MIRA
Dissolution Authority

ADDENDUM NO. 4
Issued November 21, 2024

TO

REQUEST FOR PROPOSALS

For Engineering, Procurement and Major Salvage Operations Management Services for the Hartford Resource Recovery Facility, Jet Turbine Facility and South Meadows Site

(RFP Number 25-AUTH-002)

Note: **Entities submitting a Proposal are required to acknowledge this and all Addenda in Section 4 of the Proposal Form.**

1. RESPONSES TO SELECTED QUESTIONS

1.	Question	Is MIRA Dissolution Authority (MDA) expecting the response to this RFP package to include the environmental decommissioning and demolition of the interior contents (non-structural) or just the identification and removal of high value items at the site (i.e., motors, pumps, copper wiring, pressure vessels)?
	Answer	This RFP includes identification and removal of non-structural installed equipment within the Resource Recovery Facility. Removal may be through dismantling of specific equipment identified for marketing and sale, or interior demolition (non-structural) for equipment identified as scrap. These designations are to be made when developing the "Salvage Equipment List". The concept of removing "non-structural" equipment within the Resource Recovery Facility reflects the status of the draft "Closure Plan" for the facility on file with DEEP and available to all proposers. The draft Closure Plan presently prevents any structural demolition within the Resource Recovery Facility. The limitation to non-structural installed equipment applies only to the Resource Recovery Facility (not any other equipment at the South Meadows Site). As noted in the Scope of Work, following completion of the Salvage Equipment List, plans and specifications for equipment removal are to be developed. Those plans and specifications are subject to third party environmental review which will include, but not be limited to, identifying any environmental decommissioning needed as part of removal. Also note, the RFP includes "examples" of installed equipment. This RFP is not necessarily limited to high value items. See answer 3.
2.	Question	Does MDA expect to have the contractor removing equipment perform asbestos abatement if required?
	Answer	Asbestos abatement requirements would be identified as part of developing and evaluating the Salvage equipment List. If asbestos abatement is required for removal of specific equipment, the plans and specifications and scope of work for such equipment removal will need to include the asbestos abatement.
3.	Question	What is MDA's long-term goal with the completion of this project if the buildings are not physically demolished as part of this major salvage operation?
	Answer	The MDA's goal for this project is to establish a timely and efficient process, that maximizes revenue and minimizes costs, associated with the removal, sale or recycling of all machinery and equipment acquired and installed in support of operations conducted at the South Meadows Site. This process is intended to maintain forward momentum toward a Potential Future Use of the Site considering the status and purpose of the Resource Recovery Facility's draft Closure Plan, the Verification Report concerning remediation of the Site to Commercial / Industrial Standards and the MDA's "South Meadows Redevelopment Considerations Study". The overall process is intended to clear the Site of such equipment to the greatest extent possible, and as efficiently as possible, thereby maximizing reserves available for, and reducing work associated with, implementation of a Potential Future Use.
4.	Question	Is MDA expecting the holder of this contract to solicit bids for the removal of the turbine generators and other large pieces of equipment? Who will make the final decision on a sale price for such equipment (MDA or holder of contract)?
	Answer	The turbine generators and other large pieces of equipment should be evaluated by the selected Proposer for inclusion in the Salvage Equipment List either for resale or scrap. If such equipment is designated for resale, the Equipment Broker will market and sell the equipment to the highest bidder. If the equipment is designated for scrap, the MDA would expect a share of an appropriate metals market index ultimately to be contracted. As noted in the RFP, the MDA will consider alternatives to this approach including contracting for Equipment Brokerage and Major Salvage Operations to the same entity or other approaches that may be in its best interests considering the goals of the project.

5.	Question	Will the holder of this RFP contract also be holding the contract with the prospective buyer of equipment or will MDA hold that contract?
	Answer	The Equipment Broker will be holding the contract with the prospective buyer. The Salvage Contractor's role is in the engineering, procurement and major salvage operations management services necessary to develop the Salvage Equipment List and execute the removal of equipment on that list as necessary for its designated sale or scrap.
6.	Question	Has MDA determined a frequency of meetings that will need to be held to review plans/specifications prior to soliciting buyers or a # of on-going weekly meetings MDA would like to have over the course of the project?
	Answer	The MDA is open to a flexible frequency of meetings dependent on the pace of work. A weekly meeting should be assumed for Proposal planning purposes.
7.	Question	Can MDA provide a definition of "structural" vs "non-structural" equipment that will be part of the scrap/salvage effort? Does this RFP include the removal to grade of large equipment such as the bag houses, scrubbers, coal/RDF conveyors and tower, etc.?
	Answer	As noted in Answer 1 above, the term "non-structural" stems from the Authority's draft "Closure Plan" for the Resource Recovery Facility and associated correspondence which can be found on the Authority's website at https://www.ctmira.org/records-reports/additional-communications/closure-plan. The specific items referenced in this question 7 are considered non-structural. Generally, non-structural equipment includes anything that does not compromise the building structure. The referenced items above are considered non-structural. These and all items have to be evaluated by the successful Proposer as part of the development of the Salvage Equipment List (in accordance with Section 2.1 of the Sample Agreement included as Addendum 1 of this RFP). Additionally, as noted in answer #1 above, plans and specifications for equipment removal are subject to third party environmental review which will include, but not be limited to, identifying any environmental decommissioning needed as part of removal.
8.	Question	Are there any existing requirements determining what is considered "clean" for either sale or scrap of any of the materials to be removed (i.e. visually clean vs. laboratory analysis).
	Answer	Visually clean standard for waste residues and ash residues is acceptable for equipment removal purposes in accordance with the draft closure plan and related correspondence. As indicated previously, any equipment removal that requires hazardous building materials abatement (asbestos, lead-based paint, and/or PCBs) as part of its removal will be subject to applicable abatement and confirmatory sampling protocols established by State and/or Federal laws and regulations.
9.	Question	Can MDA provide any OM&M manuals or records that would document the decommissioning of the equipment that was performed as part of the facility shutdown?
	Answer	The RRF operations and maintenance contractor maintained manufacturer's operation and maintenance manuals for each major piece of RRF processing equipment. Those operations and maintenance manuals are available for review on site by the successful to the extent such manuals are available. Decommissioning Activities: Jets decommissioning: The four Jet twin-packs were delisted from the ISO market as of 5/31/2023. The disconnects for transformers 11x and 13x (the transformers connecting the Jets to the Transmission system) were opened and locked out in June 2023. Eversource is currently scoping a project to perform the following work: a. Remove Current Transformer (CT) contributions from the 1A-13X to the 115kV

		1704 line Primary & Backup protection groups. b. Remove any protective trips, block closing and status associated with the 1A-13X protection and high-side MOD in the 1A-5T-2 and 1A-7T-2 trip and close circuits. c. Remove any protective tripping or interlocking associated with the 1704 line tele-protection relays. d. Remove any SCADA indication and control wiring for the 1A-13X1-4 and respective generator breakers (1A-13U-2 & 1A-14U-2). RTU Configuration will require modification (done by Eversource). Decommissioning of 500,000 gallon jet fuel tank: The fuel tank was drained of fuel and the interior cleaned with a squeegee and vactor. Residual fuel may remain in the fuel lines between the tank and the jets. Decommissioning of Other Equipment: Decommissioning of other equipment has generally been limited to the following: a. Opening electrical circuit breakers servicing the equipment b. Draining and proper disposal of lubricating and hydraulic fluids c. Broom cleaning d. Explosive blast cleaning of the three municipal waste combustors to remove slag from the water-wall tubes e. Removal and proper off-site disposal of the baghouse filters associated with the three municipal waste combustors
10.	Question	Can MDA provide any laboratory analysis for fly ash, bottom ash, or combined ash for review?
	Answer	The Authority's predecessor used to conduct an annual hazardous waste characterization (8 RCRA metals via TCLP) of the combined fly ash and bottom ash that was conveyed to the ash load-out and storage building. A copy of the calendar year 2021 ash characterization report (from the final full year of RRF operation) is included at Attachment 1 to this Addendum. In August 2016, the MDA's predecessor conducted analysis of four ash samples (combined fly ash and bottom ash) for metal parameters via mass analytical procedures. A copy of the laboratory report associated with the August 2016 sampling events is included as Attachment 2 of this Addendum.
11.	Question	If structural demolition is required to remove a piece of equipment (e.g., removal of a portion of a wall), does the building need to be restored after equipment removal? Or would that equipment not be part of the salvage process if it cannot be removed without structural demolition?
	Answer	The Authority recognizes that it may be necessary or preferable to include some structural demolition to effectively remove certain equipment and will consider such structural demolition with or without restoration on a case by case basis provided that proper safety measures are employed and the overall structure is not compromised. Structural demolition proposals would be detailed by the successful Proposer as part of the development of the Salvage Equipment List.
12.	Question	Will MDA require a cost comparison of equipment sale vs scrap price?
	Answer	A form of cost benefit analysis conducted as part of the salvage equipment list will aid in determining the most efficient means of removal with the goal of minimizing costs and maximizing revenues
13.	Question	As alternative approaches and scopes are under consideration in response to this RFP, would MDA consider responses complete if variable scopes and associated costs were pro-

		vided, allowing for MDA to evaluate cost/benefit of presented scopes?
	Answer	Yes
14.	Question	If yes to the above, how will the bid responses be evaluated?
	Answer	Pursuant to the Proposal Evaluation criteria included in Section I.K of the RFP with emphasis on the stated goals of this project as noted in the RFP and answer 3 above. The MDA specifically desires to establish the Salvage Equipment List and implement the removal of Installed Equipment (by the Salvage Contractor or as permitted by prospective buyers under the Equipment Brokerage contract) to the greatest extent possible by June 30, 2025. The MDA desires to establish and maintain forward momentum toward a Potential Future Use as noted above and to position its successors to continue same.
15.	Question	Understanding that MDA has a reserve budget and mission, does MDA have a budget in mind for this RFP that could be used to scale the scope accordingly, providing best value?
	Answer	The MDA will establish a reserve budget for this project consistent with and following selection of a Proposer and final contracting activity.
16.	Question	Who drains tanks and provides cleaning paperwork for rinsing of fuels and liquid products?
	Answer	Requirements for tank draining and cleaning etc. will need to be included in plans and specifications developed by the selected Proposer for removal of associated equipment and included in the scope of work for such removal.
17.	Question	Who will disconnect the power to equipment for demo / scrapping?
	Answer	Requirements for power disconnections will need to be included in plans and specifications developed by the selected Proposer for removal of associated equipment and included in the scope of work for such removal.
18.	Question	Environmental hazard study, who is to manage haz materials during the process? Will all haz materials be remediated prior to demo / scraping? Will items for identified such as calking in the trash grapple operator stations?
	Answer	A Hazardous Buildings Materials (HBM) Survey is being completed as part of the MDA's South Meadows Redevelopment Considerations Study. Sampling and analysis has been completed and a draft report developed. The final report will be available and provided to the selected Proposer. It is expected that the HBM Survey will be used by the selected Proposer in order to safely conduct facility inspections needed to establish the Salvage Equipment List, and in determining items that may be safely removed or should be excluded from the Salvage Equipment List at this time (and demolished at a later date). As noted above and in the RFP, plans and specifications for removal of equipment on the salvage Equipment List are subject to third party environmental review which will include, but not be limited to, identifying any environmental decommissioning needed as part of removal. Requirements for such environmental decommissioning will need to be included in plans and specifications developed by the selected Proposer for removal of associated equipment and included in the scope of work for such removal.
19.	Question	Will power to lights be left live and turned on for demo / scrapping of installed equipment?
	Answer	The site continues to maintain its electrical interconnection/service. Circuits serving interior lighting have generally been turned off since operations were suspended. Many of the lighting circuits can be re-energized, but contractor should be aware that the likelihood of weather/moisture intrusion into the facility continues to increase and some lighting circuits may require repair or may become unrepairable.
20.	Question	How will the hand-over be handled once current employees are let go in June / July? Who will the successful bidder work with onsite?

	Answer	These determinations will be made as part of the transition to a successor agency.
21.	Question	Can equipment broker arrange for new buyer of item to hire a dismantling crew?
	Answer	Yes (see Equipment Broker RFP and associated questions / answers from that RFP repeated in Section 2 below)
22.	Question	Hours of operation for gathering of parts and items for sale? Weekends? Nights?
	Answer	Currently anticipated as normal business hours (Monday – Friday 7:00 AM to 5:00 PM). Extended hours may be requested in proposals and considered by the MDA. Please note that there are local noise ordinances (e.g. Chapter 23 of the City of Hartford Code of Ordinances) related to both the intensity of the noise (i.e., decibel level) and the acceptable hours for certain exempt activities, like construction and demolition. Proposers should assume in their proposals that the acceptable hours for construction and demolition are between 7:00 AM and 6:00 PM, Monday through Friday (and Saturday with the permission of the City). Note that the acceptable hours for blasting is limited to 8:00 AM and 5:00 PM.
23.	Question	Can we do torching on site for demo / scrapping?
	Answer	The Authority will consider but be advised that the fire suppression system is turned off so any torching would have to include appropriate fire suppression and comply with all required employee health and safety training and standards in accordance OSHA, with the Project Equipment List and Hazardous Building Materials List.
24.	Question	Can we shear on site for demo / scrapping?
	Answer	Yes.
25.	Question	Will equipment be cleaned thoroughly before it's demoed / scrapped? Bag house filters, fly ash building, trash conveyors.
	Answer	See answers 16, 17 and 18. The MDA anticipates all removal requirements for equipment on the Salvage Equipment List to be reflected in plans and specifications developed by the selected Proposer and included in the scope of work for such removal.
26.	Question	Do you have original plans / serial numbers for installed equipment?
	Answer	Original plans associated with the installed equipment at the RRF and the Jet Turbine Facility, as well as serial numbers associated with the jet engines, are readily available for the Successful Proposer to review and utilize in the development of the Salvage Equipment List. Regarding serial numbers, the serial numbers associated with currently-installed RRF equipment is not readily available.
27.	Question	Do you have original drawings/ plans and serial numbers for installed equipment? Also is there a flow chart that shows sized of convoy if they are rubber or steel conveyor belting? (I.e. shredders, conveyors, trommels, RTO, two large transformers, jet engines, turbines, steel conveyors, bag houses, furnaces, acid scrubber, etc.)
	Answer	Attachment 3 of this Addendum includes twenty (20) general arrangement drawings associated with the Waste Processing Facility, including a Process Flow Diagram, that provide additional information regarding conveyor sizes and if they are rubberized belt conveyors or steel pan conveyors.

		There are additional general arrangement drawings, detailed drawings of other RRF equipment and maintenance manuals that provide details regarding each component of the jet engines on site. To the extent that each drawing or manual is available, they will be made available to the Successful Proposer to review and utilize in the development of the Salvage Equipment List.
28.	Question	I, just wanted to check in and be sure that we are able to bid. I was not at the bid walk so I don't think it was mandatory but can you confirm that for me? I had a family emergency but I am on the list and I am getting the addendums.
	Answer	As specified in Section I.F. of the RFP, the Authority believes attendance at the site tour was strongly encouraged but was not mandatory.

2. RE-PUBLISHING ADDITIONAL QUESTIONS AND ANSWERS FROM RFP25-AUTH-001

Below are selected questions that were answered via an addendum as part of RFP25-AUTH-001 (the equipment broker RFP). These questions and answers are being republished herein this Addendum 4 in order to incorporate those answers into this RFP25-AUTH-002 since the Authority believes these answers could also impact some salvage operations proposals.

1.	Question	Could the deadline for questions for RFP25-AUTH-001 be extended to mirror the deadline for questions for RFP25-AUTH-002?
	Answer	Yes the Authority will accept questions on this RFP through the November 14, 2024 deadline in the Salvage Contractor RFP. By way of this Addendum 4, Section I.C. of the RFP (RFP Projected Timeline) is revised accordingly.
2.	Question	Can we sell the installed jets and the spare jet turbine equipment via this RFP (without the Salvage contractor from RFP25-AUTH-002)?
	Answer	Yes. Pursuant to the Scope of Work for Installed Equipment, the Authority reserves the right to have the selected Proposer pursuant to this RFP auction specified Equipment for removal by the successful buyer thereof if beneficial to the Authority and upon terms and conditions satisfactory to the Authority.
3.	Question	When is the Metals RFP coming out? Will all 3 proposals be due on the same day?
	Answer	The Authority deferred issuance of the Metals Recycling RFP pending development of the Salvage Equipment List described in the Authority's RFP for Engineering, Procurement and Major Salvage Operations Management Services. The Authority believes completion of the Salvage Equipment List may aid in the development of Metals Recycling Proposals. However, the Authority is accepting alternative approaches to both of its currently issued RFPs for Equipment Brokerage and Major Salvage Operations. Incorporating metals recycling is a permissible alternative the Authority may consider. As noted in Addendum 3 - Such conditions and alternatives should be specified in adequate detail to enable the Authority to determine if they are in its best interest considering the objective to establish a timely and efficient process, that maximizes revenue and minimizes costs, associated with the removal, sale or recycling of all machinery and equipment acquired and installed in support of operations conducted at the South Meadows Site. All proposals are expected to fully address the Scope of Work provided in Section I.B and the Proposal Contents required in Section I.G of this RFP.
4.	Question	Who decides what items within the Installed Equipment gets set aside for the Equipment Broker?

	Answer	The Authority working with the Equipment Broker and Salvage Contractor. The Authority does not intend to assign Installed Equipment to the Equipment Broker that the Equipment Broker does not believe can be successfully auctioned. Likewise, the Authority does not intend to assign Installed Equipment to the Equipment Broker that the Salvage Contractor does not believe can be properly removed for purposes of resale.
5.	Question	What if we identify Installed Equipment to broker but the Salvage Contractor damages it when taking things apart?
	Answer	The damaged equipment would be designated as scrap metal unless the Equipment Broker demonstrates that a sale "as is" or undertaking repairs and a subsequent sale may produce greater net revenue. Also see answer 2. Also note, the Salvage Equipment List is intended to identify non-structural machinery and equipment that may be safely removed and/or disassembled for resale or scrap. The Authority does not intend to assign Installed Equipment to Broker that Salvage Contractor believes may become damaged in removal.
6.	Question	Is there a possibility of purchasing the whole plant in its entirety – where is as is?
	Answer	This RFP (and the Salvage Contractor RFP) are not intended to result in a conveyance of the real property constituting the South Meadows Site, or a redevelopment of the Site. The Authority may consider alternative approaches as noted in Answer 3 which may include a single sale of all Available Equipment and Installed Equipment as defined in the Broker and Salvage Contractor RFPs. Any alternative approach must be specified in adequate detail to enable the Authority to determine if it is in its best interest considering the objective to establish a timely and efficient process, that maximizes revenue and minimizes costs, associated with the removal, sale or recycling of all machinery and equipment acquired and installed in support of operations conducted at the South Meadows Site.
7.	Question	Are the RTOs considered available equipment that can be marketed right away or installed equipment that has to wait for the Salvage contractor?
	Answer	The RTOs are considered Installed Equipment. However, as noted in Answer 2, the Authority reserves the right to have the selected Proposer pursuant to this RFP auction specified "Equipment" for removal by the successful buyer thereof if beneficial to the Authority and upon terms and conditions satisfactory to the Authority. The term "Equipment" includes Available Equipment and Installed Equipment. Accordingly, the Broker may identify any Equipment it desires market expeditiously.
8.	Question	The RFP references a Hazardous Building Material Survey and a Draft Closure Plan. Are either of these documents available?
	Answer	The Hazardous Building Material Survey is expected to be completed within a month and will be made available. The Draft Closure Plan is currently available on the Authority's website at https://www.ctmira.org/records-reports/additional-communications/closure-plan
9.	Question	If DAS is the Authority's successor before the end of the contract, is there any DAS Prequalification required to be the primary (for either RFP25-AUTH-001 or 25-AUTH-002) or governing the use of subcontractors (e.g. use of SBE/MBE contractors, use of DAS pre-qualified subcontractors?).
	Answer	As part of becoming the Authority's successor, DAS will assume existing contracts pursuant to the existing terms and conditions of those contracts. A pre-qualification process would not be required to continue existing contracts.

10.	Question	Are the people who came to the site tour the only people that can bid on this RFP?
	Answer	No. the Site tour was not mandatory. However, the Authority believes attendance at the Site tour is beneficial to the development of complete and accurate Proposals
11.	Question	What is your time frame for when the work needs to be completed?
	Answer	The Authority prefers that Available Equipment be marketed and sold as expeditiously as possible with an objective to complete such sales prior to June 30, 2025. The same timeline and objective would apply to Installed Equipment that the Broker desires to direct market for removal by the buyers thereof. Sale of Installed Equipment that is to be removed by the Salvage Contractor would likely extend beyond June 30, 2025. The Authority's objective is to have the Salvage Equipment List referenced in Answer 3 completed by June 30, 2025.
12.	Question	Does someone have to submit a proposal to broker all items in this RFP or can they propose just for selected items (e.g. just the stuff in the tool rooms, just the Jets equipment, etc.)?
	Answer	The Authority may consider an alternative proposal for specified equipment. However, the Authority's overall objective is to establish a timely and efficient process, that maximizes revenue and minimizes costs, associated with the removal, sale or recycling of all machinery and equipment acquired and installed in support of operations conducted at the South Meadows Site.
13.	Question	Has the "de-energized" installed equipment been disconnected from its power supply?
	Answer	De-energized installed equipment has been de-energized by opening breaker(s) servicing such equipment. Electrical wiring has not been removed.
14.	Question	For the installed equipment, where will electrical disconnections be made (e.g. at the equipment or at its disconnect switch?)? For some installed equipment, that may impact the value.
	Answer	The Authority will work with broker to maximize the value of the equipment, which will include a determination of the location of the electrical disconnection to maximize equipment value.
15.	Question	If a buyer wants to uninstall a piece of equipment, can they do so, or does that have to be done by the Salvage contractor?
	Answer	Yes the buyer may uninstall. See Answers 2 and 7.
16.	Question	We have people interested in the Jet turbines. Can you please send more information on them?
	Answer	The JTF is composed of eight (8) identical Pratt and Whitney FT4A-9 turbine engines, which are configured into four (4) power generation twin-packs). Collectively they had a qualified capacity of 148.493 Megawatts for the Capacity Commitment Period ending May 31, 2023. The JTF was operated pursuant to a comprehensive operation and maintenance agreement between MIRA and NAES Corporation (the "JTF O&M Agreement"). The JTF units were delisted from ISO-NE at the end of May 31, 2023 and the JTF O&M Agreement expired June 30, 2023.

		Attached hereto and incorporated herein this Addendum 4 is information regarding CSWS Jet Turbine Facility Installation, Repair and Test Dates. Additional manuals are available to review on-site upon request.

- END OF ADDENDUM 4 (attachment follows) –

ATTACHMENT 1

MIRA MEMORANDUM

Date: December 3, 2021

To: File, MIRA Environmental Division

From: Peter W. Egan, MIRA

Cc: Scott Kelly, NAES
Thomas Lally, NAES

Re: 40 C.F.R. § 262.11(c)(2) – Compliance Statement - Calendar Year 2021
MIRA CSWS Resource Recovery Facility

During the months of September through October 2021 the Materials Innovation and Recycling Authority ("MIRA") tested the municipal waste combustion ("MWC") ash residue generated at the Facility located on Reserve Road in Hartford, Connecticut in accordance with the United States Environmental Protection Agency's ("USEPA") "Guidance for the Sampling and Analysis of Municipal Waste Combustion Ash for the Toxicity Characteristic" (EPA Pub. No. EPA530-R-95-036). That testing demonstrated that the Facility's ash residue is not a hazardous waste.

Results of this testing were assembled in a formal ash characterization report by NAES Corp., dated November 24, 2021. This Report is incorporated by reference into this memorandum (the cover page is attached). NAES undertook the actual sampling of the ash and contracted with the analytical laboratory to perform the analysis.

In accordance with Conn. Agencies Regs. § 22a-449(c)-102(a)(2)(A) and 40 C.F.R. § 262.11(c)(2), I have made a hazardous waste determination based on my knowledge of the process that generates this waste stream, the analytical testing that was conducted in August through October 2020, and periodic pH measurements on the ash residue during the past year. In addition to the analytical testing that has been conducted, I have also applied my knowledge of the process generating the ash residue waste stream, considering the following:

1. The ash residue is generated from the combustion of municipal solid waste. The Facility does not receive any listed hazardous wastes as defined in 40 CFR Part 261. Therefore, the ash residue is not a listed hazardous waste.

2. Because of the high temperature combustion process, the ash residue is not expected to exhibit the hazardous waste characteristic of toxicity for the waste codes D012 through D043 as defined in 40 CFR Part 261 (these are organic compounds that would be destroyed in the combustion process).

3. Because of the high temperature combustion process, the ash residue is not expected to exhibit the characteristic of ignitability (D001), or reactivity (D003) (again, any constituents that would contribute to either of these characteristics would be destroyed in the combustion process).

4. Based on my knowledge of the ash residue, and in particular its physical state, the ash residue does not meet the definition of a characteristically hazardous waste exhibiting the characteristic of corrosivity (D002) as set forth in 40 CFR 261.22. The ash residue is not "aqueous" as this term is used in 40 CFR 261.22(a). (See also the USEPA regulatory clarification memorandum dated April 23, 1993 (attached) regarding the definition of the term "aqueous" as it applies to the definition of a corrosive hazardous waste.).

This memorandum to the file is to also note that there have been no changes to the process generating the ash residue waste stream since the last Compliance Statement (October 2020). The ash residue is generated from the combustion of municipal solid waste. The Facility has continued to accept the same material, municipal solid waste (i.e., trash, garbage), during the period since the last Compliance Statement (October 2020). NAES periodically conducts pH measurements of the ash residue in accordance with an internal protocol, with the intent of confirming that the ash amendment system is operating satisfactorily. Results of NAES's periodic pH analyses are attached.

