<u>CAROLLO ENGINEERS, INC.</u> Architect/Consultant/Engineer

SANITARY SEWER MASTER PLAN Project Title

MAJNC/50490-000-4140 Budget Account Number

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THIS PROFESSIONAL SERVICES AGREEMENT (Agreement) is entered into on Detail 20 , 2022, between the City of Chico, a municipal corporation under the laws of the State of California, (City) and Carollo Engineers, Inc., a California corporation, (Consultant).

SECTION 1 - DESCRIPTION OF PROJECT

City desires to undertake that certain project (Project) described in EXHIBIT A, entitled "DESCRIPTION OF PROJECT," and to engage Consultant to provide the required professional services relating to the Project.

SECTION 2 - SCOPE OF PROFESSIONAL SERVICES - BASIC; COMPLETION SCHEDULE

Consultant shall perform those basic professional services in connection with the Project as are set forth more particularly in EXHIBIT B, entitled "SCOPE OF PROFESSIONAL SERVICES - BASIC; COMPLETION SCHEDULE," and shall complete said professional services in accordance with the completion schedule for professional services as incorporated in EXHIBIT B.

SECTION 3 - SCOPE OF PROFESSIONAL SERVICES - ADDITIONAL; COMPLETION SCHEDULE

City and Consultant agree that it may be necessary, in connection with the Project, for Consultant to perform or secure the performance of professional services other than those set forth in EXHIBIT B. In each such instance, Consultant shall advise City, in advance and in writing, of the need for such additional professional services, their cost and the estimated time, if CA STD FORM 06/01/22

appropriate, required to perform them. Consultant shall not proceed to perform any such required additional professional service until City has determined that such professional service is beyond the scope of the basic professional service to be provided, is required, and has given its written authorization to perform or obtain it. Each additional professional service so authorized shall constitute an amendment to this Agreement, shall be identified and sequentially numbered as "Amendment No. 1" and so forth, shall be subject to all of the provisions of this Agreement, and shall be incorporated into EXHIBIT B accordingly.

SECTION 4 - COMPENSATION

Consultant shall be compensated for professional services rendered to City pursuant to this Agreement periodically in the amounts, manner and in accordance with the payment schedule as set forth in EXHIBIT C, entitled "COMPENSATION." Amounts due to Consultant from City for professional service rendered shall be evidenced by the submission to City by Consultant of an invoice, prepared in a form satisfactory to City, setting forth the amount of compensation due for the period covered by it. Each such invoice shall be forwarded to City so as to reach it on or before the 15th day of the month next following the month or months, or other applicable period, for which the professional service invoiced were provided. All such invoices shall be in full accord with any and all applicable provisions of this Agreement. City will make payment on each such invoice within 30 days of receipt of it. However, if Consultant submits an invoice which is incorrect, incomplete, or not in accord with the provisions of this Agreement, then City shall not be obligated to process any payment to Consultant until a correct and complying invoice has been submitted.

SECTION 5 - RESPONSIBILITY OF CONSULTANT

By executing this Agreement, Consultant warrants to City that Consultant possesses, or will arrange to secure from others, all of the necessary professional capabilities, experience, resources and facilities necessary to provide to City the professional services under this Agreement. In procuring the professional services of others to assist Consultant in performing the professional services set forth at EXHIBIT B or additional professional services under SECTION 3 of this Agreement, Consultant shall not employ or otherwise obtain the professional services of any person or entity known to Consultant or City to have, or be likely to develop during the term of this Agreement, an interest that is personally, or professionally, or financially adverse to any interest of City. Consultant will follow the best current, generally accepted professional practices in performing tests and procedures, making findings, rendering opinions, preparing factual presentations and providing professional advice and recommendations regarding professional services rendered under this Agreement.

SECTION 6 - RESPONSIBILITY OF CITY

To the extent appropriate to the Project contemplated by this Agreement, City shall:

6.1 Assist Consultant by placing at Consultant's disposal all available information pertinent to the Project, including previous reports and any other data relative to design and construction of the Project.

<u>6.2</u> Guarantee access to and make all provisions for Consultant to enter upon public and private property as required for Consultant to perform Consultant's professional services.

- <u>6.3</u> Examine all studies, reports, sketches, drawings, specifications, proposals, and other documents prepared and presented by Consultant, and render verbally or in writing as may be appropriate, decisions pertaining thereto within a reasonable time so as not to delay the progress of the services by Consultant.
- <u>6.4</u> Designate in writing a person to act as City's representative with respect to the services to be performed under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to materials, equipment, elements and systems pertinent to Consultant's professional services.
- <u>6.5</u> Give prompt written notice to Consultant whenever City observes or otherwise becomes aware of any defect in the Project.
- <u>6.6</u> Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

SECTION 7 - INDEMNIFICATION

To the fullest extent permitted by law, Consultant shall defend (with counsel of City's choosing), indemnify and hold City, its officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, related to, or incident to any alleged acts, errors or omissions, or willful misconduct of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the services provided under this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys' fees and other related costs and expenses. Consultant shall reimburse City and its officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

Consultant's responsibility for such defense and indemnity obligations shall survive the termination or completion of this Agreement for the full period of time allowed by law. The defense and indemnification obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by City, its directors, officials, officers, employees, agents, or volunteers. Consultant's obligation to indemnify, defend and hold harmless the City, its officers, employees and agents for claims involving "Professional Liability" claims involving acts, errors or omissions in the rendering of professional services (as defined in Civil Code section 2782.8(2), specifically, architects (Business & Professions Code section 5500), landscape architects (Business & Professions Code section 5615), professional engineers (Business & Professions Code section 6701), and professional land surveyors (Business & Professions Code section 8701)), shall be limited to the extent caused by Consultant's negligent acts, errors or omissions.

SECTION 8 - INSURANCE

Any requirements by City that Consultant carry general liability, errors and omissions, or CA STD FORM 06/01/22

any other type of insurance in connection with the services to be performed and/or professional services to be rendered by Consultant pursuant to this Agreement shall be as set forth in EXHIBIT D, entitled "INSURANCE PROVISIONS."

SECTION 9 - GENERAL PROVISIONS

9.1 Access to Records

Consultant shall maintain all books, records, documents, accounting ledgers, and similar materials relating to services performed for City under this Agreement on file for at least four years following the date of final payment to Consultant by City. Any duly authorized representative(s) of City shall have access to such records for the purpose of inspection, audit and copying at reasonable times, during Consultant's usual and customary business hours. Consultant shall provide proper facilities to City's representative(s) for access and inspection. Consultant shall be entitled to reasonable compensation for time and expenses related to such access and inspection activities, which shall be considered to be an additional professional service to City, falling under the provisions of SECTION 3 of this Agreement.

9.2 Assignment

This Agreement is binding on the heirs, successors, and assigns of the parties hereto and shall not be assigned by either City or Consultant without the prior written consent of the other.

