

PALMER FOUNTAIN RECONSTRUCTION PLANS AND SPECIFICATIONS

Dated: April 28, 2023

Amended: May 11, 2023

Landscape Architect
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NOTICE TO BIDDERS

City of Gardiner is currently seeking proposals to complete site and water fountain improvements for the restoration of the Palmer Fountain in the Gardiner Common Park. The address is the vicinity of 2 Dresden Ave. The fountain is an approximately a 22' diameter historic fountain with an existing 5' wide walkway and 4 benches. The contract would include all new plumbing, pump and filter system for the fountain and associated site work. Removal of the existing concrete basin and walkways will need to be carefully done so as to not damage the granite basin perimeter wall or the bronze sculpture. All work to be coordinated with the City's Public Works Department. The new site work will include, but not limited to, a concrete fountain basin, a new below grade fault, pump and filter system, walkways, granite benches, installation of a new approximately 130' long 4" drain line to tie into the City storm drain, fountain lighting and all other works specified in the contract documents.

Contractor shall coordinate all construction activity and timing with the Director of Public Works:

John Cameron Director of Public Works Gardiner, Maine 207-582-4408

Insurance Certificates:

The contractor shall maintain and forward proof of the following:

Workers' compensation, public liability insurance, unemployment compensation and casualty loss, other insurance, which may be reasonably required by the City of Gardiner, State or Federal Law, shall be provided.

Bidding Documents and Award Schedule:

Amendment: 5/11/2023

Deadline for proposals extended until 5/26/2023 at 12:00pm. Proposals will be opened at 12:05 and read aloud at 6 Church Street Gardiner Maine. Winning bidder will be notified by 6/2/2023. The City reserves the right to reject any and all bids.

Notification / Publication Date: 4/28/23 Pre-Bid Site Meeting: 5/5/23 9:30am at Site

Closing Date / Time: 5/12/23 12:00pm - 5/26/23 at 12:00pm

Bid Opening Information: 5/12/23, 12:15pm 5/26/23, 12:05pm, Council Chambers, City Hall

Committee Bid Review: Week of 5/29/23 Winning Bidder Notification: 6/2/23

QUESTIONS RE. THE PLANS AND BID DOCUMENTS

Any and all "Request for Information" must be submitted in a written email to:

Tom Farmer, Landscape Architect tsffarmer@gmail.com including: Andrew Carlton, City Manager ACarlton@gardinermaine.com

The subject line shall read "RFI PALMER FOUNTAIN RESTORATION" and must be received no later than 2 business days (24 hours) prior to the bid submission deadline, in order for all questions to be copied to all bidding contractors.

This is the only allowable mechanism for answering project specific questions. The city will not be bound to any answers to project specific questions received during the Bidding phase through other processes.

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CONTRACT AGREEMENT, OFFER & AWARD

with its principal administrative offices located at 6 Church Street, Gardiner, Maine and a corporation or other legal entity organized under the laws of the State of Maine			
named:			
with its principal place of business located at			
The City and the Contractor, in consideration of the mutual promises set forth in this			

AGREEMENT made on the date last signed below, by and between the City of Gardiner

A. The Work.

Agreement (the "Contract"), hereby agree as follows:

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control e.g., inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

Due to the maximum project budget, the City shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before October 27, 2023, unless otherwise agreed to by the City. Further, the City may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002 and related Special Provisions.

C. Price.

The proposed bid will serve as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond.

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D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, with revision as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

- 1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents and the Contract are still complete and accurate as of the date of this Agreement.
- 2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
- 3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, Standard Details, as updated through advertisement, Supplemental Specifications, Special Provisions, do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the total price.

As Offeror also agrees:

First: To do and be compensated for any extra work, not covered or foreseen by the Construction Document, which may arise or be ordered by the Owner, and to accept as full compensation the amount determined and agreed to by the Contractor and Owner prior to commencement of extra work.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

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CONTRACTOR

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

Date:
By:
By: (Signature of Legally Authorized Representative of the Contractor)
Proposed Bid Amount:
Award.
Your offer is hereby accepted:
Contract Amount:
This award consummates the Contract, and the documents referenced herein
Date:

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PALMER FOUNTAIN RESTORATION SPECIFICATIONS

SECTION 01000 GENERAL CONDITIONS

These specifications cover labor and materials for the PALMER FOUNTAIN RESTORATION.

- 1. Shown on the drawings and described herein.
- 2. All work shall be executed in a workman like manner in accordance with the Maine DOT Manual of Specifications. Unless mandated otherwise by local authorities and applicable codes.
- 3. The Contractor shall secure and pay for all permits, licenses, and fees required to execute the work.
- 4. The Owner will pay for all electrical use costs during construction.
- 5. The Contractor shall submit to the Owner for their approval a list of all subcontractors prior to signing the contract with the subcontractors.
- 6. The total contracted price shall be paid with progress payments as requested by the contractor to coincide with work completed.
- 7. The General Contractor and his subcontractors shall maintain throughout the life of his contracts a minimum coverage of the following:
 - a. Workman's Compensation and Employer's Liability per statutory limits if required. \$1,000,000 each occurrence
 - b. Comprehensive General Liability Bodily Injury Limits: \$1,000,000 Property Damage Limits: \$1,000,000
 - c. Comprehensive Auto Liability Bodily Injury Limits: \$1,000,000. Property Damage Limits: \$1,000,000

The Contractor and subcontractors shall provide a Certificate of Insurance to the Owner before starting the work.

