COSTELLO
DISMANTLING

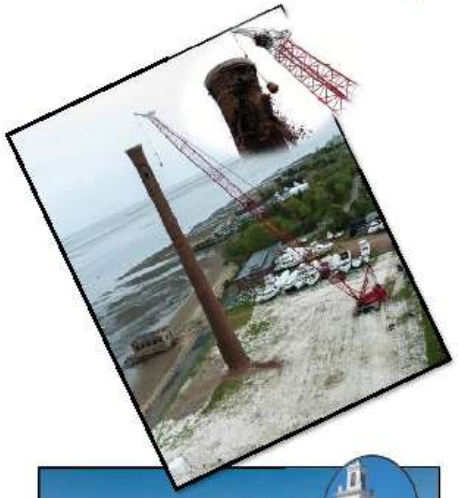
# Every Demolition Job is Different

# Who is Costello Dismantling?

- Founded in 1985
- Mission statement - to continue as a leader in the dismantling industry through embracing a culture of innovation, safety, integrity, and respect for our employees, clients, and the environment
- Disciplines of demolition work including co-generation plant dismantling for reconstruction, removal of stacks, boilers, bridges, underground and above ground tanks; fuel terminal demolition, mill buildings, high-rise structures, and every realm of industrial plant demolition
- Clients include hundreds of major manufacturers, oil companies, chemical and pharmaceutical producers, utilities, developers and municipalities regionally and throughout the country
- Modern fleet of equipment
- Full asbestos and hazardous material removal

# High Profile Projects

COSTELLO
DISMANTLING



*Changing the Local Skyline*

# Two Case Studies

- The first case study had a lot of deconstruction and reuse success
- The second case study had very good intentions but in reality, it didn't turn out as we hoped it would

# Deconstructing 22 Drydock Avenue

# DECONSTRUCTION IS ONE OF THE MOST VALUABLE TOOLS IN THE DEMOLITION OR DISMANTLING CONTRACTOR'S ARSENAL

There are several necessities for a successful deconstruction phase of a demolition project:

- Salvageable building components
- Being able to select a safe and efficient work practice to recover the selected building components
- Having the contractual time to enact a deconstruction operation
- Having sufficient space for processing salvaged material for economic shipment from the site

This is a **LEED PLATINUM** project, and we are actively participating in our material recycling protocols, but also in salvage of architectural artifacts that will be reincorporated in the new building being developed for the site.

We recognized the potential for good salvage from the 22 Drydock building early in our introduction to the project.

The structural make up of the building was heavy timber framing. We know from similar building types, that we have well honed mechanical capabilities to dismantle this structure safely, with minimal labor exposure and high recovery of delicate timbers, by using one of our high reach excavators equipped with a rotating grapple.

A great deal of planning, sequencing work and site preparation must occur to allow the planned salvage to occur.

First of all, asbestos abatement and haz mat recovery must take place. Only then can any of the dismantling process begin.

We had sequenced our work so that all asbestos abatement and an adjacent concrete structure had been demolished, leaving a clean slab for processing and stockpiling the 22 Drydock building material components.

In a very systematic manner, we separate and remove building components to reveal the timbers to be harvested.

This results in a deliberate, careful source separation of:

- painted and unpainted bricks
- painted and unpainted concrete
- high wood content C&D debris
- mixed unsorted debris
- mixed grades of ferrous scrap metal
- mixed grades of nonferrous scrap metal

We utilize a variation of the source separation theme on every project which we undertake.

Not only is disposal pricing controlled, but we maintain the site in a neat and organized manner which greatly improves site safety and appearance during a demolition project.

In a continuous effort of sorting and packaging all salvaged materials, as demolition proceeds, timbers were bundled and loaded for delivery to a local sawmill with whom we have a long-standing relationship.

Upon delivery, another life begins for the timbers.

Before that can happen, we realize that if we do not extract, handle, and package these timbers without substantial damage, they are useless and will carry a great cost for disposal rather than producing a stream of revenue, and producing the new life for the timbers as previously mentioned.

This building dated to 1923, so these timbers are 100 years old in the building. They are delicate.


**CATAUMET SAWMILL** further sorts the timbers by species and size.

They conduct extensive denailing before sending any timber through a series of saws, millers, planers, and kiln drying before producing a market ready product.