9.3 Changes to Scope of Services - Basic Professional Services

City may at any time, upon a minimum of 10 days written notice, modify the scope of basic professional services to be provided under this Agreement. Consultant shall, upon receipt of said notice, determine the impact on both time and compensation of such change in scope and notify City in writing. Upon agreement between City and Consultant as to the extent of said impacts to time and compensation, an amendment to this Agreement shall be prepared describing such changes. Execution of the amendment by City and Consultant shall constitute the Consultant's notice to proceed with the changed scope.

9.4 Compliance with Laws, Rules, Regulations

All professional services performed by Consultant pursuant to this Agreement shall be performed in accordance and full compliance with all applicable Federal, State, or City statutes, and any rules or regulations promulgated thereunder.

9.5 Conflict of Interest Code Applicability

If City's City Manager has determined that one or several of Consultant's Principal(s) or Project Manager(s) are subject to the provisions of Section 2R.04.180 of the Chico Municipal Code (the City's Conflict of Interest Code), then each such person will be required to comply with the provisions of said Code in connection with the professional services they render to the City under this Agreement. In such event, City's requirements are set forth in EXHIBIT E, entitled "CONFLICT OF INTEREST PROVISIONS," to this Agreement.

9.6 Exhibits Incorporated

All Exhibits attached to and referred to in this Agreement are hereby incorporated by this reference.

9.7 Independent Contractor

City and Consultant agree that the relationship between them created by this Agreement is that of an employer-independent contractor. Consultant shall be solely responsible for the conduct and control of the services performed under this Agreement. Consultant shall be free to render professional consulting services to others during the term of this Agreement, so long as such activities do not interfere with or diminish Consultant's ability to fulfill the obligations established herein to City.

9.8 Integration; Amendment

This Agreement represents the entire understanding of City and Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered in it. This Agreement may not be modified or altered except by amendment in writing signed by both parties.

9.9 Jurisdiction

This Agreement shall be administered and interpreted under the laws of the State of California. Jurisdiction of litigation arising from this Agreement shall be in that state. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null, and void insofar as it is in conflict with said laws, but the remainder of the Agreement shall continue to be in full force and effect.

9.10 Notice to Proceed; Progress; Completion

Upon execution of this Agreement by the parties, City shall give Consultant written notice to proceed with the services. Such notice may authorize Consultant to render all of the professional services contemplated herein, or such portions or phases as may be mutually agreed upon. In the latter event, City shall, in its sole discretion, issue subsequent notices from time to time regarding further portions or phases of the services. Upon receipt of such notices, Consultant shall diligently proceed with the services authorized and complete it within the agreed time period.

9.11 Ownership of Documents

Title to all documents, designs, drawings, specifications, and the like with respect to services performed under this Agreement shall vest with City at such time as City has compensated Consultant, as provided herein, for the professional services rendered by Consultant in connection with which they were prepared.

9.12 Subcontracts

Consultant shall be entitled, to the extent determined appropriate by Consultant, to subcontract any portion of the services to be performed under this Agreement. Consultant shall be responsible to City for the actions of persons and firms performing subcontract services. The subcontracting of services by Consultant shall not relieve Consultant, in any manner, of the obligations and requirements imposed upon Consultant by this Agreement.

9.13 Term; Termination

The term of this Agreement shall commence upon City's issuance to Consultant of a notice to proceed for all or a portion of the services, as hereinabove provided, and shall end upon CA STD FORM 06/01/22

City's acceptance and payment for all or such portion of the services as was authorized by such notice, including any and all retentions. Notwithstanding the foregoing, City may, in its sole discretion, terminate this Agreement at any time and for any reason whatsoever by giving at least 10 days prior written notice of such termination to Consultant. In this latter event, Consultant shall be entitled to compensation for all professional service rendered and services performed for City to the date of such termination.

9.14 Notice

Any notices required to be given pursuant to this Agreement shall be deemed to have been given by their deposit, postage prepaid, in the United States Postal Service or, alternatively, by personal delivery or overnight courier service addressed to the parties as follows:

To City:

City Manager City of Chico P. O. Box 3420

Chico, CA 95927-3420

or

City Manager City of Chico 411 Main Street Chico, CA 95928

To Consultant: Carollo Engineers, Inc.

2880 Gateway Oaks Drive, Suite 300

Sacramento, CA 95833

SECTION 10 - SPECIAL PROVISIONS

This Agreement shall include all special provisions, if any, as are set forth on EXHIBIT F, entitled "SPECIAL PROVISIONS."

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date first set forth above.

CITY:

Mark Sorenser, City Manager

CONSULTANT:

TIERREZ

*Authorized pursuant to Section 3.08.060

of the Chico Municipal Code

Title VICE PRESIDENT

APPROVED AS TO CONTENT:

APPROVED AS TO FORM:

Vincent C. Ewing, City Attorney*

Leigh Ann Sutton, Public Works Director.

Engineering

*Pursuant to The Charter of the City of Chico, Section 906(D)

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CITY:	CONSULTANT:
Mark Sorensen City Manager	By: SIGNED IN COUNTERPART
*Authorized pursuant to Section 3.08.060 of the Chico Municipal Code	

APPROVED AS TO FORM:

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APPROVED AS TO CONTENT:

Vincent C. Ewing, City Attorney*

Leigh Ann Sutton, Public Works Director,

Engineering

*Pursuant to The Charter of the City of Chico, Section 906(D)

CA STD FORM 06/01/22

REVIEWED AS TO CONTENT:

Barbara Martin, Interim Administrative Services Director*

*Reviewed by Finance and Information Systems

<u>CAROLLO ENGINEERS, INC.</u> Architect/Consultant/Engineer

SANITARY SEWER MASTER PLAN Project Title

MAJNC/50490-000-4140 Budget Account Number

EXHIBIT A

DESCRIPTION OF PROJECT

The City of Chico requires an engineering firm to update the City's Sanitary Sewer Master Plan (Master Plan). The City's existing Master Plan was developed in 2013, and there have been several events that have changed the conditions and assumptions with which the 2013 Master Plan was based. The City is in need of a new basis from which to guide its sewer improvements and development cost assumptions.

CAROLLO ENGINEERS, INC. Architect/Consultant/Engineer

SANITARY SEWER MASTER PLAN Project Title

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EXHIBIT B

SCOPE OF PROFESSIONAL SERVICES - BASIC; COMPLETION SCHEDULE

Scope of Professional Services - Basic

The Consultant shall provide professional services as follows:

TASK 1. PROJECT MANAGEMENT

Consultant's project manager shall direct and coordinate the efforts of the project team members to deliver all of the components of the City of Chico's Sanitary Sewer Master Plan (SSMP) project.

Task 1a. Biweekly Meetings

Consultant shall conduct biweekly progress meetings to summarize project status, share information, and gain concurrences on key project issues. Consultant shall prepare meeting agendas and meeting notes to document discussions, decisions, and work progress. Progress meetings shall include discussion of project progress, schedule, budget, action item list, and decision log.

Task 1b. Monthly Meetings

Consultant shall conduct monthly progress meetings for management and stakeholders. These meetings shall generally be virtual. The purpose of the meetings shall be to share project progress and progress towards deliverables and discuss key decisions.

