

2016 REQUEST FOR PROPOSAL

RANDOM CRACK SEALING FOR BITUMINOUS PAVEMENTS

RANDOM CRACK SEALING OF BITUMINOUS CONCRETE PAVEMENT

DESCRIPTION:

WORK UNDER THIS SECTION OF THE SPECIFICATION CONSISTS OF FURNISHING ALL EQUIPMENT, LABOR, AND MATERIALS REQUIRED TO PERFORM ALL OPERATIONS IN CONNECTION WITH THE RESHAPING, CLEANING, DRYING, AND SEALING OF ALL RANDOM, CONSTRUCTION AND THERMAL CRACKS IN A BITUMINOUS CONCRETE PAVEMENT. THE REMOVAL OF ALL VEGETATION, GRASS, DIRT AND DEBRIS AND THE PREPARATION OF THE CRACKS, AS REQUIRED BY THE FIELD CONDITIONS AND THE ENGINEER, SHALL BE PERFORMED PRIOR TO THE SEALING OF THE CRACKS IN THE BITUMINOUS CONCRETE.

MATERIALS:

MATERIALS SHALL MEET THE REQUIREMENTS OF NHDOT STANDARD SPECIFICATION SECTION 413.

EQUIPMENT:

EQUIPMENT USED IN THE PERFORMANCE OF THIS WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER AND MAINTAINED IN A SATISFACTORY WORKING CONDITION AT ALL TIMES.

AIR COMPRESSOR: AIR COMPRESSORS SHALL BE PORTABLE AND CAPABLE OF FURNISHING NO LESS THAN 100 CUBIC FEET OF AIR PER MINUTE AT NOT LESS THAN 90 LBS. PER SQUARE INCH PRESSURE AT THE NOZZLE. THE COMPRESSOR SHALL BE EQUIPPED WITH TRAPS THAT WILL MAINTAIN THE COMPRESSED AIR FREE OF OIL AND WATER.

HOT-AIR LANCE: HOT-AIR LANCES FOR BLOWING CLEAN AND DRYING CRACKS SHALL BE AN APPROVED PROPANE GAS BURNER AND COMPRESSED AIR DEVICE THAT DOES NOT ALLOW THE FLAME TO TOUCH THE PAVEMENT.

PAVEMENT CUTTER: THE PAVEMENT CUTTER (ROUTER) SHALL HAVE A SET OF (6) STAR-SHAPED CARBIDE-TIPPED CUTTERS RADIALLY MOUNTED AROUND A FLYWHEEL, HELD IN PLACE ON HARDENED STEEL PINS. THE CUTTERS SHOULD BE ADJUSTABLE BY RE-ARRANGEMENT OF HOLDING SPACERS TO ACHIEVE A MAXIMUM CUT WIDTH OF TWO INCHES (2") AND A MINIMUM CUT OF THREE-EIGHTHS (3/8"). THE PAVEMENT CUTTER SHALL BE SHARP AND CAPABLE OF CUTTING WITH EASE AT ALL TIMES. A MINIMUM TWENTY (20) H.P. ENGINE SHALL POWER THIS UNIT.

MELTING KETTLE: THE UNIT USED TO MELT THE JOINT SEALING COMPOUND SHALL BE A DOUBLE BOILER, INDIRECT FIRED TYPE KETTLE. THE SPACE BETWEEN THE INNER AND OUTER SHELLS FILLED WITH OIL OR OTHER HEAT TRANSFER MEDIUM HAVING A FLASH POINT OF NOT LESS THAN 530 DEGREES F. THE KETTLE SHALL INCLUDE POSITIVE TEMPERATURE CONTROLS, AUTOMATIC AND CONTINUOUS MECHANICAL AGITATION, RECIRCULATING PUMPS AND THERMOMETERS FOR CONTINUOUS TEMPERATURE READING OF THE SEALING COMPOUND AND THE HEAT TRANSFER MEDIUM. THE KETTLE SHALL BE EQUIPPED WITH A THERMOSTAT TO MAINTAIN THE SEALING COMPOUND WITHIN THE RANGE OF TEMPERATURES SPECIFIED BY THE MANUFACTURER.

APPLICATION WAND: THE APPLICATION SHALL BE ATTACHED TO THE KETTLE WITH A HEAT RESISTANT HOSE EQUIPPED WITH A SHUT-OFF VALVE CAPABLE OF COMPLETELY STOPPING THE FLOW OF MATERIAL BETWEEN CRACKS. THE MATERIAL SHALL NOT BE ALLOWED TO SIT IDLE IN THE WAND FOR A PERIOD GREATER THAN THIRTY (30) SECONDS. SHOULD THE DELAY BE GREATER THAN THIRTY (30) SECONDS, THE MATERIAL IN THE WAND SHALL BE RECIRCULATED INTO THE KETTLE TO ENSURE PROPER TEMPERATURE OF THE SEALANT AT THE TIME OF APPLICATION. THE APPLICATION WAND SHALL BE EQUIPPED WITH A SHOE, WHICH WILL ALLOW MATERIAL TO FILL THE CRACKS FROM THE BOTTOM UP, AND TO LEAVE AN OVERBAND ON THE SURFACE. THE OVERBAND SHALL BE KEPT TO A MINIMUM WHEREVER POSSIBLE.

