

AMENDMENT NO. 3

TOWN OF PARADISE VALLEY SERVICES AGREEMENT STREET PRESERVATION

THIS AMENDMENT NO. 3 to the Town of Paradise Valley Services Agreement-Street Preservation, Contract No CON-18-0012-PBW is made this ____ day of _____, 2021 ("Effective Date"), by and between the Town of Paradise Valley, an Arizona municipal corporation, hereinafter referred to as "TOWN," and M.R. Tanner Development & Construction, Inc., an Arizona corporation, hereinafter referred to as "CONTRACTOR".

RECITALS

- A. Town and Contractor previously entered into the Town of Paradise Valley Services Agreement-Street Preservation, Contract No CON-18-0012-PBW ("Agreement") effective March 22, 2018 for a term of three years, with two optional one-year extensions.
- B. Town and Contractor previously wish to modify and amend the Agreement to extend the term for one additional year and to provide for a scope of work and price for the pavement work on Lincoln Drive, subject to and strictly in accordance with the terms of this Amendment No. 3.

AGREEMENT

In consideration of the mutual promises set forth herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Town and Contractor hereby agree as follows:

- 1. **Recitals.** The recitals set forth above are not merely recitals but form an integral part of this Amendment No. 3.
- 2. **Term.** Pursuant to paragraph 5.1 of the Agreement, the Term is extended one additional year, effective March 22, 2021 to March 20, 2022.
- 3. **Timeline.** Contractor shall begin work authorized in this Amendment No. 3 no later than 90 days after execution of the Amendment No. 3, and Contractor shall complete all work within 120 days of starting.
- 4. **Scope of Work.** The Scope of Work to be performed pursuant to this Amendment No. 3 is the paving of Lincoln Drive from 32nd Street to Mockingbird Lane, as more fully set forth Exhibit G-A3 (Proposal of Work to be Furnished for Job "Lincoln Budget"), attached hereto and made a part hereof. Except for Exhibit G, all other provisions of the Scope of Work, Paragraph 2 of the Agreement, remain unchanged, including but not limited to Pricing.
- 5. **Compensation.** Paragraph 4 "Price," in Amendment No. 2 is deleted in its entirety, and replaced by the following:

4. PRICE:

4.1 TOWN shall pay to CONTRACTOR an amount not to exceed Two Million Three Hundred Five Thousand Four Hundred Eighty-Six Dollars and Eighty Cents (\$2,305,486.80) for completion of the paving on Lincoln Drive as described herein in Exhibit G-A3, which sum shall include all costs or expenses incurred by CONTRACTOR, payable on actual quantities at the unit pricing as set forth in Exhibit C to the original Agreement, as set forth in Contractor's Proposal labeled "Lincoln Budget" and attached hereto in Exhibit G-A3.

4. **Insurance Certificate.** There are no changes to the insurance requirements and other insurance provisions. However, a current certificate of insurance must be provided prior to the Effective Date of this Amendment No. 3.

5. **Ratification of Agreement.** Town and Contractor hereby agree that except as expressly provided herein, the provisions of the Agreement shall be, and remain in full force and effect and that if any provision of this Amendment conflicts with the Agreement, then the provisions of this Amendment shall prevail.

IN WITNESS WHEREOF, the parties have entered into this Amendment No. 2 effective on the date first above written.

TOWN OF PARADISE VALLEY

CONTRACTOR

By: _____
Jill B. Keimach, Town Manager

By: _____
Signature

Printed Name, Title

Date: _____

Date: _____

ATTEST:

Duncan Miller, Town Clerk

APPROVED AS TO FORM:

Deborah Robberson, Acting Town Attorney

EXHIBIT G-A3

See Attached: Contractor Proposal for Paving and Related Services on Lincoln Drive from 32nd Street to Mockingbird Lane



1327 West San Pedro Street · Gilbert, Arizona 85233-2403
Phone (480) 633-8500 · Fax (480) 633-8111

BUDGET

CLASS A LICENSE NO. 111576-A
An Equal Opportunity Employer

Date 1/16/2021

To PARADISE VALLEY

Attention JERRY COOPER

Job Name Lincoln Budget
Location PARADISE VALLEY, AZ
Architect- Engineer NA
Plans Dated NA
Soil Engineer NA
Report Date NA

We propose to furnish all labor and material necessary to complete the work as described per our unit prices. All work will be done in accordance with the plans, specifications, and per the requirements of the governing municipality.

Thank you for the opportunity of submitting a bid on the above- described job.

PROPOSAL OF WORK TO BE FURNISHED

NO.	ITEM DESCRIBED	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	LINCOLN				
	1.50" RUBBERIZED AC (COP HV)	172,350.00	SY	7.30	1,258,155.00
	MILL ASPHALT	172,350.00	SY	1.00	172,350.00
	MANHOLE ADJUSTMENTS (BLACK CONC)	158.00	EA	415.00	65,570.00
	WATER VALVE ADJUSTMENT (BLACK CONC)	223.00	EA	390.00	86,970.00
	SURVEY MONUMENT ADJUSTMENT (BLACK CONC)	45.00	EA	180.00	8,100.00
	CONCRETE FLATWORK	62.00	EA	2,600.00	161,200.00
	PROJECT SIGNS	10.00	EA	500.00	5,000.00
	TRAFFIC CONTROL/BARRICADING	85.00	DA	4,500.00	382,500.00
	UNIFORMED, OFF-DUTY POLICE OFFICER	600.00	HR	75.00	45,000.00
	4" WHITE PAINT	60,698.00	LF	0.15	9,104.70
	4" WHITE THERMO	60,698.00	LF	0.40	24,279.20
	8" WHITE PAINT	22,403.00	LF	0.25	5,600.75
	8" WHITE THERMO	22,403.00	LF	0.75	16,802.25
	12" WHITE PAINT	8,850.00	LF	0.55	4,867.50
	12" WHITE THERMO	8,850.00	LF	1.75	15,487.50
	18" WHITE PAINT	1,854.00	LF	0.85	1,575.90
	18" WHITE THERMO	1,854.00	LF	2.50	4,635.00
	TURN ARROWS - PAINT	58.00	EA	50.00	2,900.00
	TURN ARROWS - THERMO	58.00	EA	115.00	6,670.00
	6 FT BIKE LANE SYMBOL	24.00	EA	205.00	4,920.00
	RPM'S (WHITE)	1,553.00	EA	3.50	5,435.50
	RPM'S (YELLOW)	1,105.00	EA	3.50	3,867.50
	BLUE FIRE HYDRANT REFLECTORS	40.00	EA	6.00	240.00
	LOOP DETECTORS	8.00	EA	1,782.00	14,256.00
	SUBTOTAL				\$ 2,305,486.80

Payment to be based on actual field-measured quantities unless otherwise stated. 90% monthly progress draws on completed work with the final 10% due 30 days after final completion and acceptance of our work. Interest will be charged at the rate of 1.5% per month on all late balances. Any and all costs or fees necessarily incurred in the pursuit of the collection of this account will be paid by the owner.

ACCEPTANCE OF CONTRACT/ PROPOSAL

The above prices, specifications and conditions on the front and **back** of this proposal are satisfactory and are hereby accepted, giving M.R. TANNER CONSTRUCTION authorization to complete work as specified. Funding verification and further payment term conditions to be established prior to execution of contract agreement or commencement of work.

M. R. TANNER CONSTRUCTION

Firm Name: _____

By: _____

Accepted by: _____

Title: _____

Title: _____

Date: _____

Date: _____

**TOWN OF PARADISE VALLEY
SERVICES AGREEMENT
STREET PRESERVATION**

COPY

THIS AGREEMENT is made and entered into this 22nd day of March, 2018 ("Effective Date"), by and between the Town of Paradise Valley, an Arizona municipal corporation, hereinafter referred to as "TOWN", and M.R. Tanner Development & Construction, Inc., an Arizona corporation, hereinafter referred to as "CONTRACTOR".

WHEREAS, CONTRACTOR represents that CONTRACTOR has the expertise and is qualified to perform the services described in the Agreement.

NOW THEREFORE, in consideration of the mutual promises and obligations set forth herein, the parties hereto agree as follows:

1. CONTRACT ADMINISTRATOR:

- 1.1. Contract Administrator.** CONTRACTOR shall act under the authority and approval of the Jerry Cooper, Public Works Supervisor (Contract Administrator), to provide the services required by this Agreement.
- 1.2. Key Staff.** CONTRACTOR has identified personnel and subcontractors it intends to perform the services required herein. CONTRACTOR shall not change nor substitute any of these for work on this Agreement without prior written approval by TOWN.
- 1.3. Subcontractors.** During the performance of the Agreement, CONTRACTOR may engage such additional SUBCONTRACTORS as may be required for the timely completion of this Agreement. In the event of subcontracting, the sole responsibility for fulfillment of all terms and conditions of this Agreement rests with CONTRACTOR.
- 1.4. Subcontracts.** CONTRACTOR shall not enter into any Subcontract under this Agreement for the performance of this Agreement without the advance written approval of TOWN. The subcontract shall incorporate by reference the terms and conditions of this Agreement.

2. SCOPE OF WORK: CONTRACTOR shall perform street preservation services, including various surface seals, asphalt mill and inlay, and concrete flat work, all as more specifically set forth in the Scope of Work and Technical Specifications, labeled Exhibit B; Pricing, Exhibit C; Bid Bond, Exhibit D1; Performance Bond, Exhibit D2; Payment Bond, Exhibit D3; Construction Sign Detail, Exhibit E; Contractors Equipment, Exhibit F1; Subcontractors/Personnel, Exhibit F2; and Maps for routine preservation work and services in first year, Exhibit G; Maps for preservation work and services on Tatum Boulevard in first year, Exhibit H, attached hereto and made a part hereof by reference and as set forth in the Specifications and details included therein.

- 2.1. Non-Discrimination.** The CONTRACTOR shall comply with State Executive Order No. 99-4 and all other applicable Town, State and Federal laws, rules and regulations, including the Americans with Disabilities Act.

- 2.2. Licenses.** CONTRACTOR shall maintain in current status all Federal, State and local

licenses and permits required for the operation of the business conducted by the CONTRACTOR as applicable to this Agreement.

2.3. Advertising, Publishing and Promotion of Agreement. The CONTRACTOR shall not use, advertise or promote information for commercial benefit concerning this Agreement without the prior written approval of the TOWN.

2.4. Compliance with Applicable Laws. CONTRACTOR shall comply with all applicable Federal, State and local laws, and with all applicable licenses and permit requirements.

2.4.1 Immigration Law Compliance. Pursuant to the provisions of A.R.S. § 41-4401, the Contractor hereby warrants to the Town that the Contractor and each of its subcontractors ("Subcontractors") will comply with all Federal Immigration laws and regulations that relate to the immigration status of their employees and the requirement to use E-Verify set forth in A.R.S. §23-214(A) (hereinafter "Contractor Immigration Warranty").

2.4.2 A breach of the Contractor Immigration Warranty (Exhibit A) shall constitute a material breach of this Agreement that is subject to penalties up to and including termination of the Agreement.

2.4.3 The Town retains the legal right to inspect the papers of any Contractor or Subcontractor employee who works on this Agreement to ensure that the Contractor or Subcontractor is complying with the Contractor Immigration Warranty. The Contractor agrees to assist the Town in the conduct of any such inspections.