Peter W. Egan
Director of Operations & Environmental Affairs
Materials Innovation and Recycling Authority

December 3, 2021
Date

Annual Ash Characterization Report

2021

Mid-Connecticut Resource Recovery Facility
2021 Annual Ash Characterization Report

REPORT DATE:	November 24, 2021
PREPARED FOR:	Materials Innovation and Recycling Authority (MIRA)
PURPOSE:	Characterization of Ash Residue
SAMPLE PERIOD:	September 7th through October 28th 2021
PREPARED BY:	Thomas Lally Environmental Manager NAES Mid-CT Resource Recovery Facility

USEPA Clarification Memorandum

Interpretation of "Aqueous" as Applied to the Corrosivity Characteristic (40 CFR 261.22)

Document Record Detail

Full Document:	
Title:	INTERPRETATION OF "AQUEOUS" AS APPLIED TO THE CORROSIVITY CHARACTERISTIC
RCRA Online Number:	11738
Date:	04/23/1993
To:	Franzmathes, Region
From:	Guesaid
Organization of Recipient:	EPA
Description:	Aqueous means amenable to pH measurement. The corrosivity characteristic (D002) references Method 9040. The scope and application of 9040 rules that it applies only to aqueous wastes and those wastes where the aqueous phase constitutes at least 20% of the total volume of the waste.
Regulatory Citation(s):	261.22 (CFR 261.22(a)(1))
Statutory Citation(s):	NA Read US Code 42, Chapter 82 (RCRA 1003(b)(1))
Topic(s):	Characteristic Wastes; Corrosive Wastes; Hazardous Waste; Test Methods
Approximate Number of Hardcopy Pages:	2
EPA Publication Number:	NA
RPPC Number (if applicable):	9443.1993(06)
OSW Policy:	No

9443.1993(05)

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

April 23, 1993

MEMORANDUM

SUBJECT: Interpretation of "Aqueous" as Applied to the Corrosivity Characteristic (40 CFR 261.22)

TO: Joseph R. Franzmathes, Director
Waste Management Division

FROM: David Bussard, Director
Characterization and Assessment Division

This memorandum responds to your memorandum to Bruce Diamond dated March 11, 1993 requesting clarification of the term "aqueous" as it applies to the corrosivity characteristic. Your memorandum references a September 1992 "Hotline Questions and Answers" publication produced by the RCRA/Superfund Hotline contractors and concurred upon by my Division and by OSW.

The Hotline publication correctly defines "aqueous," for the purposes of the corrosivity characteristic, to mean in a form amenable to pH measurement. This interpretation is consistent with the supporting documentation found in the background document for the corrosivity characteristic final rulemaking (Background Document: Section 261.22 - Characteristic of Corrosivity, May 2, 1980). I have attached the applicable section for your information.

A more specific interpretation of "aqueous" for the purpose of the corrosivity characteristic may be found in the method referenced in the actual regulatory text for the corrosivity characteristic at 40 CFR 261.22(a)(1). The regulation states that "[the EPA test method for pH is specified as Method 5.2, in "Test Methods for the Evaluation "of Solid Waste, Physical/Chemical Methods" (see attachment). Method 5.2, pH Electrometric Measurement, which was renumbered to Method 9040 specifies under scope and application that the method "is used to measure the pH of

aqueous wastes and those wastes where the aqueous phase constitutes at least 20% of the total volume of "waste." Therefore, any waste for which this method is applicable must contain at least 20% free water by volume. This method is also attached for your information.

If you or your staff should have any questions regarding this memorandum, please call me or have your staff call Al Collins, of my staff, at 202-260-4791.

Attachments

Quarterly pH Analyses

Peter Egan

From: Christopher Shepard
Sent: Friday, January 22, 2021 3:24 PM
To: Thomas, Jarrett
Cc: Peter Egan
Subject: FW: 2021 Quarter 1 Ash Sampling Data
Attachments: ash sample log 2021.xlsx

Hi Jarrett:

Please also send this information to Peter Egan of MIRA.

His email address (in case you don't already have it) is: pegan@ctmira.org.

Sincerely,
Chris Shepard

Christopher R. Shepard, P.E.
Environmental Compliance Manager

Materials Innovation and Recycling Authority
200 Corporate Place, Suite 202
Rocky Hill, Connecticut 06067
Telephone: 860-757-7706
Cell Phone: 860-716-2431
Fax: 860-757-7740

From: Thomas, Jarrett [mailto:Jarrett.Thomas@naes.com]
Sent: Friday, January 22, 2021 2:34 PM
To: Christopher Shepard
Subject: 2021 Quarter 1 Ash Sampling Data

Hey Chris,

I was informed that you normally receive the data on the ash sampling done each quarter. I have attached the three ash samples taken in January 2021 to date.

If you need anything else reach out at any time.

Thanks,

Jarrett

Jarrett Thomas
Environmental Manager

NAES Corp.
Gate 20 Reserve Road
Hartford, Ct. 06114
Ph 860.240.7144 cell 860.803.1509

Ash Sample Log 2021

Date	Start time	End Time	Characterization sample #	Sample #	Time In Tumbler	Date in	Time Out Tumbler	Date Out	pH COMPOSITE	Element One pH	Element One Status	Comments	S.G.	11 slurry ratio	12 slurry ratio	13 slurry ratio
1/8/2021	0545am	1:30pm	1	1	2:00pm	1/8/2021	1:30pm	1/9/2021	7.46				1.09		28	12
1/10/2021	0715am	1500am	2	2	1630pm	1/10/2021	1030am	1/12/2021	12.74				1.08		26	12
1/17/2020	0700am	1448pm	3	3	1715pm	1/17/2021	1115am	1/48/2021	12.14				1.12		21	9

Peter Egan

From: Thomas, Jarrett <Jarrett.Thomas@naes.com>
Sent: Thursday, June 3, 2021 4:28 PM
To: Christopher Shepard
Cc: Rowe, Robert; John Clark; Peter Egan
Subject: RE: RRF Semi-Annual Solid Waste Compliance Audit Information
Attachments: Q2 Ash Sampling pH Results.pdf

Good afternoon John, Chris, Peter,

Please find attached the quarterly ash pH sampling documents for quarter two 2021.

If need any further information, reach out at any time.

Best Regards,

Jarrett

Jarrett Thomas
Environmental Manager
NAES
NAES Corp.
Gate 20 Reserve Road
Hartford, Ct. 06114
Ph 860.240.7144 cell 860.803.1509

From: Christopher Shepard <cshepard@ctmira.org>
Sent: Thursday, June 3, 2021 4:24 PM
To: Thomas, Jarrett <Jarrett.Thomas@naes.com>
Cc: Rowe, Robert <Robert.Rowe@naes.com>
Subject: RE: RRF Semi-Annual Solid Waste Compliance Audit Information

Please also provide the quarterly ash pH testing results, as well.

Sincerely,
Chris Shepard

Christopher R. Shepard, P.E.
Environmental Compliance Manager

Materials Innovation and Recycling Authority
200 Corporate Place, Suite 202
Rocky Hill, Connecticut 06067
Telephone: 860-757-7706

Cell Phone: 860-716-2431
Fax: 860-757-7740

Please consider the environment before printing this e-mail.

From: Thomas, Jarrett [mailto:Jarrett.Thomas@naes.com]
Sent: Thursday, June 03, 2021 4:20 PM
To: Christopher Shepard
Cc: Rowe, Robert
Subject: RRF Semi-Annual Solid Waste Compliance Audit Information

Good afternoon Chris,

I have attached the information requested in this email for the semi-annual solid-waste inspection that is to be conducted on June 10th.

I have provided all of the certificates for the operators that are currently on staff. We have received the training invite for the DEEP training session on the 11th and plan to have the new operators go through the certification program on the 11th.

There is one spill event since February of 2018 in my records and that is for the 25 gallon oil spill to pavement on 5-19-21. I have attached this document for your review.

If you need anything else, reach out at any time.

Best Regards,

Jarrett

Jarrett Thomas
Environmental Manager
NAES
NAES Corp.
Gate 20 Reserve Road
Hartford, Ct. 06114
Ph 860.240.7144 cell 860.803.1509

MIRA Mid-CT PBF

ASH SAMPLING
For pH TCLP Field Analysis

Sampler Name: Kevin Waszkiewicz Date: 5-3-21

Sample Number: 1

Start of Sampling Date/Time: 5-3-21 / 5:45am

End of Sampling Date/Time: 5-3-21 / 1:30pm

Start of Tumbling Date/Time: 5/3/21 1540

End of Tumbling Date/Time: 5/4/21 1550

pH (SU): 12.36

SAMPLE	DATE	START TIME	END TIME	PUGMILL OPERATION (Y/N) PUGMILL 1	PUGMILL 2	COMMENTS
#1	5-3-21	5:45am				
#2		6:00am				
#3		6:15am				
#4		6:30am				
#5		6:45am				
#6		7:00am				
#7		7:15am				
#8		7:30am				
#9		7:45am				
#10		8:00am				
#11		8:15am				
#12		8:30am				
#13		8:45am				
#14		9:00am				
#15		9:15am				
#16		9:30am				
#17		9:45am				
#18		10:00am				
#19		10:15am				
#20		10:30am				
#21		10:45am				
#22		11:00am				
#23		11:15am				
#24		11:30am				
#25		11:45am				
#26		12:00pm				
#27		12:15pm				
#28		12:30pm				
#29		12:45pm				
#30		1:00pm				
#31		1:15pm				
#32		1:30pm				

Comments/Notes:

How many boilers online?	2	U11 Slurry Ratio?	21
What is lime feed rate?	4.40rpm	U12 Slurry Ratio?	20
Specific Gravity of slurry?	1.11	U13 Slurry Ratio?	
Dolo feed system (Circle):	(Dry)	Wet	
If Wet — Pump on	A	B	
Rotary Feeder Speed	%%		
Lime Pump Speed	%	Total Flow	Gpm

1. **Refer to "Ash Sampling Procedure" for complete instructions**
2. Every fifteen minutes, take a grab sample from the ash discharge flow coming off of 5B conveyor.
3. Place the four grab samples in a bucket to create the one-hour composite sample. (These one-hour composite will be combined later to create a shift composite)
4. Use separate buckets for each one-hour composite sample
5. Put a cover on the bucket
6. Label the one-hour composite sample buckets with the date and time
7. Refer to ash sampling proceedure step 2.0 to make shift composite.

MIRA Mid-CT PBF

ASH SAMPLING
For pH TCLP Field Analysis

Sampler Name: Kevin Wasielewicz Date 5-4-21

Sample Number: 2

Start of Sampling Date/Time: 5:45am 5-4-21

End of Sampling Date/Time: 1:30pm 5-4-21

Start of Tumbling Date/Time: 1600 5/4/21

End of Tumbling Date/Time: 1420 5/5/21

pH (SU): 12.32

SAMPLE	DATE	START TIME	END TIME	PUGMILL OPERATION (Y/N) PUGMILL 1	PUGMILL 2	COMMENTS
#1	5-4-21	5:45am				
#2		6:00am				
#3		6:15am				
#4		6:30am				
#5		6:45am				
#6		7:00am				
#7		7:15am				
#8		7:30am				
#9		7:45am				
#10		8:00am				
#11		8:15am				
#12		8:30am				
#13		8:45am				
#14		9:00am				
#15		9:15am				
#16		9:30am				
#17		9:45am				
#18		10:00am				
#19		10:15am				
#20		10:30am				
#21		10:45am				
#22		11:00am				
#23		11:15am				
#24		11:30am				
#25		11:45am				
#26		12:00pm				
#27		12:15pm				
#28		12:30pm				
#29		12:45pm				
#30		1:00pm				
#31		1:15pm				
#32		1:30pm				

Comments/Notes:

How many boilers online?		2	U11 Slurry Ratio?	15
What is lime feed rate?		4411	U12 Slurry Ratio?	10
Specific Gravity of slurry?		1.1	U13 Slurry Ratio?	
Dolo feed system (Circle)		Dry	Wet	
If Wet	Pump on	A	B	
Rotary Feeder Speed		%		
Lime Pump Speed		%	Total Flow	Gpm

1. **Refer to "Ash Sampling Procedure" for complete instructions**
2. Every fifteen minutes, take a grab sample from the ash discharge flow coming off of 5B conveyor.
3. Place the four grab samples in a bucket to create the one-hour composite sample. (These one-hour composite will be combined later to create a shift composite)
4. Use separate buckets for each one-hour composite sample
5. Put a cover on the bucket
6. Label the one-hour composite sample buckets with the date and time
7. Refer to ash sampling proceedure step 2.0 to make shift composite.

MIRA Mid-CT PBF

ASH SAMPLING
For pH TCLP Field Analysis

Sampler Name: Kevin Waszkiewicze Date: 5-5-21

Sample Number: 3

Start of Sampling Date/Time: 5-5-21 / 5:30am

End of Sampling Date/Time: 5-5-21 / 1:15pm

Start of Tumbling Date/Time: 5/5/21 ~~1430~~ 1450

End of Tumbling Date/Time: 5/6/21 1045

pH (SU): 11.84

SAMPLE	DATE	START TIME	END TIME	PUGMILL OPERATION (Y/N) PUGMILL 1	PUGMILL 2	COMMENTS
#1	5-5-21	5:30am				
#2		5:45am				
#3		6:00am				
#4		6:15am				
#5		6:30am				
#6		6:45am				
#7		7:00am				
#8		7:15am				
#9		7:30am				
#10		7:45am				
#11		8:00am				
#12		8:15am				
#13		8:30am				
#14		8:45am				
#15		9:00am				
#16		9:15am				
#17		9:30am				
#18		9:45am				
#19		10:00am				
#20		10:15am				
#21		10:30am				
#22		10:45am				
#23		11:00am				
#24		11:15am				
#25		11:30am				
#26		11:45am				
#27		12:00pm				
#28		12:15pm				
#29		12:30pm				
#30		12:45pm				
#31		1:00pm				
#32		1:15pm				

Comments/Notes:

How many boilers online?		2	U11 Slurry Ratio?	18 LB/Ton
What is lime feed rate?		440	U12 Slurry Ratio?	18
Specific Gravity of slurry?		1.09	U13 Slurry Ratio?	~~18 LB/Ton~~
Dolo feed system (Circle)		(Dry)	Wet	
If Wet	Pump on	A	B	
Rotary Feeder Speed		440 %		
Lime Pump Speed		%	Total Flow	Gpm

1. **Refer to "Ash Sampling Procedure" for complete instructions**
2. Every fifteen minutes, take a grab sample from the ash discharge flow coming off of 5B conveyor.
3. Place the four grab samples in a bucket to create the one-hour composite sample. (These one-hour composite will be combined later to create a shift composite)
4. Use separate buckets for each one-hour composite sample
5. Put a cover on the bucket
6. Label the one-hour composite sample buckets with the date and time
7. Refer to ash sampling proceedure step 2.0 to make shift composite.

Mid-Connecticut Resource Recovery Facility
2021 Annual Ash Characterization Report

REPORT DATE:	November 24, 2021
PREPARED FOR:	Materials Innovation and Recycling Authority (MIRA)
PURPOSE:	Characterization of Ash Residue
SAMPLE PERIOD:	September 7th through October 28th 2021
PREPARED BY:	Thomas Lally Environmental Manager NAES Mid-CT Resource Recovery Facility

ASH RESIDUE CHARACTERIZATION REPORT
FOR MID-CONNECTICUT RESOURCE RECOVERY FACILITY

TABLE OF CONTENTS

1.0 INTRODUCTION

An ash residue characterization program (Program) has been implemented at the Mid-Connecticut Resource Recovery Facility (Facility) located in Hartford, Connecticut. The Program was designed to incorporate the sampling and analytical

procedures in EPA's May 24, 1994 draft guidance document "Sampling and Analysis of Municipal Refuse Incinerator Ash" [1] and its supporting document "Test Methods for Evaluating Solid Waste (SW-846).[2] The Program is consistent with the EPA's final guidance on ash sampling.[3] Combined ash was sampled as it was delivered from Conveyor 6B to the ash residue building. This location has been determined to be the most representative of the point of generation and is consistent with the January 25, 1995 EPA decision regarding appropriate ash testing locations for determining toxicity characteristics.

Ash sampling at the Facility was performed by representatives of the Facility between September 7th and October 28th 2021. Fourteen (14) 8-hour shifts are represented by this sample period with each shift being represented by one shift composite subsample, totaling 14 composite subsamples. The shift composite subsamples were delivered to a laboratory for analysis in accordance with the U.S. EPA Toxicity Characteristic Leaching Procedure (TCLP), Method 1311, as described in 40 CFR 261, Appendix II. A minimum of one (1) aliquot from each of the fourteen composite subsamples was analyzed, totaling 14 analyses.

2.0 FIELD ASH SAMPLING PROCEDURES

Field sampling occurred over the period between September 7th and October 28th 2021. Field sampling consisted of eight 1-hour grab samples collected in the ash residue building.

The grab samples occurred at a 1-hour frequency. Samples were obtained from the ash residue building, which is downstream of the pug mill and Conveyor 6B, which transports the combined ash into the ash residue building. The operator would collect an ash sample off of Conveyor 5B every 15 minutes for an hour and place it into a plastic bucket for the hourly composite. This process was repeated each hour for 8 hours, for a total of 8 hourly composites. The location and method provided random and representative samples.

Following the collection of the hourly composite sample, the 8-hour shift composite sample (i.e. individual composite sample) was created by mixing the hourly composite samples in a cement mixer. The well-mixed composite material was then spread to create a square of equal depth and was subsequently divided into quarters. A random shovel swipe from each quarter was collected to create one (1) final composite sample that was labeled and delivered to a laboratory with an accompanying chain-of-custody form.

Table 1 presents a summary of the field sample program scope, schedule and bulk characteristics. The laboratory information used to develop Table 1 is presented in

Appendix A. The material listed as being noncrushable was subjected to the EPA size reduction procedures.[3]

3.0 LABORATORY INFORMATION

3.1 Metals

One shift composite subsample was delivered to Element One, Inc. in Wilmington, North Carolina for 14 operating shifts. This laboratory provided the sample preparation procedures required to reduce the approximate 1 kilogram subsamples to representative 100-gram aliquots as required by EPA Method 1311. This laboratory provided the bulk sample characteristics in Table 1, and the analytical scope of services required by EPA Method 1311.

4.0 ASH SUBSAMPLE PREPARATION

Each composite subsample was prepared in accordance with the following steps:

1. The entire composite subsample was passed over a two-inch screen. Material passing the 2-inch screen was set aside. Material larger than two inches was struck to determine if it was crushable. If the material did not break, it was weighed and discarded. If it did break and could pass through the two-inch screen, it was recombined with the material naturally less than two inches.

2. The material less than two inches was passed over a 3/8-inch screen. Material passing through the 3/8-inch screen was weighed, recorded and set aside. Material larger than 3/8 inch was weighed, recorded and then passed through a crusher device to reduce the material to be less than 3/8 inch. If material could not be crushed by the machine, this material was subjected to the hammer procedure described above. If the material was made to pass the 3/8-inch screen, it was combined with the material that went through the crushing machine. If the material was not reduced to pass through a 3/8-inch screen after the machine and manual crushing step, it was recombined with the material larger than two inches that could not be crushed.

   The material naturally less than 3/8 inch and the material which was crushed to be less than 3/8 inch were combined and mixed together very well.

3. This combined, well-mixed sample was used to prepare the aliquot for TCLP extraction. The remaining material was saved for further analysis, if required.

5.0 ANALYTICAL PROCEDURES

The Toxicity Characteristic Leaching Procedure (TCLP) was performed in accordance with Method 1311 as detailed in the Environmental Protection Agency Manual SW-846 - Test Methods for Evaluating Solid Waste - Physical/Chemical Methods. Table 2 presents an overview of the analytical test procedures used in analyzing the TCLP extract from each aliquot. Quality control and assurance procedures used a sample spike, duplicate and blank, at a minimum, on every set of fourteen (14) samples.

6.0 DATA ANALYSIS AND CONCLUSION

6.1 Overview

The laboratory analytical data presented as Appendix A have been evaluated in accordance with the procedures in SW-846, Chapter 9. The quality assurance and quality control results are submitted with the results in Appendix A.

The statistical procedures set forth in Section 9.1.1.2 and Table 9-1 of SW-846 are based on the set of individual concentrations being treated as a normal distribution.

6.2 Analytical Results

The laboratory analytical results are presented in Table 3 and Appendix A of this report. When greater than 50% of the samples are below the laboratory detection limit, the detection limit is used in the statistical analysis (Table 3). When less than 50% of the laboratory results are below the detection one half of the detection limit is used in the statistical analysis (Table 3).

6.3 Statistical Results

Table 3 provides a summary of laboratory data and statistical analysis. Table 4 presents a comparison of the Regulatory Threshold for each metal analyte and the relevant SW-846 statistical value for determining whether a waste material exhibits a toxicity characteristic.

6.4 Conclusion

The analytical data was evaluated in complete compliance with the procedures set forth and required by SW-846. The statistical evaluation has determined that the

waste does not exhibit a hazardous characteristic and that it should be managed as a nonhazardous solid waste.

7.0 REFERENCES

(1) Environmental Protection Agency,
"Sampling and Analysis of Municipal Refuse Incinerator Ash," (Draft Guidance Document) May, 1994.

(2) Environmental Protection Agency,
"Manual SW-846 - Test Methods for Evaluating Solid Waste - Physical/Chemical Methods," March, 1992.

(3) Environmental Protection Agency,
"Guidance for the Sampling and Analysis of Municipal Waste Combustion Ash for the Toxicity Characteristic," June, 1995.

(4) Environmental Protection Agency,
"Introduction to Environmental Statistics."

Table 1

FIELD ASH SAMPLE SCHEDULE AND BULK CHARACTERISTICS

		Final Composite Sample Bulk Characteristics (kg)			
Sample	Date	Greater than 3/8 Inches (>3/8" non-crushable sample)	Less than 3/8 Inches (sample <3/8")	Total Sample Weight	Solids (as Wt.%)
1	9/7/21	0.00	0.31	0.31	78.0
2	9/8/201	0.00	0.30	0.30	83.9
3	9/9/21	0.00	0.29	0.29	85.4
4	9/10/21	0.00	0.30	0.30	82.8
5	9/11/21	0.00	0.29	0.29	80.1
6	9/12/21	0.00	0.30	0.30	76.4
7	9/14/21	0.00	0.30	0.30	75.3
8	9/15/21	0.00	0.29	0.29	75.7
9	9/16/21	0.00	0.30	0.30	76.0
10	9/22/21	0.00	0.30	0.30	77.2
11	9/23/21	0.00	0.30	0.30	74.8
12	10/26/21	0.00	0.23	0.29	71.1
13	10/27/21	0.00	0.24	0.29	69.6
14	10/28/21	0.00	0.22	0.29	72.4

Table 2

ANALYTICAL TEST PROCEDURES

PARAMETER	ANALYTICAL METHOD (b)
1.0 TCLP (a)	
1.1 TCLP Metals	
Arsenic	6020
Barium	6020
Cadmium	6020
Chromium	6020
Lead	6020
Mercury	7470
Selenium	6020
Silver	6020

(a) EPA Method 1311, Toxic Characterization Leaching Procedure.

(b) Inductively Coupled Plasma Spectroscopy
Cold Vapor Atomic Absorption

NAES Mid-CT RRF
2021 Ash Characterization
Table 3
TCLP Laboratory Data and Statistical Analysis

Sample Number	Date of Composite	Concentrations of detected constituents in milligrams per liter (mg/L)							
		Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Lead (Pb)	Mercury (Hg)	Selenium (Se)	Silver (Ag)
Sample #1	9/7/2021	0.05	1.34	0.08	0.05	0.05	0.0021	0.056	0.05
Sample #2	9/8/2021	0.05	1.75	0.05	0.05	0.05	0.0004	0.052	0.05
Sample #3	9/9/2021	0.05	1.63	0.05	0.05	0.05	0.0004	0.05	0.05
Sample #4	9/10/2021	0.05	1.00	0.05	0.05	0.05	0.0004	0.05	0.05
Sample #5	9/11/2021	0.05	2.05	0.05	0.05	0.05	0.0004	0.052	0.05
Sample #6	9/12/2021	0.05	1.02	0.05	0.05	0.05	0.0004	0.05	0.05
Sample #7	9/14/2021	0.05	1.07	1.32	0.05	0.19	0.0006	0.05	0.05
Sample #8	9/15/2021	0.05	0.752	0.05	0.05	0.05	0.0004	0.05	0.05
Sample #9	9/16/2021	0.05	0.836	0.05	0.05	0.05	0.0004	0.05	0.05
Sample #10	9/22/2021	0.05	0.942	0.05	0.05	0.05	0.0004	0.05	0.05
Sample #11	9/23/2021	0.05	0.914	0.05	0.05	0.05	0.0004	0.05	0.05
Sample #12	10/26/2021	0.05	0.979	0.05	0.05	1.88	0.0004	0.077	0.05
Sample #13	10/27/2021	0.05	0.836	0.05	0.05	0.157	0.0004	0.065	0.05
Sample #14	10/28/2021	0.05	1.23	0.05	0.05	0.177	0.0004	0.061	0.05
Statistical Analysis									
Regulatory Threshold		5.00	100.00	1.00	5.00	5.00	0.20	1.00	5.00
Number of Samples		14	14	14	14	14	14	14	14
Sum of the Concentrations		0.7	16.349	2	0.7	2.904	0.0075	0.763	0.7
(Sum of the Concentrations)		0.49	267.289801	4	0.49	8.433216	0.00005625	0.582169	0.49
Sum of the Squares of the Concentrations		0.04	21.060197	1.7788	0.035	3.651478	0.00000669	0.042419	0.035
Student "T" Constant (two tailed confidence interval @ 80%, t.20)		1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Mean, x		0.050	1.168	0.143	0.050	0.207	0.001	0.055	0.050
Variance, s^2		0.00	0.15	0.11	0.00	0.23	0.00	0.00	0.00
Standard Deviation,s		0.00	0.39	0.34	0.00	0.48	0.00	0.01	0.00
Standard Error, s_x		0.00	0.10	0.09	0.00	0.13	0.00	0.00	0.00
Upper Confidence Interval (normal)		**0.050**	**1.308**	**0.265**	**0.050**	**0.382**	**0.0007**	**0.0574**	**0.050**

*When less than 50% of the laboratory results are below the detection one half of the detection limit is used in the statistical analysis

Table 4

COMPARISON OF SW-846 STATISTICAL RESULTS ANDREGULATORY THRESHOLDS FOR METAL ANALYTES

Analyte	90% Upper Confidence Interval per SW-846 (b)	Regulatory Threshold (a)
Metals		
Arsenic	0.050	5.0
Barium	1.308	100.0
Cadmium	0.265	1.0
Chromium	0.050	5.0
Lead	0.382	5.0
Mercury	0.0007	0.2
Selenium	0.0574	1.0
Silver	0.050	5.0

(a) 40 CFR Part 261. All units are expressed as milligrams per liter (mg/L).