- 8. The Owners will maintain their own liability and property damage insurance.
- 9. **Warranty**: the contractor shall agree to a warranty period of one year after final completion, except as otherwise specified by manufacturer's warranty. This shall include subcontract work. Final completion is the date that final construction punch-list items are completed and approved.

- 10. Substitutions for products listed herein will be permitted only with the approval of the Owner.
- 11. The Contractor shall maintain safety fencing and pedestrian signage on-site during the course of construction and shall keep the site locked and secured and free from debris.
- 12. Protect and restore all open areas used for access, storage or staging.
- 13. All existing conditions (benchmarks) to be used as reference for new work are to be field verified by the Contractor. Notify the Owner of any discrepancies prior to proceeding with the work.

END OF SECTION

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SECTION 02000 SITE WORK

PART 1 - GENERAL

1.01 DESCRIPTION

A. These general site work requirements apply to all site work operations.

1.02 QUALITY ASSURANCE

- A. Comply with all applicable local, state, and federal requirements regarding standards, materials, methods of work, and disposal of excess and waste materials.
- B. Obtain and pay for all required inspections, permits, and fees. Provide notices required by governmental authorities.

1.03 PROJECT CONDITIONS

- A. Contact DIGSAFE and locate and identify existing underground services and utilities within contract limit work areas. Provide adequate means of protection of utilities and services designated to remain. Repair utilities damaged during site work operations at Contractor's expense.
- B. Obtain approval from Owner and utility companies before disconnecting utilities and services. Arrange for disconnection, disconnect and seal or cap all utilities and services designated to be removed before start of site work operations. Perform all work in accordance with the requirements of the applicable utility company or agency involved.
- C. When uncharted or incorrectly charted underground piping or other utilities and services are encountered during site work operation, notify the Owner and applicable utility company immediately to obtain procedure directions. Cooperate with the applicable utility company in maintaining active services in operation.
- D. Perform site work operations and the removal of debris and waste materials to assure minimum interference with streets, drives, walks, and other adjacent facilities.
- E. Obtain governing authorities' written permission when required to close or obstruct streets, drives, walks, and adjacent facilities. Provide alternate routes around closed or obstructed traffic ways when required by governing authorities.
- F. Control dust caused by the work. Comply with the current Best Management Practices by Maine Department of Environmental Protection.

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- G. Protect existing trees, fences, paving, other structures and other services or facilities on the site and adjacent to the site from damage caused by site work operations. Cost of repair and restoration of damaged items shall be at Contractor's expense.
- H. Protect and maintain street lights, vegetation, utility poles and services, except items designated for removal. Coordinate the temporary relocation of traffic signs with the applicable governmental agency. Provide for temporary relocation when required to maintain facilities and services in operation during construction work.
- I. Contractor shall meet with the Owner and owner's representative prior to construction to coordinate demolition procedure, access during construction, construction timetable and other aspects of the work that may interfere with normal activity.

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT

A. Materials and equipment: As selected by Contractor, except as indicated.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Examine the areas and conditions under which site work is performed. Do not proceed with the work until unsatisfactory conditions are corrected.
- B. Consult the records and drawings of adjacent work and of existing services and utilities which may affect site work operations.

END OF SECTION

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SECTION 02100 DEMOLITION & PREPARATION

PART 1 - GENERAL

1.01 DESCRIPTION

All demolition work will be performed prior to the construction of the new improvements. The demolition work is shown on <u>Sheet L-1</u>, <u>Existing Conditions</u> and <u>Demolition Plan</u>, and shall includes the removal of all unsuitable subsurface soils and utilities within the limit of work area.

- A. Perform demolition of existing paving and subgrade as shown and specified. The work includes and is not limited to:
 - 1. Demolish concrete interior of the fountain basin,
 - 2. Demolish walkway as specified on drawings,
 - 3. Remove pump vault and associated plumbing from vault to fountain,
 - 4. Remove all demolished material from the site.
 - 5. Protecting existing site features including:
 - a. The Lady and the Bird Sculpture. The Contractor shall use extreme caution to protect the Lady and the Birds Sculpture during its removal, storage and replacement. All work involving the removal and handling of the sculpture will be closely coordinated with and supervised by the Director of Public Works.
 - b. trees and vegetation (within work area). Specifically, the large 32" diameter Oak tree near the fountain.
 - c. adjacent roads and curbing
 - d. adjacent park perimeter fence
 - e. all overhead and underground utilities, not proposed to be removed.
- B. Related Work:
 - 1. Section 02000: Site Work
 - 2. Section 02200: Earthwork