2.4.4 The Town may, at its sole discretion, conduct random verifications of the employment records of the Contractor and any Subcontractors to ensure compliance with Contractors Immigration Warranty. The Contractor agrees to assist the Town in performing any such random verifications.

2.4.5 The provisions of this Article must be included in any contract the Contractor enters into with any and all of its subcontractors who provide services under this Agreement or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

2.4.6 In accordance with A.R.S. §35-393.01, the Contractor hereby warrants that Contractor does not participate in, and agrees not to participate in during the term of this Agreement a boycott of Israel.

2.4.7 In accordance with A.R.S. § 34-251, the Contractor hereby warrants that Contractor, nor anyone associated with Contractors business, has directly or indirectly participated in any collusion, entered into any contract, combination, conspiracy or other act in restraint of trade or commerce.

2.5. Warranties.

One-Year Warranty. CONTRACTOR must provide a one-year warranty on all work performed pursuant to this Agreement.

3. ACCEPTANCE AND DOCUMENTATION: Each task shall be reviewed and approved by the Contract Administrator to determine acceptable completion.

3.1. Records. The CONTRACTOR shall retain and shall contractually require each

SUBCONTRACTOR to retain all data and other "records" relating to the acquisition and performance of the Contract for a period of six years after the completion of the Contract.

3.2. Audit. At any time during the term of this Agreement and six (6) years thereafter, the CONTRACTOR'S or any SUBCONTRACTOR'S books and records shall be subject to audit by the Town to the extent that the books and records relate to the performance of the Agreement or Subcontract. Upon request, the CONTRACTOR shall produce a legible copy of any or all such records.

3.3. Property of TOWN. Any materials, including plans, diagrams, drawings, reports, computer programs and other deliverables, created under this Agreement are the sole property of TOWN. CONTRACTOR is not entitled to a patent or copyright on those materials and may not transfer the patent or copyright to anyone else. CONTRACTOR shall not use or release these materials without the prior written consent of TOWN.

4. PRICE:

4.1. TOWN shall pay to CONTRACTOR an amount not to exceed One Million Five Hundred and Forty Thousand Dollars (\$1,540,000.00) for the first year of the Agreement for the completion of all routine street preservation work and services described herein, which sum shall include all costs or expenses incurred by CONTRACTOR, payable on actual quantities at the unit pricing as set forth in Exhibit C, attached hereto and made a part hereof by reference.

TOWN shall pay to the CONTRACTOR an amount not to exceed One Million Seven Hundred and Seventy-Six Thousand Dollars (\$1,776,564) for the first year of the Agreement for the completion of preservation work and services as described herein on Tatum Boulevard, which sum shall include all costs or expenses incurred by CONTRACTOR, payable on actual quantities at the unit pricing as set forth in Exhibit C, attached hereto and made a part hereof by reference.

4.2. Taxes. CONTRACTOR shall be solely legally responsible for any and all tax obligations, which may result out of CONTRACTOR'S performance of this Agreement. TOWN shall have no legal obligation to pay any amounts for taxes, of any type, incurred by CONTRACTOR. Town agrees that Contractor may bill the Town for applicable privilege license taxes which are paid for by Contractor and that the Town will reimburse Contractor for privilege license taxes actually paid by Contractor. If Contractor obtains any refund of privilege license taxes paid, Town will be entitled to a refund of such amounts.

4.3. Payment. A separate invoice shall be issued for each shipment of material or service performed, and no payment will be issued prior to receipt of material and/or completion of specified services and receipt of a correct invoice.

4.4. Estimated Quantities. The quantities shown on Exhibit C (the Price List) are annual estimates only for routine pavement preservation work and services, based upon available information. Payment shall be based on actual quantities and there is no guarantee that any certain quantity shall be required by TOWN. Town reserves the right to increase or decrease the quantities actually required.

4.5. IRS W9 Form. In order to receive payment CONTRACTOR shall have a current I.R.S. W9 Form on file with TOWN, unless not required by law.

4.6. Price Adjustment. All prices offered herein shall be firm against any increase for three (3) years from the effective date of the Agreement. Prior to commencement of subsequent renewal terms, TOWN will entertain a request for price adjustments. TOWN shall determine whether the

requested price adjustment is in the best interest of the TOWN. CONTRACTOR must request all price adjustments in writing at least 120 days prior to the renewal date.

4.7. Acceptance by Town. TOWN reserves the right to accept or reject the request for a price increase. If TOWN approves the price increase, the price shall remain firm for the renewal term for which it was requested. If a price increase is agreed upon a written Agreement Amendment must be approved and executed by the Parties.

4.8. Price Reduction. CONTRACTOR shall offer TOWN a price reduction for its services concurrent with a published price reduction made to other customers.

5. TERM:

5.1. The term of this Agreement is **three (3) years**, commencing on the Effective Date noted above, Subject to mutual acceptance by the TOWN and CONTRACTOR, the Agreement may be extended for up to two (2) additional terms of one year each.

6. Use of Contract by Town: The Agreement is for the sole convenience of the Town of Paradise Valley. TOWN reserves the rights to obtain like services from another source to secure significant cost savings or when timely completion cannot be met by CONTRACTOR.

6.1. Cooperative Use of Contract. In addition to the Town of Paradise Valley and with approval of the CONTRACTOR, this Agreement may be extended for use by other municipalities, school districts and government agencies of the State. Any such usage by other entities must be in accordance with the ordinance, charter and/or procurement rules and regulations of the respective political entity.

6.2. Emergency Purchases: TOWN reserves the rights to purchase from other sources those items, which are required on an emergency basis and cannot be supplied immediately by the CONTRACTOR.

7. TOWN'S CONTRACTUAL REMEDIES:

7.1. Right to Assurance. If the Town in good faith has reason to believe that the CONTRACTOR does not intend to, or is unable to perform or continue performing under this Agreement, the Contract Administrator may demand in writing that the CONTRACTOR give a written assurance of intent to perform. Failure by the CONTRACTOR to provide written assurance within the number of Days specified in the demand may, at the Town's option, be the basis for terminating the Agreement in addition to any other rights and remedies provided by law or this Agreement.

7.2. Stop Work Order. The Town may, at any time, by written order to the CONTRACTOR, require the CONTRACTOR to stop all or any part, of the work called for by this Agreement for period(s) of days indicated by the Town after the order is delivered to the CONTRACTOR. The order shall be specifically identified as a stop work order issued under this clause. Upon receipt of the order, the CONTRACTOR shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage.

If a stop work order issued under this clause is canceled or the period of the order or any extension expires, the CONTRACTOR shall resume work. The Contract Administrator shall make an equitable adjustment in the delivery schedule or Agreement price, or both, and the Agreement shall be amended in writing accordingly.

7.3. Non-exclusive Remedies. The rights and the remedies of the Town under this Agreement are not exclusive.

7.4. **Nonconforming Tender.** Services and materials supplied under this Agreement shall fully comply with Agreement requirements and specifications. Services or materials that do not fully comply constitute a breach of contract.

7.5. **Right of Offset.** The Town shall be entitled to offset against any sums due CONTRACTOR, any expenses or costs incurred by the Town, or damages assessed by the Town concerning the CONTRACTOR'S non-conforming performance or failure to perform the Agreement, including expenses to complete the work and other costs and damages incurred by TOWN.

8. **TERMINATION:**

8.1 **Termination for Convenience:** TOWN reserves the right to terminate this Agreement or any part thereof for its sole convenience with thirty (30) days written notice. In the event of such termination, CONTRACTOR shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and subcontractors to cease such work. As compensation in full for services performed to the date of such termination, the CONTRACTOR shall receive a fee for the percentage of services actually performed. This fee shall be in the amount to be mutually agreed upon by the CONTRACTOR and TOWN, based on the agreed Scope of Work. If there is no mutual agreement, the Public Works Director shall determine the percentage of work performed under each task detailed in the Scope of Work and the CONTRACTOR'S compensation shall be based upon such determination and CONTRACTOR'S fee schedule included herein.

8.2 **Termination for Cause:** Town may terminate this Agreement for Cause upon the occurrence of any one or more of the following events:

- 1) If CONTRACTOR fails to perform pursuant to the terms of this Agreement;
- 2) If CONTRACTOR is adjudged a bankrupt or insolvent;
- 3) If CONTRACTOR makes a general assignment for the benefit of creditors;
- 4) If a trustee or receiver is appointed for CONTRACTOR or for any of CONTRACTOR'S property;
- 5) If CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws;
- 6) If CONTRACTOR disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction.

Where Agreement has been so terminated by TOWN, the termination shall not affect any rights of TOWN against CONTRACTOR then existing or which may thereafter accrue.

8.3. **Cancellation for Conflict of Interest.** Pursuant to A.R.S. § 38-511, TOWN may cancel this Agreement after execution without penalty or further obligation if any person significantly involved in initiating, negotiating, securing, drafting or creating the Agreement on behalf of the Town is or becomes at any time while this Agreement or an extension of this Agreement is in effect, an employee of or a consultant to any other party to this Agreement. The cancellation shall be effective when the CONTRACTOR receives written notice of the cancellation unless the notice specifies a later time.

8.4. **Gratuities.** TOWN may, by written notice, terminate this Agreement, in whole or in part, if TOWN determines that employment or a Gratuity was offered or made by CONTRACTOR or a representative of CONTRACTOR to any officer or employee of TOWN for the purpose of influencing the outcome of the procurement or securing this Agreement, an amendment to this Agreement, or favorable treatment concerning this Agreement, including the making of

any determination or decision about contract performance. The TOWN, in addition to any other rights or remedies, shall be entitled to recover exemplary damages in the amount of three times the value of the Gratuity offered by CONTRACTOR.

- 8.5. Suspension or Debarment.** TOWN may, by written notice to the CONTRACTOR, immediately terminate this Agreement if TOWN determines that CONTRACTOR has been debarred, suspended or otherwise lawfully prohibited from participating in any public procurement activity, including but not limited to, being disapproved as a SUBCONTRACTOR of any public procurement unit or other governmental body. Submittal of an offer or execution of a contract shall attest that the CONTRACTOR is not currently suspended or debarred. If CONTRACTOR becomes suspended or debarred, CONTRACTOR shall immediately notify TOWN.
- 8.6. Continuation of Performance through Termination.** The CONTRACTOR shall continue to perform, in accordance with the requirements of the Agreement, up to the date of termination, as directed in the termination notice.
- 8.7. No Waiver.** Either party's failure to insist on strict performance of any term or condition of the Agreement shall not be deemed a waiver of that term or condition even if the party accepting or acquiescing in the nonconforming performance knows of the nature of the performance and fails to object to it.
- 8.8. Availability of Funds for the next Fiscal Year.** Funds may not presently be available under this Agreement beyond the current fiscal year. No legal liability on the part of the TOWN for services may arise under this Agreement beyond the current fiscal year until funds are made available for performance of this Agreement. The TOWN may reduce services or terminate this Agreement without further recourse, obligation, or penalty in the event that insufficient funds are appropriated. The Town Manager shall have the sole and unfettered discretion in determining the availability of funds.
- 9. FORCE MAJEURE:** Neither party shall be responsible for delays or failures in performance resulting from acts beyond their control. Such acts shall include, but not be limited to, acts of God, riots, acts of war, epidemics, governmental regulations imposed after the fact, fire, communication line failures, power failures, or earthquakes.
- 10. DISPUTE RESOLUTION:**
- 10.1 Dispute Resolution.** The parties hereby agree that each claim, controversy and dispute, including claims filed by CONTRACTOR pursuant to A.R.S. § 12-821.01, (each a "Dispute") between Contractor and Town will be resolved in accordance with Exhibit I, Dispute Resolution.
- 10.2 Arizona Law.** This Agreement shall be governed and interpreted according to the laws of the State of Arizona.
- 10.3 Jurisdiction and Venue.** The parties agree that this Agreement is made in and shall be performed in Maricopa County. Any lawsuits between the Parties arising out of this Agreement shall be brought and concluded in the courts of Maricopa County in the State of Arizona, which shall have exclusive jurisdiction over such lawsuits.
- 10.4 Fees and Costs.** Except as otherwise agreed by the parties, the prevailing party in any adjudicated dispute relating to this Agreement is entitled to an award of reasonable attorney's fees, expert witness fees and costs; provided, however, that no award of attorney's fees shall exceed ten percent (10%) of the damages awarded the prevailing party unless the non-prevailing party has been determined to have acted in bad faith or in a frivolous manner

during the adjudication.