(b) 90% Upper Confidence Interval as a single-tailed distribution is equivalent to an 80% Upper Confidence Interval as a two-tailed distribution.

APPENDIX A

Laboratory and QA/QC Results
And
Bulk Sample Characteristics

elementOne

Element One Inc.
6319-D Carolina Beach Rd.
Wilmington, NC 28412

Phone: 910 793-0128
Fax: 910 792-6853
e1lab@e1lab.com

FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

September 17, 2021
Client Project Name
Client Project Number

Sample ID: 1-9/7/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	09/16/2021
Date Combined	09/07/2021	Time Sampled		Time Received	1125
Sampler	D. Gallaher	Delivered by	UPS	Received by	LLB
Extraction Begun	09/16/21 1530	Extraction Ended	09/17/21 0815	E1 Sample #	37381-1

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.09	SU			EPA 1311	09/16/21
Fluid Determination pH	10.84	SU			EPA 1311	09/16/21
TCLP pH, Final	8.10	SU			EPA 1311	09/17/21
pH, Extraction Fluid #2	2.88	SU			EPA 1311	09/16/21
Solids	78.0	%			SM2540G	09/16/21
Total Sample Weight	0.31	Kg			EPA 1311	09/16/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	09/16/21
Sample < 3/8"	0.31	Kg			EPA 1311	09/16/21
Sample > 3/8"	0.00	Kg			EPA 1311	09/16/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	09/16/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	09/16/21

Ken Smith, Laboratory Director

Report compiled by KH

Certifications: NJ NELAP NC009, NY ELAP 11889 and NC DWQ DENR 604

Element One Inc.
6319-D Carolina Beach Rd.
Wilmington, NC 28412

Phone: 910 793-0128
Fax: 910 792-6853
e1lab@e1lab.com

elementOne

FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

September 17, 2021
Client Project Name
Client Project Number

Sample ID: 1-9/8/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	09/16/2021
Date Combined	09/08/2021	Time Sampled		Time Received	1125
Sampler	D. Gallaher	Delivered by	UPS	Received by	LLB
Extraction Begun	09/16/21 1530	Extraction Ended	09/17/21 0815	E1 Sample #	37381-2

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.16	SU			EPA 1311	09/16/21
Fluid Determination pH	11.39	SU			EPA 1311	09/16/21
TCLP pH, Final	10.34	SU			EPA 1311	09/17/21
pH, Extraction Fluid #2	2.88	SU			EPA 1311	09/16/21
Solids	83.9	%			SM2540G	09/16/21
Total Sample Weight	0.30	Kg			EPA 1311	09/16/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	09/16/21
Sample < 3/8"	0.30	Kg			EPA 1311	09/16/21
Sample > 3/8"	0.00	Kg			EPA 1311	09/16/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	09/16/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	09/16/21

Ken Smith, Laboratory Director

Report compiled by Ian

Certifications: NJ NELAP NC009, NY ELAP 11889 and NC DWQ DENR 604

37381

CHAIN OF CUSTODY

Element One, Inc.
5022-C Wrightsville Av.
Wilmington, NC 28403

Phone: 910-793-0128
FAX: 910-792-6853
Email: e1lab@e1lab.com

Client	NAES
Project No	
Project ID:	
PO No	2022 - 00231

Sampling Site	Mid-Conn
Date:	9-13-21
Plant Name:	NAES MIRA
Plant City, State	Hartford CT

Contact	Thomas Lally	Address: Gate 20 Reserve Rd Hartford CT 06114
Phone:	860-240-7144	Cell
Fax:	860-240-7186	email Thomas.Lally@NAES.com

Sample ID	Custody Seal #	Date	Unit / Run Number	Sample Fraction	Filter ID	Filter Tare
1	1	9-7-21	ash composite			
2	2	9-8-21	ash composite			

Analysis Requested.

Method	131
Analytical Parameters	TCLP pH Per David via email 9.16.21 ZRB

	Signature	Company	Date	Time
Collected by:		NAES	9-13-21	1200
COC Completed by:	David Gallagher	NAES	9-13-21	1300
Relinquished by:		NAES	9-13-21	1300
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:	Lisa Bratton	Element One Inc	9.16.21	1125
Sample Condition Upon Receipt	Good	Temperature Upon Receipt		

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 3-9/9/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/09/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-3

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.04	SU			EPA 1311	10/04/21
Fluid Determination pH	11.94	SU			EPA 1311	10/04/21
TCLP pH, Final	10.76	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	85.4	%			SM2540G	10/04/21
Total Sample Weight	0.29	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.29	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

Report compiled by

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 4-9/10/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/10/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-4

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.30	SU			EPA 1311	10/04/21
Fluid Determination pH	11.82	SU			EPA 1311	10/04/21
TCLP pH, Final	9.54	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	82.8	%			SM2540G	10/04/21
Total Sample Weight	0.30	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.30	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 5-9/11/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/11/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-5

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.33	SU			EPA 1311	10/04/21
Fluid Determination pH	11.79	SU			EPA 1311	10/04/21
TCLP pH, Final	10.87	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	80.1	%			SM2540G	10/04/21
Total Sample Weight	0.29	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.29	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 6-9/12/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/12/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-6

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.24	SU			EPA 1311	10/04/21
Fluid Determination pH	11.19	SU			EPA 1311	10/04/21
TCLP pH, Final	8.85	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	76.4	%			SM2540G	10/04/21
Total Sample Weight	0.30	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.30	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 7-9/14/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/14/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-7

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.13	SU			EPA 1311	10/04/21
Fluid Determination pH	9.94	SU			EPA 1311	10/04/21
TCLP pH, Final	7.57	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	75.3	%			SM2540G	10/04/21
Total Sample Weight	0.30	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.30	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 8-9/15/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/15/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-8

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.25	SU			EPA 1311	10/04/21
Fluid Determination pH	11.20	SU			EPA 1311	10/04/21
TCLP pH, Final	9.46	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	75.7	%			SM2540G	10/04/21
Total Sample Weight	0.29	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.29	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 9-9/16/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/16/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-9

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.47	SU			EPA 1311	10/04/21
Fluid Determination pH	11.77	SU			EPA 1311	10/04/21
TCLP pH, Final	10.56	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	76.0	%			SM2540G	10/04/21
Total Sample Weight	0.30	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.30	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 10-9/22/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/22/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-10

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.36	SU			EPA 1311	10/04/21
Fluid Determination pH	11.71	SU			EPA 1311	10/04/21
TCLP pH, Final	9.79	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	77.2	%			SM2540G	10/04/21
Total Sample Weight	0.30	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.30	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 5, 2021
Client Project Name
Client Project Number

Sample ID: 11-9/23/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/23/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-11

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.30	SU			EPA 1311	10/04/21
Fluid Determination pH	11.43	SU			EPA 1311	10/04/21
TCLP pH, Final	9.75	SU			EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	10/04/21
Solids	74.8	%			SM2540G	10/04/21
Total Sample Weight	0.30	Kg			EPA 1311	10/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	10/04/21
Sample < 3/8"	0.30	Kg			EPA 1311	10/04/21
Sample > 3/8"	0.00	Kg			EPA 1311	10/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	10/04/21
> 3/8" crushable sample	0.00	Kg			EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

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CHAIN OF CUSTODY

37381

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Email: e1lab@e1lab.com

Client: NAES	Sampling Site: Mid-CT RRF PBF
PO No: 2022-00231	Date: 9/28/2021
Project ID:	Plant Name: Mid-CT Resource Recovery Facility
Project	Plant City, State: Hartford, CT

Contact: Tom Hochdorfer		Address: MIRA/NAES
Phone: 860-240-7144	Cell: 860-803-1509	Reserve Road, Gate 20
Fax: 860-240-7148	Email: Thomas.lally@naes .com	Hartford, CT 06114

Sample ID	Custody Seal #	Date	Unit / Run Number	Sample Fraction	Filter	
					ID	Tare
3	3	9-9-21	ash Composite	Combined Ash		
4	4	9-10-21	ash Composite			
5	5	9-11-21	ash Composite			
6	6	9-12-21	ash Composite			
7	7	9-14-21	ash Composite			
8	8	9-15-21	ash Composite			
9	9	9-16-21	ash Composite			
10	10	9-22-21	ash Composite			
11	11	9-23-21	ash Composite			

Analysis Requested.

Method: 1311 (fluid determination)

Analytical Parameters: TCLP pH Report pH prior to Met & Hal

	Signature	Company	Date	Time
Collected by:	Various Operators Thomas Lally	NAES		
COC Completed by:	Thomas Lally	NAES	9-28-21	11:30am
Relinquished by:	Thomas Lally	NAES	9-29-21	11:00am
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:	Lisa Kuntz	Element One Inc	10-1-21	1000
Sample Condition Upon Receipt		Temperature Upon Receipt		

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

November 5, 2021
Client Project Name
Client Project Number

Sample ID: 12-10/26/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	11/04/2021
Date Combined	10/26/2021	Time Sampled	1340-1100	Time Received	1325
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	11/04/21 1430	Extraction Ended	11/05/21 0830	E1 Sample #	37381-12

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.51	SU			EPA 1311	11/04/21
Fluid Determination pH	11.37	SU			EPA 1311	11/04/21
TCLP pH, Final	11.88	SU			EPA 1311	11/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	11/04/21
Solids	71.1	%			SM2540G	11/04/21
Total Sample Weight	0.29	Kg			EPA 1311	11/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	11/04/21
Sample < 3/8"	0.23	Kg			EPA 1311	11/04/21
Sample > 3/8"	0.06	Kg			EPA 1311	11/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	11/04/21
> 3/8" crushable sample	0.06	Kg			EPA 1311	11/04/21

Ken Smith, Laboratory Director

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

November 5, 2021
Client Project Name
Client Project Number

Sample ID: 13-10/27/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	11/04/2021
Date Combined	10/27/2021	Time Sampled	1400-1210	Time Received	1325
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	11/04/21 1430	Extraction Ended	11/05/21 0830	E1 Sample #	37381-13

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.63	SU			EPA 1311	11/04/21
Fluid Determination pH	11.66	SU			EPA 1311	11/04/21
TCLP pH, Final	11.37	SU			EPA 1311	11/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	11/04/21
Solids	69.6	%			SM2540G	11/04/21
Total Sample Weight	0.29	Kg			EPA 1311	11/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	11/04/21
Sample < 3/8"	0.24	Kg			EPA 1311	11/04/21
Sample > 3/8"	0.05	Kg			EPA 1311	11/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	11/04/21
> 3/8" crushable sample	0.05	Kg			EPA 1311	11/04/21

Ken Smith, Laboratory Director

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

November 5, 2021
Client Project Name
Client Project Number

Sample ID: 14-10/28/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	11/04/2021
Date Combined	10/28/2021	Time Sampled	1400-1045	Time Received	1325
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	11/04/21 1430	Extraction Ended	11/05/21 0830	E1 Sample #	37381-14

Parameter	Result	Unit	Dilution	DL	Method	Date
pH, Initial	12.70	SU			EPA 1311	11/04/21
Fluid Determination pH	11.45	SU			EPA 1311	11/04/21
TCLP pH, Final	10.91	SU			EPA 1311	11/05/21
pH, Extraction Fluid #2	2.89	SU			EPA 1311	11/04/21
Solids	72.4	%			SM2540G	11/04/21
Total Sample Weight	0.29	Kg			EPA 1311	11/04/21
Non-crushable sample > 2"	0.00	Kg			EPA 1311	11/04/21
Sample < 3/8"	0.22	Kg			EPA 1311	11/04/21
Sample > 3/8"	0.07	Kg			EPA 1311	11/04/21
> 3/8" non-crushable sample	0.00	Kg			EPA 1311	11/04/21
> 3/8" crushable sample	0.07	Kg			EPA 1311	11/04/21

Ken Smith, Laboratory Director

Report compiled by

Certifications: NJ NELAP NC009, NY ELAP 11889 and NC DWQ DENR 604

37381

CHAIN OF CUSTODY

Element One, Inc.
6319-D Carolina Beach Road
Wilmington, NC 28412

Phone: 910-793-0128
FAX: 910-792-6853
Email: e1lab@e1lab.com

Client: NAES	Sampling Site: Mid-CT RRF
PO No:	Date:
Project ID:	Plant Name: Mid-CT Resource Recovery Facility
PO No:	Plant City, State: Hartford, CT

Contact: Tom Lally		Address: MIRA/NAES
Phone: 860-240-7144	Cell: 860-803-1509	Reserve Road, Gate 20
Fax: 860-240-7148	Email: **tom.hochdorfer@naes.com**	Hartford, CT 06114

	Sample ID	Custody Seal #	Date	Unit / Run Number	Sample Fraction	Filter ID	Filter Tare
12	12		10-26-21	1140PM - 11:00PM	Combined Ash		
13	13		10-27-21	1400PM - 12:10PM	↓		
14	14		10-28-21	1400PM - 1045AM			

Analysis Requested.

Method: 1311 (fluid determination)
Analytical Parameters: pH

	Signature	Company	Date	Time
Collected by:	Various Operators	NAES		
COC Completed by:	Tom Lally	NAES	11-1-21	1400
Relinquished by:	Rosanne Tully	NAES	11-2-21	0815
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:	Greg Brown	Element One Inc	11-4-21	1325
Sample Condition Upon Receipt		Temperature Upon Receipt		

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

September 27, 2021
Client Project Name
Client Project Number

Sample ID: 1-9/7/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	09/16/2021
Date Combined	09/07/2021	Time Sampled		Time Received	1125
Sampler	D. Gallaher	Delivered by	UPS	Received by	LLB
Extraction Begun	09/16/21 1530	Extraction Ended	09/17/21 0815	E1 Sample #	37381-1

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Selenium, TCLP digested	0.056	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Cadmium, TCLP digested	0.080	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Barium, TCLP digested	1.34	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Mercury, TCLP digested	0.0021	mg/L	0.0004	2	0.0002	EPA 1311/7470A	09/20/21
Solids	78.0	%				SM2540G	09/16/21
pH, Initial	12.09	SU				EPA 1311	09/16/21
Fluid Determination pH	10.84	SU				EPA 1311	09/16/21
TCLP pH, Final	8.10	SU				EPA 1311	09/17/21
pH, Extraction Fluid #2	2.88	SU				EPA 1311	09/16/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 1-2 Compiled by

Certifications: NJ NELAP NC009, NY ELAP 11889 and NC DWQ DENR 604

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

September 27, 2021
Client Project Name
Client Project Number

Sample ID: 2-9/8/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	09/16/2021
Date Combined	09/08/2021	Time Sampled		Time Received	1125
Sampler	D. Gallaher	Delivered by	UPS	Received by	LLB
Extraction Begun	09/16/21 1530	Extraction Ended	09/17/21 0815	E1 Sample #	37381-2

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Selenium, TCLP digested	0.052	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Barium, TCLP digested	1.75	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	09/20/21
Solids	83.9	%				SM2540G	09/16/21
pH, Initial	12.16	SU				EPA 1311	09/16/21
Fluid Determination pH	11.39	SU				EPA 1311	09/16/21
TCLP pH, Final	10.34	SU				EPA 1311	09/17/21
pH, Extraction Fluid #2	2.88	SU				EPA 1311	09/16/21

Katie Gattis, QA/QC Officer

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

September 27, 2021
Client Project Name
Client Project Number

Sample ID: TCLP Extraction Blank

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	09/16/2021
Date Combined	09/07-08/2021	Time Sampled		Time Received	1125
Sampler	D. Gallaher	Delivered by	UPS	Received by	LLB
Extraction Begun	09/16/21 1530	Extraction Ended	09/17/21 0815	E1 Sample #	37385-BLK

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Barium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	09/22/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	09/20/21
pH, Extraction Fluid #2	2.88	SU				EPA 1311	09/16/21
Chromium, Spike Recovery	104	%		50	0.001	EPA 1311/6020B	09/22/21
Arsenic, Spike Recovery	101	%		50	0.001	EPA 1311/6020B	09/22/21
Selenium, Spike Recovery	98	%		50	0.001	EPA 1311/6020B	09/22/21
Silver, Spike Recovery	104	%		100	0.001	EPA 1311/6020B	09/22/21
Cadmium, Spike Recovery	101	%		50	0.001	EPA 1311/6020B	09/22/21
Barium, Spike Recovery	96	%		50	0.001	EPA 1311/6020B	09/22/21
Lead, Spike Recovery	99	%		50	0.001	EPA 1311/6020B	09/22/21
Mercury, Spike Recovery	105	%		2	0.0002	EPA 1311/7470A	09/20/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 1-2 Compiled by

Certifications: NJ NELAP NC009, NY ELAP 11889 and NC DWQ DENR 604

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CHAIN OF CUSTODY

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Client	NAES
Project No	
Project ID:	
PO No	2022 - 00231

Sampling Site	Mid-Conn
Date:	9-13-21
Plant Name:	NAES MIRA
Plant City, State	Hartford Ct

Contact	Thomas Lally		Address: Gate 20 Reserve Rd Hartford Ct 06114
Phone:	860-240-7144	Cell	
Fax:	860-240-7106	email	Thomas.Lally@NAES.com

Sample ID	Custody Seal #	Date	Unit / Run Number	Sample Fraction	Filter ID	Filter Tare
1	1	9-7-21	ash composite			
2	2	9-8-21	ash composite			

Analysis Requested.

Method	1311
Analytical Parameters	TCLP pH Per David via email 9.16.21 ZXB

	Signature	Company	Date	Time
Collected by:	DeDeter	NAES	9-13-21	1200
COC Completed by:	Daniel Gallagher DeDeter	NAES	9-13-21	1300
Relinquished by:	DeDeter	NAES	9-13-21	1300
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:	Lisa Bratton	Element One Inc	9.16.21	1125
Sample Condition Upon Receipt	Good	Temperature Upon Receipt		

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 3-9/9/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/09/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-3

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	1.63	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	85.4	%				SM2540G	10/04/21
pH, Initial	12.04	SU				EPA 1311	10/04/21
Fluid Determination pH	11.94	SU				EPA 1311	10/04/21
TCLP pH, Final	10.76	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 3-11 Compiled by

Certifications: NJ NELAP NC009 and NY ELAP 11889

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 4-9/10/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/10/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-4

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	1.00	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	82.8	%				SM2540G	10/04/21
pH, Initial	12.30	SU				EPA 1311	10/04/21
Fluid Determination pH	11.82	SU				EPA 1311	10/04/21
TCLP pH, Final	9.54	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 3-11 Compiled by

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 5-9/11/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/11/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-5

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	0.052	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	2.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	80.1	%				SM2540G	10/04/21
pH, Initial	12.33	SU				EPA 1311	10/04/21
Fluid Determination pH	11.79	SU				EPA 1311	10/04/21
TCLP pH, Final	10.87	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 3-11 Compiled by

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 6-9/12/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/12/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-6

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	1.02	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	76.4	%				SM2540G	10/04/21
pH, Initial	12.24	SU				EPA 1311	10/04/21
Fluid Determination pH	11.19	SU				EPA 1311	10/04/21
TCLP pH, Final	8.85	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 3-11 Compiled by

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 7-9/14/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/14/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-7

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	1.32	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	1.07	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	0.190	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	0.0006	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	75.3	%				SM2540G	10/04/21
pH, Initial	12.13	SU				EPA 1311	10/04/21
Fluid Determination pH	9.94	SU				EPA 1311	10/04/21
TCLP pH, Final	7.57	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 3-11 Compiled by

Certifications: NJ NELAP NC009 and NY ELAP 11889

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 8-9/15/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/15/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-8

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	0.752	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	75.7	%				SM2540G	10/04/21
pH, Initial	12.25	SU				EPA 1311	10/04/21
Fluid Determination pH	11.20	SU				EPA 1311	10/04/21
TCLP pH, Final	9.46	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 3-11 Compiled by

Certifications: NJ NELAP NC009 and NY ELAP 11889

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e1lab@e1lab.com

elementOne

SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 9-9/16/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/16/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-9

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	0.836	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	76.0	%				SM2540G	10/04/21
pH, Initial	12.47	SU				EPA 1311	10/04/21
Fluid Determination pH	11.77	SU				EPA 1311	10/04/21
TCLP pH, Final	10.56	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 10-9/22/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/22/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-10

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	0.942	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	77.2	%				SM2540G	10/04/21
pH, Initial	12.36	SU				EPA 1311	10/04/21
Fluid Determination pH	11.71	SU				EPA 1311	10/04/21
TCLP pH, Final	9.79	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: 11-9/23/21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/23/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37381-11

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	0.914	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
Solids	74.8	%				SM2540G	10/04/21
pH, Initial	12.30	SU				EPA 1311	10/04/21
Fluid Determination pH	11.43	SU				EPA 1311	10/04/21
TCLP pH, Final	9.75	SU				EPA 1311	10/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37385

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

October 8, 2021
Client Project Name
Client Project Number

Sample ID: TCLP Extraction Blank

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	10/01/2021
Date Combined	09/09-23/2021	Time Sampled		Time Received	1200
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	10/04/21 1540	Extraction Ended	10/05/21 0800	E1 Sample #	37385-3-11 BLK

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Barium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	10/07/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	10/06/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	10/04/21
Chromium, Spike Recovery	106	%		50	0.001	EPA 1311/6020B	10/07/21
Arsenic, Spike Recovery	104	%		50	0.001	EPA 1311/6020B	10/07/21
Selenium, Spike Recovery	106	%		50	0.001	EPA 1311/6020B	10/07/21
Silver, Spike Recovery	81	%		50	0.001	EPA 1311/6020B	10/07/21
Cadmium, Spike Recovery	101	%		50	0.001	EPA 1311/6020B	10/07/21
Barium, Spike Recovery	102	%		50	0.001	EPA 1311/6020B	10/07/21
Lead, Spike Recovery	100	%		50	0.001	EPA 1311/6020B	10/07/21
Mercury, Spike Recovery	104	%		2	0.0002	EPA 1311/7470A	10/06/21

Katie Gattis, QA/QC Officer

37381 NAES Metals Report 3-11 Compiled by

Certifications: NJ NELAP NC009 and NY ELAP 11889

CHAIN OF CUSTODY

37381

Element One, Inc.
6319-D Carolina Beach Road
Wilmington, NC 28412

Phone: 910-793-0128
FAX: 910-792-6853
Email: e1lab@e1lab.com

Client: NAES	Sampling Site: Mid-CT RRF PBF
PO No: 2022-00231	Date: 9/28/2021
Project ID:	Plant Name: Mid-CT Resource Recovery Facility
Project	Plant City, State: Hartford, CT

Contact: Tom Hochdorfer		Address: MIRA/NAES
Phone: 860-240-7144	Cell: 860-803-1509	Reserve Road, Gate 20
Fax: 860-240-7148	Email: Thomas.lally@naes .com	Hartford, CT 06114

Sample ID	Custody Seal #	Date	Unit / Run Number	Sample Fraction	Filter ID	Filter Tare
3	3	9-9-21	ash Composite	Combined Ash		
4	4	9-10-21	ash Composite			
5	5	9-11-21	ash Composite			
6	6	9-12-21	ash Composite			
7	7	9-14-21	ash Composite			
8	8	9-15-21	ash Composite			
9	9	9-16-21	ash Composite			
10	10	9-22-21	ash Composite			
11	11	9-23-21	ash Composite			

Analysis Requested.

Method: 1311 (fluid determination)

Analytical Parameters: TCLP pH Report pH prior to Met & Hal

	Signature	Company	Date	Time
Collected by:	Various Operators Thomas Lally	NAES		
COC Completed by:	Thomas Lally	NAES	9-28-21	11:35am
Relinquished by:	Thomas Lally	NAES	9-29-21	11:00am
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:		Element One, Inc.	10-1-21	1200
Sample Condition Upon Receipt		Temperature Upon Receipt		

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

November 10, 2021
Client Project Name
Client Project Number

Sample ID: 12-10-26-21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	11/04/2021
Date Combined	10/26/2021	Time Sampled	1340-1100	Time Received	1325
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	11/04/21 1430	Extraction Ended	11/05/21 0830	E1 Sample #	37381-12

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Selenium, TCLP digested	0.077	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Barium, TCLP digested	0.979	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Lead, TCLP digested	1.88	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	11/10/21
Solids	71.1	%				SM2540G	11/04/21
pH, Initial	12.51	SU				EPA 1311	11/04/21
Fluid Determination pH	11.37	SU				EPA 1311	11/04/21
TCLP pH, Final	11.88	SU				EPA 1311	11/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	11/04/21

Ken Smith, Laboratory Director

37381 NAES Metals Report 12-14 Compiled by

Certifications: NJ NELAP NC009, NY ELAP 11889, and NC DWQ DENR 604

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

November 10, 2021
Client Project Name
Client Project Number

Sample ID: 13-10-27-21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	11/04/2021
Date Combined	10/27/2021	Time Sampled	1400-1210	Time Received	1325
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	11/04/21 1430	Extraction Ended	11/05/21 0830	E1 Sample #	37381-13

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Selenium, TCLP digested	0.065	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Barium, TCLP digested	0.836	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Lead, TCLP digested	0.157	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	11/10/21
Solids	69.6	%				SM2540G	11/04/21
pH, Initial	12.63	SU				EPA 1311	11/04/21
Fluid Determination pH	11.66	SU				EPA 1311	11/04/21
TCLP pH, Final	11.37	SU				EPA 1311	11/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	11/04/21

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SUMMARY OF TCLP ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

November 10, 2021
Client Project Name
Client Project Number

Sample ID: 14-10-28-21

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	11/04/2021
Date Combined	10/28/2021	Time Sampled	1400-1045	Time Received	1325
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	11/04/21 1430	Extraction Ended	11/05/21 0830	E1 Sample #	37381-14

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Selenium, TCLP digested	0.061	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Barium, TCLP digested	1.23	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Lead, TCLP digested	0.177	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	11/10/21
Solids	72.4	%				SM2540G	11/04/21
pH, Initial	12.70	SU				EPA 1311	11/04/21
Fluid Determination pH	11.45	SU				EPA 1311	11/04/21
TCLP pH, Final	10.91	SU				EPA 1311	11/05/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	11/04/21

Ken Smith, Laboratory Director

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FINAL REPORT OF ANALYSES
Element One, Inc. Project Number e37381

NAES Mid-CT Resource Recovery Facility
Reserve Road, Gate 20
Hartford, CT 06114

November 10, 2021
Client Project Name
Client Project Number

Sample ID: TCLP Extraction Blank

Sample Matrix	Combined Ash	Sample Type	Composite	Date Received	11/04/2021
Date Combined	10/26-28/2021	Time Sampled		Time Received	1325
Sampler	Various	Delivered by	UPS	Received by	LLB
Extraction Begun	11/04/21 1430	Extraction Ended	11/05/21 0830	E1 Sample #	37381-12-14 BLK

Parameter	Result	Unit	Calc. RL	Dilution	DL	Method	Date
Chromium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Arsenic, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Selenium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Silver, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Cadmium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Barium, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Lead, TCLP digested	< 0.05	mg/L	0.05	50	0.001	EPA 1311/6020B	11/08/21
Mercury, TCLP digested	< 0.0004	mg/L	0.0004	2	0.0002	EPA 1311/7470A	11/10/21
pH, Extraction Fluid #2	2.89	SU				EPA 1311	11/04/21
Chromium, Spike Recovery	106	%		50	0.001	EPA 1311/6020B	11/08/21
Arsenic, Spike Recovery	98	%		50	0.001	EPA 1311/6020B	11/08/21
Selenium, Spike Recovery	99	%		50	0.001	EPA 1311/6020B	11/08/21
Silver, Spike Recovery	107	%		50	0.001	EPA 1311/6020B	11/08/21
Cadmium, Spike Recovery	99	%		50	0.001	EPA 1311/6020B	11/08/21
Barium, Spike Recovery	103	%		50	0.001	EPA 1311/6020B	11/08/21
Lead, Spike Recovery	101	%		50	0.001	EPA 1311/6020B	11/08/21
Mercury, Spike Recovery	92	%		2	0.0002	EPA 1311/7470A	11/10/21

Ken Smith, Laboratory Director

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37381

CHAIN OF CUSTODY

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Wilmington, NC 28412

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FAX: 910-792-6853
Email: e1lab@e1lab.com

Client: NAES	Sampling Site: Mid-CT RRF
PO No:	Date:
Project ID:	Plant Name: Mid-CT Resource Recovery Facility
PO No:	Plant City, State: Hartford, CT

Contact: Tom Lally		Address: MIRA/NAES
Phone: 860-240-7144	Cell: 860-803-1509	Reserve Road, Gate 20
Fax: 860-240-7148	Email: **tom.hochdorfer@naes.com**	Hartford, CT 06114

Sample ID	Custody Seal #	Date	Unit / Run Number	Sample Fraction	Filter ID	Filter Tare
12		10-26-21	1140PM - 11:00PM	Combined Ash		
13		10-27-21	1400PM - 12:10PM	↓		
14		10-28-21	1400PM - 1045AM	↓		

Analysis Requested.

