

**PROJECT: Asphalt Resurfacing/ Repair at US Embassy Baguio Compound**  
**S I T E: U.S. Embassy Baguio Compound**

# S P E C I F I C A T I O N S

## B.1 DESCRIPTION OF WORK

B.1.1 The contractor shall provide all materials, labor, transportation, tools, equipment and skilled workers, including a competent English speaking on-site supervisor, to perform and satisfactorily accomplish the **Asphalt Resurfacing/ Repair of Roads (PHASE 3 & 4), approximately 2,567.85 m<sup>2</sup> located at the U.S. Embassy Baguio Compound**, in accordance with this specifications and accompanying technical drawing/s. Measurement and conditions at the work site must be verified by the Contractor.

B.1.2 The scope of work shall include the following:

- a. Repair of Potholes
- b. Resurfacing of Existing Pavement
- c. Repair of concrete curbs, gutters and road signs
- d. Site Cleaning
- e. Painting

## B.2 TECHNICAL PROVISION

### B.2.1 REPAIR OF POTHoles AND PAVEMENT DEFECTS

- a. Patch-up and repair all defective pavement and potholes by excavating rectangular patches, extending 12 inches (300 mm) into adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Re-compact existing unbound aggregate base coarse to form new sub-grade compact.
- b. As shown in the drawing or as directed by the COR or his delegated inspector, affected tree roots shall be removed. Grab tree roots that are two (2) inches or larger in diameter, at least two feet below the finished sub-grade line. Holes that are deeper than the sub-grade level shall be filled with material that is capable to form a suitable fill.

- c. After the area to be patched has been properly prepared - with edges trimmed and correct prime and tack coats applied, the hole shall be filled with asphalt bituminous concrete. The quantity of material to be placed in the patch should be sufficient to ensure that the patched surface, after compaction, is level with the adjacent surface.
- d. When the base course or sub-grade is found defective or loose, the subgrade shall be replaced with a 3" thick crushed base coarse tamped with mechanical compactor to 95% compaction. After the base course has been repaired, apply priming coat of emulsified asphalt. The side of the hole should be tack- coated with emulsified asphalt to ensure bond between the existing and the patch mix (asphalt bituminous concrete). Asphalt primer and tack coat should be applied twenty four (24) hours before filling with the required volume of asphalt bituminous concrete.
- e. When the base of the cut asphalt has been disturbed, item B.2.1 should be followed.
- f. Periodic compaction test of sub-base will be performed, if needed, depending upon the discretion of COR.
- g. For areas where grass grows, the contractor should apply herbicide treatment on the surface prior to application of bituminous tack coat.

#### B.2.2 RESURFACING/OVERLAY OF PAVEMENT

- a. All defective areas and potholes shall be repaired prior to any pavement preparation or a level coarse application. After repair work has been completed, the surface shall be swept clean until it is free of all dirt, sand mud, dust, loose and foreign materials. This will condition and prepare the surface for the application of the tack coat prior to resurfacing.
- b. Tack coat shall be applied on all asphalt-paved surfaces and repaired areas before resurfacing is performed. Tack coat shall be emulsified asphalt cold mix (two gallons of pure water per 55 gallon drum of pure emulsified asphalt). Tack coat shall be applied with a self-powered pressure distribution only. No application shall be made when weather is foggy or rainy. Tack coat shall be evenly

applied at the rate of 1-1/2 liters per square yard of surface area. The surfaces of structures, trees and plants adjacent to the area being treated shall be protected to prevent splatter. Attention shall be taken that the application at junction spreads is not in excess of the specified amount. Any excess coat application shall be removed from the surface.

- c. Grade of low areas shall be adjusted for efficient drainage as directed by COTR. All affected manholes and covers shall be raised or lowered before resurfacing work is started.
- d. Leveling Course: A coarse (asphalt aggregate mixture) of variable thickness shall be applied first to eliminate irregularities in the contour of existing surface.
- e. Bituminous Resurfacing: The asphalt overlay or resurfacing coarse shall be plant hot mixed asphalt bituminous concrete spread over the prepared existing paved area to be resurfaced (thickness and cross section per accompanying drawing). The plant hot mixed bituminous surface course shall be composed of " coarse mineral aggregate", " fine aggregate", mineral filler and bituminous material conforming to the specifications for bituminous concrete surfaces by the Philippine Standard specifications for highways and bridges, latest edition. Asphalt laying temperature should not be less than 107°C. Surface course shall follow existing line and cross section of the asphalt paving except in low areas which has to adjusted as directed by COR. It shall be spread by asphalt paver to the required amount, depth and cross section.
- f. Traffic shall be kept off the tack coat at all times. The tack coat shall be sprayed only so far in advance on the surface course as will permit it to dry to a tacky condition. The Contractor shall maintain the tack coat until the next course has been placed. Any area that has become fouled, by traffic or otherwise, shall be cleaned and re-sprayed as the Contractor's expense before the next course is applied.
- g. After resurfacing is done, initial rolling should be done by a tandem roller followed by pneumatic roller. Use pneumatic roller not less than 10 tons in weight immediately after spreading and smoothing while bituminous binder is still warm and shall continue until the pavement is thoroughly compacted and bonded. Rolling shall progress gradually from the sides to the center line of the roadway