- 11. INDEMNIFICATION:** To the fullest extent permitted by law, CONTRACTOR, its successors, and assigns shall defend, indemnify and hold harmless on a current basis the Town of Paradise Valley, and any of its elected or appointed officials, officers, directors, commissioners, board members, agents or employees (collectively, the "Indemnified Parties") from and against any and all allegations, demands, claims, proceedings, suits, actions, damages, including without limitation, property damage, environmental damages, personal injury and wrongful death claims, losses, expenses, expenses (including claim adjusting and handling expenses), penalties and fines (including, but not limited to, attorney fees, court costs and the cost of appellate proceedings), judgments or obligations, which may be imposed upon or incurred by or asserted against the TOWN and any of the Indemnified Parties by reason of this Agreement or the services performed or permissions granted under it, or related to, arising from or out of, or resulting from any negligent or intentional actions, acts, errors, mistakes or omissions caused in whole or part by CONTRACTOR, or any of its subcontractors, or anyone directly or indirectly employed by or contracted with any of them or anyone for whose acts any of them may be liable, relating to the discharge of any duties or the exercise of any rights or privileges arising from or incidental to this Agreement, including but not limited to, any injury or damages claimed by any of CONTRACTOR's and subcontractor's employees.

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph. The obligations under this Section 11 shall survive termination of this Agreement.

12. INSURANCE:

12.1. General.

- A. Within 10 days of execution of this Agreement, the CONTRACTOR shall furnish the TOWN a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to TOWN. Provided, however, the A.M. Best rating requirement shall not be deemed to apply to required Workers' Compensation coverage.
- B. The CONTRACTOR and any of its subcontractors, subconsultants or sublicensees shall procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.
- C. The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.
- D. The Town in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect CONTRACTOR from liabilities that might arise out of the performance of the Agreement services under this Agreement by CONTRACTOR, its agents, representatives, employees, subcontractors, sublicensees or subconsultants and the CONTRACTOR is free to purchase any additional insurance as may be determined necessary.
- E. Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve the CONTRACTOR from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

- F. Use of SubContractors: If any work is subcontracted in any way, the CONTRACTOR shall execute a written agreement with Subcontractor containing the same Indemnification Clause and Insurance Requirements as the TOWN requires of the CONTRACTOR in this Agreement. The CONTRACTOR is responsible for executing the Agreement with the Subcontractor and obtaining Certificates of Insurance and verifying the insurance requirements.

12.2 Minimum Scope and Limits of Insurance. The CONTRACTOR shall provide coverage with limits of liability not less than those stated below

- A. *Commercial General Liability-Occurrence Form.* CONTRACTOR must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than \$2,000,000 for each occurrence, \$4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.
- B. *Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles*
Vehicle Liability: CONTRACTOR must maintain Business/Automobile Liability insurance with a limit of \$1,000,000 each accident on CONTRACTOR owned, hired, and non-owned vehicles assigned to or used in the performance of the CONTRACTOR's work or services under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.
- C. *Workers Compensation and Employers Liability Insurance:* CONTRACTOR must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of CONTRACTOR employees engaged in the performance of work or services under this Agreement and must also maintain Employers' Liability insurance of not less than \$1,000,000 for each accident and \$1,000,000 disease for each employee.
- D. *Builders' Risk Insurance (Course of Construction).* The CONTRACTOR bears all responsibility for loss to all Work being performed and to buildings under construction. Unless waived in writing by the TOWN, the CONTRACTOR will purchase and maintain in force Builders' Risk-Installation insurance on the entire work until completed and accepted by the TOWN. This insurance will be Special Causes of Loss policy form, (minimally including perils of fire, flood, lightning, explosion, windstorm and hail, smoke, aircraft and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, and collapse), completed value, replacement cost and all subsequent modifications. The CONTRACTOR's Builders' Risk-Installation insurance must be primary and not contributory.
1. Builders' Risk-Installation insurance must name the TOWN, the CONTRACTOR and all tiers of Sub Contractors as Additional Insured's and must contain a provision that this insurance will not be canceled or materially altered without at least 30 days advance notice to the TOWN. The TOWN must also be named as a Loss Payee under Builders' Risk-Installation coverage.
 2. Builders' Risk-Installation insurance must cover the entire Work including reasonable compensation for architects and engineers' services and expenses and other "soft costs" made necessary by an insured loss. Builders' Risk-Installation insurance must provide coverage from the time any covered property comes under the CONTRACTOR's control and or responsibility, and continue without interruption during the course of construction, renovation and or installation, including any time during which any project property or equipment is in transit, off site, or while on site for future use or installation. Insured property must include, but not be limited to, scaffolding, false work, and temporary buildings at the site. This insurance must also cover the cost of removing debris, including demolition as may be legally required by operation of any law,

ordinance, regulation or code.

3. Builders' Risk Insurance must be maintained until whichever of the following first occurs: (i) final payment has been made, or, (ii) until no person or entity, other than the TOWN, has an insurable interest in the property required to be covered.
 - a. The Builders' Risk Insurance must be endorsed so that the insurance will not be canceled or lapse because of any partial use or occupancy by the TOWN.
 - b. This insurance must include as named insureds, the TOWN, the CONTRACTOR, SubContractors, Subconsultants and others with an insurable interest in the Work who will be named as additional insureds unless they are able to provide some level of coverage with the TOWN and CONTRACTOR named as additional insureds. Certificates must contain a provision that the insurance will not be canceled or materially altered without at least 30 days advance notice to the TOWN. The TOWN must also be named as a Loss Payee under the Builders Risk-Installation coverage.
 - c. This insurance must be written using the Special Causes of Loss policy form, replacement cost basis.
 - d. All Rights of subrogation are, by this Agreement, waived against the TOWN, its officers, officials, agents and employees.
 - e. The CONTRACTOR is responsible for payment of all deductibles under the Builders' Risk policy.

12.3 Additional Policy Provisions Required.

- A. *Self-Insured Retentions or Deductibles.* Any self-insured retentions and deductibles must be declared and approved by the TOWN. If not approved, the TOWN may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to the TOWN, its officers, officials, agents, employees, and volunteers.
- B. *TOWN as Additional Insured.* The policies are to contain, or be endorsed to contain, the following provisions:
 1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: The TOWN, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, the CONTRACTOR including the TOWN's general supervision of the CONTRACTOR; Products and Completed operations of the CONTRACTOR, and automobiles owned, leased, hired, or borrowed by the CONTRACTOR.
 2. The CONTRACTOR's insurance must contain broad form contractual liability coverage and must not exclude liability arising out of explosion, collapse, or underground property damage hazards ("XCU") coverage.
 3. The TOWN, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by the CONTRACTOR even if those limits of liability are in excess of those required by this Agreement.
 4. The CONTRACTOR's insurance coverage must be primary and noncontributory insurance with respect to the TOWN, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by the TOWN, its officers, officials, agents, and employees shall be in excess

of the coverage provided by the CONTRACTOR and must not contribute to it.

5. The CONTRACTOR's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
 6. Coverage provided by the CONTRACTOR must not be limited to the liability assumed under the indemnification provisions of this Agreement.
 7. The policies must contain a severability of interest clause and waiver of subrogation against the TOWN, its officers, officials, agents, and employees, for losses arising from Work performed by the CONTRACTOR for the TOWN.
 8. Within 10 business days of the execution of the Agreement, but prior to beginning any work, CONTRACTOR must deliver to the Public Works Director certificates of insurance for each of the policies, which will confirm the existence or issuance of the policies in accordance with the requirements set forth herein, and copies of the endorsements of the policies in accordance with the provisions set forth herein. Town is and will be under no obligation to either ascertain or confirm the existence or issuance of the required policies and endorsements or to inform Contractor or any Sub-contractor in the event that the coverage does not comply with the requirements set forth herein. CONTRACTOR'S failure to secure and maintain the Policies and to assure Sub-contractor Policies as required will constitute a material default under the Agreement.
 9. If any of the required policies expire during the life of this Agreement, the CONTRACTOR must forward renewal or replacement Certificates and/or endorsements to the TOWN within 10 days after the renewal date containing all the necessary insurance provisions.
- 12 **NOTICES:** All notices or demands required to be given pursuant to the terms of this Agreement shall be given to the other party in writing, delivered by hand or registered or certified mail, at the addresses set forth below, or to such other address as the parties may substitute by written notice given in the manner prescribed in this paragraph.

In the case of the TOWN:

Town of Paradise Valley
Public Works
6401 East Lincoln Drive
Paradise Valley, AZ 85253
Attn: Jerry Cooper

In the case of the CONTRACTOR:

Firm Name: M.R. Tanner Development
and Construction, Inc.
Contact: Kevin Day, Secretary
Address: 1327 West San Pedro Street
State, Zip: Gilbert, AZ 85233

WITH A COPY TO:

Town of Paradise Valley
Town Attorney
6401 East Lincoln Drive
Paradise Valley, AZ 85253

Notices shall be deemed received on date delivered, if delivered by hand, and on the delivery date indicated on receipt if delivered by certified or registered mail.

13 CONFLICT OF INTEREST:

13.2 No Kickback. CONTRACTOR warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no member of the Town Council or any employee of the TOWN has any interest, financially or otherwise, in the firm unless this interest has been declared pursuant to the provisions of A.R.S. Section 38-501. Any such interests were disclosed in CONTRACTOR'S proposal to the TOWN.

13.3 Kickback Termination. TOWN may cancel any contract or agreement, without penalty or obligation, if any person significantly involved in initiating, negotiating, securing, drafting or creating the Agreement on behalf of the TOWN is, at any time while the Agreement or any extension of the Agreement is in effect, an employee of any other party to the Agreement in any capacity or a CONTRACTOR to any other party to the Agreement with respect to the subject matter of the Agreement. The cancellation shall be effective when written notice from TOWN is received by all other parties, unless the notice specifies a later time (A.R.S. §38-511).

