically generate and email the report as an attachment. Permissioned users can set up report subscriptions for other users in Masterworks.
3.10	Functional	Dashboarding and Reporting	The solution will provide reports on user production statistics by user ID, time of day, length of job, etc. to determine who is viewing a report, what reports are being used and resources consumed by agency/user	With Configuration	Contract Management	Reports can be configured to report on any data contained in Masterworks.
3.11	Functional	Dashboarding and Reporting	The solution will provide capability to copy and modify existing reports to create new reports.	Out-of-the-Box	Contract Management	Masterworks Report Builder has this capability built-in
3.12	Functional	Dashboarding and Reporting	The solution will provide authorized users the ability to configure new reports and templates.	Out-of-the-Box	Contract Management	Masterworks Report Builder has this capability built-in
3.13	Functional	Dashboarding and Reporting	The solution will allow a user to save a personal copy for later execution of a pre-defined report with a set of specific selection criteria	Out-of-the-Box	Contract Management	Masterworks Report Builder has this capability built-in
3.14	Functional	Dashboarding and Reporting	The solution will provide functionality for the user to incorporate formulas, functions, and mathematical calculations into reports	Out-of-the-Box	Contract Management	Masterworks Report Builder has this capability built-in

Requirements

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
3.15	Functional	Dashboarding and Reporting	The solution will allow users to track and report by project, cost center, and capital stack (Note: removed the word "solution" and added "stack")	With Configuration	Contract Management, Project Management, Fund Management, Capital Planning	Reports can be configured to report on any data contained in Masterworks.
3.16	Functional	Dashboarding and Reporting	The solution will filter performance by project delivery type.	With Configuration	Contract Management	Reports can be configured to report on any data contained in Masterworks.
3.17	Functional	Dashboarding and Reporting	The solution will track and report O&M task orders in the system, in order to track and report all work in one system	With Configuration	Consultant Service Contracting	Reports can be configured to report on any data contained in Masterworks.
3.18	Functional	Dashboarding and Reporting	The solution will track and report projects within zones of influence, in order to identify projects where there are planned multiple projects.	With Configuration	Construction Project Management	Reports can be configured to report on any data contained in Masterworks.
3.19	Functional	Dashboarding and Reporting	The solution will be able to track and report the time spent by staff during the planning stages of a project to understand cost structure.	With Configuration	Construction Project Management	Reports can be configured to report on any data contained in Masterworks.
3.20	Functional	Dashboarding and Reporting	The solution will report RFIs and submittals for record of all projects.	Out-of-the-Box	Contract Management	Masterworks come with built-in reports for RFIs and Submittals.
3.21	Functional	Dashboarding and Reporting	The solution will generate reports rolling up project level data that can be grouped by department/business unit, program, asset class/type, funding source, project phase, operating impact, sponsor, project manager, custom, etc. in the following areas: financial/cost, resource management, custom, etc.	With Configuration	Construction Project Management	Masterworks come with built-in reports for rolling up project level data based on programs, funding sources, project phases, etc. New reports will be configured to address City's specific needs.
3.22	Functional	Dashboarding and Reporting	The solution will provide an entity relationship diagram(s) to support development of end-user reports.	Out-of-the-Box	Platform	The Aurigo team will provide this post-implementation when data relationships are finalized.
3.23	Functional	Dashboarding and Reporting	The solution will support creation of gauges for dashboards	Out-of-the-Box	Platform	Masterworks Report Builder has this capability built-in
3.24	Functional	Dashboarding and Reporting	The solution will generate summary cash flows by project by month, quarter fiscal year, total project	Out-of-the-Box	Construction Project Management	Mastworks comes with built-in reports for cashflow forecast at project level, program level, and portfolio level
3.25	Functional	Dashboarding and Reporting	The solution will generate user defined dashboards and scorecard reports at the project level based on: Financial status and performance; Schedule Status and Performance; Issues; Project Risk Profile	Out-of-the-Box	Construction Project Management	Masterworks Report Builder has the capability for users to define their own dashboards and scorecard reports based on data contained in the project.
3.26	Functional	Dashboarding and Reporting	The solution will provide reporting with budgets by: Department/City business unit, program, asset class/asset type, all chart of accounts elements, expenditure object, fund, project type, WBS levels, source of revenue, Project/Subproject/Phase	With Configuration	Construction Project Management	Masterworks comes with built-in reports for project budgets. Additional reports will be configured to address City's specific needs
3.27	Functional	Dashboarding and Reporting	The solution will provide reporting with budgets and detailed capital and operating project budgets by: Location (for example Line Segment or Line Segment between two defined location references).	With Configuration	Construction Project Management	Reports can be configured to report on any data contained in Masterworks.
3.28	Functional	Dashboarding and Reporting	The solution will provide reporting with budgets by: Governmental or Legislative Boundaries (for example County, City, Congressional District, State Senate District, State House District, County Commission Precinct, etc.), and budgets that cross multiple boundaries of the prior.	With Configuration	Construction Project Management	Reports can be configured to report on any data contained in Masterworks.
3.29	Functional	Dashboarding and Reporting	The solution will generate reports by resources for: Budgets, Actuals, Remaining, and At Completion/Forecasted costs and units portfolio wide by month, quarter, fiscal year, calendar years, and total Project	With Configuration	Construction Project Management	Reports can be configured to report on any data contained in Masterworks.
3.30	Functional	Dashboarding and Reporting	The solution provides the ability to track staff time spent on individual projects and tasks.	With Custom Programming	Resource Management	New forms, workflows, and reports will be configured in Masterworks' Resource Management product to capture and report on the number of hours employees have worked on projects and tasks.
3.31	Functional	Dashboarding and Reporting	The solution provides the ability to create custom queries for external reporting. Need the ability to query the database from an external reporting source.	With Configuration	Masterworks Platform	During the elaboration phase of the implementation project, Aurigo's Business Analyst and System Integration Specialist will work with the OCWUT's SMEs to fully understand the OCWUT's system integration requirements. Masterworks comes with out-of-the-box APIs that can be used to easily integrate Masterworks with external analytics and business intelligence systems. Based on the identified touchpoints between

Requirements

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
4	Functional	Document Management	Support electronically recording and managing project documentation (including but not limited to RFIs, submittals, progress payments, transmittals, records of conversations, meeting minutes, emails, daily reports). Provide scanning, indexing and full- search/retrieval capabilities, retention capabilities (including schedules) and configurable workflow capabilities, replacement of paper-based forms with electronic forms, and data archival capabilities.			
4.1	Functional	Document Management	The solution provides ability to store all project documents within PMIS with a standardized file structure.	Out-of-the-Box	Document Management	Project templates can be defined in order to standardize project layouts. Documents can be stored either separately as part of projects or as part of project workflows.
	Functional	Document Management	The solution provides for retrieval of any document in its native format if the user has access to open the file in the required native software or an appropriate viewer tool.	Out-of-the-Box	Document Management	Project documents that are stored in Masterworks are retrievable by users who have permission to do so.
4.3	Functional	Document Management	The solution provides ability to print any retrieved document	Out-of-the-Box	Document Management	Project documents that are stored in Masterworks are retrievable by users who have permission to do so. In some cases, printing may be dependent upon access to open the file in the required native software application.
4.4	Functional	Document Management	The solution supports document search and retrieval by various user defined parameters including Project Number, Project Name, Program, Department, Document Type, Asset Class/Type, Location, Date Received/Created, Date Stored and other similar attributes, including documents unrelated to projects	Out-of-the-Box	Document Management	Masterworks supports searchable document metadata fields. Metadata can be defined based on the type of document being uploaded.
4.5	Functional	Document Management	The solution will allow documents to have meta data to enable documents to be easily searched.	Out-of-the-Box	Document Management	Masterworks supports searchable document metadata fields. Metadata can be defined based on the type of document being uploaded.
4.6	Functional	Document Management	The solution will allow users to search for data, transactions or documents using a range of data values.	Out-of-the-Box	Document Management	Masterworks has a powerful Enterprise Search feature built-in.
4.7	Functional	Document Management	The solution will link task order documents to task orders.	Out-of-the-Box	Document Management	Documents can be attached to all records in Masterworks including task orders
4.8	Functional	Document Management	The solution will generate a calendar reminder to the assigned reviewer for their document review assignment.	Out-of-the-Box	Platform	"My Tasks" in Masterworks will list all pending tasks including documents pending for review. Also, the document management dashboards will display all pending documents. Note: Calendar reminders to the City's emailing client, like Outlook, will need a new interface to be developed for the City's emailing client.
4.9	Functional	Document Management	The solution will provide for automatic date and time stamping of all documents generated by the PMIS.	Out-of-the-Box	Document Management	Masterworks document management system comes with built-in version control with check-in and check-out features. All changes to the document are versioned with a date and time stamp. Permissioned users will be able to retrieve any version of the document. Reports generated in Masterworks will have the date and time stamp on the report footer. Similarly, records generated in Masterworks are date and time stamped automatically and stored with the creator information. All workflow actions (Approve/Reject) are also date and time stamped.
4.10	Functional	Document Management	The solution will provide functionality to copy a document in order to create a new document of the same type.	With Configuration	Document Management	Masterworks does not have a document copy feature built-in, but it is something we have developed for other customers and can be included in the City's installation.
4.11	Functional	Document Management	The solution will provide ability to use the "print screen" function on any screen.	Out-of-the-Box	Platform	Print screen option from keyboard can be initiated in any screen of Masterworks and is a feature of the OS which we do not block. This feature is not natively provided by Masterworks.
4.12	Functional	Document Management	The solution will provide red-lining to allow a user to mark-up a document in a document viewer.	Out-of-the-Box	Document Management	Aurigo comes integrated with Lead Tools which will allow red-lining of documents.
4.13	Functional	Document Management	The solution will allow an assigned reviewer to upload a marked-up version of the document in its native software and attach this marked-up version to the deliverable comments.	Out-of-the-Box	Document Management	Masterworks allows document attachment to all objects in Masterworks as well as at every stage of the applicable workflow.
5	Functional	Budget and Funding/Grants Management	Enable staff to set-up approved project budgets and commit funds, coordinating and integrating closely with the City's Financial System for agency level financial transactions management and reporting.			
5.1	Functional	Budget and Funding/Grants Management	The solution will allow for the ability to compare design fees by project type and construction budget.	With Configuration	Construction Project Management	Reports can be configured to compare the design fees by project type and construction budget
5.2	Functional	Budget and Funding/Grants Management	The solution will allow the establishment of projects that may cross multiple funding sources or budgets.	Out-of-the-Box	Construction Project Management	Masterworks allows projects with multiple funding sources and/or budgets out-of-the-box.
5.3	Functional	Budget and Funding/Grants Management	The solution will allow budgets across multiple, varying funding sources at separate stages of a WBS.	Out-of-the-Box	Construction Project Management	Masterworks allows budgets with multiple funding sources at separate stages of a WBS out-of-the-box.
5.4	Functional	Budget and Funding/Grants Management	The solution will allow for multiple proposed budgets to be reviewed at the same time.	Out-of-the-Box	Construction Project Management	Masterworks allows for multiple proposed budgets to be reviewed at the same time out-of-the-box.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
5.5	Functional	Budget and Funding/Grants Management	The solution will allow a project that is already in place to have an unlimited amount of modifications to a budget, along with a description/rationale for the change, with the appropriate security control according to City-defined business rules.	With Configuration	Construction Project Management	Masterworks will be configured for the City to allow unlimited budget modifications, along with description/rationale for the change and appropriate security controls.
5.6	Functional	Budget and Funding/Grants Management	The solution will provide the ability to drill down from a project budget error message to the project summary/snapshot screen and automatically retrieve project budget information for correction.	With Configuration	Construction Project Management	The City's instance of Masterworks will be configured to meet this requirement.
5.7	Functional	Budget and Funding/Grants Management	The solution will allow a user to report/document a requested budget change in detail including the net change by funding sources and the funding splits for each funding source/type.	Out-of-the-Box	Construction Project Management	Masterworks come with built-in budget change management features that allows users to specify the funding splits by assigning funding rule for each budget line that needs to be changed.
5.8	Functional	Budget and Funding/Grants Management	The solution will store a proposed budget by it's funding source/type along with the current budget funding source/type.	Out-of-the-Box	Construction Project Management	Masterworks stores proposed budgets by their funding source/type along with the current budget funding source/type.
5.9	Functional	Budget and Funding/Grants Management	The solution will be able to track and report budgets for Estimate to Completion (ETC), Estimate at Complete (EAC), and variance to budget for ETC and EAC.	With Configuration	Construction Project Management	Masterworks will be configured to track and report budgets for ETC, EAC, and variance to budget for each.
5.10	Functional	Budget and Funding/Grants Management	The solution will be able to track and report changes across all budget line items in a change log.	Out-of-the-Box	Construction Project Management	Masterworks will track and report changes across all budget line items in a change log.
5.11	Functional	Budget and Funding/Grants Management	The solution will track and report budgets for a project by: Budget Cost vs. Actual Expenditure, by cost breakdown structure level, and summary level.	Out-of-the-Box	Construction Project Management	Masterworks tracks and reports budgets for a project by cost vs. actuals, by cost breakdown structure, and by summary level out-of-the-box.
5.12	Functional	Budget and Funding/Grants Management	The solution will have the ability to store all financial information and its changes on a project.	Out-of-the-Box	Construction Project Management	Masterworks stores all financial information and its changes on a project out-of-the-box.
5.13	Functional	Budget and Funding/Grants Management	The solution will keep record of multiple grant numbers	Out-of-the-Box	Construction Project Management	Masterworks Grants Management feature supports managing multiple grant numbers.
5.14	Functional	Budget and Funding/Grants Management	The solution will track and report color of money, to ensure time limited funds are spent on time.	Out-of-the-Box	Construction Project Management	Masterworks fund management capabilites track and report on color of the money including forecasted amount and actual spent.
5.15	Functional	Budget and Funding/Grants Management	The solution provides ability to perform rolling wave planning at the phase level(from generic to specific)	With Configuration	Construction Project Management	The City's instance of Masterworks will be configured to meet this requirement.
6	Functional	Invoicing	Support submission and payment of Invoices against projects for all levels (Contracts, Task Orders, Work Orders, Purchase Orders) and provides detailed fields to capture pertinent data			
6.1	Functional	Invoicing	The solution will track and report payment status from within the system for payment application and invoices.	Out-of-the-Box	Contract Management	Masterworks provides the ability to generate and manage contractor payment application and invoicing.
6.2	Functional	Invoicing	The solution provides ability to compare the daily report of an inspector to the Pay-App sent in from the contractor for billing and invoices.	Out-of-the-Box	Contract Management	Masterworks provides the ability to create pay apps (Pay estimates) from the dailies. Appropriate approval workflows will be configured for dailies and pay apps (Pay estimates). Contractors can be permissioned to request the Pay-App in MW which then can be routed to City staff for approval.
6.3	Functional	Invoicing	The solution stores the amount of contract retainage to be withheld as a percentage of amount invoiced and the ability to partially release retainage by an authorized user, and be tied to a project to report on.	Out-of-the-Box	Contract Management	Masterworks manages retainage as one of its out-of-the-box features.
6.4	Functional	Invoicing	The solution allows an authorized user to place a hold on invoice payments against the contract based on incomplete or expired insurance coverage.	With Configuration	Contract Management	Masterworks will be configured to allow holds to be placed on invoice payments.
6.5	Functional	Invoicing	The solution integrates with Workday to provide the ability to validate that required insurance coverage are current prior to issuing an invoice payment.	With Configuration	Contract Management	An API interface will be developed in order for Masterworks to integrate with Workday
6.6	Functional	Invoicing	The solution will allow contractors to submit invoices for projects with direct ties to project budget.	Out-of-the-Box	Contract Management	Masterworks supports invoices for projects with direct ties to project budget out-of-the-box.
6.7	Functional	Invoicing	The invoices will route through appropriate approval levels (PM, Contracting, Director, DSBO, etc.).	Out-of-the-Box	Contract Management	Masterworks comes with a preconfigured approval workflow for invoices. City-specific stages and stakeholders need to be configured
6.8	Functional	Invoicing	The invoices will provide all pertinent information: Prime, Sub Consultants, Billable hours, Requested Payment Breakout, Paid to date, invoice #, period of performance, Small Business Certification types.	With Configuration	Contract Management	Masterworks will be configured to provide all required information on invoices using the Form Builder

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
6.9	Functional	Invoicing	The solution will allow the invoices to provide detailed SOV detail and can update contractual information.	Out-of-the-Box	Contract Management	Masterworks Pay estimates (pay requests) have detailed SOV information including the current contract quantity, quantity completed previously, quantity completed this period, and quantity completed till date. They also have other information including retentions, rententions released, hold amount and hold amounts released, liquidated damages, prepayments, prepayments recovered, Materials on Hand, etc.
6.10	Functional	Invoicing	Approved Invoices will update financial information for the contract.	Out-of-the-Box	Contract Management	Masterworks has this invoice functionality built into the product.
6.11	Functional	Invoicing	Retainage will be automatically calculated.	Out-of-the-Box	Contract Management	Masterworks has this retainage functionality built into the product.
6.12	Functional	Invoicing	The solution will track and report field order change directives.	Out-of-the-Box	Contract Management	Masterworks provides the ability to manage and report field change directives.
7	Functional	Mobile Capability	Degree to which the system is integrated and supported on a mobile platform.			
7.1	Functional	Mobile Capability	The solution will be functional, including self-service from mobile platforms (iOS and Android).	Out-of-the-Box	Mobile	Masterworks has a companion mobile app for iOS and Android.
7.2	Functional	Mobile Capability	The solution will allow users to perform offline field based data- capture, reporting and analysis functions where data automatically synchronizes upon network connection.	Out-of-the-Box	Mobile	This can be done with Masterworks' companion mobile app. Forms will have to be configured for mobile use.
7.3	Functional	Mobile Capability	The solution will use a design to allow the end user with a perspective of real-time updates of data even if some batch processes may actually be required in the background to complete the updating of the database.	Out-of-the-Box	Mobile	Masterworks Mobile app stores all data locally and will sync upon network connection. Data updates made within the mobile app will persist within the mobile app.
7.4	Functional	Mobile Capability	The solution will allow manual entry and also contextually validated drop down lists of relevant values for each field.	Out-of-the-Box	Mobile	Forms will need to be configured for mobile use.
7.5	Functional	Mobile Capability	The solution will provide immediate transfer of values from "pop up" list of values tables to the appropriate field when selected.	Out-of-the-Box	Mobile	This is part of the mobile solution out-of-the-box.
7.6	Functional	Mobile Capability	The solution will allow user to access other input screens and modules without backing out of menus, menu paths, or active screens / activities.	Out-of-the-Box	Mobile	Masterworks Mobile App allows this out of the box.
7.7	Functional	Mobile Capability	The solution will allow navigation between multiple, related input screens without losing information input on the original (or header) screen.	Out-of-the-Box	Mobile	Masterworks Mobile App allows this out of the box.
7.8	Functional	Mobile Capability	The solution will allow the user to move backward within a menu structure without losing data.	Out-of-the-Box	Mobile	Masterworks Mobile App allows this out of the box.
7.9	Functional	Mobile Capability	The solution will allow user to open multiple screens/windows simultaneously within the same user session.	Out-of-the-Box	Platform	Masterworks Mobile App allows this out of the box.
7.10	Functional	Mobile Capability	The solution will allow a user to cancel transaction and/or exit any document or screen without saving changes.	Out-of-the-Box	Platform	Masterworks allows this out-of-the-box.
7.11	Functional	Mobile Capability	The solution will support cut and paste for copying data between windows.	Out-of-the-Box	Platform	Masterworks supports cut/copy-and-paste functionality.
7.12	Functional	Mobile Capability	The solution will provide a display of all required fields for entry on any screen.	Out-of-the-Box	Mobile	Masterworks will indicate any and all required fields on the input screens.
7.13	Functional	Mobile Capability	The solution will provide a search and filter capability on screens containing columns of data.	Out-of-the-Box	Platform	Masterworks provides for searching and filtering on screens that contain columns of data.
7.14	Functional	Mobile Capability	The solution will allow automatic system numbering or user-defined numbering (with reserved ranges, specific numbers, or a defined prefix) for business object identifications.	Out-of-the-Box	Platform	Masterworks comes out of the box with features to set up auto numbering for all business objects. City's specific formatting for auto numbering will need to be configured.
7.15	Functional	Mobile Capability	The solution will prevent duplicate document numbers or reference numbers based on City-specified criteria.	Out-of-the-Box	Platform	Form logic will be configured to meet this requirement.
7.16	Functional	Mobile Capability	The solution will support the use of alphanumeric characters for documents (i.e., RFI number) and other references (i.e., contract, vendor, project contact, etc.).	Out-of-the-Box	Platform	Masterworks supports the use of alphanumeric characters for document and form identifiers. Masterworks can also be configured to auto generate these identifiers
7.17	Functional	Mobile Capability	The solution will allow any master record or validation table entry to be activated or inactivated.	Out-of-the-Box	Platform	Masterworks allows for activation and inactivation of records.
7.18	Functional	Mobile Capability	The solution will provide for wildcard or partial searches.	Out-of-the-Box	Platform	Masterworks has a powerful enterprise search functionality that supports wildcard and partial searches.
7.19	Functional	Mobile Capability	The solution will provide the capability to default the value of a field based on the value of another field according to user-defined business rules.	Out-of-the-Box	Platform	Masterworks provides the ability to default field values based on business logic. City-specific business logic will need to be configured.