and lapping uniformly each preceding rear wheel track by one half of the width and shall continue until the aggregate does not creep or displace ahead of the roller. While the surface is being compacted and finished, the edge shall be neatly trimmed to line.

B.2.3 REPAINTING OF PARKING LINES, DIRECTIONAL TRAFFIC LINES, ROAD CURBS AND ROAD SIGNS

- a. The Contractor shall paint traffic lines, road curbs, parking stall lines and road signs with traffic paint whose spacing, width and color are at the discretion of the COR.
- b. Surfaces should be smooth and clean prior to painting. The brand for the reflective traffic paint must be approved by the COR.

B.3 QUALITY CONTROL

B.3.1 The Contractor shall guarantee all materials and workmanship for one year reckoned from the date of final acceptance.

B.3.2 Samples of materials shall be presented to COR for inspection and approval before application. This is mandatory.

B.3.3 All damages inflicted on the existing surrounding structures and property resulting from the performance of this project must be repaired or restored to its original condition at the Contractor's expense.

B.3.4 All work shall be done in favorable weather conditions.

B.3.5 RESERVED

B.4 RESERVED

B.5 SECURITY

B.5.1 The Contractor shall submit to the COR for approval of the Security Office a complete list of personnel who will work on the project and their Vehicle plate numbers, seven (7) days prior to the start of the project.

B.6 PROHIBITIONS

B.6.1 Smoking is strictly prohibited at the work site. A smoking area will be assigned.

B.6.2 Contractor's personnel are to use only proper toilet facilities. No urinating on walls, grass and other areas. Violators shall be permanently removed from the compound.

B.7 GOVERNMENT-FURNISHED PROPERTIES AND SERVICES

B.7.1 Electric power and water required for this project shall be supplied by the U.S. Embassy. The Contractor is responsible for all connections and extensions from the source to the work area.

B.7.2 The project shall be monitored and inspected by the COR (Contracting Officer's Representative) and/or his assigned project inspector upon whose approval of the work will be accepted.

B.8 CONTRACTOR FURNISHED ITEMS

B.8.1 The contractor shall furnish all materials required, tools and special equipment to perform Item B.1.2.

B.8.2 RESERVED

B.9 RESERVED

B.10 CLEANING TASK

B.10.1 The Contractor shall continuously, during the progress of work, remove and dispose of dirt and debris and keep the work area clean, neat and orderly and in such order as to prevent safety hazards. Before end of each day's work, debris shall be collected from the job-site and placed in pre-designated external area for disposal.

B.10.2 Domestic rubbish containers on the premises shall not be utilized by the Contractor for storage or disposal of construction debris.

B.10.3 Should the Contractor default in the performance of the construction debris removal and it becomes necessary for the Embassy to remove the same. The Contractor shall pay charges at the rate of two times the actual expense incurred by the Embassy.

B.11 SAFETY

B.11.1 The project safety, in all respects, is the sole responsibility of the

Contractor.

- B.11.2 The Contractor shall comply with the U.S. OSHA Occupational Health and Safety Administration) and Local Safety and Health Requirements, and shall assume full responsibility and liability for compliance with all other applicable standards and regulations pertaining to accident prevention, life, health, and safety of personnel, as well as preventing damage to materials, supplies, and equipment. The Contractor will hold the Government and its agents harmless for any action, errors, or omission on his part, his employees, or his subcontractors that result in illness, injury or death.
- B.11.3 The Contractor shall provide employees with, and require the use of safety equipment, personal protective equipment and devices necessary for protection.
- B.11.4 The Contractor is responsible for all injuries to his workers. The Embassy's Medical Unit shall not be used by the Contractor's personnel.