Method: 1311 (fluid determination)
Analytical Parameters: pH

	Signature	Company	Date	Time
Collected by:	Various Operators	NAES		
COC Completed by:	Tom Lally	NAES	11-1-21	1400
Relinquished by:	[signature] Tom Lally	NAES	11-2-21	0815
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				
Received by:	[signature]	Element One Inc	11-4-21	1325
Sample Condition Upon Receipt		Temperature Upon Receipt		

ATTACHMENT 2

Peter Egan

From: Peter Egan
Sent: Tuesday, September 13, 2016 4:05 PM
To: Peter Egan
Subject: FW: Total Metals Ash Lab Report
Attachments: August 2016 Ash Total Metal.pdf

Memo to File:

NAES conducted the sampling of the ash for these analyses.

Each of these four ash samples represent composites of 8, one hour grab samples.

The 8 one hour grab samples were mixed with a cement mixer.

Peter W. Egan
Director of Operations & Environmental Affairs
Materials Innovation & Recycling Authority
200 Corporate Place, Suite 202
Rocky Hill, CT 06067
Tel: 860-757-7725
pegan@ctmira.org
MIRA has relocated – note our new address

From: Hochdorfer, Tom [mailto:Tom.Hochdorfer@naes.com]
Sent: Friday, August 19, 2016 8:26 AM
To: Peter Egan
Cc: O'Rourke, John; Christopher Shepard
Subject: Total Metals Ash Lab Report

Peter,
Attached is the laboratory report for the 4 ash samples analyzed for the total metal list you had provided.

Regards,
Tom

Thomas Hochdorfer
Environmental Manager
NAES Corp.
Gate 20 Reserve Road
Hartford, CT 06114
Ph 860.240.7144 Cell 860.803.1509
Tom.Hochdorfer@naes.com

PHOENIX
Environmental Laboratories, Inc.

Thursday, August 18, 2016

Attn: Tom Hochdorfer
NAES Corporation PBF
Reserve Road, Gate 20
Hartford, CT 06114

Project ID: NAES-ASH
Sample ID#s: BN88115 - BN88118

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 18, 2016

FOR: Attn: Tom Hochdorfer
NAES Corporation PBF
Reserve Road, Gate 20
Hartford, CT 06114

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		07/30/16	16:45
Location Code:	NAES	Received by:	SW	08/08/16	13:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2016-1082				

Laboratory Data

SDG ID: GBN88115
Phoenix ID: BN88115

Project ID: NAES-ASH
Client ID: SAMPLE 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	8.47	0.42	mg/Kg	1	08/09/16	LK	SW6010C
Arsenic	41.5	0.84	mg/Kg	1	08/09/16	LK	SW6010C
Barium	557	0.42	mg/Kg	1	08/09/16	LK	SW6010C
Beryllium	0.40	0.34	mg/Kg	1	08/09/16	LK	SW6010C
Cadmium	89.7	0.42	mg/Kg	1	08/09/16	LK	SW6010C
Cobalt	38.9	0.42	mg/Kg	1	08/09/16	LK	SW6010C
Chromium	167	0.42	mg/Kg	1	08/09/16	LK	SW6010C
Copper	1440	42	mg/kg	100	08/10/16	LK	SW6010C
Mercury	4.39	0.34	mg/Kg	1	08/09/16	RS	SW7471B
Nickel	212	42	mg/Kg	100	08/10/16	LK	SW6010C
Lead	2330	42	mg/Kg	100	08/10/16	LK	SW6010C
Antimony	297	42	mg/Kg	10	08/15/16	EK	SW6010C
Selenium	< 1.7	1.7	mg/Kg	1	08/09/16	LK	SW6010C
Thallium	< 3.8	3.8	mg/Kg	1	08/09/16	LK	SW6010C
Vanadium	24.5	0.42	mg/Kg	1	08/09/16	LK	SW6010C
Zinc	6240	42	mg/Kg	100	08/10/16	LK	SW6010C
Percent Solid	70		%		08/08/16	W	SW846-%Solid
Mercury Digestion	Completed				08/09/16	W/W	SW7471B
Total Metals Digest	Completed				08/08/16	X/AG	SW3050B

Project ID: NAES-ASH
Client ID: SAMPLE 1

Phoenix I.D.: BN88115

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
August 18, 2016
Reviewed and Released by: Deb Lawrie, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 18, 2016

FOR: Attn: Tom Hochdorfer
NAES Corporation PBF
Reserve Road, Gate 20
Hartford, CT 06114

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		07/31/16	14:45
Location Code:	NAES	Received by:	SW	08/08/16	13:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2016-1082				

Laboratory Data

SDG ID: GBN88115
Phoenix ID: BN88116

Project ID: NAES-ASH
Client ID: SAMPLE 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	9.07	0.48	mg/Kg	1	08/09/16	LK	SW6010C
Arsenic	34.7	0.95	mg/Kg	1	08/09/16	LK	SW6010C
Barium	582	0.48	mg/Kg	1	08/09/16	LK	SW6010C
Beryllium	0.42	0.38	mg/Kg	1	08/09/16	LK	SW6010C
Cadmium	70.7	0.48	mg/Kg	1	08/09/16	LK	SW6010C
Cobalt	29.4	0.48	mg/Kg	1	08/09/16	LK	SW6010C
Chromium	80.0	0.48	mg/Kg	1	08/09/16	LK	SW6010C
Copper	875	48	mg/kg	100	08/10/16	LK	SW6010C
Mercury	3.32	0.34	mg/Kg	1	08/09/16	RS	SW7471B
Nickel	111	0.48	mg/Kg	1	08/09/16	LK	SW6010C
Lead	1770	48	mg/Kg	100	08/10/16	LK	SW6010C
Antimony	247	48	mg/Kg	10	08/15/16	EK	SW6010C
Selenium	< 1.9	1.9	mg/Kg	1	08/09/16	LK	SW6010C
Thallium	< 4.3	4.3	mg/Kg	1	08/09/16	LK	SW6010C
Vanadium	23.1	0.48	mg/Kg	1	08/09/16	LK	SW6010C
Zinc	5120	48	mg/Kg	100	08/10/16	LK	SW6010C
Percent Solid	72		%		08/08/16	W	SW846-%Solid
Mercury Digestion	Completed				08/09/16	W/W	SW7471B
Total Metals Digest	Completed				08/08/16	X/AG	SW3050B

Project ID: NAES-ASH
Client ID: SAMPLE 2

Phoenix I.D.: BN88116

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
August 18, 2016
Reviewed and Released by: Deb Lawrie, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 18, 2016

FOR: Attn: Tom Hochdorfer
NAES Corporation PBF
Reserve Road, Gate 20
Hartford, CT 06114

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		08/01/16	14:30
Location Code:	NAES	Received by:	SW	08/08/16	13:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2016-1082				

Laboratory Data

SDG ID: GBN88115
Phoenix ID: BN88117

Project ID: NAES-ASH
Client ID: SAMPLE 3

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	7.01	0.44	mg/Kg	1	08/09/16	LK	SW6010C
Arsenic	30.5	0.88	mg/Kg	1	08/09/16	LK	SW6010C
Barium	587	0.44	mg/Kg	1	08/09/16	LK	SW6010C
Beryllium	0.40	0.35	mg/Kg	1	08/09/16	LK	SW6010C
Cadmium	46.5	0.44	mg/Kg	1	08/09/16	LK	SW6010C
Cobalt	29.6	0.44	mg/Kg	1	08/09/16	LK	SW6010C
Chromium	88.9	0.44	mg/Kg	1	08/09/16	LK	SW6010C
Copper	2360	44	mg/kg	100	08/10/16	LK	SW6010C
Mercury	2.57	0.31	mg/Kg	1	08/09/16	RS	SW7471B
Nickel	134	0.44	mg/Kg	1	08/09/16	LK	SW6010C
Lead	1680	44	mg/Kg	100	08/10/16	LK	SW6010C
Antimony	219	44	mg/Kg	10	08/15/16	EK	SW6010C
Selenium	< 1.8	1.8	mg/Kg	1	08/09/16	LK	SW6010C
Thallium	< 3.9	3.9	mg/Kg	1	08/09/16	LK	SW6010C
Vanadium	27.6	0.44	mg/Kg	1	08/09/16	LK	SW6010C
Zinc	5090	44	mg/Kg	100	08/10/16	LK	SW6010C
Percent Solid	75		%		08/08/16	W	SW846-%Solid
Mercury Digestion	Completed				08/09/16	W/W	SW7471B
Total Metals Digest	Completed				08/08/16	X/AG	SW3050B

Project ID: NAES-ASH
Client ID: SAMPLE 3

Phoenix I.D.: BN88117

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
August 18, 2016
Reviewed and Released by: Deb Lawrie, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

August 18, 2016

FOR: Attn: Tom Hochdorfer
NAES Corporation PBF
Reserve Road, Gate 20
Hartford, CT 06114

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		08/02/16	14:30
Location Code:	NAES	Received by:	SW	08/08/16	13:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	2016-1082				

Laboratory Data

SDG ID: GBN88115
Phoenix ID: BN88118

Project ID: NAES-ASH
Client ID: SAMPLE 4

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	5.92	0.41	mg/Kg	1	08/09/16	LK	SW6010C
Arsenic	34.4	0.83	mg/Kg	1	08/09/16	LK	SW6010C
Barium	812	0.41	mg/Kg	1	08/09/16	LK	SW6010C
Beryllium	0.40	0.33	mg/Kg	1	08/09/16	LK	SW6010C
Cadmium	48.8	0.41	mg/Kg	1	08/09/16	LK	SW6010C
Cobalt	29.1	0.41	mg/Kg	1	08/09/16	LK	SW6010C
Chromium	64.3	0.41	mg/Kg	1	08/09/16	LK	SW6010C
Copper	993	41	mg/kg	100	08/10/16	LK	SW6010C
Mercury	3.50	0.34	mg/Kg	1	08/09/16	RS	SW7471B
Nickel	84.8	0.41	mg/Kg	1	08/09/16	LK	SW6010C
Lead	1180	41	mg/Kg	100	08/10/16	LK	SW6010C
Antimony	271	41	mg/Kg	10	08/15/16	EK	SW6010C
Selenium	< 1.7	1.7	mg/Kg	1	08/09/16	LK	SW6010C
Thallium	< 3.7	3.7	mg/Kg	1	08/09/16	LK	SW6010C
Vanadium	19.8	0.41	mg/Kg	1	08/09/16	LK	SW6010C
Zinc	6080	41	mg/Kg	100	08/10/16	LK	SW6010C
Percent Solid	71		%		08/08/16	W	SW846-%Solid
Mercury Digestion	Completed				08/09/16	W/W	SW7471B
Total Metals Digest	Completed				08/08/16	X/AG	SW3050B

Project ID: NAES-ASH
Client ID: SAMPLE 4

Phoenix I.D.: BN88118

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
August 18, 2016
Reviewed and Released by: Deb Lawrie, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

August 18, 2016

QA/QC Data

SDG I.D.: GBN88115

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 355047 (mg/kg), QC Sample No: BN87645 (BN88115, BN88116, BN88117, BN88118)													
Mercury - Soil	BRL	0.03	61.3	63.7	3.80	121	107	12.3	82.2			70 - 130	30
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 354992 (mg/kg), QC Sample No: BN87646 (BN88115, BN88116, BN88117, BN88118)													
ICP Metals - Soil													
Antimony	BRL	3.3	<3.3	<3.5	NC	99.9			86.6			75 - 125	30
Arsenic	BRL	0.66	2.54	2.45	NC	93.3			87.9			75 - 125	30
Barium	BRL	0.33	41.1	38.0	7.80	89.3			107			75 - 125	30
Beryllium	BRL	0.26	<0.26	<0.28	NC	91.8			92.4			75 - 125	30
Cadmium	BRL	0.33	<0.33	<0.35	NC	86.4			88.0			75 - 125	30
Chromium	BRL	0.33	9.91	11.3	13.1	94.4			96.2			75 - 125	30
Cobalt	BRL	0.33	3.09	3.74	19.0	90.8			91.5			75 - 125	30
Copper	BRL	0.33	38.1	34.0	11.4	95.5			101			75 - 125	30
Lead	BRL	0.33	75.5	60.4	22.2	91.1			86.7			75 - 125	30
Nickel	BRL	0.33	9.24	9.84	6.30	92.2			92.3			75 - 125	30
Selenium	BRL	1.3	<1.3	<1.4	NC	84.9			80.7			75 - 125	30
Silver	BRL	0.33	<0.33	<0.35	NC	93.3			93.6			75 - 125	30
Thallium	BRL	3.0	<3.0	<3.1	NC	94.7			92.4			75 - 125	30
Vanadium	BRL	0.33	13.0	14.5	10.9	99.9			94.0			75 - 125	30
Zinc	BRL	0.33	65.5	104	45.4	90.3			89.3			75 - 125	30 r

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
August 18, 2016

Sample Criteria Exceedences Report

GBN88115 - NAES

Criteria: None

State: CT

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Cooler: Yes ☐ No ☐
Coolant: IPK ☑ ICE ☐ No ☐

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 6 °C Pg of

Contact Options:
☐ Fax:
☒ Phone: 860-240-7144
☑ Email: tom.Hochdorfer@naes.com

Customer: NAES
Address: Reserve Rd. Gate 20
Hartford, CT 06114

Project: NAES - Ash
Report to: Tom Hochdorfer
Invoice to: Tom Hochdorfer

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: Tom H Date: 8/8/16

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Total Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc	Glass Zinc	Soil VOA Vials [ ]	GL Soil container [ ] methanol [ ] H2O	GL Soil container [ ] oz	40 ml VOA Vial [ ] oz	GL Amber 1000ml [ ] As is [ ] HCl	PL As is [ ] 250ml [ ] As is [ ] H2SO4	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml	PL HNO3 250ml [ ] 250ml [ ] 500ml	PL NaOH 250ml	Bacteria Bottle
88115	Sample 1	Ash	7/30/16	945-1645	X	X										
88116	Sample 2	↓	7/31/16	745-1445	X	X										
88117	Sample 3	↓	8/1/16	730-1430	X	X										
88118	Sample 4	Ash	8/2/16	730-1430	X	X										

Relinquished by:
Tom H
Fridge

Accepted by:
Fridge

Date:	Time:
8/8/16	1208
8/8/16	1256
8/8/16	1323

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☐ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

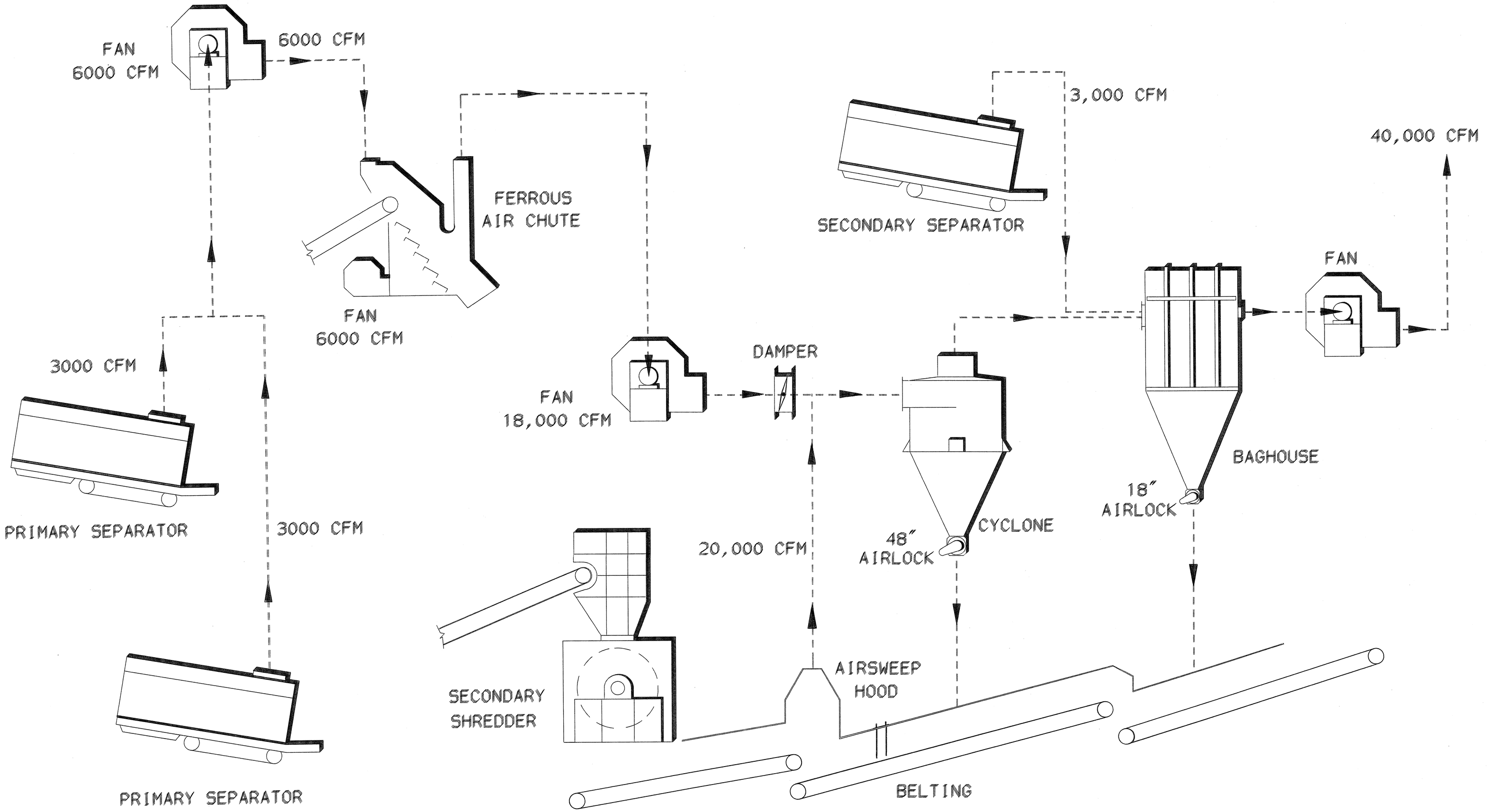
State where samples were collected: CT

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☑ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

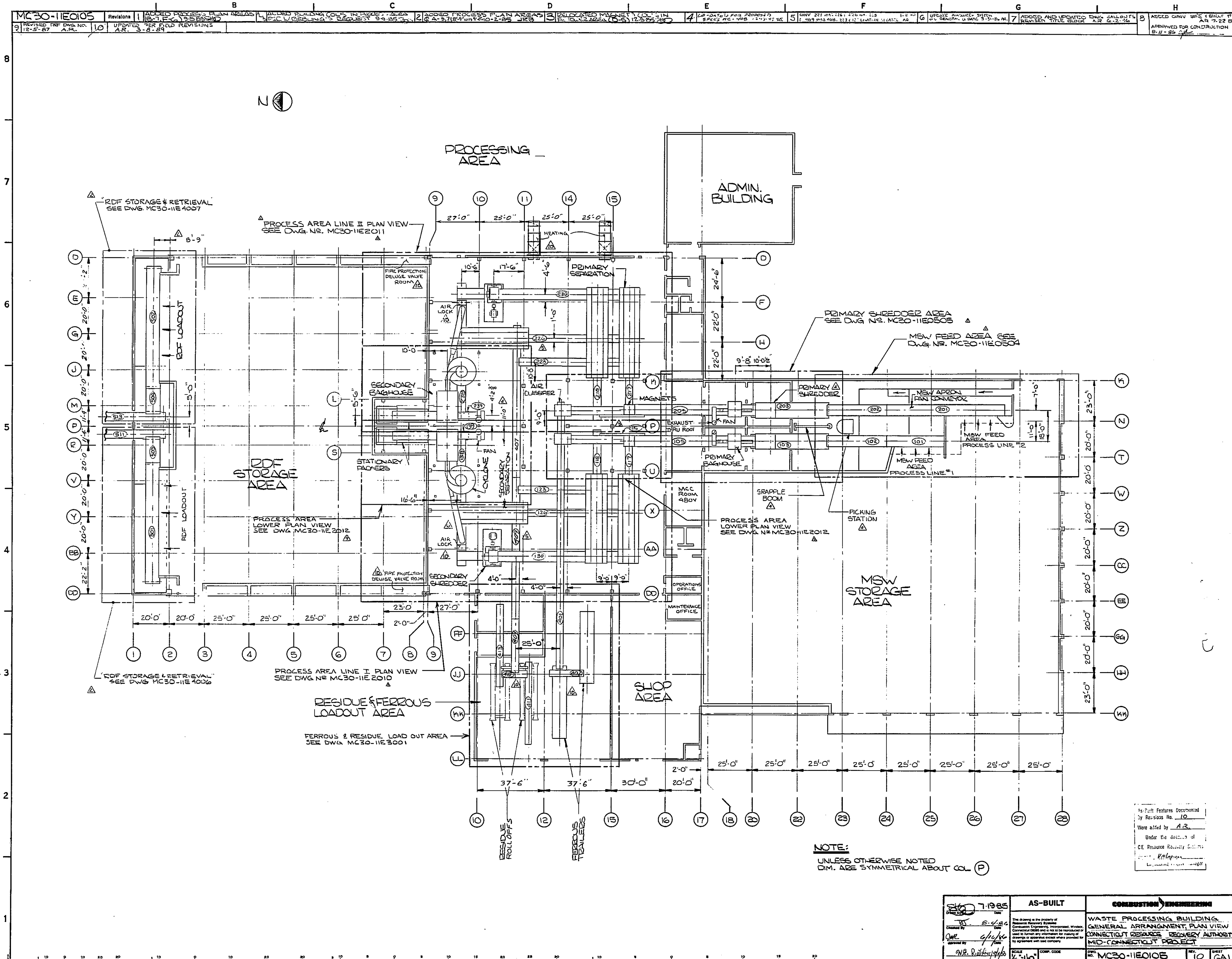
ATTACHMENT 3

MAIN AIR SYSTEM - PNEUMATIC CONVEYING



METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO. ME7-041

A.ROTO 9-2-87 DRAWN BY: DATE:		COMBUSTION ENGINEERING
CHECKED BY: DATE:	This drawing is the property of Combustion Engineering, Incorporated, Windsor, Connecticut 06095 and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where provided for by agreement with said Company	FLOW CHART, MAIN AIR SYSTEM PNEUMATIC CONVEYING, TRAINING AID CONNECTICUT RESOURCE RECOVERY AUTHORITY MID CONNECTICUT PROJECT
APPROVED BY: DATE:	SCALE: NONE / COMP. CODE	DWG. NO. MC30-11E8059. . 00 / REV. / SHEET