Requirements

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
7.20	Functional	Mobile Capability	The solution will allow for descriptions on all transactions.	Out-of-the-Box	Platform	All forms in Masterworks come with one or more "Notes"/"Comments" fields to capture any additional information.
7.21	Functional	Mobile Capability	The solution will provide spell check capability.	Out-of-the-Box	Platform	Spellcheck for the mobile app is provided by the OS.
7.22	Functional	Mobile Capability	The solution will support the definition and use of City-specific data fields.	With Configuration	Platform	Form logic will be configured to meet this requirement.
7.23	Functional	Mobile Capability	The solution will track, report and store effective date changes throughout all modules.	Out-of-the-Box	Platform	Masterworks handles effective date changes out-of-the-box.
7.24	Functional	Mobile Capability	The solution will provide query features that support alternate field lookup; for instance, using project name to look up project number.	With Configuration	Platform	Masterworks can be configured to support alternate field lookup.
7.25	Functional	Mobile Capability	The solution will provide the capability of securely segregating all project specific information by City department and line of business.	Out-of-the-Box	Platform	Department and Line of Business (Business Unit) are part of the project attributes in MW. Permissions can be configured in MW to provide or deny access to the project based on business rules. E.g. Users can access only the projects that belong to their department.
7.26	Functional	Mobile Capability	The solution will provide table look-up fields that can be linked to or refer to other tables.	Out-of-the-Box	Platform	Masterworks supports this feature.
7.27	Functional	Mobile Capability	The solution will provide the capability to add, change, and inactivate reference tables in both batch and on-line mode.	Out-of-the-Box	Platform	Masterworks supports modifying reference tables out of the box.
7.28	Functional	Mobile Capability	The solution will provide the capability to perform cross-reference table validations.	Out-of-the-Box	Platform	Form logic will be configured to meet this requirement.
7.29	Functional	Mobile Capability	The solution will provide the capability to back out (rollback) previously entered batches.	Cannot Meet	Platform	History of information can be fetched and re-updated. Rollback/Undo is not provided in enterprise applications.
8	Functional	Project Life Cycle Management	Project Life Cycle Management would address the requirements needed in the system to fulfil the Project Life Cycle Management of every project going through the PMIS. This includes; lessons learned, estimate history, claims/dispute tracking and project closeout.			
8.1	Functional	Project Life Cycle Management	The solution will allow for Tier-Planning as to investigate projects not yet decided to completely initiate and undertake.	Out-of-the-Box	Capital Planning	Masterworks supports Tier Planning out of the box.
8.2	Functional	Project Life Cycle Management	The solution will have a budget sheet template in order to standardize the way actual, pending and budgeted costs are reported track/reported.	Out-of-the-Box	Capital Project Management	Masterworks supports budget sheet templates out of the box.
8.3	Functional	Project Life Cycle Management	The solution will allow for an 'intake' of potential projects from from a proposed concept through either a project if approved, a tenative project for future consideration on hold or a project not approved.	Out-of-the-Box	Capital Planning	Masterworks manages the entire project life cycle from planning to execution out of the box.
8.4	Functional	Project Life Cycle Management	The solution allows a project manager to see a consolidated view of all task assignments, the status of these task assignments and due dates for their project team members	Out-of-the-Box	Capital Project Management	Masterworks schedule management allows permissioned users to have a consolidated Gantt view of all tasks of a project including resources assigned, start date, and end date for each task.
8.5	Functional	Project Life Cycle Management	The solution provides the capability for a user to select an item in the ball in court list assigned to them and drill down to the appropriate screen in PMIS on which to perform the assigned item	Out-of-the-Box	Platform	Masterworks supports drilling down to action items from My Tasks out-of-the-box.
8.6	Functional	Project Life Cycle Management	The solution will flag any assigned action items which are within a user defined number of days of being due	With Configuration	Platform	The implementation team will configure Masterworks to identify any tasks that are within a defined number of days being due.
8.7	Functional	Project Life Cycle Management	The solution provides an on-line function for contractors, consultants or other project stakeholders to submit questions or requests for information to City project staff without being considered as named users in the PMIS. Potential stakeholders depending on the specific project will include City staff not directly assigned to the project team, a City consultant working on aspects of the project or external partner agency staff (City staff, etc.)	Out-of-the-Box	Contract Management	Masterworks comes with enhanced Request for Information (RFI) capabilities with the option for permissioned users to assign questions to one or more users with a target date to receive the response. Assigned users will automatically receive the notification of the assignment and can respond within the system. Assigned users will have the ability to attach documents or link any documents in MW. Note: Anyone accessing Masterworks will need to have a Masterworks login ID and will be considered a named user in Masterworks
8.8	Functional	Project Life Cycle Management	The solution allows the City project manager to assign the question or information request to project team members for resolution/task completion, with an assigned completion date	Out-of-the-Box	Contract Management	Masterworks comes with enhanced Request for Information (RFI) capabilities with the option for permissioned users to assign questions to one or more users with a target date to receive the response. Assigned users will automatically receive the notification of the assignment and can respond within the system. Assigned users will have the ability to attach documents or link any documents in MW.
8.9	Functional	Project Life Cycle Management	The solution allows the user assigned a question or request for information to record an answer in the system	Out-of-the-Box	Contract Management	Masterworks supports the RFI process out of the box.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
8.10	Functional	Project Life Cycle Management	The solution allows a user to store and attach documents in either the City document management system or from an outside source and link it to the question/inquiry in PMIS	Out-of-the-Box	Document Management	Masterworks comes with enhanced Request for Information (RFI) capabilities with the option for permissioned users to assign questions to one or more users with a target date to receive the response. Assigned users will automatically receive the notification of the assignment and can respond within the system. Assigned users will have the ability to attach documents or link any documents in MW. Note: Full URL of the external links can be stored in one of the descriptive fields of the RFI form
8.11	Functional	Project Life Cycle Management	The solution supports generating estimates that align to a standard WBS	Out-of-the-Box	Capital Project Management	Masterworks provides the ability to define detailed budget templates in the library. Standard WBS can be configured as a budget template, which then can be used to generate estimates.
8.12	Functional	Project Life Cycle Management	The solution supports applying user defined escalation factors by project type/commodity type	Out-of-the-Box	Platform	Masterworks provides the ability to set up various inflation rules and allows the user to set inflation rules for every budget line of a project.
8.13	Functional	Project Life Cycle Management	The solution allows application of contingency based on project type, complexity, similar projects, project phase, or a standard formula	Out-of-the-Box	Capital Planning	Masterworks supports contingency out of the box.
8.14	Functional	Project Life Cycle Management	The solution supports adding predetermined contingency amounts based on different criteria automatically or manually	With Configuration	Capital Planning	Form logic can be configured to accommodate this requirement.
8.15	Functional	Project Life Cycle Management	The solution provides a work flow for review of estimates by impacted stakeholders, with workflow defined by project type	Out-of-the-Box	Platform	Masterworks comes with standard with approval workflows for estimates. City-specific stages and stakeholders will be configured.
8.16	Functional	Project Life Cycle Management	The solution provides for sorting and filtering of estimates at the discipline level by various criteria including type of work and WBS element	With Configuration	Capital Planning	Masterworks will be configured to support sorting and filtering of estimates by the specified criteria.
8.17	Functional	Project Life Cycle Management	The solution supports working with amounts that have been loaded and unloaded	With Configuration	Capital Planning	Masterworks will be configured to support working with loaded and unloaded amounts.
8.18	Functional	Project Life Cycle Management	The solution will sort estimate by three main categories; internal labor, materials and other (other shall include consultants, contractors, fees, expenses, etc.).	With Configuration	Capital Planning	Masterworks will be configured to support sorting estimates by the three specified categories.
8.19	Functional	Project Life Cycle Management	The solution will integrate with Workday and Salesforce and capture and store bid results at the detail level	With Configuration	Estimation & Bidding	Integrations with Workday and Salesforce will need to be developed using the Masterworks API in order to capture and store this data.
8.20	Functional	Project Life Cycle Management	The solution will maintain a set of inflation factors by major type of project/type of work for use in estimate preparation	With Configuration	Capital Planning	Masterworks will be configured to maintain a set of inflation factors by major type of project/type of work.
8.21	Functional	Project Life Cycle Management	The solution will maintain project estimate in current year dollars and then make adjustments based on the anticipated project start date and pre-defined inflation factors to calculate the estimated cost to deliver/implement the project in the appropriate future year dollars	With Configuration	Capital Planning	Form logic can be configured to accommodate this requirement.
8.22	Functional	Project Life Cycle Management	The solution will maintain a history of estimate changes including the amount of the estimate change, date of change and reason for the change	Out-of-the-Box	Capital Planning	Masterworks budget revision functionality allows the users to request every estimate change and route them through an workflow for approval. Masterworks captures all the details for every estimate change including requested date, final approved date, change amount, reason for chane, etc.
8.23	Functional	Project Life Cycle Management	The solution will allocate track/report budget dollars by selected user-defined levels	With Configuration	Capital Planning	Masterworks will be configured to report on budget dollars by user-defined levels.
8.24	Functional	Project Life Cycle Management	The solution supports recording of project budgets, pre-encumbrances, encumbrances, expenditures, anticipated revenues, and receivables, labor costs, displaying and recording information interfaced from Workday by WBS levels	With Configuration	Capital Project Management	An interface with Workday will be developed using the Masterworks API in order to accomplish this.
8.25	Functional	Project Life Cycle Management	The solution allows recording of expenditure at the lowest level while budgeting at a higher level	Out-of-the-Box	Capital Project Management	Masterworks records expenditures out of the box.
8.26	Functional	Project Life Cycle Management	The solution will maintain historical data for all projects independent of general ledger data (across multiple fiscal years) but with detail selectable by specific timeframes	Out-of-the-Box	Capital Project Management	Masterworks maintains historical data for all projects out of the box.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
8.27	Functional	Project Life Cycle Management	The solution provides the ability to define track/report a project from project request to completion and closeout	Out-of-the-Box	Capital Project Management	Masterworks handles end-to-end project management.
8.28	Functional	Project Life Cycle Management	The solution provides linkages of historical project data to supporting details (time charges, payments) stored within PMIS or within Workday	With Configuration	Capital Project Management	Masterworks provides the ability to link any historical records. The link is not just limited to project information; any information stored in Masterworks can be linked to any record. A new interface will need to be developed for linking historical project data stored in Workday
8.29	Functional	Project Life Cycle Management	The solution will track and report projects, over multiple years, by budget revisions	Out-of-the-Box	Capital Planning	Masterworks provides the ability to track budget revisions out of the box.
8.30	Functional	Project Life Cycle Management	The solution supports various delivery methods utilized for City construction projects (design-bid-build, design-build, other alternative delivery methods, etc.) and custom.	Out-of-the-Box	Contract Management	Construction Delivery method is an attribute of the projects and the values are definable in the library.
8.31	Functional	Project Life Cycle Management	The solution supports authorized users to create and maintain WBS templates to at least a seven level Work Break Down Structure (WBS) (for example Project, Phase, Task, Activity, Sub-activity, Line Item, Category)	Out-of-the-Box	Capital Project Management	Masterworks supports seven level WBS out of the box.
8.32	Functional	Project Life Cycle Management	The solution supports creation of a project structure by copying a portion of a work break down structure from another project or from a project template	Out-of-the-Box	Capital Project Management	Masterworks support WBS templates out of the box.
8.33	Functional	Project Life Cycle Management	The solution supports a hierarchy for projects i.e. subprojects linked to a primary project	With Configuration	Capital Project Management	Masterworks will be configured to support a project hierarchy.
8.34	Functional	Project Life Cycle Management	The solution provides ability to document lessons learned from a project or subproject or phase within a project	Out-of-the-Box	Capital Project Management	Masterworks comes with a lessons learned form at the project level and allows capturing lessons learned more than once for a project.
8.35	Functional	Project Life Cycle Management	The solution supports documenting track/reporting the resolution of construction contractor disputes and claims based on City business rules	With Configuration	Contract Management	Forms and workflows can be configured to apply business rules.
8.36	Functional	Project Life Cycle Management	The solution provides for linking and cross referencing a dispute to key project/contract documents including but not limited to daily reports, drawings, non-conformance reports, deficiencies, etc. to support generating a log and providing traceability for all documents tied to a dispute, change, non-conformance, etc.	With Configuration	Contract Management	Masterworks will be configured to support linking documents tied to a dispute, change, or non-conformance in a project.
8.37	Functional	Project Life Cycle Management	The solution allows an authorized City user to record the nature of a dispute and attach supporting documentation	With Configuration	Contract Management	Masterworks will be configured using Forms and Workflows to allow an authorized City user to record the nature of a dispute and attach supporting documentation.
8.38	Functional	Project Life Cycle Management	The solution will store estimated cost of potential claims	With Configuration	Claims Management	Masterworks will be configured using Forms to support this requirement.
8.39	Functional	Project Life Cycle Management	The solution allows an authorized representative of the contractor to record their view of a dispute online and upload supporting documentation	With Configuration	Contract Management	Masterworks will be configured to use Forms and Workflows to fulfill this requirement.
8.40	Functional	Project Life Cycle Management	The solution provides an automated workflow to facilitate review of the dispute across several potential steps by multiple authorized users	With Configuration	Contract Management	A workflow can be configured within Masterworks to meet this requirement.
8.41	Functional	Project Life Cycle Management	The solution allows an authorized user to document the resolution of the dispute	With Configuration	Contract Management	A form and workflow will be configured to handle disputes in Masterworks.
8.42	Functional	Project Life Cycle Management	The solution supports development of City capital program through modeling of different program scenarios based on different revenue assumptions and mix of projects; this will include/consider cost and risk assumptions.	Out-of-the-Box	Capital Planning	Masterworks supports modeling different program scenarios out of the box.
8.43	Functional	Project Life Cycle Management	Update project status based on final disposition of a candidate project within the approved program	Out-of-the-Box	Capital Planning	Masterworks supports all aspects of project planning out of the box.
8.44	Functional	Project Life Cycle Management	The solution generates budget, revenue and expenditure forecasts for an individual project or a program of projects	Out-of-the-Box	Capital Planning	Masterworks generates budget, revenue, and expenditure forecasts out of the box.
8.45	Functional	Project Life Cycle Management	The solution supports the development of a forecast of revenue and expenditures by funding source(s) and budget line.	Out-of-the-Box	Capital Planning	Masterworks supports forecasting revenue and expenditures by source and budget line out of the box.

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8.46	Functional	Project Life Cycle Management	The solution supports the development of a cash flow forecast for a user defined period of time for an individual project, a program of related projects, for the entire portfolio of projects, with an ability to add a lag or lags to work performed for generation of cash flow forecasts.	**With Configuration**	Capital Planning	Masterworks can be configured to meet this requirement.
8.47	Functional	Project Life Cycle Management	The solution supports generation of a forecast based upon average of actual expenditures	**Out-of-the-Box**	Capital Planning	Masterworks supports generating a forecast based upon the average of actual expenditures out-of-the-box.
8.48	Functional	Project Life Cycle Management	The solution supports generation of a forecast based upon a user defined expenditure pattern (cost curve and histograms by project type or for a specific project)	**With Configuration**	Capital Planning	Aurigo will configure the City's implementation of Masterworks to support this requirement.
8.49	Functional	Project Life Cycle Management	The solution provides the capability to import a financial plan from an external management tool and utilize this plan to generate a forecast	**With Configuration**	Capital Planning	Aurigo will configure the City's implementation of Masterworks to support this requirement. A new interface will need to be configured to import the data from the external management tool.
8.50	Functional	Project Life Cycle Management	The solution provides the capability to set time periods for the forecast	**Out-of-the-Box**	Capital Planning	Masterworks provides the ability to set time periods for forecasts out-of-the-box.
8.51	Functional	Project Life Cycle Management	The solution will incorporate the financial impact of any pending or approved budget changes or any identified contractor change orders in the forecast.	**Out-of-the-Box**	Capital Planning	Masterworks will incorporate any pending or approved budget changes or change orders in the forecast out-of-the-box.
8.52	Functional	Project Life Cycle Management	The solution provides the capability to link related projects together to track and report the total cost and overall performance of a program of projects	**With Configuration**	Capital Project Management	Masterworks can be configured to link related projects together to track the performance of a program of projects.
8.53	Functional	Project Life Cycle Management	The solution provides a program or portfolio level snapshot capability which displays for the total program budget, actual expenditures, pre-encumbrances, encumbrances and revenues fiscal year to date with the ability to drill down to the individual project details within the program	**Out-of-the-Box**	Capital Planning	Masterworks supports snapshot capability with drill down out of the box.
8.54	Functional	Project Life Cycle Management	The solution allows City program managers to group projects in to one or many virtual portfolios and then to manage the portfolio based on a roll-up of individual project performance including monitoring track/reporting budget and schedule performance; portfolios can be defined various attributes such as project type, asset type, location, project manager, contractor, etc.	**Out-of-the-Box**	Capital Planning	Masterworks supports portfolios out of the box.
8.55	Functional	Project Life Cycle Management	The solution provides a dashboard function for monitoring program-level performance including a financial and schedule snapshot which integrates with Workday roll-up schedule and financial data for each project in a specific program or a user-defined portfolio of projects	**With Configuration**	Capital Planning	Aurigo will configure the City's implementation of Masterworks to support this requirement. A new interface will need to be configured to import the data from Workday
8.56	Functional	Project Life Cycle Management	The solution allows for drill-down from the portfolio snapshot to individual project financial and schedule information	**Out-of-the-Box**	Capital Planning	Masterworks supports drill down from portfolio snapshots out of the box.
8.57	Functional	Project Life Cycle Management	The solution supports monitoring track/reporting of budget and schedule performance against baselines for individual projects by project/phase/sub phase	**Out-of-the-Box**	Capital Planning	Masterworks supports monitoring/tracking/reporting of budget and schedule performance against baselines out of the box.
8.58	Functional	Project Life Cycle Management	The solution supports monitoring of City enterprise-wide level and program level project delivery performance measures including cost performance, schedule performance and earned value	**Out-of-the-Box**	Capital Planning	Masterworks supports monitoring peformance of the project delivery at various level. City-specific rollup reports will need to be configured.
8.59	Functional	Project Life Cycle Management	The solution will capture and store all purchase orders associated with a project, subproject, phase , specific WBS element or deliverable with the ability to drill down to the details of the order/requisition by an authorized user	**Out-of-the-Box**	Capital Project Management	Masterworks supports capturing relevant purchase orders and drilling down out of the box.
8.60	Functional	Project Life Cycle Management	The solution records commitment type based on a user-defined list of commitments along with a description	**With Configuration**	Capital Project Management	Masterworks will be configured to meet this requirement.
8.61	Functional	Project Life Cycle Management	The solution will display track/report open commitments within PMIS for a project, subproject, phase, WBS element or deliverable	**Out-of-the-Box**	Capital Project Management	Masterworks tracks and reports commitments out of the box
8.62	Functional	Project Life Cycle Management	The solution will maintain multiple types of project completions/status, including partialy closing projects. For example, project may be complete from a performance viewpoint but still open for accounting purposes	**With Configuration**	Capital Project Management	Masterworks will be configured to meet this requirement.
8.63	Functional	Project Life Cycle Management	The solution allows the user to specify and control the project closing process through user defined tables and security roles at the agency level	**With Configuration**	Capital Project Management	Masterworks will be configured to meet this requirement.