13.4 No Conflict: CONTRACTOR stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this project.

14 GENERAL TERMS:

14.2 Ownership. All deliverables and/or other products of the Agreement (including but not limited to all software documentation, reports, records, summaries and other matter and materials prepared or developed by CONTRACTOR in performance of the Agreement) shall be the sole, absolute and exclusive property of TOWN, free from any claim or retention of right on the part of CONTRACTOR, its agents, sub-contractors, officers or employees.

14.3 Performance and Payment Bonds. Within fifteen (15) days from the time a contract is awarded, CONTRACTOR shall furnish fully executed Performance and Payment Bond (Labor and Materials) in such form and context as determined by TOWN from a surety approved by TOWN. Said bonds shall be in a sum no less than one hundred (100%) of the Agreement price.

TOWN has the option to forfeit said bonds if the Agreement is terminated by the default of CONTRACTOR or if TOWN determines that CONTRACTOR is unable or unwilling to complete the work as specified in the Agreement Documents.

If the Agreement schedule is not adhered to, and TOWN determines that the work is unlikely to be completed within a reasonable time after the original target date, then TOWN may terminate the Agreement and collect the Performance Bond.

The Performance Bond will be reviewed annually and any increases in the Agreement amount will require bond to be increased and reissued.

14.4 Entire Agreement. This Agreement, including Exhibits attached hereto, constitutes the entire understanding of the parties and supersedes all previous representations, written or oral, with respect to the services specified herein. This Agreement may not be modified or amended except by a written document, signed by authorized representatives of each party.

14.5 Assignment: Services covered by this Agreement shall not be assigned in whole or in part without the prior written consent of the TOWN.

14.6 Amendments. The Agreement may be modified only through a written Amendment executed by authorized persons for both parties. Changes to the Agreement, including the addition of work or materials, the revision of payment terms, or the substitution of work or materials, directed by a person who is not specifically authorized by the Town in writing or made unilaterally by the CONTRACTOR are violations of the Agreement. Any such changes,

including unauthorized written Agreement Amendments shall be void and without effect, and the CONTRACTOR shall not be entitled to any claim under this Agreement based on such changes.

14.7 Independent CONTRACTOR. The CONTRACTOR under this Agreement is an independent CONTRACTOR. Neither party to this Agreement shall be deemed to be the employee or agent of the other party to the Agreement.

14.8 Integration. This Agreement contains, except as stated below, the entire agreement between the Town and Contractor and supersedes all prior conversations and negotiations between the parties regarding the project or this Agreement. Inconsistencies between the Solicitation, any addenda to the Solicitation, the response or exceptions, if any, and this Agreement, will be resolved by the terms and conditions stated in this Agreement.

14.9 Interpretation. The parties fairly negotiated the Agreement's provisions to the extent they believed necessary. The parties are of equal bargaining position and this Agreement must be construed equally between the parties without consideration of which of the parties may have drafted this Agreement. No course of prior dealings between the parties and no usage of the trade shall supplement or explain any terms used in this document and no other understanding either oral or in writing shall be binding.

14.10 Authority: Each party hereby warrants and represents that it has full power and authority to enter into and perform this Agreement, and that the person signing on behalf of each has been properly authorized and empowered to enter this Agreement. Each party further acknowledges that it has read this Agreement, understands it, and agrees to be bound by it.

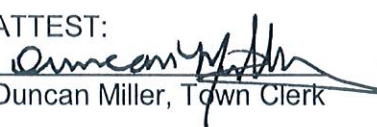
IN WITNESS WHEREOF, the parties have entered into this Agreement effective on the date first above written.

TOWN OF PARADISE VALLEY

By: 
Kevin Burke, Town Manager

Date: 3/21/18

ATTEST:


Duncan Miller, Town Clerk

APPROVED AS TO FORM:


Andrew M. Miller, Town Attorney

CONTRACTOR

By: 
Signature

ALAN EVANS, PRESIDENT
Printed Name, Title

Date: 3-21-2018

EXHIBIT A

Contractor Immigration Warranty
To Be Completed by Contractor Prior to Execution of Agreement

A.R.S. § 41-4401 requires as a condition of your contract verification of compliance by the Contractor and subcontractors with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the immigration status of its employees.

By completing and signing this form the Contractor shall attest that it and all subcontractors performing work under the cited contract meet all conditions contained herein.

Contract Number: CON-18-0012-PBW		
Name (as listed in the contract): M. R. TANNER DEV. + CONSTRUCTION, INC.		
Street Name and Number: 1327 W. SAN PEDRO ST		
Town: GILBERT	State: AZ	Zip Code: 85233

I hereby attest that:

1. The Contractor complies with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the immigration status of those employees performing work under this contract;
2. All subcontractors performing work under this contract comply with the Federal Immigration and Nationality Act (FINA), all other Federal immigration laws and regulations, and A.R.S. § 23-214 related to the immigration status of their employees.

Signature of Contractor (Employer) or Authorized Designee

Printed Name: ALAN EVANS

Title: PRESIDENT

Date (month/day/year): 1/24/2018

EXHIBIT B

SCOPE OF WORK

GENERAL INFORMATION

Contractor shall provide Pavement Preservation (various surface seals, asphalt mill & inlay and concrete flat work) services on an as needed basis. Each year, the Town of Paradise Valley performs routine pavement preservation work on designated streets, which are principally located in residential neighborhoods in the Town. On an annual basis, the Town's routine pavement preservation averages approximately 18 linear miles of surface seal and 7-9 miles of mill and asphalt inlay. Miscellaneous concrete flat work may be required in connection with this routine pavement maintenance, such as for ADA ramps, valley gutter or curbs and gutters. Maps indicating work locations for the first year of routine pavement preservation work are attached as Exhibit G.

In addition to this routine pavement preservation work, the Town may seek pavement preservation work on two major arterials: Tatum Boulevard and Lincoln Drive. A description of the preservation work and services and a map indicating the work locations for the work on Tatum Boulevard are attached as Exhibit H.

GENERAL CONTRACTOR QUALIFICATIONS

The Contractor shall be in compliance with all applicable Federal, State, local, ANSI and OSHA laws, rules and regulations and all other applicable regulations for the term of this Agreement.

The Contractor, without additional expense to the Town, shall be responsible for obtaining and maintaining any necessary licenses and permits required in connection with the completion of the required services herein.

The Contractor must hold a valid license issued by the State of Arizona Registrar of Contractors prior to submission of a bid and must maintain same throughout the duration of the Agreement term and any subsequent extensions. Failure to maintain said license may be grounds for default or breach of the contract and subsequent termination.

The Contractor may not subcontract any segment or services covered herein, without prior approval of the Contract Administrator. All subcontractors used under the scope of this Agreement shall meet all requirements, terms and conditions set forth herein. All subcontracted services shall be warranted by and be the responsibility of the Contractor.

EXHIBIT B

SCOPE OF WORK (CONTINUED) TECHNICAL SPECIFICATIONS

STANDARD SPECIFICATION AND STANDARD DETAILS. Town of Paradise Valley is now operating under the latest revision of the 2012 edition of the Uniform Standard Specification for Public Works Construction, published by the Maricopa Association of Governments as amended by the Town of Paradise Valley, which is herewith incorporated by reference and made apart hereof.

1. ASPHALT CONCRETE MILLING – VARIOUS LOCATIONS

1.1 Mill Asphaltic Concrete Pavement (1 ½")

CONTRACTOR shall remove existing asphalt pavement to lines and depths indicated in the specifications in accordance with the requirements of MAG Standard Specifications, Section 350. Asphalt shall be milled using a high flow milling drum. All milled materials will be hauled off site and will be disposed at CONTRACTOR'S expense. After milling and prior to the crack sealing, the entire street will be swept with a street sweeper to remove loose material.

1.2 Measurement and payment: Measurement and payment for AC milling shall be for each square yard of milled asphalt complete in place.

2.0 CRACK SEALING.

2.1 Cleaning of Cracks - Applying sealant. CONTRACTOR shall seal all cracks with an average clear opening of ¼" or greater. All cracks with an average clear opening of ¼" or greater shall be sealed. All cracks with an average clear opening or less than ¼" shall not be sealed. Immediately prior to applying the sealant, the cracks shall be thoroughly cleaned of loose particles, dust, and other deleterious substances by means of using forced air (65 psi and greater) with a downward blast into the crack and a vacuum attachment to vacuum the debris released. The material shall be vacuumed and contained to prevent it from getting into the atmosphere. All cracks shall be cleaned to a depth of 1" to 1 ½"

Contract Administrator/designee shall make the determination as to what work will be done under this contract.

2.2 Sealant shall be CRAFCO Polyflex Type 3 or approved equal. CONTRACTOR shall place sealant so as to completely fill the crack and form a lap of approximately 1" on each side. Thickness of the lap shall not exceed 1/16 inch. Immediately after the application, CONTRACTOR shall use a rubber squeegee or other acceptable means to force the material into the crack and for the lap. Blotter material (sand) may be required to prevent asphalt-rubber bleed and/or pickup of sealant by vehicular traffic. CONTRACTOR shall install blotter material of a type acceptable to and at the direction of the Contract Administrator/designee (no cement powder shall be acceptable).

2.3 Within two (2) days after the work has been completed on residential streets, CONTRACTOR shall take caution to make sure the site is left clean and free of excess material, debris, etc. The streets, gutters, sidewalks and driveways shall be cleaned before the job is considered complete. Cleaning of the streets shall be by vacuum or regenerative sweeper. CONTRACTOR shall be required to clean the streets to the satisfaction of the Contract Administrator/designee. CONTRACTOR shall be responsible for the disposal of all debris swept from the streets.

2.4 Equipment. The equipment used by CONTRACTOR in the application of the asphalt rubber material shall have a mixing system in the material vat in order to maintain a consistent, uniform, homogeneous mixture throughout the crack sealing operation. The unit shall heat the asphalt rubber material by means of an indirect heat transfer median for adequate material temperature control. The equipment. shall provide continuous supply so that operations may proceed without delays. CONTRACTOR shall apply the material under pressure with a hose and wand assembly. The Contract Administrator/designee prior to use shall approve any equipment designated for use by CONTRACTOR.

2.5 Measurement and Payment. Measurement and payment shall be by the lineal foot of cracks sealed complete in place in accordance with the project.

3.0 ASPHALTIC CONCRETE BASE REPAIR. Consists of furnishing all materials, equipment, tools and labor as necessary to visually inspect and repair the asphaltic concrete pavement after the pavement has been milled if necessary as determined by the Contract Administrator/designee.

3.1 CONTRACTOR and Contract Administrator/designee will inspect the AC pavement after milling for deteriorated areas having excessive cracks and inadequate AC pavement depths of less than 1/2". In the event there are deteriorated areas or inadequate AC pavement depths, as determined by CONTRACTOR and Public Works Supervisor/Inspector, the pavement should be saw cut, removed and replaced with a 1" lift of new AC pavement or repaired as directed by Contract Administrator/designee.

3.2 New AC pavement shall meet the requirements of ASPHALTIC CONCRETE OVERLAY (PVMT STR SCT NO 1). If the existing AC pavement is saw cut and removed, CONTRACTOR shall inspect and remove the existing aggregate base course, and shall replace and re-compact as follows. CONTRACTOR shall remove and replace 3"-6" of aggregate base course to replace surface aggregate base course that has been disturbed or contaminated in the process of AC base pavement removal.