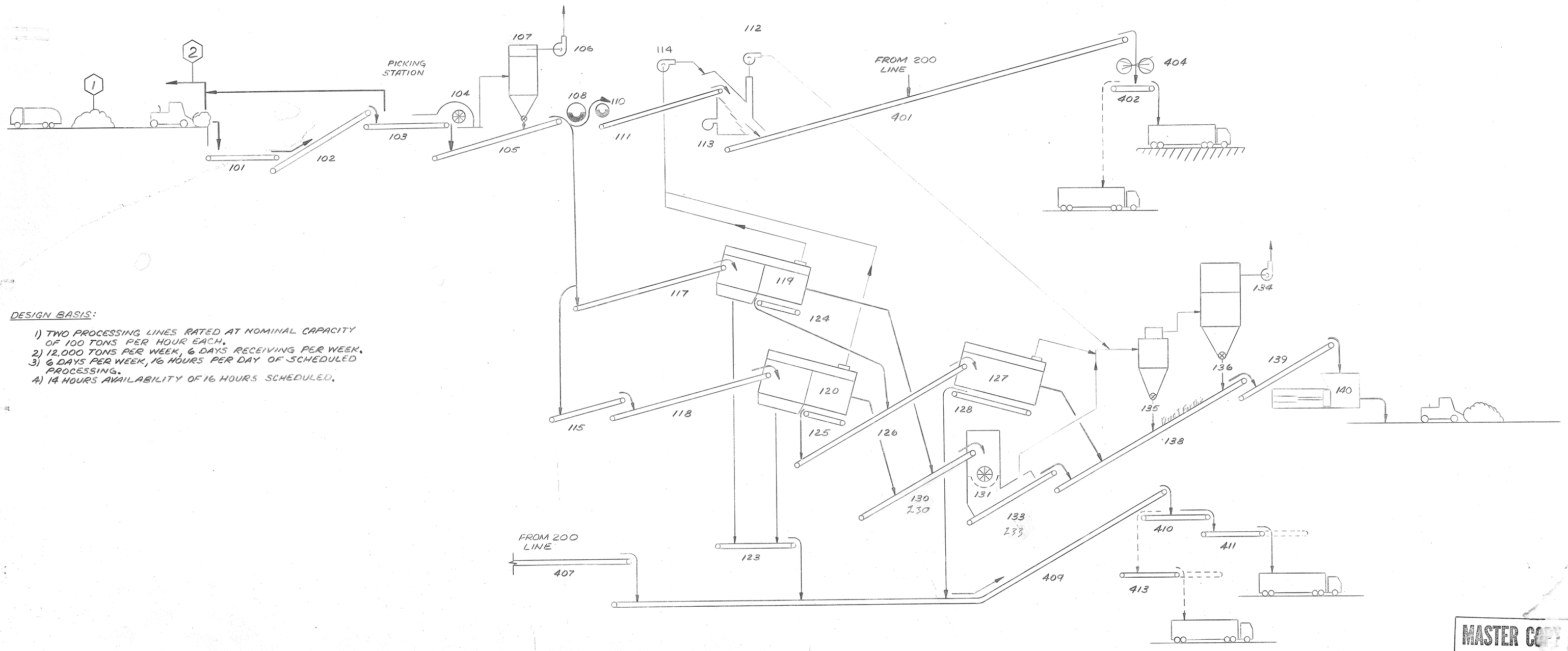

MC30-11E0105
Revisions
PROCESSING AREA
ADMIN. BUILDING
RDF STORAGE & RETRIEVAL SEE DWG. MC30-11E4007
PROCESS AREA LINE II PLAN VIEW SEE DWG. NO. MC30-11E2011
PRIMARY SEPARATION
FIRE PROTECTION DELUGE VALVE ROOM
AIR LOCK
SECONDARY BAGHOUSE
AIR CLASSIFIER
MAGNETS
EXHAUST FAN
PRIMARY SHREDDER AREA SEE DWG NO. MC30-11E0505
MSW FEED AREA SEE DWG. NO. MC30-11E0504
PRIMARY SHREDDER
MSW APRON PAN CONVEYOR
MSW FEED AREA PROCESS LINE #2
MSW FEED AREA PROCESS LINE #1
PRIMARY BAGHOUSE
GRAPPLE BOOM
PICKING STATION
MCC ROOM 480V
STATIONARY PACKERS
CYCLONE
FAN
SECONDARY SEPARATION
RDF STORAGE AREA
RDF LOADOUT
PROCESS AREA LOWER PLAN VIEW SEE DWG MC30-11E2012
SECONDARY SHREDDER
OPERATIONS OFFICE
MAINTENANCE OFFICE
MSW STORAGE AREA
RDF STORAGE & RETRIEVAL SEE DWG MC30-11E4006
PROCESS AREA LINE I PLAN VIEW SEE DWG NO MC30-11E2010
RESIDUE & FERROUS LOADOUT AREA
FERROUS & RESIDUE LOAD OUT AREA SEE DWG MC30-11E3001
SHOP AREA
RESIDUE ROLL OFFS
FERROUS TRAILERS
NOTE: UNLESS OTHERWISE NOTED DIM. ARE SYMMETRICAL ABOUT COL. (P)
AS-BUILT
COMBUSTION ENGINEERING
WASTE PROCESSING BUILDING GENERAL ARRANGEMENT PLAN VIEW
CONNECTICUT RESOURCE RECOVERY AUTHORITY
MID-CONNECTICUT PROJECT
MC30-11E0105
10
GA1

08 APPROVED FOR CONSTRUCTION 7-31-86

EQUIPMENT OR STREAM NO.

	1	2	101	102	103	104	105	106	107	108	110	111	112	113	114	115		117	118	119	120	123	124	125	126	127	128	130	131	133	134	135	136	138	139	140	401	402	404	407		409	410	411	413
EQUIP NAME	—	—	LOAD CONV.	LEVELING CONV.	SHREDDER FEED CONV.	PRIMARY SHREDDER	PRI SHRED DISCHARGE CONV.	BAG-HOUSE FAN	PRI SHRED BAGHOUSE	PRIMARY MAGNET	TAKE AWAY MAGNET	FE REMOVAL CONV.	FE AIR-CHUTE FAN	FE AIR CHUTE	PRI SEP DUST FAN	FLOW SPLITTER CONV.		PRI. SEP. FEED CONV.	PRI. SEP. FEED CONV.	PRIMARY SEPARATOR	PRIMARY SEPARATOR	PRI. SEP. FINES CONV.	PRI. SEP. SEC. STAGE CONV.	PRI. SEP. SEC. STAGE CONV	SEC. SEP. FEED CONV	SECONDARY SEPARATOR	SEC. SEP. RESIDUE CONV	SEC. SHRED FEED CONV.	SECONDARY SHREDDER	SEC. SHRED DISC. CONV.	AIR SWEEP FAN	AIR SWEEP CYCLONE	AIR SWEEP BAGHOUSE	RDF TRANS. CONV.	RDF ELEVATING CONV.	RDF STATIONARY PACKER	FE TRANSPORT CONV.	FE TRACK CONV.	DENSIFIER	RESIDUE COLLECTION CONV.		RESIDUE CONV. TO LOADOUT	RESIDUE CROSS CONV.	SHUTTLE LOADOUT CONV.	SHUTTLE LOADOUT CONV.
TYPE	—	—	STEEL PAN	STEEL PAN	STEEL DRAG FLIGHT	FLAIL	RUBBER BELT	CENTRI-FUGAL FAN	RUSE-JET FABRIC FILTER	STEEL DRUM	STEEL DRUM	RUBBER CONV	CENTRI-FUGAL FAN	STEPPED AIR CLASSIFIER	CENTRI-FUGAL FAN	RUBBER BELT		RUBBER BELT	RUBBER BELT	ROTARY SCREEN	ROTARY SCREEN	RUBBER BELT FLEXIBLE WALL	RUBBER BELT	RUBBER BELT	RUBBER BELT FLEXIBLE WALL	ROTARY SCREEN	RUBBER BELT	RUBBER BELT - FLEXIBLE WALL	HAMMER MILL	RUBBER BELT	CENTRI-FUGAL FAN	CYCLONE	RUSE-JET FABRIC FILTER	RUBBER BELT	RUBBER BELT	HYDRAULIC RAM COMPACTOR	RUBBER BELT	RUBBER BELT	DOUBLE STEEL DRUM	RUBBER BELT		RUBBER BELT FLEXIBLE WALL	RUBBER BELT	RUBBER BELT	RUBBER BELT
CAPACITY NOM/MAX	—	—	100/150	100/150	100/150	100/130	100/150	—	—	100/150	5/8	5/8	—	—	—	50/75		50/75	50/75	50/60	50/60	10/15	20/30	20/30	35/53	35/50	7/10	50/75	50/65	50/75	—	—	—	80/120	80/120	80/90	10/15*	10/15*	10/15*	15/30		30/45*	30/45*	30/45*	30/45*
CONV. WIDTH INCHES	—	—	72	72	80	—	72	—	—	—	—	60	—	—	—	60		60	60	—	—	48	48	48	54	—	48	72	—	72	—	—	—	60	72	—	48	48		48		48	48	48	48
CONV. SPEED FPM	—	—	5-25	15-45	30-60	—	225	—	—	—	—	50	—	—	—	130		130	130	—	—	100	100	100	200	—	150	200	—	250	—	—	—	300	250	—	50	105	—	35		200	125	60	60
ACFM	—	—	—	—	—	—	—	4500	4500	—	—	—	18,000	6,000	6,000	—		—	—	—	—	—	—	—	—	—	—	—	—	—	40,000	40,000	40,000	—	—	—	—	—	—	—		—	—	—	—
H.P.	—	—	75/10**	20	15	300/200	20	15	1.5 AIR LOCK	15	7½	1.5	30	15	20	5		3	5	50	50	7.5	5	5	10	50	5	10	1000	7½	200	15 AIR LOCK	1.5 AIR LOCK	15	15	60	5	2	20	3		15	3	2	2
MAT'L	ACCEPTABLE WASTE	NON-PROC. WASTE	PROCESSIBLE WASTE (MSW)	MSW	MSW	MSW	PRI SHRED MSW	—	AIR / DUST	—	—	FE	—	—	AIR / DUST	PRI SHRED MSW		PRI SHRED MSW	PRI SHRED MSW	—	—	RESIDUE	HEAVY COMBUST	HEAVY COMBUST	HEAVY COMBUST	HEAVY COMBUST	RESIDUE	SHREDDED COMBUSTIBLES		RDF	—	AIR / DUST	AIR / DUST	RDF	RDF	RDF	FE	FE	FE	RESIDUE		RESIDUE	RESIDUE	RESIDUE	RESIDUE
AVE. THROUGHPUT TONS/HR.	102	2	100.5	100.5	100	100	100	—	NIL	—	—	4.7	—	—	NIL	47.5		47.5	47.5	47.5	47.5	8	17.5	17.5	35	35	6.2	50	50	50	—	NIL	NIL	78.8	78.8	78.8	9.4*	9.4*	9.4*	14.2		28.4*	28.4*	28.4*	28.4*
BULK DENSITY LB/FT³	10-12	—	10-12	10-12	10-12	—	7-11	—	—	—	—	7-9	—	—	—	7-11		7-11	7-11	—	—	18-35	10-20	10-20	10-20	35	18-35	3-7	—	5-8	—	—	—	5-8	5-8	—	7-9	7-9	—	18-35		18-35	18-35	18-35	18-35
HHV BTU/lb	—	—	4800	4800	4800	—	4800	—	—	—	—	—	—	—	—	—		—	—	—	—	2154	4740	4740	4740	—	1034	5670	—	—	—	—	—	5785	5785	—	86.0	86.0	—	1667		1667	1667	1667	1667
%ASH	—	—	21.3	21.3	21.3	—	21.3	—	—	—	—	—	—	—	—	—		—	—	—	—	45.0	22.0	22.0	22.0	—	53.0	10.75	—	—	—	—	—	12.75	12.75	—	93.0	93.0	—	48.48		48.48	48.48	48.48	48.48
%MOIST	—	—	23.0	23.0	23.0	—	23.0	—	—	—	—	—	—	—	—	—		—	—	—	—	30.0	23.0	23.0	23.0	—	35.0	23.46	—	—	—	—	—	20.12	20.12	—	6.0	6.0	—	30.18		30.18	30.18	30.18	30.18
%OF TOTAL BTU'S	—	—	100.0	100.0	100.0	—	100.0	—	—	—	—	—	—	—	—	—		—	—	—	—	3.59	34.56	34.56	34.56	—	1.33	61.76	—	—	—	—	—	95.0	95.0	—	.08	.08	—	4.92		4.92	4.92	4.92	4.92

△2 * TWO LINES COMBINED ON A COMMON BELT.
** LOWER NO. REPRESENTS LINE H.P



DESIGN BASIS:

1) TWO PROCESSING LINES RATED AT NOMINAL CAPACITY OF 100 TONS PER HOUR EACH.
2) 12,000 TONS PER WEEK, 6 DAYS RECEIVING PER WEEK.
3) 6 DAYS PER WEEK, 16 HOURS PER DAY OF SCHEDULED PROCESSING.
4) 14 HOURS AVAILABILITY OF 16 HOURS SCHEDULED.

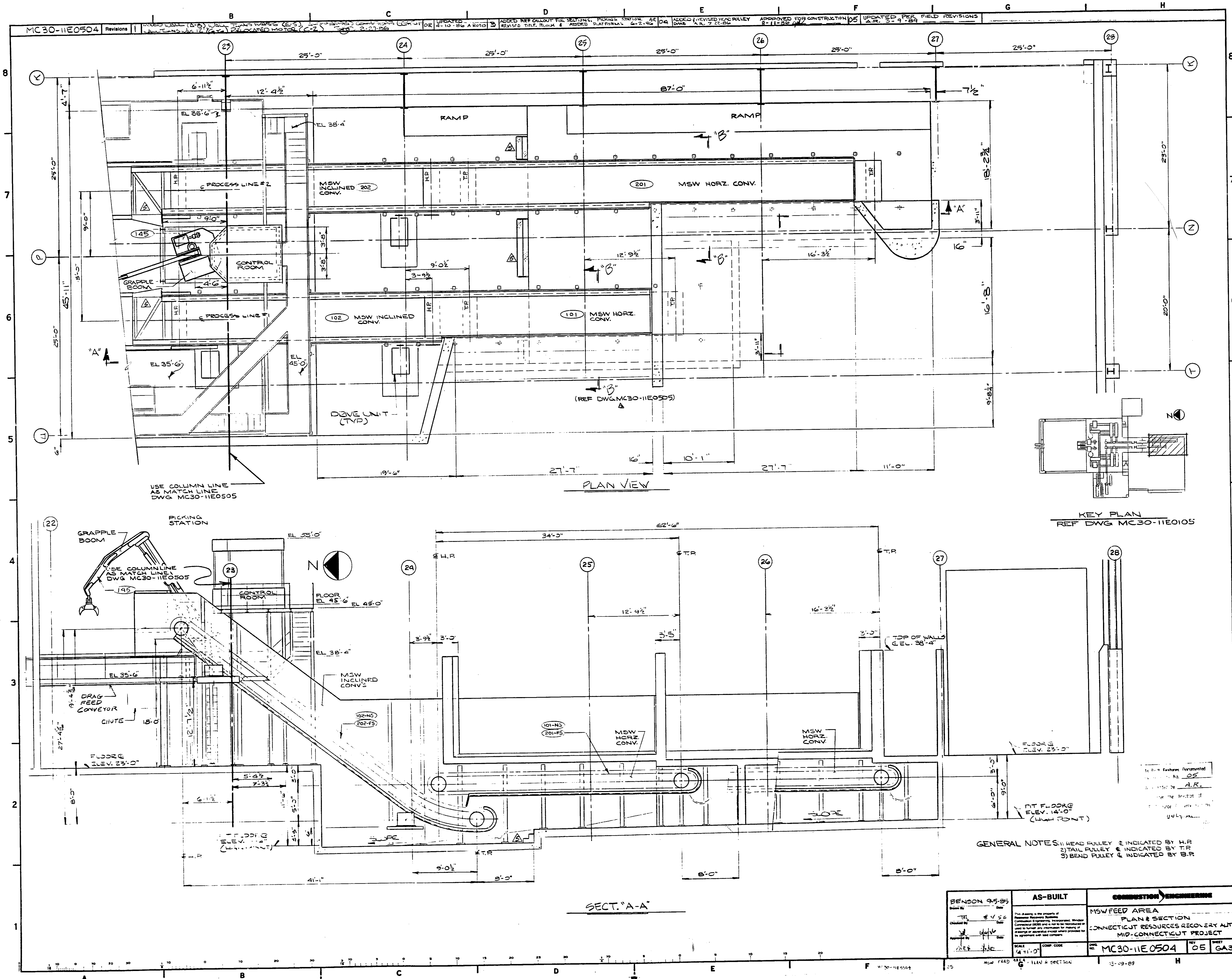
105-504-105-109

MASTER COPY

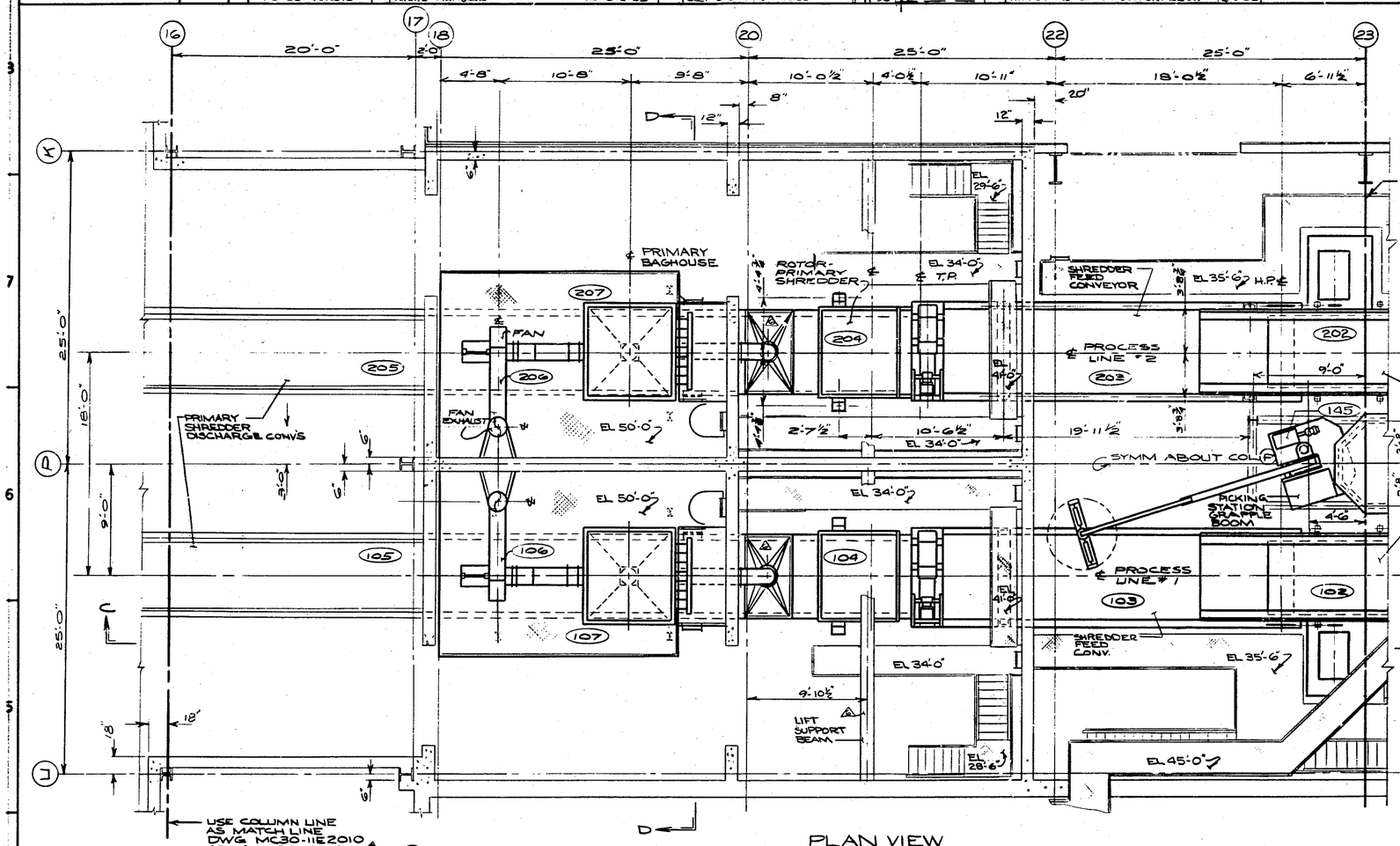
PROCESS FLOW DIAGRAM

(ONE PROCESS LINE SHOWN INCLUDING EQUIPMENT COMMON TO BOTH LINES)

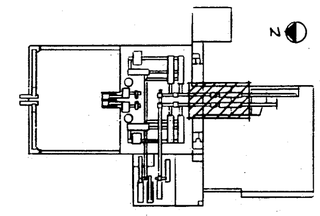
Drawn By: Completed 7/31/86			COMBUSTION ENGINEERING
Checked By: HS 8-4-86	This drawing is the property of Resource Recovery Systems Combustion Engineering, Incorporated, Windsor, Connecticut 06095 and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where provided for by agreement with said company.		PROCESS FLOW DIAGRAM
Approved By: [illegible] 8/4/86			CONNECTICUT RESOURCES RECOVERY AUTHORITY
[illegible] 8/4/86	SCALE: NONE	COMP. CODE	MID CONNECTICUT PROJECT
		DWG. NO. MC30-11E0106	REV. 03 SHEET GA2


MC30-11E0504
Revisions
1 MOVED WALL (A-8) WALL THKNS WAS 6 (E-5) WALL THKNS WAS 12 (G-Z) RELOCATED MOTOR (C-Z) 2-27-86
02 UPDATED 4-10-86 A.R.
3 ADDED REF CALLOUT FOR SECTIONS, PICKING STATION. REVISED TITLE BLOCK & ADDED PLATFORMS 6-2-86
04 ADDED & REVISED HEAD PULLEY DIMS A.R. 7-22-86
APPROVED FOR CONSTRUCTION 8-11-86
05 UPDATED PER FIELD REVISIONS A.R. 5-9-89
RAMP
MSW INCLINED CONV. 202
201 MSW HORZ. CONV.
PROCESS LINE #2
PROCESS LINE #1
145
CONTROL ROOM
GRAPPLE-BOOM
102 MSW INCLINED CONV.
101 MSW HORZ. CONV.
DRIVE UNIT (TYP)
EL 38'-4"
EL 35'-6"
EL 45'-0"
(REF DWG MC30-11E0505)
USE COLUMN LINE AS MATCH LINE DWG MC30-11E0505
PLAN VIEW
KEY PLAN
REF DWG MC30-11E0105
PICKING STATION
GRAPPLE BOOM
USE COLUMN LINE AS MATCH LINE DWG MC30-11E0505
CONTROL ROOM
FLOOR EL 45'-6"
EL 45'-0"
EL 55'-0"
MSW INCLINED CONV'S
102-NS
202-FS
101-NS
201-FS
MSW HORZ CONV.
DRAG FEED CONVEYOR
CHUTE
FLOOR@ ELEV. 23'-0"
TOP OF WALLS EL. 38'-4"
PIT FLOOR@ ELEV. 14'-0" (HIGH POINT)
SLOPE
SECT. "A-A"
GENERAL NOTES: 1) HEAD PULLEY ℄ INDICATED BY H.P.
2) TAIL PULLEY ℄ INDICATED BY T.P.
3) BEND PULLEY ℄ INDICATED BY B.P.
BENSON 9-5-85
Drawn By Date
Checked By Date
Approved By Date
AS-BUILT
This drawing is the property of Resource Recovery Systems Combustion Engineering, Incorporated, Windsor Connecticut 06095 and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where provided for by agreement with said company.
SCALE 1/4"=1'-0"
COMP. CODE
COMBUSTION ENGINEERING
MSW FEED AREA
PLAN & SECTION
CONNECTICUT RESOURCES RECOVERY AUTH
MID-CONNECTICUT PROJECT
DWG. NO. MC30-11E0504
REV 05
SHEET GA3
MSW FEED AREA, PLAN & SECTION
03-09-89

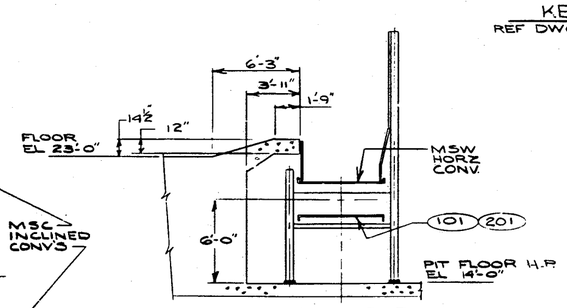
MC30-11E0505	Revisions	03	UPDATED & REDRAWN 4-8-86 A.ROTO	A	CHANGED MATCH LINE REF NO REVISED TITLE BLOCK AC 6-2-86 ADDED PLATFORMS	05	ADDED D/M (D/M) REVISED ROOF SKLT D-D AR 7-14-86	ADDRVED FOR CONSTRUCTION 8-11-86	D6	UPDATED DIST HOUD & SHREDDER DIA. ADDED LIFT SUPPORT BEAM	AR 12-8-86