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8.64	Functional	Project Life Cycle Management	The solution provides the ability to define a turn-over checklist for each project within the system to monitor and report completion of activities on the turn-over list	With Configuration	Capital Project Management	Masterworks will be configured to meet this requirement.
8.65	Functional	Project Life Cycle Management	The solution provides a workflow for review and approval of one or more project closeout requests or project WBS structures, including subprojects, phases and tasks within an open project.	With Configuration	Capital Project Management	Masterworks will be configured to meet this requirement.
8.66	Functional	Project Life Cycle Management	The solution provides the capability to identify projects lacking financial activity for a user-defined period for possible closeout	With Configuration	Capital Project Management	Masterworks will be configured to meet this requirement.
8.67	Functional	Project Life Cycle Management	The solution allows a user with appropriate security to re-open a closed project and trigger interface with Workday financials to initiate re-opening of project in financial system	With Configuration	Capital Project Management	An interface with Workday will need to be developed using Masterworks API in order to accomplish this.
8.68	Functional	Project Life Cycle Management	The solution provides a workflow to support approval of re-opening a project	With Configuration	Capital Project Management	Masterworks has a powerful Workflow Builder that will be configured to meet this requirement.
8.69	Functional	Project Life Cycle Management	The solution provides a workflow based capability to request and enroll a proposed project, subproject or phase within an existing project	With Configuration	Capital Project Management	Masterworks will be configured to meet this requirement.
8.70	Functional	Project Life Cycle Management	The solution will capture required project information based on pre-defined project template if available	With Configuration	Capital Project Management	Masterworks provides the ability to create and maintain various project templates and new projects can be created using one of the templates. City-specific templates will need to be configured.
8.71	Functional	Project Life Cycle Management	The solution allows a user to copy from an existing project to start the initiation of a new project	Out-of-the-Box	Capital Project Management	Masterworks supports copying from an existing project to a new project out of the box.
8.72	Functional	Project Life Cycle Management	The solution will assign a unique project number to each project or subproject based on City-defined business rules.	With Configuration	Capital Project Management	City business rules will be defined during the requirements gathering phase of implementation.
8.73	Functional	Project Life Cycle Management	The solution will store a brief project description, proposed project scope with assets impacted, anticipated project schedule	Out-of-the-Box	Capital Project Management	Masterworks stores additional data about the project out of the box.
8.74	Functional	Project Life Cycle Management	The solution will integrate with ArcGIS system to populate project repository with information on assets proposed for replacement within the project	With Configuration	Capital Project Management	Masterworks integrates out-of-the-box with ESRI ArcGIS.
8.75	Functional	Project Life Cycle Management	The solution will store business units within City and external stakeholders required to participate in the proposed project	Out-of-the-Box	Capital Project Management	Masterworks supports business units and required stakeholders out-of-the-box.
8.76	Functional	Project Life Cycle Management	The solution will store types of resources required to execute the proposed project.	Out-of-the-Box	Capital Project Management	Masterworks stores types of resources out of the box.
8.77	Functional	Project Life Cycle Management	The solution will store a rough order of magnitude budget estimate.	Out-of-the-Box	Capital Project Management	Masterworks works with order-of-magnitude budget estimates out of the box.
8.78	Functional	Project Life Cycle Management	The solution will store a description of the anticipated business case associated with the proposed project.	Out-of-the-Box	Capital Project Management	Masterworks stores anticipated business cases out of the box.
8.79	Functional	Project Life Cycle Management	The solution provides a workflow driven review and approval process for a project request definable by project type.	With Configuration	Capital Project Management	Workflows can be configured to meet business requirements.
8.80	Functional	Project Life Cycle Management	The solution provides a project dashboard/snapshot capability which displays budget, revenue, actual expenditures, retainage, pre-encumbrances, encumbrances, pending change orders, available balance, estimate to complete, estimate at complete and the estimated budget variance	Out-of-the-Box	Capital Project Management	Masterworks supports project dashboards out of the box.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
8.81	Functional	Project Life Cycle Management	The solution provides a dashboard to support monitoring of project level performance measures in terms of budget variance, schedule variance and earned value (for projects where these calculations are performed)	With Configuration	Capital Project Management	Masterworks can be configured to support these particular performance measures and display them in a dashboard.
8.82	Functional	Project Life Cycle Management	The solution provides the project snapshot capability for the total project and for each budgeted WBS level within the project	Out-of-the-Box	Capital Project Management	Masterworks support project snapshots at the stated levels out of the box.
8.83	Functional	Project Life Cycle Management	The solution provides the project snapshot capability for project life to date, current fiscal year and prior fiscal year	Out-of-the-Box	Capital Project Management	Masterworks provides project snapshot capabilities out of the box.
8.84	Functional	Project Life Cycle Management	The solution provides the designated project manager or another authorized user the ability to enter and update the estimate to complete for the project life to date and the current fiscal year at each budgeted WBS level to support forecasting and variance calculations	Out-of-the-Box	Capital Project Management	Masterworks provides project estimation and forecasting capabilities out of the box.
8.85	Functional	Project Life Cycle Management	The solution supports the tracking and reporting of revenues, actual expenditures, pre-encumbrances and encumbrances against life-to-date and fiscal year budget by: Project/Phase or any lower level WBS structure within the Project, Department, other City business unit, Program, Asset Class or Type, Location, Political Subdivision, all chart of account elements, expenditure object, fund or source of revenue	With Configuration	Capital Project Management	Masterworks will be configured to meet this requirement.
8.86	Functional	Project Life Cycle Management	The solution supports the tracking and reporting of revenues, actual expenditures, pre-encumbrances and encumbrances against total project budget or fiscal year project budget at the lowest WBS level budgeted or any roll-up from the lowest level budgeted	Out-of-the-Box	Capital Project Management	Masterworks supports this functionality out of the box.
8.87	Functional	Project Life Cycle Management	The solution allows an authorized user to custom set-up alerts against various dates and budget amounts within the system. Examples include a milestone date which is X days behind schedule, a project which is within X% of total budget or fiscal year budget, a contractor request for information is which is X days overdue in being responded to a submittal which is X day overdue, etc.	With Configuration	Capital Project Management	Workflows can be configured to alert stakeholders when milestone dates are missed and/or overdue.
8.88	Functional	Project Life Cycle Management	The solution supports calculation of performance metrics for some but not all projects as defined by project type or at the individual project level	With Configuration	Capital Project Management	Masterworks will be configured to support calculation of performance metrics defined by project type or at the individual project level.
8.89	Functional	Project Life Cycle Management	The solution generates and reports on earned value (EV) calculation, cost variances, schedule variance, cost performance indexes, schedule performance indexes	With Configuration	Capital Project Management	Masterworks will be configured to generate reports on the mentioned fields or calculated fields.
8.90	Functional	Project Life Cycle Management	The solution supports roll-up of project performance metrics by program level and for entire portfolio	With Configuration	Capital Project Management	Additional reports need to be configured to roll-up project performance metrics by program and portfolio level
8.91	Functional	Project Life Cycle Management	The system will generate meeting minutes	Out-of-the-Box	Contract Management	Masterworks generates meeting minutes out of the box.
8.92	Functional	Project Life Cycle Management	The system will allow inspectors to upload photos & videos from construction inspections	Out-of-the-Box	Contract Management	Photos can be uploaded directly from the field using the Masterworks Mobile client
8.93	Functional	Project Life Cycle Management	The solution will allow tracking of permits- applied for, obtained inspections, closeout- with pdfs of permits and related documents.	With Configuration	Permitting	Masterworks will be configured to allow tracking of permits in different stages with PDFs of permits and related documents.
8.94	Functional	Project Life Cycle Management	The solution will allow tracking of utility connections- applied for, completed inspection, fees - with pdfs of permits and related documents.	With Configuration	Permitting	Masterworks will be configured to allow tracking of utility connections in different stages and their associated fees with PDFs of permits and related documents.
9	Functional	Project Risk/Issue Management	Allow project team members to document and record project issues. Track the issue owner and provide notification and tracking of target resolution dates and reporting on issues which are overdue for resolution. Record potential project risks and the risk owners. Classify risks according to City business rules and document proposed risk management strategies.			
9.1	Functional	Project Risk/Issue Management	The solution provides a capability for a project manager or other authorized users to enter, update and track/report project Risk/Issues	Out-of-the-Box	Capital Project Management	Masterworks comes out-of-the-box with risk and issue registers with enhanced functionalities. Masterworks also comes with preconfigured workflows to track and close them
9.2	Functional	Project Risk/Issue Management	The solution provides a register for documenting identified project risks and issues	Out-of-the-Box	Capital Project Management	Masterworks comes out-of-the-box with risk and issue registers with enhanced functionalities. Masterworks also comes with preconfigured workflows to track and close them

Requirements

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
9.3	Functional	Project Risk/Issue Management	The solution tracks and reports the following fields with the ability to roll up/down the highest and lowest levels: Identification Date , Identified By, Impacted WBS elements (multiple), Description, Probability of occurrence, Impact to Project, Score (probability of occurrence x impact if it occurs, Classification based on user defined rules related to prioritization, strategy, details, Owner/responsible party, current status of risk/issue, Date item last updated, resolution description, resolution date	Out-of-the-Box	Capital Project Management	Masterworks comes out-of-the-box with risk and issue registers with enhanced functionalities. Masterworks also comes with preconfigured workflows to track and close them. Additional reports may need to be configured to address City's specific reporting needs
9.4	Functional	Project Risk/Issue Management	The solution will store an initial risk assessment for the delivery of the proposed project.	With Configuration	Capital Project Management	Forms, workflows, and reports can be configured to accomplish this requirement.
9.5	Functional	Project Risk/Issue Management	The solution will allow a user to document and search an issue related to an inquiry including issue description; team member identifying and recording issue; team member issue is assigned to; issue level based on user-defined rules for issue classification and escalation; target resolution date; issue status based on user defined rules; proposed issue resolution and actual resolution date	Out-of-the-Box	Capital Project Management	Masterworks comes out-of-the-box with risk and issue registers with enhanced functionalities. Masterworks also comes with preconfigured workflows to track and close them. Permissioned users will be able to search issues and risks. Issue register captures proposed as well as acutal resolutions.
9.6	Functional	Project Risk/Issue Management	The solution will allow a cost estimate for risk impact, that can be added into the EAC. Allowing users to have connection between risks and forecasts.	With Configuration	Capital Project Management	Masterworks will be configured to allow connections between risks and forecasts.
10	Functional	Scheduling	Support setup of multiple breakdown structures (organizational, work, etc.) and milestone measurements at the project and the program level. Integrate with budget and cost data. Maintain schedules within the PMIS solution and/or integrate with other industry leading scheduling tools including Microsoft Project and Oracle Primavera P6.			
10.1	Functional	Scheduling	The solution will allow for scenario planning for project funding to plan expenditure.	Out-of-the-Box	Capital Project Management	Masterworks allows for scenario planning out of the box.
10.2	Functional	Scheduling	The solution supports preparation of schedules for various types of projects including but not limited to all phases of construction projects (major and minor); systems planning projects; capital equipment replacement; maintenance projects; research projects; information technology projects, etc.	Out-of-the-Box	Capital Project Management	Masterworks supports preparation of schedules for various types of projects out-of-the-box.
10.3	Functional	Scheduling	The solution supports scheduling of projects primarily being performed by consultants or contractors where the third party is performing most of the work and City is resourcing the deliverable review steps track/reporting schedule milestones for vendor managed and performed steps	Out-of-the-Box	Capital Project Management	Masterworks supports scheduling projects primarily performed by consultants or contractors out-of-the-box.
10.4	Functional	Scheduling	The solution allows a user to develop a schedule from a template or by copying from an existing project	Out-of-the-Box	Capital Project Management	Masterworks allows the creation of schedules from a template or from copying from an existing project out of the box.
10.5	Functional	Scheduling	The solution allows project schedules to have varying levels of detail (for example less detail for out years of projects)	Out-of-the-Box	Capital Project Management	Masterworks allows users to vary the level of details in project schedules.
10.6	Functional	Scheduling	The solution provides user defined criteria for sorting, filtering, and grouping data in the PMIS.	Out-of-the-Box	Capital Project Management	Masterworks has a powerful sorting, filtering, and grouping feature.
10.7	Functional	Scheduling	The solution provides the ability to establish and maintain multiple baselines	Out-of-the-Box	Capital Project Management	Masterworks supports multiple baselines out of the box.
10.8	Functional	Scheduling	The solution allows for definition of critical path	Out-of-the-Box	Capital Project Management	Masterworks allows the definition of critical path out of the box.
10.9	Functional	Scheduling	The solution provides for both employees and staff augmentation resources to be included in the resource loading against a project schedule	Out-of-the-Box	Capital Project Management	Masterworks meets this requirement out of the box.
10.10	Functional	Scheduling	The solution supports cost loading of schedules	Out-of-the-Box	Capital Project Management	Masterworks supports cost loading of schedules out-of-the-box.
10.11	Functional	Scheduling	The solution supports reporting of variances against multiple baselines (start, finish, float, remaining duration, etc.)	With Configuration	Capital Project Management	Masterworks can be configured to support the reporting of variances against multiple baselines.
10.12	Functional	Scheduling	The solution supports generation of milestone reports (major and intermediate)	With Configuration	Capital Project Management	Masterworks can be configured to generate milestone reports.
10.13	Functional	Scheduling	The solution allows for drill down into the activities from high level WBS nodes	Out-of-the-Box	Capital Project Management	Masterworks supports drill down from WBS nodes out-of-the-box.

Requirements

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
10.14	Functional	Scheduling	The solution provides performance indicators at the project level and lower WBS levels	With Configuration	Capital Project Management	Masterworks can be configured to provide performance indicators at the project level and lower WBS levels.
10.15	Functional	Scheduling	The solution generates a portfolio summary schedule by phase	With Configuration	Capital Project Management	Masterworks supports summary of schedules at the portfolio level. Reports to address the City's specific needs will be configured.
10.16	Functional	Scheduling	The solution allows definition of various look ahead views	With Configuration	Capital Project Management	Masterworks can be configured to support various look-ahead views.
10.17	Functional	Scheduling	The solution supports generating schedule views based on one or more As-Of dates	Out-of-the-Box	Capital Project Management	Masterworks supports generating schedule views based on as-of dates out of the box.
10.18	Functional	Scheduling	The solution supports creation and assignment of custom codes at the project, activity and resource assignment levels	With Configuration	Capital Project Management	Masterworks can be configured to support creation and assignment of custom codes at the project, activity, and resource assignment levels.
10.19	Functional	Scheduling	The solution allows for assignment of canned or custom cost distribution curves to resource assignments	With Configuration	Capital Project Management	The City's instance of Masterworks will be configured to support this requirement.
10.20	Functional	Scheduling	The solution supports spreading budgeted and remaining costs over the activity a resource is assigned to	With Configuration	Capital Project Management	Masterworks can be configured to support spreading budgeted and remaining costs over the activity a resource is assigned to.
10.21	Functional	Scheduling	The solution supports exporting of schedule data to Excel, PDF, and back into the scheduling tools	Out-of-the-Box	Capital Project Management	Masterworks supports exporting a schedule to Excel, PDF, and scheduling tool formats out-of-the-box.
10.22	Functional	Scheduling	The solution allows an authorized user to adjust forecast manually at the resource assignment level	Out-of-the-Box	Capital Project Management	Masterworks allows authorized users to adjust forecasts manually at the resource assignment level out-of-the-box.
10.23	Functional	Scheduling	The solution provides for monthly, annual, and total forecasts by resource or resource type, from the lowest level to the highest, including up to the project and portfolio levels	With Configuration	Capital Project Management	Additional forecast reports will need to be configured to address this requirement
10.24	Functional	Scheduling	The solution will store actual costs and units by month and sum to annual amounts and total project amounts.	Out-of-the-Box	Capital Project Management	Masterworks stores actual costs and units by month and sum to annual amounts and total project amounts out of the box.
10.25	Functional	Scheduling	The solution will display incremental and cumulative actuals and forecasted costs and units by month	With Configuration	Capital Project Management	Masterworks will be configured to display incremental and cumulative actuals and forecasted costs and units by month.
10.26	Functional	Scheduling	The solution supports linking of items in the risk registry to associated activities in the schedule, and the ETC for monitoring and managing,	Out-of-the-Box	Capital Project Management	Masterwork supports linking of items in the risk registry out of the box.
10.27	Functional	Scheduling	The solution provides ability for a consultant/contractor to submit proposed schedule changes for City review which then creates a project issue item for review in a workflow. The solution shall process the schedule change and apply updates to the schedule if approved ; if the requested schedule change is not approved, the system shall record the reasons for non-approval and the workflowshall return the request to the consultant/contractor.	With Configuration	Capital Project Management	The City's instance of Masterworks will be configured to support this requirement.
10.28	Functional	Scheduling	The solution supports printing of schedules based on user-defined parameters	With Configuration	Capital Project Management	Masterworks will be configured to support printing of schedules based on user-defined parameters.
10.29	Functional	Scheduling	The solution allows the comparison of multiple project schedules.	Out-of-the-Box	Capital Project Management	Masterworks support the comparison of multiple project schedules out of the box.
10.30	Functional	Scheduling	The solution will allow a task of one project impact the schedule of a separate project.	With Configuration	Capital Project Management	Masterworks will be configured to allow the task of one project to impact the schedule of a separate project.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
10.31	Functional	Scheduling	The solution will apply different labor rates loaded and unloaded by fiscal year.	With Configuration	Capital Project Management	Masterworks will be configured to apply different labor rates loaded and unloaded by fiscal year.
10.32	Functional	Scheduling	The solution supports conduct of what-if scenarios for resource requirements and impacts by varying project start and/or finish dates	With Configuration	Capital Project Management	Masterworks will be configured to support the conducting of what-if scenarios as specified in this requirement.
11	**Functional**	**Workflow Management**	**Provide an infrastructure for the set-up, performance and monitoring of a defined sequence of tasks, arranged as a workflow application; a collaborative environment with deliverable reviews.**			
11.1	Functional	Workflow Management	The solution will match the City's workflow requirements in order to allow a better user experience across all departments and have all standard workflows automated.	With Configuration	Platform	Masterworks Workflow Designer will allow workflows to meet the business needs of the City.
11.2	Functional	Workflow Management	The solution will allow a collaborative environment so users can work on projects/ tasks together.	Out-of-the-Box	Platform	Masterworks allows multiple users to work on a project
11.3	Functional	Workflow Management	The solution enables electronic document flow over updated forms	Out-of-the-Box	Platform	Masterworks meets this requirement out-of-the-box
11.4	Functional	Workflow Management	The solution will provide users with an inbox within the system for workflow items, which can also send an email or calendar notification whenever a change is made, or when an approval/ rejection is made.	Out-of-the-Box	Platform	Workflow notifications can be configured via our Workflow Builder
11.5	Functional	Workflow Management	The solution will allow users to have workflow subprocesses for projects before they are approved projects.	Out-of-the-Box	Platform	Masterworks Workflow Engine allows subprocesses (child workflows) to be initiated and/or validated from any approval workflow
11.6	Functional	Workflow Management	The solution will allow the City PM or another authorized City user to change the narrative or disposition comments (for example to set it to close) to create a consolidated list of comments for submission to consultant/contractor.	Out-of-the-Box	Platform	Masterworks has role and user-based security that will allow a designated or permissioned user to change the narrative or disposition comments in order to create a consolidated list.
11.7	Functional	Workflow Management	The solution will allow a consultant/contractor to upload a revised deliverable reflecting updates based on reviewer comments.	With Configuration	Platform	Workflows can be configured to meet this requirement.
11.8	Functional	Workflow Management	The solution will monitor automatically, the progress of deliverable review against the defined review period in the project schedule and notify assigned parties when the review timeframe is about to expire and/or is overdue based on user-defined business rules.	With Configuration	Platform	Workflows can be configured to send notifications on time-based conditions.
11.9	Functional	Workflow Management	The solution supports workflow routing by: Project Type, Funding Source, Department or other Organization Unit, Project, Task Assignments	With Configuration	Platform	Workflows can be configured based upon different fields.
11.10	Functional	Workflow Management	The solution will be able to provide notifications via email to alert users of job completion status through a set of City defined statuses.	With Configuration	Platform	Workflows can be configured to send notifications when workflow state changes.
11.11	Functional	Workflow Management	The solution should have a project completion checklist/ workflow for project closeout.	With Configuration	Platform	Workflows can be configured for project closeout.
11.12	Functional	Workflow Management	The solution will have to require regulatory reviews as part of stage gate reviews, in order to ensure permitting and other approvals are completed properly.	With Configuration	Platform	Workflows can be configured to meet this requirement.
11.13	Functional	Workflow Management	The solution will allow for revision with comments on workflows.	With Configuration	Platform	Workflows can be configured to allow revisions based on comments.
11.14	Functional	Workflow Management	The solution will have a workflow for individuals requesting additional funding.	With Configuration	Platform	A workflow for this requirement can be configured.