3.3 Measurement and Payment. Measurement and payment shall be by the square yard of AC pavement removed, replaced and/or repaired complete in place in accordance with these specifications, MAG Standard Specifications and as directed by the Contract Administrator/designee, including inspection, saw cutting, AC and aggregate base course removal, replacement and re- compaction. The quantity shown in Exhibit C is an estimate only and may or may not be used depending on the condition of the AC pavement after milling.

4.0 ASPHALTIC CONCRETE OVERLAY (1 1/2") - City of Phoenix (COP) Mix Design. This work shall consist of constructing a 1 1/2-inch bituminous pavement overlay in conformance with the dimensions and sections shown on the plans. CONTRACTOR shall construct in accordance with the requirements of MAG Standard Specifications, Sections 321, and 336 except that the mix design and material testing shall conform to the latest C.O.P Hot Asphalt Mix Criteria. CONTRACTOR shall submit all mix designs to the Public Works Supervisor for review and approval a minimum of ten (10) working days prior to the start of production. All finished pavement overlay shall be water tested for drainage in the presence of the Contract Administrator/designee before final acceptance. Any areas not draining properly shall be corrected to the Contract Administrator/designee's satisfaction at the expense of the CONTRACTOR. Water for this testing shall be provided and paid for by the CONTRACTOR.

4.1 Measurement and Payment. Measurement and payment for asphaltic concrete overlay shall be by the square yard, complete in place, including tack coat.

5.0 **MANHOLE AND VALVE ADJUST.** Manhole and valves will be adjusted with black concrete to be flush with the new asphalt. Adjustments will follow MAG Detail 422, 270. TOWN Debris Shields shall be installed in all manholes prior to adjustments and remain in place until the work is completed, shields removed, enclosures cleaned and inspected by Contract Administrator/designee. CONTRACTOR shall provide the TOWN Public Works Supervisor/Inspector with a final detailed count (gas, SRP, Qwest, Water, etc.), map and location of any and all utility and/or manhole adjustments prior to actual project commencement.

5.1 Measurement and Payment. Measurement and payment for manhole and valve adjustments will be paid for on the "each" basis

6.0 **SPEED HUMPS.** This work shall consist of installing speed humps per TOWN/MAG Standards Specifications, Section 210 and per Town guidelines. Striping shall be reflective striping tape. Speed humps will be paid on the basis of each hump crossing the entire width of the street.

TRAFFIC CONTROL. CONTRACTOR shall adhere to all Town, State and Federal Traffic and Safety guidance, TOWN construction sign requirements and the Manual on Uniform Traffic Control Devices (MUTCD). CONTRACTOR shall submit all traffic control plans for approval to the TOWN to the Town of Paradise Valley Public Works Supervisor. Traffic control shall include uniformed Town of Paradise Valley Police Officer and squad car as required. If a Town of Paradise Valley police officer is not available then the CONTRACTOR can choose an officer from another municipality of their choice.

7.0 **STRIPING.** CONTRACTOR shall provide TOWN with striping as-builds before start of project. All striping shall follow the latest version of the TOWN MUTCD Standard Details and Specifications Manual. Thermo Striping shall be 90 mil or greater. No striping shall begin until approved by TOWN by the Town's Contract Administrator/designee.

8.0 **SURVEY MONUMENTS.** This work will consist of adjusting survey monuments. Brass caps shall be adjusted according to MAG Standard Detail 120-2D. Frames and covers shall be adjusted according to MAG Standard Detail 422 or 270. Survey monuments shall be re-established and referenced by a Registered Land Surveyor (RLS). The RLS shall reset and punch the survey monuments. Any and all new survey coordinates shall be recorded and described in detail to the TOWN and governing authorities by the RLS.

8.1 Measurement and Payment. Measurement and Payment for survey monuments will be made on the "each" basis.

9.0 **SURFACE SEAL SPECIFICATIONS.** See Exhibit: C.

10.0 **PERMITS.** Unless otherwise specified, TOWN will, upon appropriate cooperation from CONTRACTOR, obtain and provide to CONTRACTOR those permits issued by TOWN. CONTRACTOR shall obtain all other permits and licenses. CONTRACTOR shall pay all other governmental charges and inspection fees necessary for the completion of the work, which are applicable at the time of bid opening. CONTRACTOR shall also pay all charges of utility service companies for connections to the work, and TOWN shall pay all charges of such companies for capital costs related thereto, such as plant

10.1 Work in any public easement or right-of-way shall be done in accordance with the requirements of a permit issued by the public agency in whose easement or right-of-way the work is located, in addition to conforming to the drawings and specifications. If a permit is not required, the work shall conform to the standards of the public agency involved in addition to conforming to the drawings and specifications.

10.2 TOWN permits and permits from all applicable governing jurisdictions (i.e. Maricopa County and Arizona Department of Transportation) are required while performing work on TOWN contracts. CONTRACTOR shall pay all permit fees as required by the other governing jurisdictions. Construction, water and landfill fees will not be waived and shall be paid for by CONTRACTOR.

11.0 DUST CONTROL. CONTRACTOR shall keep suitable equipment on hand at the job site for maintaining dust control and shall employ appropriate equipment for that purpose, in accordance with the requirements of the "Maricopa County Environmental Services Department of Air Pollution Control Regulations". CONTRACTOR shall be responsible for obtaining an Air Quality Permit for Maricopa County prior to starting the work. County permit fees shall be paid for by the CONTRACTOR.

11.1 Recordkeeping. Any person who conducts dust-generating operations that require a Dust Control Plan shall keep a written record of self-inspection on each day dust-generating operations are conducted. Self-inspection records shall include daily inspections for crusted or damp soil, track-out conditions and clean-up measures, daily water usage, and dust suppressant application. Such written record shall also include the following information:

- Method, frequency, and intensity of application or implementation of the control measures;
- Method, frequency, and amount of water application to the site;
- Street sweeping frequency;
- Types of surface treatments applied to and maintenance of track-out control devices, gravel pads, fences, wind barriers, and tarps;
- Types and results of test methods conducted;
- If contingency control measures are implemented, actual application or implementation of contingency control measures and why contingency control measures were implemented;
- List of sub-Contractors' names and registration numbers updated when changes are made; and
- Names of employee(s) who successfully completed dust control training class(es) required by Section 309, date of the class(es) that such employee(s) successfully completed, and name of the agency/representative who conducted such class(es).

11.2 Any person who conducts dust-generating operations that do not require a Dust Control Plan shall compile and retain records (including records on any street sweeping, water applications, and maintenance of track-out control devices, gravel pads, fences, wind barriers, and tarps) that provide evidence of control measure application, by indicating the type of treatment or control measure, extent of coverage, and date applied.

11.3 Upon verbal or written request by the Contract Administrator/designee, the log or the records and supporting documentation shall be provided as soon as possible but no later than 48-hours, excluding weekends. If the Contract Administrator/designee is at the site where requested records are kept, records shall be provided without delay.

11.4 Records Retention. Any person who conducts dust-generating operations that require a Dust Control Plan shall retain copies of approved Dust Control Plans, control measurers implementation records, and all supporting documentation for at least six (6) months following the termination of the dust-generating operation and for at least two (2) years from the date of such records were initiated. If a person has obtained a Title V Permit and is subject to the requirements of this rule, then such person shall retain records required by this rule for at least five (5) years from the date such records are established.

12.0 CLEAN UP. CONTRACTOR shall be responsible for keeping the sidewalks, streets, alleys, and adjacent areas around the site free from debris, obstacles, mud, dirt, etc. CONTRACTOR shall immediately and continuously clean up any and all mud or dirt tracked onto streets or sidewalks by construction traffic.

12.1 During progress of work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish, and other debris resulting from work. Failure of CONTRACTOR to comply with Contract Administrator/designee clean-up orders may result in an order to suspend work until the condition is corrected. No additional compensation or time will be allowed as a result of such suspension.

12.2 Excess or unsuitable material, broken asphaltic concrete, and broken Portland cement concrete resulting from the work shall be removed from the site and disposed of by CONTRACTOR. Disposal of material landfill/area will be the CONTRACTOR'S discretion.

12.3 CONTRACTOR shall prevent silt, mud, and/or debris resulting from work from being discharged into the TOWN'S storm drains, retention basins or street right-of-ways. Earthwork stockpiles shall not exceed 6' in height. Any earthwork stockpile, regardless of height, shall be removed within seven (7) days of TOWN notification if dust suppression efforts fail to maintain satisfactory airborne containment control.

12.4 At completion of work, CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises, as well as all tools, appliances, equipment and machinery, temporary construction facilities and surplus materials. CONTRACTOR shall leave the site clean and ready for occupancy by TOWN. CONTRACTOR shall restore conditions to their original condition, those portions of the site not designated for alteration by Contract Administrator/designee. CONTRACTOR shall also leave the public right-of-way, all streets, sidewalks, utility easements, and any affected private property in a neat and clean condition with all damages, including landscaping, repaired and restored.

12.5 If CONTRACTOR is instructed by Contract Administrator/designee to perform clean up or street sweeping operations and fails to do so to Contract Administrator/designee's satisfaction within two (2) working days, the TOWN may procure clean up services and/or commercial street sweeping services and charge such costs, including TOWN administrative time, to CONTRACTOR.

13.0 CONSTRUCTION SIGNS. It shall be the responsibility of CONTRACTOR to furnish and erect construction signs in accordance with agreement specifications. The signs shall be professionally prepared and subject to approval by the Contract Administrator/designee, shall be maintained by CONTRACTOR for the duration of the work, and shall be removed by CONTRACTOR during the final clean-up.

13.1 The number of signs required, the size, shape, installation requirements and information to be included for signs is established on Exhibit E (Construction Sign Detail); however, signs shall be a minimum of 4' x 8' and shall be installed so that the bottom of

the sign is at least 4' above grade. CONTRACTOR shall include cost of signs in their bid price. Sign locations shall be determined by Contract Administrator/designee.

All required construction signs shall be installed by CONTRACTOR within seven (7) days of Notice to Proceed. CONTRACTOR shall submit all traffic control plans to TOWN to the Town's Public Works Supervisor.

14.0 NOTIFICATION OF PUBLIC. CONTRACTOR shall notify all affected citizens and businesses by mail box (taped to mailbox) flyer 72 hours prior to work beginning and include any and all pertinent information, description of work, time, schedules and CONTRACTORS name with 24-hour contact numbers. The flyer information shall be submitted to the Public Works Supervisor for approval before distribution. Any flyers remaining on mail boxes after the 72 hours, the CONTRACTOR shall remove them.

14.1 Extreme care shall be taken by CONTRACTOR to ensure that all alley access (gates, garage doors, etc.) is clear and free of material that would obstruct operation or admission.

15.0 SURFACE TREATMENT SPECIFICATIONS

POLYMER MODIFIED MASTER SEAL, READY TO USE (PMM) APPLICATION RATES:

CONTRACTOR shall apply two coats of PMM at application rate of .28-.36 gallons/square yard per coat. Application rates may be adjusted depending on the pavement condition, traffic volume and other factors. Adjustments of application rates must be in writing by the CONTRACTOR and must be approved by the Town of Paradise Valley's Public Works Supervisor.

