**AGREEMENT BETWEEN OWNER AND HDR ENGINEERING, INC. FOR PROFESSIONAL SERVICES**

**THIS AGREEMENT** is made as of this 24th day of October, 2017, between City of Grand Island, Nebraska ("OWNER") a municipal corporation, with principal offices at 100 East First Street, Grand Island, Nebraska, and HDR ENGINEERING, INC., ("ENGINEER") a Nebraska corporation, with principal offices at 8404 Indian Hills Drive, Omaha, Nebraska, 68114 for services in connection with the project known as Central Nebraska Regional Airport Sanitary Sewer Collection System Rehabilitation ("Project");

**WHEREAS**, OWNER desires to engage ENGINEER to provide professional engineering, consulting and related services ("Services") in connection with the Project; and

**WHEREAS**, ENGINEER desires to render these Services as described in SECTION I, Scope of Services.

**NOW, THEREFORE**, OWNER and ENGINEER in consideration of the mutual covenants contained herein, agree as follows:

## SECTION I. SCOPE OF SERVICES

ENGINEER will provide Services for the Project, which consist of the Scope of Services as outlined on the attached Exhibit A.

## SECTION II. TERMS AND CONDITIONS OF ENGINEERING SERVICES

The "HDR Engineering, Inc. Terms and Conditions for Professional Services," which are attached hereto in Exhibit B, are incorporated into this Agreement by this reference as if fully set forth herein.

## SECTION III. RESPONSIBILITIES OF OWNER

The OWNER shall provide the information set forth in paragraph 6 of the attached "HDR Engineering, Inc. Terms and Conditions for Professional Services."

## SECTION IV. COMPENSATION

Compensation for ENGINEER'S services under this Agreement shall be on the hourly basis with a not to exceed amount of **$206,429.00**.

Reimbursable Expense shall mean the actual expenses incurred directly or indirectly in connection with the Project for transportation travel, subconsultants, subcontractors, technology charges, telephone, telex, shipping and express, and other incurred expense. ENGINEER will add five percent (5%) to invoices received by ENGINEER from subconsultants and subcontractors to cover administrative expenses and vicarious liability.

**SECTION V. PERIOD OF SERVICE**

Upon receipt of written authorization to proceed, ENGINEER shall perform the services as described in Exhibit A.

**SECTION VI. SPECIAL PROVISIONS**

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

Stacy R. Jankovf
Asst. City Attorney

CITY OF GRAND ISLAND, NEBRASKA
"OWNER"

BY: _____

NAME: Jeremy L. Jensen

TITLE: Mayor

ADDRESS: 100 East First Street
Grand Island, NE 68802

HDR ENGINEERING, INC.
"ENGINEER"

BY: _____

NAME: Ron Sova, P.E.

TITLE: Vice President

ADDRESS: 8404 Indian Hills Drive
Omaha, NE 68114

**EXHIBIT A**

**SCOPE OF SERVICES**

**EXHIBIT A**

**SCOPE OF WORK**

**GRAND ISLAND WWTP BNR/BLOWER SIZE REDUCTION STUDY**

PART 1.0 PROJECT DESCRIPTION:

The City of Grand Island's Wastewater Treatment Plant (WWTP) consists of a headworks screening and pumping facility, grit removal facility, primary clarifiers, screw pumps, aeration basins with three anoxic zones each, secondary clarifiers, and UV disinfection. Primary solids and WAS are combined, pressed using one gravity belt thickening and 4 belt filter presses, temporarily stored in a metal building and then hauled off to landfill for cover. The treated effluent is discharged into the Wood River. The facility has allocated a portion of its capacity to industries, with the majority of industrial flows and loads coming from the JBS meat processing facility located adjacent to the south side of the WWTP. The City needs a viable road map to prepare for future nutrient standards and optimize existing processes and infrastructure, all in the context of minimizing customer rate impacts.

The goals of the study are:

- Develop defensible TN and TP NPDES Permit Limits by surveying neighbor state's permits.
- Examine wastewater data currently being collected as they pertain to BNR and make recommendations as to additional testing (if any) and frequency.
- Define influent characteristics and estimate kinetic parameters for BioWin modeling to simulate various BNR configurations and scenarios.
- Investigate the feasibility of retrofitting current MLE process to BNR process.
- Recommend how to utilize existing idle infrastructure for BNR.
- JBS, a meat processor, has expressed a willingness to remove the Phosphorus generated by their operation rather than have the City of Grand Island remove it. The Conceptual approach will include a scenario for both JBS performing and not performing this removal at their facility.
- Identify options to automate the BNR system and integrate it in the current SCADA system.
- Evaluate current blowers and confirm that they are oversized for existing conditions and potentially proposed BNR conditions. Investigate potential solutions in sizing and quantity of blowers for potential operating cost reductions.
- Develop cost estimates for both process improvements and operating costs needed to comply with projected NPDES Permit Limits for proper budgeting.
- Summarize findings of the various study areas in a report for future reference

PART 2.0 SCOPE OF SERVICES TO BE PERFORMED BY ENGINEER ON THE PROJECT:

**Key Understandings:**

1. OWNER will provide access to system components for visual inspection.
2. OWNER will provide available data including:
    - GI Collection System Master Plan (CH2M)
    - WWTP Design Reports (B&V)
    - Other Studies/Reports on Capacity/Flows/WWTP Modification Alternatives
    - CIP Planning projects information – Sewer Trunk (South Interceptor) projects
    - Current Biowin model for the WWTP
    - NPDES Permit
    - Other reports, drawings and plant data as necessary.
3. The inspection of the existing system components will be visual only and will not include detailed structural analysis, coring, or non destructive testing.
4. No topographic survey is included in the scope of services.
5. Geotechnical investigations are not included in the scope of work.
6. Permitting is not included in the scope of work.
7. Final design of any recommended improvements is not included in the scope of work.
8. Meetings will be held at City Hall or at the WWTP.
9. The scope of work does not include completion of funding applications.

**PART 1 – BASIC SERVICES**

The Basic Services to be provided initially include the following tasks further defined on the pages which follow.

- TASK SERIES 100 – PROJECT MANAGEMENT
- TASK SERIES 200 – KICK-OFF MEETING AND DATA COLLECTION
    - KICKOFF MEETING
    - DATA COLLECTION
- TASK SERIES 300 – FLOWS AND LOADS PROJECTIONS
    - CURRENT FLOWS AND LOADS
    - POPULATION AND GROWTH PROJECTIONS
    - FUTURE FLOWS AND LOADS
    - FLOWS AND LOADS TECH MEMO
- TASK SERIES 400 – INDUSTRIAL (JBS) STAKEHOLDER COORDINATION
    - INDUSTRIAL FLOWS AND LOADINGS MANAGEMENT AND STAKEHOLDER COMMUNICATION
- TASK SERIES 500 – EVALUATION OF EXISTING FACILITY
    - STAFF INTERVIEWS AND WALKTHROUGH
    - PHYSICAL CONDITION AND OPERATIONAL ASSESSMENT
        - BLOWERS
        - SCREW PUMPS
        - IDLE TANKS
        - SCADA/INSTRUMENTATION
    - OPTIMIZING EXISTING EQUIPMENT/FACILITIES TECHNICAL MEMORANDUM
- TASK SERIES 600 – NUTRIENT REMOVAL EVALUATION
    - MODEL CALIBRATION
        - SUPPLEMENTAL SAMPLING PLAN

