# SECTION 01505 - CONSTRUCTION WASTE MANAGEMENT

## PART 1 GENERAL

### 1.1 DESCRIPTION OF WORK

A. This Section describes the construction waste management and recycling goals and includes administrative and procedural requirements for the development and execution of a construction waste management plan.

### 1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

### 1.3 SUMMARY

A. This Section describes construction waste management and recycling goals and includes administrative and procedural requirements for the development and execution of a construction waste management plan.

B. Waste management shall be the responsibility of the Contractor for General Construction. All Prime Contractors shall cooperate with the Contractor for General Construction in support of the construction waste management plan.

C. Related Sections include the following:

1. Section 01573 "Indoor Environmental Control" for administrative procedures to achieve environmental goals for the Work.
2. Division 1 Section 01510 "Temporary Facilities and Controls" requirements for installation, maintenance and removal of temporary utilities, controls, and facilities during construction.
3. Section 01320 “Construction Progress Documentation.”
4. **Division 2 Section 02050 “Site Demolition” requirements for salvage and recycling of demolition debris.**

### 1.4 CONSTRUCTION WASTE MANAGEMENT GOALS

A. The College has established that this Project shall generate the least amount of waste possible and that processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors shall, be employed.

B. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized.

C. Diversion Goal: A minimum 75% of total project waste shall be diverted from the landfill.

D. With regard to these goals all Prime Contractors shall develop a coordinated Waste Management Plan for this Project for the Design Professional's review.

1.5 SUBMITTALS

A. Coordinated Construction Waste Management Plan.

B. Periodic and final summary report of waste materials recycled, salvaged and landfilled.

C. Weight tickets for all waste materials removed from the site during demolition and construction.

1.6 CONSTRUCTION WASTE MANAGEMENT PLAN

A. Draft Waste Management Plan: Prior to the Pre-Construction Conference, or prior to any waste removal, whichever occurs sooner, the Prime Contractors shall meet with the Construction Manager and the Design Professional to discuss preparation of a Draft Waste Management Plan. The Draft Plan shall contain the following:

1. Analysis of the proposed jobsite waste to be generated. Include the types of material to be generated and estimated quantity of each material (in tons).

2. Landfill options: Estimated cost of disposing of all project waste in transfer station(s)/landfill(s), name of transfer station(s)/landfill(s) where Project waste would normally be disposed of and tipping fees. Estimated cost of transportation and other relevant costs and fees.

3. Alternatives to Landfilling: A list of each material proposed to be salvaged or recycled during the course of the Project. The list of these materials is to include, at a minimum, the following materials:
   a. Concrete
   b. Asphalt
   c. Bricks
   d. Concrete Masonry Units (CMU)
   e. Landclearing debris
   f. Clean dimensional wood
   g. Plywood, OSB, and particle board
   h. Cardboard
   i. Paper
   j. Metals
   k. Gypsum Wallboard
   l. Carpet
   m. Paint
   n. Plastic
   o. Glass
   p. Rigid foam insulation
   q. Beverage Containers

4. Material Handling Procedures: A description of the means by which any waste materials identified in item (3) above will be protected from contamination, and a description of the means to be employed in recycling the above materials consistent with requirements for acceptance by designated facilities.

5. Transportation: A description of the means of transportation of the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site) and destination of materials. The final destination must be approved by College designated representative(s).

6. Source Reduction: List processes that minimize waste such as working with suppliers to take back or buy back substandard, rejected or unused items and to deliver supplies using returnable pallets and containers. Also include procedures to minimize breakage, mishandling, contamination, and other factors that reduce job site waste.

7. Meetings: Contractor for General Construction shall conduct regular Construction Waste Management meetings. Meetings shall include all Prime Contractors, subcontractors affected by the Waste Management Plan as well as College designated representative(s). At a minimum, waste management goals and issues shall be discussed at the following meetings: pre-bid meeting, pre-construction meeting, and regularly scheduled job-site meetings.

8. Indicate any instance where compliance with requirements of this specification does not appear to be possible and request resolution from the College and Design Professional.

B. Resource for Development and Implementation of Waste Management Plan: The following resource can be used in developing and implementing the Draft Waste Management Plan:

1. Philadelphia Office of Recycling: Commercial Recycling Handbook. Or call 215-686-5586.

C. Waste Management Plan Review Meeting: Once the Construction Manager and the Design Professional have reviewed the Draft Waste Management Plan and prior to any waste removal at the site, schedule and conduct a follow-up meeting agreed upon during the meeting identified in item 1.5 A. The purpose of the meeting is to review the Draft Waste Management Plan and discuss procedures, schedules and specific requirements for waste materials recycling and disposal. Discuss coordination and interface between the Contractor and other construction activities. Identify and resolve potential compliance problems with requirements. Record minutes of the meeting, identifying all conclusions reached and matters requiring further resolution.

1. Attendees: The Prime Contractors and related Contractor personnel associated with the work of this section, including personnel to be in charge of the waste management program, the Construction Manager, Design Professional, the

College and such additional personnel as the Construction Manager or College deem appropriate.

D. Final Construction Waste Management Plan: Make any revisions to the Draft Waste Management Plan agreed upon during the meeting identified in item 1.5 C above and incorporate resolutions agreed to be made subsequent to the meeting. Submit the revised plan to the Construction Manager and Design Professional for approval within 10 calendar days of the meeting.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION

3.1 IMPLEMENTATION OF CONSTRUCTION WASTE MANAGEMENT PLAN

A. Manager: The Prime Contractors shall designate an on-site party (or parties) responsible for instructing workers and overseeing and documenting results of the Waste Management Plan for the Project.

B. Distribution: The Prime Contractors shall distribute copies of the Waste Management Plan to the Job Site Foreman, each Subcontractor, the Construction Manager, the College, and the Design Professional.

C. Instruction: The Prime Contractors shall provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the Project.

D. Separation facilities: The Contractor for General Construction shall lay out and label a specific area to facilitate separation of materials for potential recycling, salvage, reuse, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid contamination of materials.

E. Hazardous Waste: Hazardous wastes shall be separated, stored, and disposed of according to local, state and federal regulations.

F. Application for Progress Payments: The Contractor of General Contractor shall submit with each Application for Progress Payment a Summary of Waste Generated by the Project. Failure to submit this information shall render the Application for Payment incomplete and shall delay Progress Payment. The Summary shall be submitted on a form acceptable to the College and shall contain the following information:

1. The amount of waste (in tons) landfilled from the Project, the identity of the transfer station/landfill, the total amount of tipping fees paid at the landfill, the transportation cost, and the total disposal cost. Include manifests, weight tickets, receipts, and invoices.
2. For each material recycled, reused, or salvaged from the Project, the amount (in tons), the date removed from the jobsite, the receiving party, the transportation

cost, the amount of any money paid or received for the recycled or salvaged material, and the net total cost or savings of salvage or recycling each material. Attach manifests, weight tickets, receipts, and invoices.

G. At the end of the project the Contractor for General Construction shall submit a Final Waste Management Report. The Report shall be submitted on a form acceptable to the Construction Manager and Design Professional and shall contain the following information:

1. The total amount of waste landfilled from the Project, the identity of the transfer station/landfill, the total amount of tipping fees paid at the landfill, the transportation cost, and the total disposal cost.

2. The total amount (in tons) of each material recycled, reused, or salvaged from the Project, the receiving party, and net cost savings or additional costs resulting from separating and recycling (versus landfilling) each material. The total amount of all materials recycled in tons and the total net cost savings or additional costs.

3. The total percentage of material recycled in tons.

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