PMM APPLICATION GUIDELINES: New asphalt should not be sealed until after it has cured for a minimum of 30-60 days. New micro seals must be exposed to a full summer heat cycle before application of PMM. Ambient and surface temperature must be at least 55°F and rising during application, and must remain above 50°F for a 24 hour period after application is completed. Do not apply if rain is forecast within 24 hours. Pavement surface should be misted with water in extremely hot temperatures (90 degrees and above). CONTRACTOR shall apply two coats as recommended by Seal Master Guidelines. The first coat must be completely dry before applying the second coat. Do not apply a second coat in areas that appear to be wet or areas that are damp to the touch until they are completely dry. A third coat may be applied in heavy traffic areas or on severely distressed pavements. Allow the sealcoat to dry completely before resuming traffic. Drying times are determined by the contractor based on temperature, humidity and other factors.

APPLICATION EQUIPMENT: PMM must be applied by mechanical spray tankers that are capable of applying at least 15,000 square yards of material per day. Equipment must be equipped with a digital operator control station that is capable of adjusting material spread rate in accordance with pre-set calibrations. It should be equipped with speed sensing equipment capable of maintaining a constant delivery rate of material per square yard of surface at variable speeds. Application units should be equipped with mechanical agitation systems to maintain the consistency of the material during the application, or to mix additional aggregate if needed.

PMM SURFACE PREPRATION: CONTRACTOR shall be sure/prep that the pavement is free of loose and embedded dirt, dust, vegetation and other foreign material. If traditional cleaning methods are not effective a power washer or tack coat of asphalt emulsion diluted 1:4 with water may be used. Structural repairs should be made and cracks 1/4" and larger CONTRACTOR shall seal. Sealant shall be CRAFCO Polyflex Type 3 or approved equal. All grease and oil spots should be treated with PrepSeal or PetroSeal.

PMM Ready to Use Specifications

TEST PROPERTIES	TEST METHOD	SPECIFICATION
EMULSION:		
Uniformity	ASTM D 2939.04	PASS
Weight/gallon @ 77 deg. F	ASTM D 2939.07	10.5 lbs./gal.min
Residue by Evaporation (Solids), %	ASTM D 2939.08	50% min.
Asphalt Content by Weight, %	ASTM D 2939.21	17 min.
VOC Content by Volume, %	ASTM D 244-89	< 3%
Fine Aggregate and Mineral Filler Content by Weight, %	Manufacture	34% min.
Polymer Content by Volume, %	Manufacture	1.8%
PERFORMANCE BASED TESTING:		
Resistance to Heat (No sagging or slipping observed.)	ASTM D 2939.14	PASS
Resistance to Water (No blistering or re-emulsification.)	ASTM D 2939.15	PASS
Wet Flow, mm	ASTM D 2939.19	0
Direct Flame Test (No continued combustion after 10 sec. No slippage, run down or charred material observed.)	ASTM D 2939.20	PASS
Wet Film Continuity (Material was uniformly distributed; no signs of inconsistency.)	ASTM D 2939.22	PASS
Resistance to Kerosene (No leakage of kerosene, loss of adhesion or discoloration of tile.)	ASTM D 2939.25	PASS
Wet Track Abrasion Test (1 hr.) gms/sqft. loss	ASTM D 3910	< 15
Wet Track Abrasion Test (6 day) gms/sqft. loss	ASTM D 3910	< 15
FINE AGGREGATE SIEVE ANALYSIS:		
	MESH SIZE	% PASSING (+ or -)
	40	100
	50	93
	70	80
	80	69
	120	49
	200	35
	325	2

MEASUREMENT and PAYMENT. Measurement and payment for PMM shall be by the square yard, complete in place, including crack seal.

SEAL MASTER LIQUID ROAD (LMHSS) APPLICATION GUIDELINES: New asphalt should not be sealed until after it has cured for a minimum of 30-60 days. New slurry seals must be exposed to a full summer heat cycle before application of **Liquid Road**. Ambient and surface temperature must be at least 55°F and rising during application, and must remain above 50°F for a 24 hour period after application is completed. Do not apply if rain is forecast within 24 hours. Pavement surface should be misted with water in extremely hot temperatures (90 degrees and above). Two coats are required. The first coat must be completely dry before applying the second coat. Do not apply a second coat in areas that appear to be wet or areas that are damp to the touch until they are completely dry. A third coat may be applied in heavy traffic areas or on severely distressed pavements. Allow the product to dry completely before resuming traffic. Drying times are determined by the contractor based on temperature humidity and other factors.

SEAL MASTER LIQUID ROAD (LMHSS) SURFACE PREPARATION: CONTRACTOR shall be sure/prep that the pavement is free of loose and embedded dirt, dust, vegetation and other foreign material. If traditional cleaning methods are not effective a power washer or tack coat of asphalt emulsion diluted 1:4 with water may be used. Structural repairs should be made and cracks 1/4" and larger CONTRACTOR shall seal with approved crack sealant material. All grease and oil spots should be treated with PrepSeal or PetroSeal.

SEAL MASTER LIQUID ROAD (LMHSS) APPLICATION: CONTRACTOR shall apply LIQUID ROAD according to Seal Master Specs. CONTRACTOR shall apply two coats at an application rate of .25 gallons - .35 gallons sq. yd. / per coat (.50 - .70 gallon per sq. yd. = total for 2 coats). Application rates may be adjusted depending on the pavement condition, traffic volume and other factors. Adjustments of application rates must be in writing by the CONTRACTOR and must be approved by the Town of Paradise Valley's Public Works Supervisor.

APPLICATION EQUIPMENT: Liquid Road shall be applied by mechanical squeegee/brush equipment. Equipment shall have continuous agitation or mixing capabilities to maintain homogenous consistency of Liquid Road and aggregate mixture throughout the application process. Truck mount or self-propelled squeegee/brush equipment shall have at least 2 squeegee or brush devices (one behind the other) to assure adequate distribution and penetration of Liquid Road into bituminous pavement. Hand squeegees and brushes shall be acceptable in areas where practicality prohibits the use of mechanized equipment.

MEASUREMENT and PAYMENT. Measurement and payment for Liquid Road shall be by the square yard, complete in place, including crack seal.

Liquid Road Ready to Use Specifications

TEST PROPERTIES		TEST METHOD	SPECIFICATION
EMULSION:			
Uniformity		ASTM D 2939.04	PASS
Weight/gallon @ 77 deg. F		ASTM D 2939.07	11.0 lbs./gal.min
Residue by Evaporation (Solids), %		ASTM D 2939.08	55% min.
Asphalt Content by Weight, %		ASTM D 2939.21	15% min.
VOC Content by Volume, %		ASTM D 244-89	< 3%
Fine Aggregate and Mineral Filler Content by Weight, %		Manufacture Certification	34% min.
Polymer Content by Volume, %		Manufacture Certification	1.8%
PERFORMANCE BASED TESTING:			
Resistance to Heat (No sagging or slipping observed.)		ASTM D 2939.14	PASS
Resistance to Water (No blistering or re-emulsification.)		ASTM D 2939.15	PASS
Wet Flow, mm		ASTM D 2939.19	0
Direct Flame Test (No continued combustion after 10 sec. No slippage, run down or charred material observed.)		ASTM D 2939.20	PASS
Wet Film Continuity (Material was uniformly distributed; no signs of inconsistency)		ASTM D 2939.22	PASS
Resistance to Kerosene (No leakage of kerosene, loss of adhesion or discoloration of tile.)		ASTM D 2939.25	PASS
Wet Track Abrasion Test (1 hr.) gms/sqft. loss		ASTM D 3910	< 15
Wet Track Abrasion Test (6 day) gms/sqft. loss		ASTM D 3910	< 20
AGGREGATE SIEVE ANALYSIS:			
SILICA SAND		FINE AGGREGATE	
Mesh Size	% PASSING (+ or -2)	Mesh Size	% PASSING (+ or -2)
16	99	40	100
20	86	50	93
30	58	70	80
40	26	80	69
50	4	120	49
70	1	200	55
100	0.2	325	2

CLEANING OF CRACKS – APPLYING SEALANT: CONTRACTOR shall seal all cracks with an average clear opening of ¼" or greater. All cracks with an average clear opening of ¼" or greater shall be sealed. All cracks with an average clear opening or less than ¼" shall not be sealed. Immediately prior to applying the sealant, the cracks shall be thoroughly cleaned of loose particles, dust, and other deleterious substances by means of using forced air (65 psi and greater) with a downward blast into the crack and a vacuum attachment to vacuum the debris released. The material shall be vacuumed and contained to prevent it from getting into the atmosphere. All cracks shall be cleaned to a depth of from ½" to 1". Contract Administrator/designee shall make the determination as to what work will be done under this contract.

Sealant shall be CRAFCO Polyflex Type 3 or approved equal. CONTRACTOR shall place sealant so as to completely fill the crack and form a lap of approximately 1" on each side. Thickness of the lap shall not exceed 1/16 inch. Immediately after the application, CONTRACTOR shall use a rubber squeegee or other acceptable means to force the material into the crack and for the lap. Blotter material (sand) may be required to prevent asphalt-rubber bleed and/or pickup of sealant by

vehicular traffic. CONTRACTOR shall install blotter material of a type acceptable to and at the direction of the Contract Administrator/designee (no cement powder shall be acceptable).

CRACK SEAL EQUIPMENT: The equipment used by CONTRACTOR in the application of the asphalt rubber material shall have a mixing system in the material vat in order to maintain a consistent, uniform, homogeneous mixture throughout the crack sealing operation. The unit shall heat the asphalt rubber material by means of an indirect heat transfer median for adequate material temperature control. The equipment shall provide a continuous supply so that operations may proceed without delays. CONTRACTOR shall apply the material under pressure with a hose and wand assembly. The Contract Administrator/designee prior to use shall approve any equipment designated for use by CONTRACTOR.

Measurement and Payment. Measurement and payment shall be by the lineal foot of cracks sealed complete in place in accordance with the project.

MICRO SEAL APPLICATION (RUBBERIZED):

This project shall be constructed in accordance with this special provision of the contract MAG specifications modified here in as follows except where modified in the special provision of the Contract Agreements;

331.1 GENERAL: The work covered by this specification consists of furnishing all labor, equipment, and materials for the application of a "quick traffic solid/polymer microsurface." This specification covers the equipment and construction procedures for rut filling and/or resurfacing of existing paved surfaces. The microsurface shall be a mixture of cationic polymer modified asphalt emulsion, mineral aggregates, mineral filler, water and other additives properly proportioned, mixed and spread on the pavement surface.

331.2 MATERIALS: The CONTRACTOR shall supply all materials necessary for the performance of the work in accordance with the specifications. The asphalt emulsion, aggregate, and mineral filler shall be as specified in Section 714. Materials shall be approved by the Engineer prior to the start of construction. Certificates of Compliance shall accompany each delivery of emulsion. The CONTRACTOR shall be responsible for the safety of all materials of which he has taken delivery until they are in place on the road, and shall take all necessary precautions to avoid loss by fire or theft, or damage by water, and shall bear the cost of replacing any such material that is lost, spilt, destroyed or damaged after delivery.

331.3 PROPORTIONING: The microsurface shall be proportioned in accordance with the mix design. Calibrated sign flowmeters shall be provided to measure both the addition of water and additives to the pugmill. Emulsion and cement flow shall be tied directly to aggregate flow. All additive flows shall be calibrated.