1.02 QUALITY ASSURANCE

A. Comply with Section 02200 requirements.

1.04 PROJECT CONDITIONS

- A. Demolition shall take place in a manner to minimize construction impacts, i.e., noise, dust, and debris during working hours.
- B. Protection: Perform demolition work to prevent injury or damage to adjacent buildings, structures, utilities, other facilities and the general public.
 - 1. Provide necessary barricades, warning lights and enclosures for public and worker safety.
 - 2. Provide necessary shoring and bracing for protection of adjacent structures and facilities that will remain.
 - 3. Promptly repair damages to adjacent structures, utilities, and facilities caused by demolition operations. Cost of repair shall be at Contractors expense, where Contactor was responsible.
- C. Traffic: Do not close or obstruct streets, sidewalks, and passageways without proper authorization.
 - 1. Ensure there is a safe passage for the public around the demolition work area.
 - 2. Perform demolition work and removal of demolished materials to assure minimum interference with streets, driveways, sidewalks, walkways, and other facilities.
- D. Existing Conditions: The Owner assumes no responsibility for the actual condition of the items scheduled for demolition.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Materials and equipment: As selected by the Contractor except as indicated.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Examine the site. Verify extent of demolition work required.
- B. Contractor to submit and gain approval of the Gardiner Director of Public Works, of their proposed plan for the protection of and the removal, storage and replacement of the existing Lady and the Birds Sculpture.

C. Coordinate the removal and/or the protection of the utilities with the proper utility companies.

3.02 DEMOLITION

- A. Comply with local and Maine State DEP regulations for environmental protection and noise and pollution control. Avoid flooding and run-off into the excavated area.
- B. Perform demolition by methods of Contractor's choice with the Owner's approval, in accordance with governing regulations.
- C. Explosives: Use of explosives not permitted.

3.03 DISPOSAL OF DEMOLISHED MATERIALS

A. Stockpile, haul from site, and legally dispose of demolished materials on the same day the material is removed.

3.04 CLEARING AND GRUBBING

- A. Locate and suitably identify trees and improvements to remain.
- B. Clear areas within construction limits as required for site access and execution of the work. Clearing shall include the removal of all trees, shrubs, brush, stumps, sod, and debris within the area of work, except for trees noted to remain.
- C. Grub areas within construction limit to remove roots, stumps, and other undesirable material. Do not excavate or damage the existing roots of the 32" dia. Oak tree. Consult with the Owner and Owner's representative if roots are encountered.
- D. Use hand methods for grubbing inside the drip line of trees to remain.

3.05 TREE PROTECTION

- A. Protect existing trees scheduled to remain against injury or damage, including cutting, breaking, or skinning of roots, trunks or branches; smothering by stockpiled construction materials or excavated materials; or root compaction from vehicular traffic within the drip line of the tree.
 - 1. Protect designated trees with a temporary wood snow fence enclosure or as shown on the Plan Details Sheet. Provide a minimum 8'-0" radius from center of tree trunk. Increase enclosure size as directed by Owner's Representative for large trees.

- 2. No machinery shall be stored under the drip-line of existing 32" Oak tree and adjacent trees. Where it is necessary to work under the drip line of existing trees, the Contractor shall:
 - a. For the 32" Oak tree: wrap the trunks with burlap, secured by rope,
 - b. tie wooden planks (2" nominal thickness lumber) on the outside of the mat and
 - c. bridge the ground surface with timber mats to avoid overly compacting the root mass
- B. Erect temporary fencing before commencing site preparation work. Remove temporary fencing when acceptable to the Owner.
- C. Interfering branches of trees scheduled to remain may be removed according to acceptable pruning practices as directed by the Owner
- D. Repair trees scheduled to remain and damaged by construction operations in a manner acceptable to the Owner and as defined in Section 02480, Landscaping. Repair damaged trees promptly to prevent progressive deterioration caused by damage.
- E. Any tree that is scheduled to remain and become damaged beyond repair by construction operations to the extent that it is dying, shall be replaced with a new tree(s) of similar characteristics according to the following schedule:

4" tree 4" cal. tree 6" tree 2 trees @ 3" cal. 8" tree 3 trees @ 3" cal. OR 2 trees @ 4" cal.

Damaged Tree Replacement

10" or
$$>$$
 tree 6 trees $\textcircled{@}$ 3" cal. OR 5 trees $\textcircled{@}$ 4" cal.

Periodic inspection shall be made of all existing trees on the site by the Owner with the Contractor to ensure that the Contractor is in compliance with Section 02100, Site Preparation and Section 02480, Landscaping. Any obvious damage will be noted and recorded.

Final determination of responsibility for tree replacement, in the case of the death of a tree, shall be made by the Owner. Replacement trees, if required, shall be installed at the Contractor's expense and at locations within site to be designated by the Owner. Species of replacement trees shall be similar to existing trees and shall be approved by the Owner.