        - KINETIC EVALUATION
    - TARGET EFFLUENT LEVELS FOR NUTRIENTS
    - PLANT MASS BALANCE AND PROCESS MODELING
    - UNIT PROCESS EVALUATION
    - TREATMENT ALTERNATIVES IDENTIFICATION AND SCREENING
    - TREATMENT ALTERNATIVES DEVELOPMENT AND EVALUATION
    - RECOMMENDED NUTRIENT REMOVAL PLAN
- TASK SERIES 700 – RESOURCE RECOVERY POTENTIAL
    - ANAEROBIC DIGESTION
    - NUTRIENT RECOVERY AND BIOGAS UTILIZATION OPTIONS
    - RESOURCE RECOVERY TM
- TASK SERIES 800 – WORKSHOPS
    - WORKSHOP 1- BNR ALTERNATIVES SCREENING
    - WORKSHOP 2 – EXISTING EQUIPMENT/FACILITIES EVALUATION
    - WORKSHOP 3 - ALTERNATIVE ANALYSIS, COSTS AND IMPLEMENTATION PLAN
- TASK SERIES 900 – BNR IMPLEMENTATION PLAN
    - IMPLEMENTATION PLAN, TRIGGERS, AND CAPITAL NEEDS PLAN
    - DRAFT PLAN
    - REVIEW MEETING
    - FINAL PLAN

**Task Series 100 - Project Management**

**Objective:** Plan, organize, and monitor project team activities.

**HDR Activities:**

- Develop Project Management Plan to define scope activities, constraints, guidelines, budgets, schedule, and procedures.
- Provide coordination with Owner and HDR project team throughout duration of project.
- Manage and allocate project resources based on activities and schedule.
- Monitor schedule and budget.
- Prepare monthly status report and invoice for services provided.
- Coordinate quality control reviews for each Project deliverable.
- Conduct monthly notifications to the City via conference call.
- Conduct progress meetings with the Owner as needed (2 meetings budgeted)

**HDR Deliverables:**

- Project Management Plan (for internal use).
- Monthly status reports and invoices.

**Task Series 200 – Kick-off Meeting and Data Collection**

**Objective:** Effectively initiate project work.

**HDR Activities:**

**Task 210– Kickoff Meeting**

Conduct kickoff meeting to:

- Review and establish Project goals.
- Identify Owner concerns and potential obstacles.
- Establish Project vision.
- Review procedures, contacts and protocols outlined in Project Management Plan.
- Review available data.
- Review and refine Scope of Services and overall Schedule, as required.

**Task 220 – Data Collection**

- Request and obtain relevant background information including original design drawings and specifications.
- Request and obtain relevant background information including study and reports prepared by others
    - GI Collection System Master Plan (CH2M)
    - WWTP Design Reports (B&V)
    - Other Studies/Reports on Capacity/Flows/WWTP Modification Alternatives
    - CIP Planning projects information – Sewer Trunk projects
    - Current Biowin model for the WWTP
    - NPDES Permit
    - Other reports, drawings and plant data as necessary.
- Obtain five years of plant operating data
- Obtain seven years of plant flow data
- Equipment replacement and maintenance records
- Other, as appropriate

**HDR Deliverables:**

- Minutes from kickoff meeting.

**Task Series 300 – Flow and Loads Projections**

**Objective:** Summarize current plant flows and loads and develop the future flows and loads for the planning period.

**HDR Activities:**

**Task 310 – Current Flows and Loads**

- Utilizing 3 years of most current plant data summarize current critical flows and loads for CBOD, TSS, TKN, Phosphorous and Ammonia.
- Compare above data with the 2010 master plan by CH2M to confirm peaking factors for maximum month and peak day for CBOD, TSS, TKN, Phosphorous and Ammonia.

**Task 320 – Population and Growth Projections**

- City will provide or existing master plan data and other reports will be used for population and industrial growth projections for a 20-year planning period.

**Task 330 – Future Flows and Loads**

- Graph 3 years of monthly ADW, AWW, MWW and PHWW influent flow data in parallel with monthly precipitation data to establish the recent 3 year trends in influent flows. Existing information/reports will be heavily relied upon to develop this information.
- Develop future flows and loads for the planning period in 5-year increments.
- Use peaking factors to project maximum month and peak day loads for CBOD, TSS, TKN, Phosphorous and Ammonia.

**Task 340 – Flows and Loads Tech Memo**

- Summarize the outcomes of Task Series 710-730 in a Tech Memo
- Distribute to the City and obtain comments.
- Revise TM to reflect City comments.

**HDR Deliverables:**

- Flows and Loads TM

**Task Series 400 – Industrial (JBS) Stakeholder Coordination**

**Objective:** Analyze flows, loading and impacts from JBS facility.

**HDR Activities:**

**Task 410 – Industrial Flows and Loadings Management and Stakeholder Communication**

- Review flows and organic loadings from JBS facility.
- Meet with JBS personnel to investigate options of implementing nutrient removal at JBS facility vs. at the GI WWTP. (Two meetings budgeted)
- Identify source reduction strategies.
- Identify impacts to the WWTF loadings and treatment scenarios if source reduction strategies are implemented.

**HDR Deliverables:**

- Source Reduction Strategies

- Impact on WWTP if source reduction is implemented

**Task Series 500 – Evaluation of Existing Facility**

**Objective:** Through interviews and site visits, work with GI WWTP staff to perform physical condition and operational assessment of the plant.

**HDR Activities:**

**Task 510 – Staff Interviews and Walkthrough**

- Initial site visit to review how existing facility is being operated and maintained including items such as current operations responsibilities and protocols, operational modes, instrumentation, reliability issues, possible flexibility improvements, maintenance responsibilities and protocols, and maintenance issues.

**Task 520 – Physical Condition and Operational Assessment**

- Utilizing a team of specialists assess the following unit process (equipment), in the facility and summarize reliability issues, capacity issues, maintenance issues, condition evaluation and remaining useful life. Existing buildings and structures housing the equipment are assumed to be in adequate condition and a structural/architectural evaluation is not included in this task.
    - Blowers
    - Screw Pumps
    - Idle Infrastructure (tanks)
    - SCADA/Instrumentation

**Task 530 – Optimizing Existing Equipment/Facilities Technical Memorandum**

- Investigate how the existing equipment analyzed in Task 520 can be downsized or integrated efficiently in future BNR improvements. Develop and evaluate up to two alternatives for optimizing the referenced process equipment and
- Identify operational cost savings if optimization is implemented.
- Identify costs to efficiently integrate existing infrastructure for future BNR improvements.