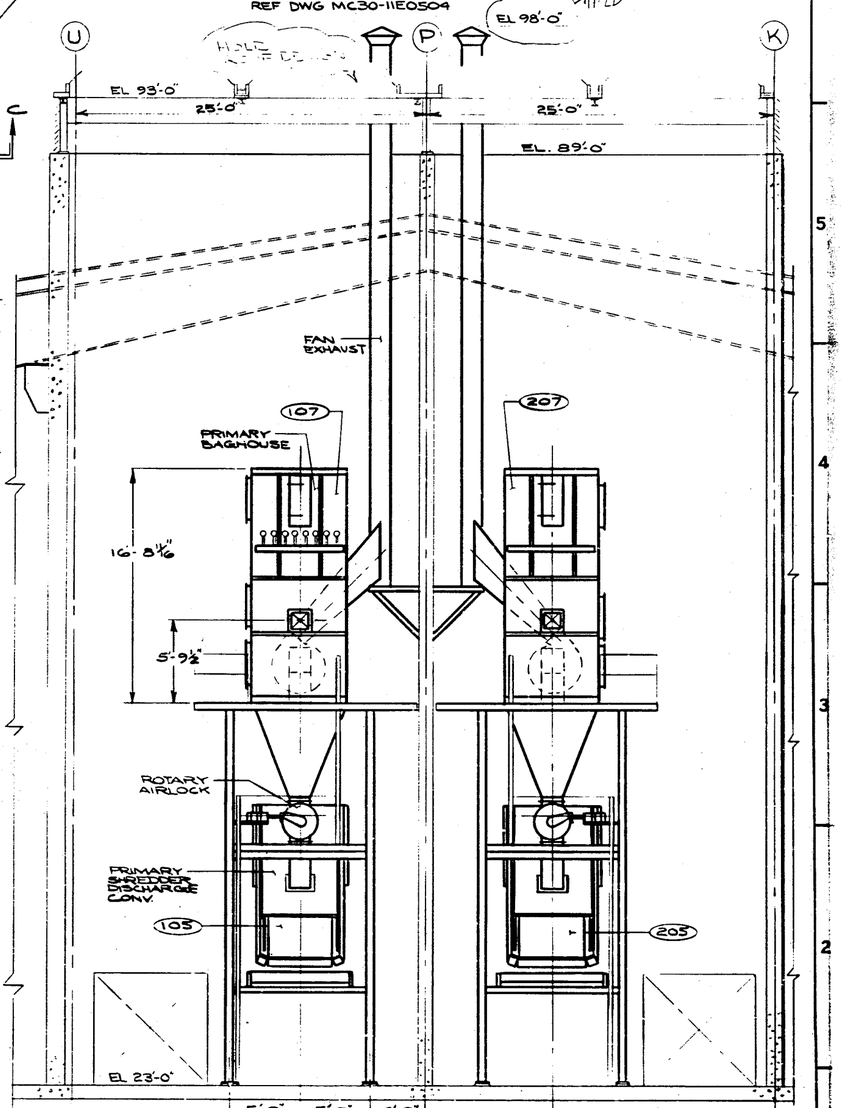
PLAN VIEW



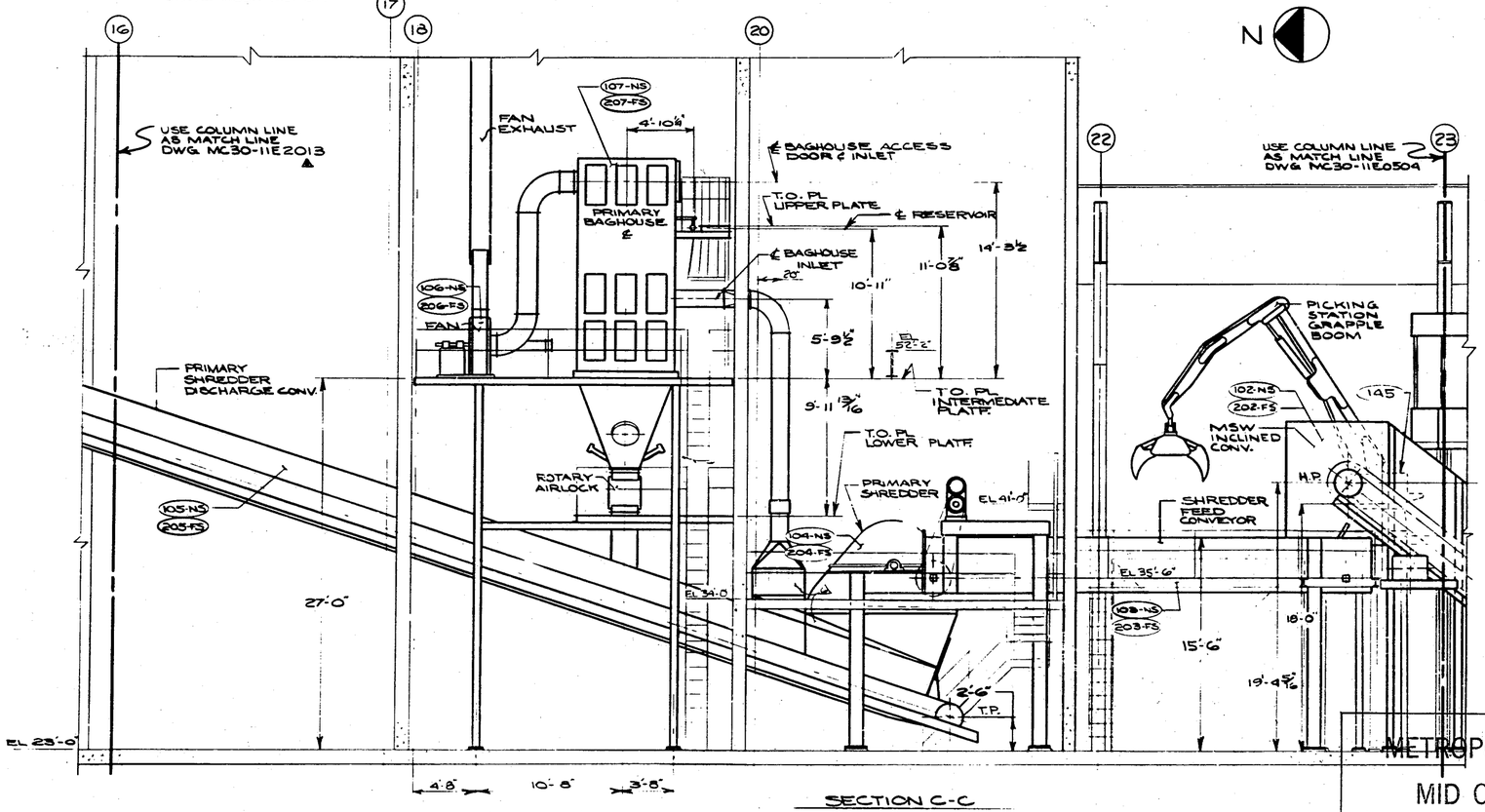
KEY PLAN
REF DWG MC30-11E0105



SECTION B-B
REF DWG MC30-11E0504



SYMM ABOUT COLM (P) SECTION D-D



SECTION C-C

METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO.

T.B. A ROTO 4-8-86 Drawn By Date	This drawing is the property of Ogden Martin Systems, Combustion Engineering, Incorporated, Windsor Connecticut 06095 and is not to be reproduced or used to furnish any information for making or assembling of apparatus except where provided for by agreement with said company.	COMBUSTION ENGINEERING
Checked By Date		PRIMARY SHREDDER AREA PLAN & SECTIONS CONNECTICUT RESOURCES RECOVERY AUTHORITY MID-CONNECTICUT PROJECT
Approved By Date	SCALE 1/8"=1'-0"	DWG NO. MC30-11E0505 REV. 06 SHEET GA9

MC30-11E2010	Revisions	01	GENERAL REVISIONS ADDENDUM #3 CONTRACT #3A AR 7-29-86	02	ADDED MAGNET ABS NOTE, ADDED PREJUMATIC CONVEYING & FANS 112 & 114. A.R. 12-8-86

N

KEY PLAN
(REF DWG MC30-11E0105)

USE COLUMN LINE AS MATCH LINE DWG MC30-11E2011

USE COLUMN LINE AS MATCH LINE DWG MC30-11E0505

RDF ELEVATING CONV. (139)

STATIONARY PACKER (140)

BAGHOUSE (136)

I.D. FAN & STACK (134)

FAN (112) EL 62'-11"

RESIDUE COLLECTION CONV. (407)

2000# JIB CRANE

PNEUMATIC CONVEYING SYSTEM

CYCLONE (135)

SECONDARY SEPARATOR (127)

PRIMARY SEPARATOR FINES CONV. (123)

SECONDARY SEPARATOR FEED CONV. (126)

SECONDARY SHREDDER (131)

SHREDDER LUBE UNIT

SECONDARY SHREDDER INFEED CONV. (130)

RDF TRANSFER CONV (138)

SECONDARY SHREDDER DISCHARGE CONV 133

RESIDUE COLLECTION CONV TO LOAD OUT (409)

PROPOSED FRESH AIR

PROPOSED DUCT LOCATION.

131 SECONDARY SHREDDER MOTOR (TOP VIEW)

LADDER

FERROUS REMOVAL CONV. (111)

STEPPED AIR CLASSIFIER (113)

TAKE AWAY MAGNET (110)

FAN (114)

PRIMARY SEPARATOR INFEED CONV. (118)

FERROUS TRANSFER CONV (401)

PRIMARY SHREDDER DISCHARGE CONV (105)

PRIMARY MAGNET (108)

PRIMARY SEPARATOR INFEED CONV (117)

PRIMARY SEPARATOR (119)

PRIMARY SEPARATOR (120)

(REF DWG MC30-11E2018)

(REF DWG MC30-11E2019)

(REF DWG MC30-11E2015)

USE COLUMN LINE AS MATCH LINE DWG MC30-11E3001

(REF DWG MC30-11E2017)

PLAN VIEW

METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO.

PROCESS AREA: LINE "1"
PLAN VIEW
CONNECTICUT RESOURCES RECOVERY AUTHORITY
MID CONNECTICUT PROJECT

MC30-11E2010 | 02 | GAS

MC30-11E2011	Revisions	01	GENERAL REVISIONS AS PER T-IN-76 APPROVED FOR CONSTRUCTION 2-11-76	02	ADD MAGNET AS7 NOTE, ADDED PNEUMATIC CONVEYING & FANS A.R. 5-5-87

KEY PLAN
(REF DWG MC30-11ED105)

PROPOSED FRESH AIR

PROPOSED DUCT LOCATION

231 SECONDARY SHREDDER MOTOR

USE COLUMN LINE AS MATCH LINE DWG MC30-11E505

PRIMARY SEPARATOR 219

USE COLUMN LINE AS MATCH LINE DWG MC30-11E2010

(SEE DWG MC30-11E2013)

SEE CLARIFICATION DWG MC30-11A804

(REF DWG MC30-11E2013)

(REF DWG MC30-2016)

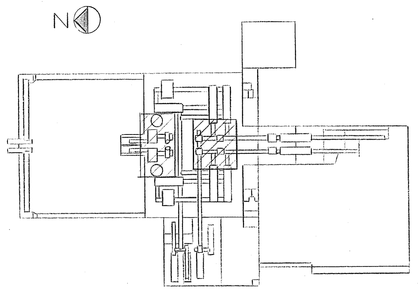
PLAN VIEW

METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO.

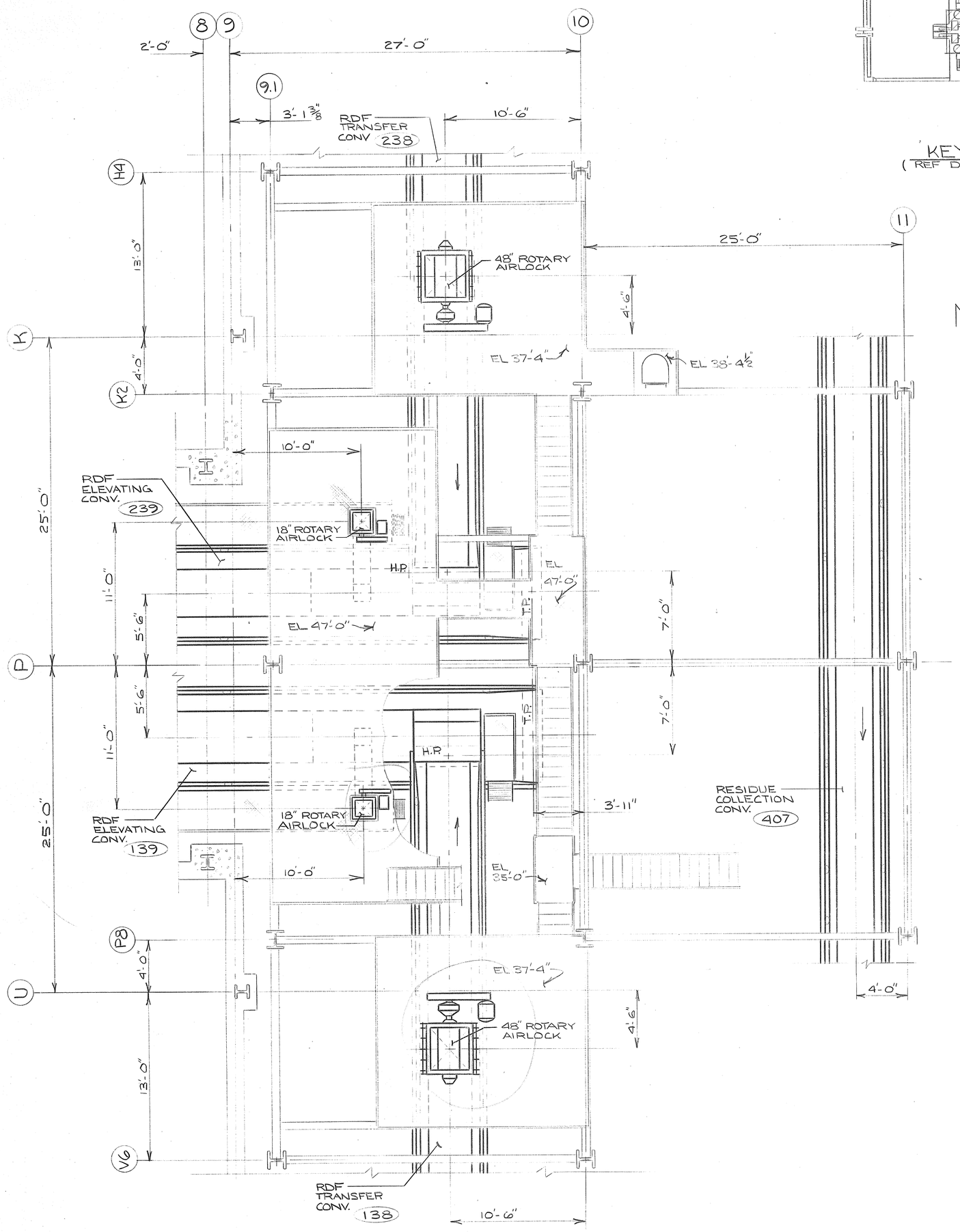
PROCESS AREA LINE "2"
PLAN VIEW
CONNECTICUT RESOURCES RECOVERY AUTHORITY
MID-CONNECTICUT PROJECT

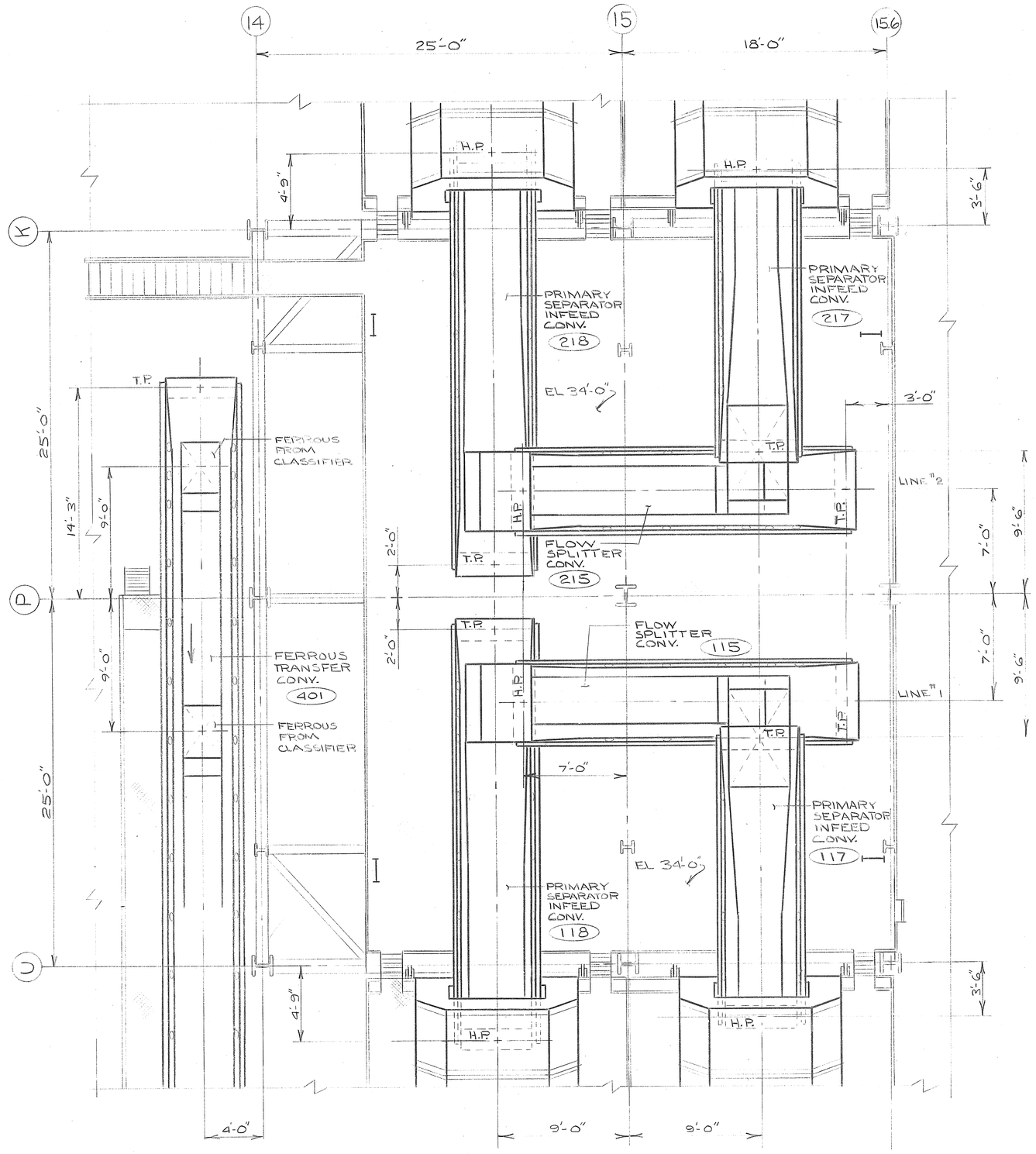
SCALE 1/4"=1'-0" | DWG NO. MC30-11E2011 | REV 02 | SHEET GA6

MC30-11E2012	Revisions	01	ADDED STRUCTURAL COLUMN CALLOUTS AND GENERAL REVISIONS	A.R. 7-24-96	APPROVED FOR CONSTRUCTION 8-11-96



KEY PLAN
(REF DWG MC30-11E0105)



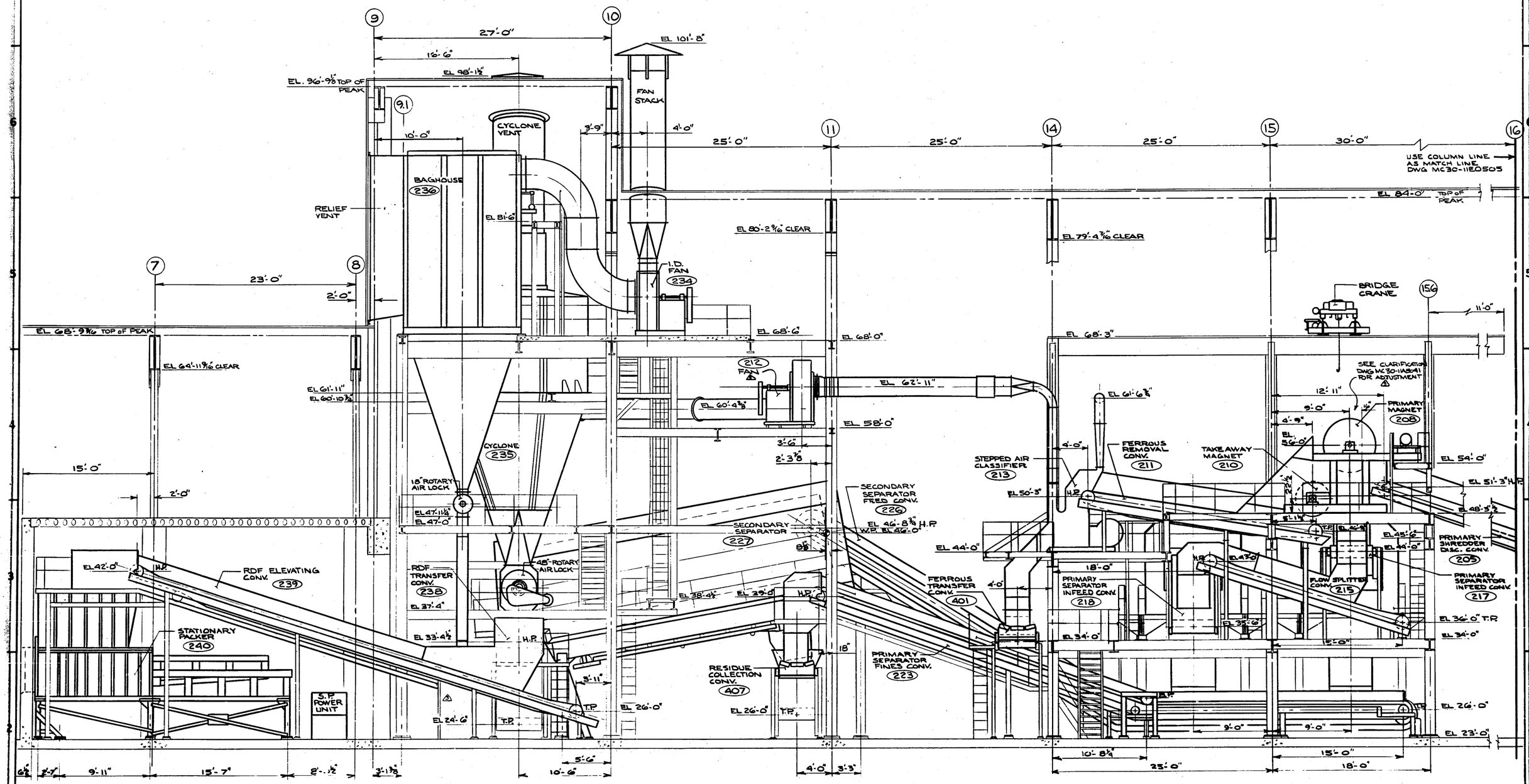


LOWER PLAN VIEWS

MASTER COPY

A. ROTO 6-9-86 Drawn By Date	This drawing is the property of **Resource Recovery Systems** Combustion Engineering, Incorporated, Windsor, Connecticut 06095 and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where provided for by agreement with said company.	COMBUSTION ENGINEERING
Checked By Date		PROCESS AREA
Approved By Date		LOWER PLAN VIEW
SCALE 1/4"=1'-0"	COMP. CODE	CONNECTICUT RESOURCES RECOVERY AUTHORITY
		MID-CONNECTICUT PROJECT
		DWG. NO. MC30-11E2012 / REV. 01 / SHEET GA7

MC3011E2013	Revisions	01	56'-0" WAS 55'-11½", 48'-3¾" WAS 48'-3½", ADDED EL 68'-3"	02	GENERAL REVISIONS APPROVED FOR CONSTRUCTION AR 7-24-86 8-22-86	03	ADDED PNEUMATIC CONVEYING SYSTEM, REVISED RDF CONV. ACCESS LADDER, UPDATED FERROUS TOWER ACCESS STAIRS AR 2-6-87

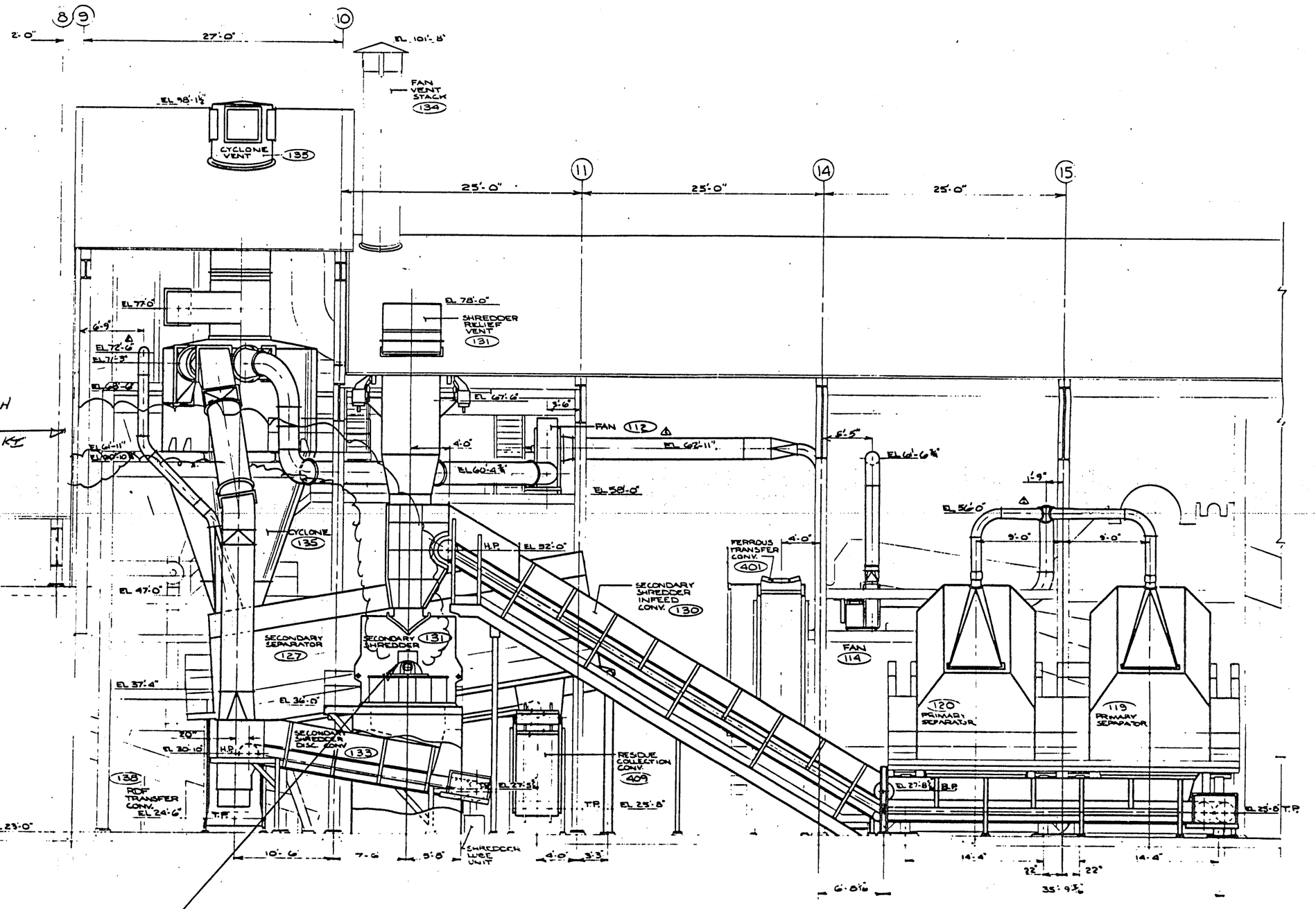


SECTION A-A
(REF DWG MC30-11E2011)

METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO. Misc. 14-0010

A/ROTO Drawn By	5-29-86 Date	This drawing is the property of Resource Recovery Systems Combustion Engineering, Incorporated, Windsor Connecticut 06095 and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where permitted by agreement with said company	COMBUSTION ENGINEERING
Checked By	6-4-86 Date		PROCESS AREA
Approved By	11/24/86 Date		SECTION A-A
RWH	8/10/87		CONNECTICUT RESOURCES RECOVERY AUTHORITY
SCALE ⅜"=1'-0"	COMP. CODE		MID-CONNECTICUT PROJECT
DWG. NO. MC30-11E2013	REV. 03	SHEET GA8	

MC30-11E2014	Revisions	01	GENERAL REVISION APPROVED FOR CONSTRUCTION 4.0 7-25-86 8-11-86	02	ADDED PNEUMATIC CONVEYING SYSTEM. AR 3-8-87



← N

SECTION B-B
(REF DWG MC30-11E2010)

131 Secondary Shredder Motor.

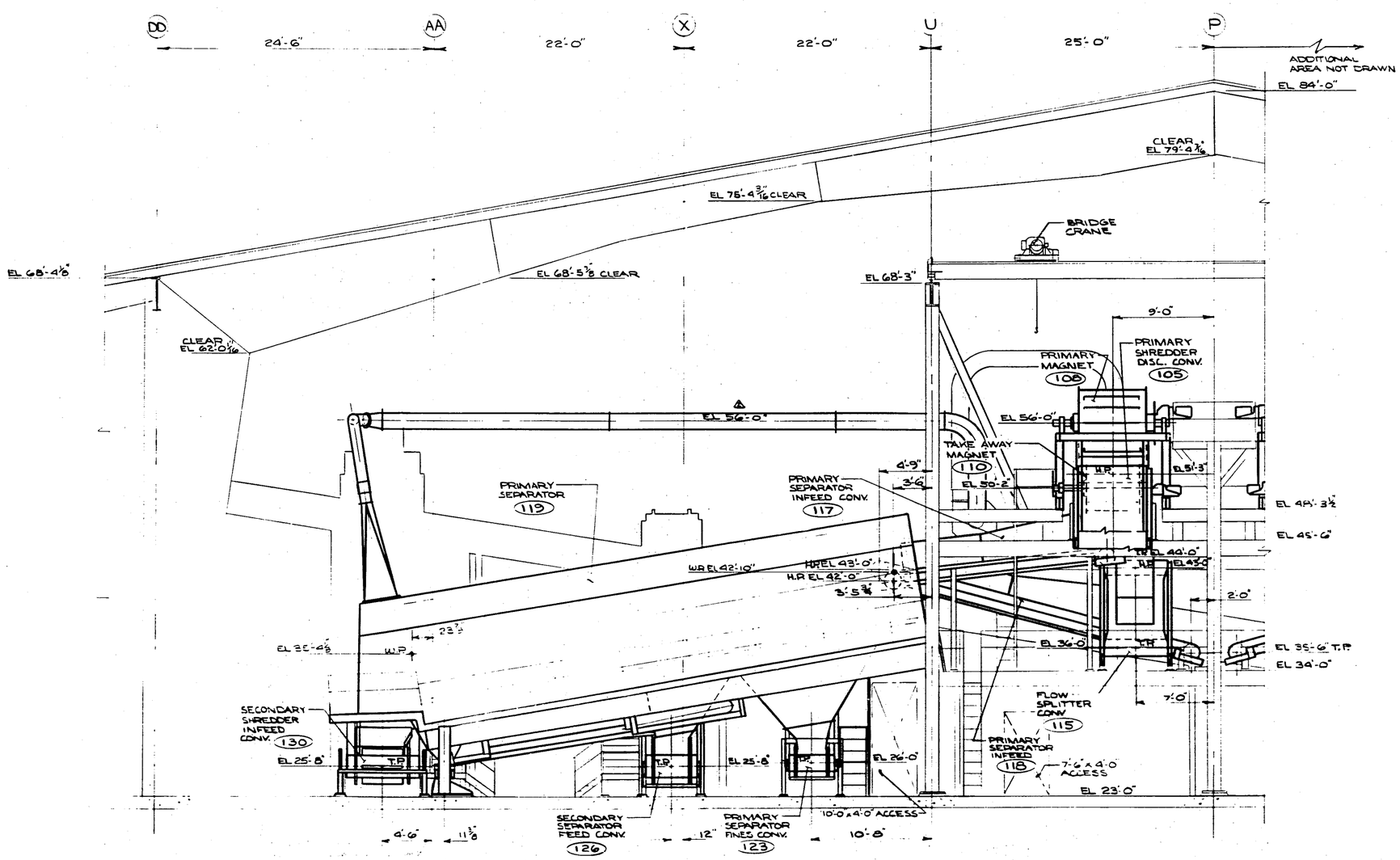
METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO.

CONSTRUCTION

PROCESS AREA
SECTION B-B
CONNECTICUT RESOURCES RECOVERY AUTHORITY
MID-CONNECTICUT PROJECT

SCALE 3/4"=1'-0"
DRAWING NO. MC30-11E2014
REV. 02
SHEET 649

MC30-11E2015	Revisions	01	ADDED BRIDGE CRANE 7-28-86 A.R. APPROVED FOR CONSTRUCTION 7-31-86 DM	02	ADDED PNEUMATIC CONVEYING SYSTEM AR 2-9-87

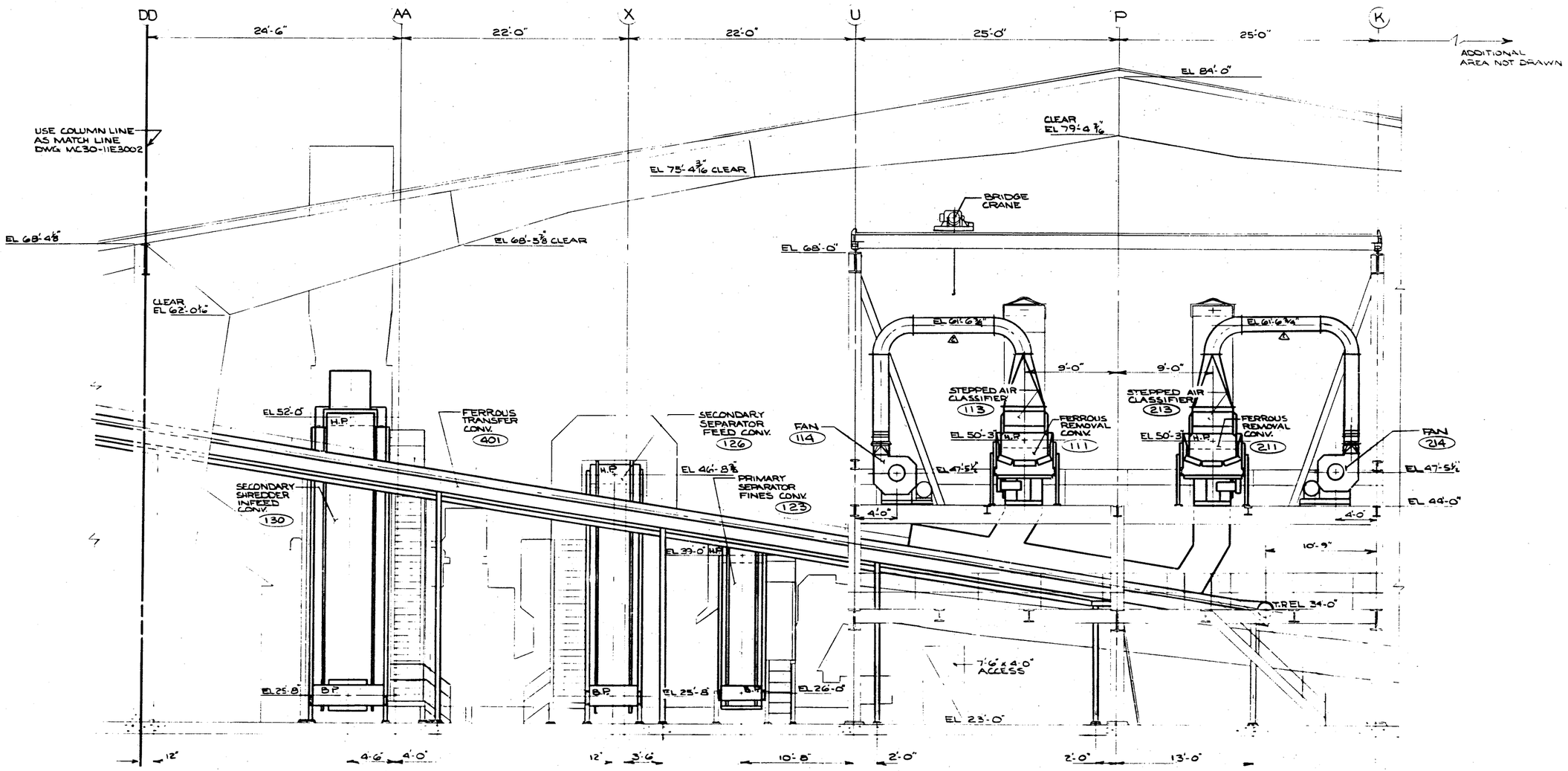


SECTION C-C
(REF DWG MC30-11E2010)

METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO. Misc 14-0011

A PRO'D	6-30-86 Date	COMBUSTION ENGINEERING	
Drawn By	Date		PROCESS AREA
Checked By	Date		SECTION C-C
Approved By	7/4/86 Date		CONNECTICUT RESOURCE RECOVERY AUTHORITY
Approved By	7/4/86 Date		MID CONNECTICUT PROJECT
SCALE 1/4"=1'-0"	CORP CODE	DWG NO. MC30-11E2015	REV 02 SHEET GA10

MC30-11E2016	Revisions	01	ADDED BRIDGE CRANE 7-20-86 AR APPROVED FOR CONSTRUCTION 7-31-86	02	ADDED PNEUMATIC CONVEYING SYSTEM RELOCATED FERROUS "OVER" ACCESS STAIRS AC 2-9-87

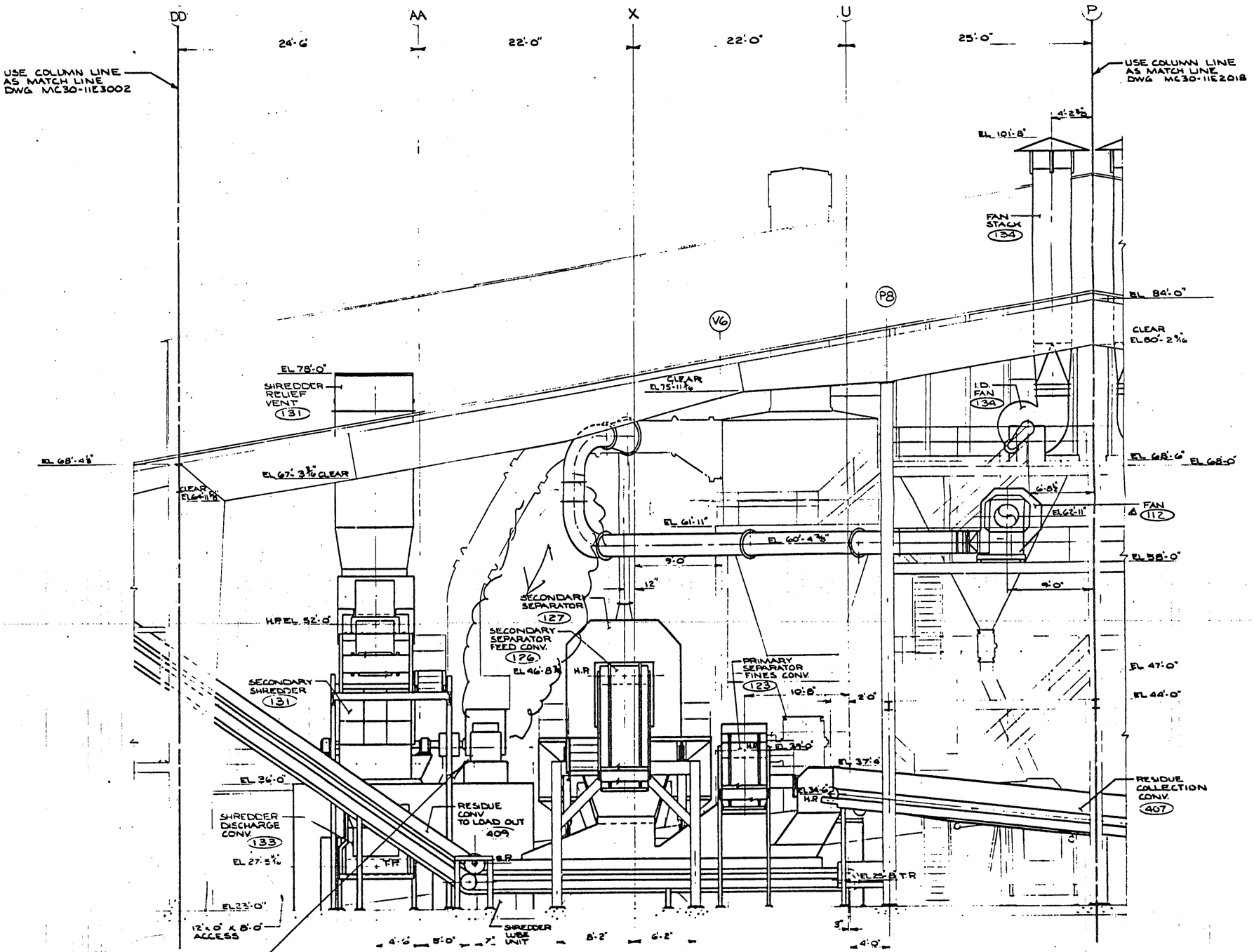


SECTION D-D
(REF DWG MC30-11E2010)

METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO. Misc 14-0012

AS BUILT				CONSTRUCTION	
				PROCESS AREA	
				SECTION D-D	
				CONNECTICUT RESOURCES RECOVERY AUTHORITY	
				MID - CONNECTICUT PROJECT	
				SCALE 1/4"=1'-0"	DWG NO. MC30-11E2016 REV 02 SHEET GA11

MC30-11E2017	Revisions	01	GENERAL REVISION ADDENDUM NO CONSTRUCTION 7-28-86 AR 8-11-86	02	ADDED PNEUMATIC CONVEYING SYSTEM AR 2-10-87



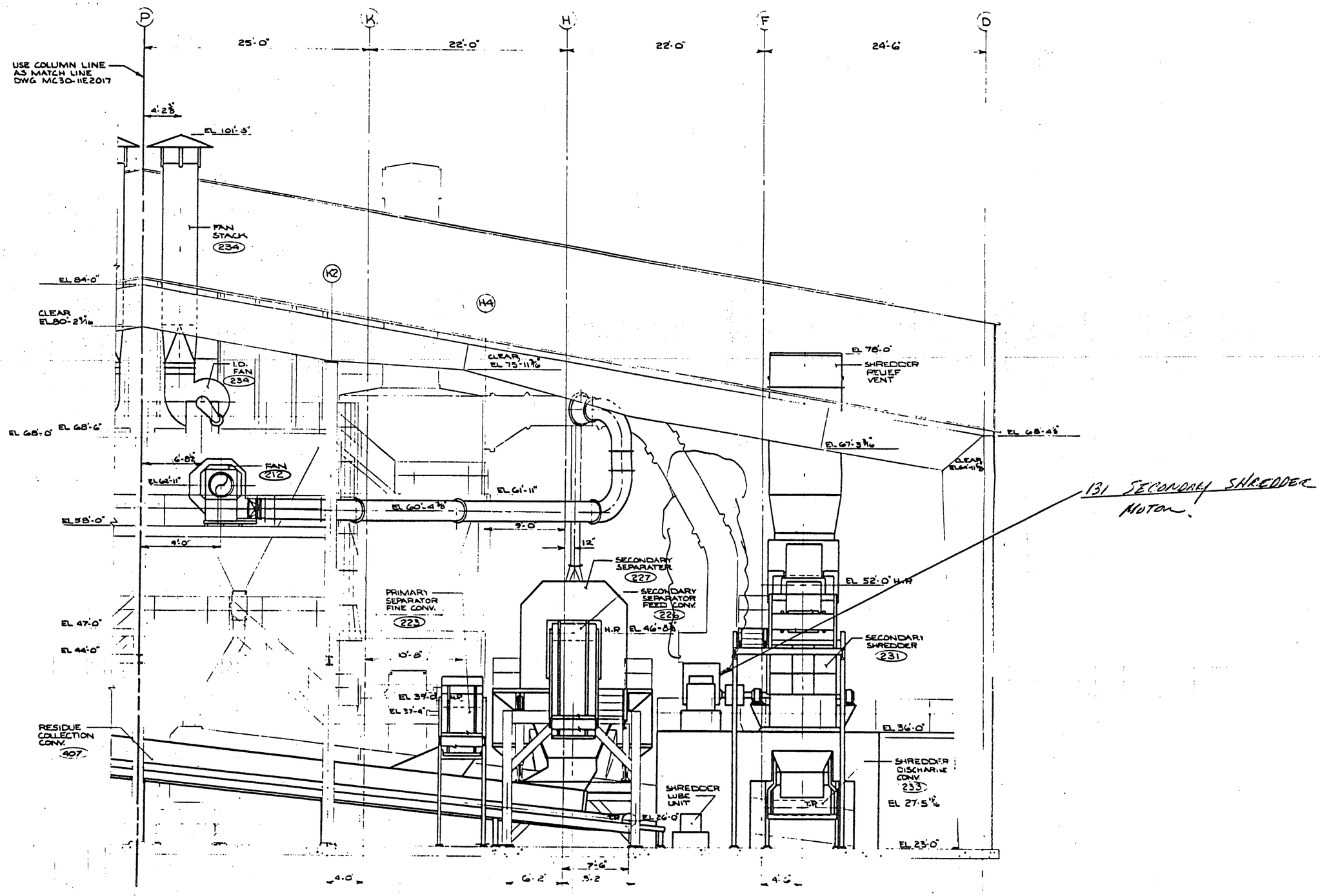
SECTION E-E
(REF DWG MC30-11E2010)

131 Secondary Shredder Motor

METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO.

A. ROTO 6-26-86		COMBUSTION ENGINEERING
		PROCESS AREA
		SECTION E-E
		CONNECTICUT RESOURCES RECOVERY AUTHORITY
		MID-CONNECTICUT PROJECT
	SCALE 1/8"-1'-0"	DWG MC30-11E2017 REV 02 SHEET GA12

MC30-11E2018	Revisions	01	GENERAL REVISION APPROVED FOR CONSTRUCTION 7-23-86 AJR 9-11-86 JMC	02	ADDED PNEUMATIC CONVEYING SYSTEM AJR 2-10-87



131 SECONDARY SHREDDER MOTOR.

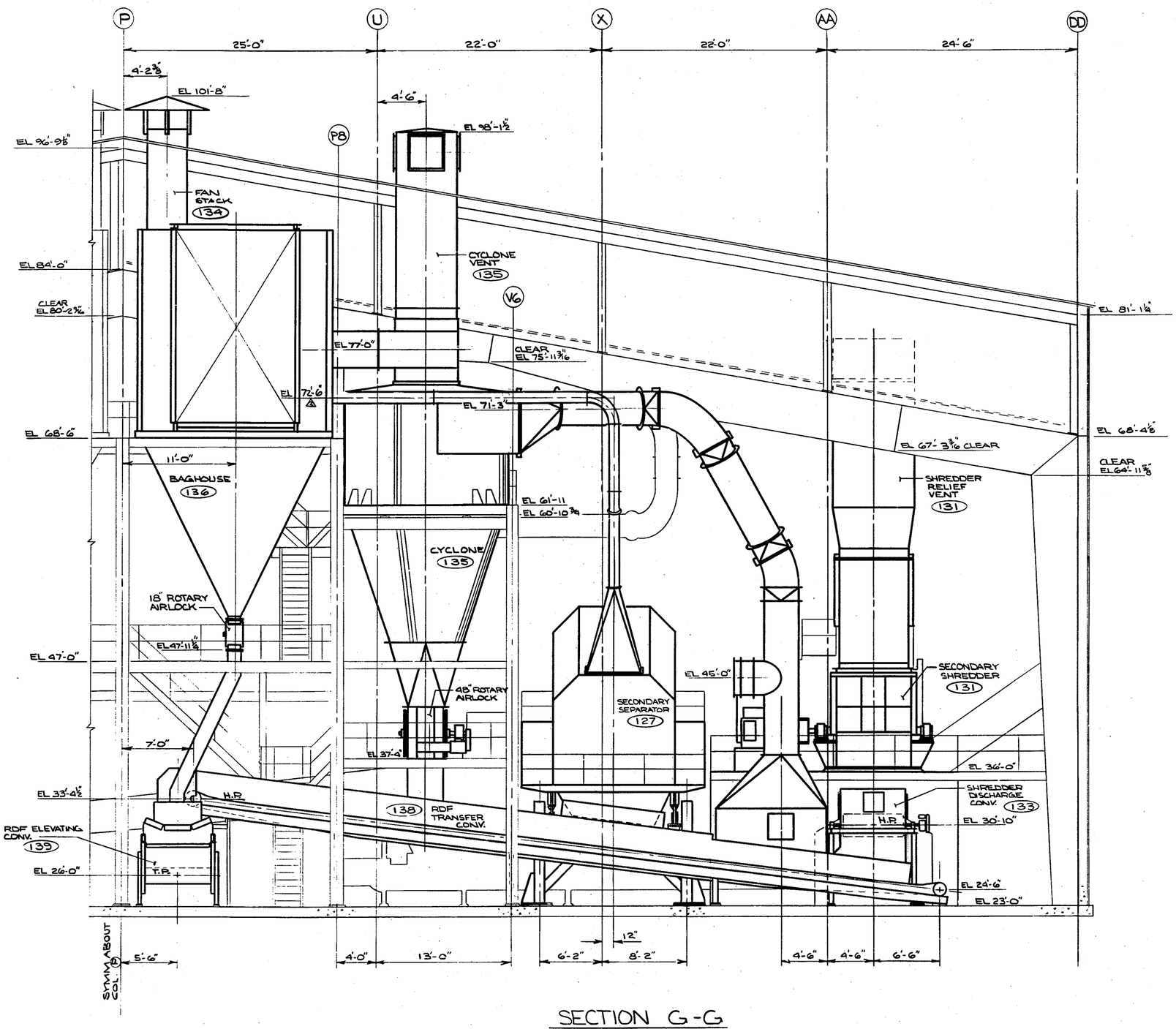
SECTION F-F

(REF DWG MC30-11E2011)

METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO. _____

Δ ROTO 6-26-86		COMBUSTION ENGINEERING
Drawn by RS 6-2-86	This drawing is the property of Combustion Engineering, Incorporated. Neither it nor its contents are to be used for any purpose not authorized by Combustion Engineering, Incorporated, or disclosed to unauthorized persons without its written permission.	PROCESS AREA SECTION F-F CONNECTICUT RESOURCE RECOVERY AUTHORITY MID CONNECTICUT PROJECT
Checked by JMC 9/9/86		
Issued JMC 9/9/86	SCALE 1/4"=1'-0"	DWG. NO. MC30-11E2018 REV. 02 SHEET GA13

MC30-11E2019	Revisions	01	GENERAL REVISION APPROVED FOR CONSTRUCTION 7-29-86 A.R. 8-11-86	02	ADDED PNEUMATIC CONVEYING SYSTEM AR 2-10-87



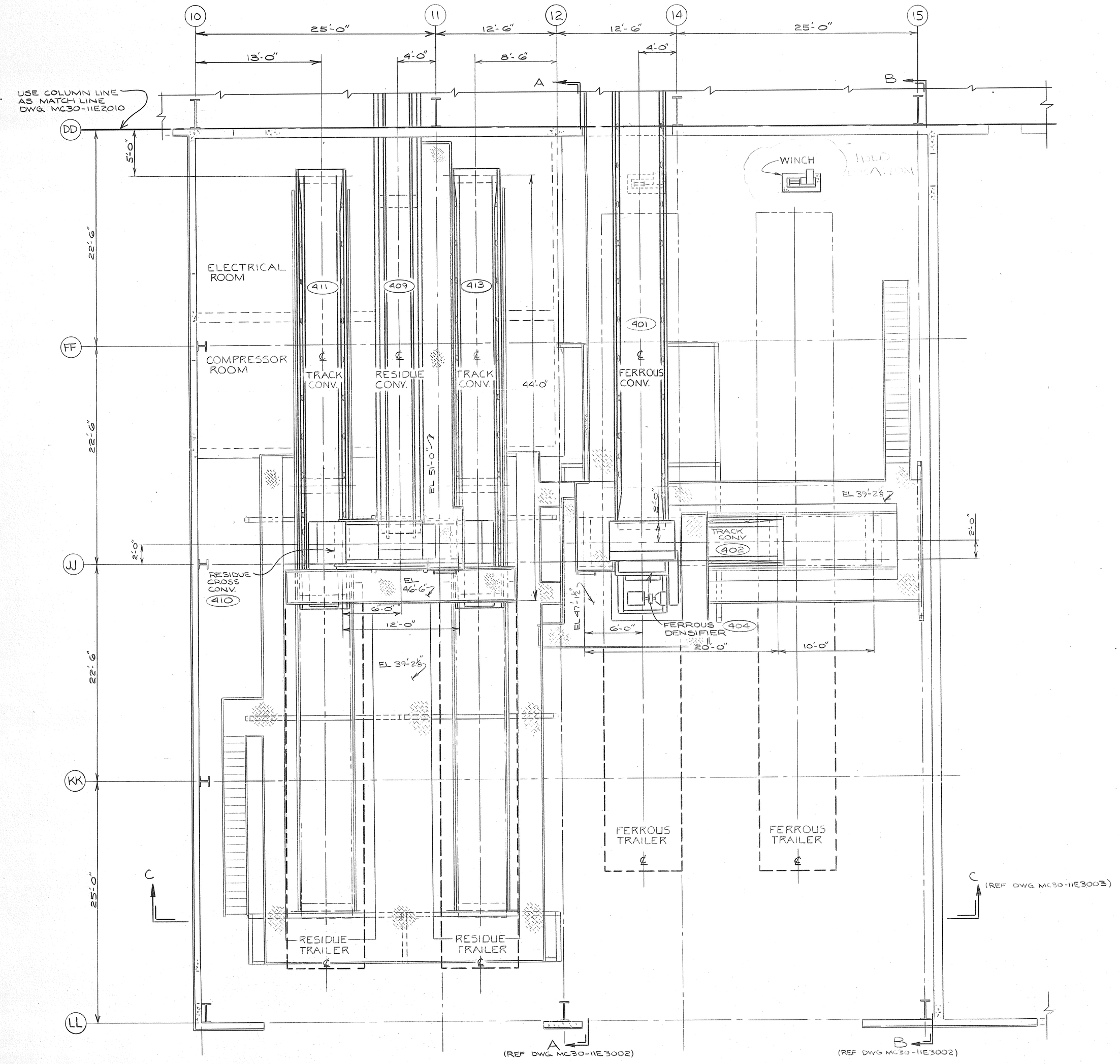
SECTION G-G

(REF DWG MC30-11E2010)