- F. Water trees and other vegetation which are to remain within the limits of the work as required to maintain their health during the course of construction operations.
- G. Clearing, grubbing, and other site preparation activities within the drip-line of existing trees shall be done by hand.
 - 1. Temporarily cover all exposed roots with wet burlap to prevent roots from drying out. Provide earth cover as soon as possible.
 - 2. Hand compact any additional soil placed within the drip line of existing trees. Do not saturate soil layers around trees.
- H. Do not nail into any trees on the site or pile construction materials against them.

3.06 SITE IMPROVEMENTS

- A. Remove existing site improvements within contract limits as indicated.
 - 1. Remove, stockpile, and reuse acceptable existing fill.
 - 2. All concrete and stone foundations, reinforcing steel, and other remnants of former structures not indicated to remain shall be removed, at a minimum, to a depth that will allow for the full construction of the improvements of this contract.

B. Existing utilities:

- 1. All information relating to existing utility lines and services is furnished only for information and is not guaranteed. Excavate test pits and/or work with utility companies as required to determine exact locations of all existing utilities
- 2. Perform work and provide necessary materials to disconnect and/or relocate existing utilities as indicated. Record existing utility termination points before disconnecting. Record according to utilities recommendations.
- 3. Coordinate and perform the work in accordance with the applicable utility company requirements.
- C. Remove existing paving, including all base material, as required to accommodate new construction. Cut existing paving in neat, straight lines with a paving saw or compressed air cutter to provide a uniform, even transition from new paving and other surfaces to adjacent street and sidewalks. Cut back existing paving a sufficient distance, but not greater than 2 feet, to permit forming and installation of new work.

D. Leave below-grade voids open and clean. Provide fill material and grade as specified under Earthwork, Section 02200.

3.07 DISPOSAL OF WASTE MATERIALS

A. Stockpile, haul from site, and legally dispose of waste materials and debris daily. Accumulation is not permitted.

3.08 CLEANING

A. Upon completion of site preparation work, clean areas within contract limits, remove tools, and equipment. Provide site clean, and free of materials and debris and suitable for work operations.

3.09 SALVAGED MATERIALS

A. Materials, items, and equipment not scheduled for reinstallation or salvaged for Owner's use are property of the Owner. Remove demolished materials from the site as work progresses. Contractor shall be responsible for removal, transportation and storage of salvaged material in an area designated by the Owner.

END OF SECTION

SECTION 02200 EARTHWORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work: Earthwork includes, but is not limited to:
 - 1. Site excavating and filling
 - 2. Preparing subsoil and grading to indicated elevations, profiles and contours
 - 3. Site grading and compacting
 - 4. Preparing subgrade for fountain basin and sidewalk pavers
 - 5. Providing borrow material for site fill as required
 - 6. Removal of unsuitable materials from the site and disposal

1.02 RELATED WORK

- 1. Section 02100: Demolition & Preparation
- 2. Section 02480: Landscaping
- 3. Section 03300: Cast in Place Concrete
- 4. Section 02517: Granite Pavers

1.03 QUALITY ASSURANCE

- A. Industry Standards: American Society for Testing and Materials (ASTM).
- B. Comply with Section 02000 requirements.
- C. Testing and inspection: To be performed by the Owner in accordance with the provisions specified in the General and Supplementary Conditions. The Owner shall provide testing and inspection during operations.
- D. The Contractor shall establish the lines and grades in conformity with the Drawings and maintain same to properly perform this work.
- E. Comply with the following:
 - a. MDOT Subsection 703.06 Aggregate for Base and Subbase.

1.04 PROJECT CONDITIONS

A. Site Information

- 1. Contractors shall make their own interpretations of site conditions and shall be responsible for interpretations and conclusions draws from the plans.
- 2. The Contractor may make any reasonable exploratory actions, at no cost to the Owner.
- B. Existing Utilities: It is the Contractor's responsibility to contact all utility companies or authorities which may be reasonably expected to have utilities on, above, under, or near the site, and to locate exactly any and all utilities. Existing utilities to remain shall be protected from damage or interruption of service.

C. Protection:

- 1. Comply with Section 02000, Demolition & Preparation.
- 2. Barricade open excavations occurring as part of this work, as approved by the Owner or Owner's representative.
- 3. Protect structures, utilities, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and any other hazards created by earthwork operations.
- 4. Protect existing trees, plants and other features designated to remain or that are adjacent to the contract limits.
- 5. Notify Owner of unexpected subsurface conditions and discontinue work in affected area until notification to resume work.
- 6. Protect excavations and soil adjacent to and beneath foundations from frost.
- 7. Grade the top perimeter of all excavations to prevent surface water from running into excavations.
- 8. Protect excavations by shoring, bracing, sheet piling, underpinning or other methods required to prevent cave-in or loose soil from falling into excavation.
- 9. Protection Maintenance of Existing Utilities:
 - a. Keep existing sewers, storm drains, gas lines, water mains, and other utilities in full operation.

