

**AGREEMENT WITH HDR Engineering, Inc.
FOR PROFESSIONAL CONSULTANT SERVICES
FOR
Immediate Action Projects, Package 3 (IAP III)**

This agreement, made and entered into this day of _____, by and between the **CITY OF SAN MATEO**, a municipal corporation existing under the laws of the State of California, hereinafter referred to as "CITY", and HDR Engineering, Inc., a corporation with offices at 100 Pringle Ave., Suite 400, Walnut Creek, CA. 94596 hereinafter referred to as "CONSULTANT":

RECITALS:

- A. CITY desires certain professional services hereinafter described.
- B. CITY desires to engage CONSULTANT to provide these professional services by reason of its qualifications and experience for performing such services and CONSULTANT has offered to provide the required services on the terms and in the manner set forth herein.

NOW, THEREFORE, IT IS AGREED as follows:

SECTION 1 - SCOPE OF PROJECT

The scope of services to be performed by CONSULTANT under this Agreement is described in Exhibit A, Scope of Services, attached and incorporated by reference.

SECTION 2 - RELIANCE UPON PROFESSIONAL SKILL OF CONSULTANT

It is mutually understood and agreed by and between the parties hereto that CONSULTANT is skilled in the professional calling necessary to perform the work agreed to be done under this Agreement and that CITY relies upon the skill of CONSULTANT to do and perform the work with the care and skill ordinarily used by members of CONSULTANT's profession practicing under the same or similar circumstances at the same time and in the same locality. The acceptance of CONSULTANT'S work by CITY does not operate as a release of CONSULTANT from said obligation.

SECTION 3 - PROJECT COORDINATION/STAFFING

3.1 CITY

BRAD B. UNDERWOOD, PUBLIC WORKS DIRECTOR, will be the representative of CITY for all purposes under this Agreement. Kelly Irving is hereby designated as the PROJECT MANAGER and shall supervise the day to day progress and execution of this Agreement.

3.2 **CONSULTANT**

CONSULTANT's services are unique and personal. CONSULTANT shall not assign or transfer its interest or obligation under this Agreement without the CITY's written consent. CONSULTANT shall not subcontract its duties under this Agreement without the CITY's written consent.

CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. Holly Kennedy is hereby designated as the PROJECT DIRECTOR for CONSULTANT.

CONSULTANT shall assign a PROJECT COORDINATOR to represent CONSULTANT during the day-to-day work on the Project. Ted Kontonickas is hereby designated as the PROJECT COORDINATOR for CONSULTANT.

CONSULTANT shall assign additional key personnel as follows:

Bill Ettlich
Rob Natoli
Arashdeep Singh

In addition, CONSULTANT is specifically authorized to subcontract with the following sub-consulting firms to assist in providing the services required by this Agreement:

Ewing Construction Services

CONSULTANT shall be responsible for employing or engaging all sub-consultants necessary for performance of the CONSULTANT'S scope of work. CONSULTANT shall manage, evaluate, and incorporate sub-consultants work into the project as necessary.

All work on this project shall be accomplished by the above named CONSULTANT'S personnel and sub-consultants. CONSULTANT shall not substitute personnel or sub-consultants without the CITY'S written consent.

SECTION 4 - INDEPENDENT CONTRACTOR

It is expressly agreed that in the performance of the professional services required under this Agreement, CONSULTANT shall at all times be considered an independent contractor as defined in Labor Code Section 3353, under control of the CITY as to the result of the work but not the means by which the result is accomplished. Nothing herein shall be construed to make CONSULTANT an agent or employee of CITY while providing services under this Agreement.

SECTION 5 - DUTIES OF CONSULTANT

CONSULTANT'S Services shall be furnished as described below and as more particularly described in Exhibit A, Scope of Services. Any changes in the Scope of Services must be approved in advance, in writing, by the Public Works Director and CONSULTANT.

CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all studies, reports, designs, drawings, specifications, and other items furnished by CONSULTANT under this Agreement. CONSULTANT shall, without additional compensation, correct or revise any negligent errors or deficiencies in its studies, reports, designs, drawings, specifications, and other items.

CONSULTANT represents that it is qualified to furnish the services described under this Agreement.

All documents, drawings and specifications relating the project prepared by CONSULTANT or CONSULTANT's approved sub-consultants shall be approved, signed, and sealed by professional engineers duly registered in the State of California for each required discipline. The Contract Documents prepared by CONSULTANT shall provide for a completed project that conforms to all applicable national, state and local construction codes and ordinances, building, fire, electrical, plumbing and occupancy codes and standards.

CONSULTANT shall be responsible for employing or engaging all persons necessary to perform the services of CONSULTANT. No sub-consultant of CONSULTANT will be recognized by CITY as such; rather, all sub-consultants are deemed to be the agents of CONSULTANT, and CONSULTANT agrees to be responsible for their performance. CONSULTANT shall give its personal attention to the fulfillment of the provisions of this Agreement by all of its employees and sub-consultants, if any, and shall keep the work under its control. If any employee or sub-consultant of CONSULTANT fails or refuses to carry out the provisions of this Agreement or appears to be incompetent or to act in a disorderly or improper manner, he or she shall be discharged immediately from the work under this Agreement on demand of CITY.

CONSULTANT shall furnish CITY with every reasonable opportunity for CITY to ascertain that the services of CONSULTANT are being performed in accordance with the requirement and intentions of this Agreement.

SECTION 6 - DUTIES OF CITY

CITY shall provide pertinent information regarding its requirements for the project.

CITY shall examine all documents submitted by CONSULTANT and shall render decisions pertaining thereto promptly to avoid unreasonable delay in the progress of CONSULTANT'S work.

SECTION 7 - TERM, PROGRESS AND COMPLETION

The services to be performed under this Agreement shall commence and be completed as set forth in Exhibit B, Project Schedule.