PREPARATION:

THE MAJOR RANDOM, TRANSVERSE, AND LONGITUDINAL JOINTS AND CRACKS 1/8" AND WIDER SHALL BE WIDENED TO A DIMENSION OF 3/4" WIDE WITH A DEPTH OF 5/8" BY USE OF A PAVEMENT CUTTER. CRACKS GREATER THAN 3/4" WIDE SHALL BE TREATED BUT NOT ROUTED. ALL CRACKS ARE TO BE CLEANED OF ALL DIRT, MOISTURE, FOREIGN MATERIAL AND LOOSE EDGES BY USE OF A HOT-AIR LANCE. TWO PAVEMENT CUTTERS (ROUTERS) SHALL BE ON SITE DURING THE SEALING PROCESS IN CASE OF MECHANICAL FAILURE. SEALANT SHALL BE APPLIED OVER A PREVIOUSLY SEALED CRACK IF THE PRIOR SEALANT IS FAILED. THE CRACK MUST BE PROPERLY CLEANED AND PREPARED PRIOR TO PLACEMENT OF NEW SEALANT. ROUTER BITS WILL BE MAINTAINED TO ENSURE THAT RECTANGULAR DIMENSIONS ARE ACHIEVED AND SURFACE OF PAVEMENT IS NOT UNNECESSARILY CHEWED UP OR DAMAGED DURING ROUTING PROCESS. A ROUNDED SHAPE WILL NOT BE ALLOWED.

NO HOT-AIR LANCE OR CRACK SEALING SHALL BE PERFORMED WHEN THE PAVEMENT AND CRACKS ARE WET OR THE AMBIENT TEMPERATURE IS BELOW 50°F.

APPLICATION:

SEALER SHALL BE DELIVERED TO THE PAVEMENT SURFACE WITH A PRESSURE HOSE LINE AND APPLICATOR SHOE AT THE TEMPERATURE SPECIFIED BY THE MANUFACTURER. OVER-BAND OF SEALER MAY NOT BE WIDER THAN THREE (3) INCHES. A SEPARATING AGENT (AS RECOMMENDED BY THE MANUFACTURER) SHALL BE APPLIED ONLY AS NECESSARY TO PREVENT TRACKING OF SEALANT (I.E. INTERSECTIONS AND DRIVEWAYS). WATER SHALL NOT BE USED TO COOL DOWN CRACKS. SEALANT IS NOT TO BE APPLIED OVER EXISTING SEALANT UNLESS THE EXISTING SEALANT IS NO LONGER SOUND AND THE CRACK HAS BEEN PREPARED TO RECEIVE THE SEALANT. SEE ATTACHED EXAMPLES OF CRACK SEALING IN GOFFSTOWN.

TEMPERATURES SHALL BE RECORDED EVERY HOUR IN A LOG DURING APPLICATION. ANY MATERIAL LEFT IN THE KETTLE AT THE END OF THE DAY CANNOT BE REHEATED AND REUSED THE FOLLOWING DAY.

TRAFFIC CONTROL:

THE TRAFFIC CONTROL SHALL BE IN STRICT ADHERENCE TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) TO ENSURE THE SAFETY OF THE CREW, AND TRAVELING PUBLIC. THE SETUP SHALL INCLUDE BUT NOT BE LIMITED TO ROAD SIGNS, SAFETY VESTS, AND FLAGGERS WHERE NECESSARY AND TRAFFIC CONES.

CRACK SEALING EXAMPLES:

BELOW ARE SIX EXAMPLES OF CRACK SEALING IN THE TOWN OF GOFFSTOWN. THE THREE EXAMPLES ON THE TOP ARE ACCEPTABLE CRACK TYPES TO SEAL ON ROADS IN GOOD/FAIR CONDITION. THE THREE EXAMPLES ON THE BOTTOM ARE UNACCEPTABLE METHODS FOR CRACK SEALING FOR TWO REASONS – (1) SEAL HAS BEEN APPLIED IN A GRID PATTERN AND NOT IN A ROUTED OUT CRACK AND (2) THESE ROADS ARE CLEARLY IN POOR/FAILING CONDITION AND DAMAGED TO THE POINT THAT SEALING IS NOT THE PROPER MAINTENANCE OPTION. ALSO, EDGE CRACKS LESS THAN 1 FOOT FROM THE EDGE OF PAVEMENT DO NOT NEED TO BE SEALED. ANY CRACKS FURTHER IN THAN 1 FOOT SHOULD BE SEALED PROPERLY. THE TOWN WILL NOT PAY FOR CRACK SEALING COMPLETED LIKE THE EXAMPLES ON THE BOTTOM. IF YOU HAVE ANY QUESTIONS ABOUT ANY ROAD IN TOWN, PLEASE CONTACT DPW AT 497-3617 BEFORE APPLYING CRACK SEAL.