Requirements

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11.15	Functional	Workflow Management	The solution will allow users to work on drafts and/or archive them so that not every change is considered final/can be referred back to; hypotheticals.	Out-of-the-Box	Platform	Masterworks allows draft functionality out-of-the-box so hypotheticals can be created for the City's purposes.
11.16	Functional	Workflow Management	The solution will allow users to link documents, including imaged documets with any transaction, record or workflows.	Out-of-the-Box	Platform	Users can attach documents at any stage of a workflow if the workflow is so configured.
11.17	Functional	Workflow Management	The solution will provide users the ability to view, manage, track and report the status of workflow items at any given time.	Out-of-the-Box	Platform	Reports can be configured by users to see the workflow status of items.
11.18	Functional	Workflow Management	The solution will provide users an option to opt in and out of email notifications with approval.	Future Release	Platform	Capability of users opting in and out of email notifications is expected to be released in Q3 2021. All product roadmap items are available for customers to implement upon release into Masterworks. The capability is provided as part of the MasterWorks license. Based upon the implementation level of effort (e.g., configuration, data migration, testing, training materials, etc.) of the item(s) there may be an associated implementation investment required. This is unknown until the product roadmap items have been developed and a scope is mutually identified and agreed upon. Please not that all product roadmap item delivery dates are subject to change and not guaranteed.
11.19	Functional	Workflow Management	The solution will allow a project manager to assign deliverable reviewers by document type.	With Configuration	Platform	Masterworks' Workflow functionality can be configured to allow a project manager to assign deliverable reviewers by document type.
11.20	Functional	Workflow Management	The solution will allow a consultant/contractor to record a response to each deliverable comment.	Out-of-the-Box	Platform	Workflows can be configured to allow users with certain roles to be notified when a workflow reaches a certain state and add comments if necessary.
11.21	Functional	Workflow Management	The solution will sort out transactions to a separate workgroup after a specific time of inaction.	Out-of-the-Box	Platform	Workflows can be configured with time to complete if a workflow action is not completed within the specified time frame, escalation will occur
11.22	Functional	Workflow Management	The solution will provide tools for modifying preconfigured workflows or developing new workflows.	Out-of-the-Box	Platform	Masterworks comes with a powerful Workflow Editor.
11.23	Functional	Workflow Management	The solution will allow workflow items to be 'pre-approved' by a user higher in the approval chain before it arrives in the inbox of the user who would usually be next in the workflow sequence.	With Configuration	Platform	Masterworks' Workflow functionality can be configured to allow this requirement.
11.24	Functional	Workflow Management	The solution will allow each workflow to have an all encompassing workflow 'master' who can approve transactions at any time whether in the normal workflow or not.	With Configuration	Platform	Workflows can be configured to have a 'master' user who can move items along the workflow despite not being a part of the regular workflow.
11.25	Functional	Workflow Management	The solution will allow notifications/alerts to be tied to any transaction based on user-defined criteria	With Configuration	Platform	Workflows can be configured to notify stakeholders or select users based on criteria set by the City.
11.26	Functional	Workflow Management	The solution will provide templates or shortcuts for recurring document entry or processing.	With Configuration	Platform	Masterworks allows templates for document entry or processing and can be configured to allow certain templates for certain recurring events.
11.27	Functional	Workflow Management	The solution will provide the capability to recognize and capture rejected (by-passed) transactions for review, correction and reprocessing.	Out-of-the-Box	Platform	Items in a workflow state such as "needs review" or "rejected" can be captured and reported on, then moved to a "corrected" or similar state in the workflow.
11.28	Functional	Workflow Management	The solution will provide bi-directional electronic routing of documents for approval or other tasks through workflow.	Out-of-the-Box	Platform	Workflows can be configured to flow bi-directionally depending on approval or rejection of the item in the workflow state.
11.29	Functional	Workflow Management	The solution will support routing of workflow to multiple destinations/viewers based on various user-defined criteria, and reverse any approvals, returning the workflow transaction to the originating user and any other users who had previously approved the transaction in the event that one or more reviewers disapproves a transaction.	Out-of-the-Box	Platform	Workflows are completely configurable based on business rules and can be routed as necessary based on approval/disapproval of transactions.
11.30	Functional	Workflow Management	The solution will support initiation of workflows from both online real-time and batch driven/initiated events based on user-defined business rules.	Out-of-the-Box	Platform	Workflows can be initiated from both manually-entered items and items batch imported from other sources based on business rules.
11.31	Functional	Workflow Management	The solution will allow a due date to be established for a document review based on user defined business rules by project type or set at the individual project level	Out-of-the-Box	Platform	Workflows can be configured to allow due dates based on business rules.
11.32	Functional	Workflow Management	The solution will support workflow routing by threshold amounts.	With Configuration	Platform	Workflows can be configured with business logic based on threshold amounts.
11.33	Functional	Workflow Management	The solution will allow project manager or other authorized user to re-assign deliverable reviews from one team member to another - all deliverables assigned to Person X reassigned to Person Y.	Out-of-the-Box	Platform	Masterworks will allow an authorized user to reassign all deliverables from one person to another.

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11.34	Functional	Workflow Management	The solution will generate a list of tasks that need to be re-assigned if a user leaves a project or is deactivated from the system.	Out-of-the-Box	Platform	Masterworks will generate a list of tasks that need to be reassigned if a user is no longer on the project for whatever reason.
11.35	Functional	Workflow Management	The solution will generate an email reminder and/or calendar reminder when a deliverable review assignment is coming due, approved or overdue based on user-defined business rules.	Out-of-the-Box	Platform	Workflows can generate time-based notifications with deliverables.
11.36	Functional	Workflow Management	The solution will allow a consultant/contractor to submit a deliverable online for review; the system shall allow an authorized consultant/contract user to establish a record of the deliverable in a deliverable log and upload the deliverable document itself for review.	Out-of-the-Box	Platform	Masterworks allows this functionality out of the box.
11.37	Functional	Workflow Management	The solution will support the utilization of the deliverable review process for all types of projects and the various deliverable types created on these projects.	With Configuration	Capital Project Management	Workflows can be configured for each deliverable according to the appropriate business rules for each deliverable.
11.38	Functional	Workflow Management	The solution will establish a disposition log for each deliverable under review.	Out-of-the-Box	Platform	Masterworks establishes a disposition log out of the box.
11.39	Functional	Workflow Management	The solution will support at least eight levels of approval in workflow.	Out-of-the-Box	Platform	Workflows can be configured to meet the business needs of the City.
11.40	Functional	Workflow Management	The solution will allow assigned reviewers to log comments on the deliverable.	Out-of-the-Box	Platform	Users will be able to log comments at each transaction along the workflow.
11.41	Functional	Workflow Management	The solution will generate a notification/alert to the consultant/contractor submitting document via email when a reviewer has completed their review.	With Configuration	Platform	Email notifications can be configured to document stakeholders at any and all stages of the workflow.
11.42	Functional	Workflow Management	The solution will allow a consultant/contractor to view and be able to respond to each comment as it is added to the disposition log.	With Configuration	Platform	Masterworks allows consultant/contractors to respond to comments in the disposition log.
11.43	Functional	Workflow Management	The solution provides capability to filter, sort and select for viewing comments by various criteria including but not limited to element type, comment type, page number, reviewer making the comment, etc..	Out-of-the-Box	Platform	Masterworks provides the capability to filter/sort/select comments out of the box.
11.44	Functional	Workflow Management	The solution will allow a change made on the redline document to automatically populate an entry on the disposition log with document, page, nature of change and user making comment.	With Configuration	Platform	Masterworks can be configured to automatically populate an entry on the disposition log based on changes made on the redline document.
11.45	Functional	Workflow Management	The solution will allow City Project Manager or other authorized City user to have the option to control publication of deliverable comments back to external party.	With Configuration	Platform	Masterworks can be configured to allow an authorized City user to have the option to control the publication of deliverable comments back to the external party.
11.46	Functional	Workflow Management	The solution will allow authorized users the ability to upload and download various data from spreadsheets, word processors and databases.	With Configuration	Platform	Masterworks will be configured to allow authorized users the ability to upload and download data from spreadsheets, documents, and databases.
11.47	Functional	Workflow Management	The solution will have ball in court alerting in order to track and report status and keep actions moving forward.	Out-of-the-Box	Platform	Masterworks has My Tasks out of the box for ball-in-court notifications. Other notifications (i.e. email) can be configured in the respective workflow.
11.48	Functional	Workflow Management	The solution will allow approval and rejection by email.	Out-of-the-Box	Platform	Masterworks workflow engine configured to email the users for all workflow actions, including approve and rejection. Permissioned users will be able to access the record via the link in the email notification and take perform requried workflow action
11.49	Functional	Workflow Management	The solution will allow generation of customizable RFI & submittal logs.	With Configuration	Platform	Masterworks can be configured to allow generation of customizable RFI and submittal logs.
12	Functional	System Job Scheduling	Describes the functionality of the system in regards to controlling unattended background program execution of jobs.		Platform	
12.1	Functional	System Job Scheduling	The solution provides the ability to design/manage a batch job stream with multiple dependencies like job start time, priority of the batch process, and transaction type.	Out-of-the-Box	Platform	Masterworks supports running batch jobs on the server via Masterworks APIs. Jobs can be scheduled and assigned priority. Aurigo has deployed such batch job to exchange data with other system. E.g. Some of our customers are running a daily jobs to bring the project expenses from their financial system to Masterworks

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12.2	Functional	System Job Scheduling	The solution provides the capability to utilize job scheduling tools to automate administrative tasks such as database backups or regular report production	**With Configuration**	Platform	Masterworks will be configured to provide the capability to use job scheduling tools to automate administrative tasks.
12.3	Functional	System Job Scheduling	The solution provides ability to establish job dependencies and control subsequent job execution based on user-defined condition codes	**Out-of-the-Box**	Platform	Masterworks supports establishing dependencies and sequences for jobs using the API capabilities of Masterworks platform.
12.4	Functional	System Job Scheduling	The solution allows authorized user to modify job status (e.g., changing status of a job to "Complete", etc.)	**With Configuration**	Platform	Masterworks will be configured to allow an authorized user to modify a job status.
12.5	Functional	System Job Scheduling	The solution produces a log of job results and appends to this log if the job re-runs	**Out-of-the-Box**	Platform	Masterworks supports logging all job runs and results in the database, including the success and failure of every transaction . Permissioned users will be able to retrieve the results from Masterworks. Masterworks can be configured to re-run the job ased on a predefined conditions
12.6	Functional	System Job Scheduling	The solution provides the capability to establish and maintain user-defined calendars of scheduled jobs	**Out-of-the-Box**	Platform	Masterworks supports running batch jobs on the server via Masterworks APIs. Jobs can be scheduled and assigned priority. Masterworks can also be configured to initiate job/jobs manually from Masterworks by permissioned users
12.7	Functional	System Job Scheduling	The solution allows scheduling of report and query jobs	**With Configuration**	Platform	Masterworks will be configured to allow scheduling of report and query jobs.
13	**Functional**	**Data Repository**	**This addresses functional requirements that describe information/structure/attribute requirements.**			
13.1	Functional	Data Repository	The solution provides a repository function for storing various attributes about proposed/ candidate projects, active projects and completed projects	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
13.2	Functional	Data Repository	The solution provides the ability to search for a project by unique system project number or one or more applicable alternate project numbers	**Out-of-the-Box**	Platform	Aurigo Masterworks comes with an Enterprise Search to search for projects by various attributes. Additionally users can filter the project list page based on various attributes and can save a personal filter for future use.
13.3	Functional	Data Repository	The solution will track and report status of the entire project and the various work break down levels within the project	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
13.4	Functional	Data Repository	The solution will keep record of the department who is the owner of the project	**With Configuration**	Capital Project Management	Project data can be configured to track the department that owns the project.
13.5	Functional	Data Repository	The solution will keep record of department responsible for managing the project (may be different from the owning department)	**With Configuration**	Capital Project Management	Project data can be configured to track the department who is managing the project.
13.6	Functional	Data Repository	The solution provides an automated cross reference between the unique system project number and any alternate project numbers	**With Configuration**	Capital Project Management	Multiple data points can be stored about projects, including system-generated project numbers and alternate project numbers.
13.7	Functional	Data Repository	The solution provides capability to develop project templates by project type which group user-defined fields specific to a project type	**With Configuration**	Capital Project Management	Masterworks supports creating and maintaining project templates. Project templates specific to the City will be configured.
13.8	Functional	Data Repository	The solution stores location of project specific documentation (plans, notes, work papers, etc.) and provide ability to link to these documents through integration with City's document management system	**With Configuration**	Capital Project Management	An interface with the City's document management system will be developed using Masterworks' API.
13.9	Functional	Data Repository	The solution supports attaching CAD files in various formats to project records including AutoCAD and Micro Station files	**Out-of-the-Box**	Capital Project Management	Files of any type can be attached to project records.
13.10	Functional	Data Repository	The solution supports attaching Microsoft Office files including Word, Excel, PowerPoint, Microsoft Access databases, Visio files, PDF files, Primavera P6, Microsoft Project, sound, and video files, vector and raster files	**Out-of-the-Box**	Capital Project Management	Files of any type can be attached to project records.
13.11	Functional	Data Repository	The solution supports attaching design files and emails to project records	**Out-of-the-Box**	Capital Project Management	Files of any type can be attached to project records.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
13.12	Functional	Data Repository	The solution stores one or more URL links to project related information	**With Configuration**	Capital Project Management	Project information forms can be configured to accept any number of links.
13.13	Functional	Data Repository	The solution provides the ability for a user to select an area of interest and show all projects meeting various user-defined selection criteria (by program, by asset class or type, by project type, by funding source, active projects, recently completed projects, etc.) within the selected area	**Out-of-the-Box**	Capital Project Management	Masterworks enterprise map viewer allow users to view projects on the map for a selected area. Additional attributes to further filter the projects will need to be configured.
13.14	Functional	Data Repository	The solution provides the ability to select one or more projects from the map and drill down to see the detailed information about the project within PMIS	**Out-of-the-Box**	Capital Project Management	Masterworks enterprise map viewer supports this requirement out-of-the-box
13.15	Functional	Data Repository	The solution integrates with the City ArcGIS environment in order to display proposed, active and completed projects within the City ArcGIS environment through use of a projects data layer	**Out-of-the-Box**	Capital Project Management	Masterworks integrates out-of-the-box with ESRI ArcGIS.
14	**Non-Functional**	**Performance Efficiency**	**This characteristic represents the performance relative to the amount of resources used under stated conditions. This characteristic is composed of the following sub-characteristics:** **Time behavior: Degree to which the response and processing times and throughput rates of a product or system, when performing its functions, meet requirements.** **Resource utilization: Degree to which the amounts and types of resources used by a product or system, when performing its functions, meet requirements.** **Capacity: Degree to which the maximum limits of a product or system parameter meet requirements.**			
14.1	Non-Functional	Number of Users	The system will allow the total number of users to be unlimited.	**Out-of-the-Box**	Platform	There are no restrictions with the number of users in the system. Masterworks supports unlimited users. The subscription plan the customer buys will determine the number of users legally allowed in the system.
14.2	Non-Functional	System Performance	The solution is architected to support implementation of application controlled parallel batch processing	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
14.3	Non-Functional	System Performance	The solution provides support for user session isolation such that a failure in one session has no impact on other user sessions	**Out-of-the-Box**	Platform	User sessions are isolated.
14.4	Non-Functional	System Performance	The solution provides a solution which is architected to support access to data for pre-defined reports, ad-hoc queries and business intelligence without impacting online transaction performance	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
14.5	Non-Functional	System Performance	The solution supports utilization of industry leading third party performance monitoring tools for real-time monitoring by administrators of response time, system use and capacity, concurrent users, and system errors.	**Out-of-the-Box**	Platform	Masterworks is monitored by our Customer Success and Cloud Ops teams using New Relic software.
14.6	Non-Functional	System Performance	The solution provides ability to integrate with DBMS tools which allow the database administrator or authorized user to tune the system to improve performance.	**Out-of-the-Box**	Platform	Aurigo uses modern tools to manage the database and ensure that it is performing at maximum efficiency.
14.7	Non-Functional	System Performance	The solution allows user initiated reports and queries to be limited by elapsed time and the number of records retrieved.	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
14.8	Non-Functional	System Performance	The solution allows limits to be defined for other types of query functions such as table joins, multiple sorts, etc..	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
14.9	Non-Functional	System Performance	The solution delivers content via the current and most recent previous supported versions of Mozilla Firefox, Chrome, Safari, Internet Explorer, Opera, etc.	**Out-of-the-Box**	Platform	Aurigo Masterworks supports the current and most recent previous supported version of Apple Safari, Mozilla Firefox, Microsoft Edge, and Google Chrome. Microsoft Internet Explorer versions 10 and above are also supported.
14.10	Non-Functional	System Performance	The solution ensures that content can be delivered via a web browser without requiring browser security settings to be lowered beyond typical industry standards in order for system functionality to perform properly.	**Out-of-the-Box**	Platform	There are no additional requirements for the browsers listed in the previous requirement (14.9) to access Masterworks
14.11	Non-Functional	System Performance	The solution delivers content via browser without Active X controls or plug-in support (Java Runtime Environment, Adobe Flash, etc.).	**Out-of-the-Box**	Platform	There are no plugins or third-party extensions necessary to access Masterworks.
14.12	Non-Functional	System Performance	The solution delivers content via the web browser capability available on the IOS and Android.	**Out-of-the-Box**	Platform	Masterworks is accessible via mobile versions of Apple Safari, Mozilla Firefox, and Google Chrome. Masterworks also comes a native mobile client to perform field related activities. Masterworks mobile client works offline and is supported on IOS and Android tablets.
14.13	Non-Functional	System Performance	The solution ensures any software which is required to be on a desktop can be deployed through industry standard Office Automation push technology.	**Out-of-the-Box**	Platform	Aurigo does not need any software installed on a desktop to access Masterworks.
14.14	Non-Functional	System Performance	The solution provides a solution which is architected to support best practice load balancing approaches	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
14.15	Non-Functional	System Performance	The solution implements a system design which is architected so as to allow system availability on a continuous basis.	Out-of-the-Box	Platform	Masterworks is architected in such a way that the solution is constantly running in two datacenters, thus ensuring continuous availability except for periods of agreed downtime or maintenance.
15	**Non-Functional**	**Usability**	Degree to which a product or system can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use. This characteristic is composed of the following sub-characteristics: Appropriateness recognizability: Degree to which users can recognize whether a product or system is appropriate for their needs. Learnability: Degree to which a product or system can be used by specified users to achieve specified goals of learning to use the product or system with effectiveness, efficiency, freedom from risk and satisfaction in a specified context of use. Operability: Degree to which a product or system has attributes that make it easy to operate and control. User error protection: Degree to which a system protects users against making errors. User interface aesthetics: Degree to which a user interface enables pleasing and satisfying interaction for the user. Accessibility: Degree to which a product or system can be used by people with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use.			
15.1	Non-Functional	Web UX/UI Standards	The solution will allow users to have multiple screens open during a single session.	Out-of-the-Box	Platform	Users can have multiple browser instances (tabs or windows) open to Masterworks at once.
15.2	Non-Functional	Usability	The solution will provide the ability to define/set-up batch checkpoints.	With Configuration	Platform	Masterworks will be configured to provide this ability.
15.3	Non-Functional	Usability	The solution will update all related modules and tables with a single entry (e.g., a change to a project attribute or project status information is made only once but takes effect throughout the system).	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
15.4	Non-Functional	Usability	The solution will provide a sequential unique identifier for a batch.	With Configuration	Platform	Masterworks will be configured to provide sequential unique identifiers for batches.
15.5	Non-Functional	Usability	The solution will support the ability to add printable and non-printable notes to any field or document.	Out-of-the-Box	Platform	Masterworks form builder supports notes fields to the form. Permissioned users can user the form builder to add requird notes fields to a form. Using Masterworks report builder permission users can build reports with logic to print only the required notes field
15.6	Non-Functional	Usability	The solution will provide the capability to set-up standard document and letter templates at either the City-wide or department/business unit level for use throughout the PMIS solution with names, titles, labels, pre-defined backgrounds, etc.	Out-of-the-Box	Platform	Masterworks allows templates for documents and letters using MS Word and the Mail Merge feature.
15.7	Non-Functional	Usability	The solution will provide messaging capability to allow the system administrator or other authorized users to broadcast messages to all system users.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
15.8	Non-Functional	Usability	The solution will provide the capability for the application administrator or other authorized users to manage and maintain system tables.	Out-of-the-Box	Platform	Users with the System Administrator role will be able to manage and maintain system tables via Masterworks form manager
15.9	Non-Functional	Usability	The solution will provide the capability for configurable queue management for broadcast emails.	Out-of-the-Box	Platform	Masterworks can be configured to send emails to groups defined in email servers. The queue management is handled by the email server.
15.10	Non-Functional	Usability	The solution will provide the capability to configure/edit text of system email messages.	Out-of-the-Box	Platform	Masterworks provides the ability to define templates for email bodies. Authorized users will be able to configure these templates and edit them as needed.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
15.11	Non-Functional	American Disabilities Act (ADA)	The purpose of the American Disabilities Act is to make sure that people with disabilities have the same rights and opportunities as everyone else. The ADA gives civil rights protections to individuals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications. The ADA is divided into five titles (or sections) that relate to different areas of public life. For more information please see below. https://adata.org/learn-about-ada Demonstration of Compliance: The DOJ is currently developing regulations to provide specific guidance, but organizations are encourage to use the WCAG 2.0 level AA guidelines as a guide on how to become accessible.	**Out-of-the-Box**	Platform	Masterworks is accessible to users with disabilities, including those who use magnification and screen readers.
16	**Non-Functional**	**Reliability**	**Degree to which a system, product or component performs specified functions under specified conditions for a specified period of time.**			
16.1	Non-Functional	Recovery Point Objective (RPO)	The solution will provide the capability to perform full backups, incremental backups and recovery capabilities for data and application components. Back-ups shall not require maintenance windows; backups shall be able to function in the background of a production SOA or clustered environment and not impact system availability.	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
16.2	Non-Functional	Recovery Point Objective (RPO)	The solution will allow for maintenance of a current back-up of the PMIS solution including application data and system tables and configurations to be utilized for restoration in the event of catastrophic failure and loss of data	**Out-of-the-Box**	Platform	Aurigo has a comprehensive diaster recovery/business continuity plan in place that includes maintaining an always-up-to-date backup of Masterworks implementations, configurations, and data.
17	**Non-Functional**	**Security**	**Degree to which a product or system protects information and data so that persons or other products or systems have the degree of data access appropriate to their types and levels of authorization. This characteristic is composed of the following sub-characteristics:** **Confidentiality: Degree to which a product or system ensures that data are accessible only to those authorized to have access.** **Integrity. Degree to which a system, product or component prevents unauthorized access to, or modification of, computer programs or data.** **Non-repudiation: Degree to which actions or events can be proven to have taken place, so that the events or actions cannot be repudiated later.** **Accountability: Degree to which the actions of an entity can be traced uniquely to the entity.** **Authenticity: Degree to which the identity of a subject or resource can be proved to be the one claimed.**			
17.1	Non-Functional	Identity Management	The solution will use advanced security options of operating system, network, database, desktop, storage and security server (examples include: multi-factor identification, User-ID/Password Length, Log-in Credential case sensitivity and other advanced security protocols for operating system, server, database, network, storage, browser)	**Out-of-the-Box**	Platform	Aurigo leverages multiple security features on the systems that host the Masterworks implementations. These include VPN-only access, expiring passwords, generated secure passwords, and restrictions by role.
17.2	Non-Functional	Access Management	The solution will allow access into the PMIS with single-sign on or through City VPN.	**Out-of-the-Box**	Platform	Masterworks supports single-sign on
17.3	Non-Functional	Access Management	They solution will allow the ability for a system admin or an authorized user, to define users to the system including the following information: user's first and last name, agency; agency unit, email address and effective date of user access to the system.	**Out-of-the-Box**	Platform	System Administrators will be able to manage users, their information, and their roles.
17.4	Non-Functional	Access Management	The solution will allow the system admin or an authorized user to grant user groups access to each system function including with the type of access allowed along with their effect and start and end date for the access.	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
17.5	Non-Functional	Access Management	The solution will allow a system admin or authorized user to generate a random temporary password through the system	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box
17.6	Non-Functional	Access Management	The solution will allow the system administrator to grant individual users access to a system function that their user group is not entitled to access and to establish the type of access to be allowed (add, change, inquire, retire, delete) and the effective start and end date for this access; provide an audit trail and exception report for any additional security access granted	**Out-of-the-Box**	Platform	Masterworks supports this requirement out-of-the-box