It is understood and agreed that time is of the essence of this Agreement. CONSULTANT agrees to perform the services within the time limits set forth in Exhibit B.

CITY agrees to exercise due diligence in performing its tasks to implement the CONSULTANT'S timetable.

SECTION 8 - PAYMENT

Payment shall be made by the CITY only for services rendered and upon submission of a payment request upon completion and CITY approval of the work performed. In consideration for the full performances of the services and any reimbursable expenses set forth in this Agreement, CITY agrees to pay CONSULTANT a fee based on verified time and materials not to exceed \$217,932. Requests for payments shall be itemized and correspond to the various items of work described in Exhibit A and shall be based on the rate and cost schedule set forth in Exhibit C.

Payment for extra work or changes in the work will not be made unless for work authorized in advance in writing by the PUBLIC WORKS DIRECTOR. Prior to commencing such extra work or changes, CONSULTANT and CITY shall agree upon an estimated not-to-exceed cost for such extra work. In no event shall CONSULTANT be paid for additional work that is necessary because of CONSULTANT'S errors or oversights.

CONSULTANT shall maintain complete and accurate records as to the number of hours worked by persons and the direct costs incurred during each phase under this Agreement. All such records shall be maintained on a generally accepted accounting basis and shall be clearly identified and readily accessible. CONSULTANT shall provide free access to such books and records to the CITY at all times, shall permit the CITY to examine and audit those books and records, shall permit the CITY to make copies of those books and records, and shall permit the CITY to inspect all work data, documents, proceedings, and activities related to this Agreement for a period of three (3) years from the date of final payment under this Agreement. All accounting records shall provide an understandable breakdown of costs charged to this Agreement. All records encompassed by this subparagraph, as well as supporting documentation, shall be kept separate from other CONSULTANT documents and records and shall be maintained by CONSULTANT for three (3) years after CONSULTANT'S receipt of final payment under this Agreement.

CONSULTANT shall bill the CITY within thirty (30) days for all compensable activity on the project.

CITY shall pay CONSULTANT within thirty (30) days of receipt of billings. If CITY disagrees with any portion of a billing, the CITY shall pay the disputed amount and promptly notify CONSULTANT of the disagreement, and the CITY and the CONSULTANT shall attempt to resolve the disagreement. CITY's payment of any amounts shall not constitute a waiver of any disagreement.

SECTION 9 - CHANGES IN WORK

CITY may order changes in scope or character of work, either decreasing or increasing the amount of CONSULTANT's services by amending this Agreement. In the event that such changes are

ordered, CONSULTANT shall be entitled to full compensation for all work performed prior to receipt of notice of change. In no event shall CITY be liable for payment unless the amount of such extra compensation shall first have been agreed to in writing by CITY.

In the event that changes are ordered pursuant to this section, the schedule for progress and completion in Section 7 of this Agreement and compensation in Section 8 of this Agreement shall be adjusted by negotiation between CONSULTANT and CITY, subject to approval, if necessary by the San Mateo City Council.

SECTION 10 - CONFLICT OF INTEREST

CONSULTANT understands that its professional responsibility is solely to CITY. CONSULTANT covenants that it presently has no interest, and will not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the services under this Agreement. CONSULTANT shall not knowingly, and shall take reasonable steps to ensure that, it does not employ a person having such an interest in the performance of this Agreement. If after employment of a person, CONSULTANT discovers that it has employed a person with a direct or indirect interest that would conflict with its performance of this Agreement, CONSULTANT shall promptly sever the employment relationship.

SECTION 11 - TERMINATION

A. Without limitation to such rights or remedies as CITY shall otherwise have by law, CITY may, by ten days written notice to CONSULTANT, terminate this Agreement in whole or in part at any time, either for CITY'S convenience or because of the failure of CONSULTANT to fulfill its agreement obligations, provided that CITY will not terminate for cause without providing CONSULTANT written notice of the breach or failure and a reasonable opportunity to cure. Upon receipt and within ten days of such notice CONSULTANT shall:

1. Immediately discontinue all services affected (unless the notice directs otherwise); and
2. Deliver to CITY all data, documents, reports, estimates, summaries and such other information and materials as may have been accumulated by CONSULTANT in performing this Agreement, whether completed or in progress.

B. If the termination is for the convenience of CITY, CONSULTANT shall be compensated for all authorized work performed prior to notification of termination but no amount shall be allowed for anticipated profit on unperformed services.

C. If, after any notice of termination for failure to fulfill agreement obligations, it is determined by a court or other arbitrator that CONSULTANT had not so failed, the termination shall be deemed to have been effected for the convenience of CITY. In such event, adjustment in the agreement price shall be made as provided in paragraph (B) of this section.

D. CONSULTANT may terminate this Agreement or suspend work on the project upon thirty (30) days written notice to CITY, but only in the event of substantial failure of performance by CITY or in the event CITY abandons or indefinitely postpones the Project.

E. Upon termination of this Agreement or suspension of work on the project by either CITY or CONSULTANT, all duties of CITY and CONSULTANT as set forth in Sections 5 and 6 herein above shall terminate.

SECTION 12 - STATUS OF REPORTS

All documents prepared by CONSULTANT in the performance of this Agreement, although instruments of professional service, are and shall be the property of the CITY, whether the project for which they are made is executed or not. All documents furnished to CONSULTANT by the CITY and all reports and supportive data prepared by the CONSULTANT in connection with the performance of this Agreement are the CITY'S property and shall be delivered to the CITY upon the completion of CONSULTANT'S services or at the CITY'S written request. Any modification or reuse of such documents for purposes other than those intended by this Agreement shall be at CITY's sole risk and without liability to CONSULTANT. All reports, information, data, and exhibits prepared or assembled by CONSULTANT in connection with the performance of its services pursuant to this Agreement are confidential until released by the CITY to the public, and the CONSULTANT shall not make any of these documents or information available to any individual or organization not employed by the CONSULTANT or the CITY without the written consent of the CITY before any such release.