**HDR Deliverables:**

- Optimizing Existing Equipment/Facilities TM

**Task Series 600 – Nutrient Removal Evaluation**

**Objective:** Identify, screen, and evaluate treatment alternatives for achieving projected nutrient reduction goals.

**HDR Activities:**

**Task 610 – Model Calibration**
**Supplemental Sampling Plan**

- Work with Grand Island to identify additional wastewater sampling needed for various streams throughout the facility including plant influent, unit process influents and effluents, solids streams, recycle streams, and plant final effluent to support mass balance and characterization of organics, nutrients, and solids for facility.
    a. Create summary of sampling plan for sampling and testing by Grand Island staff.

b. Compile, statistically analyze, and summarize additional sampling data.
c. Determine influent waste ratios relative to chemical oxygen demand (COD), total Kjeldahl nitrogen (TKN), and total phosphorus.
d. Populate and calibrate influent specifier in order to develop influent characterization based on Biowin State Variables (Influent COD module)

- Kinetic Calibration
  a. Work with Grand Island staff to identify, and refine as needed, protocol (e.g. High F/M, Low F/M, washout, respirometric, inhibition assays, etc.) for kinetic testing to be used to further refine Biowin™ calibration.
  b. Coordinate sampling, shipping and subsequent testing at Iowa State University.
  c. Develop and document summary of findings for kinetic evaluation.
  d. Incorporate kinetic coefficients into Biowin™ models with appropriate notation.

**Task 620 – Target Effluent Levels for Nutrients**

- Establish target levels for nutrients to evaluate capacity and nutrient removal needs. HDR will evaluate improvements needed to achieve nutrient scenarios of 10 mg/l TN and 1 mg/l TP. An order of magnitude costs will also be developed to get to a nutrient effluent scenario of 5 mg/l TN and 0.5 mg/l TP.

**Task 630 – Plant Mass Balance and Process Modeling**

- Review existing Plant mass balance and process Biowin Model
- Refine and Calibrate model to aid in identifying BNR alternatives.

**Task 640 – Unit Process Evaluation**

- Review and summarize capacities for each of the unit processes at the facility from previous reports and Biowin model.
  - Headworks
  - Primary Clarifiers
  - Aeration Basins
  - Final Clarifiers
  - Solids Handling facilities

**Task 650 – Treatment Alternatives Identification and Screening**

- Identify applicable treatment alternatives available for effluent nutrient limit levels. Treatment alternatives evaluated will include:
  a. Removal of primary clarifiers from the treatment train
  b. Operating the aeration basin in a SND mode
  c. Mixed liquor recycle discharge location options
  d. Retrofitting existing aeration basin with sequencing batch reactor (SBR).
  e. Chemical phosphorous removal.
- Summarize alternatives and provide general discussion of operation, relative merits of each, advantages and disadvantages, process flow diagrams, etc. of various alternatives at Workshop 1 in Task 810.

**Task 660 – Treatment Alternatives Development and Evaluation**

- Combine the treatment technologies identified in Task 630 into 2-3 logical, step wise, plans of improvements to the facility. These plans

should reflect the results of the operational and condition assessment previously performed, community growth, and anticipated timing of more stringent permit limitations.
- Perform necessary process modeling, sizing, costs and site plan for each of the 2-3 plans.
- Evaluate the impacts of nutrient removal alternatives on the existing solids handling process (belt pressing solids and hauling off to dispose in landfill as cover).
- Evaluate the impacts of implementing a lime stabilization process for the Biosolids which will give the city an option to land apply the Biosolids.
- Evaluate alternatives using order of magnitude Capital and O&M costs, timing of improvements, and relative merits of various alternatives in an Alternative Evaluation TM.
- Distribute copies for Owner review and comment.
- Provide internal QA/QC review, and incorporate changes as appropriate.

**Task 670 – Recommended Nutrient Removal Plan**
- Using the results of Tasks 610-640, develop a Recommended Nutrient Removal Plan.
- Develop order of magnitude costs, flow schematics, and preliminary site plans.

**HDR Deliverables:**
- Supplemental Sampling Plan
- Alternative Evaluation TM
- Recommended Nutrient Removal Plan

**Assumptions**

This task assumes BNR will be implemented, while maintaining the current Biosolids handling scheme or implementing a lime stabilization process to handle the Biosolids. Anaerobic digestion of the Biosolids will not be considered when identifying the BNR alternatives or improvements. Implementing anaerobic digestion will be analyzed separately in Task Series 700.

**Task Series 700 Resource Recovery Potential**

**Objective:**

Evaluate the impacts of implementing Anaerobic Digestion of the Biosolids in the existing WWTP. This high level evaluation will be of a conceptual level if the plant staff chose to implement anaerobic digestion in the future. The task will present nutrient removal and recovery, gas utilization, and solids processing schemes to prompt discussion and create a vision of what could be possible for a future footprint at the Grand Island WWTP.

**HDR Activities:**

**Task 710 – Anaerobic Digestion**
- Review and summarize effects if implanting anaerobic digestion for the Biosolids.
- Options for sizes/types of anaerobic digesters will be presented along with possibility of using existing infrastructure to implement anaerobic digestion.
- Impacts on the BNR alternatives developed in Task 600 will be evaluated along with needs for sidestream treatment to achieve nutrient limit goals.

- Conceptual level layouts and order of magnitude costs will be developed.

**Task 720 – Nutrient Recovery and Biogas Utilization Options**

- Implementing anaerobic digestion opens up the possibility for the WWTP to be a resource recovery facility that can extract and capitalize on the value of the incoming wastewater. This task will present options for nutrient recovery and using biogas as a resource for energy.

**Task 730 – Plant of the Future TM**

- Summarize the outcomes of Tasks 610-620 in a Plant of the Future TM.
- Develop high level concept layouts and costs.
- Distribute to the City and obtain comments.
- Revise TM to reflect City comments.

**HDR Deliverables:**

- Plant of the Future TM

**Task Series 800 – Workshops**

**Objective:**

Workshops shall be conducted to effectively capitalize on and integrate the knowledge and expertise of the **Owner** and **HDR Project** team members, and to tailor **Project** recommendations to **Owner** operations and maintenance preferences. Three workshops will be held to effectively capitalize on and integrate the knowledge and expertise of the Owner and HDR Project team members.

**HDR Activities:**

**Task 810 - Workshop 1 – BNR Alternative Screening**

Workshop 1 is anticipated to consolidate the following

- Kickoff Meeting (Task 210)
- Data Collection Review (Task 220)
- Outline Supplemental Sampling Plan (Task 610)
- Establish planning period flows and loadings (Task 340)
- Preliminary Identification and Screening of Nutrient Removal Alternatives (Task 650)

**Task 820 - Workshop 2 – Existing Equipment/Facilities Evaluation**

Workshop 2 is anticipated to consolidate the following

- Results of the Physical Condition and Operational Assessment (Task 520)
- Review how the existing equipment fit into the BNR alternatives.

**Task 830 - Workshop 3 – Alternative Analysis, Costs and Implementation Plan**

Workshop 3 is anticipated to consolidate the following

- Review Alternatives Development and Evaluation (Task 660)
- Results of Nutrient Removal Plan Development (Task 670)
- Presentation of Implementation Plan (Task 900)

**HDR Deliverables:**

- Minutes from workshops

**Task Series 900 – Implementation Plan**

**Objective:** Develop draft and final Implementation Plan document.

**HDR Activities:**

**Task 910– Implementation Plan, Triggers, and Capital Needs Plan**

- Develop a yearly implementation plan of improvements.
- Identify specific loading, hydraulic, regulatory, or useful life trigger for each step of the plan.
- Prepare a 20-year Capital Needs Plan that projects anticipated replacement/major upgrades for major treatment components and equipment. The developed CIP will reflect the timing of anticipated needs based on the evaluation of existing facility (Task Series 500), additional facilities recommended (Task Series 600). The CIP will also be reflective of balancing costs and staff time committed to projects among years.