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17.7	Non-Functional	Access Management	The solution will suspend access for a period of time determined by the system administrator, following the City's number of invalid sign-on attempts	Out-of-the-Box	Platform	The number of invalid sign-on attempts can be determined by the City.
17.8	Non-Functional	Access Management	The solution will log incidents of invalid password entries, exceeding the maximum allowable number of attempts along with the attempted logins, type of violation (invalid user id, invalid password or invalid id and password) and date and time of the violation; place the incident log in the audit trail log.	Out-of-the-Box	Platform	Masterworks maintains an audit log.
17.9	Non-Functional	Access Management	The solution will log incidents of security/access violations within the system capturing user identification, system function for which unauthorized access was attempted and date and time of security violation.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.10	Non-Functional	Access Management	The solution will allow the system administrator or authorized users to generate user friendly report of invalid password attempts or security/access violations within the system.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.11	Non-Functional	Access Management	The solution will provide deactivation of a user account based on no use, over a user-defined period of time; system default will be 60 days and any user-defined period for an individual function except for self-service functions must not exceed this threshold	With Configuration	Platform	Masterworks will be configured to provide deactivation of user accounts based on the criteria defined.
17.12	Non-Functional	Access Management	The solution will allow system administrator or other authorized user to define the period of time a user is allowed to be inactive while logged on.	With Configuration	Platform	The amount of time a user is allowed to be inactive can be determined by the City and configured by Aurigo.
17.13	Non-Functional	Access Management	The solution will disconnect or log out a user session when it exceeds the admin defined period of inactivity configured in the system.	Out-of-the-Box	Platform	Masterworks will log out a user after a configured period of inactivity.
17.14	Non-Functional	Access Management	The solution will warn user that they will be disconnected before they are automatically logged off.	Out-of-the-Box	Platform	Before a user is logged out due to inactivity, Masterworks will display a dialog box informing the user they are about to be logged out.
17.15	Non-Functional	Access Management	The solution will support use of electronic signatures to record and route items in the PMIS through authentication of the user to the system by entry of valid user credentials at the time the user signs on to the system.	Out-of-the-Box	Platform	Supported through built-in DocuSign integration
17.16	Non-Functional	Access Management	The solution will allow self-reset passwords.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.17	Non-Functional	Role-Based Security	The solution will allow the system admin or other authorized user to define user access groups based on job responsibilities for separation of duties; this will include a group name, code and a description of the role and capabilities of the named group.	With Configuration	Platform	Masterworks will be configured to allow authorized users to define user access groups to address the City's business needs.
17.18	Non-Functional	Role-Based Security	The solution will restrict the display of systems functions upon signing into the PMIS to only screens that display a users security rights.	Out-of-the-Box	Platform	Masterworks uses comprehensive role-based security features, including not displaying functionality that cannot be accessed by a user.
17.19	Non-Functional	Role-Based Security	The solution will provide a workflow to allow authorized City managers to request access for employees to specific system functions and obtain management approval based on enterprise and business unit rules for this access; based on agency management approvals, request will then be forwarded to system administrator or authorized user for review and potential action	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.20	Non-Functional	Role-Based Security	The solution will administer role-based security and privileges by position and department/business unit.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.21	Non-Functional	Role-Based Security	The solution will provide granular management and administrator control over transactions, forms access, field updates, row locking, interfacing events, data queries and other types of authorizations using role-based security.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.22	Non-Functional	Role-Based Security	The solution with integrate with the PMIS' automated workflow components including establishing access and updated privileges for work lists, page access related to the selection of word list items, and definition of which users are included in particular workgroups.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.23	Non-Functional	Role-Based Security	The solution will allow only specific user(s) with proper privileges to decide workflow destinations.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.24	Non-Functional	Role-Based Security	The solution will allow admin to delegate others users the privilege to have temporary access to approval delegations, and other security privileges during PTO or vacation.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.25	Non-Functional	Role-Based Security	The solution will provide the capability to download all documents stored within the PMIS system if it allowed in their role-based security.	Out-of-the-Box	Platform	Masterworks provides the ability to specify role permission for each document folders in system. Permissioned users can download the required documents. Note: Additional customization is needed if the City needs the capability to download all documents in the system with a single click.
17.26	Non-Functional	Audit Logging	The solution will allow read-only permissions to project files for audits.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box

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17.27	Non-Functional	Audit Logging	The solution will maintain an audit trail of all user actions that update and access the database including at a minimum user id, action performed, and time/date stamps; includes online updates, batch, web services or self-service functions.	Out-of-the-Box	Platform	Masterworks maintains an audit log of user activity.
17.28	Non-Functional	Audit Logging	The solution will monitor the audit trail logs via an auto alarm based on user-defined business rules.	With Configuration	Platform	Masterworks support Audit trails logs. Dashboards and email notifictions can be configured based on the business rules
17.29	Non-Functional	Audit Logging	The solution will send notifications/alerts via email or text to identified users based on user-defined auto alarms.	With Configuration	Platform	Masterworks will be configured to send notifications via email or text based on user-defined auto alarms.
17.30	Non-Functional	Audit Logging	The solution will maintain security logs and audit trails distinctly for each concurrent user session.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.31	Non-Functional	Audit Logging	The solution will allow the system administrator to define inquiry functions within the system to be audited.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.32	Non-Functional	Audit Logging	The solution will provide a standardized audit block for each table in the system along with when it was last changed.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.33	Non-Functional	Audit Logging	The solution will have a timestamp of when a document was created and entered into the PMIS.	Out-of-the-Box	Platform	Masterworks' database is architected in such a way that whenever any object is created, including document uploads, the creation timestamp is automatically recorded.
17.34	Non-Functional	Audit Logging	The solution will store the user ID of the system user who last changed a row in a table.	Out-of-the-Box	Platform	Masterworks keeps a comprehensive audit log of transactions.
17.35	Non-Functional	Audit Logging	The solution will store all iterations of any information changed and saved.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.36	Non-Functional	Audit Logging	The solution will store value for any information that is deleted, previous to its deletion.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.37	Non-Functional	Audit Logging	The solution will store audit trail changes to the PMIS software application configuration and components including user initiating the change, the type of change and the date/time stamp.	Out-of-the-Box	Platform	Masterworks maintains an audit log of user activity.
17.38	Non-Functional	Audit Logging	The solution will support encryption or masking of any fields with access restricted to authorized users by agency and role and responsibility.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.39	Non-Functional	Audit Logging	The solution will provide an audit trail for each interface program which shows: user, agency user or program initiating an interface, the date and time of interface execution and the interface completion status.	Out-of-the-Box	Platform	When Aurigo builds its API-based interfaces for the City, they will include a logging capability detailing the results of the interface.
17.40	Non-Functional	Audit Logging	The solution will provide the capability to manage the retention and archiving of audit trails based on user-defined business rules.	With Configuration	Platform	Masterworks will be configured to provide the capability to manage the retention and archiving of audit trails.
17.41	Non-Functional	Audit Logging	The solution will support mass changes to defined groups of transactions or data with appropriate audit trail.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
17.42	Non-Functional	Audit Logging	The solution will provide ability for an authorized user to edit a transaction in error and resubmit it, with the system producing a daily report of error transactions by system function.	With Configuration	Platform	Forms and Workflows can be configured with the City's desired business rules to allow authorized users to edit transactions that are flagged as errors.
18	Non-Functional	Data Retention	Encompasses the retention of digital and hardcopy artifacts and media. This would include the policies that define how much historical information will be available in the system and in what conditions this information will be archived/removed.			
18.1	Non-Functional	Data Retention	The solution will store annual budgets, capital improvement projects budgets, studies, plans and reports permanently.	Out-of-the-Box	Capital Project Management	Masterworks supports this requirement out-of-the-box
18.2	Non-Functional	Data Retention	The solution will store financial guarantees 1 year after expiration with a completion, completion of guaranteed action or release.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.3	Non-Functional	Data Retention	The solution will store or delete non operational & maintenance projects (O&M), project bonds, O&M projects, project records including Information Tech and communications systems, development case files for a duration following the City guidelines (from immediately - 10 years) with the ability to override based on user-defined exceptions.	With Configuration	Platform	Masterworks will be configured to meet this requirement.
18.4	Non-Functional	Data Retention	The solution will follow an archival/restoration process defined by the City.	With Configuration	Platform	Aurigo will work with the City to understand the archival/restoration process needed.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
18.5	Non-Functional	Data Retention	The solution will provide authorized user with ability to mark and unmark records for deletion but do not remove them from the database until archived..	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.6	Non-Functional	Data Retention	The solution will ensure any customized help files carry forward automatically during upgrades.	Out-of-the-Box	Platform	Aurigo will ensure that any customized help files will carry forward as part of the upgrade process.
18.7	Non-Functional	Data Retention	The solution will allow modified changes to be re-applied after upgrades/ releases.	Out-of-the-Box	Platform	Aurigo's upgrade and release process ensures that modified changes persist throughout the process.
18.8	Non-Functional	Data Retention	The solution will automatically include user-defined documentation automatically during an upgrade/update process.	Out-of-the-Box	Platform	Aurigo's upgrade and release process ensures that modified changes persist throughout the process.
18.9	Non-Functional	Data Retention	The solution will provide a suspense file for rejected batch transactions, with an authorized user able to delete rejected records from the suspense file.	With Configuration	Platform	The City's instance of Masterworks will be configured to support this requirement.
18.10	Non-Functional	Data Retention	The solution will follow an archival process that is automated for inactive reference data; reference data must show as being unused across all tables in the system before archival.	With Configuration	Platform	The City's instance of Masterworks will be configured to support this requirement.
18.11	Non-Functional	Data Integrity	The solution maintains referential integrity of data through either database referential integrity declarations or application code.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.12	Non-Functional	Data Integrity	The solution utilizes high availability and advanced security features of the database to the extent appropriate	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.13	Non-Functional	Data Integrity	The solution supports data replication, load balancing and synchronization across multiple physical or virtual servers	Out-of-the-Box	Platform	Masterworks is architected to support data replication, load balancing, and synchronization across multiple virtual servers.
18.14	Non-Functional	Data Integrity	The solution exploits DBMS database features and database and application design to reduce contention between updates by online users and those of concurrently running batch processes.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.15	Non-Functional	Data Integrity	The solution ensures that on-line search queries will not be delayed by waiting for locks to be released.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.16	Non-Functional	Data Integrity	The solution ensures in a two user scenario when both users retrieve data and attempt to update data one after another, to avoid loss of updates and/or to avoid overwriting of each other's data the system must notify the second user as the data is being updated by the first user (provide selection of "first in wins", last, etc.).	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.17	Non-Functional	Data Integrity	The solution supports automatic "clean up" of partial database updates after suspended network sessions or after other failures	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.18	Non-Functional	Data Integrity	The solution allows database structure changes to be made with a minimal impact to the system availability	Out-of-the-Box	Platform	The Form Builder capability of Masterworks provides for database structure changes to be made on-the-fly, without any impact to system availability.
18.19	Non-Functional	Data Integrity	The solution provides automatic replication of table updates to multiple databases; provide replication of tables across application instances (test, training, dev, prod)	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.20	Non-Functional	Data Integrity	The solution supports configuration of data attributes by the system administrator	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.21	Non-Functional	Data Integrity	The solution provides structured query language (SQL) capabilities for database queries	Cannot Meet	Platform	There is no need to use SQL when performing database queries. Masterworks includes a powerful Reports Builder that abstracts SQL and makes database queries intuitive.
18.22	Non-Functional	Data Integrity	The solution has the ability to store XML inside database.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.23	Non-Functional	Data Integrity	The solution provides the capability for system administrator or other authorized users to create new data items on-line and automatically update a global data dictionary with these new elements	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
18.24	Non-Functional	Data Integrity	The solution will include new data items automatically in migration paths during software upgrades.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
19	Non-Functional	Maintainability	This characteristic represents the degree of effectiveness and efficiency with which a product or system can be modified to improve it, correct it or adapt it to changes in environment, and in requirements. This characteristic is composed of the following sub-characteristics: Modularity: Degree to which a system or computer program is composed of discrete components such that a change to one component has minimal impact on other components. Reusability: Degree to which an asset can be used in more than one system, or in building other assets. Analyzability: Degree of effectiveness and efficiency with which it is possible to assess the impact on a product or system of an intended change to one or more of its parts, or to diagnose a product for deficiencies or causes of failures, or to identify parts to be modified. Modifiability: Degree to which a product or system can be effectively and efficiently modified without introducing defects or degrading existing product quality. Testability: Degree of effectiveness and efficiency with which test criteria can be established for a system, product or component and tests can be performed to determine whether those criteria have been met.			
19.1	Non-Functional	Workflow Management	The solution will allow users to select attributes for projects for the self-generation of portfolios.	Out-of-the-Box	Capital Project Management	Masterworks allows users to select attributes for projects for the self-generation of portfolios out-of-the-box.
19.2	Non-Functional	Workflow Management	The solution will provide the capability to change a master record without necessarily changing the associated transaction history; change must be logged.	Out-of-the-Box	Platform	Masterworks provides the capability to change a master record without necessarily changing the associated transaction history and will log the change to the master record accordingly.
19.3	Non-Functional	Business Rules Management	The solution will edit all system input according to user-defined business rules so that the rules are appropriately applied and the data is validated at the time it is being entered, individually or through a batch process.	With Configuration	Platform	Masterworks will be configured to meet this requirement.
19.4	Non-Functional	Business Rules Management	The solution will embed and enforce City processes, in order to ensure shortcuts cannot be taken in a project's lifecycle to reduce project quality.	With Configuration	Platform	The core of maintaining adherence to business processes is through Masterworks' Workflow Builder. Workflows can be configured to business rules and processes and cannot be bypassed.
19.5	Non-Functional	Business Rules Management	The solution will allow preconfigured workflows to be amended to meet the City's business requirements.	Out-of-the-Box	Platform	Masterworks workflow engine allows permissioned users to amend preconfigured workflows.
19.6	Non-Functional	Business Rules Management	The solution will generate an email notification to a user's email address when information defined as 'sensitive' through the City's defined business rules are changed through the self-service function.	With Configuration	Platform	Masterworks will be configured to generate email notifications when defined criteria are met.
19.7	Non-Functional	User-Defined Attributes	The solution will allow internet based self-service capabilities for various employee and vendor/partner business functions within the PMIS.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.8	Non-Functional	User-Defined Attributes	The solution will allow access to self-service functions from within the City's network environment and/or from the internet	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.9	Non-Functional	User-Defined Attributes	The solution will allow scale to size and type of projects so that all types of projects are organized and manageable in the system (ex: full lifecycle of City construction projects, planning projects, maintenance projects, research projects, information technology projects and other various types)	Out-of-the-Box	Contract Management	Masterworks allows various project types be created and managed
19.10	Non-Functional	User-Defined Attributes	The solution will support City defined standardized forms as well as creation of user-defined form letters or business forms.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.11	Non-Functional	User-Defined Attributes	The solution will enable users to incorporate user-created documentation into system documentation (ex: user procedures, business rules, etc.) which is accessible in the same manner as documentation from the software provider.	Future Release	Platform	End user document editing is expected to be released in Q1 2021. All product roadmap items are available for customers to implement upon release into Masterworks. The capability is provided as part of the MasterWorks license. Based upon the implementation level of effort (e.g., configuration, data migration, testing, training
19.12	Non-Functional	User-Defined Attributes	The solution will allow users to version control of all non user and user-created documentation.	Out-of-the-Box	Document Management	Masterworks supports complete document version control. Permissioned users will be able to retrieve all version of the documents
19.13	Non-Functional	User-Defined Forms and/or Screens	The solution allows user-defined fields to be configured and business rules established without programming effort being required.	Out-of-the-Box	Platform	Masterworks has built-in Form Builder and Workflow Builder components which do not require any programming to use.
19.14	Non-Functional	User-Defined Forms and/or Screens	The solution allows individual user-defined fields to be segregated so as to only be available for use by certain departments or user groups based on role (and not visible to other departments or user groups)	Out-of-the-Box	Platform	Masterworks form builder supports creating forms with sections that are accessible/visible only to certain roles and at a certain stage of the workflow