Task 1c. In-Person/Major Meetings

It is anticipated that five (5) major in-person meetings shall be required for this project.

- 1. **Kickoff Meeting** Consultant shall conduct a kickoff meeting with City staff. The purpose of the kickoff meeting shall be to confirm project objectives, review staff and team members, discuss scope and schedule, and review the data collection matrix.
- 2. Review of Project Prioritization Consultant shall conduct a workshop to review

project prioritization as it relates to the condition assessment and risk classification. The objective of the workshop shall be to discuss and formalize the decision matrix related to project prioritization and formalize the decision process.

- 3. Review of Developed Projects Consultant shall meet with the internal stakeholders to review projects that have been developed for eventual inclusion into the Capital Improvement Project (CIP). The intent of this meeting shall be to gain consensus on project details to make sure projects are viable, feasible and aligned with plan objectives, such as vulnerability, infill, planned development, and other criteria.
- **4. Draft SSMP Report Review Public Meeting** Consultant shall conduct a workshop with internal and external stakeholders, including the public, to communicate the findings of the report and receive stakeholder feedback of the draft SSMP.
- 5. City Council Public Meeting Plan Adoption Consultant shall work with City staff to deliver a presentation to the City Council on the findings of the report. Consultant shall address questions and any concerns in the meeting and incorporate decisions discussed into the final document, as appropriate.

Task 1d. Project Schedule

Consultant shall develop an updateable Smartsheet schedule that highlights major tasks, milestones, deliverables, and City review periods, along with major meetings and workshops.

Deliverables:

- All Meetings. Agenda, presentation, minutes, action items, consensus achieved, collection of comments received during the meetings, and responses for all comments received.
- In-Person/Major Meetings. Agenda, presentation, minutes, action items, consensus achieved, collection of comments received during the meetings, and responses for all comments received.
- **Project Schedule.** Schedule including identification of critical path and key decision points. Schedule shall be in Smartsheet format as provided by the City.

TASK 2. PUBLIC OUTREACH

The overarching goal of this task shall be to include the public and stakeholders in SSMP development to foster ownership in successful adoption of the SSMP by City Council.

Task 2a. Public Outreach Plan

Consultant team shall be responsible for generating a public outreach plan consisting of schedule, messaging strategies, identification of key stakeholder groups, key decisions that require consensus among stakeholders, critical items for public comment, and an overall strategy for the SSMP to be reviewed and adopted by City Council.

The purpose of the Public Outreach Plan shall be to provide guidelines to be considered and implemented to make ensure the City conveys timely, accurate, and clear information to all stakeholders throughout the master planning process. This plan shall include strategies and tactics to inform internal and external stakeholders, understand the purpose and need of the CA STD FORMS 04/25/22

SSMP, have the opportunity to provide comment where it can inform the planning process, and ultimately, to help make sure the SSMP is adopted by City Council. The Plan shall include content such as key messages, stakeholder identification, schedule, critical decision points in the process that require stakeholder feedback and methods to obtain feedback, and other relevant content.

Task 2b. Public Outreach Content

Consultant team shall develop a range of tailored, SSMP-specific materials that shall provide general information about the master planning effort, as well as opportunities for stakeholder and public input. To address the technical nature of the SSMP, Consultant shall design and deliver engaging, public-friendly materials that shall be appropriate for the range of stakeholders involved and make sure public and stakeholder input is appropriate and useful. Consultant team shall develop materials suitable for interchangeable formats and channels. Including social media, newsletter articles, event handouts, and website updates.

Task 2c. Public Meeting and Community Engagement

As part of the Public Outreach Plan development and to encourage productive public engagement and outreach, Consultant team shall develop an overall engagement strategy that includes an approach to public meeting format and logistics. This outreach effort shall be planned to foster the public's understanding of the City's vision for wastewater collection.

Deliverables:

- **Public Outreach Plan.** The Public Outreach Plan shall consist, at minimum, of the following:
 - o Schedule.
 - o Messaging strategies.
 - o Identification of key stakeholder groups.
 - Critical decisions that require consensus among stakeholders.
 - o Critical items for public review and comment.
 - o Overall strategy for the SSMP to be reviewed and adopted by City Council.
- **Public Outreach Content.** Content as described in the Public Outreach Plan, including but not limited to website content, infographics, and any other material identified in the Public Outreach Plan.

TASK 3. REVIEW AND ASSESS EXISTING INFORMATION

A review and assessment of existing information shall allow for the determination of a condition assessment, including vulnerability, criticality, and associated risk scores.

Task 3a. Review of Reports and Documentation

Consultant shall develop a data collection matrix that lists the required data and supporting documentation required to complete the SSMP. Consultant shall review the data collection matrix at the Kickoff meeting. In addition to any other available data necessary to develop the SSMP, Consultant shall review the following:

- Current City of Chico standards, regulatory requirements, amendments, and provisions.
- City of Chico Municipal Code.
- City of Chico Capital Improvement Plan.

- Chico Sewer System Management Plan.
- Chico Sanitary Sewer Overflow Response Plan.
- City of Chico Sanitary Sewer Master Plan Update, June 2013 (Carollo).
- WPCP Strategic Planning Report FINAL, February 2021 (Carollo).
- 2022 WPCP Facility Planning Update Report DRAFT January 2022 (Carollo), including planning for the Paradise Sewer Project.
- City of Chico General Plan 2030.

All assumptions used in this plan shall be consistent with the City of Chico General Plan 2030.

Task 3b. Review of Existing GIS Database

Consultant shall review the existing asset inventory at the appropriate level of detail for risk analysis, capital rehabilitation, and replacement planning. Consultant shall summarize missing data, such as diameter, length, inverts, and rim elevations.

Consultant shall review all available City records, including as-builts and sewer camera recordings, to fill in critical missing data. Consultant shall identify areas of the system targeted for field survey. Consultant shall identify locations for supplemental field surveys to fill in critical missing data.

Task 3c. Field Verification of Critical Assets

Consultant shall provide a list of viable and qualified personnel/subcontractors that are able to perform field verification at a predetermined hourly/daily cost. The City shall determine which, if any, critical assets will be field verified.

Task 3d. Environmental Documentation

Consultant's team shall develop the appropriate environmental documentation to target an Initial Study/(Mitigated) Negative Declaration. The Consultant's team shall consider the City's anticipated level of environmental review, considering factors such as consistency with the City of Chico 2030 General Plan and associated Environmental Impact Report, and provide feedback as to the adequacy of this environmental determination. In coordination with the City, Consultant's team shall prepare an administrative draft of the CEQA documentation at the appropriate level necessary to analyze the potential for systematic and project-level improvement impacts.

Deliverables:

- GIS Data and Gap Analysis. The GIS data compiled for this document shall be delivered in ESRI ArcGIS File Geodatabase with sewer nodes and sewer lines entered in a geometric network. The data shall be projected in NAD 1983 StatePlane California II FIPS 0402 Feet-WKID: 2226 Authority: EPSG.
 - o Identification of critical missing GIS data.
 - o List, by priority, of field survey locations where additional GIS data is needed.
 - o Updated and improved GIS database.