**Task 920 – Draft Plan**

- Compile finalized TMs into Draft Implementation Plan.
- Prepare Executive Summary capturing the major points and recommendations of the plan.
- Distribute to the City and obtain comments.
- Revise Draft Plan to reflect City comments.

**Task 930 – Review Meeting**

- Meet with City Staff to go through comments and resolve any remaining issues at Workshop 3 (Task 830).

**Task 940 – Final Plan**

- Revise Draft Implementation Plan to reflect City comments.

**HDR Deliverables:**

- Draft Implementation Plan
- Executive Summary
- Final Implementation Plan
- Meeting Minutes

PART 3.0 AUTHORIZATION

Work will not proceed on a task without authorization.

PART 4.0 OWNER'S RESPONSIBILITIES:

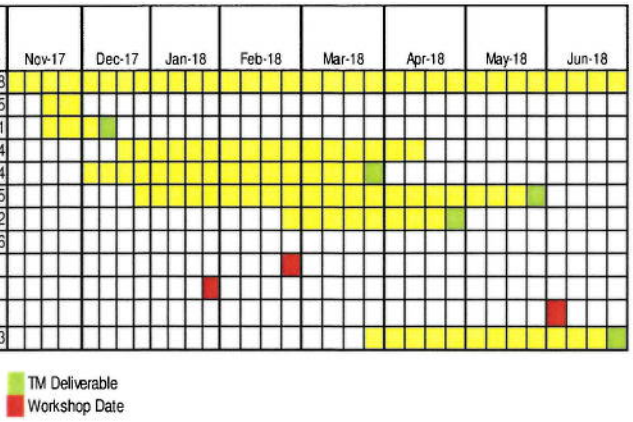
OWNER will be responsible for the following as identified in the above Scope of Work:

i. Coordinate Owner staff participation and actively participate in Workshops.
ii. Provide meeting facilities to conduct Workshops.
iii. Provide existing reports/studies conducted by other consultants as necessary.
iv. Provide existing biowin model.
v. Provide population projections for the planning period.
vi. Participate in ongoing project activities to support consultant activities.
vii. Provide timely review and comment on HDR deliverables.
viii. Provide timely payment for services provided.
ix. Provide relevant background information including original design drawings and specifications.
x. Lead Customer/Stakeholder Meetings (if any)

PART 5.0 PERIODS OF SERVICE:

| | |
|---|---|
| Notice to Proceed | October 30, 2017 |
| Existing facilities TM | March 29, 2018 |
| Nutrient Removal Plan | May 28, 2018 |
| Final Implementation Plan | June 27, 2018 |

| | | Time from Start Date (Months) | Start Date | End Date | Duration (Months) |
|---|---|---|---|---|---|
| **TASK SERIES 100 - PROJECT MANAGEMENT** | | 0 | 10/30/17 | 6/27/2018 | 8 |
| **TASK SERIES 200 -KICK-OFF MEETING AND DATA COLLECTION** | | 0.5 | 11/14/17 | 11/29/2017 | 0.5 |
| **TASK SERIES 300 - FLOWS AND LOADINGS PROJECTIONS** | | 0.5 | 11/14/17 | 12/14/2017 | 1 |
| **TASK SERIES 400 - INDUSTRIAL (JBS) STAKEHOLDER COORDINATION** | | 1.5 | 12/14/17 | 4/13/2018 | 4 |
| **TASK SERIES 500 - EVALUATION OF EXISTING FACILITY** | | 1.0 | 11/29/17 | 3/29/2018 | 4 |
| **TASK SERIES 600 - NUTRIENT REMOVAL EVALUATION** | | 2.0 | 12/29/17 | 5/28/2018 | 5 |
| **TASK SERIES 700 - RESOURCE RECOVERY POTENTIAL** | | 4.0 | 2/27/18 | 4/28/2018 | 2 |
| **TASK SERIES 800 - WORKSHOPS** | | 2.0 | 12/29/17 | 6/27/2018 | 6 |
| Task 810 | Workshop 1 – BNR Alternative Screening | | | | |
| Task 820 | Workshop 2 – Existing Equipment/Facilities Evaluation | | | | |
| Task 830 | Plan | | | | |
| **TASK SERIES 900 -IMPLEMENTATION PLAN** | | 5.0 | 3/29/18 | 6/27/2018 | 3 |




NEXT PHASES OF WORK:
Preliminary and final design for any of the projects identified in the implementation plan.

## GI WWTF BNR/BLOWER SIZE REDUCTION STUDY
### Fee Summary

| Task Series | Labor Hours | Labor Cost | Travel Expenses | Mail | Print & Photo-copy | Sub Consultant | Direct Expenses | Total Fee |
|---|---|---|---|---|---|---|---|---|
| TASK SERIES 100 - PROJECT MANAGEMENT | 100 | $16,341 | $390 | $0 | $50 | $0 | $440 | **$16,781** |
| TASK SERIES 200 -KICK-OFF MEETING AND DATA COLLECTION | 50 | $8,045 | $130 | $0 | $60 | $0 | $190 | **$8,235** |
| TASK SERIES 300 - FLOWS AND LOADINGS PROJECTIONS | 90 | $13,720 | $130 | $0 | $100 | $0 | $230 | **$13,950** |
| TASK SERIES 400 - INDUSTRIAL (JBS) STAKEHOLDER COORDINATION | 74 | $12,899 | $390 | $0 | $300 | $0 | $690 | **$13,589** |
| TASK SERIES 500 - EVALUATION OF EXISTING FACILITY | 236 | $41,418 | $390 | $0 | $300 | $0 | $690 | **$42,108** |
| TASK SERIES 600 - NUTRIENT REMOVAL EVALUATION | 276 | $45,368 | $260 | $0 | $200 | $4,500 | $4,960 | **$50,328** |
| TASK SERIES 700 - RESOURCE RECOVERY POTENTIAL | 160 | $24,796 | $130 | $0 | $0 | $0 | $130 | **$24,926** |
| TASK SERIES 800 - WORKSHOPS | 102 | $17,108 | $390 | $0 | $300 | $0 | $690 | **$17,798** |
| TASK SERIES 900 -IMPLEMENTATION PLAN | 109 | $18,354 | $260 | $0 | $100 | $0 | $360 | **$18,714** |
| **Total** | **1,197** | **$198,049** | **$2,470** | **$0** | **$1,410** | **$4,500** | **$8,380** | **$206,429** |

