## DOTD SPECIFICATION FOR ON-SITE CONCRETE CRUSHING Dated 10/12/2023

Contractor will crush/recycle an existing concrete stockpile at the Willow Glenn Storage Facility. The pile contains approximately 10,000 cubic yards of material. Contractor is to crush broken concrete revetment to a crushed size of 1 ½ inches or smaller and remove any steel material; all labor may be performed on-site on DOTD Property. The DOTD portion of crushed concrete material will be stockpiled and remain on site excluding filtered steel. Crushed concrete that exceeds the maximum 1 ½ " size (discharged in tailing piles) can be reprocessed until the size is achieved or remain on the DOTD storage yard. The quantity of oversized crushed concrete left at the DOTD facility will not be included in the retained percentage of Recycled Concrete Material (RCM) for DOTD.

Payment for recycled concrete material will be determined on a percentage retained quantity for the contractor and DOTD. The contractor's retained RCM percentage shall include the cost for all labor, equipment and incidentals necessary to complete all items and provisions in the contract. The cost of mobilization to and from the site is to be included in this item. The contractor shall form trapezoidal shaped stockpiles with the finished RCM product, for facilitation of volume calculations.

## **RECOMMENDED JOB SITE VISIT**

The quantity of the concrete stockpile is only an estimated quantity. The contractor will be responsible for determining quantities of material at the Willow Glenn storage facility for bidding purposes. The contractor is to visit the site with a DOTD representative at the time of the visit. The Project Engineer or designated representative will be available to visit the site prior to bid opening date with a 1-day notice. If contractor does not visit site and it is determined the quantity is larger or less than the estimated quantity, contractor is obligated to fulfill the services regardless of quantity.

## MATERIAL PROCESSING REQUIREMENTS

## **Crushing and Screening**

Following the initial crushing of concrete rubble in a jaw crusher or equal equipment and removal of any steel by magnetic separation, RCM must be crushed and screened to the following desired gradation using conventional aggregate processing equipment.

Particle Size U.S. (Metric) Sieve Size	Percent Passing By Weight (Mass)
1 <sup>1</sup> / <sub>2</sub> inches (37.5 mm)	95-100
<sup>3</sup> / <sub>4</sub> inch (19.0 mm)	40 - 85
No. 4 (4.75 mm)	0-15

All crushing operations shall be conducted in a safe manner. These items are to include the cost to provide adequate measures to protect the traveling public from dust and flying debris. The Contractor shall exercise caution at all times for the protection of persons and property. Safety provisions shall be strictly observed. It is required that the Contractor keep the necessary protective guards and protective devices at locations where work is being performed to prevent injury to the public or damage to public or private property. The contractor is also responsible to obtain all necessary air quality permits and to comply with all DEQ permitting requirements. Contractor shall be responsible for all liability and retain insurance meeting the attached insurance requirements.

The Contractor agrees to furnish and pay all necessary expenses for all labor, tools and equipment in connection with the on-site concrete crushing operation. The Contractor is responsible for providing, maintaining and transporting all necessary equipment, fuel, labor and water for use in connection with this contract. All other tools and supplies necessary for performing work required by this contract will be provided by the Contractor.

The contractor shall provide the following equipment (OR EQUAL): A portable jaw type rock-crushing machine with a minimum 24" x 30" Jaw size As well as any powered conveyor belts, screens or other material moving apparatus that may be required.

A magnet capable of removing miscellaneous steel and iron from the material being processed.

An excavator and a front end loader as needed to feed the crushing machine, move materials and stockpile the finished recycled concrete material product.

The contractor will be required to complete all concrete crushing and stockpiling operations within by June 30, 2024.

The contractor will have until June 30, 2024 to remove their portion of recycled crushed concrete and all property and equipment from the Willow Glenn Storage Facility. Any crushed recycled material designated to be retained by the contractor that remains at the DOTD facility after the removal period will become the property of DOTD. The contractor will be responsible for all maintenance, repairs and security of equipment while on DOTD property. DOTD will not secure, protect or insure contractor equipment on DOTD property.