**Costello Dismantling Company, Inc.**

**Date of Report: 10/24/2023**

## CONSTRUCTION & DEMOLITION WASTE MANAGEMENT PLAN

**Innovation Square - PHASE 3 (20 Drydck 16,805 SF; 22 Drydock 45,000 SF = 61,805 SF)**

| Contractor | Material | Tons Non-Haz LEEDS | % total | Collection Method | Sent to | % Diversion | Tons Diverted | End Use |
|---|---|---|---|---|---|---|---|---|
| Costello | Non-Friable ACM-NTWP | 51 | 1% | Abatement | Minerva | **0%** | NA | NA |
| Costello | Friable/Non-Friable Traditional ACM | 32 | 1% | Abatement | Minerva | **0%** | NA | NA |
| Costello | HAZMAT | 10 | 0% | Abatement | Republic Svcs. | **0%** | NA | NA |
| Costello | Metal | 260 | 5% | Separated | *Spiegel-Middleboro Recycle* | **100.0%** | 260 | Feedstock |
| Costello | Concrete/Masonry | 92 | 2% | Separated | *RSK* | **100.0%** | 92 | Road Base |
| Costello | Wood/Timbers | 99 | 2% | Deconstruct | *Cataumet* | **100.0%** | 99 | Reclaimed |
| Costello | High Wood | 532 | 10% | Source Separated | *Epping* | **96.0%** | 511 | Fuel |
| Costello | Mixed C&D | 196 | 4% | Source Separated | *Roxbury* | **75.0%** | 147 | Facility Byproduct |
| Costello | C&D Special Waste | 218 | 4% | Comingled | *SA Dunns, NY* | **0.0%** | 0 | DTM |
| Costello | Clean Concrete | 3,650 | 71% | Source Separated Downsized | *Remain Onsite* | **100.0%** | 3,650 | Temporary Onsite Use |
| | **TOTALS** | **5,141** | **100%** | **5,048** | **tons** | **94.3%** | **4,759** | |
| | | | | **Recycled Total** | | | | |
| | **Floor Area** | **61,805** | SF | | | **94.3%** | Check | |
| | | | | | | **75.0%** | **LEEDS** | |
| | **Average Weight** | **166** | PSF | | NOTE: LOWEST C&D Recycling Rate Shown. | | | |

# Good Intentions

- Everyone had good intentions and wanted to salvage and reuse as much of the materials as possible, but as you'll see, the contamination issues prevented that from happening

