

## Tascon, Augusto

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**From:** Tascon, Augusto  
**Sent:** Friday, May 31, 2013 9:05 AM  
**To:** 'craig@alper-enterprises.com'; 'savvas1@optonline.net'; 'roof@rminj.com'; 'matt@danolt.com'; 'info@nerm-inc.com'  
**Cc:** Arrighi, Dean (Dean.Arrighi@njdmava.state.nj.us); Flatt, John; Lauritzen, Chris  
**Subject:** PB120 Roof Repairs Sea Girt NJ  
**Attachments:** a. Scope of Work Sea Girt Bldgs (7, 15, 37, 60, 94, 95).docx; b. Bldg 7 Asbestos Containing Roof Repairs.doc; c. Bldg 7 Asbestos Report.pdf; d. Agency Request for Proposal PB120.pdf; e. Construction Waste Mngmnt 01749.pdf; f. Roof Damage Pics.docx

Prospective bidders,

Please see attached documents to include the Scope of Work for The Roof Repairs project at The New Jersey National Guard Training Center in Sea Girt, NJ. Please respond to this email if you plan to attend the mandatory Pre-Bid/Site meeting scheduled for **Tuesday, June 11, 2013 at 10:00 AM in Building 7**. Bids shall be received No Later Than **4:00 PM on Friday, June 21, 2013**.

Very Respectfully,

1LT Augusto J. Tascon  
Project Manager  
Construction Management Bureau, CFMO

NJ Department of Military & Veterans Affairs  
101 Eggerts Crossing Rd  
Lawrenceville, NJ 08648  
609.530.6903 (v)

# SCOPE OF WORK

## SANDY STORM-RELATED ROOF AND SIDING REPAIRS SEA GIRT BUILDINGS (7, 15, 37, 60, 94, 95)

### FOR NEW JERSEY DEPARTMENT OF MILITARY & VETERANS AFFAIRS NATIONAL GUARD TRAINING CENTER Sea Girt, NJ 08750

#### GENERAL

1. Super Storm Sandy damaged many of the buildings located on the National Guard Training Center in Sea Girt, NJ and these are in need of repair.
  - A. The existing roof in Bldg. 7 is a bitumen roof membrane and the leak over the conference is to be located and repaired. This roof has asbestos containing materials, refer to Section 07080 for removal procedures.
  - B. Several leaks are found in Bldg. 15. Repair copula on Bldg. 15 and seal to prevent roof leaks. Repair roof at the corner of the entrance to prevent further leaks.
  - C. Damaged sections of fascia and ridge are to be replaced on Bldg. 37. Missing downspout with all accessories is to be installed.
  - D. Damaged end cap on the coping of Bldg. 60. Repair damaged flashing on rear of the building. Missing snow guards, on front of the building, and on rear of the building over the doors, are to be replaced.
  - E. Damaged sections of fascia are to be replaced on Bldg. 94. Missing fascia cladding is to be installed on the same building.
  - F. Missing and damaged vinyl siding along with missing or damaged shingles are to be replaced on Bldg. 95. Missing downspout with all accessories is to be installed. Gutter is to be replaced on Bldg. 95.
  
2. SEA GIRT ROOF AND SIDING REPAIRS
  - A. Place associated work areas out of service, and/or make necessary arrangements, and post signs notifying building occupants throughout duration of project.
  - B. Remove and dispose (in conformance with Section 01749-Construction Waste Management, attached) of all roofing waste materials. Clean and prepare surface and new construction material for installation. Provide any missing insulation necessary.
  - C. Inspect new roofing materials for cracks, bends, and/or wear. Clean and prepare affected areas. Use bonding adhesive, seam sealant, slicing tape, splicing sealant and lap sealant compatible to existing and new membrane.
  - D. Repair/patch/paint to match existing roofing or siding disturbed or damaged due to roof repairs.
  - E. Replace/reposition/restore to existing operation any equipment, systems or materials that may

have been removed or disturbed in the course of the roof repair work, including but not limited to electric, heating, fire suppression, gas, venting, and unrelated materials.

F. The Contractor will pay for all permits required by the New Jersey Department of Community Affairs. The Contractor will be responsible to contact the Department of Community Affairs for all inspections.

G. CLOSE-OUT

1. Remove and clean job related debris. Leave work areas and all existing equipment clean and in good operating condition.
2. Provide One Year Workmanship Warranty.
3. Provide DMAVA a copy of all plans, permit applications, correspondence, inspector's reports, and as-builds.

3. The contractor's proposal shall include:

A. A cost proposal on company's letterhead for the bid items broken down both by individual buildings and a total cost. The proposal shall include all labor, material, equipment, permit fees, installation, disposal, cleanup, travel and closeout. Contractor shall be responsible to pay for all the fees, permits, inspections and licenses for all applicable inspecting agencies to carry out this work. In addition, bidders shall submit a completed Department of the Treasury, Agency Request for Proposal form ADMF-120.

B. PB-120, "Agency Request for Proposal" Form and all related documentation in the link: [http://www.state.nj.us/treasury/purchase/forms/DPA\\_Form\\_Packet.pdf](http://www.state.nj.us/treasury/purchase/forms/DPA_Form_Packet.pdf) the packet must be completed and returned along with the bid quote.