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
19.15	Non-Functional	User-Defined Forms and/or Screens	The solution ensures any program code provided by the systems integrator or any of its software providers within the proposed PMIS passes industry standard vulnerability checks prior to promotion into the City environment.	Out-of-the-Box	Platform	Aurigo's product performs penetration testing for every product release. In additon, Aurigo's professional services team also performs penetration testings for all configured products prior to promotion into the City's production environment.
19.16	Non-Functional	User-Defined Forms and/or Screens	The solution allows authorized technical staff to create new tables, fields (including changing field structures) and objects	Out-of-the-Box	Platform	When authorized users create or modify a form in Masterworks, Masterworks platform will automatically create/update required tables, views, stored procedures, and API required for that form
19.17	Non-Functional	User-Defined Forms and/or Screens	The solution allows for identification/reporting of new user-defined tables, fields, objects	Out-of-the-Box	Platform	When authorized users create or modify a form in Masterworks, Masterworks platform will automatically create/update required tables, views, stored procedures, and API required for that form
19.18	Non-Functional	User-Defined Forms and/or Screens	The solution supports the inclusion of any user-defined or developed objects (user-defined tables, fields, and other objects, etc.) in the upgrade path.	Out-of-the-Box	Platform	Upgrades to future versions of Masterworks will include configurations made to forms, workflows, and other objects in Masterworks.
19.19	Non-Functional	Business Intelligence and Reporting	The solution will have a common set of data fields across projects, in order to allow standardized reporting across project types.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.20	Non-Functional	Business Intelligence and Reporting	The solution will be able to calculate risk exposure to report on contingency for projects.	With Configuration	Capital Project Management	Masterworks will be configured to calculate risk exposure.
19.21	Non-Functional	Business Intelligence and Reporting	The solution will be able to track and report previous baselines.	Out-of-the-Box	Capital Project Management	Masterworks supports this requirement out-of-the-box
19.22	Non-Functional	Business Intelligence and Reporting	The solution will track and report performance trending, in order to identify project issues and mitigate them in a timely fashion	With Configuration	Capital Project Management	Masterworks will be configured to track and report performance trending.
19.23	Non-Functional	Business Intelligence and Reporting	The solution will ensure security on the report distribution software within the PMIS is consistent with the security model in the core PMIS software so that a user cannot view a report containing data that they are not authorized to view	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.24	Non-Functional	Business Intelligence and Reporting	The solution will ensure report and ad-hoc query results are subject to the system security model such that users cannot access data through reports and queries for which they are not authorized in the system.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.25	Non-Functional	Business Intelligence and Reporting	The solution will provide the capability to integrate the PMIS reporting environment with the City ArcGIS environment to spatially display ad-hoc query results where geo-referenced data is captured	With Configuration	Platform	Aurigo Masterworks comes out-of-the-box with ESRI ArcGIS integration, which may need to be configured to meet the City's exact needs.
19.26	Non-Functional	Business Intelligence and Reporting	The solution will allow system administrator or other authorized user to override parameters for an individual query or report	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.27	Non-Functional	Business Intelligence and Reporting	The solution will provide functionality to audit exports of report data and modifications to report definitions	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.28	Non-Functional	Business Intelligence and Reporting	The solution will provide the ability to configure reports such that information can be suppressed based on a user's role	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.29	Non-Functional	Business Intelligence and Reporting	The solution maintains an active metadata repository that contains definitions of all data elements and attributes within the data warehouse (maintain both product meta-data and user configured changes).	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.30	Non-Functional	Business Intelligence and Reporting	The solution will provide a solution which is architected to support the ability to have 24-hour/7 day a week access (excluding defined maintenance windows) to the reporting functions.	Out-of-the-Box	Platform	Aurigo Masterworks is architected to support 24/7 access, save planned maintenance windows, by design.
19.31	Non-Functional	Business Intelligence and Reporting	The solution will support utilization of the same hardware and operating system specifications that are required for the PMIS platform for the reporting environment to the extent feasible.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.32	Non-Functional	Business Intelligence and Reporting	The solution will provide users with a personalized report portal that allows access to only those reports that the user is authorized to see consistent with PMIS role-based security definitions	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.33	Non-Functional	Business Intelligence and Reporting	The solution will allow viewing of rows and/or columns within the report to be restricted based on user's role (e.g. the user can only view data for his or her business unit, etc.)	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.34	Non-Functional	Business Intelligence and Reporting	The solution lists reports that have been distributed to the user via the portal (i.e. the user has been granted authorization to view a report by the designated report publisher/owner)	With Configuration	Platform	Masterworks provides the ability to specify role based access for every report in the system. Masterworks logs can be configured to log the distribution whenever Masterworks emails a report.
19.35	Non-Functional	Business Intelligence and Reporting	The solution lists saved personalized reports and ad-hoc queries that the user has authority to either create or modify in the user's personal reports list	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.36	Non-Functional	Business Intelligence and Reporting	The solution lists or provide links only to reports that the user is authorized to see in detail	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box

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19.37	Non-Functional	Business Intelligence and Reporting	The solution will allow users to search existing reports inventory and subscribe to reports after requesting and receiving permission from the report owner/publisher	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.38	Non-Functional	Business Intelligence and Reporting	The solution will provide the ability for designated report publishers to un-publish reports to individual users or groups of users	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.39	Non-Functional	Business Intelligence and Reporting	The solution will allow users to share saved personalized reports and ad-hoc queries for use by another user	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.40	Non-Functional	Business Intelligence and Reporting	The solution will provide drill down capability from summary information to the supporting detail transactions and drill up from the detail transaction to the summary information	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.41	Non-Functional	Business Intelligence and Reporting	The solution will provide, as part of drill down functionality, the ability to print the expanded sections of the drill down results with the content of the original query results.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.42	Non-Functional	Business Intelligence and Reporting	The solution will allow users to define or modify the sort order of reports.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.43	Non-Functional	Business Intelligence and Reporting	The solution will provide sufficient control reports generated by the systems to ensure the integrity of the PMIS business operations (e.g. control totals, record counts, brought forward/carried forward totals, etc.).	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.44	Non-Functional	Business Intelligence and Reporting	The solution will provide authorized users with the capability to perform free-form text searching that includes embedded, attached or linked documents.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.45	Non-Functional	Business Intelligence and Reporting	The solution will provide authorized users with the capability to perform free-form text searching subject to page limits set by the systems administrator. Search capability shall include the specification of words that are in a given range of words.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.46	Non-Functional	Business Intelligence and Reporting	The solution will provide functionality to allow any inquiry available online to be printed	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.47	Non-Functional	Business Intelligence and Reporting	The solution will provide standard print capabilities such as those typically available in Windows-based products such as print preview, print a range of pages, print a number of copies, etc.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.48	Non-Functional	Business Intelligence and Reporting	The solution will allow on-line reports to be run in the background and allow users to continue processing such that report results can then be accessed through the report portal with an online user notification provided when the report is generated	With Configuration	Platform	Masterworks will be configured to allow reports to be run in the background.
19.49	Non-Functional	Business Intelligence and Reporting	The solution will provide ability to schedule a report to run automatically if certain conditions are met.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.50	Non-Functional	Business Intelligence and Reporting	The solution will provide self service reports and downloads that are either pre-defined and selected (pulled by the user) or created ad-hoc from a pre-populated user friendly database structure using report tools commonly associated with data warehousing methodologies	Out-of-the-Box	Platform	Masterworks built-in Report Builder allows for both pre-defined and ad hoc reports to be requested, and requires no SQL or other coding knowledge to use.
19.51	Non-Functional	Business Intelligence and Reporting	The solution will provide for report distribution based on events, process milestones, or predefined data thresholds or values, e.g., based on data values contained within the report (i.e., conditional operators >, <, =, etc.)	With Configuration	Platform	Masterworks will be configured to meet this requirement.
19.52	Non-Functional	Business Intelligence and Reporting	The solution will provide functionality to distribute reports by a variety of methods such as sending links to reports via email, web, mobile	Out-of-the-Box	Platform	Masterworks platform supports muitple way to distrbute the reports. Masterworks workflow engine can email the reports as an attachement or embade the link to the report in the email.
19.53	Non-Functional	Business Intelligence and Reporting	The solution will provide the ability to print reports on special forms	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.54	Non-Functional	Business Intelligence and Reporting	The solution will support effective date selection and query including Boolean operations such as date ranges	Out-of-the-Box	Platform	Masterworks' Report Builder supports effective date selection and Boolean operators in queries.
19.55	Non-Functional	Business Intelligence and Reporting	The solution will provide cursor selection and drag-and-drop features to assist users in formatting of files, elements, and operands (e.g., +,-, /, *) from data dictionary or other pre-established lists	Future Release	Platform	Advanced features such as this for Report Builder are expected to be released in Q4 2021. All product roadmap items are available for customers to implement upon release into Masterworks. The capability is provided as part of the MasterWorks license. Based upon the implementation level of effort (e.g., configuration, data migration, testing, training materials, etc.) of the item(s) there may be an associated implementation investment required. This is unknown until the product roadmap items have been developed and a scope is mutually identified and agreed upon. Please
19.56	Non-Functional	Business Intelligence and Reporting	The solution will provide graphical report layout tools and drag-and-drop features to assist users in formatting reports and inquires	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.57	Non-Functional	Business Intelligence and Reporting	The solution will provide ability for the report generator to include unstructured data in query results (e.g., MS Word, Excel, scanned images and other documents attached to transactions)	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
19.58	Non-Functional	Business Intelligence and Reporting	The solution will provide interactive analysis capabilities that help decision makers use communication technologies, data, documents, knowledge, and analytical models to identify and solve problems	With Configuration	Platform	Masterworks comes with numerous business intelligence reposrt. The City's instance of Masterworks will be configured to new reports to address this requirement.
19.59	Non-Functional	Business Intelligence and Reporting	The solution will provide ability to link from reporting tool to Microsoft Office graphic, spreadsheet and presentation applications	With Configuration	Platform	Masterworks will be configured to provide this ability.
19.60	Non-Functional	Business Intelligence and Reporting	The solution will generate a summarized CIP Master Summary Schedule with one bar representing each approved project, and/or compared with project baseline(s)	With Configuration	Platform	Masterworks will be configured to generate a summarized CIP Master Summary Schedule.
19.61	Non-Functional	Business Intelligence and Reporting	The solution will provide summary level data for a Total CIP Master Plan with project status for grouping by: Active, Pending Approval, Deferred, Suspended, Delayed, Cancelled, Planned for Out Years (with code to indicate year of planned start)	With Configuration	Platform	Masterworks will be configured to provide summary level data for Total CIP Master Plans.
19.62	Non-Functional	Business Intelligence and Reporting	The solution will provide key organizational performance data on a near real-time and integrated basis that provides managers with access to analytical systems and tools, in a user-friendly environment, that helps support organization-wide analysis and integrated decision-making	With Configuration	Platform	Masterworks can provide real-time data via integrated dashboards which can be used for analysis and decision-making.
19.63	Non-Functional	Business Intelligence and Reporting	The solution will allow users to build ad-hoc queries to report on any fields in the PMIS for which they are authorized using one or more or a combination of different criteria; provide online access to a data dictionary showing data element and table to assist query building	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.64	Non-Functional	Business Intelligence and Reporting	The solution will ensure a user cannot access information through an ad-hoc query if they are not authorized to view this information in the PMIS.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.65	Non-Functional	Business Intelligence and Reporting	The solution will allow a user to save an ad-hoc query for later execution without impacting any base query that was used as a start point	Out-of-the-Box	Platform	Masterworks Report Builder allows users to build, copy, and save modified queries under new names to avoid impacting original queries
19.66	Non-Functional	Business Intelligence and Reporting	The solution will display a user's saved ad-hoc queries by descriptive name on the user's report portal	Out-of-the-Box	Platform	The user's saved queries will be displayed under the name the user saved them as in the My Reports section of Masterworks.
19.67	Non-Functional	Business Intelligence and Reporting	The solution will allow a user to authorize one or more additional users to have access to a saved ad-hoc query through the report portal	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.68	Non-Functional	Business Intelligence and Reporting	The solution will display any ad-hoc queries authorized by one user for use by a second user on the second user's report portal	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.69	Non-Functional	Business Intelligence and Reporting	The solution will provide ability to integrate with the existing City business intelligence environment	With Configuration	Platform	Aurigo will develop an interface based on the Masterworks API and existing City BI environment endpoints to fulfill this requirement.
19.70	Non-Functional	Business Intelligence and Reporting	The solution will provide ability to track and report data by user-defined performance indicators	With Configuration	Platform	Masterworks will be configured to track and report data by user-defined performance indicators.
19.71	Non-Functional	Business Intelligence and Reporting	The solution will leverage open standards to enable the exchange of metadata with other systems	Out-of-the-Box	Platform	Masterworks platform comes with standard API to exchange data with other systems
19.72	Non-Functional	Business Intelligence and Reporting	The solution will provide a solution architected so as to centrally manage the reporting tool set to ensure that any updates are distributed to users and that all users are accessing the same version of the reporting software	Out-of-the-Box	Platform	Masterworks is architected using Microsoft SSRS as its primary reporting tool; any upgrades to Microsoft SSRS applied by Aurigo will automatically be applied to the entire user base.
19.73	Non-Functional	Business Intelligence and Reporting	The solution will allow the system administrator or other authorized user to define limits on the execution time for a report or query and/or the numbers being retrieved	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.74	Non-Functional	Business Intelligence and Reporting	The solution will cancel automatically, a query or report job if it fails to meet system administrator defined criteria like time limits, infinite loops, excessive pages, etc.).	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.75	Non-Functional	Business Intelligence and Reporting	The solution will provide the ability for authorized users or system administrator to run ad hoc reports without degradation of system performance unless it significantly reduces system performance.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
19.76	Non-Functional	User-Defined Error Messages	The solution will provide for user-defined error messages.	Out-of-the-Box	Platform	Masterworks provides the ability to configure the user-defined error messages using Masterworks workflow engine
20	Transition	Data Migration	Captures the data migration requirements necessary to transition from the current solution to the new solution. This could include requirements such as data mapping, data cleanup/verification, data transfer (extraction/loading), and any other testing to ensure for a successful data migration.			