- b. If any existing utilities are disturbed provide for maintenance of such flows until work is completed.
- c. Notify appropriate utility company immediately of any damage to utility installations.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Backfill material and ordinary fill shall be as follows:
 - 1. Clean, free draining granular soil which can be readily spread and compacted, and consists of mineral soil, substantially free of organic materials, loam, wood, rubbish, leather scraps, or other perishable substances. Rocks over six (6) inches in diameter shall be removed from excavated material before using it for fill. Backfill material is subject to approval by the Owner's authorized representative.
 - 2. Backfill over pipes shall be free of stones over one (1) inch diameter for the first one (1) foot over the top of the pipes.
- B. Aggregate Base: Crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3-inch sieve shall meet the gradation requirements of MDOT Specifications.

Percentage by Weight

Section 703.06 Type A aggregate with the following limits:

	Passing Square	Mesh Sieves
Sieve		
Designation	Screened	Crushed
_		
1/2 inch	45-75	45-70
1/4 inch	30-55	30-55
No. 40	0-20	0-20
No. 200	0-5	0-5

Type A aggregate for base shall not contain particles of rock which will not pass the 3-inch square mesh sieve.

- C. Aggregate Subbase: shall meet MeDOT Specifications, 703.06, Type D.
- D. Paver Base Material: shall consist of sandy gravel to gravelly sand free of organic material, debris, loam, trash, snow, ice, frozen soil and other objectionable material, and should be well graded within the following limits:

Sieve Size	Percent Fines by Weight	
3 in.	100	
No. 4	30 to 90	
No. 40	10 to 50	
No. 200	0 to 8.	

PART 3 - EXECUTION

3.01 COMMON EXCAVATION

- A. Common excavation consists of removal and disposal of materials encountered when establishing the required sub-grade elevations and other job requirements.
- B. Stability of Excavations: Excavate to comply with local codes and ordinances having jurisdiction and with good construction engineering practice. Maintain sides of excavations in a safe condition until completion of backfilling.
- C. Verification of Work:
 - 1. Examine the areas and conditions under which excavating and filling is to be performed and notify Owner or Owner's representative in writing of conditions detrimental to proper and timely completion of work.
 - 2. Correct unsatisfactory conditions in a manner acceptable to Owner or Owner's representative prior to proceeding with work.
- D. Dewatering: Prevent surface water and/or ground water from flowing into excavations and flooding project site and surrounding areas.
 - 1. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pump and other dewatering systems components necessary to convey water away from excavations. Perform dewatering by methods which maintain the undisturbed condition of the soil and permit construction in-the-dry.
- E. Materials Storage: Dispose of existing unacceptable soil material and waste materials as specified hereinafter.
- F. Removal of Unsatisfactory Soil Materials: Excavate unsatisfactory soil materials such as soft compressible soil, organic materials, and/or void producing objects encountered that extend below specified elevations to additional depth as required with the Owners prior approval.
- G. Cold Weather Protection: Protect excavation bottoms against freezing when atmospheric temperature is less than 35 degrees Fahrenheit.

3.02 UNAUTHORIZED EXCAVATION

A. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of the Owner or Owner's representative. Backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by the Owner or Owner's Representative.

3.03 BACKFILL AND FILL CONSTRUCTION

- A. All materials shall be placed and compacted to conform to the lines, elevations, and cross sections indicated on the Drawings. Do not start fills until the site has been inspected and approved by the Owner and/or Owner's Representative.
- B. Fill shall not be placed on a surface of frozen material, nor shall snow, ice, frozen earth, or debris be incorporated into the fill. All material shall be approved by the Owner and/or Owner's Representative before being placed. If sufficient suitable fill material is not available from excavations under this contract, additional fill, suitable for use, shall be brought to the site from other sources.
- C. Fill shall be placed in maximum eight (8) inch layers and compacted to 95 percent of maximum dry density. Each layer shall be free from ruts and shall meet compaction requirements before the next layer is placed. Maintain layers with crown or other practical means of drainage.
- D. Compacted structural fill around the base of retaining walls and buildings shall be placed in layers not exceeding six inches (6") in loose measure and compacted by hand-guided compaction equipment at approximately optimum moisture content to a dry density of a least 95 percent (95%) of the maximum dry density, as determined in accordance with ASTM Test Designation D1557. Existing fill excavated at the site meeting the above gradation requirements may be stockpiled and reused as structural fill.
- E. Backfill excavations as promptly as work permits, but not until completion of the following:
 - 1. Acceptance of construction below finish grade by the Owner's representative.
 - 2. Inspection, testing, approval and recording locations of underground utilities.
 - 3. Removal of trash and debris.

4. Removal of bracing and backfilling of voids with satisfactory materials. Prevent settlement of structures and utilities.