4. Bids shall be good for sixty (90) days. A **mandatory Pre-Bid Meeting** date is scheduled for **Tuesday, June 11, 2013, Building 7 at 10:00 AM.**
5. Proposals along with the PB120 and related paper work are due to NJDMAVA Project Officer 1LT Gus Tascon Tel: 609-530-6903, Fax: 609 530-6880, Email: [augusto.tascon@njdmava.state.nj.us](mailto:augusto.tascon@njdmava.state.nj.us) no later than **4:00 PM on Friday, June 21, 2013.** To save time please e-mail your proposal to the Project Officer.
6. There may be up to a 30 day delay in award to comply with NJ Executive Order 125.
7. Performance Period: No more than one hundred and twenty (120) calendar days from receipt of State Purchase Order.
8. This scope of work in conjunction with attached site photos, floor plans and applicable specifications are being provided to bidders as a courtesy. Bidders are responsible for becoming familiar with the existing site conditions and code requirements.

All correspondence and documents will be addressed to the building owner's representative, 1LT Gus Tascon, New Jersey Army National Guard, Department of Military & Veterans Affairs, Construction and Facility Management Office, Construction Management Bureau (CFM-CM), 101 Eggerts Crossing Road, Lawrenceville, NJ 08648-2987, (609) 530-6903.

# ***PRE-BID MEETING/SITE VISIT (Mandatory)***

## ***AGENDA***

**Project: Super Storm Sandy Related ROOF AND SIDING REPAIRS  
Buildings (7, 15, 37, 60, 94, & 95) National Guard Training Center Sea Girt, NJ**

**Meeting Time and Location: Tuesday, June 11, 2013, 10:00 AM Building 7**

**Attendance list: DPMC pre-qualified Contractors + CMB Project Managers**

1. Purpose of Pre-Bid/Site Visit:
  - a. Introductions.
  - b. Review Scope of Work.
  - c. Review timeline.
  - d. Perform a 'walk-through' as necessary and for questions
2. Introductions:
3. Summary of Scope of Work:

Super Storm Sandy damaged many of the buildings located on the National Guard Training Center in Sea Girt, NJ and these are in need of repair. Roof and siding damage has been identified in numerous buildings and is to be repaired. The existing roof in Bldg. 7 has asbestos containing materials, refer to Section 07080 for removal procedures.

4. Timeline: Mandatory Pre-bid meeting, Tuesday 11 June, 10:00 AM  
RFIs to be received NLT close of business Mon 17 June;  
RFI responses returned by close of business Wed, 19 June;  
Bid submission – NLT 4:00 PM, Fri. 21 June;  
Award and NTP – approximately 26 July;  
Pre-construction meeting – 14 days after NTP;  
Construction Time - 120 Calendar days starting after NTP;  
Completion Date - NTP plus construction time.
5. Q&A with CMB Project Managers:
6. Walk-Through, if necessary

**Contacts Super Storm Sandy Related ROOF AND SIDING REPAIRS  
Buildings (7, 15, 37, 60, 94, & 95) National Guard Training Center Sea Girt, NJ**

**Dean Arrighi - Construction Management Bureau (CMB) Chief**

Bus. phone: 609-530-7130  
Cell phone: 609-209-9951  
Fax number: 609-530-6880  
Email address: [dean.arrighi@njdmava.state.nj.us](mailto:dean.arrighi@njdmava.state.nj.us)

**Augusto Tascon – CMB Project Manager**

Bus. Phone: 609-530-6903  
Fax number: 609-530-6880  
Email address: [augusto.tascon@njdmava.state.nj.us](mailto:augusto.tascon@njdmava.state.nj.us)

**John Flatt - CMB Project Manager/Contracting Officer Representative**

Bus. phone: 609-530-6911  
Fax number: 609-530-6880  
Email address: [john.flatt@njdmava.state.nj.us](mailto:john.flatt@njdmava.state.nj.us)

**Robert Hill - CMB Construction Code Official**

Bus. phone: 609-530-7139  
Cell phone: 609-847-6311  
Fax number: 609-530-6880  
Email address: [robert.hill@njdmava.state.nj.us](mailto:robert.hill@njdmava.state.nj.us)

**Joseph Landree- National Guard Training Center**

Bus. Phone: 732-974-5962 /52  
Email address: [Joseph.Landree@njdmava.state.nj.us](mailto:Joseph.Landree@njdmava.state.nj.us)

## DIVISION 7 – THERMAL AND MOISTURE PROTECTION

### SECTION 07565 - PREPARATION FOR RE-ROOFING

#### PART 1 - GENERAL

##### 1.1 SCOPE OF WORK

- A. Removal and disposal of existing damaged and deteriorated roofing materials including but not limited to insulation, base flashings, curb flashings, sheet metal, wood work, vent stack flashings etc.
- B. Disconnection (mechanical/electrical), of roof top Hvac units jack/raise to accommodate new roofing on equipment pads. Reinstall Hvac units back at their respective locations including reconnection, restoration and resumption of Hvac function to original operation complete with all associated controls, devices and accessories. Perform this work in phases in order to keep the the facility operational. All work to be performed in a professional manner conforming to governing Codes and standards.
- C. Investigate and water test areas reported for leaks, to identify actual source of leak and make all preparatory arrangement for roof repair works.

##### 1.2 PRE-INSTALLATION CONFERENCE

- A. Review installation procedures and coordination required with related work.

##### 1.3 ENVIRONMENTAL REQUIREMENTS

- A. Do not remove existing roofing system or damaged decking when weather conditions threaten the integrity of the building contents or intended continued occupancy. Maintain continued temporary protection prior to installation of the new roofing system.

##### 1.4 PROTECTION

- A. It shall be the Contractor's responsibility to respond immediately to correction of roof leakage during construction. A four (4) hour time limit shall be given from the time of notification of emergency conditions. In the event of water penetration during rain or a storm, the Contractor shall provide for repair or protection of the building contents and interior. If the Contractor does not respond or cannot be contacted, the Owner will effect repairs or emergency action and the Contractor shall be back charged for all expenses and damages, if any.