• Environmental Documentation

Administrative Draft of Initial Study/Proposed (Mitigated) Negative Declaration,

- Notice of Intent (NOI), and Notice of Determination (NOD) documents for the project.
- Allow for and incorporate one round of City comments into documents, as needed. (Note: the City shall coordinate the publishing of the NOI and file the NOD with the Butte County Clerk Recorders' Office and State Clearinghouse, including payment of associated fees.)

TASK 4. FLOW MONITORING PROGRAM

Consultant shall contract with V&A Consulting Engineers (subconsultant) to conduct a temporary flow monitoring program. The flow monitoring program shall include 18 sites for a period of 10 weeks.

Task 4a. Develop Flow Monitoring Site Recommendations

The Consultant team shall work closely with City operations staff to develop a list of recommended monitoring sites. The site recommendations shall be based on past metering efforts, Consultant system knowledge, operations staff recommendations, and subconsultant site reconnaissance.

Task 4b. Flow Monitoring Installation and Data Collection

Subconsultant shall install, calibrate, and monitor the 18 flow metering sites over the course of the 10-week period. Subconsultant shall make weekly checks on data accuracy and make measurement adjustments as necessary.

Deliverables:

- Flow Monitoring Report consisting of:
 - o Executive Summary.
 - o Introduction and background.
 - o Methods and procedures.
 - o Sites and presentation of data.
 - O Summary of flow monitoring data that shall be included in public outreach efforts, such as graphs, diagrams, infographics, etc.

TASK 5. FLOW MODELING - COLLECTION SYSTEM HYDRAULIC MODELING

Task 5a. Projections of Flow for Planning Horizon

Consultant shall coordinate closely with City Planning and other department staff to develop flow projections for the 20-year planning horizon. Consultant shall use population projections, combined with land use identified in the General Plan, to develop flow projections throughout the City. Consultant shall use information from flow monitoring to develop peaking factors and validate flow projections. Consultant shall also consider assumptions related to construction of accessory dwelling units (ADUs) and distribution of ADUs in the collection system. Consultant shall coordinate with City staff on the historical trends of ADU permit applications to predict future ADU construction rates.

Consultant shall also summarize, and document flows attributed to planned new developments and allocate the flows in the updated hydraulic model. Projects required to serve the planned new developments shall be used in the development of the 10-Year CIP for specific new development

projects that may or may not occur within the planning horizon.

Task 5b. Hydraulic Modeling Update

Consultant shall update the hydraulic model pipeline network to include projects that have been completed since the 2013 Master Plan was finalized. The model update shall also include updating the baseline wastewater flows and the wet weather flow factors. The design storm shall be reviewed and updated based on NOAA Atlas 14 isopluvial maps for specific areas within the City of Chico.

Task 5c. Hydraulic Modeling Calibration and Validation

The flow monitoring data for average flows and wet weather flows shall be used to calibrate the hydraulic model to both dry and wet weather flow conditions. The model shall be calibrated to flow, velocities, and levels at each of the flow monitoring locations.

Task 5d. Hydraulic Analysis

The model shall be used to evaluate the hydraulic capacity of the collection system. The evaluation shall include determination of the following:

- Capacity deficiencies.
- Critical pipeline segments.
- Identification of new pipe segments that could improve overall system flow dynamics.
- Identification of new pipe segments and projects that could reduce the number of lift stations.

Consultant shall provide analysis and results for three flow projections: low, medium, and high relative to population and development projects described in City and County planning documents. Medium population projection shall be based on projections used in the City of Chico General Plan 2030.

Consultant shall incorporate results from flow monitoring to calibrate and validate flow model results.

Task 5e. Draft and Final Technical Memorandum (TM): Flow Projections

Consultant shall develop a Draft and Final TM summarizing the methods and findings from Task 5b through 5d.

Deliverables:

• Draft and Final TM: Flow Projections

- o Identification of population projections, land use projections, and associated flow projections, including supporting documentation.
- List of planned new development projects, their associated flow projections, and impacts to the existing system.

• Draft and Final TM: Flow Modeling Evaluation

- o Software options, limitations, and recommendations.
- o Model calibration and validation using flow monitoring data.
- o Maps and figures.
- o Identification of capacity deficiencies.
- o Identification of critical pipeline segments.
- o New pipe segments that could improve the overall system flow dynamics.

- New pipe segments and projects that could reduce the number of lift stations.
- *Updated Hydraulic Model* Consultant shall provide the City a copy of the updated hydraulic model upon completion of the SSMP.

TASK 6 COLLECTION SYSTEM CONDITION ASSESSMENT

Task 6a. Conduct Collection System Condition Assessment

Consultant shall utilize findings from the desktop assessment to develop estimates of remaining useful life for pipeline assets. These estimates shall serve as initial parameters for determining the optimal replacement timing and shall be used to calculate a vulnerability score for each asset.

Task 6b. Establish Vulnerability Scores

Consultant shall utilize findings from the desktop assessment to develop estimates of remaining useful life for pipeline assets. These estimates shall serve as initial parameters for determining the optimal replacement timing and shall be used to calculate a vulnerability score for each asset.

Task 6c. Establish Criticality Scores

Utilizing results from flow monitoring, flow modeling, and City input, Consultant shall establish criticality, or consequence of asset failure, scores for the assets in terms of:

- Impact of failure to the environment.
- Impact to customers (number and type of connections).
- Impact to health and safety (hospitals, schools, etc.)
- Ability to return the asset to service.
- Estimated repair costs.

Pipeline segments shall be scored based on the above identified criteria, with the weighted summation equating to the Criticality Score for each segment of pipeline identified.

Task 6d. Calculate Risk Scores for Project Prioritization

Consultant shall combine the criticality scores with the vulnerability scores to calculate risk scores. Assets shall be sorted by risk to verify that known areas of concern are appropriately ranked. These scores shall be used to schedule capital replacement projects within the overall planning effort included in the 10-Year CIP.

Task 6e. Draft and Final TMs: Conditions Assessment and Project Prioritization

Consultant shall develop draft and final TMs for the condition assessment tasks, and the project prioritizations.

Deliverables:

- Draft and Final TM: Collection System Condition Assessment. This TM shall include a complete review and assessment of the collection system and shall identify:
 - Length and location of pipe beyond life expectancy.
 - o Predicted failure modes and locations.
 - o Genres of pipe within the City that are more or less likely subject to catastrophic failure.
- Draft and Final TM: Project Prioritization
 - o Present the process for how projects are prioritized based on condition,

- vulnerability, and criticality.
- Present design criteria, including flow projections and recommendations that shall be used to further develop projects.