ACCEPTABLE CRACK SEALING METHODS:



UNACCEPTABLE CRACK SEALING METHODS:



MEASUREMENT AND PAYMENT:

MEASUREMENT SHALL BE IN ACCORDANCE WITH THE DIMENSIONS PROVIDED IN THE ATTACHED LIST WHICH ARE THE MEASURED DIMENSIONS IN OUR MICROPAVER DATABASE. PAYMENT WILL BE BY THE SQUARE YARD OF PAVEMENT TREATED. THE NUMBER OF CRACKS IN EACH SECTION OF ROADWAY VARIES SO VENDORS ARE ENCOURAGED TO SURVEY THE ROADS BEFORE SUBMITTING BIDS.

TOWN OF GOFFSTOWN--BID SPECIFICATION SCHEDULE RANDOM CRACK SEALING SERVICES-BITUMINOUS CONCRETE PAVEMENT

THE TOWN OF GOFFSTOWN IS REQUESTING PRICING INFORMATION AND AVAILABILITY ON THE PURCHASE OF RANDOM CRACK SEALING SERVICES FOR BITUMINOUS CONCRETE PAVEMENT AT LOCATIONS THROUGHOUT THE TOWN AS SPECIFIED BY THE PUBLIC WORKS DEPARTMENT. THE LIST OF ROADS AND A MAP TO BE COMPLETED IS ATTACHED. ALL BIDS MUST BE RECEIVED IN A SEALED ENVELOPE, CLEARLY MARKED WITH THE WORDS **“2016 CRACK SEALING BID”** NO LATER THAN **1:00 PM** ON **JULY 29, 2016**. BIDS WILL BE OPENED AND PUBLICLY READ AT THAT TIME. ANY QUESTIONS SHOULD BE DIRECTED TO ADAM JACOBS, DIRECTOR OF PUBLIC WORKS, AT 603-497-3617, EXT. 210 MONDAY THRU FRIDAY, BETWEEN 7:00 AM AND 3:30 PM. ALL WORK UNDER THIS CONTRACT MUST BE COMPLETED BY SEPTEMBER 30, 2016 AND BE DONE TO THE SPECIFICATIONS ATTACHED.

BID RESPONSE MUST BE BASED ON ALL LABOR AND MATERIALS PER ATTACHED SPECIFICATIONS.

\$_____ PER SQ YD OF SEALED ROADWAY

_____ PRODUCT TO BE USED AS SEALANT

ANTICIPATED DELIVERY DATE: _____

WARRANTY/GUARANTEE _____

SUBMITTED BY _____

SIGNATURE _____ TITLE _____

TELEPHONE # _____

FAX # _____

DATE: _____

ANY DEVIATION FROM THE ABOVE STATED SPECIFICATIONS MUST BE SO NOTED AND ANY BID PRICES MUST BE REFLECTIVE OF THESE DEVIATIONS. THE FOB IS ALWAYS TO BE GOFFSTOWN UNLESS OTHERWISE STATED BY THE BIDDER. AN FOB POINT OTHER THAN THE TOWN OF GOFFSTOWN MUST BE SO STIPULATED BY THE BIDDER.

LEGAL NOTICE

THE TOWN OF GOFFSTOWN
DEPARTMENT OF PUBLIC WORKS IS
REQUESTING BID PROPOSALS FOR RANDOM
CRACK SEALING OF VARIOUS ROADS TO BE
DETERMINED BY THE DIRECTOR OF PUBLIC
WORKS. COPIES OF THE BID
DOCUMENTS/SPECIFICATIONS MAY BE
OBTAINED ON THE TOWN'S WEBSITE AT
WWW.GOFFSTOWN.COM. ALL PROPOSALS
MUST BE SUBMITTED IN A SEALED
ENVELOPE, CLEARLY MARKED ON THE
OUTSIDE WITH THE WORDS "2016 CRACK
SEALING BID" AND RECEIVED BY **1:00 P.M.**
ON **JULY 29, 2016** AT THE TOWN OFFICES,
16 MAIN STREET, GOFFSTOWN, NH 03045.
BIDS WILL BE OPENED AND PUBLICLY READ.

**THE TOWN OF GOFFSTOWN RESERVES THE
RIGHT TO ACCEPT OR REJECT ANY AND ALL
BIDS AS WELL AS WAIVE ANY
INFORMALITIES WHICH ARE IN THE BEST
INTEREST OF THE TOWN.**

ADAM JACOBS,
DIRECTOR OF PUBLIC WORKS