##### 1.5 SCHEDULING

- A. Schedule work to coincide with commencement of installation of new roofing system.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Temporary protection: Sheet Polyethylene. Provide weights or fasteners to retain sheeting in position.
- B. Base Sheet: ASTM D-4601 Type II. Provide weights or fasteners to retain sheeting in position.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. The Roofing Contractor is to verify existing site conditions, including roof area and dimensions.
- B. The Roofing Contractor must verify that the existing roof surface is clear and ready for work of the section.
- C. Roof top units, stacks, roof drains, roof penetrations etc are shown to the best from all available sources. It is contractor`s responsibility to verify on site. Any item missed on drawing but exist on roof shall be included in the bid price, as no extra shall be considered later.

### 3.2 MATERIALS REMOVAL

- A. Remove all membrane, cant strips, rigid insulation, expansion joints, base flashings, and any other items shown on the drawings. In addition, complete removal of all nails and other debris is required to leave a smooth, even surface for re-roofing.
- B. Under certain conditions, it will be necessary and desirable to incorporate one or more of the following methods for removal of dirt, silt, gravel, debris, roof membrane and insulation from the roof surface in order to preserve the ecology, eliminate unsightly conditions, and protect the building surfaces:
  - 1. Enclosed chutes to dumpsters with protective shrouds on the building and ground surfaces.
- C. All debris dumped from the roof shall be transported from the roof via chutes into dumpsters or trucks and this debris shall be removed from the premises when

vehicles are full at the Contractors cost. No debris shall be transported from the area being worked on over a previously finished roof without an underlayment of 3/4" plywood.

- D. All roof equipment not in use or left filled will be parked on the column lines on 3/4" plywood.
- E. Building and/or ground damage caused by the removal or installation of the roof system will be the sole responsibility of the Contractor.
- F. All asbestos containing materials, if found to be present within the existing roof system, must be handled, removed and disposed of in accordance with all state and local mandates. The Contractor handling asbestos-containing materials must be qualified and familiar with all proper procedures involving the removal of asbestos materials.

### 3.3 TEMPORARY PROTECTION

- A. Provide temporary protective sheeting over uncovered deck surfaces.
- B. Turn sheeting up and over parapets and curbing. Retain sheeting in position with weights or temporary fasteners.
- C. Provide for surface drainage from sheeting to existing drainage facilities.
- D. Do not permit traffic over unprotected deck surface.

END OF SECTION



# **SANDY STORM-RELATED ROOF AND SIDING REPAIRS**

## **SEA GIRT BUILDING 7**

### **ASBESTOS-CONTAINING ROOFING MATERIAL REPAIR**

#### **PART 1 - GENERAL**

##### **1.1 RELATED DOCUMENTS**

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

##### **1.2 SCOPE**

- A. The work specified herein shall be the repair of asbestos-containing roofing materials by persons who are knowledgeable, qualified, licensed, and trained in the removal, treatment, handling, and disposal of asbestos-containing roofing material, and the subsequent cleaning of the affected environment. The Contractor shall have a Competent Person in control on the job site with authority to take prompt corrective measures at all times during roofing removal work. This person must comply with applicable Federal, State and Local regulations which mandate work practices, and be capable of performing the work of this contract.
- B. Deviations from this Specification require the written approval from the Owner.
- C. The asbestos-containing roofing materials shall be removed via non-friable methods as a Class II asbestos removal project.

##### **1.3 DESCRIPTION OF WORK**

- A. The Contractor shall supply all labor, materials, equipment, services, insurance (with specific coverage for asbestos), and incidentals which are necessary or required to perform the work in accordance with applicable governmental regulations and these specifications.
- B. The tar (8%) used in the built up roof, paper material (10%) on the curbing of the roof top units and other roof penetrations, and the mesh tape (5%) at the roof peaks have tested positive for asbestos. Although the shingle patch materials have tested negative for asbestos, they will be considered asbestos containing as they were tested with an older test method that's been superseded.
- C. The Contractor shall investigate the sources of water infiltration at the conference room and repair the exiting roof with torch down modified bitumen roof membrane as indicated on the drawings. Any repair work shall follow this asbestos containing roofing material repair SOW.
- D. The Contractor must provide temporary weather protection until the roof installation commences.

#### 1.4 DEFINITIONS

- A. AGENCY - The authoritative force, usually at the state level, or their representative.
- B. ASBESTOS-CONTAINING MATERIAL (ACM) - Any material containing more than one percent asbestos.
- C. CLASS II ASBESTOS WORK – In addition to the definition in 29 CFR 1926.32(b), the activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
- D. COMPETENT PERSON - In addition to the definition in 29 CFR 1926.32(f), one who is in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f), in addition, for Class II work who is specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR Part 763) for Supervisor, or its equivalent.
- E. HIGH-EFFICIENCY PARTICULATE AIR (HEPA) - A filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles 0.3 microns in diameter.
- F. LEAK-TIGHT - Solids or liquids cannot escape or spill out. It also means dust-tight.
- G. OWNER – The New Jersey Department of Military and Veteran's Affairs.
- H. REGULATED AREA - Area established by the Competent Person to demarcate areas where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the Permissible Exposure Limit.
- I. NON-FRIABLE REGULATED ASBESTOS -CONTAINING MATERIAL – Means any material containing more than 1 percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section I, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- J. REGULATED ASBESTOS -CONTAINING MATERIAL (RACM) – Means (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