Add the following to MAG subsection 331.3

The quantities of emulsified asphalt and dry mineral aggregate for Type II and Type III micro surfacing shall be estimated using the information in table 1. Exact quantities of emulsified asphalt and dry mineral aggregate shall be determined by mix design, or as directed by the Engineer. The amount of aggregate placed during construction can vary between 18 to 22 pounds per square yards for Type II and between 24 and 32 pounds per square yards for Type III depending on the surface condition of the pavement to be treated. The amount of emulsified asphalt shall be between 12.5%-13% by weight of the dry mineral aggregate for Type II and between 11%-12% by weight of the dry mineral aggregate for Type III. Target quantities for the amount dry mineral aggregates and emulsified asphalt shall be as shown in table 1 below.

TABLE 1- Target Quantities for Mineral Aggregate and Emulsified		
Material	Type II	Type III
	Microsurfacing	Microsurfacing
Emulsified Asphalt, by weight of Dry Mineral Aggregate, percent	13	12
Dry Mineral Aggregate, pounds per square yard	20	28

331.3.1 Performance: The microsurface mixture shall be proportioned per the mix design to ensure: (A) Traffic ability - the material will permit controlled traffic without damage to the surface within thirty (30) minutes and uncontrolled traffic without damage within sixty (60) minutes, per Section 331.4.2.2. (B) Prevent development of bleeding, raveling, separation or other distress for seven (7) days after placing the microsurface.

Add the following to subsection 331.30;

Any material placed in the pavement exhibiting bleeding, raveling, separation or other distress within seven (7) days after placing the microsurface shall be removed by grinding and resurfaced at no additional cost to the Town of Paradise Valley.

331.4 MIX DESIGN:

331.4.1 General: The CONTRACTOR shall provide a job mix formula from an approved laboratory and present certified test results for the Town's approval. Compatibility of the aggregate and polymer modified emulsion shall be certified by the emulsion manufacturer. All the materials used in the job mix formula shall be representative of the materials proposed by the Contractor for use in the project.

331.4.1.2: All the products used in the construction shall have certifications from the suppliers and they shall be given to the Public Works Supervisor upon delivery to the project.

331.4.1.3: Mix design and proportioning will be approved by the Town prior to the start of the project.

331.4.2.1: The Town shall approve the mix design prior to use. After the mix design has been approved, no material substitution will be permitted unless approved by the Town. The specification limits are as follows to conform to the requirements of Table 2.

TABLE 2		
PROPERTY	TEST METHOD	REQUIREMENT
Residual Asphalt Content	ASTMD 2172	6.0%- 11.5%, by weight of dry aggregate
Mineral Filler	ASTM C136	0.1%-2.0%, by weight of dry aggregate
Additive	----	As required for mix properties
Water	----	As required for mix properties
Polymer Content/Type	----	4%min

Mix Time @ 77° F	ISSA TB-113	Controllable to 120 seconds minimum
Wet Track Abrasion Loss, (1hour soak)	ISSA TB-100	50 g/ft ² maximum
Wet Track Abrasion Loss, (6 day	ISSA TB-100	75 g/ft ² maximum
Wet Stripping	ISSA TB-114	90% minimum
Wet Cohesion, @ 30 minutes minimum (Set)	ISSA TB-139	12 Kg/em minimum
Consistency	(ISSA T-106)	2.5 to 3.0 em
Wet Cohesion, @ 60 minutes minimum (Traffic)	ISSA TB-139	20 Kg/em minimum
Loaded Wheel Sand Adhesion	ISSA TB-109	50 g/ft ² maximum
Lateral Displacement	ISSA TB-147	5% maximum
Specific Gravity after 1,000 cycles of 125 lb.	ISSA TB-147	2.10 maximum

EQUIPMENT PER MAG SPECS (section 331.6.1 thru 331.6.6.3):

331.6.1 General: All equipment, tools and machines used in the performance of this work shall be maintained in satisfactory working condition at all times to ensure a high quality product.

331.6.2 Mixing Equipment: The mixing machine shall be a self-propelled or truck mounted mixing machine which shall be able to accurately deliver and proportion the aggregate, mineral filler, water, additive, and polymer-modified asphalt emulsion to a revolving multi-blade mixer capable of minimum speeds of 200 RPM and discharge the product on a continual flow basis. The machine shall have sufficient storage capacity for aggregate, polymer modified asphalt emulsion, mineral filler, water, and additive to maintain an adequate supply to the proportioning controls.

331.6.3 Material Control:

331.6.3.1 Calibration: Each mixing unit to be used in the performance of the work shall be calibrated prior to construction. Calibration data, if done within the calendar year, using the same material, may be used, providing a verification of the aggregate feed agrees. Individual volume or weight controls for proportioning each material to be added to the mix shall be provided, and shall be accessible to the Engineer. Each material control device shall be calibrated prior to work and documented for inspection by the Town.

331.6.3.2 Aggregate Feed: The aggregate feed to the mixer shall be equipped with a revolution counter or similar device so the amount of aggregate used may be determined at any time.

331.6.3.3 Emulsion Pump: The emulsion pump shall be the positive displacement type with a jacketed housing for uniform heating. A revolution counter or similar device shall be fitted so that the amount of emulsion used may be determined at any time.

331.6.3.4 Fines Feeder: An approved fines feeder is required that will provide a uniform, positive, accurately metered range of 0 to 1 percent by dry aggregate weight. The fines feeder shall have a counter so the amount of mineral filler can be determined at any time.

331.6.3.5 Liquid Additive: The mixing machine shall be equipped with a liquid additive system that provides a pre-determined amount of additive to the mixing chamber. This additive system must be equipped with a counter that can determine the amount used at any time.

331.6.3.6 Water System: The mixing machine shall be equipped with a water system that provides a pre-determined amount of water to the mixing chamber. This water system must be equipped with a counter that can determine the amount used at any time.

331.6.4 Operator Controls: Controls will allow the operator to sequence and proportion the material per the mix design.

331.6.5 Spray Bars: The mixing machine shall be equipped with a water pressure system that provides a water spray immediately ahead of and outside the spreader box.

331.6.6 Spreading Equipment:

331.6.6.1: The paving mixture shall be spread uniformly by means of mechanical type laydown box attached to the mixer, equipped with agitation, to spread the materials throughout the box without any dead zones. The paddles shall be designed and operated so all the fresh mix will be agitated. Flexible seals, front and rear, shall be in contact with the road surface to prevent loss of mixture from the box. The spreader box shall be equipped with hydraulic cylinders for controlling the thickness of the spread mixture.

331.6.6.2: The rut filling spreader box shall have 6 to 8 skids to provide for leveling and filling uneven depressed areas. Two adjustable steel strike-off plates are required. The rear flexible seal shall act a final strike-off and shall be adjustable. The steel strike-offs shall be controlled by hydraulic cylinders placed at the rear of the spreader box.

331.6.6.3: The spreading equipment shall be maintained free from build-up of the mixture on the paddles or side walls. Skips, lumps, or tears will not be allowed in the finished product

331.7 APPLICATION:

331.7.1 General: The microsurface shall be of the desired consistency when deposited in the spreader box and nothing more shall be added to it. The mixing time shall be sufficient to produce a complete and uniform coating of the aggregate and the mixture shall be chuted into the moving spreader box at a sufficient rate to maintain an ample supply across the full width of the strike-off squeegee at all times.

331.7.2 Weather: Microsurfacing shall not be placed if either the pavement or air temperature is below 50 degrees F and falling, but may be applied if both the air and pavement temperature are at least 45 degrees F and rising, and it is not raining.

331.7.3 Protection of Existing Surfaces: The Contractor shall take all necessary precautions to prevent microsurface or other material used from entering or adhering to gratings, hydrants, valve boxes, manhole covers, bridge or culvert decks, and other road fixtures. Immediately after resurfacing, the Contractor shall clean off any such material and leave any grating, manholes, etc. in a satisfactory condition.

331.7.4 Fogging Pavement: The surface shall be pre-wetted by Fogging ahead of the spreader box. The rate should be adjusted as dictated by the pavement temperature, surface texture, humidity, and dryness of existing pavement.

331.7.5 Mix Stability: The mix shall possess sufficient stability so that premature breaking of material in the spreader box does not occur. The mixture shall be homogeneous during mixing and spreading; it shall be free of excess water or emulsion, and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

331.7.6 Application Rate: The application rates, pounds per square yard of mix specified, are average rates; the surface texture variation throughout the work will dictate the actual spreading

rates. The strike-off squeegee shall be adjusted to provide a microsurface thickness which will completely fill the surface voids and provide an additional thickness not exceeding one and one-half times the largest top-size stone. The requirement of 1-1/2 stone depth does not apply to rut filling operations as these depths vary greatly according to the surface irregularities.

331.7.7 Joints: No excessive build-up or unsightly appearance shall be permitted on longitudinal or transverse joints. A maximum of 4.0" overlap will be permitted on longitudinal joints. The Contractor shall provide suitable width spreading equipment to produce a minimum number of longitudinal joints throughout the work. Half passes and odd width passes will be used in minimal amounts. If half passes are used, they cannot be the last pass on any area. Care shall be taken to ensure straight lines along curbs and shoulders. No runoff will be permitted on these areas. Construction joints shall be neat in appearance and shall be tapered or feathered to conform to the existing surface. All excess material shall be removed from the surface upon completion of each run.

331.7.8 Handwork: Approved squeegees and lutes shall be used to spread the mixture in areas inaccessible to the spreader box and in other areas where hand spreading may be required.

331.7.9 Protection of the Microsurface: Adequate means shall be provided by the CONTRACTOR to protect the uncured product. Any damage done to the product shall be repaired at the CONTRACTOR'S expense.

331.7.10 Damage to the Microsurface: The Contractor's responsibility to replace microsurface damaged by unexpected rain after spreading shall be limited to the period within four (4) hours of placement of the microsurface.

331.8 PAYMENT: The micro-surfacing shall be paid for by the weight of the aggregate and weight of emulsified asphalt, as shown on certified weight tickets from the supplies delivered to the project, less weigh backs. The price shall be full compensation for furnishing, mixing and applying all materials; and for all labor, equipment, tools, design tests, and incidentals necessary to complete the job as specified herein.

Storage and Transport: The CONTRACTOR shall transport and store the emulsified asphalt in non-leaking tanks. It will be the CONTRACTOR'S sole responsibility to find storage/staging areas. At the storage staging area, the CONTRACTOR shall use Best Management Practices which minimize leaks or spills. The Town of Paradise Valley will not be held responsible for any leaks or spills at storage/staging areas or cleaning up.