SECTION 13 - INSURANCE

CONSULTANT shall procure and maintain for the duration of the contract and three years thereafter (five years for building or major improvements) the insurance as specified in Exhibit C of the Agreement.

SECTION 14 - NONASSIGNABILITY

Both parties hereto recognize that this Agreement is for the personal services of CONSULTANT and cannot be transferred, assigned, or subcontracted by CONSULTANT without the prior written consent of CITY.

SECTION 15 - INDEMNITY

CONSULTANT agrees to hold harmless and indemnify City of San Mateo and the Estero Municipal Improvement District, their elected and appointed officials, employees, and agents, from and against any and all claims, loss, liability, damage, and expense to the extent arising out of CONSULTANT'S negligence, recklessness, or willful misconduct. To the extent permitted under state law, including but not limited to California Civil Code 2782.8, CONSULTANT agrees to defend City of San Mateo and the Estero Municipal Improvement District, their elected and appointed officials, employees, and agents, against any such claims to the extent of CONSULTANT'S negligence, recklessness, or willful misconduct.

SECTION 16 - WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any provisions of any ordinance or law shall not be deemed to be a waiver of such term, covenant, condition, ordinance or law or of any subsequent breach or violation of the same or of any other term, covenant, condition, ordinance or law or of any subsequent breach or violation of the same or of any other term, condition, ordinance, or law. The subsequent acceptance by either party of any fee or other money which may become due hereunder shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, covenant, or condition of this Agreement or of any applicable law or ordinance.

SECTION 17 - COSTS AND ATTORNEYS FEES

Attorney fees in an amount not exceeding \$85 per hour per attorney, and in total amount not exceeding \$5000, shall be recoverable as costs (by the filing of a cost bill) by the prevailing party in any action or actions to enforce the provisions of this Agreement. The above \$5000 limit is the total of attorney fees recoverable whether in the trial court, appellate court, or otherwise, and regardless of the number of attorneys, trials, appeals, or actions. It is the intent of this Agreement that neither party shall have to pay the other more than \$5000 for attorney's fees arising out of an action, or actions to enforce the provisions of this Agreement.

SECTION 18 - NON-DISCRIMINATION

CONSULTANT warrants that it is an Equal Opportunity Employer and shall comply with applicable regulations governing equal employment opportunity. Neither CONSULTANT nor any of its sub-consultants shall discriminate in the employment of any person because of race, color, national origin, ancestry, physical handicap, medical condition, marital status, sex, or age, unless based upon a bona fide occupational qualification pursuant to the California Fair Employment and Housing Act.

SECTION 19 - MEDIATION

Should any dispute arise out of this Agreement, any party may request that it be submitted to mediation. The parties shall meet in mediation within 30 days of a request. The mediator shall be agreed to by the mediating parties; in the absence of an agreement, the parties shall each submit one name from mediators listed by either the American Arbitration Association, the California State Board of Mediation and Conciliation, or other agreed-upon service. The mediator shall be selected by a blind draw.

The cost of mediation shall be borne equally by the parties. Neither party shall be deemed the prevailing party. No party shall be permitted to file a legal action without first meeting in mediation and making a good faith attempt to reach a mediated settlement. The mediation process, once commenced by a meeting with the mediator, shall last until agreement is reached by the parties but not more than 60 days, unless the maximum time is extended by the parties.

SECTION 20 - LITIGATION

CONSULTANT shall testify at CITY'S request if litigation is brought against CITY in connection with CONSULTANT'S services under this Agreement. Unless the action is brought by CONSULTANT, or is based upon CONSULTANT'S wrongdoing, CITY shall compensate CONSULTANT for preparation for testimony, testimony, and travel at CONSULTANT'S standard hourly rates at the time of actual testimony.

SECTION 21 - NOTICES

All notices hereunder shall be given in writing and mailed, postage prepaid, addressed as follows:

To CITY:	<i>Deryk Daquigan, Clean Water Program Manager City of San Mateo 330 West 20th Avenue San Mateo, CA 94403</i>
To CONSULTANT:	<i>HDR Engineering, Inc. Attn: Ted Kontonickas 2365 Iron Point Road, Suite 300 Folsom, CA 95630</i>

SECTION 22 - AGREEMENT CONTAINS ALL UNDERSTANDINGS; AMENDMENTS

This document represents the entire and integrated agreement between CITY and CONSULTANT and supersedes all prior negotiations, representations, and agreements, either written or oral.

This document may be amended only by written instrument, signed by both CITY and CONSULTANT.

SECTION 23 – AUTHORITY TO ENTER INTO AGREEMENT

CONSULTANT has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and to bind each respective party.

SECTION 24 – SEVERABILITY

If any term or portion of this Agreement is held to be invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions of this Agreement shall continue in full force and effect.

SECTION 25 - GOVERNING LAW

This Agreement shall be governed by the laws of the State of California.

SECTION 26 - VENUE

In the event of litigation, venue will be in the County of San Mateo.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, CITY OF SAN MATEO and HDR ENGINEERING, INC. have executed this Agreement the day and year first above written.

CITY OF SAN MATEO

CONSULTANT

Brad B. Underwood
Public Works Director

Holly L. Kennedy
Its Authorized Agent

Senior Vice President
If a Corporation, can be either 1) President or
2) Vice President plus an additional
corporate officer (i.e., Secretary, Treasurer)
who shall sign below.