#### 1.5 REFERENCES

- A. The current issue of each document shall govern. Where conflict among requirements or with these specifications exists, the more stringent requirements shall apply.
  - 1. Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101 - Asbestos

2. Environmental Protection Agency (EPA) 40 CFR 61, Subpart M - National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision; Final Rule. 40 CFR 763, Appendix C to Subpart E - Asbestos Model Accreditation Plan (MAP)

## 1.6 SUBMITTALS AND NOTICES

- A. Prior to commencement of asbestos abatement work, submit to the Owner and Construction Coordinator and receive approval and/or acknowledgment of following:
  1. State and Federal notifications (NJDOL, NJDOH and US EPA).
  2. Asbestos worker medical clearance to wear respirator documentation.
  3. Asbestos worker and Competent Person training documentation.
  4. Asbestos worker respiratory fit testing documentation.
- B. Within 7 days following the date the asbestos waste trailer leaves the job site, submit to The New Jersey Department of Military & Veterans Affairs.
  1. Waste shipment record for disposal of asbestos roofing materials; please include the name of the building on all disposal records.

## 1.7 PERSONNEL PROTECTION

- A. Provide and require all workers to wear protective clothing and half face respirators when present in the Regulated Area established by the Competent Person.

## 1.8 WORKER TRAINING REQUIREMENTS

- A. Training for the Competent Person, Supervisor, and Workers shall meet the requirements of Federal and State Regulations. The training shall include at a minimum all the elements included in paragraph 1926.1101(k)(9)(viii) and in addition, the specific work practices and engineering controls set forth in paragraph 1926.1101(g) which specifically relate to Class II work. Such course shall include "hands-on" training and shall take at least 8 hours.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Polyethylene sheeting and disposal bags shall be six (6) mil.
- B. Labels and signs shall conform to applicable regulations.

### 2.2 TOOLS AND EQUIPMENT

- A. Air monitoring equipment of the type and quantity required to monitor operations and conduct personnel exposure surveillance per OSHA requirements.

- B. Protective clothing, respirators, filter cartridges, air filters and sample filter cassettes shall be provided in sufficient quantities for the project.
- C. Waste Containers shall be lined with 2 layers of 6 mil polyethylene sheeting and 1 layer of polypropylene burlap.

## PART 3 - EXECUTION

### 3.1 PREPARATION OF WORK AREA

- A. Post warning signs meeting the specifications of OSHA 29 CFR 1910 and 29 CFR 1926.1101 at each Regulated Area. In addition, signs shall be posted at all approaches to Regulated Areas so that an employee may read the sign and take the necessary protective steps before entering the area.
- B. Prior to start of work, and as needed during the job, the Competent Person shall inspect the work site and determine whether the roofing material is non-friable asbestos containing material and will likely remain non-friable asbestos containing material during removal activities.
- C. Shut down and seal (with duct tape and 6-mil. poly sheeting) windows and roof level heating and ventilation air intakes that are in position to entrain dust or vapors from the roofing activities. Coordinate shut down of mechanical systems with facility maintenance personnel. Where intake shutdown is not feasible (as determined by facility maintenance personnel), supply and install horizontal or vertical extensions to relocate the opening of the air intake outside or above the regulated area so as not to entrain dust and vapor emissions from the roofing removal and re-roofing activity.

### 3.2 ASBESTOS-CONTAINING ROOFING MATERIAL REMOVAL

- A. All work shall be performed in accordance with OSHA Construction Industry Standard (29 CFR 1926.1101(g) (7) and (8)) and EPA NESPAP Standard (40 CFR 61) and applicable State of New Jersey regulations.
- B. A Competent Person shall be on the job at all times to ensure proper work practices throughout the project.
- C. The Contractor shall utilize methods which do not sand, grind, cut or abrade the Asbestos-Containing Roofing Material. Should roofing materials be identified as regulated asbestos-containing material, additional federal and state regulations will apply.
- D. Pick up or HEPA vacuum asbestos-containing roofing debris from non-intact roofs prior to removal of the roofing. Bag debris for disposal.
- E. Utilize wet methods to remove asbestos-containing roofing materials unless such wet methods are not feasible or will create safety hazards, as determined by the competent person, in writing.
- F. HEPA vacuum asbestos-containing dust and debris left after the removal of asbestos-containing roofing. Where asbestos-containing built-up roofing is removed, HEPA vacuum the roof decking following roofing removal. Bag dust and debris for disposal.

- G. When removing asbestos-containing shingles, cut the nails with flat, sharp instruments prior to removal. Do not intentionally cut, abrade, or break shingles or tiles during removal.
- H. Remove asbestos-containing flashings and associated cements or mastics using manual methods (such as axe, knife, or shovel). Do not sand, abrade or grind these materials.
- I. Asbestos-containing roofing material shall be carried or passed to the ground by hand or lowered to the ground by crane or hoist. Do not drop asbestos-containing roofing material to the ground or into the dumpster. Transfer lowered asbestos-containing roofing material to the leak tight disposal dumpster carefully so as not to disperse dust.

### 3.3 DISPOSAL OF ASBESTOS-CONTAINING ROOFING MATERIAL

- A. Disposal of asbestos-containing and/or asbestos contaminated material shall occur at an authorized site and must be in compliance with the requirements of, and authorized by the Office of Solid Waste Management, Department of Environmental Protection, or other designated agency having jurisdiction over solid waste disposal.
- B. Asbestos warning signs must be attached to containers used to transport asbestos-containing waste. Warning signs shall be posted during loading and unloading of disposal containers. The signs must be posted so that they are plainly visible.
- C. Label containers of asbestos-containing waste material or wrapped asbestos-containing waste material using warning labels specified by OSHA 29 CFR 1926.1101. Label asbestos-containing waste material destined for off-site transport with the name of the waste generator and the location where the waste was generated.