Project Start Date: Oct-17 | Escalation Rate: 5.00%

## ESTIMATED LABOR-HOURS

| TASK DESCRIPTIONS | PROJ PRINC | QC SR | PARR Sr Proc | T Adv & Sr Proc | PROJ MAN | Project ENGINEERING PE | JR | DRFT | PROCESS Engineering SR | JR | I/C Engineer | CLERICAL | TOTAL LABOR HOURS | TOTAL BASE LABOR ($) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Proposed Personel** | Sova | Dechant | TBD | Bakke | Amit Shrivastava | Gina Rust | Kylie Wilmes | Brosch | Eric Evans | Adam Smith | Dave Penner | Joanne Weise | | |
| **Rate Multiplier** | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | | |
| **2017 Labor Rate** | 278 | 310 | 318 | 209 | 168 | 146 | 147 | 142 | 179 | 114 | 212 | 67 | | |
| **TASK SERIES 100 - PROJECT MANAGEMENT** | | | | | | | | | | | | | | |
| Task 110 Project Management | 2 | | 4 | | 46 | | 40 | | | | | 8 | 100 | $15,942 |
| TASK SERIES 100 - SUBTOTALS | | | | | | | | | | | | | | |
| HDR HOURS | 2 | 0 | 4 | 0 | 46 | 0 | 40 | 0 | 0 | 0 | 0 | 8 | 100 | $15,942 |
| TOTAL HOURS | 2 | 0 | 4 | 0 | 46 | 0 | 40 | 0 | 0 | 0 | 0 | 8 | 100 | $15,942 |
| Time From Start Date Start Date: 0 Months | | | | | | | | | | | | | Escalated Cost | $16,341 |
| Start Date: 10/30/17 | | | | | | | End Date: 6/27/2018 | | | | | | | |
| Task Duration: 8 Months | | | | | | | Percent Escalated: 50 | | | | | | | |
| **TASK SERIES 200 -KICK-OFF MEETING AND DATA COLLECTION** | | | | | | | | | | | | | | |
| Task 210 Kick off meeting | | | | | 6 | | 12 | | 8 | | | | 26 | $4,202 |
| Task 220 Data Collection | | | | | 6 | | 12 | | 6 | | | | 24 | $3,843 |
| TASK SERIES 200 -SUBTOTAL | | | | | | | | | | | | | | |
| HDR HOURS | 0 | 0 | 0 | 0 | 12 | 0 | 24 | 0 | 14 | 0 | 0 | 0 | 50 | $8,045 |
| TOTAL HOURS | 0 | 0 | 0 | 0 | 12 | 0 | 24 | 0 | 14 | 0 | 0 | 0 | 50 | $8,045 |
| Time From Start Date Start Date: 0.5 Months | | | | | | | | | | | | | Escalated Cost | $8,045 |
| Start Date: 11/14/17 | | | | | | | End Date: 11/29/2017 | | | | | | | |
| Task Duration: 0.5 | | | | | | | Percent Escalated: 0 | | | | | | | |
| **TASK SERIES 300 - FLOWS AND LOADINGS PROJECTIONS** | | | | | | | | | | | | | | |
| Task 310 Current Flows and Loads | | | | | 8 | | 6 | | 4 | 4 | | | 22 | $3,397 |
| Task 320 Population and Growth Projections | | | | | 8 | | 6 | | 2 | 4 | | | 20 | $3,038 |
| Task 330 Future Flows and Loads | | | | 1 | 8 | | 6 | | 2 | 4 | | | 21 | $3,247 |
| Task 340 Flows and Loads Tech Memo | | 2 | | 1 | 8 | | 6 | | 2 | 2 | | 6 | 27 | $4,038 |
| TASK SERIES 300 -SUBTOTAL | | | | | | | | | | | | | | |
| HDR HOURS | 0 | 2 | 0 | 2 | 32 | 0 | 24 | 0 | 10 | 14 | 0 | 6 | 90 | $13,720 |
| TOTAL HOURS | 0 | 2 | 0 | 2 | 32 | 0 | 24 | 0 | 10 | 14 | 0 | 6 | 90 | $13,720 |
| Time From Start Date Start Date: 0.5 Months | | | | | | | | | | | | | Escalated Cost | $13,720 |
| Start Date: 11/14/17 | | | | | | | End Date: 12/14/2017 | | | | | | | |
| Task Duration: 1 | | | | | | | Percent Escalated: 0 | | | | | | | |
| **TASK SERIES 400 - INDUSTRIAL (JBS) STAKEHOLDER COORDINATION** | | | | | | | | | | | | | | |
| Task 410 Industrial Flows and Loadings Management and Stakeholder Communication | 6 | | | | 20 | | 32 | | 16 | | | | 74 | $12,584 |
| TASK SERIES 400 -SUBTOTAL | | | | | | | | | | | | | | |
| HDR HOURS | 6 | 0 | 0 | 0 | 20 | 0 | 32 | 0 | 16 | 0 | 0 | 0 | 74 | $12,584 |
| TOTAL HOURS | 6 | 0 | 0 | 0 | 20 | 0 | 32 | 0 | 16 | 0 | 0 | 0 | 74 | $12,584 |
| Time From Start Date Start Date: 1.5 Months | | | | | | | | | | | | | Escalated Cost | $12,899 |
| Start Date: 12/14/17 | | | | | | | End Date: 4/13/2018 | | | | | | | |
| Task Duration: 4 | | | | | | | Percent Escalated: 50 | | | | | | | |
| **TASK SERIES 500 - EVALUATION OF EXISTING FACILITY** | | | | | | | | | | | | | | |
| Task 510 Staff Interviews and Walkthrough | | | | | 12 | | 24 | | 24 | | 8 | | 68 | $11,533 |
| Task 520 Physical Condition and Operational Assessment | | | | | 24 | | 24 | | 24 | | 12 | | 84 | $14,392 |
| Task 530 Optimizing Existing Equipment/Facilities Technical Memorandum | 2 | | | 4 | 16 | | 24 | | 24 | | 8 | 6 | 84 | $13,995 |
| TASK SERIES 500 -SUBTOTAL | | | | | | | | | | | | | | |
| HDR HOURS | 2 | 0 | 0 | 4 | 52 | 0 | 72 | 0 | 72 | 0 | 28 | 6 | 236 | $39,921 |
| TOTAL HOURS | 2 | 0 | 0 | 4 | 52 | 0 | 72 | 0 | 72 | 0 | 28 | 6 | 236 | $39,921 |
| Time From Start Date Start Date: 1.0 Months | | | | | | | | | | | | | Escalated Cost | $41,418 |
| Start Date: 11/29/17 | | | | | | | End Date: 3/29/2018 | | | | | | | |
| Task Duration: 4 | | | | | | | Percent Escalated: 75 | | | | | | | |
| **TASK SERIES 600 - NUTRIENT REMOVAL EVALUATION** | | | | | | | | | | | | | | |
| Task 610 Model Calibration | | | | | 8 | | | | 8 | 8 | | | 24 | $3,691 |
| Task 620 Target Effluent Levels for Nutrients | | | | | 8 | | 4 | | 2 | | | | 14 | $2,287 |
| Task 630 Plant Mass Balance and Process Modeling | | | | 1 | 8 | | 8 | | 12 | 8 | | | 37 | $5,792 |
| Task 640 Unit Process Capacity Summary | | | | 1 | 8 | | 12 | | 4 | 4 | | | 29 | $4,487 |
| Task 650 Treatment Alternatives Identification and Screening | | | | 1 | 12 | | 8 | | 8 | 8 | | | 37 | $5,745 |
| Task 660 Treatment Alternatives Development and Evaluation | | | | 1 | 12 | | 8 | | 24 | 32 | 4 | | 81 | $12,210 |
| Task 670 Recommended Nutrient Removal Plan | 2 | 4 | | 2 | 12 | | 8 | | 8 | 8 | 4 | 6 | 54 | $8,996 |
| TASK SERIES 600 -SUBTOTAL | | | | | | | | | | | | | | |
| HDR HOURS | 2 | 4 | 0 | 6 | 68 | 0 | 48 | 0 | 66 | 68 | 8 | 6 | 276 | $43,208 |
| TOTAL HOURS | 2 | 4 | 0 | 6 | 68 | 0 | 48 | 0 | 66 | 68 | 8 | 6 | 276 | $43,208 |
| Time From Start Date Start Date: 2.0 Months | | | | | | | | | | | | | Escalated Cost | $45,368 |
| Start Date: 12/29/17 | | | | | | | End Date: 5/28/2018 | | | | | | | |
| Task Duration: 5 | | | | | | | Percent Escalated: 100 | | | | | | | |
| **TASK SERIES 700 - RESOURCE RECOVERY POTENTIAL** | | | | | | | | | | | | | | |
| Task 710 Anaerobic Digestion | 1 | | | 1 | 8 | 12 | 4 | | 12 | 12 | | | 50 | $7,687 |
| Task 720 Nutrient Recovery and Biogas Utilization Options | 1 | | | 1 | 8 | 12 | 4 | | 12 | 12 | | | 50 | $7,687 |
| Task 730 Resource Recovery TM | 1 | | | 1 | 8 | 16 | 4 | | 12 | 12 | | 8 | 60 | $8,467 |
| TASK SERIES 700 -SUBTOTAL | | | | | | | | | | | | | | |
| HDR HOURS | 3 | 0 | 0 | 3 | 22 | 40 | 12 | 0 | 36 | 36 | 0 | 8 | 160 | $23,842 |
| TOTAL HOURS | 3 | 0 | 0 | 3 | 22 | 40 | 12 | 0 | 36 | 36 | 0 | 8 | 160 | $23,842 |
| Time From Start Date Start Date: 4.0 Months | | | | | | | | | | | | | Escalated Cost | $24,796 |
| Start Date: 2/27/18 | | | | | | | End Date: 4/28/2018 | | | | | | | |
| Task Duration: 2 | | | | | | | Percent Escalated: 80 | | | | | | | |
| **TASK SERIES 800 - WORKSHOPS** | | | | | | | | | | | | | | |
| Task 810 Workshop 1 – BNR Alternative Screening | | | | 2 | 12 | | 8 | | 8 | 4 | | | 34 | $5,497 |
| Task 820 Workshop 2 – Existing Equipment/Facilities Evaluation | | | | 2 | 12 | | 8 | | 8 | 4 | | | 34 | $5,497 |
| Task 830 Implementation Plan | | | | 2 | 12 | | 8 | | 8 | 4 | | | 34 | $5,497 |
| TASK SERIES 800 -SUBTOTAL | | | | | | | | | | | | | | |
| HDR HOURS | 0 | 0 | 0 | 6 | 36 | 0 | 24 | 0 | 24 | 12 | 0 | 0 | 102 | $16,490 |
| TOTAL HOURS | 0 | 0 | 0 | 6 | 36 | 0 | 24 | 0 | 24 | 12 | 0 | 0 | 102 | $16,490 |
| Time From Start Date Start Date: 2.0 Months | | | | | | | | | | | | | Escalated Cost | $17,108 |
| Start Date: 12/29/17 | | | | | | | End Date: 6/27/2018 | | | | | | | |
| Task Duration: 6 | | | | | | | Percent Escalated: 75 | | | | | | | |
| **TASK SERIES 900 -IMPLEMENTATION PLAN** | | | | | | | | | | | | | | |
| Task 910 Implementation Plan, Triggers, and Capital Needs Plan | 2 | | | 2 | 12 | | 24 | | 8 | | | 8 | 56 | $8,475 |
| Task 920 Draft Plan | | 2 | | 1 | 6 | | 8 | | 4 | | | | 21 | $3,726 |
| Task 930 Review Meeting | | | | 1 | 6 | | | | 4 | | | | 11 | $1,932 |
| Task 940 Final Plan | 2 | 1 | | | 6 | | | | 6 | | | 6 | 21 | $3,346 |
| TASK SERIES 900 -SUBTOTAL | | | | | | | | | | | | | | |
| HDR HOURS | 4 | 3 | 0 | 4 | 30 | 0 | 32 | 0 | 22 | 0 | 0 | 14 | 109 | $17,480 |
| TOTAL HOURS | 4 | 3 | 0 | 4 | 30 | 0 | 32 | 0 | 22 | 0 | 0 | 14 | 109 | $17,480 |
| Time From Start Date Start Date: 5.0 Months | | | | | | | | | | | | | Escalated Cost | $18,354 |
| Start Date: 3/29/18 | | | | | | | End Date: 6/27/2018 | | | | | | | |
| Task Duration: 3 | | | | | | | Percent Escalated: 100 | | | | | | | |
| | | | | | | | | | | | | | | $198,049 |
| Total Hours | 19 | 9 | 4 | 25 | 318 | 40 | 308 | 0 | 260 | 130 | 36 | 48 | 1197 | |
| | $5,273 | $2,788 | $1,272 | $5,230 | $53,302 | $5,823 | $45,211 | $0 | $46,623 | $14,882 | $7,629 | $3,198 | 0 | |