F. Subgrade Construction

- 1. Upon completion of the excavation, the subgrade shall be compacted as specified. Any soft or unsuitable areas encountered during compaction shall be excavated and replaced with compacted structural fill.
- 2. Provide subgrade surface free from irregular surface changes, exposed boulders or stones in a manner approved by the Owner's representative.
- 3. Rough grading of the subgrade shall have a tolerance of plus or minus one inch as measured from a ten (10) foot rule laid parallel to grade.
- 4. Paved areas: Shape surface of subgrade areas to line, grade, and cross-section indicated. Provide compacted subgrade suitable to receive paving base and setting bed materials. Subgrade tolerance plus or minus 3/8 inch as measured from a ten (10) foot rule laid parallel to grade.

3.04 COMPACTION

- A. General: Control soil compaction during construction providing minimum percentages of density specified for each area classification. Compaction testing will be performed in accordance with ASTM 1556.
 - 1. Compact the top 12" of subgrade and each layer of fill or backfill material at foundations and paved areas to 100% of maximum dry density at optimum moisture content in accordance with ASTM D698 Standard Proctor Method. Extend compaction at least 1'-0" beyond foundations and paved areas.
 - 2. Compact top 6" of subgrade and each layer of fill material at lawns and unpaved areas to 95% of maximum dry density at optimum moisture content in accordance with ASTM D698 Standard Proctor Method.
 - 3. Water settling, puddling, and jetting of fill and backfill materials as compaction methods are not acceptable.
 - 4. Maintain moisture content of materials during compaction operations within required moisture range to obtain indicated compaction density.
 - 5. Provide adequate equipment to achieve consistent and uniform compaction of fill and backfill materials.

3.05 GRADING

A. General Grading Requirements: For walkways, lawn areas, and general site grading, the finish contours and spot elevations shown on the drawings

- indicate the finished surface to be obtained by construction. Due allowance shall be made.
- B. Grade paved surfaces to assure positive drainage away from fountain base and to prevent ponding and pockets of surface drainage.

3.06 MAINTENANCE

A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion, and keep free of trash and debris. Repair and re-establish grades in settled, eroded, or rutted areas to specified tolerances. Where completed compacted areas are disturbed by subsequent activities or adverse weather, remove to sound material, re-shape, and compact to required density prior to further construction.

3.07 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Removal from Owner's Property: Remove waste material, including excess and unacceptable excavated material, trash, and debris from the Owner's property and legally dispose of it unless otherwise directed by the Owner's Representative.

END OF SECTION

SECTION 02495 ACCESSORIES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work under this section includes all materials, tools, fees, permits, and labor required to complete the work, which includes:
 - 1. Providing electrical service, moisture-proof GFI outlet in vault
 - 2. Installing pump vault, pump, filter, plumbing and related accessories
 - 3. Provide and install LED light on base of fountain
 - 4. Water hose lawn spigot
 - 5. Fountain spray nozzles
 - 6. Grout for circular basin granite stones
- B. Related work:
 - 1. Section 02100: Site Demolition & Preparation.
 - 2. Section 02200: Earthwork.
 - 3. Section 02480: Landscape.
 - 4. Section 02517: Granite Stonework.
 - 5. Section 03300: Concrete.

1.02 QUALITY ASSURANCE

A. Comply with all applicable manufacturer instructions, local, state, and federal requirements regarding materials and methods of work.

1.03 SUBMITTALS

- A. Manufacturer's information: Submit catalogue cuts and/or installation information for any changes to the following specified items:
 - 1. LED waterproof light
 - 2. Fountain Pump and Filter
 - 3. Lawn hydrant
 - 4. Fountain spray nozzles

PART 2 - PRODUCTS

2.01 FOUNTAIN LIGHTING

A. Lighting fixture to be VOLT® RGBW Salty Dog Integrated LED Brass Underwater Light (Bronze), Model #VUL-6803-BBZ with VOLT® RGBW Remote Control, Model # VAC-REMOTE-IR1, manufactured by VOLT Lighting, 15486 N Nebraska Ave, Lutz, FL 33549, Tel: (813) 978-3700, or approved equal.

2.02 FOUNTAIN PUMP, FILTER AND PLUMBING

- A. To be supplied and installed by Dave's Pool Sales & Service, Inc. Windham, ME, Tel: (207) 893-2500, per price estimate # 2031 (Total = \$3,353.74). Specifically, Dave's Pool to supply and install the following: Installation of Filter System with in-line Chlorinator, Main Drain 2 Pack WG1048AVPAK2 (Color: Dark Gray), 16" Hayward Pro-series Sand Filter with Base, 25 lbs. Zeo-sand, Variable Speed Filter Pump VS 300 SP1580X15VSP, Frog Cycler with Mineral Reservoir, Frog Chlorine Bac Pac, Fittings and Other Small Misc. Plastics for install, High Pressure Hose (Foot), PVC Glue.
- B. Contractor to supply 1 ½" schedule 40 white PVC pipe from the fountain basin drain to the yault.