### 3.4 CONTRACTOR PERSONAL AIR MONITORING RESPONSIBILITY

- A. Conduct air sampling to assure that workers are using appropriate respiratory protection in accordance with OSHA Construction Industry Standard 1926.1101. Documentation of air sampling results must be recorded at the work site within twenty-four (24) hours and shall be available for review until the job is complete.
- B. Produce a written initial asbestos exposure assessment prior to starting asbestos roofing removal work in compliance with OSHA Standard 1926.1101. Keep the exposure assessment on site for review by all concerned parties.

END OF SECTION 07080



EMSL Analytical, Inc.

CHAIN OF CUSTODY

040424235  
Asbestos

NJDE50

EMSL Representative: Philip Loh

Your Company Name: NJ Dept. Military and Vets Affairs

EMSL-Bill to: Juanita Carwin

Street: 101 Eggert Crossing Rd

Box #: 390

City/State: Trenton NJ Zip 08625

Street: Same

Box #: Same

City/State: Zip:

Phone Results to: Name Bill McBride

Telephone #: 609 530 7136

Fax Results to: Name Bill McBride

Fax Number: 609 530 6880

Project Name/Number: Sea Girt

Bldg 7

Purchase Order #:

MATRIX

- Air
- Bulk
- Wipe
- Floor Tile
- Drinking Water
- Wastewater
- Soil
- Dust

TURNAROUND

- 6-10 Days
  - 5 Days
  - 72 Hours
  - 48 Hours
  - 24 Hour
  - 12 Hour
  - Same Day\*
  - 6 Hours
- \*S.D. - A.M. delivery by Fed. Ex. - Results by Mid-night or earlier

PCM

- NIOSH 7400
- OSHA
- Other:

TEMAIR

- AHERA
- NIOSH 1502
- Level I
- Level II

TEM WATER

- Wastewater
- Drinking Water EPA 100.1
- Water - NY Wastewater
- Water-NY Drinking Water

PLM

- EPA 600
- NOB
- Point Count
- Other:

TEM BULK

- Drop Mount (Qualitative)
- Chatfield
- Chatfield / SEM QC
- Conventional (Quantitative)
- EMSL Method
- NOB
- NOB / SEM QC
- Micro Vac - Quantitative
- Micro Vac - Qualitative

TEM WIPE

- Quantitative
- Qualitative

SEM

- Qualitative
- Quantitative

XRD

- Asbestos
- Silica

OTHER

- 

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL, INC.

RECEIVED  
EMSL  
WESTMONT, N.J.  
04 DEC -9 PM 3:52

Client Sample # (s) MAA - 5C1

Total Samples: 17

Relinquished: [Signature]

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received: [Signature]

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

NOTE: Please duplicate this form and use additional sheets if necessary.

WT



CHAIN OF CUSTODY

Your Company Name: NS Dept. Military and Vets. Affairs

Project Name/Number: \_\_\_\_\_

Purchase Order #: \_\_\_\_\_

SAMPLE NUMBER	LOCATION	VOLUME (If Applicable)
1A1	Roofing paper @ A/C unit skirt	
1B1	" " " " " "	
1C1	" " " " " "	
2A1	Roofing mesh tape @ roof peaks	
2B1	" " " " " "	
2C1	" " " " " "	
3A1	Roof tar	
3B	" "	
3C	" "	
3D	" "	
3E	" "	
4A1	Roof Patching tar @ asphaltic shingle patch	
4B1	" " " " " "	
4C1	" " " " " "	
5A1	Roof asphaltic shingle patch	
5B1	" " " " " "	
5C1	" " " " " "	

NOTE: Please duplicate this form and use additional sheets if necessary.

**EMSL Analytical, Inc.**

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: [ssiegel@EMSL.com](mailto:ssiegel@EMSL.com)



Attn: **Bill McBride**  
**NJ Dept. Of Military & Veterans Affairs**  
**101 Eggerts Crossing Road**  
**CN340**  
**Trenton, NJ 08648**

Fax: (609) 530-6880 Phone: (609) 530-7136  
 Project: **SEA GIRT BLDG 7**

Customer ID: NJDE50  
 Customer PO:  
 Received: 12/09/04 3:42 PM  
 EMSL Order: 040424235  
 EMSL Proj:  
 Analysis Date: 12/14/04  
 Report Date: 12/14/04

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy**

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1A1 040424235-0001	✓	Black Non-Fibrous Heterogeneous	10% Cellulose 2% Glass 3% Synthetic	75% Non-fibrous (other)	10% Chrysotile
1B1 040424235-0002	✓	Black Non-Fibrous Heterogeneous	10% Cellulose 2% Glass 3% Synthetic	75% Non-fibrous (other)	10% Chrysotile
1C1 040424235-0003	✓	Black Non-Fibrous Heterogeneous	10% Cellulose 2% Glass 3% Synthetic	75% Non-fibrous (other)	10% Chrysotile
2A1 040424235-0004	✓	Various Fibrous Heterogeneous	80% Glass	15% Non-fibrous (other)	5% Chrysotile
2B1 040424235-0005	✓	Various Fibrous Heterogeneous	80% Glass	15% Non-fibrous (other)	5% Chrysotile
2C1 040424235-0006	✓	Various Fibrous Heterogeneous	75% Glass	20% Non-fibrous (other)	5% Chrysotile
3A1 040424235-0007	✓	Black Non-Fibrous Heterogeneous	5% Cellulose 2% Glass	85% Non-fibrous (other)	8% Chrysotile