# Historical Preservation Through Demolition with 10 Twists

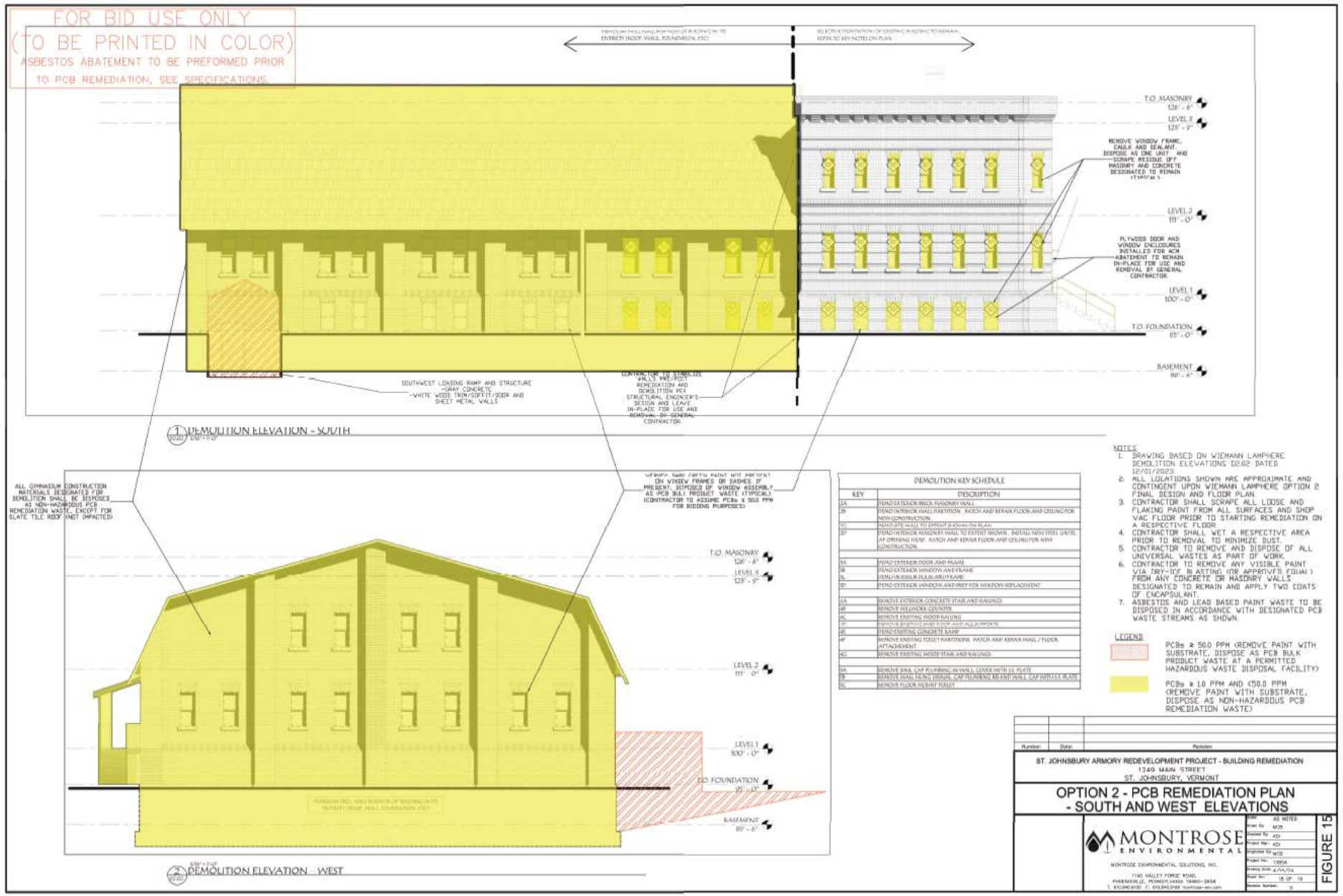
ARMORY BUILDING
ST. JOHNSBURY, VT

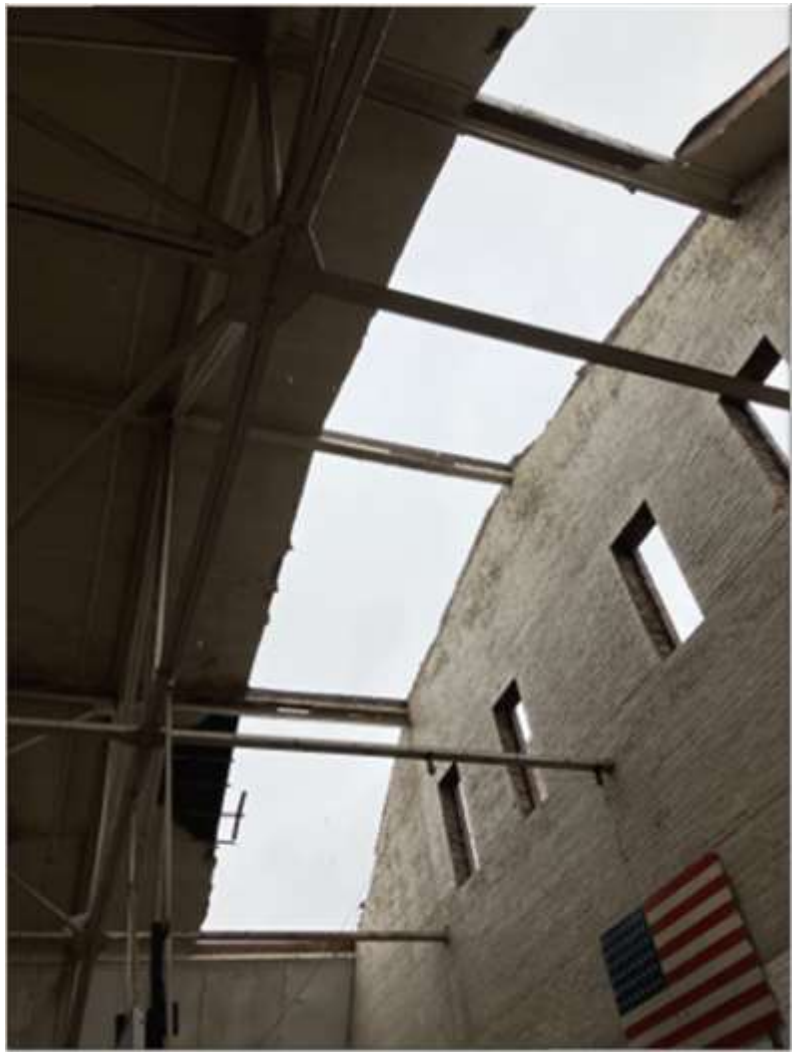
The Armory Building in St. Johnsbury, VT built in 1916 as an armory and was used as such until 1975 then owned by St. Johnsbury and used as a community recreational center until 2009.