Requirements

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20.1	Transition	Data Migration	The solution supports multiple data-transfer methods including XML and flat file (e.g. ASCII, variable and/or fixed length, comma-delimited, etc.) to minimize changes to interfacing agency systems, while optimizing use of modern data transfer technologies where appropriate	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
20.2	Transition	Data Migration	The solution encrypts all data with personally identifiable information in transit and at rest in all file structures.	Out-of-the-Box	Platform	All data handled by Masterworks is encrypted in-transit using HTTPS and TLS 1.2; data at rest is encrypted using AWS 256-bit encryption.
20.3	Transition	Data Migration	The solution provides the ability for data in the PMIS system to be extensible to authorized users from both an exposure and consumption standpoint	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
20.4	Transition	Data Migration	The solution provides the ability to execute interfaces with other systems on a pre-defined schedule or on the request of an authorized user	Out-of-the-Box	Platform	Masterworks is the most integration-friendly system on the market today. It uses a built-in RESTful API to interface with other systems.
20.5	Transition	Data Migration	The solution edits interfaced data by applying the same business rules that are defined for the equivalent transaction entered through the PMIS system.	Out-of-the-Box	Platform	Data imported or interfaced with Masterworks will have to meet the same validation rules as data entered manually into Masterworks.
20.6	Transition	Data Migration	The solution pre-validates and reformats all incoming batch data.	With Configuration	Platform	Masterworks will be configured to pre-validate and reformat all incoming batch data.
20.7	Transition	Data Migration	The solution generates an error report for any validation issues or other errors identified during execution of a data load or an interface program.	Out-of-the-Box	Platform	Masterworks generates an error log of batch transactional data. The format of the log and validation will be determined during requirements gathering.
20.8	Transition	Data Migration	The solution displays validation errors on-line within a job history function or print in a report format at user option.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
20.9	Transition	Data Migration	The solution places records not passing validation into a suspense file within the PMIS system.	With Configuration	Platform	Aurigo recommends storing the records not passing the validation in a suspense table in the database rather than a file. Masterworks data migration tool can be configured to have such table and store the failed records
20.10	Transition	Data Migration	The solution allows for correction of suspended records within the PMIS system.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
20.11	Transition	Data Migration	The solution provides the capability to validate data during both the initial load step and during processing steps	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
20.12	Transition	Data Migration	The solution allows the system administrator or other authorized users to browse the suspense file in the PMIS system	With Configuration	Platform	Aurigo recommends storing the records not passing the validation in a suspense table in the database rather than a file. Masterworks data migration tool can be configured to have such table and store the failed records. A new for can be configured to allow permissioned users to view all filed records
20.13	Transition	Data Migration	The solution provides facilities for verification and batch controls tools to ensure the complete file was received and that the file was not a duplicate.	With Configuration	Platform	Aurigo's data migration tool can be configured to verify the recevied file is complete and not a duplicate.
21	Transition	System Migration	Captures the system migration requirements necessary to transition from the current solution to the new solution. This could include requirements such as orchestrating the cutover, special testing/validation, and any other requirements necessary to ensure a successful system migration.			
21.1	Transition	System Migration	The solution will construct using current but mature industry-standard application development tools, techniques and standards that can be maintained for the expected life of the system.	Out-of-the-Box	Platform	Masterworks is built using C#, HTML, CSS, and JavaScript using Microsoft's .NET platform.
21.2	Transition	System Migration	The solution will allow at a minimum for configuration across multiple environments including production, patch, user acceptance test, system test, user training, development and sand box.	Out-of-the-Box	Platform	Aurigo will provide the City with at minimum a training, UAT, and Production environment.
21.3	Transition	System Migration	The solution will provide production support for the last two major releases of the proposed PMIS software solution.	Out-of-the-Box	Platform	Aurigo Customer Success supports the previous two versions of Masterworks.
21.4	Transition	System Migration	The solution will ensure the proposed PMIS application supports the timely installation of system or application updates or security patches; the systems will be updated on an as needed basis that will be determined by the criticality of the update/patch.	Out-of-the-Box	Platform	Aurigo ensures that security and bugfix patches are installed in a timely manner. Update patches to enhance existing functionality are installed in conjunction with the City team at a negotiated time.
21.5	Transition	System Migration	The solution will identify access requirements through firewalls and follow standard port designations, where possible.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
21.6	Transition	System Migration	The solution will support access outside the City network/ firewall to the application through virtual private network solutions or internet access to self-service applications with appropriate application security.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
21.7	Transition	System Migration	The solution provides a solution architecture with an expandable configuration and horizontal and vertical scalability.	Out-of-the-Box	Platform	Masterworks is architected on the AWS hosting platform, which gives Aurigo the capability for scalability both horizontally and vertically.

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21.8	Transition	System Migration	The solution utilizes a service oriented architecture (SOA) to facilitate seamless integration with heterogeneous internal and external systems.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
21.9	Transition	System Migration	The solution provides a SOA capability which is platform and protocol independent and complies with OASIS (Advancing Open Standards for the Information Society) standards such as WS-Security, WS-Reliability, etc. and other open standards such as XML, SOAP, WSDL, and UDDI.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
21.10	Transition	System Migration	The solution utilizes application stack at all points in terms of the operating system, network, database, desktop and storage.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
21.11	Transition	System Migration	The solution will provide tools for Application Programming Interface (API) maintenance within the PMIS application suite.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
22	Transition	Support	Captures the requirements necessary so that there is adequate resources and processes in place for ongoing support (e.g. help desk, etc.).			
22.1	Transition	Support	The solution will provide a regularly updated and maintained help function that is easily accessible for all users of the PMIS.	Out-of-the-box	Platform	Masterworks includes a built-in online help system.
22.2	Transition	Support	The solution will provide context-sensitive, field-level on-line help features for all screen elements, screen errors and error codes.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
22.3	Transition	Support	The solution will utilize an on-line help feature which directs the user either to a help screen specific to the field they are on if help is available for that field or to a help screen which is specific to the screen they are on if no field level help is available.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
22.4	Transition	Support	The solution will bring up an error message that points the user to the field in error	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
22.5	Transition	Support	The solution will allow customization of help files by the system administrator or other authorized user by department/business unit or by roles and responsibilities within the PMIS; users must be able to modify the part of the help text that they are authorized to maintain without impacting other help text.	Future Release	Platform	End user document editing is expected to be released in Q1 2021. All product roadmap items are available for customers to implement upon release into Masterworks. The capability is provided as part of the MasterWorks license. Based upon the implementation level of effort (e.g., configuration, data migration, testing, training materials, etc.) of the item(s) there may be an associated implementation investment required. This is unknown until the product roadmap items have been developed and a scope is mutually identified and agreed upon. Please not that all product roadmap item delivery dates are subject to change and not guaranteed.
22.6	Transition	Support	The solution will provide user documentation that is comprehensive, clear and easy to use; it must also contain clear and thorough descriptions of all screen and batch processing functions, screen data, programs, system reports, and any processing parameters.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
22.7	Transition	Support	The solution will provide all system documentation and manuals electronically.	Out-of-the-box	Platform	Masterworks provides all system documentation and manuals electronically.
22.8	Transition	Support	The solution will provide search functions for on-line documentation.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
22.9	Transition	Support	The solution will allow system administrator to authorize components of the system documentation to be available for download by authorized users.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
22.10	Transition	Support	The solution will provide the capability to send communications to system's designated help source on system processes and issues, including feedback and requests for technical support.	Out-of-the-Box	Platform	Masterworks supports this requirement out-of-the-box
23	Transition	Documentation	Captures the documentation requirements necessary to use and maintain the new solution. This would include document requirements such as user and administrative documentation, hardcopy and electronic artifacts, knowledge base, and other documentation as deemed necessary by the stakeholders.			
23.1	Transition	Technical Documentation	The solution will provide a comprehensive technical system documentation and technical manuals for the PMIS including any third party add-on modules included in the proposed PMIS solution.	Out-of-the-Box	Platform	Aurigo provides end-user and system administrator quickstart guides and online help manuals.
23.2	Transition	Technical Documentation	The solution will include program descriptions in technical system documentation.	Out-of-the-Box	Platform	Aurigo will provide this in the functional specs for the City's implementation of Masterworks.
23.3	Transition	Technical Documentation	The solution will include screen definitions and descriptions in technical system documentation.	Out-of-the-Box	Platform	Aurigo will provide this in the functional specs for the City's implementation of Masterworks.
23.4	Transition	Technical Documentation	The solution will include database definitions, logical data model, and record layouts in technical system documentation.	Out-of-the-Box	Platform	Aurigo will produce a database schema document as part of the solution implementation
23.5	Transition	Technical Documentation	The solution will include audit trail management documentation in technical system documentation.	Out-of-the-Box	Platform	Aurigo will provide this in the functional specs for the City's implementation of Masterworks.

ID	Requirement Type	Requirement Name	Requirement Description	Requirement Compliance	Product/Module	Vendor Response Comments
23.6	Transition	Technical Documentation	The solution will include security administration documentation in technical system documentation.	Out-of-the-Box	Platform	Aurigo provides this as part of the system administrator guide.
23.7	Transition	Technical Documentation	The solution will include workflow process and administration documentation in technical system documentation.	Out-of-the-Box	Platform	Aurigo provides this as part of the system administrator guide.
23.8	Transition	Technical Documentation	The solution will include disaster recovery procedures in technical system documentation.	Out-of-the-Box	Platform	Aurigo will provide this as part of the project implementation.

RTM Product/Module	Mapping to SLA
Contract Management	Contract Management - PPM-CM-P
Consultant Service Contracting	Contract Management - PPM-CM-P
Document Management	PLT Core - PLT-COR-P
Contract Management, Project Management, Fund Management, Capital Planning	PLT Core - PLT-COR-P
Construction Project Management	PPM Core - PPM-COR-P
Platform	PLT Core - PLT-COR-P
Resource Management	Resource Management - PPM-RM-P
Masterworks Platform	PLT Core - PLT-COR-P
Mobile	PPM Mobile - PPM-MBL-P
Capital Planning	Capital Planning - PPM-PLN-P
Capital Project Management	PPM Core - PPM-COR-P
Estimation & Bidding	Bidding and Estimation - PPM-BID-P
Claims Management	PPM Core - PPM-COR-P
Permitting	PPM Core - PPM-COR-P

AURIGO MASTERWORKS CLOUD
SOFTWARE SUBSCRIPTION SERVICE EXHIBIT

This Exhibit, in addition to the Customer's (CITY AND COUNTY OF DENVER) Master Services Agreement, shall govern the delivery of Services to the City.

1.   DEFINITIONS

"Add-on Service" means additional functionality or services that may be ordered by Customer for an additional subscription fee or charge.

"Affiliate" means any legal entity that a Party owns, that owns a Party, or that is under its common Ownership. "Ownership" means, for purposes of this definition, control of more than a 50% interest in an entity. If Customer is an agency of a state, provincial, or local government, "Affiliate" means:

1. any government agency, department, office, instrumentality, division, unit, or other entity of Customer's federal, state, provincial, or local government that is supervised by or is part of Customer, which supervises Customer or of which Customer is a part, or which is under common supervision with Customer;
2. any county, borough, commonwealth, city, municipality, town, township, special purpose district, or other similar types of governmental instrumentality established by the laws of Customer's state or province, and located within the jurisdiction and geographic boundaries of Customer's state or province; and
3. any other entity in Customer's state or province expressly authorized by the laws of Customer's state or province to purchase under state or provincial contracts; provided that a state or province and its Affiliates shall not, for purposes of this definition, be considered to be Affiliates of the federal government or its Affiliates. Notwithstanding the foregoing, provincial Crown corporations are not Affiliates for the purposes of this definition. If Customer is an agency of the U.S. government, "Affiliate" means any other agency of the U.S. government. If Customer is an agency of the Canadian government, "Affiliate" means any other agency of the Canadian government, except for a federal Crown corporation.

"CPGL" means Core Product Go Live. It is the date that the base functionality of the Masterworks Commercially Off the Shelf platform and the licensed module(s) is/are made available to Customer. This is different from Solution Go-live date when the entire solution will be hosted in a production environment.

"Client Software" means any software provided to Customer related to the Service.

"Content" means all data, including all text, sound, or image files and software that are provided to Aurigo by, or on behalf of, Customer, its Users, and associated account Users through their use of the Service.

"Customer" means the entity that has entered into this Agreement. If an individual enters this

Exhibit E - Software Subscription and Service Level Agreement

Agreement on behalf of a company or other legal entity, such individual represents that he or she has the authority to bind such entity to this Agreement.

"Go-Live" means the date the entire configured Service is hosted and available in Aurigo's production environment for User access.

"Intellectual Property" means any intellectual or industrial property rights protected or protectable under the laws of United States of America, and includes Moral Rights, trade secrets, patent rights, rights in inventions, trade-marks, trade names, and service marks, as well as applications for, and registrations, extensions, renewals and re-issuances of, the foregoing, in whatever form such rights may exist and whether registered or unregistered.

"License" means the rights granted by Aurigo to Customer to copy, install, use, access, display, run and/or otherwise interact with the Service and/or Client Software for, as applicable, for Customer's internal business purposes.

"Aurigo" means Aurigo Software Technologies Inc. or its Affiliates.

"Work Order" also referred to as "Order" means an order for Services.

"Software" means the computer programs described in Schedule 1 (Description of Software Subscription Services) and, if applicable, any other computer programs provided by Aurigo pursuant to the Agreement, including any updates, modifications, releases, or enhancements to such computer programs provided by Aurigo

"Specifications" means the specifications and features of the Software Subscription Services described in Schedule 1 (Description of Software Subscription Services).

"Subscription" means the part of the Order identifying the specific Services being ordered and may include the User quantity, ship-to address, or other information.

"Users" means individuals within Customer's organization who have the right to use the Services, as dictated by the number of User Licenses purchased by Customer.

"User Licenses" refer to the named user license subscriptions that Customer has purchased under its Subscription for Services.

"Work Product" means any item (tangible and intangible) which is created or produced as a result of the performance of any Professional Services by Aurigo. For the sake of clarity, Work Product does not include any items that are derivative work of intellectual property owned by Aurigo, including configuration of existing code. For derivative work of intellectual property owned by Aurigo, Customer will retain licensing rights to use derivative work within the terms of this SSA.

Exhibit E - Software Subscription and Service Level Agreement

2.   LICENSE GRANT – WHAT CUSTOMER IS LICENSED TO USE

The content of this section has moved to MSA Section 15.

3. ORDERING, PRICING, PAYMENTS, RENEWALS, AND TAXES

3.1   Ordering. Customer shall place an Order for each Subscription for a Service with a new or reused Purchase Order, which must be issued for all changes to Subscriptions. If Customer desires to use the Service for more than the total number of User Licenses defined in the Service level it has subscribed to, it must first subscribe to the appropriate Service level prior to commencing any such use. If Customer desires to reduce the total number of Users at the end of an annual term, it may do so without penalty. Any Services added to a Subscription will expire at the end of the then-current Term. Customer may place Orders for its Affiliates under this Agreement and grant its Affiliates administrative rights to manage the Services. Affiliates may not place Orders under this Agreement. To the extent Customer grants any rights to Affiliates, such Affiliates shall be bound by the terms and conditions of this Agreement. Customer agrees that it is jointly and severally liable for any Services purchased for, or other actions taken by, any of its Affiliates or third party to which it provides rights under this Agreement**.**

3.2   Subscription Fees. "Subscription Fee" means the annual fee Customer is required to pay for the Subscription to the Service and Client Software. Customer is required to pay the Subscription Fee in advance. Payments are due and must be paid in accordance with the Order. Price level changes are not retroactive. Prices for each price level are fixed at the time the Subscription is first placed and apply throughout the Term. Subscription Fees are subject to change at the end of the initial contract Term and at the end of any contract renewal term.

3.3   Renewal. The renewal terms for this Agreement are defined in Schedule 1.

3.4   New agreement. Prior to placing new Orders, renewing any Subscriptions, or further use of the Service after the end of the initial contract term (defined in Schedule 1), and upon notice, Aurigo may require Customer to enter into an updated Software Service Exhibit to govern Orders, renewal Subscriptions, or usage of the Service from that date forward.

3.5   Incidental Charges. The prices and rate plans do not include any phone charges, Internet access charges, mobile text messaging, wireless services, or other data transmission charges unless expressly stated otherwise. Customer is responsible for all such incidental charges. City will provide a certificate of tax exemption certificate.

3.6   **Refunds.** All charges are non-refundable unless expressly stated otherwise, or otherwise provided by law.

3.7   **Late Payments.** Payments to Aurigo are due 35 days from receiving a correct invoice. Aurigo may suspend or cancel the Service if Customer does not pay in full and on time.

4. TERM AND TERMINATION

The content of this section has moved to MSA Section 20, except the terms below

4.1 Cancellation or suspension of the Service for Customer's violation of the terms of this Agreement will not obligate Aurigo to refund any remaining and/or unused Subscription fees.

If Customer cancels the Service to migrate to another Aurigo offering, the cancellation fee will be waived. Notwithstanding any amounts due as a consequence of provisioning the Services prior to a migration, no cancellation fee will be owed to Aurigo if Customer migrates to another Aurigo-operated online services platform.

4.2 **No liability for the deletion of Content.** Customer acknowledges that, other than as expressly described in these terms, Aurigo will have no obligation to continue to hold, export, or return Customer's Content beyond 90 days. Customer acknowledges that Aurigo will have no liability whatsoever for deletion of Content pursuant to these terms.

5. PRIVACY

5.1 Use of Customer Data. Customer data will be used only to provide Customer with the Service. This may include troubleshooting aimed at preventing, detecting and repairing problems affecting the operation of the Service and the improvement of features that involve the detection of, and protection against, emerging and evolving threats to the User (such as malware or spam).

Aurigo will not disclose Customer data to a third party (including law enforcement, other government entity, or civil litigant; excluding Aurigo's subcontractors) except as Customer directs or unless required by law. Should a third party contact Aurigo with a demand for Customer data, Aurigo will attempt to redirect the third party to request it directly from Customer. In response to such a third-party request, Aurigo may provide Customer's basic contact information to the third party. If compelled to disclose Customer data to a third party, Aurigo will use commercially reasonable efforts to notify Customer in advance of a disclosure unless legally prohibited. Customer is responsible for responding to requests by a third party regarding Customer's use of the Service, such as a request to take down content under the Digital Millennium Copyright Act.

Exhibit E - Software Subscription and Service Level Agreement

6. USE RIGHTS AND LIMITATIONS

6.1 SLAs. Aurigo will comply with the then-current SLA in place relating to the Services, as set forth here

6.2 Customer's Use. While the Customer uses the Service,

Customer agrees to:

- comply with all laws;
- comply with any codes of conduct or other notices provided by Aurigo;
- keep its password(s) secret; and
- promptly notify Aurigo if it learns of a security breach or unauthorized access related to the Service.

Customer agrees to not:

- use the Service in any way that harms Aurigo or its Affiliates, resellers, distributors and/or vendors (collectively, the "Aurigo parties"), any customer of a Aurigo party, or the use of the Service by other Users;
- engage in, facilitate, or further unlawful conduct;
- damage, disable, overburden or impair the Service (or the networks connected to the Service) or interfere with anyone's use and enjoyment of the Service; resell or redistribute the Service, or any part of the Service, unless Customer has a contract with Aurigo that permits it to do so;
- use any portion of the Service as a destination linked from any unsolicited bulk messages or unsolicited commercial messages ("spam");
- use any unauthorized automated process or service to access and/or use the Service (such as a BOT, a spider, periodic caching of information stored by Aurigo or "meta-searching"), however, periodic automated access to the Service for report creation or scheduling is permitted;
- use any unauthorized means to modify or reroute, or attempt to modify or reroute, the Service or attempt to work around any of the technical limitations in the Service;
- modify, create derivative works from, reverse engineer, decompile, disassemble, or otherwise attempt to discover any trade secret contained in the Service or in any technology or system used by Aurigo in connection with providing the Service, except and only to the extent that applicable law expressly permits Customer to do so despite this limitation;
- create internet "links" to the Service or "frame" or "mirror" any content of the Service, to give the impression that Customer is offering any functionality of the

Service as Customer's own service located on Customer's servers;

- build a product or service using similar ideas, features, functions, or graphics of the Service;
- copy any ideas, features, functions, or graphics of the Service.

6.3 Use of Other Aurigo Services. Customer may need to use certain Aurigo websites or services to access and use the Services. If so, the terms of use associated with those websites or services, as applicable, apply to Customer's use of them.

6.4 Third-Party Services. Aurigo or its partners may make services from third parties available to Customer (a) through the Service or (b) that interface with the Aurigo Service. These third-party services are the responsibility of the third party and not Aurigo. The third-party service providers may require Customer to accept additional terms and conditions and/or pay a fee to use their services. Those additional terms and conditions are between Customer and the third party. Any third party's use of information Customer provides as part of using their service is subject to the privacy statements and practices of that third party and/or their suppliers. Aurigo encourages Customer to carefully review the privacy statements of third-party providers. Aurigo is not responsible for the privacy statements or privacy practices of these third-party providers or their suppliers.

6.5 Third-Party Software. Customer is solely responsible for any installed third-party software used with the Services. Aurigo is not a party to and is not bound by any terms governing Customer's use of the third-party software. Customer acknowledges that it will direct the installation of third-party software and control the use of such software with the Service.