| TASK | | OTHER DIRECT COSTS | | | | | TOTALS |
|---|---|---|---|---|---|---|---|
| | | No. Trips | Travel Expenses | Mail | Print & Photo-copy | Sub | |
| **TASK SERIES 100 - PROJECT MANAGEMENT** | | | | | | | |
| Task 110 | Project Management | 3 | $ 390 | | $ 50 | | $ 440 |
| **TASK SERIES 100 - SUBTOTALS** | | 3 | $ 390 | $ - | $ 50 | $ - | $ 440 |
| | | | | | | | |
| **TASK SERIES 200 -KICK-OFF MEETING AND DATA COLLECTION** | | | | | | | |
| Task 210 | Kick off meeting | 1 | $ 130 | | $ 50 | | $ 180 |
| Task 220 | Data Collection | | | | $ 10 | | $ 10 |
| **TASK SERIES 200 -SUBTOTAL** | | 1 | $ 130 | $ - | $ 60 | $ - | $ 190 |
| | | | | | | | |
| **TASK SERIES 300 - FLOWS AND LOADINGS PROJECTIONS** | | | | | | | |
| Task 310 | Current Flows and Loads | | | | | | |
| Task 320 | Population and Growth Projections | | | | | | |
| Task 330 | Future Flows and Loads | | | | | | |
| Task 340 | Flows and Loads Tech Memo | 1 | $ 130 | | $ 100 | | $ 230 |
| **TASK SERIES 300 -SUBTOTAL** | | 1 | $ 130 | $ - | $ 100 | $ - | $ 230 |
| | | | | | | | |
| **TASK SERIES 400 - INDUSTRIAL (JBS) STAKEHOLDER COORDINATION** | | | | | | | |
| Task 410 | Industrial Flows and Loadings Management and Stakeholder Communication | 3 | $ 390 | | $ 300 | $ - | $ 690 |
| TASK SERIES 400 -SUBTOTAL | | 3 | $ 390 | $ - | $ 300 | $ - | $ 690 |
| | | | | | | | |
| **TASK SERIES 500 - EVALUATION OF EXISTING FACILITY** | | | | | | | |
| Task 510 | Staff Interviews and Walkthrough | 1 | $ 130 | | $ 100 | | $ 230 |
| Task 520 | Physical Condition and Operational Assessment | 1 | $ 130 | | $ 100 | $ - | $ 230 |
| Task 530 | Optimizing Existing Equipment/Facilities Technical Memorandum | 1 | $ 130 | | $ 100 | $ - | $ 230 |
| TASK SERIES 500 -SUBTOTAL | | 3 | $ 390 | $ - | $ 300 | $ - | $ 690 |
| | | | | | | | |
| **TASK SERIES 600 - NUTRIENT REMOVAL EVALUATION** | | | | | | | |
| Task 610 | Model Calibration | | | | | 4500 | $ 4,500 |
| Task 620 | Target Effluent Levels for Nutrients | | | | | | $ - |
| Task 630 | Plant Mass Balance and Process Modeling | | | | | | $ - |
| Task 640 | Unit Process Capacity Summary | | | | | | $ - |
| Task 650 | Treatment Alternatives Identification and Screening | 1 | $ 130 | | | | $ 130 |
| Task 660 | Treatment Alternatives Development and Evaluation | | | | $ 100 | | $ 100 |
| Task 670 | Recommended Nutrient Removal Plan | 1 | $ 130 | | $ 100 | | $ 230 |
| TASK SERIES 600 -SUBTOTAL | | 2 | 260 | 0 | 200 | 4500 | $ 4,960 |
| | | | | | | | |
| **TASK SERIES 700 - RESOURCE RECOVERY POTENTIAL** | | | | | | | |
| Task 710 | Anaerobic Digestion | | | | | | $ - |
| Task 720 | Nutrient Recovery and Biogas Utilization Options | | | | | | $ - |
| Task 730 | Resource Recovery TM | 1 | $ 130 | | | | $ 130 |
| TASK SERIES 700 -SUBTOTAL | | 1 | 130 | 0 | 0 | 0 | 130 |
| | | | | | | | |
| **TASK SERIES 800 - WORKSHOPS** | | | | | | | |
| Task 810 | Workshop 1 – BNR Alternative Screening | 1 | $ 130 | | $ 100 | | $ 230 |
| Task 820 | Workshop 2 – Existing Equipment/Facilities Evaluation | 1 | $ 130 | | $ 100 | | $ 230 |
| Task 830 | Workshop 3 – Alternative Analysis, Costs and Implementation Plan | 1 | $ 130 | | $ 100 | | $ 230 |
| TASK SERIES 800 -SUBTOTAL | | 3 | 390 | 0 | 300 | 0 | 690 |
| | | | | | | | |
| **TASK SERIES 900 -IMPLEMENTATION PLAN** | | | | | | | |
| Task 910 | Implementation Plan, Triggers, and Capital Needs Plan | 1 | $ 130 | | | | $ 130 |
| Task 920 | Draft Plan | | | | | | $ - |
| Task 930 | Review Meeting | 1 | $ 130 | | $ 100 | | $ 230 |
| Task 940 | Final Plan | | | | | | $ - |
| TASK SERIES 900 -SUBTOTAL | | 2 | 260 | 0 | 100 | 0 | $ 360 |