APPROVED AS TO FORM

ADDITIONAL CORPORATE OFFICER
(if necessary per the above)

Caio Arrellano
Assistant City Attorney

Attachments:

- Exhibit A: Scope of Services
- Exhibit B: Project Schedule
- Exhibit C: Insurance Requirements
- Exhibit D: Rate and Cost Schedule Including Hourly Rates, Sub-Consultants and Reimbursable Expenses

EXHIBIT A
SCOPE OF SERVICES

Exhibit A

Scope of Services

City of San Mateo Clean Water Program *Immediate Action Projects, Package III (Job No. 46T010)*

Phase 1 – Project Analysis

The following scope of work involves providing design analysis for the City of San Mateo (City) Clean Water Program (CWP) Immediate Action Projects, Package III (Job No. 46T010), located at the San Mateo/Estero Municipal Improvement District (EMID) Wastewater Treatment Plant.

PROJECT DESCRIPTION

The purpose of Immediate Action Projects, Package III, is to analyze and improve two pumping systems (site waste and effluent) and rehabilitate electrical systems and building components. The project segments within this package will include:

- **AMC No. 33:** Analysis of firm capacity, control strategy, operation, reliability, and redundancy of the effluent pumping system, including the four effluent (i.e., dry weather) pumps and three storm (i.e., wet weather) pumps, working as a single system.
- **AMC No. 31:** Analysis of the site waste pump station, including location, capacity, pump type, maintenance access, reliability, and redundancy.
- **AMC No. 5:** Replacement of motor control centers (MCCs) P1, P2, P3, and P4, utilized for secondary treatment, building heating, ventilation, and air conditioning (HVAC) and lighting, and effluent pumping.
- **AMC No. 7.2:** Addition of variable frequency drives (VFDs), anti-ratcheting devices on motors, and/or mechanical check valves to the three storm pumps.
- **AMC No. 9:** Replacement of four MCC and VFD control panels for the effluent (dry weather) pumps.
- Improvements to the effluent pump station, main structure, and solids building, which include:
 - **AMC No. 10:** Replacing doors and windows, repairing the roof, and adding HVAC at the effluent pump station.
 - **AMC No. 13:** Rehabilitating wall louvers in the main structure to protect MCCs (related to AMC No. 5) from moisture.
 - **AMC No. 14:** Adding fresh air supply and improve filters for HVAC in the solids building MCC and control rooms.

The professional services provided will be executed in three phases – Phase I - Project Analyses, Phase 2 – Detailed Design, and Phase 3 – Construction Services. This scope of work is for Phase 1 – Project Analyses only. For this phase, HDR will provide engineering design analysis services to more firmly establish the scope and content of the detailed design and associated construction projects for each project segment.

SCOPE OF WORK

Task 1 – General Services

This task covers general project management, meetings, quality control, and coordination activities through the following tasks.

Task 1.1 – Project Management

Task 1.1.1 – General Management

HDR will manage the project, including subconsultants, to adhere to the scope, budget, and schedule, and will keep the CWP/City apprised of the status of the project.

A project management plan (PMP) will be developed as a communication tool to the City, CWP, and HDR team (including subconsultants). The PMP will include project development plan, a project schedule, project team contact list, quality management plan, change management plan, communication plan, risk register and management plan, health and safety plan, and project administration requirements.

Other activities under this task include project set-up, filing, documentation, administration, and staff management.

Deliverables: PMP in PDF format.

Task 1.1.2 – Progress Report

HDR will prepare and submit monthly progress reports that include a summary of the work completed by task, project action item log, upcoming work, project issues, budget and schedule status, percent complete, cost to complete, earned value versus actual spent analysis, potential scope or budget changes, and other important project information. The monthly progress report will be submitted with the project invoice as part of the monthly request for payment.

Deliverables: Monthly progress reports in PDF format.

Task 1.1.3 – Project Invoices

HDR will prepare and submit monthly invoices in accordance with CWP's standards. The invoices will document the man-hours and billing rates for staff for each task in the work breakdown structure (WBS), as well as overhead, profit, and direct costs. The current and previous billing period invoicing, as well as a summary of the budget spent, budget remaining, cost to complete, and backup documentation for expenses will be included. The monthly progress report and project schedule will be submitted with the project invoice as part of the monthly request for payment.

Deliverables: Monthly invoices in PDF format.

Task 1.1.4 – Progress Schedule

HDR will create a project schedule with tasks and task durations, and submit it for the CWP's/City's approval. The schedule will be cost-loaded to calculate a monthly earned value of work performed. HDR will prepare a planned value curve at the beginning of the project.

HDR will prepare and deliver a project schedule each month in PDF format using P6. HDR will provide the percent complete for each activity worked on during the billing period and calculate the earned value for the month. The earned value will be compared to the planned value and the actual invoice value for the month. HDR will include justification for requests for monies over the planned value, and explain how the overall budget will be met over the life of the project.

Deliverables: Monthly progress schedule to be included with the final version of the monthly invoice and progress report submittal. P6 file of the monthly progress schedule.

Task 1.2 – Risk Management

HDR will lead the development and maintenance of a risk management plan and risk register in coordination with CWP's risk management team. During the project kick-off meeting with the City and CWP, a draft risk management plan will be shared and risks will be jointly reviewed, new risks will be identified, and mitigation of potential risks to the project will be discussed. HDR will keep the risk management plan up to date throughout the work.

Deliverables: Risk management plan and risk register in PDF format.

Task 1.3 – Workshops and Meetings

HDR will attend the following meetings:

- 3-hour kick-off meeting at the City's office in San Mateo, to be attended by up to four HDR team members. The budget is based on one kick-off meeting. One hour of the kick-off meeting will be devoted to discussion of the risk management plan. A field site visit to the treatment plant will follow the kick-off meeting.
- 2-hour project progress meetings will be conducted by conference calls with up to three HDR team members. The budget assumes up to four calls at 2 hours each. Progress calls will include a review the status of the project scope, schedule, budget, and a discussion of ongoing project tasks.
- 4-hour draft technical memorandum (TM) review meeting at the City's office, to be attended by up to three HDR team members. The budget assumed one review meeting.