Aurigo will not run, operate, or make any copies of third-party software licensed by the Customer except to support Customer's use of the Service. Customer may not install or use the third-party software in any way that would subject Aurigo's intellectual property or technology to obligations beyond those included in the Agreement. Aurigo does not, and will not have any obligation to, provide technical or other support for any third-party software. Aurigo does not make any representation or guaranty that any third-party software will operate successfully with the Service or continue performing after an update, upgrade, services patch, support fix or platform migration has been made to the Service.

7. CUSTOMER CONTENT

7.1 **Content.** Customer, its Users, and associated account Users may be able to post or store Content to third-party or Aurigo websites made available through the Service. As part of the Service, Customer may be able to post or provide materials (including feedback) in a publicly accessible area that allows Customer to communicate with others. The terms of use associated with websites where public access is made available by Aurigo for Customer to share Content, as applicable, only apply to Customer's use of such websites. Customer acknowledges that certain technical processing may be required for posting Content, to store and retrieve the Content, conform to connecting networks' technical requirements, and conform to the limitations of the Service.

7.2 **Links to third-party Web sites.** The Service may contain links to third-party websites. These third-party websites are not under Aurigo's control. If Aurigo has included these links in the Service, it provides them as a convenience only. The inclusion of these links is not an endorsement by Aurigo of any third-party website, service, or product. Aurigo reserves the right to disable links to any third-party website that Customer posts on the Service.

7.3 **Aurigo will not own any Content.** Aurigo performs regular backups of Content for the purpose of recovery in the event of a failure in Aurigo's data centers. However, notwithstanding the foregoing, Customer is solely responsible for maintaining and backing up any Content that it uses with the Service. Customer, not Aurigo, shall have sole responsibility for the accuracy, quality, integrity, legality, reliability, appropriateness, and intellectual property ownership or right to use such Content. Aurigo shall not be responsible or liable for the deletion, correction, destruction, damage, loss, or failure to store any Content that Customer uses with the Service.

Exhibit E - Software Subscription and Service Level Agreement

8. PRE-RELEASE SERVICE

If the version of the Service that is Licensed to Customer is a pre-release or early access version, including its user interface, features, and documentation ("Beta Version"), then it may not work the way a final version of the feature or Service will. Aurigo reserves the right to not release a commercial version of, or to change, any Beta Version of the Service at any time without notice to Customer. Any such Beta Version is confidential and proprietary to Aurigo and its suppliers. For five years after Customer subscribes to the Beta Version of the Service or the subsequent commercial version of the Service, whichever is first, Customer agrees not to disclose any Beta Version to third parties or to use any Beta Version other than for its internal purposes in connection with Customer's use of the Service. Customer's duty to protect the confidentiality of any Beta Version survives this Agreement.

Pre-release services are provided "as-is", "with all faults", and "as available." Customer bears the risk of using pre-release services. To the maximum extent permitted by law, the Aurigo parties give no express warranties, guarantees, or conditions. Customer may have additional rights under Customer's local laws that this Agreement cannot change. To the extent permitted by law, Aurigo excludes any implied warranties or conditions including those of merchantability, fitness for a particular purpose, workmanlike effort, non-infringement, and satisfactory quality.

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9. VERIFYING COMPLIANCE

During the Term of any Subscription and for three years thereafter, Customer must keep all usual and proper records relating to the Subscription(s) and Customer's use of the Services and/or Client Software under this Agreement. Aurigo may request that Customer conduct an internal audit of all Services in use throughout Customer's organization, comparing the number of subscriptions in use to the number of subscriptions issued to and/or paid for by Customer. By requesting an audit, Aurigo does not waive its rights to enforce this Agreement or to protect Aurigo's intellectual property by any other means permitted by law. If verification or self-audit reveals any unlicensed use, Customer must promptly order sufficient subscriptions to cover its past and present use. If material for unlicensed use is found, Customer must acquire the necessary additional subscriptions at the then-current retail subscription rate within thirty (30) days.

   9.1 **U.S. export jurisdiction.** The Services are subject to U.S. export jurisdiction. Customer must comply with all applicable laws including the U.S. Export Administration Regulations, the International Traffic in Arms Regulations, as well as end-user, end-use, and destination restrictions issued by U.S. and other governments.

SCHEDULE 1

DESCRIPTION OF SOFTWARE SUBSCRIPTION SERVICES

Product Name	Aurigo Masterworks Cloud
Product Version	12
Products Included	1. PLT Core - PLT-COR-P 2. System Integration Suite - PLT-MBL-P 3. Outlook Plugin - PLT-OUT-P 4. PPM Core - PPM-COR-P 5. Contract Management - PPM-CM-P 6. Fund Management - PPM-FND-P 7. Bidding and Estimation - PPM-BID-P 8. Capital Planning - PPM-PLN-P 9. Resource Management - PPM-RM-P 10. PPM Mobile - PPM-MBL-P 11. Configuration Tool Suite - CTK-CT-P
Type of License	Software Subscription Plan
Contract Term	5 years
Subscription Term	1 year
# of Users	1,500 Users (for included products only)
Organization(s)	CITY AND COUNTY OF DENVER
Support Plan (Can be changed annually at additional cost)	Silver Support Plan

Note: Only the products listed above are included with the annual subscription.

Exhibit E - Software Subscription and Service Level Agreement

SCHEDULE 2

SERVICE SUPPORT

Aurigo provides this SLA subject to the terms and conditions below, which will be fixed for the duration contract term (defined in Schedule 1) of the Service subscription. If a new SLA is proposed, it must be agreed upon in writing between both Aurigo and CITY AND COUNTY OF DENVER.

Aurigo will provide product support to the Users of the system who are identified as the Customer's system administrators. System Administration Users can contact Aurigo for support during the support times defined in the Support Plan selected by the Customer in Schedule 1.

A. Definitions:

1. **"Aurigo"** means Aurigo Software Technologies, Inc. (or, if applicable, its affiliate).

2. **"Claim"** means a claim submitted by Customer to Aurigo that a Service Level under this SLA has not been met and that a Service Credit may be due to Customer.

3. **"Customer"** means the person or organization that contracted for Services under the Agreement.

4. **"Downtime"** means the time when the Service is not functional and is not available for Customer to use.

5. **"Incident"** means an unplanned interruption or degradation in Masterworks Service.

6. **"Monthly Uptime Percentage"** is calculated on a calendar month basis (according to the formula set forth in Section A) using data collected about the Service's availability for a given calendar month by a third-party provider who makes frequent log-in attempts to the Service on a 24-hour/seven day a week basis.

7. **"Scheduled Downtime"** means published maintenance windows or times when Aurigo notifies Customer of periods of scheduled Downtime for network, hardware, Service maintenance, or Service upgrades at least 5 days before the commencement of such Downtime. If an emergency Downtime is required (such as a fix to a zero-day vulnerability), Aurigo is authorized to give Customer notification that is less than twenty-four (24) hours before the required downtime. Except all Emergency Downtime, Customers approval is mandatory for Scheduled Downtime. For Emergency Downtime, Customer will be notified. Every month, a three hour maintenance (over weekend) is scheduled for security patching.

8. **"Service" or "Services"** means the Aurigo Masterworks Online service provided to Customer pursuant to the Agreement.

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9. **"Service Level"** means the percentage of Service availability for a given month that Aurigo agrees to provide Customer, which is measured by the Monthly Uptime Percentage.

10. **"Subscription Fee"** means the annual fees that Customer pays Aurigo for their subscription to the Service.

B. Uptime Service Level

The Uptime Service Level for the Service is 99.5%

The Monthly Uptime Percentage is calculated for a given calendar month using the following formula:

Monthly Uptime Percentage =		
Total number of minutes in a given calendar month	**minus**	Total number of minutes of Unplanned Downtime in a given calendar month
Total number of minutes in a given calendar month		

C. Claims against Uptime Service Level

1. Customer may submit an Uptime Service Level claim to Aurigo during any month when the Service availability does not meet or exceed the Uptime Service Level guarantee. To submit an Uptime Service Level claim, Customer's account must be active and in good standing.

2. Customer must submit a formal Uptime Service Level claim at support@aurigo.com.

3. Customer must provide all reasonable Service downtime details related to the Uptime Service Level claim.

4. Customer must provide sufficient evidence to support the claim within 90 days following the month in which the downtime incident(s) occurred.

5. Aurigo will use all reasonably available information to validate claims and make a good faith judgment on what the Uptime Service Level was for the month in which Customer claims they experienced a downtime. Aurigo utilizes commercially available monitoring software and services to ensure that the Service meets the Uptime Service Level. Aurigo will send the monthly Service availability report to Customer by 7th of the month for the previous month. The report will sent by email to Customer's authorized representative. Customer may request additional reports on ad-hoc basis.

6.   Aurigo will use commercially reasonable efforts to process claims within forty-five (45) days after Customer provides sufficient evidence to support their claim.

D. Incident (Service issue) definitions and support process

Aurigo commits to responding to support requests promptly. If an issue is being caused by a bug, the time required to provide a fix for the bug is dependent on the nature of the bug. Aurigo will provide Customer with an estimated time to fix the bug. In such cases, Aurigo may provide a workaround or other advisory instructions, such as when the fix will be released into production. When Aurigo provides Customer with a workaround or advisory instructions that is acceptable to Customer, the SLA clock for that specific issue will be paused.

Severity Level	Name	Description	Time to Response	Time to Repair
1	**Urgent**	A system-wide outage that has halted the normal functioning of the Service. The Service is completely inaccessible to Users or severe performance degradation leaving system unusable to users	15 minutes during business hours 1 Hour - after hours	4 Hours
2	**High**	Major functionality in the Service is not working as designed and having a high impact on portions of the Customer's business and impacting a majority of Users. If a reasonable workaround is found for an "Urgent" issue, it can be downgraded to "High" with Customer's consent.	4 Business Hours	2 Business Days
3	**Normal**	Partial, non-critical loss of use in the Service with a medium-to-low impact on Customer's business. However, Customer's business can continue to function. If a reasonable workaround is found for a "High" issue, it can be downgraded to "Normal" with Customer's consent.	1 Business Day	7 Business Days
4	**Low**	Minor inconveniences with little to no impact on Customer's business. Requests for clarifications from Customer are categorized as "Low". If a reasonable workaround is found for a "Normal" issue, it can be downgraded to "Low" with Customer's consent.	1 Business Day	No specified turnaround time

The service level time will be measured from the first communication to Aurigo via email or Aurigo's support line during standard business hours.

To calculate "Time to Repair" accurately, the SLA clock will pause if Aurigo is waiting on Customer to give approval, clarification, or confirmation for a corrective change. This applies to all severity levels.

The system is monitored 24x7x365. For severity 1 outage, the coverage is 24x7x365. Such an outage would alert Aurigo staff and a remediation will begin immediately irrespective of the day and time. An escalation matrix will be shared with the customer during support helpdesk onboarding time.

E. Exclusions

Downtime does not include:

1. The time when the Service is not available as a result of Scheduled Downtime.

2. The following performance or availability issues that may affect the Service:

   a. Due to factors outside Aurigo's reasonable control;

   b. Related to add-on features for the Service that include, but are not limited to, Internet Marketing and Reporting Services;

   c. That resulted from the use of Customer's or third-party's hardware, software or services;

   d. That resulted from actions or inactions of Customer or third parties;

   e. That resulted from actions or inactions by Customer or Customer's employees, agents, contractors, or vendors, or anyone gaining unauthorized access to Aurigo's network using Customer's passwords or equipment;

   f. That was caused by Customer's use of the Service after Aurigo advised Customer (through an email to the authorized Customer representative) to modify its use of the Service and Customer did not modify its use as advised;

   g. Through Customer's use of beta software, trial offers, early access programs, and/or demos (as determined by Aurigo).

3. Service availability SLAs apply to production systems only.

4. For software defect issues that are not classified as Severity 1 and require a code fix, Aurigo will provide a committed time to fix the defect within the Time to Repair window.

Aurigo will provide full explanation to reasoning behind the committed timeline. As long as Aurigo delivers the fix within the committed time, Aurigo will be deemed compliant with Time to Repair service level.

5. Change Requests that require a separate Statement of Work, including scope definition, list of deliverables, and cost of deliverables.

6. Service Requests for configuration changes.

F. Data Backup and Retention

Aurigo Service is configured to backup Customer data on regular basis. The following schedule defines the data back frequency and data backup retention period.

Data Backup Frequency	Database Transactions – Every hour Uploaded Documents – Every day
Data Backup Retention	3 Years

G. Release Management

Aurigo will classify releases based on the type of the release. Deployment of these releases is completed through authorization and scheduled as agreed to and authorized by CUSTOMER.

Hot Fix Releases

A hotfix release is made for Severity 1 issues and Severity 2 issues as agreed. Issues that are causing disruption to a large user base and Issues that have a critical business impact with no workarounds fall into this category. The deployment of the temporary fix is generally done as soon as possible.

Minor Releases

Aurigo plans a scheduled release to production every 6 weeks. This release will include all issues logged in the past 6 weeks other than the ones that have been deployed as part of an ad hoc or hotfix release. The list of issues addressed in the minor release will be provided to CUSTOMER at the time of deployment to UAT. Aurigo and CUSTOMER may jointly agree to more frequent deployments.

Schedule:

- Release to UAT - 2 weeks before the release date

- Release to Production – Every 6th weekend (contingent on approval by close of business Wednesday)

Minor releases may also result from CUSTOMER requested change requests. These are scheduled based on the associated project plan as discussed, scheduled, and approved by CUSTOMER and Aurigo.

Exhibit E - Software Subscription and Service Level Agreement

Major Releases

Generally, once a year, Aurigo may publish a Major release of Masterworks. Customer has an option of skipping up to 2 major releases in deployment to its environment. However, Customer is required to upgrade before the release of the 3rd Major release. These are scheduled based on the associated project plan as discussed, scheduled, and approved by CUSTOMER and Aurigo. Deployment of the major release follows Customer initiated change request process.

Deployment Process

Prior to any software moving from the development and test environment into production, an appropriate level of deployment planning is required, including evaluating the release from supportability and operational perspective.

Deployment Planning encompasses one or more of the following activities (as applicable):

- Release Note creation and updated Engineering Specifications by Aurigo, if required.
- System testing by Aurigo
- User Acceptance testing by CUSTOMER, if required
- Performance Testing by Aurigo, if required

Exhibit E - Software Subscription and Service Level Agreement

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Schedule 2.1 – Aurigo Support Plans

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The Silver Support Plan is included at no additional cost with all annual subscription plans. The cost for Gold and Platinum Support Plans are listed in the Pricing Matrix.

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Silver Support Plan

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The Aurigo Silver Support Plan is Aurigo's standard support plan.

Support Hours	8:00 AM – 5:00 PM Mountain Time Monday through Friday, excluding US federal and state holidays
Support Channel	Phone, Email, Web
Product Support - Included	Platform support – updates and break-fix patches Purchased Products support – updates and break-fix patches
Solution Support – Warranty	Thirty (30) days post-production go-live
Solution Support - Post Warranty	Provided on Time and Materials Basis
Concierge Desk Services	Not included
Service Uptime	99.5% (excluding Scheduled Downtime)

Notes:

1. Hourly rate for Post Warranty Solution Support is $200.
2. Through the Concierge Desk, Customer gets access to Rapid Prototyping Services using the available bundled hours. Customers are also provided with a dedicated support call-in number. Concierge Desk services are available with the Platinum Support Plan only.

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Gold Support Plan

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The Aurigo Gold Support Plan adds solutions support to our standard support plan and provides your organization peace of mind while using Aurigo Masterworks. The Gold Support Plan provides extensive support on the base product functionality along with solution support. The Gold Support Plan ensures that our customers are getting everything committed to in our Silver Support Plan plus so much more, such as 45 days of post product go-live warranty support.

Support Hours	8 AM – 5:30 PM Mountain Time Monday through Friday, excluding US federal and state holidays
Support Channel	Phone, Email, Web
Product Support - Included	Platform – Updates and Break-Fix Patches

Exhibit E - Software Subscription and Service Level Agreement

	Purchased Products – Updates and Break-Fix Patches
Solution Support – Warranty	45 Days Post Production Go-Live
Solution Support - Post Warranty	250 Hours (per year) of support for Break-Fix or Solution Services
Concierge Desk	Not included
Application Uptime	99.7% (excluding planned downtime)

Notes:

1. Unused Solution Support Hours do not roll forward to the next subscription year.
2. Discounted rate for each additional hour of Solution Support is $175
3. Through concierge desk customers get access to Rapid Prototyping Service using available bundled hours. Customers are also provided dedicated support call-in number. Concierge desk is available with the Platinum support plan only.

Platinum Support Plan

The Aurigo Platinum Support Plan is our premium plan that provides your organization peace of mind while using Aurigo Masterworks along with world-class technical support for all its configurations and integrations. The Platinum Support Plan provides extensive support on the base product functionality along with solution support. The plan ensures our customers are getting everything committed to in our Gold Support Plan plus so much more, such as 60 days of post product go-live warranty support.

Support Hours	8 AM – 6 PM Mountain Time Monday through Friday, excluding US federal and state holidays
Support Channel	Phone, Email, Web
Product Support - Included	Platform – Updates and Break-Fix Patches Purchased Products – Updates and Break-Fix Patches
Solution Support – Included	60 Days Post Production Go-Live
Solution Support - Post Warranty	1000 Hours (per year) of support for Break-Fix or Solution Services
Concierge Desk	Included with: - Dedicated Support Number - Rapid prototyping service
Application Uptime	99.9% (excluding planned downtime)

Notes:

1. Unused Solution Support Hours do not roll forward to the next subscription year.

2. Discounted rate for each additional hour of Solution Support is $155
3. Through concierge desk customers get access to Rapid Prototyping Service using available bundled hours. Customers are also provided dedicated support call-in number. Concierge desk is available with the Platinum support plan only.

ACORD

CERTIFICATE OF LIABILITY INSURANCE

OP ID: EI

DATE (MM/DD/YYYY)
07/30/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:
Regan Agency, Inc. 463 Deer Park Ave Babylon, NY 11702 Regan Agency, Inc.	PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: AURIG-1

	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED Aurigo Software Technologies 29 Bob's Lane Setauket, NY 11733	INSURER A : Valley Forge Insurance Company	20508
	INSURER B : Hartford Fire Ins Co	19682
	INSURER C : Continental Casualty Company	20443
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES   **CERTIFICATE NUMBER:**   **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR X **0-Deductible** X **Empl Dishonesty** GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC	X	X	4017351353 4017351353 $1,000,000	03/25/2020 03/25/2020	03/25/2021 03/25/2020	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 300,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $

A
A
	AUTOMOBILE LIABILITY
	   ANY AUTO
	   ALL OWNED AUTOS
	   SCHEDULED AUTOS
	X HIRED AUTOS
	X NON-OWNED AUTOS
	X **0-Deductible**
		X		4017351353	03/25/2020	03/25/2021	COMBINED SINGLE LIMIT (Ea accident)
							BODILY INJURY (Per person)
							BODILY INJURY (Per accident)
							PROPERTY DAMAGE (PER ACCIDENT)
								$ 1,000,000
								$
								$
								$
								$
								$

C	X **UMBRELLA LIAB** OCCUR X **EXCESS LIAB** CLAIMS-MADE DEDUCTIBLE X RETENTION $ 10,000		X	6072102043	03/25/2020	03/25/2021	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000 $ $
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A					WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $
B	**Prof Liab**			12 TE 0322831-20	06/30/2020	06/30/2021	Prof Liab	10,000,000
B	**Data Breach**			4017351353	03/25/2020	03/25/2021	Data Brch	5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
RFP 11024
Title: Project Management Information System

Certificate Holder is Additional Insured.

CERTIFICATE HOLDER	CANCELLATION
COLORCC City and County of Denver General Services 201 W. Colfax Avenue Dept. 304 Denver, CO 80202	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE _[signature]_

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