**EXHIBIT B**

**TERMS AND CONDITIONS**

# HDR Engineering, Inc.
# Terms and Conditions for Professional Services

1. **STANDARD OF PERFORMANCE**
The standard of care for all professional engineering, consulting and related services performed or furnished by ENGINEER and its employees under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under the same or similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

2. **INSURANCE/INDEMNITY**
ENGINEER agrees to procure and maintain, at its expense, Workers' Compensation insurance as required by statute; Employer's Liability of $250,000; Automobile Liability insurance of $1,000,000 combined single limit for bodily injury and property damage covering all vehicles, including hired vehicles, owned and non-owned vehicles; Commercial General Liability insurance of $1,000,000 combined single limit for personal injury and property damage; and Professional Liability insurance of $1,000,000 per claim for protection against claims arising out of the performance of services under this Agreement caused by negligent acts, errors, or omissions for which ENGINEER is legally liable. OWNER shall be made an additional insured on Commercial General and Automobile Liability insurance policies and certificates of insurance will be furnished to the OWNER. ENGINEER agrees to indemnify OWNER for third party personal injury and property damage claims to the extent caused by ENGINEER's negligent acts, errors or omissions. However, neither Party to this Agreement shall be liable to the other Party for any special, incidental, indirect, or consequential damages (including but not limited to loss of profits or revenue; loss of use or opportunity; loss of good will; cost of substitute facilities, goods, or services; and/or cost of capital) arising out of, resulting from, or in any way related to the Project or the Agreement from any cause or causes, including but not limited to any such damages caused by the negligence, errors or omissions, strict liability or breach of contract.

3. **OPINIONS OF PROBABLE COST (COST ESTIMATES)**
Any opinions of probable project cost or probable construction cost provided by ENGINEER are made on the basis of information available to ENGINEER and on the basis of ENGINEER's experience and qualifications, and represents its judgment as an experienced and qualified professional engineer. However, since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s') methods of determining prices, or over competitive bidding or market conditions, ENGINEER does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost ENGINEER prepares.

4. **CONSTRUCTION PROCEDURES**
ENGINEER's observation or monitoring portions of the work performed under construction contracts shall not relieve the contractor from its responsibility for performing work in accordance with applicable contract documents. ENGINEER shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. ENGINEER shall not be responsible for the acts or omissions of the contractor or other parties on the project. ENGINEER shall be entitled to review all construction contract documents and to require that no provisions extend the duties or liabilities of ENGINEER beyond those set forth in this Agreement. OWNER agrees to include ENGINEER as an indemnified party in OWNER's construction contracts for the work, which shall protect ENGINEER to the same degree as OWNER. Further, OWNER agrees that ENGINEER shall be listed as an additional insured under the construction contractor's liability insurance policies.

5. **CONTROLLING LAW**
This Agreement is to be governed by the law of the state where ENGINEER's services are performed.

6. **SERVICES AND INFORMATION**
OWNER will provide all criteria and information pertaining to OWNER's requirements for the project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations. OWNER will also provide copies of any OWNER-furnished Standard Details, Standard Specifications, or Standard Bidding Documents which are to be incorporated into the project.

OWNER will furnish the services of soils/geotechnical engineers or other consultants that include reports and appropriate professional recommendations when such services are deemed necessary by ENGINEER. The OWNER agrees to bear full responsibility for the technical accuracy and content of OWNER-furnished documents and services.

In performing professional engineering and related services hereunder, it is understood by OWNER that ENGINEER is not engaged in rendering any type of legal, insurance or accounting services, opinions or advice. Further, it is the OWNER's sole responsibility to obtain the advice of an attorney, insurance counselor or accountant to protect the OWNER's legal and financial interests. To that end, the OWNER agrees that OWNER or the OWNER's representative will examine all studies, reports, sketches, drawings, specifications, proposals and other documents, opinions or advice prepared or provided by ENGINEER, and will obtain the advice of an attorney, insurance counselor or other consultant as the OWNER deems necessary to protect the OWNER's interests before OWNER takes action or forebears to take action based upon or relying upon the services provided by ENGINEER.

7. **SUCCESSORS, ASSIGNS AND BENEFICIARIES**
OWNER and ENGINEER, respectively, bind themselves, their partners, successors, assigns, and legal representatives to the covenants of this Agreement. Neither OWNER nor ENGINEER will assign, sublet, or transfer any interest in this Agreement or claims arising therefrom without the written consent of the other. No third party beneficiaries are intended under this Agreement.