For each of the meetings, HDR will prepare and distribute draft agenda and meeting minutes to attendees to review and comment. The final meeting minutes will be distributed after addressing comments.

Deliverables: Meeting agenda and minutes in PDF format.

Task 1.4 – Quality Control

HDR will develop a quality assurance/quality control (QA/QC) plan for implementation of the scope of work. HDR's QA/QC plan will be reviewed and approved by the CWP/City. Deliverables to the

CWP/City will receive an internal, independent review by HDR senior technical staff before being submitted to the CWP/City. Each submittal, or partial submittal, shall be accompanied by a written certification, signed by the HDR's project manager and the responsible individual from the applicable subconsultant stating that QA/QC procedures have been complied with for the information or submittal being delivered to the CWP/City.

Deliverables: QA/QC plan and signed QA/QC review forms in PDF format.

Task 1.5 – Subconsultant Management

HDR will manage the activities of subconsultants during performance of the project. This will include the administration of the subconsultant's contract, review of the PMP, monthly invoices, progress schedule, and status reports.

Task 1.6 – Agency Coordination

HDR will assist the CWP/City in coordinating the project with various local/county, state/regional, and federal agencies, if required. This task includes attending meetings, as needed, with applicable agencies, providing meeting notes, and providing project information and exhibits to the agencies. This task is an allowance task and will only be used when specifically requested by the CWP/City in writing. Costs for this task will be invoiced as a separate line item and invoicing will include a copy of the authorization from the City.

Up to two agency coordination meetings have been budgeted. Each meeting is assumed to be up to two hours in length, located in San Mateo, CA, and is assumed to be attended by up to two HDR team members. An additional four hours of project manager support time has been budgeted for an allowable under this task as well.

Task 2 – Project Analyses

Task 2.1 – Background Data Review and Field Investigations Plan

HDR will review and evaluate available data, record drawings, reports, and operating requirements, which will be provided by the City.

HDR will prepare and submit for review a field inspection plan that includes the following:

- The scope of the field investigations for process, structural, electrical, and mechanical assessments.
- Activities planned during the field investigations.
- Coordination required and schedule for site inspections.
- A field test plan for the effluent and storm pump systems. The test plan will include a list of activities required to be completed before the tests, actual test protocol, and roles and responsibilities of the CWP, City, and HDR. HDR will be present during the field tests. It will be preferable if field testing is performed during a high flow and a low flow scenarios.

The results of the field investigations and tests will be used to:

- Confirm of past field testing results.

- Define scope for the activities under Task 2.2.
- Determine requirements, issues, and potential impacts to/from surrounding features that need to be addressed in the design for each activity under Task 2.2.
- Determine the detail and extent of the problems. The budget for field investigations are included in Task 2.1.
- Develop prescreening alternatives analysis details based on initial findings and issues.

The budget for this task will assume the following site visits:

- One 2-hour field inspection visit each by up to four HDR team members to occur after the kick-off meeting.
- One-day visit to monitor field tests by up to two HDR team members.

Deliverables: Draft and final field inspection plans. Updated definition and findings for each project segment based on inspection.

Assumptions

- Available data, record drawings, reports, and operating requirements will be provided by the CWP/City before the field investigation task commencement.
- The City will run field tests on pumping systems guided by HDR's test plan. HDR will be present to witness the field tests.

Task 2.2 – Project Segment Preliminary Design Analyses

HDR will evaluate and verify critical elements of each project segment scope. This task includes the following:

Task 2.2.1 – Effluent Pump Station Analysis

HDR will conduct an analysis of firm capacity, control strategy, reliability, and redundancy of the entire effluent pumping system that includes four effluent and three storm pumps to recommend a solution for a reliable, 60 mgd (firm capacity) pump system. The following activities will be performed as part of this sub-task:

- Hydraulic analysis of the existing effluent pump system (four dry weather pumps) that includes calculation of the system headloss and net positive suction head (NPSH) to determine system capacity and operation point. Evaluate the design of the wet wells against Hydraulic Institute (HI) standards. The results of the field tests will be used in the hydraulic analysis and determination of pump operating conditions.
- Verify the hydraulic capacity of the storm pump system from the field tests. The results of the field test will be verified against the results of the Effluent Pumping station Peak Flow Hydraulic Analysis TM from December 2018.

- Hydraulic analysis based on combination of the existing effluent pumps and storm pumps that includes calculation of the system headloss and net positive suction head (NPSH) to determine system capacity and operation point.
- Perform an alternative analysis for the recommended solution. Pre-screen up to five alternatives. Up to three alternatives will be evaluated based on economic factors; non-economic factors, such as performance, control strategy, flow measurement, reliability, and redundancy; and process improvements to the pump system. The three alternatives will be discussed in the TM and a solution will be recommended.
- Review the existing condition assessment report pertaining to the pumps, piping and appurtenances.
- Preliminary design analysis of the replacement of the doors and windows, and repair of the roof at the effluent pump station.
- Preliminary cost estimate for each of the three evaluated alternatives.

Deliverables: The results of this analysis will be documented as part of the TM described in Task 2.3.

Assumptions

- The results of the “Effluent Pumping station Peak Flow Hydraulic Analysis” and the “Chlorine Contact Tanks to the Effluent Pump Station” TMs will be used as a base for the alternatives analysis and recommendations.
- Data gathering, field inspection, and field testing is complete before the start of this task.
- Figures in ACAD format will be provided for the alternatives analyzed.