TASK 7. LIFT STATION ASSESSMENT

Consultant shall inspect the seven lift stations evaluated as part of the 2013 Master Plan for condition, vulnerability, and criticality. From condition, vulnerability, and criticality data, Consultant shall provide a risk score for each lift station and recommend a course of action, by priority, for reliable, sustainable, and cost-effective operation. This shall include a plan to remove identified lift stations from service, if possible. The 2013 Master Plan developed pipeline improvements to allow four of the seven lift stations to be abandoned.

Task 7a. Pre-Assessment Workshop

Consultant shall conduct a workshop with operations staff to review critical information required for the field inspection of the City's lift stations. Consultant shall review as-built drawings, existing known condition issues, and any other valuable information required for the efficient inspection.

Task 7b. Lift Station Assessment

Consultant shall conduct a field inspection of the seven lift stations. Consultant shall utilize a team of selected engineers to review the stations, including experts in mechanical, structural, and electrical engineering.

Task 7c. Draft and Final TM: Lift Station Assessment

Consultant shall develop draft and final TMs that summarize the work associated with Task 7.

Deliverables:

- Draft and Final TM: Lift Station Assessment
 - o Risk scores for all lift stations.
 - o Recommended course of action for reliable, sustainable, cost-effective operation.
 - Recommended course of action to remove identified lift stations from service, if possible.

TASK 8. DEVELOP AND RANK PROJECTS

This task shall be the basis for the 10-Year CIP. Projects are intended to be developed to a level adequate for ranking and alternatives analysis.

Task 8a. Vulnerability Driven Projects

Consultant shall develop vulnerability driven projects based on the collection system assessment, vulnerability scores, and timing needed to mitigate major impacts of failure.

Task 8b. Criticality Driven Projects

Consultant shall develop projects to reduce the criticality of any one pipeline and to make the whole system more resilient. Criticality driven project development is expected to be iterative as criticality comprises several factors.

This shall include projects identified as capacity deficient related to infill population increases and not planned new development projects. It shall also include projects necessary to minimize risk to critical customers, such as hospitals, schools, and emergency services centers (police, fire, etc.).

Task 8c. Planned New Development Driven Projects

Using the City of Chico General Plan 2030, Consultant shall develop a list of projects required to accommodate specific planned new development projects. The projects shall be capacity and condition driven and shall consider criticality to make sure new pipelines do not post a long-term risk to the wastewater collection system in terms of oversizing and stranded assets.

Consultant shall research planned new development projects currently underway and provide a list of projects by priority. Projects under environmental review are considered planned new development; projects that have completed environmental review and have specific mitigation measures are considered part of the existing system.

Task 8d. Infill Projects

Consultant shall develop flows and sewer requirements to serve unsewered areas within the City limits. Consultant shall review potential infill sanitary sewer projects and identify a list of projects, by priority, to construct when funds become available. Infill projects are defined as projects that serve fully developed parcels that are currently on septic systems within City boundaries. Consultant shall coordinate with Butte County Environmental Health to obtain septic system information, determine method for ranking, and utilize information to assess priority. The intent of this task shall be to make sure funds that are collected for sewer main installation are installed in locations that have the maximum benefit to the entire City.

Task 8e. Develop Repair, Rehabilitation, or Replacement Alternatives

Consultant shall evaluate options for repair, rehabilitation, and/or replacement of facilities found to be in poor condition (and/or needing repair) during the condition assessment.

Task 8f. Prepare Planning Level Cost Estimates

Consultant shall prepare planning level (±30%-60%) project cost estimates for the identified vulnerability driven, criticality driven, infill driven, and planned new development driven projects.

Task 8g. Identify Non-Sewer Projects for Cost-Effective Nexus

Consultant shall review other City, County, and regional projects and identify opportunities for optimizing scope, schedule, and budget.

Task 8h. Project Development and Ranking

Consultant shall generate four separate project lists based on priority and schedule:

- 1. Vulnerability Driven Projects.
- 2. Criticality Driven Projects.
- 3. Planned New Development Driven Projects.
- 4. Infill Projects.

The results from these four lists shall be the basis for further development of identified projects and eventual incorporation into the 10-Year CIP.

Task 8i. Draft and Final TM: Project Development, Ranking and Costs

Consultant shall develop a draft and final TM summarizing the work associated with the development of capital project recommendations and the cost estimates.

Deliverables:

- Draft and Final TM Project Development, Ranking, and Delivery Method.
 - o Research, assumptions, and process used to develop and rank projects.
 - o Four (4) separate lists of improvement projects identified by priority:
 - Vulnerability Driven Projects.
 - Criticality Driven Projects.
 - Planned New Development Driven Projects.
 - Infill Projects.
 - o Projects shall include location, map, description, and cost estimate.
 - o Identification of nexus between non-sewer projects and proposed projects, as well as the potential benefits achieved if scheduled properly.
 - Presentation of findings on project delivery methods (bidding, construction, and project management).
 - o Identification of which projects could be optimized and recommendation of select projects.

TASK 9. CAPITAL IMPROVEMENT PLAN

Task 9a. Prepare Preliminary Design Level (±10%-30%) Cost Estimates

Consultant shall prepare preliminary design level ($\pm 10\%$ -30%) capital, operations, and maintenance cost estimates for the alternatives identified in Project Development and Ranking. Present work analysis shall be used to compare costs for the viable alternatives.

The number of projects to be analyzed for preliminary design level ($\pm 10\%$ -30%) cost estimates shall depend on the total dollar value of planning level project estimates. The City's 10-year budget is limited by forecasted revenues; therefore, top priority projects shall be brought forward for further analysis, but not beyond the City's ability to complete the projects during the 10-year planning horizon. The intent shall be to build a 10-Year CIP that generates a reliable, sustainable, and cost-effective sanitary sewer system.

Task 9b. CIP – Existing Collection System

Utilizing the information obtained from other tasks, City input, stakeholder input, and public comment, Consultant shall generate a 10-Year CIP – Existing Collection System that identifies the following:

- Location, including maps and diagrams.
- Replacement type, traditional or alternative method.
- Schedule, both duration and when in the CIP.
- Estimated cost.
- Environmental documentation required.

This task shall be a combination of infill projects and replacement projects.

Task 9c. CIP - Planned New Development

Utilizing the information obtained from other tasks, City input, stakeholder input, and public comment, Consultant shall generate a 10-Year CIP – Planned New Development that identifies the following:

- Location, including maps and diagrams.
- Replacement type, traditional or alternative method.
- Schedule, both duration and when in the CIP.
- Estimated cost.
- Environmental documentation required.

This task shall consist of a separate 10-Year CIP based on Planned New Development in Chico. The intent is to have a separate program that can be implemented based on location, phasing, and status of planned new development.

Projects that are identified as having a nexus between vulnerability, criticality, infill, and planned new development shall be included in the CIP and highlighted as to their multiple benefits, which includes benefit to existing customers as well as new customers.

Task 9d. 10-Year CIP

The SSMP shall develop a recommended 10-Year CIP based on the preferred alternatives. The final document shall include a recommendation of a phase approach to sanitary sewer improvements throughout the planning period and shall identify potential key decision points and response strategies to address changes in assumptions made during the formulation of the program.