8. **RE-USE OF DOCUMENTS**
All documents, including all reports, drawings, specifications, computer software or other items prepared or furnished by ENGINEER pursuant to this Agreement, are instruments of service with respect to the project. ENGINEER retains ownership of all such documents. OWNER may retain copies of the documents for its information and reference in connection with the project; however, none of the documents are intended or represented to be suitable for reuse by OWNER or others on extensions of the project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, and OWNER will defend, indemnify and hold harmless ENGINEER from all claims, damages, losses and expenses, including attorney's fees, arising or resulting therefrom. Any such verification or adaptation will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

9. **TERMINATION OF AGREEMENT**
OWNER or ENGINEER may terminate the Agreement, in whole or in part, by giving seven (7) days written notice to the other party. Where the method of payment is "lump sum," or cost reimbursement, the final invoice will include all services and expenses associated with the project up to the effective date of termination. An equitable adjustment shall also be made to provide for termination settlement costs ENGINEER incurs as a result of commitments that had become firm before termination, and for a reasonable profit for services performed.

10. **SEVERABILITY**
If any provision of this agreement is held invalid or unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term or condition shall not be construed by the other party as a waiver of any subsequent breach of the same provision, term or condition.

11. **INVOICES**
ENGINEER will submit monthly invoices for services rendered and OWNER will make payments to ENGINEER within thirty (30) days of OWNER's receipt of ENGINEER's invoice.

ENGINEER will retain receipts for reimbursable expenses in general accordance with Internal Revenue Service rules pertaining to the support of

expenditures for income tax purposes. Receipts will be available for inspection by OWNER's auditors upon request.

If OWNER disputes any items in ENGINEER's invoice for any reason, including the lack of supporting documentation, OWNER may temporarily delete the disputed item and pay the remaining amount of the invoice. OWNER will promptly notify ENGINEER of the dispute and request clarification and/or correction. After any dispute has been settled, ENGINEER will include the disputed item on a subsequent, regularly scheduled invoice, or on a special invoice for the disputed item only.

OWNER recognizes that late payment of invoices results in extra expenses for ENGINEER. ENGINEER retains the right to assess OWNER interest at the rate of one percent (1%) per month, but not to exceed the maximum rate allowed by law, on invoices which are not paid within thirty (30) days from the date OWNER receives ENGINEER's invoice. In the event undisputed portions of ENGINEER's invoices are not paid when due, ENGINEER also reserves the right, after seven (7) days prior written notice, to suspend the performance of its services under this Agreement until all past due amounts have been paid in full.

**12. CHANGES**

The parties agree that no change or modification to this Agreement, or any attachments hereto, shall have any force or effect unless the change is reduced to writing, dated, and made part of this Agreement. The execution of the change shall be authorized and signed in the same manner as this Agreement. Adjustments in the period of services and in compensation shall be in accordance with applicable paragraphs and sections of this Agreement. Any proposed fees by ENGINEER are estimates to perform the services required to complete the project as ENGINEER understands it to be defined. For those projects involving conceptual or process development services, activities often are not fully definable in the initial planning. In any event, as the project progresses, the facts developed may dictate a change in the services to be performed, which may alter the scope. ENGINEER will inform OWNER of such situations so that changes in scope and adjustments to the time of performance and compensation can be made as required. If such change, additional services, or suspension of services results in an increase or decrease in the cost of or time required for performance of the services, an equitable adjustment shall be made, and the Agreement modified accordingly.

**13. CONTROLLING AGREEMENT**

These Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice-to-proceed, or like document.

**14. EQUAL EMPLOYMENT AND NONDISCRIMINATION**

In connection with the services under this Agreement, ENGINEER agrees to comply with the applicable provisions of federal and state Equal Employment Opportunity for individuals based on color, religion, sex, or national origin, or disabled veteran, recently separated veteran, other protected veteran and armed forces service medal veteran status, disabilities under provisions of executive order 11246, and other employment, statutes and regulations, as stated in Title 41 Part 60 of the Code of Federal Regulations § 60-1.4 (a-f), § 60-300.5 (a-e), § 60-741 (a-e).

**15. HAZARDOUS MATERIALS**

OWNER represents to ENGINEER that, to the best of its knowledge, no hazardous materials are present at the project site. However, in the event hazardous materials are known to be present, OWNER represents that to the best of its knowledge it has disclosed to ENGINEER the existence of all such hazardous materials, including but not limited to asbestos, PCB's, petroleum, hazardous waste, or radioactive material located at or near the project site, including type, quantity and location of such hazardous materials. It is acknowledged by both parties that ENGINEER's scope of services do not include services related in any way to hazardous materials. In the event ENGINEER or any other party encounters undisclosed hazardous materials, ENGINEER shall have the obligation to notify OWNER and, to the extent required by law or regulation, the appropriate governmental officials, and ENGINEER may, at its option and without liability for delay, consequential or any other damages to OWNER, suspend performance of services on that portion of the project affected by hazardous materials until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the hazardous materials; and (ii) warrants that the project site is in full compliance with all applicable laws and regulations. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous materials, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the project site in connection with ENGINEER's services under this Agreement. If ENGINEER's services hereunder cannot be performed because of the existence of hazardous materials, ENGINEER shall be entitled to terminate this Agreement for cause on 30 days written notice. To the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER, its officers, directors, partners, employees, and subconsultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from hazardous materials, provided that (i) any such cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's sole negligence or willful misconduct.

**16. EXECUTION**

This Agreement, including the exhibits and schedules made part hereof, constitute the entire Agreement between ENGINEER and OWNER, supersedes and controls over all prior written or oral understandings. This Agreement may be amended, supplemented or modified only by a written instrument duly executed by the parties.

**17. ALLOCATION OF RISK**

**OWNER AND ENGINEER HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING ENGINEER'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE RISKS, SO, TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF ENGINEER (AND ITS RELATED CORPORATIONS, SUBCONSULTANTS AND EMPLOYEES) TO OWNER AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE LESSER OF $1,000,000 OR ITS FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF ENGINEER'S SERVICES OR THIS AGREEMENT REGARDLESS OF CAUSE(S) OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER ENGINEER'S COMMERCIAL GENERAL LIABILITY INSURANCE POLICY.**

**18. LITIGATION SUPPORT**

In the event ENGINEER is required to respond to a subpoena, government inquiry or other legal process related to the services in connection with a legal or dispute resolution proceeding to which ENGINEER is not a party, OWNER shall reimburse ENGINEER for reasonable costs in responding and compensate ENGINEER at its then standard rates for reasonable time incurred in gathering information and documents and attending depositions, hearings, and trial.

**19. NO THIRD PARTY BENEFICIARIES**

No third party beneficiaries are intended under this Agreement.

**20. UTILITY LOCATION**

If underground sampling/testing is to be performed, a local utility locating service shall be contacted to make arrangements for all utilities to determine the location of underground utilities. In addition, OWNER shall notify ENGINEER of the presence and location of any underground utilities located on the OWNER's property which are not the responsibility of private/public utilities. ENGINEER shall take reasonable precautions to avoid damaging underground utilities that are properly marked. The OWNER agrees to waive any claim against ENGINEER and will indemnify and hold ENGINEER harmless from any claim of liability, injury or loss caused by or allegedly caused by ENGINEER's damaging of underground utilities that are not properly marked or are not called to ENGINEER's attention prior to beginning the underground sampling/testing.