Analyst(s)  
 Caidong Shi (17)

*Stephen Siegel*  
 Stephen Siegel, CIH  
 or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872



**EMSL Analytical, Inc.**

407 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: [ssiegel@EMSL.com](mailto:ssiegel@EMSL.com)



Attn: **Bill McBride**  
**NJ Dept. Of Military & Veterans Affairs**  
**101 Eggerts Crossing Road**  
**CN340**  
**Trenton, NJ 08648**

Customer ID: NJDE50  
 Customer PO:  
 Received: 12/09/04 3:42 PM  
 EMSL Order: 040424235

Fax: (609) 530-6880 Phone: (609) 530-7136  
 Project: **SEA GIRT BLDG 7**

EMSL Proj:  
 Analysis Date: 12/14/04  
 Report Date: 12/14/04

**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy**

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
3B1 040424235-0008	✓	Black Non-Fibrous Heterogeneous	5% Cellulose 2% Glass	85% Non-fibrous (other)	8% Chrysotile
3C1 040424235-0009	✓	Black Non-Fibrous Heterogeneous	5% Cellulose 2% Glass	85% Non-fibrous (other)	8% Chrysotile
3D1 040424235-0010	✓	Black Non-Fibrous Heterogeneous	5% Cellulose 2% Glass	85% Non-fibrous (other)	8% Chrysotile
3E1 040424235-0011	✓	Black Non-Fibrous Heterogeneous	5% Cellulose 2% Glass	85% Non-fibrous (other)	8% Chrysotile
4A1 040424235-0012	✓	Black Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
4B1 040424235-0013	✓	Black Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
4C1 040424235-0014	✓	Black Non-Fibrous Heterogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected

Analyst(s)

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Stephen Siegel, CIH  
 or other approved signatory

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Analysis Date: 12/14/04  
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**Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy**

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
5A1 040424235-0015	✓	Various Non-Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (other)	None Detected
5B1 040424235-0016	✓	Various Non-Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (other)	None Detected
5C1 040424235-0017	✓	Various Non-Fibrous Heterogeneous	8% Cellulose	92% Non-fibrous (other)	None Detected

Analyst(s)

Caidong Shi (17)

Stephen Siegel, CIH  
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

## SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and DIVISION 01 Specification Sections, apply to this Section.

#### 1.02 SUMMARY

A. This Section includes administrative and procedural requirements for the following:

1. Salvaging nonhazardous demolition and construction waste.
2. Recycling nonhazardous demolition and construction waste.
3. Disposing of nonhazardous demolition and construction waste.

B. Related Sections include the following:

1. Environmental-protection measures during construction and location of waste containers at Project site.
2. Disposition of waste resulting from demolition of buildings, structures, and site improvements, and for disposition of hazardous waste.
3. Disposition of waste resulting from site clearing and removal of above and below grade improvements.
4. "Sustainable Design Requirements" for LEED requirements regarding Construction Waste Management and Disposal.

#### 1.02 REFERENCES:

1.03

A. Applicable Standards:

1. ASTM International: ASTM E 1609 – (2001) Development and Implementation of a Pollution Prevention Program.

#### B. DEFINITIONS

C. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging of products.

D. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.

E. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.

F. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

G. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.

H. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

#### 1.04 PERFORMANCE REQUIREMENTS:

A. General: Develop waste management plan that results in end-of-Project rates for salvage/recycling of 75 percent by weight of total waste generated by the Work. Threshold of

75% for salvage/recycling is a requirement and the second threshold of 75% for salvage/recycling is a goal that should be achieved.

B. Salvage/Recycle Requirements: Project's goal is to salvage and recycle as much nonhazardous demolition and construction waste as possible.

C. Salvage/Recycle Requirements: Project's goal is to salvage and recycle as much nonhazardous demolition and construction waste as possible. Owner has established minimum goals for the following materials:

1. Demolition Waste:

- a. Asphaltic concrete paving.
- b. Concrete.
- c. Concrete reinforcing steel.
- d. Brick.
- e. Concrete masonry units.
- f. Wood studs.
- g. Wood joists.
- h. Plywood and oriented strand board.
- i. Wood paneling.
- j. Wood trim.
- k. Structural and miscellaneous steel.
- l. Rough hardware.
- m. Roofing.
- n. Insulation.
- o. Doors and frames.
- p. Door hardware.
- q. Windows.
- r. Glazing.
- s. Metal studs.
- t. Gypsum board.
- u. Acoustical tile and panels.
- v. Carpet.
- w. Carpet pad.
- x. Demountable partitions.
- y. Equipment.
- z. Cabinets.
- aa. Plumbing fixtures.
- bb. Piping.
- cc. Supports and hangers.
- dd. Valves.
- ee. Sprinklers.
- ff. Mechanical equipment.
- gg. Refrigerants.
- hh. Electrical conduit.
- ii. Copper wiring.
- jj. Lighting fixtures.
- kk. Lamps.
- ll. Ballasts.
- mm. Electrical devices.
- nn. Switchgear and panelboards.