All projects shall be prioritized and tabulated, with costs, into a comprehensive implementation plan. Planning level layout figures illustrating the project location, description, and phasing of projects shall be included.

Task 9e. Draft and Final TM: CIP Development and Costs

Consultant shall develop a draft and final TM summarizing the development of the 10-Year CIP and the assumptions and methods use to develop the cost estimates.

Deliverables:

- Draft and Final TM: CIP Development and Costs
 - o Provide documentation on the analysis used for estimating the cost of projects.
 - Outline the methodology, process, and results of the CIP development, including:
 - CIP Existing Collection System, including Infill Projects.
 - CIP Planned New Development.
 - Capital Improvement Program.
 - Identify improvements necessary to support new development in specific parts of the City and a process for identifying triggers for when projects should be pursued.
 - o Clearly identify assumptions used in the analysis.

TASK 10. STAFFING PLAN

Task 10a. Develop Staffing Plan

Consultant shall review the City's current engineering staffing structure and develop a recommendation for a staffing plan necessary to accomplish the projects described in the 10-Year CIP. The staffing plan shall include an analysis of alternatives, including hiring additional City staff, supplementing with consulting agencies, and any other staffing models the consultant identifies as appropriate to accomplish the 10-Year CIP.

Deliverables:

- Draft and Final TM: Staffing Plan
 - Assessment of City's current engineering staffing model and its opportunities and limitations.
 - Recommendation for staffing model to accomplish the projects identified in the 10-Year CIP.

TASK 11. SANITARY SEWER MASTER PLAN REPORT

The SSMP shall combine the results of assessments, analysis, and recommendations, as well as content derived from Final TMs.

Task 11a. Draft Master Plan Report

Consultant shall develop the Draft SSMP that combines all findings into a final document with, at minimum, the following sections:

- Cover Letter
- Executive Summary
- Background
- Study Area Description
- Scope of Work and Methodology
- Flow Monitoring Program
- Flow Modeling Collection System Hydraulic Modeling
- Capacity Evaluation
- Planning Criteria and Flow Projections
- Proposed Projects and Alternatives Analysis
- Capital Improvement Program
- Staffing Plan

Consultant shall prepare the Draft SSMP for stakeholder review with the following minimum timelines:

- City review 4 weeks.
- Public review 4 weeks (Public meeting shall occur at the beginning of this duration).

Task 11b. Final Master Plan Report

Consultant shall incorporate stakeholder and City comments on the Draft Master Plan Report. Consultant shall deliver report findings and receive and incorporate stakeholder comments.

Deliverables:

- Draft SSMP (Electronic)
- FINAL SSMP:
 - o Six (6) hard copies, bound.
 - Two (2) digital versions (PDF); one combined file and one file with individual sections, chapters, and appendices.

Completion Schedule

The Consultant shall complete all services outlined herein in compliance by November 30, 2023.

<u>CAROLLO ENGINEERS, INC.</u> Architect/Consultant/Engineer

SANITARY SEWER MASTER PLAN Project Title

MAJNC/50490-000-4140
Budget Account Number

EXHIBIT C

COMPENSATION

Compensation for the services shall be in accordance with the following schedule of hourly rates attached as page C-2. Total maximum compensation for the services outlined herein shall not exceed <u>\$799,400.00</u>.

Compensation shall be based upon actual invoices received.

		Hours by Classification												Shirt Nation		Sec. Line	
Task Description	Beverly Hann Charge	Ouality Brichard Assurance Mulity Control	Lim Manager	Bigon Broject Engineer	Felicia Pames Pames	Lestinating Estimating	Bay Staffing Plan	Danielle Orgill	Modeling Mozer	S Jackie Silber	Word Processing	Total Hours	Lat	oor	Subs Other Exper	Direct	Estimated Fee
	\$303	\$303	\$303	\$258	\$258	\$258	\$303	\$213	\$185	\$142	\$120	100			1000		
Task 1 — Project Management	23	0	68	42	6	2	6	30	26	14	24	241	1	8,300	100/2004	6,100	TO DOUBLE THE TOTAL
Task 1a – Biweekly Meetings	2	0	20	6	0	0	0	0	0	0	2	30		8,500		400	
Task 1b – Monthly Meetings	4	0	20	6	2	2	2	6	2	2	2	48		12,600	77	600	-
Task 1c – In-Person/Major Meetings	16	0	24	24	4	0	4	24	24	12	16	148		33,700		4,900	
Task 1d – Project Schedule	1	0	4	6	0	0	0	0	0	0	4	15	SALES OF THE PARTY NAMED IN	3,500	-	200	-
Task 2 – Public Outreach	4	2	24	18	6	0	0	4	2	8	4	72	\$ 1	8,100		9,100	
Task 2a – Public Outreach Plan	1	0	4	6	0	0	0	0	0	2	0	13	\$	3,300		12,000	
Task 2b – Public Outreach Content	1	0	4	4	2	0	0	2	0	2	2	17		4,000		28,400	
Task 2c – Public Meeting and Community Engagement	2	2	16	8	4	0	0	2	2	4	2	42	-	10,800	-	28,700	ASSESSMENT OF THE PARTY OF THE
Task 3 – Review and Assessment of Existing Information	3	0	16	30	10	2	0	48	28	36	14	187	\$ 3	8,900	\$ 6	2,400	\$ 101,30
Task 3a – Review of Reports and Existing Information	2	0	8	12	8	2	0	16	8	8	2	66	\$ 1	15,000	\$	900	\$ 15,90
Task 3b – Review of Existing GIS Database	0	0	2	8	2	0	0	8	12	16	4	52	\$	9,900	\$	700	\$ 10,60
Task 3c – Field Verification of Critical Assets	0	0	2	6	0	0	0	16	8	4	4	40	\$	8,100	\$	500	\$ 8,60
Task 3d – Environmental Documentation	1	0	4	4	0	0	0	8	0	8	4	29	\$	5,900	\$ 6	60,300	\$ 66,20
Task 4 – Flow Monitoring	0	4	8	16	0	0	0	20	14	8	6	76	\$ 1	6,500	\$ 14	0,800	\$ 157,30
Task 4a – Develop Flow Monitoring Site Recommendations	0	2	2	4	0	0	0	4	2	4	2	20	\$	4,300	\$	300	\$ 4,60
Task 4b – Flow Monitoring Installation and Data Collection	0	0	2	4	0	0	0	8	8	4	2	28	\$	5,600	\$ 14	40,100	\$ 145,70
Task 4c – Flow Monitoring Report	0	2	4	8	0	0	0	8	4	0	2	28	\$	6,600	\$	400	\$ 7,00
Task 5 – Flow Modeling	5	12	28	52	Ö	0	0	120	152	48	16	433	\$ 8	9,400	\$	5,500	\$ 94,90
Task 5a – Projections of Flow for Planning Horizon	2	2	4	8	0	0	0	16	20	16	2	70	\$ 1	14,100	\$	900	\$ 15,00
Task 5b – Hydraulic Model Update	0	2	4	8	0	0	0	24	32	16	2	88	\$:	17,400	\$	1,100	\$ 18,50
Task 5c – Model Calibration and Validation	0	2	4	8	0	0	0	24	36	4	2	80	\$ 1	16,500	\$	1,000	\$ 17,50
Task 5d – Hydraulic Ananlysis	0	2	8	12	0	0	0	24	28	4	2	80	\$ 2	17,200	\$	1,000	\$ 18,20
Task 5e – Draft and Final TM: Flow Projections	2	2	4	8	0	0	0	16	16	4	4	56	\$ 1	11,900	\$	700	\$ 12,60
Task 5f – Draft and Final TM: Flow Modeling Evaluation	1	2	4	8	0	0	0	16	20	4	4	59	\$ 1	12,300	\$	800	\$ 13,10
Task 6 – Collection System Condition Assessment	4	10	16	22	72	0	0	54	70	56	12	316	\$ 6	7,200	\$	4,100	\$ 71,30
Task 6a – Conduct Collection System Condition Assessment	0	2	4	6	16	0	0	24	30	16	2	100	\$ 2	20,700	\$	1,300	\$ 22,00
Task 6b – Establish Vulnerability Scores	0	2	2	4	12	0	0	8	8	8	2	46	\$	9,900	\$	600	\$ 10,50
Task 6c – Establish Criticality Scores	0	2	2	4	12	0	0	8	8	16	2	54	\$ 1	11,000	\$	700	\$ 11,70
Task 6d – Calculate Risk Scores for Project Prioritization	2	2	4	4	16	0	0	6	8	8	2	52	\$:	11,700	\$	700	\$ 12,40
Task 6e – Draft and Final TM: Collection System Condition Assessment and Project Prioritization	2	2	4	4	16	0	0	8	16	8	4	64	\$ 1	13,900	\$	800	\$ 14,70