Task 2.2.2 – Site Waste Pump Station Alternatives Analysis

HDR will conduct an alternatives analysis of the site waste pump station, including location, capacity, pump type, maintenance access, reliability, and redundancy, and an Association for the Advancement of Cost Engineering (AACE) Class 4 cost estimate for a reliable pumping system that meets design flow requirements and avoids site waste overflows. The following activities will be performed as part of this sub-task:

- An alternatives analysis of the site waste pump station to compare the feasibility of rehabilitation of the existing pumping station to meet design flows with a new pumping station at a new location. The two alternatives will be evaluated based on non-economic factors such as capacity, pump type, reliability, redundancy, ease of operation and maintenance (O&M), and an economic analysis based on an AACE Class 4 estimate.
- Evaluation of the existing pumping station rehabilitation will include a hydraulic analysis that calculates system head loss to determine system capacity and operation point for current site waste flows, and future flows after the upcoming upgrade and expansion project. New pump types and pumps with higher capacity will be evaluated. Increasing the wet well capacity at the existing pumping station will also be evaluated.

- Review the existing condition assessment report pertaining to the pumps, piping and appurtenances.
- Evaluation of a new pumping station will include conceptual design for a site waste pump station at a new location. Design will include a general layout of equipment, evaluation of pump quantity, size, type, design operation point, motor configuration, pump suction/discharge header configurations, and yard piping improvements required to pipe site waste flows to the new location.
- Perform a preliminary evaluation of the electrical improvements required for the two alternatives and consider this during the alternative analysis.

Deliverables: The results of this analysis will be documented as part of the TM described in Task 2.3.

Assumptions

- Data gathering, field inspection and field testing is complete before the start of this task.
- Analysis will account for current and future process and stormwater flows to the site waste pump station.
- Figures in ACAD format will be provided for the alternatives analyzed.

Task 2.2.3 – Electrical Field Investigations and Preliminary Design

HDR will conduct field investigations and preliminary design analysis of the replacement of MCCs P1, P2, P3, and P4 to determine the recommended improvements required. The following activities will be performed as part of this sub-task:

- Evaluate existing MCCs. Compare the timeline between replacement of MCC equipment and abandonment of equipment when the new treatment plant expansion occurs. Determine if the equipment needs to remain in place once the new treatment expansion is completed.
- The Electrical Master Plan reports and upgrade and expansion project design information will be incorporated into the analysis. Compare condition of equipment with findings in the existing master plan.
- Provide a description of existing and future electrical demands.
- Provide a design layout that allows for future upgrades and potential phasing requirements for implementation.

HDR will provide a preliminary analysis of the electrical improvements required for the effluent pump system, including the following activities:

- Conduct field investigations and preliminary analysis of the replacement of four MCC and VFD control panels for the effluent pumps.
- Preliminary design analysis of the addition of VFDs and anti-ratcheting devices on existing or new motors for the storm pumps.

- Evaluate electrical improvements required for the new HVAC system at the effluent pump station.

Deliverables: The results of this analysis will be documented as part of the TM described in Task 2.3.

Assumptions

- Field investigation required for this task is included under Task 2.2.1.
- Figures in ACAD format will be provided for the alternatives analyzed.

Task 2.2.4 – Mechanical Field Investigations and Preliminary Design

HDR will provide preliminary design analysis of mechanical improvements to the effluent pump station, main structure, and solids building. This subtask includes the following activities:

- Evaluate the addition of an HVAC system at the effluent pump station. HVAC analysis will incorporate additions/changes to electrical components within the effluent pump station based on analyses of the other project segments.
- Conduct field investigations and preliminary design analysis for the rehabilitation or upgrade of the fixed wall louvers in the main structure to protect MCCs from moisture.
- Addition of a fresh air supply and improvements to the filters for HVAC in the solids building MCC and control rooms.

Deliverables: The results of this analysis will be documented as part of the TM described in Task 2.3.

Assumptions:

- Field investigation required for this task is included under Task 2.2.1.

Task 2.3 – TM Preparation

HDR will prepare a TM detailing the field investigations, project analyses, alternatives schematic layouts and comparisons, design criteria, and recommendations for each project segment, and an AACE Class 4 cost estimate for the recommended solutions.

HDR will submit a draft TM to the City/Program for review and comment. A final TM will be submitted after incorporation of City/Program comments on the draft TM.

Deliverables: Draft and final TMs in PDF format, and log responses confirming adjudication of results of each review comment.

Task 3 – Digester Control Building (Optional)