- oo. Transformers.
- 2. Construction Waste:
  - a. Site-clearing waste.
  - b. Masonry and CMU.
  - c. Lumber.
  - d. Wood sheet materials.
  - e. Wood trim.
  - f. Metals.
  - g. Roofing.
  - h. Insulation.
  - i. Carpet and pad.
  - j. Gypsum board.
  - k. Piping.
  - l. Electrical conduit.
  - m. Packaging: Regardless of salvage/recycle goal indicated above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
    - (1) Paper.
    - (2) Cardboard.
    - (3) Boxes.
    - (4) Plastic sheet and film.
    - (5) Polystyrene packaging.
    - (6) Wood crates.
    - (7) Plastic pails.

#### 1.05 SUBMITTALS

- A. Waste Management Plan: Submit 5 copies of plan within 15 days of date established for the Notice to Proceed and not less than 10 days before the preconstruction meeting.
- B. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit 5 copies of report. Include separate reports for demolition and construction waste. Include the following information:
  - 1. Material category.
  - 2. Generation point of waste.
  - 3. Total quantity of waste in tons.
  - 4. Quantity of waste salvaged, both estimated and actual in tons.
  - 5. Quantity of waste recycled, both estimated and actual in tons.
  - 6. Total quantity of waste recovered (salvaged plus recycled) in tons.
  - 7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- C. Waste Reduction Calculations: Before request for Substantial Completion, submit 5 copies of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- D. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- E. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- F. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- G. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

## H. Qualification Data: For Waste Management Coordinator

### 1.06 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Waste Management Conference: Conduct conference at Project site to comply with requirements in DIVISION 01 SECTION "Project Meetings, Schedules and Reports." Review methods and procedures related to waste management including, but not limited to, the following:

1. Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
2. Review requirements for documenting quantities of each type of waste and its disposition.
3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
5. Review waste management requirements for each trade.

### 1.07 WASTE MANAGEMENT PLAN REQUIREMENTS:

A. General: Develop plan consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Include separate sections in plan for demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.

B. Name of individuals on the Contractor's staff responsible for waste prevention and management.

C. Actions that will be taken to reduce solid waste generation.

D. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas and equipment to be used for processing, sorting, and temporary storage of wastes.

E. Waste Identification: Indicate anticipated types and quantities of demolition, site-clearing and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.

F. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.

1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.

5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.
- G. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:
  1. Total quantity of waste.
  2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
  3. Total cost of disposal (with no waste management).
  4. Revenue from salvaged materials.
  5. Revenue from recycled materials.
  6. Savings in hauling and tipping fees by donating materials.
  7. Savings in hauling and tipping fees that are avoided.
  8. Handling and transportation costs. Include cost of collection containers for each type of waste.
  9. Net additional cost or net savings from waste management plan.
- H. The Contractor shall utilize the form Construction Waste Management Plan attached to the end of this section to prepare and submit this information.

## PART 2 - PRODUCTS:

A. Used Building Materials: Organizations offering services include, but are not limited to, the following:

Habitat for Humanity Re-Store [www.habitat.org](http://www.habitat.org)

Building Materials Reuse Association [www.ubma.org](http://www.ubma.org) 1-800-990-2672

Center for ReSource Conservation [www.conservationcenter.org](http://www.conservationcenter.org) 1-303-441-3278

ReNew Building Materials & Salvage [www.renewsalvage.org](http://www.renewsalvage.org) 1-802-246-2400

Reuse Development Organization [www.redo.org](http://www.redo.org) 1-410-558-1888

The Rebuilding Center of Our United Villages

[www.rebuildingcenter.org](http://www.rebuildingcenter.org) 1-503-331-1877

The ReUse Center [www.greeninstitute.org](http://www.greeninstitute.org) 1-612-724-2608

B. Recycling Services: Companies offering services include, but are not limited to, the following:

Institution Recycling Network [www.ir-network.com](http://www.ir-network.com) 1-603-229-1962

## PART 3 - EXECUTION

### 3.01 PLAN IMPLEMENTATION

A. General: Implement waste management plan as approved by Contracting Officer. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

1. Comply with DIVISION 01 SECTION "Temporary Utilities and Facilities" for operation, termination, and removal requirements.

B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan.

Coordinator shall be present at Project site full time for duration of Project.

C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.

1. Distribute waste management plan to everyone concerned within 3 days of submittal return.
2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.

D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
2. Comply with DIVISION 01 SECTION "Temporary Utilities and Facilities" for controlling dust and dirt, environmental protection, and noise control.

### 3.02 SALVAGING DEMOLITION WASTE

A. Salvaged Items for Reuse in the Work:

1. Clean salvaged items.
2. Pack or crate items after cleaning. Identify contents of containers.
3. Store items in a secure area until installation.
4. Protect items from damage during transport and storage.
5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.

B. Salvaged Items for Sale: Not permitted on Project site.

C. Salvaged Items for Government's Use:

1. Clean salvaged items.
2. Pack or crate items after cleaning. Identify contents of containers.
3. Store items in a secure area until delivery to Government.
4. Transport items to Owner's storage area designated by Government.
5. Protect items from damage during transport and storage.

D. Doors and Hardware: Brace open end of door frames. Except for removing door closers, leave door hardware attached to doors.

### 3.03 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

A. General: Recycle paper and beverage containers used by on-site workers.

B. Procedures in paragraph and subparagraphs below describe the "source separated" method for handling recyclable waste. If space at Project site is limited, consider revising below to allow "co-mingled" method, which takes less space because it permits all recyclable waste to be placed in a single container that is separated later at the recycling facility.

C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.