	torial March	Hours by Classification															
Task Description	Principal-in- Charge	Quality Assurance/ Quality Control	Project Manager	Project Engineer	Condition Assessement	Cost Estimating	Staffing Plan	Modeling Lead	Modeling Support	GIS	Word Processing	Total Hours	Labor	abor	Subs an Other Dire Expenses	ect	Estimated Fee
	Beverly	Richard Humpherys	Tim	Ryan	Felicia James	Ryan Hook	Dan Baker	Danielle Orgill	Max Mozer	Jackie Silber	DP Staff						
	\$303	\$303	\$303	\$258	\$258	\$258	\$303	\$213	\$185	\$142	\$120						
Task 7 – Lift Station Assessement	4	2	16	8	44	0	20	0	8	10	10	122	\$	30,200	\$ 1,6	00 \$	31,800
Task 7a – Pre-Assessment Workshop	2	0	4	4	4	0	4	0	0	4	4	26	\$	6,100	\$ 3	00 \$	6,400
Task 7b – Lift Station Assessment	0	0	8	0	24	0	16	0	О	2	2	52	\$	14,000	\$ 7	00 \$	14,700
Task 7c – Draft and Final TM: Lift Station Assessment	2	2	4	4	16	0	0	0	8	4	4	44	\$	10,100	\$ 6	00 \$	10,700
Task 8 – Develop and Rank Projects	6	8	24	62	60	16	0	64	24	44	10	318	\$	72,600	\$ 4,1	00 \$	76,700
Task 8a – Vulnerability Driven Projects	0	0	2	4	4	0	0	8	2	2	0	22	\$	5,000	\$ 3	00 \$	5,300
Task 8b – Criticality Driven Projects	0	0	2	4	4	0	0	8	2	2	0	22	\$	5,000	\$ 3	00 \$	5,300
Task 8c – Planned New Development Driven Projects	0	0	2	4	4	0	o	8	o	0	0	18	\$	4,400	\$ 2	00 \$	4,600
Task 8d – Infill Projects	0	0	2	4	4	0	0	8	0	0	0	18	\$	4,400	\$ 2	00 \$	4,600
Task 8e – Develop Repair, Rehabilitation, or Replacement Alternatives	0	0	2	8	8	0	О	12	0	0	0	30	\$	7,300	5 4	00 \$	7,700
Task 8f – Prepare Planning Level Cost Estimates	0	0	2	6	8	16	0	4	8	16	2	62	\$	13,200	\$ 8	00 \$	14,000
Task 8g – Identify Non-Sewer Projects for Cost Effective Nexus	2	0	2	8	12	0	0	0	О	0	2	26	\$	6,600	\$ 3	00 \$	6,900
Task 8h – Project Development and Ranking	2	4	6	16	8	0	o	4	4	8	2	54	\$	12,800	s 7	00 \$	13,500
Task 8i – Draft and Final TM: Project Development, Ranking, and Delivery	2	4	4	8	8	0	0	12	8	16	4	66	\$	13,900	\$ 9	00 \$	14,800
Task 9 – Capital Improvement Program		10	12	24	14	32		68	32	40	14	254	\$	54,900	\$ 3,3	00 \$	58,200
Task 9a – Prepare Preliminary Design Level Cost Estimates	0	2	2	4	0	24	0	16	8	8	2	66	\$	14,700	\$ 9	00 \$	15,600
Task 9b – Capital Improvement Program – Existing System	2	2	2	4	4	4	o	12	8	8	2	48	\$	10,300	\$ 6	00 \$	10,900
Task 9c – Capital Improvement Program – Planned New Development	2	2	2	4	4	4	0	16	8	8	2	52	\$	11,200	\$ 7	00 \$	11,900
Task 9d – 10-Year Capital Improvement Program	2	2	2	4	4	0	0	0	0	8	4	26	\$	5,500	\$ 3	00 \$	5,800
Task 9e – Draft and Final TM: CIP Development and Costs	2	2	4	8	2	0	0	24	8	8	4	62	\$	13,200	\$ 8	00 \$	14,000
Task 10 — Staffing Plan			4			0	24	0	O	0	4	36	5	10,100	\$ 5	00 \$	10,600
Task 10a – Develop Staffing Plan	2	0	4	2	0	0	24	0	0	0	4	36	\$	10,100	\$ 5	00 \$	10,600
Task 11 – Sanitary Sewer Master Plan Report	6	6	16	24	8	12	6	24	48	16	20	186	5	40,300	\$ 5,4	00 \$	45,700
Task 11a – Draft Master Plan Report	4	4	8	12	4	8	2	16	24	8	12	102	\$	22,100	\$ 2,3	00 \$	24,400
Task 11b – Final Master Plan Report	2	2	8	12	4	4	4	8	24	8	8	84	\$	18,200	\$ 3,1	.00 \$	21,300
Total Hours and Fee	65	54	232	300	220	64	56	432	404	280	134	2,241	\$ 4	96,500	\$ 302,9	00 \$	799,400
Notes:			-														

(1) Other direct expenses include mileage traveling to/from meetings at IRS Federal Rate, reproduction at cost plus 5%, and Project Equipment and Communication Expense billed at \$13.00 per hour.