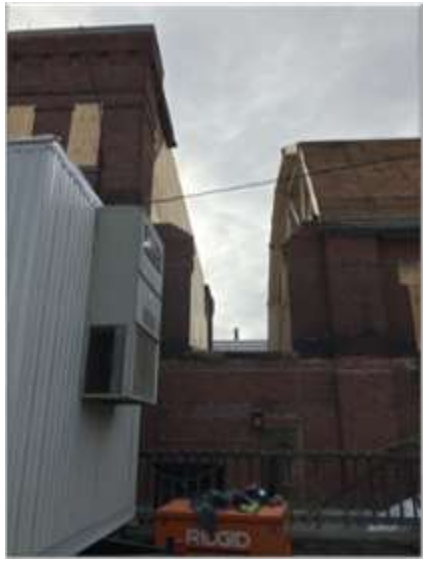
The plan calls for preservation of the two-story brick office portion of the building facing Main Street while separating the rear gymnasium portion of the building before dismantling and removing that structure.

# An extremely complicated demolition project

Develop a very technically challenging building separation plan to allow preservation of the historically significant portion of the complex and demolition of the portion of the complex that will become the footprint for new site utilization


FOR BID USE ONLY
(TO BE PRINTED IN COLOR)
ASBESTOS ABATEMENT TO BE PREFORMED PRIOR
TO PCB REMEDIATION, SEE SPECIFICATIONS.
T.O. MASONRY
LEVEL 3
LEVEL 2
LEVEL 1
T.O. FOUNDATION
BASEMENT
REMOVE WINDOW FRAME, CAULK AND SEALANT. DISPOSE AS ONE UNIT AND SCRAPE RESIDUE OFF MASONRY AND CONCRETE DESIGNATED TO REMAIN
PLYWOOD DOOR AND WINDOW ENCLOSURES INSTALLED FOR ACM ABATEMENT TO REMAIN IN-PLACE FOR USE AND REMOVAL BY GENERAL CONTRACTOR.
SOUTHWEST LOADING RAMP AND STRUCTURE -GRAY CONCRETE -WHITE WOOD TRIM/SOFFIT/DOOR AND SHEET METAL WALLS
1 DEMOLITION ELEVATION - SOUTH
ALL GYMNASIUM CONSTRUCTION MATERIALS DESIGNATED FOR DEMOLITION SHALL BE DISPOSED AS NON-HAZARDOUS PCB REMEDIATION WASTE, EXCEPT FOR SLATE TILE ROOF (NOT IMPACTED)
2 DEMOLITION ELEVATION - WEST
DEMOLITION KEY SCHEDULE
KEY
DESCRIPTION
NOTES
1. DRAWING BASED ON WIEMANN LAMPHERE DEMOLITION ELEVATIONS D2.02 DATED 12/01/2025.
2. ALL LOCATIONS SHOWN ARE APPROXIMATE AND CONTINGENT UPON WIEMANN LAMPHERE OPTION 2 FINAL DESIGN AND FLOOR PLAN.
3. CONTRACTOR SHALL SCRAPE ALL LOOSE AND FLAKING PAINT FROM ALL SURFACES AND SHOP VAC FLOOR PRIOR TO STARTING REMEDIATION ON A RESPECTIVE FLOOR.
4. CONTRACTOR SHALL WET A RESPECTIVE AREA PRIOR TO REMOVAL TO MINIMIZE DUST.
5. CONTRACTOR TO REMOVE AND DISPOSE OF ALL UNIVERSAL WASTES AS PART OF WORK.
6. CONTRACTOR TO REMOVE ANY VISIBLE PAINT VIA DRY-ICE BLASTING (OR APPROVED EQUAL) FROM ANY CONCRETE OR MASONRY WALLS DESIGNATED TO REMAIN AND APPLY TWO COATS OF ENCAPSULANT.
7. ASBESTOS AND LEAD BASED PAINT WASTE TO BE DISPOSED IN ACCORDANCE WITH DESIGNATED PCB WASTE STREAMS AS SHOWN.
LEGEND
PCBs ≥ 50.0 PPM (REMOVE PAINT WITH SUBSTRATE, DISPOSE AS PCB BULK PRODUCT WASTE AT A PERMITTED HAZARDOUS WASTE DISPOSAL FACILITY)
PCBs ≥ 1.0 PPM AND <50.0 PPM (REMOVE PAINT WITH SUBSTRATE, DISPOSE AS NON-HAZARDOUS PCB REMEDIATION WASTE)
ST. JOHNSBURY ARMORY REDEVELOPMENT PROJECT - BUILDING REMEDIATION
1249 MAIN STREET
ST. JOHNSBURY, VERMONT
OPTION 2 - PCB REMEDIATION PLAN - SOUTH AND WEST ELEVATIONS
MONTROSE ENVIRONMENTAL
FIGURE 15





# An extremely complicated demolition project

- Understand pervasive contamination throughout the building including special waste, asbestos, lead, PCBs
- Establish sequence and procedures to address 10 identified waste streams


There was pervasive PCB presence throughout this building. Navigating the mine field of PCB TSCA hazardous waste from PCB non-hazardous remediation waste to and through the presence of asbestos the crux of our project management.