2.03 LAWN HYDRANT – HOSE SPIGOT

A. Simmons Frost Proof Yard Hydrant, Item #482A18, Manufacturer Model #804SB, Supplied by Granger, Portland, ME.

2.04 FOUNTAIN SPRAY NOZZELS

A. (2) Okuyonic Fountain Nozzle, High Hardness Chemical Resistance Fountain Spray Head, 1" connection, ASIN # B0953SGZHC, manufactured by Okuyonic, sold on Amazon.

2.05 GROUT CRACK FILLER FOR GRANITE BASIN STONES

A. Por-Roc UW (Under Water) Grout, or approved equal.

PART 3 - EXECUTION

3.01 LIGHTING

A. Install waterproof electrical conduit and light fixture as per manufacturer's instructions and per locations as indicated on plans. The source outlet for the light should be located in the vault, if possible.

B. Provide and install electrical service and necessary accessories to complete lighting. All products and installations shall be in compliance with applicable codes. Locations of lines not indicated on plans shall be put on a shop drawing and submitted to the Owner for acceptance.

3.02 FOUNTAIN PUMP, FILTER AND RELATED APPERATUS

A. Install fountain pump, filter and related apparatus per manufactures recommendations and per Dave's Pool Sales & Service, Inc. instructions and recommendations.

3.03 LAWN HYDRANT – HOSE SPIGOT

A. Install lawn hydrant per manufacturer's instructions and recommendations.

3.04 FOUNTAIN SPRAY NOZZELS

A. Install lawn hydrant per manufacturer's instructions and recommendations.

3.05 GROUT FOR GRANITE BASIN STONES

A. Install grout per manufacturer's instructions and recommendations.

END OF SECTION

SECTION 02517 GRANITE STONEWORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Supplying and installing granite benches
- B. Supplying and installing engraved granite sidewalk slabs
- C. Supplying and placing aggregate subbase and bed and backfill.
- D. Related work:
 - 1. Section 02200: Earthwork.

1.02 QUALITY ASSURANCE

- A. Comply with Section 02000 requirements.
- B. Materials and methods of construction shall comply with the standards of the American Society for Testing Materials, (ASTM).
- C. Installation: Performed only by skilled workers with experience installing specified product in specified pattern on a complete project of comparable scale and quality.
- D. Do not change source of granite during the course of this work.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Protect all granite units from damage, chipping, and soiling during delivery and storage. Store off the ground on pallets or wood platforms.
- B. Store loose granular materials in a well drained area on a solid surface to prevent mixing with foreign materials. Cover loose granular materials in inclement weather to prevent saturation.

1.04 SUBMITTALS

A. Manufacturer's information: Submit mock-up examples of the (4) granite slabs with engraved words.

1.05 PROJECT CONDITIONS

A. Review installation procedures and coordinate paving work with other work affected by the granite paving work.

B. Cold weather:

- 1. Do not use frozen materials or materials mixed or coated with ice or frost.
- 2. Do not build on frozen work or wet, saturated or muddy subgrade. Remove and replace paving damaged by frost or freezing.
- C. Protect partially completed work against weather damage when work is not in progress.
- D. Provide temporary barricades and warning lights as required for protection of project work and public safety.
- E. Protect adjacent work from damage, soiling or staining during paving operations.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Contractor shall supply four (4) Granite benches and bench pedestals: Manufactured by Swenson's Granite or approved equal. Color: Woodbury Gray, split-face sides and pedestals, sawn top and bottom finish in the locations and dimensions as shown on the plans and details.
- B. Provide and install four (4) granite slabs with engraved words in the sizes and specifications as shown on the Drawings. 3" thick x 12" wide x 7' long. Times new roman font, 6" tall capital letters, centered in slab. Consult with Landscape Architect on any deviation from the above specification. The 4 slabs to read:
 - 1. Service
 - 2. Justice
 - 3. Dedication
 - 4. Honor
- C. Provide only sound granite free of defects that would interfere with proper placing of granite or impair strength or permanence of construction. Minor cracks and minor chipping incidental to methods of manufacture, handling in shipment, and delivery will be acceptable subject to Owner's review and acceptance. Excessive cracks and chipping, as determined by the Owner, will be rejected as not complying with specification requirements.
- D. Base material: See Section 02200: Earthwork.
- E. Bedding and leveling material: The sand laying course shall be a well graded clean washed sharp sand with 100% passing a 3/8" sieve size and a maximum

of 3% passing a No. 200 sieve size. ASTM C33 or AASHTO M43, #10 graded clean coarse concrete sand. Do not use mason sand.

F. Joint fill: Clean concrete sand as specified above.

PART 3 - EXECUTION

3.01 INSPECTION

A. Examine installation conditions. Do not start granite unit paving work until unsatisfactory conditions are corrected.

3.02 PREPARATION

- A. Do not use granite with chips, cracks, voids, foreign material, or other visible defects other than manufactured texturing that would be visible to exposed surface.
- B. Cut granite to fit irregular spaces as necessary Create clean, straight continuous edges. Ease all sharp edges which will be exposed.