(2) Subconsultant costs include 10% markup (3) Rates are based on 2022 billing rates

CAROLLO ENGINEERS, INC. Architect/Consultant/Engineer

SANITARY SEWER MASTER PLAN Project Title

MAJNC/50490-000-4140 Budget Account Number

EXHIBIT D

INSURANCE PROVISIONS

General Liability Insurance

Consultant/Contractor shall obtain commercial general liability insurance (occurrence policy form) from one or more U.S. domiciled insurance companies licensed to do business in the State of California with an A.M. Best Company rating of "B" or better or, in the alternative, an unlicensed U.S. domiciled company or companies with an "A" rating, which provides coverage for bodily injury, personal injury and property damage liability in the amount of at least \$1,000,000 per occurrence, and \$2,000,000 in the aggregate, with a maximum policy deductible of \$5,000, or as approved by the City's Human Resources and Risk Management Office.

It shall be a requirement under this agreement that any available insurance proceeds broader than or in excess of the specific minimum Insurance coverage requirements and/or limits shall be available to the Additional Insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any Insurance policy or proceeds available to the named Insured, whichever is greater.

The insurance coverage required herein shall be evidenced by a certificate of insurance with policy endorsements and shall be executed by an authorized official of the insurer(s). In addition to the limits of coverage described above, the certificate of insurance shall provide that the insurer shall provide to City at least 30 days prior notice of cancellation or material change in coverage, or 10 days prior notice of cancellation for non-payment.

Consultant/Contractor acknowledges and agrees that City of Chico, its officers, boards and commissions, and members thereof, its employees and agents, are covered as additional insureds with respect to any liability arising out of the activities of Consultant/Contractor as the named insured. Such additional insured status shall be evidenced by a policy endorsement executed by an authorized official of the insurer(s). A blanket endorsement which provides additional insured status to any person or organization with whom Consultant/Contractor, as named insured, has entered into a written contract, such as this Agreement, shall satisfy this requirement.

The insurance coverage required herein shall be primary and non-contributory insurance with respect to the City of Chico, its officers, officials and employees. Any insurance or self-insurance maintained by the City of Chico, its officers, officials or employees shall be in excess of the insurance afforded to the named insured by the insurance coverage required herein and shall not contribute to any loss. Such primary insurance status shall be evidenced by a policy endorsement issued by an authorized official of the insurer(s), and shall be at least as broad as CG 20 01 04 13. In the alternative, a letter issued by an authorized official of the insurer(s) and copies of the pertinent page(s) of the policy shall satisfy this requirement.

The limits of Insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess Insurance. Any umbrella or excess Insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of City of Chico (if agreed to in a written contract or agreement) before City of Chico's self-insurance shall be called upon to protect it as a named insured.

All self-insured retentions (SIR) must be disclosed to the City's Human Resources and Risk Management Office for approval and shall not reduce the limits of liability. Policies containing any (SIR) provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named Insured or City of Chico. City of Chico reserves the right to obtain a full certified copy of any Insurance policy or endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Automobile Liability Insurance

Consultant/Contractor shall obtain automobile liability insurance from one or more U.S. domiciled insurance companies licensed to do business in the State of California with an A.M. Best Company rating of "B" or better which provides coverage for bodily injury, personal injury, and property damage liability in the amount of at least \$500,000 combined single limit for each occurrence. Evidence of such coverage shall be maintained by Consultant/Contractor and provided to City upon request.

Subconsultant/Subcontractor Insurance

Consultant/Contractor agrees to include with all subconsultants/subcontractors in their subcontract the same requirements and provisions of this agreement including the indemnity and Insurance requirements to the extent they apply to the scope of the subconsultant/subcontractor's work. Subconsultant/Subcontractor agrees to be bound to Consultant/Contractor and City of Chico in the same manner and to the same extent as Consultant/Contractor is bound to City of Chico under the agreement. Subconsultant/Subcontractor further agrees to include the same requirements and provisions of this agreement, including the indemnity and Insurance requirements, with any Sub-subconsultant/Sub-subcontractor to the extent they apply to the scope of the Sub-subconsultant/Sub-subcontractor's work.

A copy of the City of Chico Insurance Provisions will be furnished to the subconsultant/subcontractor upon request. Evidence of such coverage shall be maintained by Consultant/Contractor and provided to City upon request.

Workers' Compensation Insurance

Consultant/Contractor shall, at Consultant/Contractor's expense, purchase and maintain in full force and effect workers' compensation insurance as required by Federal and State of California law. Consultant/Contractor shall also require all of Consultant's subconsultants/subcontractors to maintain this insurance coverage. Proof of workers' compensation insurance or other documentation acceptable to City evidencing such insurance coverage shall be provided by Consultant/Contractor or Consultant/Contractor's subconsultants/subcontractors to City upon request.

Subrogation

Consultant/Contractor shall agree to waive all rights of subrogation against City for losses arising from Services performed by the Consultant/Contractor or Consultant/Contractor's subconsultants/subcontractors for City under this Agreement.

Indemnity

Consultant/Contractor/Subconsultant/Subcontractor's responsibility for such defense and indemnity obligations shall survive the termination or completion of this agreement for the full period of time allowed by law.

The defense and indemnification obligations of this agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this agreement.

Professional Liability Insurance

Consultant/Contractor shall obtain professional liability (errors and omissions) insurance, with a minimum \$1,000,000 limit, from one or more U.S. domiciled insurance companies licensed to do business in the State of California with an A.M. Best Company rating of "B" or better providing coverage for services rendered to City under this Agreement.

Said insurance coverage shall be evidenced by a certificate of insurance which shall be executed by an authorized official of the insurer(s). In addition to the limits of coverage described above, the certificate of insurance shall provide that the insurer shall provide to City at least 30 days prior notice of cancellation or material change in coverage, or 10 days prior notice of cancellation for non-payment.

For All Required Insurance

In the event such proof of any insurance is not delivered as required, or in the event such insurance is canceled, at any time and no replacement coverage is provided, the City has the right to, but not the duty, to obtain any insurance it deems necessary to protect its interests under this or any other agreement and to pay the premium. Any premium so paid by the City shall be charged to and promptly paid by Consultant or deducted from sums due the City, at the City's option.

CAROLLO ENGINEERS, INC. Architect/Consultant/Engineer

SANITARY SEWER MASTER PLAN Project Title

MAJNC/50490-000-4140 Budget Account Number

EXHIBIT E

CONFLICT OF INTEREST PROVISIONS

None.

CAROLLO ENGINEERS, INC. Architect/Consultant/Engineer

SANITARY SEWER MASTER PLAN Project Title

MAJNC/50490-000-4140 Budget Account Number

EXHIBIT F

SPECIAL PROVISIONS

None.

<u>CAROLLO ENGINEERS, INC.</u> Architect/Consultant/Engineer

SANITARY SEWER MASTER PLAN Project Title

850-000-8801/50490-850-4140 Budget Account Number

EXHIBIT F

SPECIAL PROVISIONS

None.