**EXHIBIT C
PRICING**

Item	Est. Annual Quantity	Unit	Unit Price (Taxes Included)	Extended Price
1½" Asphalt Concrete Pavement (COP LV)	124,500	SY	5 ⁵⁵	690,975 ⁰⁰
1½" Rubberized Asphalt Concrete Pavement HV (contingency item)	20,000	SY	7 ³⁰	146,000 ⁰⁰
Asphalt Milling 1½" (full width mill)	124,500	SY	1 ⁰⁰	124,500 ⁰⁰
Crack Sealing ¼ inch gap or higher	34,600	LBS	1 ¹⁵	39,790 ⁰⁰
Polymer Modified Masterseal (PMM)	132,900	SY	0 ⁸²	108,978 ⁰⁰
Micro Seal (Rubber)	15,000	SY	2 ⁸⁰	42,000 ⁰⁰
Masterseal Liquid Road (LMHSS) (Square Yard)	65,500	SY	1 ⁷⁰	111,350 ⁰⁰
Manhole Adjustments (Black concrete)	55	EA	415 ⁰⁰	22,825 ⁰⁰
Hand Valve Adjustments (Black concrete)	35	EA	390 ⁰⁰	13,650 ⁰⁰
Adjust Survey Monuments & Brass Caps (Black Concrete)	60	EA	180 ⁰⁰	10,800 ⁰⁰
Concrete Flat Work (ADA Ramp Updates)	10	EA	2,600 ⁰⁰	26,000 ⁰⁰
4" White Paint -Temporary Striping	3,000	LF	0 ¹⁵	450 ⁰⁰
4" White Thermo Striping	3,000	LF	0 ⁴⁰	1,200 ⁰⁰
6" White Paint -Temporary Striping	2,500	LF	0 ²⁵	625 ⁰⁰
6" White Thermo Striping	2,500	LF	0 ⁵⁵	1,375 ⁰⁰
8" White Paint -Temporary Striping	200	LF	0 ²⁵	50 ⁰⁰

8" White Thermo Striping	200	LF	0 ⁷⁵	150 ⁰⁰
12" White Paint (cross walks) - Temporary	300	LF	0 ⁵⁵	165 ⁰⁰
12" White Thermo (cross walks)	300	LF	1 ⁷⁵	525 ⁰⁰
18" White Paint (Stop Bars) - Temporary	100	LF	0 ⁸⁵	85 ⁰⁰
18" White Thermo (Stop Bars)	100	LF	2 ⁵⁰	250 ⁰⁰
Turn Arrows, Paint - Temporary	10	EA	50 ⁰⁰	500 ⁰⁰
Turn Arrows, Thermo	10	EA	115 ⁰⁰	1,150 ⁰⁰
6ft. Bike Lane Symbols	15	EA	205 ⁰⁰	3,075 ⁰⁰
White Raised Reflective Pavement Markers (RPM's)	100	EA	3 ⁵⁰	350 ⁰⁰
Yellow Raised Reflective Pavement Markers (RPM's)	100	EA	3 ⁵⁰	350 ⁰⁰
Blue Fire Hydrant Reflectors	25	EA	6 ⁰⁰	150 ⁰⁰
Loop Detectors	1	EA	1,782 ⁰⁰	1,782 ⁰⁰
Speed Humps (Includes striping pattern per MAG Traffic Engineering Specs)	4	EA	2,700 ⁰⁰	10,800 ⁰⁰
Project Signs	6	EA	500 ⁰⁰	3,000 ⁰⁰
Traffic Control & Barricading	1	Per Day	4,500 ⁰⁰	4,500 ⁰⁰
Uniformed Paradise Valley Police Officer (Traffic Control)	8	Hours	75 ⁰⁰	600 ⁰⁰
			Total Cost (Taxes Included)	1,368,000 ⁰⁰

EXHIBIT D1

COPY

BID BOND

ARIZONA STATUTORY BID BOND PURSUANT TO TITLES 28, 34 AND 41.
OF THE ARIZONA REVISED STATUTES

(Penalty of this bond must not be less than 10% of the bid amount)

KNOW ALL MEN BY THESE PRESENTS: That, M.R. Tanner Development and Construction, Inc.
dba M.R. Tanner Construction, (hereinafter Principal), as
Principal, and
Liberty Mutual Insurance Company, (hereinafter "Surety"), a corporation
organized and existing under the laws of the State of MA, with its principal offices in
Boston, holding a certificate of authority to transact surety business in Arizona issued
by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as
Surety, held and firmly bound unto Town of Paradise
Valley, (hereinafter "Obligee"), as Obligee, in the
amount of Ten Percent (10%) of the amount of the bid of Principal, submitted by Principal to the
Obligee for the work described below, for the payment of which sum, the Principal and the Surety
bind themselves, and their heirs, executors, administrators, successors and assigns, jointly and
severally, firmly by these presents.

WHEREAS, the said Principal has submitted a bid for:

Street Replacement & Asphalt Mill & Inlay - Various Locations; Contract No. CON-18-0012-PBW

NOW, THEREFORE, if the Obligee accepts the proposal of the Principal and the Principal shall
enter into a contract with the Obligee in accordance with the terms of the proposal and give the bonds
and certificates of insurance as specified in the Standard Specifications with good and sufficient surety for
the faithful performance of the contract and for the prompt payment of labor and materials furnished in the
prosecution of the contract, or in the event of the failure of the Principal to enter into the contract and give
the bonds and certificates of insurance, if the Principal pays to the Obligee the difference not to exceed
the penalty of the bond between the amount specified in the proposal and such larger amount for which
the Obligee may in good faith contract with another party to perform the work covered by the proposal
then this obligation is void. Otherwise to remain in full force and effect provided, however, that this bond is
executed pursuant to the provisions of Section 34-201, Arizona Revised Statutes, and all liabilities on this
bond shall be determined in accordance with the provisions of that section to the extent as if it were copied
at length herein.

Witness our hands this 4th day of January, 2018.

M.R. Tanner Development and Construction, Inc.
dba M.R. Tanner Construction

Principal

By: 

Liberty Mutual Insurance Company

SEAL

SURETY

By: 

David G. Jensen, Attorney-In-Fact

SEAL

Willis of Arizona, Inc.

AGENCY OF RECORD

Its: PRESIDENT

16220 N. Scottsdale Road, Suite #600
Scottsdale, AZ 85254
AGENCY ADDRESS

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named here and they have no authority to bind the Company except in the manner and to the extent herein stated.
Certificate No. 7831888

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company West American Insurance Company

COPY

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Brandy L. Baich; David G. Jensen; Erin Brown; James A. Bracy; Kristin D. Thurber; Terry Crull

all of the city of Scottsdale, state of AZ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 10th day of July, 2017.



STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

On this 10th day of July, 2017, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 4th day of JANUARY, 2018.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

To confirm the validity of this Power of Attorney call
1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

EXHIBIT D1

BID BOND

ARIZONA STATUTORY BID BOND PURSUANT TO TITLES 28, 34 AND 41.
OF THE ARIZONA REVISED STATUTES

(Penalty of this bond must not be less than 10% of the bid amount)

KNOW ALL MEN BY THESE PRESENTS: That, _____, (hereinafter Principal), as Principal, and _____, (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____, with its principal offices in _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, held and firmly bound unto _____, (hereinafter "Obligee"), as Obligee, in the amount of Ten Percent (10%) of the amount of the bid of Principal, submitted by Principal to the Obligee for the work described below, for the payment of which sum, the Principal and the Surety bind themselves, and their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said Principal has submitted a bid for:

Street Replacement & Asphalt Mill & Inlay - Various Locations; Contract No. CON-18-0012-PBW

NOW, THEREFORE, if the Obligee accepts the proposal of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of the proposal and give the bonds and certificates of insurance as specified in the Standard Specifications with good and sufficient surety for the faithful performance of the contract and for the prompt payment of labor and materials furnished in the prosecution of the contract, or in the event of the failure of the Principal to enter into the contract and give the bonds and certificates of insurance, if the Principal pays to the Obligee the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by the proposal then this obligation is void. Otherwise to remain in full force and effect provided, however, that this bond is executed pursuant to the provisions of Section 34-201, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of that section to the extent as if it were copied at length herein.

Witness our hands this _____ day of _____, 2018.

Principal

SEAL SURETY

By: _____
Attorney-in-Fact

By: _____

SEAL

Its: _____

AGENCY OF RECORD

AGENCY ADDRESS

**EXHIBIT D2
PERFORMANCE BOND**

STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34, CHAPTER 2, ARTICLE 2,
OF THE ARIZONA REVISED STATUTES

(Penalty of this bond must be 100% of the Bond amount)

KNOW ALL MEN BY THESE PRESENTS: That, _____ (hereinafter called the Principal), as Principal, and _____ a corporation organized and existing under the law of the State of _____ with its principal office in the Town of _____, (hereinafter called the Surety), as Surety, are held and firmly bound unto the Town of Paradise Valley, County of Maricopa, State of Arizona, in the amount of _____ Dollars (\$ _____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Town of Paradise Valley, Dated the _____ day of _____, _____, for **Street Replacement & Asphalt Mill & Inlay - Various Locations; Contract No. CON-18-0012-PBW**, which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform and fulfill all the undertakings, covenants terms, conditions, and agreements of said contract during the original term of said Contract and any extensions thereof, with or without notice to the Surety, and during the life of any warranty required under the contract, and shall also perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of conditions of said Contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; then the above obligations shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2 of the Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of said Title, Chapter and Article, to the extent as if it were copied at length herein.

The prevailing party in a suit on this bond shall be entitled to such reasonable attorney's fees as may be fixed by a judge of the Court.

Witness our hands this _____ day of _____, 2018.

PRINCIPAL

SEAL

AGENT OF RECORD

BY

SURETY

SEAL

AGENT ADDRESS

EXHIBIT D3

PAYMENT BOND

ARIZONA STATUTORY PAYMENT BOND
PURSUANT TO TITLES 28, 34, AND 41, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Contract amount)

KNOW ALL MEN BY THESE PRESENTS:

THAT: _____ (hereinafter "Principal"), as Principal, and _____ (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto the Town of Paradise Valley, (hereinafter "Obligee") County of Maricopa, State of Arizona, in the amount of _____ Dollars (\$ _____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Town of Paradise Valley, dated the _____ day of _____, 20____, for Street Replacement & Asphalt & Mill Inlay - Various Locations; Agreement No. CON-18-0012-PBW, which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all moneys due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in said contract, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2 Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 2018.

PRINCIPAL SEAL

AGENT OF RECORD

BY _____

AGENT ADDRESS

SURETY SEAL

EXHIBIT E

CONSTRUCTION SIGN DETAIL

TYPICAL PROJECT IDENTIFICATION SIGN FOR GENERAL PROJECTS SHALL BE REFLECTORIZED ORANGE BACKGROUND, AND REFLECTORIZED BLACK LETTERS AND NUMERALS.

TYPICAL SIGNS ARE 3' X 5'. SIGN VERBIAGE AND SPECIFICATIONS SHALL BE APPROVED BY THE TOWN PRIOR TO INSTALLATION.

ELECTRONIC MESSAGE BOARDS ARE REQUIRED 30 DAYS PRIOR TO PROJECT COMMENCEMENT FOR MAJOR AND MINOR ARTERIALS. DEPENDING ON THE PROJECT, BETWEEN TWO AND SIX MAY BE REQUIRED.

EXHIBIT F1
Contractor's Equipment
(To be used on Agreement No. CON-18-0012-PBW)

PAVER

BOOT TRUCK

MECHANICAL BROOM

STEEL WHEEL POWERS

SPREADER TRUCK

GRADE TRACTOR

LOADER (AS NEEDED)

PNEUMATIC ROLLER

MILLING MACHINE

SKID STEER MILLING MACHINE

MAJOR SUPPLIERS LIST

[illegible]