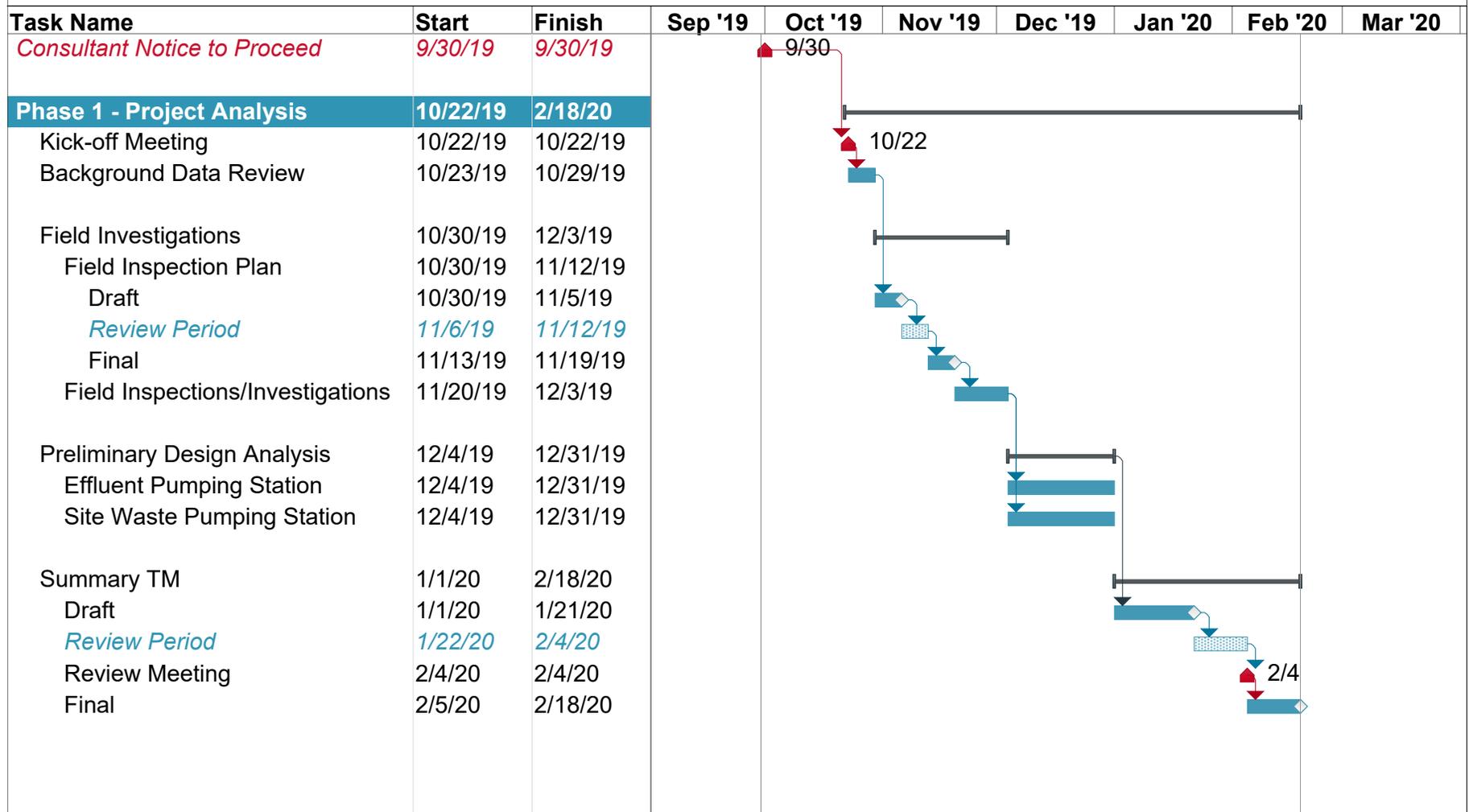
There is excessive temperature in the Digester Control Building main floor. HDR will make one (1) site visit to inspect the existing HVAC system for the Digester Control Building main floor to analyze the operation and condition of the equipment, and to study the existing design. The results of the site visit will be used to evaluate required improvements to the HVAC system and will be included in a TM. An AACE Class 4 cost estimate for the recommended solutions will be included in the TM.

HDR will submit a draft TM to the City/Program for review and comment. A final TM will be submitted after incorporation of City/Program comments on the draft TM.

Deliverables: Draft and final TMs in PDF format, and log responses confirming adjudication of results of each review comment.

EXHIBIT B
PROJECT SCHEDULE

EXHIBIT B - PROJECT SCHEDULE



City of San Mateo Clean Water Program Immediate Action Projects, Package III	Task		Workshops/Meetings	
	Milestone		Review Period	
	Summary			

EXHIBIT C

INSURANCE REQUIREMENTS

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 12 07 covering CGL on an “occurrence” basis, including products-completed operations, personal & advertising injury, with limits no less than **\$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONSULTANT has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than **\$1,000,000** per accident for bodily injury and property damage.
3. **Workers’ Compensation:** as required by the State of California, with Statutory Limits, and Employer’s Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease.
4. **Professional Liability (Errors and Omissions):** Insurance appropriate to the CONSULTANT’s profession, with limit no less than **\$1,000,000** per occurrence or claim, **\$2,000,000** aggregate

If the CONSULTANT maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the CONSULTANT.

Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status

The City, its elected and appointed officials, employees, and agents are to be covered as additional insureds on the auto policy for liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the CONSULTANT; and on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONSULTANT including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONSULTANT’s insurance (at least as broad as ISO Form CG 20 10, 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used).

Primary Coverage

For any claims related to this contract, the **CONSULTANT’s insurance coverage shall be primary** insurance as respects the City, its elected and appointed officials, employees, and agents. Any insurance or self-insurance maintained by the City, its elected and appointed officials, employees, or agents shall be excess of the CONSULTANT’s insurance and shall not contribute with it.

Notice of Cancellation

Each insurance policy required above shall provide that **coverage shall not be canceled, except after thirty (30) days’ prior written notice** (10 days for non-payment) has been given to the City.

Waiver of Subrogation

CONSULTANT hereby grants to City a waiver of any right to subrogation which any insurer of said CONSULTANT may acquire against the City by virtue of the payment of any loss under such insurance. CONSULTANT agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the City. The City may require the CONSULTANT to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

Verification of Coverage

CONSULTANT shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONSULTANT's obligation to provide them. The City reserves the right to require redacted copies of all required insurance policies, including endorsements required by these specifications, at any time.

EXHIBIT D

**RATE AND COST SCHEDULE INCLUDING HOURLY RATES, SUB-CONSULTANTS AND
REIMBURSABLE EXPENSES**

EXHIBIT)

RATE AND COST SCHEDULE

HDR Engineering, Inc.

October 1, 2019, to September 30, 2020

City of San Mateo Clean Water Program

Immediate Action Projects, Package III (Job No. 46T010)

Rate Fee Basis

1. Hourly charge basis will consist of the following:
 - Direct Wages: actual hourly salary for each individual
 - Fringe Benefits: 49.85% of direct wages
 - Overhead: 135% of direct wages
 - Profit: 12%
2. Hourly billing rates are effective from October 1, 2019, through September 30, 2020. Hourly and unit rates may be renegotiated by the Consultant and the City on an annual basis. Requests to revise the hourly and unit rates must be made in writing, thirty (30) calendar days prior to the requested changes taking effect. Maximum increases shall not exceed an average of 3% per year.