Co-mingling of waste streams can be devastating financially and in a regulatory sense.

We chase the path of navigating through ten waste streams because disposal costs of nine of those waste streams is significantly less expensive than co-mingling and shipping out all waste as hazardous waste.

# PCB Contamination

- Where were the PCB contamination locations?
- What were the PCB materials?
- Why was the PCB contamination so widespread?
- Testing and survey done by Montrose and Clay Point

| Waste Stream # | | Description | Quantity (tons) | Actual (tons) | Special Conditions | Disposal Location (or approved equal) |
|---|---|---|---|---|---|---|
| 1 | | Universal Waste (tires, fluorescent light tubes/ballasts, smoke detectors, etc.) | See inventory (Table XX) | | Varies | Republic Services Facility, Williston, VT |
| 2 | HAZ-TSCA w ACM | PCB TSCA Haz-Waste: Dried paint - failing TCLP for lead (classified as D008 hazardous waste) and with PCBs > 50 ppm. Includes PCB Paint Chips/Dust/Debris/ACM on floors, plus disposal of all ductwork, electrical, plumbing, etc. with PCB and Asbestos dust. | 40 | 14.92 | No wet paint | Wayne Disposal RCRA/TSCA Belleville Facility, Michigan |
| 3 | PCB<50 PPM w ACM Non-HAZ | PCB Non-Haz Remediation Waste: Building demo debris with asbestos. Plaster, joint compound, insulation, cloth, door(s), caulk. (friable and non-friable) Includes paint with PCBs >1 but < 50 ppm and non-haz lead paint; Slate Roof from Gym | 246 | 101.66 | Friable bagged as practical | NEWS of VT - Casella, Coventry Landfill, VT |
| 4 | PCB Bulk w/ACM Non-HAZ | PCB TSCA Haz-Waste: Building demo debris with asbestos. Plaster, joint compound, insulation, cloth, door(s), caulk. (friable and non-friable) Includes paint with PCBs >50 ppm and haz lead paint | 21 | 19.26 | Friable bagged as practical | Minerva Landfill Waynesburg, Ohio |

| Waste Stream # | | Description | Quantity (tons) | Actual (tons) | Special Conditions | Disposal Location (or approved equal) |
|---|---|---|---|---|---|---|
| 5 | PCB<50 Non-HAZ | PCB Non-Haz Remediation Waste: Building demo debris with non-haz lead paint and with PCBs > 1 but < 50 ppm. Wood, painted metal, plaster, lath, concrete rubble, brick, cinder blocks, window frames w/glass, etc. | 582 | 690.49 | No free liquids | Casella, Coventry Landfill, VT |
| 6 | PCB Bulk Non-HAZ | PCB TSCA Haz-Waste: Concrete Rubble with PCB paint levels > 50 adhered to substrate (Conversations with EPA Region 1 PCB Coordinator suggest this would be considered bulk product waste). Brick, concrete rubble, cinder blocks. | 294 | | No free liquids | Allied Niagra Falls Landfill Niagra Falls, NY |
| 7 | PCB<10 PPM | PCB Non-Haz Remediation Waste: Soils containing PCBs under 10 ppm | 10 Tons | 47.97 | No free liquids | Casella, Coventry Landfill, VT |
| 8 | | Non-Haz Waste: Soils containing PAH compounds | 116 Tons | | No free liquids | Casella, Coventry Landfill, VT |
| 9 | | Non-Haz Waste: Soils containing metals | 80 Tons | | No free liquids | Casella, Coventry Landfill, VT |
| 10 | | Non impacted C+D Debris | 170 | | | Casella, Coventry Landfill, VT |

The diversity of contaminants found on a project like this certainly poses some great challenges.

Each waste stream requires very precise testing to allow eligibility, approval and acceptance at each disposal facility long before the first pound of material is shipped.

We had ten procedures to go through on this project.

Once the waste streams were identified we started the careful segregation of each material from the rest of the building materials.

Just like a careful deconstruction and source separation project, we utilized all our skills and experience to separate and collect each of the ten material streams.

We actually encountered very little non-impacted C&D debris for disposal.

# Contact Info

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