1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
  - a. Inspect containers and bins for contamination and remove contaminated materials if found.
2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
4. Store components off the ground and protect from the weather.
5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

### 3.04 RECYCLING DEMOLITION WASTE

- A. Asphaltic Concrete Paving: Break up and transport paving to asphalt-recycling facility.
- B. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
- C. Masonry: Remove metal reinforcement, anchors, and ties from masonry and sort with other metals.
- D. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.
- E. Metals: Separate metals by type.
  1. Structural Steel: Stack members according to size, type of member, and length.
  2. Remove and dispose of bolts, nuts, washers, and other rough hardware.
- F. Asphalt Shingle Roofing: Separate organic and glass-fiber asphalt shingles and felts. Remove and dispose of nails, staples, and accessories.
- G. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.
- H. Acoustical Ceiling Panels and Tile: Stack large clean pieces on wood pallets and store in a dry location.
  1. Separate suspension system, trim, and other metals from panels and tile and sort with other metals.
- I. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.
- J. Plumbing Fixtures: Separate by type and size.
- K. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
- L. Lighting Fixtures: Separate lamps by type and protect from breakage.

M. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, Panel boards, circuit breakers, and other devices by type.

N. Conduit: Reduce conduit to straight lengths and store by type and size.

### 3.05 RECYCLING CONSTRUCTION WASTE

#### A. Packaging:

1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
2. Polystyrene Packaging: Separate and bag materials.
3. Pallets: As much as possible, require deliveries using pallets to remove pallets from

Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.

4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.

#### B. Site-Clearing Wastes: Chip brush, branches, and trees on-site or at landfill facility.

1. Comply with requirements in DIVISION 31 for use of chipped organic waste as organic mulch.

#### C. Wood Materials:

1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.

D. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.

### 3.06 DISPOSAL OF WASTE

A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn waste materials.

C. Disposal: Transport waste materials off Government property and legally dispose of them.

3.07 RECYCLING MANAGEMENT PLAN TO PROTECT RECYCLED MATERIALS FROM CONTAMINATION:

1. Use attached Waste Management Summary Form.
2. Provide containers and bins that are clearly and appropriately marked.
3. Prevent contamination of recyclable materials from incompatible products and materials.
4. Separate construction waste at the project site by one of the following methods: (check appropriate boxes)
  - Source Separated Method: Waste products and materials, that are recyclable, are separated from trash and sorted into appropriately marked separate containers and then transported to the respective recycling facility for further processing. Trash is transported to a landfill or incinerator.
  - Co-Mingled Method: All construction waste is placed into a single container and then transported to a recycling facility where the recyclable materials are sorted and processed and the remaining trash is transported to a landfill or incinerator.
  - Other methods proposed by the Contractor and approved by the Contracting Officer.

SECTION 017419 – CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

**WASTE MANAGEMENT SUMMARY FORM**

I. PROJECT WASTE					FROM (COMPANY):		
QUANTITY (TONS)	LANDFILL SITE (# from Sect. II of Waste Mgt. Plan above)	TIP FEE/TON	TOTAL COST OF DISPOSAL, INCLUDING HAULING, CONTAINER RENTAL, TIP FEES	TOTAL COST/TON	PROJECT #:		
	1.						
	2.				SUBMITTAL DATE:		
	3.				TIME PERIOD (Month/year or Total Project start date to end date):		
II. ALTERNATIVES TO LAND FILLING							
TYPE OF MATERIAL	QUANTITY (TONS)	DESTINATION AND MEANS OF TRANSPORTATION (# from Section IV of Waste Management. Plan above)	COST TO HANDLE AND TRANSPORT (\$)	REVENUE & TIP FEE EARNINGS (\$)	NET COST (\$)	COST IF LANDFILLED (\$)	COMPARISON COST (+) OR SAVINGS (-) (\$)
Cardboard							
Dimensional wood							
Beverage containers							
Land debris							
Concrete							
CMU							
Asphalt							
Metals - all types							
Gypsum board							
Paint							
Carpet							
Insulation							
Glass							
Cast stone							
Wood materials							
Electric cable							
PVC piping							
Rubber flooring							
Raised flooring							
Copper							
Plastics							
<b>III. TOTAL NET COST (+) OR SAVINGS (-) from all alternatives to land filling all project waste</b>					<b>TOTAL</b>		

SECTION 017419 – CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

**CONSTRUCTION WASTE MANAGEMENT PLAN**

SUBMITTED BY: \_\_\_\_\_

PROJECT #:

DATE:

<b>I. Project waste analysis</b>				
<b>A. Types of Construction waste anticipated</b>		<b>Quantities &amp; Options Available (tons)</b>		
		<b>Resale</b>	<b>Reuse</b>	<b>Recycle</b>
1.				
2.				
3.				
4.				
<b>B. Projected Cost of Disposal</b>		<b>Total Quantity (Tons)</b>	<b>Total Disposal Cost (\$)</b>	
(All trash with no salvage or recycling)				
<b>II. Landfills and Incinerators to be used</b>				
<b>Name</b>	<b>Tipping Fee</b>	<b>Address</b>	<b>Telephone</b>	
1.				
2.				
3.				
<b>III. SALVAGE PLAN (FOR RESALE, REUSE, OR RECYCLE)</b>				
<b>A. List of Materials &amp; Method of Reuse</b>		<b>Recycling Facility &amp; Means of Transport</b>		
		1.		
		2.		
		3.		
		4.		
<b>B. Cost to Salvage</b>		<b>Savings Resulting from Salvage</b>		<b>Net Cost/Savings</b>
<b>Cost to Separate and Recycle</b>	<b>Reuse of Demo Materials</b>	<b>Revenues from Sale</b>	<b>Avoidance of Tipping Fees</b>	<b>(Savings – Costs)</b>
1.				
2.				
3.				
4.				