Expenses

1. Bay Area Staff
 - Personal use vehicles for Project Business and Visits to Sites - Vehicle Mileage (per mile) at Current Federal Travel Regulation (FTR).
2. Non-Bay Area Staff
 - Travel meals and hotel at Federal GSA per diem rate/day as published on the USGSA website.
 - Rental car, airline tickets, and other miscellaneous travel costs at actual cost. Receipts for all costs over \$25 shall be maintained and submitted with invoices.
3. Subconsultant charges at cost plus 5% markup.
4. Outside printing services at cost, with prior approval.
5. Other direct project related costs at cost, with prior approval.

Other

1. Budget changes, rate increases, and any allocation of contingency dollars shall be approved by City Program Manager in advance of incurring any cost.

RATE SCHEDULE

City of San Mateo Clean Water Program October 1, 2019, to September 30, 2020

Person	Raw Labor Cost ¹	Raw Labor Cost with 1% Escalation ²	Fringe Benefits ³ : 49.85% of direct wages	Overhead ⁴ : 135% of direct wages	Subtotal	Profit: 12%	Hourly Billing Rate
Ettlich, Bill	\$95.63	\$96.58	\$48.15	\$130.39	\$275.11	\$33.01	\$308.13
Hasan, Ali	\$102.65	\$103.68	\$51.68	\$139.96	\$295.32	\$35.44	\$330.76
Kennedy, Holly	\$113.32	\$114.45	\$57.05	\$154.51	\$326.01	\$39.12	\$365.13
Koch, John	\$90.28	\$91.18	\$45.46	\$123.10	\$259.74	\$31.17	\$290.91
Kontonickas, Ted	\$82.45	\$83.28	\$41.51	\$112.43	\$237.22	\$28.47	\$265.68
Natoli, Rob	\$79.33	\$80.12	\$39.94	\$108.16	\$228.23	\$27.39	\$255.61
Nguyen, Phoenix	\$81.24	\$82.05	\$40.90	\$110.77	\$233.73	\$28.05	\$261.78
Ravi, Ambarish	\$60.59	\$61.19	\$30.51	\$82.61	\$174.31	\$20.92	\$195.23

¹ Raw labor rates.

² If a contract starts within one (1) quarter from when the Consultant would normally increase their employee rates, an increase up to 1% is allowed for all staff working in the first year, to begin at the starting date of the contract, and will be frozen until the anniversary of the contract. This will cover anticipated first year salary increases. Thereafter, an average maximum 3% increase for all staff working on the project from year 1 will apply.

³ Fringe benefits include vacation, holiday, sick leave, payroll taxes, insurance, and retirement benefits.

⁴ Overhead includes indirect labor, building and rental expenses, depreciation/amortization, taxes, and non-project related computer, telephone, supplies, and administrative costs, etc.

Table 1 - Estimated Work Effort and Cost

City of San Mateo Clean Water Program

Immediate Action Projects, Package III (Job No. 46T010) | Phase 1 - Project Analysis

Task No.	Task Description	Principal/ QA/QC	Project Manager	Design Manager	Project Engineer	Staff Engr	Struct Engr	Mech Engr	Elect Engr	Project Controls	CADD Tech	Admin/ Clerical	Total HDR Labor Hours	Total HDR Labor (\$)	Total HDR Expenses (\$)	Subs (\$)	Total Cost (\$)
Task 1 - General Services																	
1.1	Project Management	12	24	8	6	0	0	0	0	14	0	18	82	\$20,329	\$500		\$20,829
1.2	Risk Management	2	4		4				1				11	\$2,686	\$200		\$2,886
1.3	Workshops and Meetings	0	26	18	8	0	0	0	14	0	0	8	74	\$17,260	\$430		\$17,690
1.4	Quality Control	16	4		4							4	28	\$7,327	\$300		\$7,627
1.5	Subconsultant Management		4									6	10	\$1,860	\$95		\$1,955
1.6	Agency Coordination		20		16							2	38	\$8,703	\$350		\$9,053
	Subtotal Task 1	30	82	26	38	0	0	0	15	14	0	38	243	\$58,164	\$1,875	\$0	\$60,039
Task 2 - Project Analysis																	
2.1	Field Investigations Plan	0	4	8	12	10	4	0	8	0	0	0	46	\$9,680	\$200		\$9,880
2.2.1	Effluent Pump Station Analysis	0	12	34	64	66	16	0	0	0	0	0	192	\$37,775	\$300		\$38,075
2.2.2	Site Waste Pump Station Alternatives Analysis	0	8	20	54	64	32	0	4	0	0	0	182	\$35,984	\$300		\$36,284
2.2.3	Electrical Field Investigations and Preliminary Design	0	4	0	0	0	0	0	72	0	0	0	76	\$17,138	\$200		\$17,338
2.2.4	Mechanical Field Investigations and Preliminary Design	0	4	0	0	0	0	20	0	0	0	0	24	\$6,376	\$200		\$6,576
2.3	TM Preparation	3	12	2	40	80	10	10	20	0	28	20	225	\$40,970	\$2,049	\$6,720	\$49,739
	Subtotal Task 2	3	44	64	170	220	62	30	104	0	28	20	745	\$147,924	\$3,249	\$6,720	\$157,893
TOTALS WITHOUT OPTIONAL		33	126	90	208	220	62	30	119	14	28	58	988	\$206,088	\$5,124	\$6,720	\$217,932
Task 3 - Digester Control Building HVAC (Optional)																	
3.1	Field Investigation	1	1					8				2	12	\$2,966	\$200		\$3,166
3.2	Preliminary Design	2	2					24		2	16	16	62	\$13,153	\$200		\$13,353
	Subtotal Task 3	3	3	0	0	0	0	32	0	2	16	18	74	\$16,119	\$400	\$0	\$16,519