3.03 GRANITE BENCHES

- A. Contractor shall place and install benches in locations as shown on Drawings, per manufactures fastening and installation instructions.
- B. Bench shall be delivered to job site as units. Provide necessary protection to avoid damage during delivery and unloading at the site. Unit damaged or broken by the Contractor during or after installation but prior to final acceptance by the Owner shall be replaced at the expense of the Contractor.

3.04 GRANITE ENGRAVED SLABS

- A. Set slabs on a compacted level surface in the pattern indicated on the drawings. Initial layout shall be under supervision of Owner.
- B. Provide cut units with straight even cut surfaces, free from cracks or chips.
- C. String lines should be used to hold all pattern lines true.
- D. Place engraved slabs (and adjacent pavers) for positive drainage at ¼" per foot (2%) slope away from fountain base.
- E. Compact the subbase surface true to grade and shall not vary. Any deviations shall be corrected by removing the necessary slab, adjusting the setting bed, and repeating steps above.

3.06 PROTECTION

A. Restrict all traffic from staircase area during setting of units and until completion of installation and protect until final acceptance.

3.07 CLEANING

- A. Remove and replace granite that broken, chipped, stained, or otherwise damaged. Provide and install new matching unit pavers as specified, and eliminate evidence of replacement.
- B. Perform cleaning during installation of work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from paving operations.

END OF SECTION

SECTION 03300 CONCRETE PRODUCTS AND WORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide concrete products and work as shown on the Drawings and specified herein. The work includes:
 - 1. Concrete fountain basin. Provide formwork, shoring, bracing, and anchorage.
 - 2. Providing concrete reinforcement and accessories.
 - 3. Providing cast-in-place concrete for fountain basin.
 - 4. Curing of concrete.
 - 5. Concrete Vault (for pump and filter)
 - 6. Concrete sidewalk pavers
- B. Related work:
 - 1. Section 02100: Site Preparation
 - 2. Section 02200: Earthwork.

1.02 REFERENCES

A. State of Maine Department of Transportation Standard Specifications Highways and Bridges, current volume, hereafter designated as MDOT Specifications.

1.03 QUALITY ASSURANCE

- A. Perform work in accordance with the following standards:
 - 1. American Society for Testing and Materials, (ASTM).
 - 2. American Concrete Institute (ACI).
 - 3. MeDOT Specifications

1.06 ENVIRONMENTAL REQUIREMENTS

A. Weather and seasonal limitations as required by Section 401.07 of the MDOT Specifications shall apply to this Section.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Concrete shall meet the requirements of MDOT Section 502 Structural Concrete, Class S (3,500 psi, 28 days).
- B. Reinforcing Steel: ASTM A615, 60 kpsi yield grade billet steel deformed #6 (3/4") bars; uncoated finish.
- C. Concrete vault by Genest Concrete, 544 Elm St, Biddeford, ME 04005, Tel: # (207) 284-4519 Item: CMP 4x6 Pull Box with top frame and manhole cover.
- D. Concrete pavers by Genest Concrete, 544 Elm St, Biddeford, ME 04005, Tel: # (207) 284-4519 Item "Katahdin" Stone, 3-piece system. Color: "Granite Blend".

PART 3 – EXECUTION

3.01 CONCRETE FOUNTAIN BASIN

- A. Notify Owner minimum 24 hours prior to commencement of concreting operations.
- B. Verify compacted base and subbase material is dry and ready to support concrete and imposed loads.
- C. Verify gradients and elevations are correct and that the formwork and reinforcing conforms to the lines and grades shown on the Drawings and to standard concrete industry practices.
- D. Coordinate work of other Sections in forming and setting openings, slots, recesses, chases, sleeves, bolts, anchors, wire, conduits, and other inserts.
- E. Place, support, and secure reinforcement against displacement.
- F. Prepare and place concrete in accordance with MDOT Specifications Section 502.
- G. Apply finish to smooth finish, or as approved by Owner.

3.02 CONCRETE VAULT

- A. Install vault to manufactures recommendations for type and depths of aggregate base and backfill in locations and elevations as shown on the plans and details.
- B. Coordinate with Dave's Pool Sales & Service, Inc. for exact location of vault entrance and exit of pump and drain piping and electrical penetrations. Install floor drain in vault tied into basin drain to catch basin in Church Street as shown on plans and details.

3.03 CONCRETE PAVERS

- A. Set pavers on a compacted level surface in the pattern indicated on the drawings. Initial layout shall be under supervision of Owner.
- C. Provide cut units with straight even cut surfaces, free from cracks or chips.
- D. String lines should be used to hold all pattern lines true.
- E. Place pavers for positive drainage at 1/4" per foot (2%) slope away from fountain base.
- F. Compact the subbase surface true to grade and shall not vary. Any deviations shall be corrected by removing the necessary steps, adjusting the setting bed, and repeating steps above.

END OF SECTION