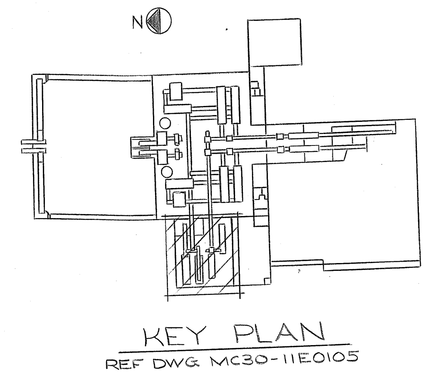
METROPOLITAN DISTRICT
MID CONN PROJECT
DRAWING NO. M/SC-14-0013

A.ROTO 7-3-86 Drawn By Date	This drawing is the property of Resource Recovery Systems Combustion Engineering, Incorporated, Windsor, Connecticut 06095, and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where provided for by agreement with said company	COMBUSTION ENGINEERING	
Checked By Date		PROCESS AREA	
Approved By 8/11/86 Date		SECTION G-G	
SCALE ¼"=1'-0"	COMP. CODE	CONNECTICUT RESOURCES RECOVERY AUTHORITY MID CONNECTICUT PROJECT	
		DWG NO. MC30-11E2019	REV. 02 SHEET GA14

MC30-11E3001	Revisions	1	UPDATED FOR PROPOSED SPEC's MC-408 12-13-85 AC	2	UPDATED & REDRAWN 5-5-86 A.R.	03	ADDED PARTITION ELEVS AR 7-28-86	APPROVED FOR CONSTRUCTION 8-11-86



PLAN VIEW

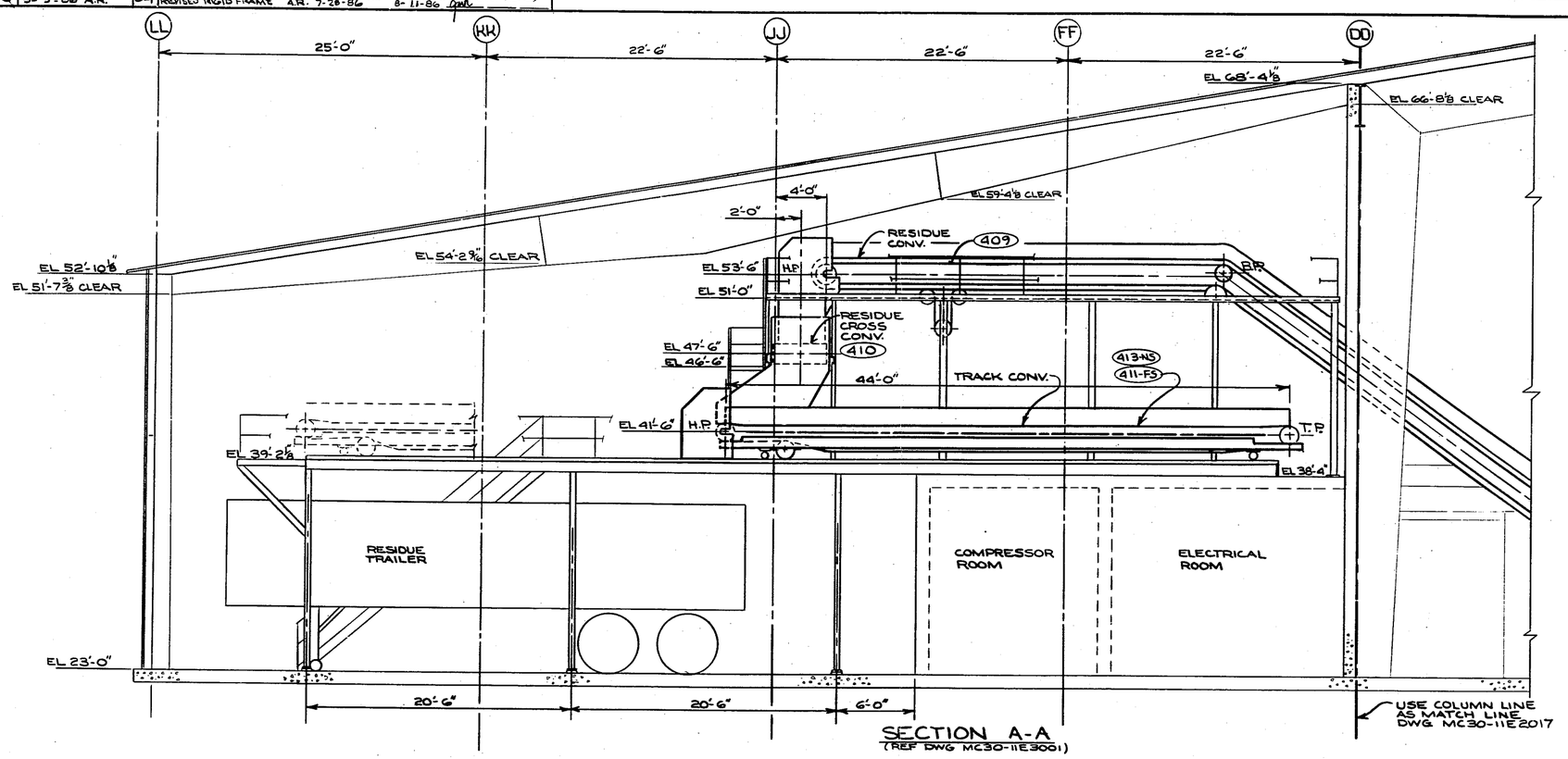


KEY PLAN
REF DWG MC30-11E0105

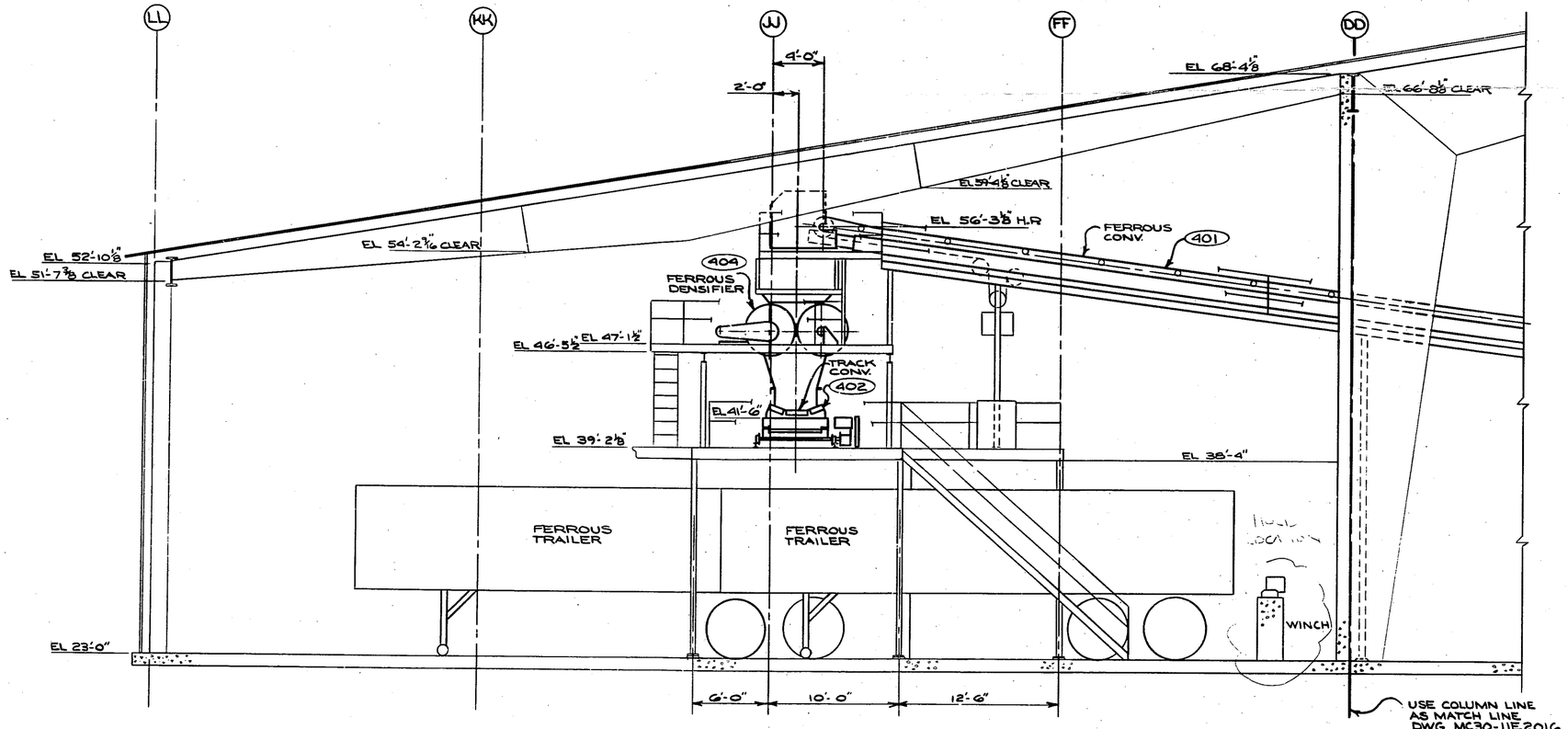
MASTER COPY

A.L. 10-15-85 Drawn By / Date AR Checked By / Date: B. 8-4-86 Approved By / Date: 6/12/86 NMR 9/11/86	This drawing is the property of Resource Recovery Systems Combustion Engineering, Incorporated, Windsor, Connecticut 06095 and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where provided for by agreement with said company.	COMBUSTION ENGINEERING FERROUS & RESIDUE LOADOUT PLAN VIEW CONNECTICUT RESOURCES RECOVERY AUTHORITY MID-CONNECTICUT PROJECT
SCALE 1/2" = 1'-0"	COMP. CODE	DWG. NO. MC30-11E3001 REV. 03 SHEET GA

E3002	Revisions	3	REVISED & REDRAWN 5-5-86 A.R.	04	ADDED STAIRS SECT A-A, ADDED EL. CONV 402 REVISED RIGID FRAME A.R. 7-28-86	APPROVED FOR CONSTRUCTION 8-11-86



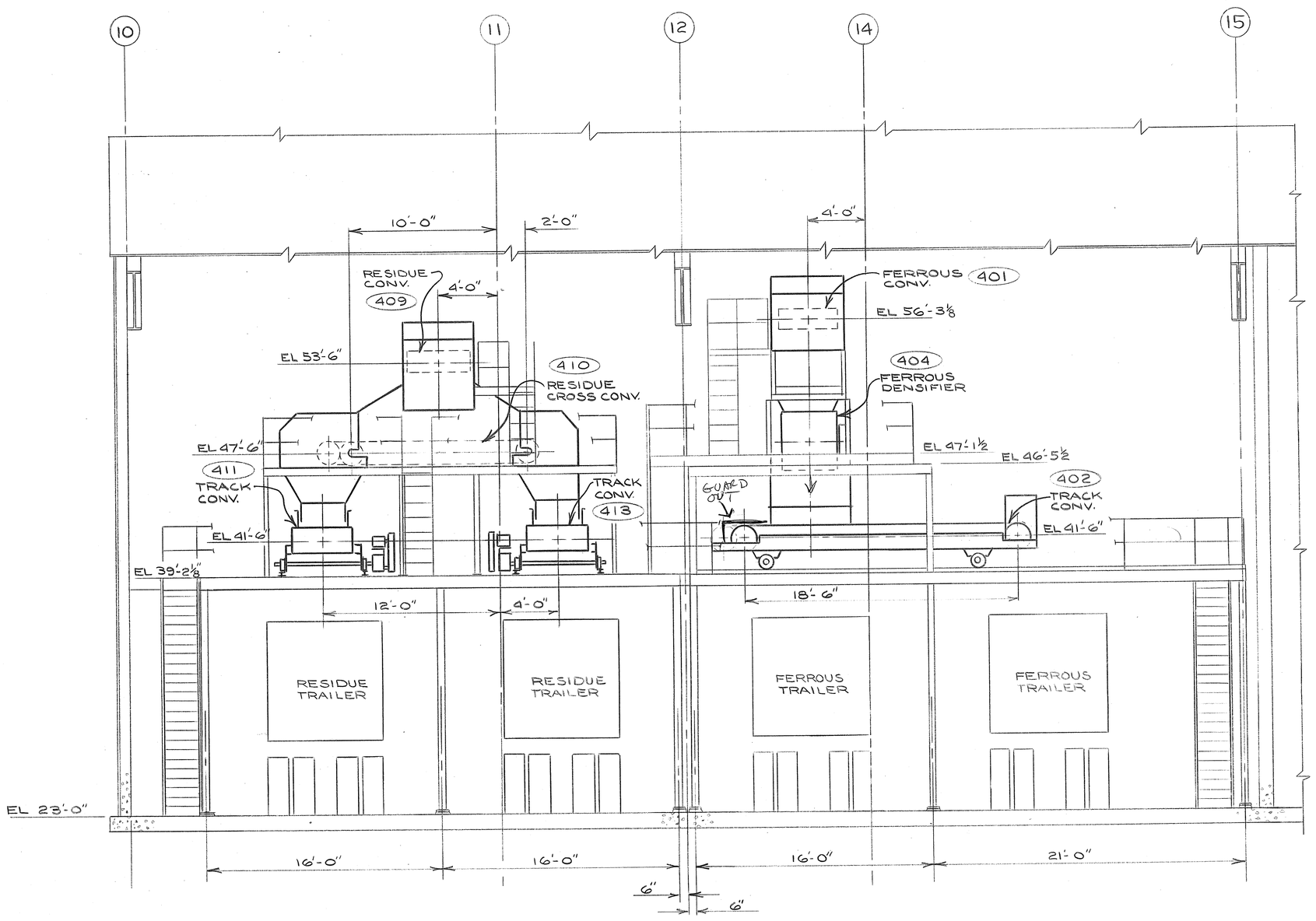
SECTION A-A
(REF DWG MC30-11E3001)



SECTION B-B
(REF DWG MC30-11E3001)

A.ROTO 4-22-86 Drawn By Date	This drawing is the property of Resource Recovery Systems Combustion Engineering, Incorporated, Windsor, Connecticut 06095 and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where provided for by agreement with said company.	COMBUSTION ENGINEERING
B.S. 8-4-86 Checked By Date		FERROUS & RESIDUE LOADOUT SECTIONS A-A & B-B
Approved By 8/11/86 Date		CONNECTICUT RESOURCES RECOVERY AUTHORITY MID-CONNECTICUT PROJECT
OWNER 8/11/86	SCALE 1/4"=1'-0" COMP. CODE	DWG. NO. MC30-11E3002 REV. 04 SHEET GA16

MC30-11E3003	Revisions	03	UPDATED & REDRAWN A.R. 5-2-86	04	REVISED STAIRS A.R. 7-28-86	APPROVED FOR CONSTRUCTION 8-11-86 DMC



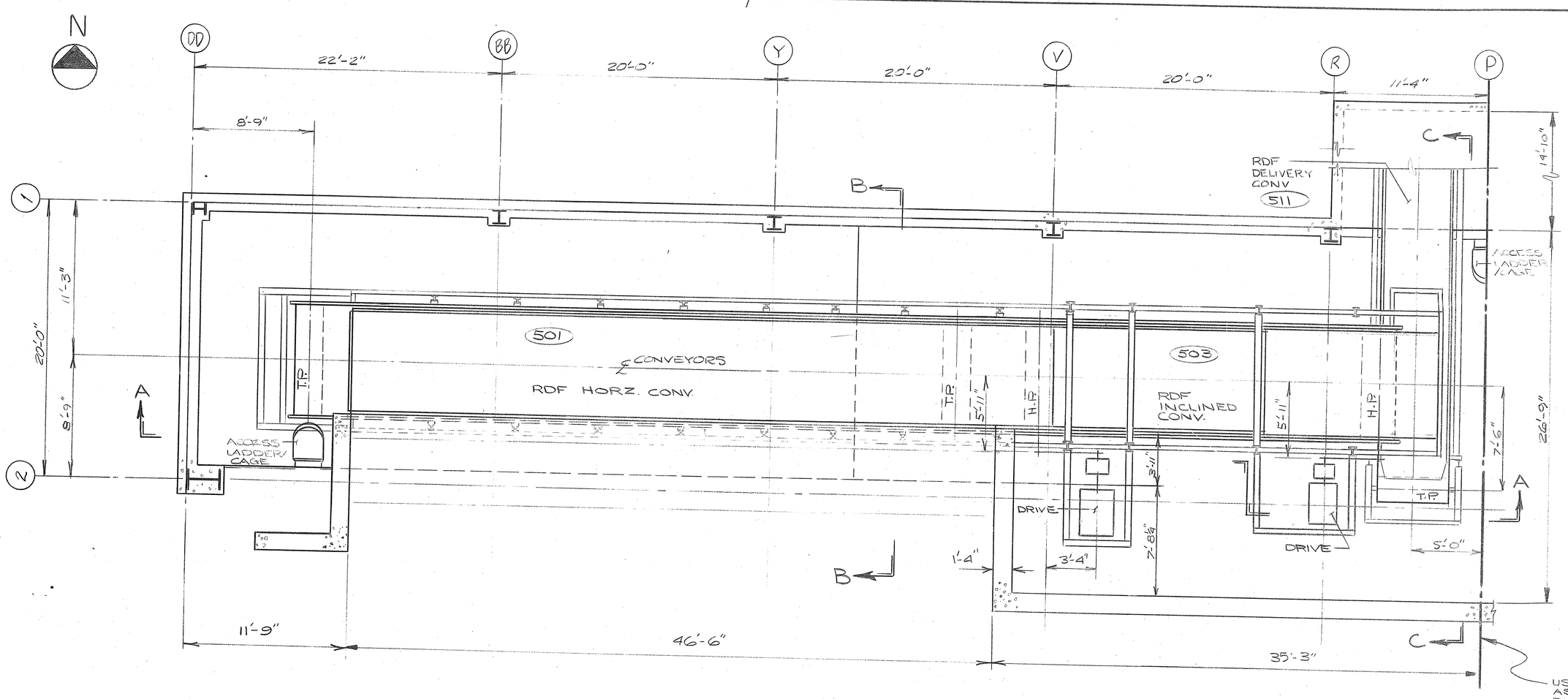
SECTION C-C

(REF DWG. MC30-11E3001)

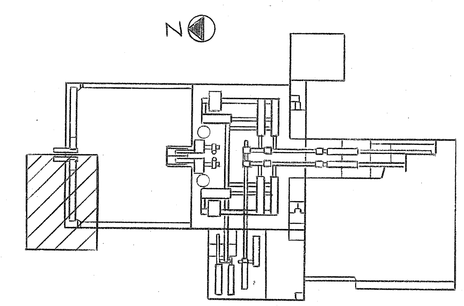
MASTER COPY

A. ROSTO 5-2-86 Drawn By Date R.T. 8-4-86 Checked By Date Approved By Date SCALE 1/4"=1'-0" COMP. CODE	This drawing is the property of Resource Recovery Systems Combustion Engineering, Incorporated, Windsor, Connecticut 06095 and is not to be reproduced or used to furnish any information for making of drawings or apparatus except where provided for by agreement with said company.	COMBUSTION ENGINEERING FERROUS & RESIDUE LOAD-OUT SECTION C-C CONNECTICUT RESOURCES RECOVERY AUTHORITY MID-CONNECTICUT PROJECT DWG. NO. MC30-11E3003 REV. 04 SHEET GA17

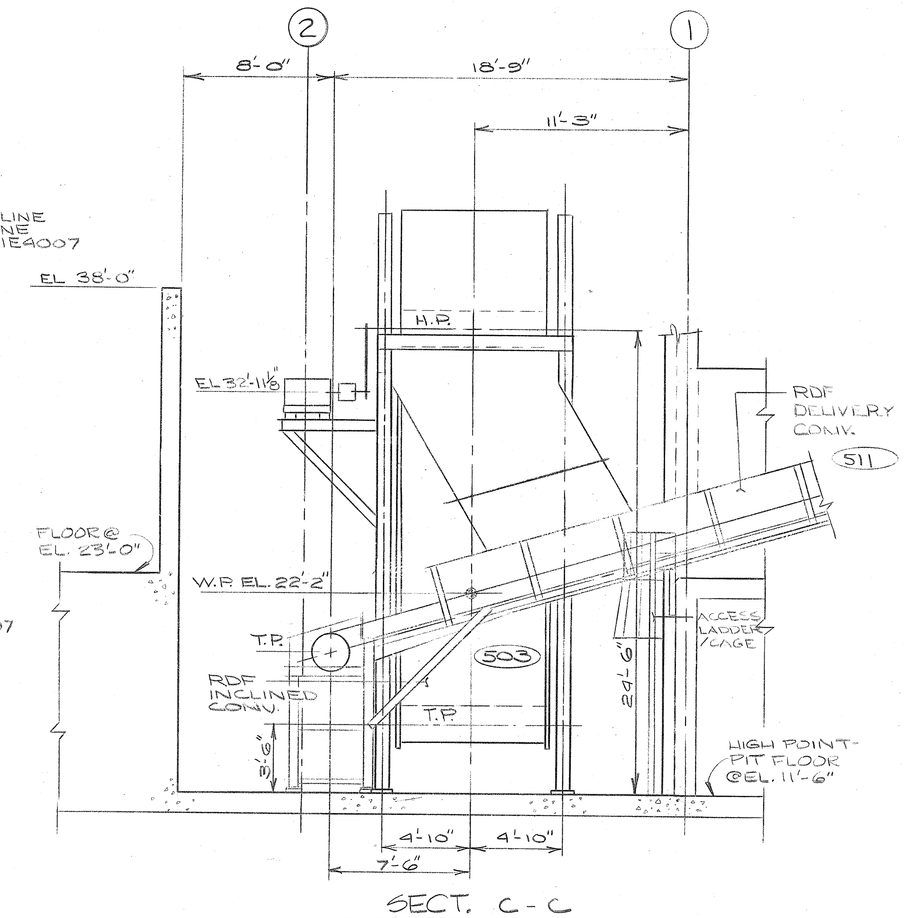
MC30-11E4006	Revisions	01	UPDATED 4-10-86 A.ROTO	2	ADDED SECT. CALLOUTS A.R 5-7-86	02	ADDED ACCESS LADDERS A.R. 7-28-86	APPROVED FOR CONSTRUCTION 8-11-86



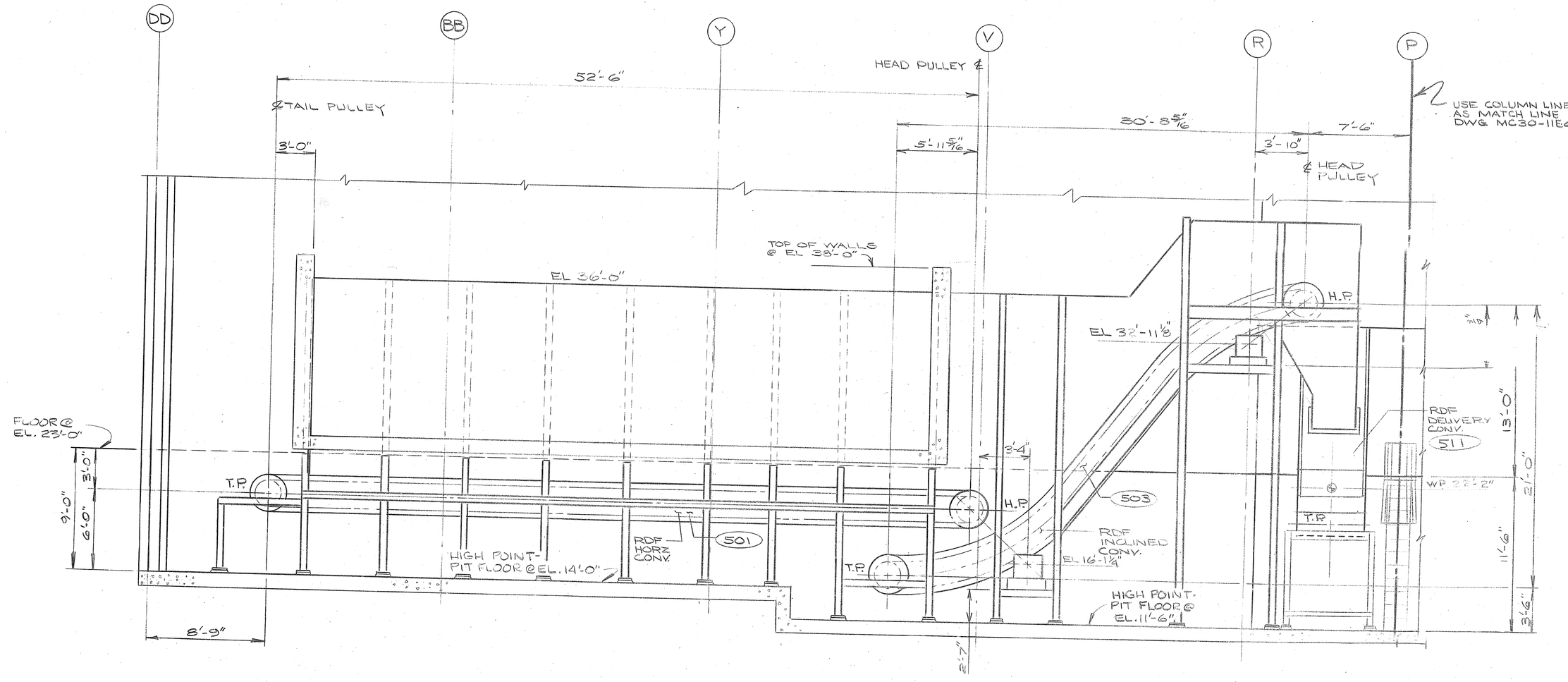
PLAN VIEW



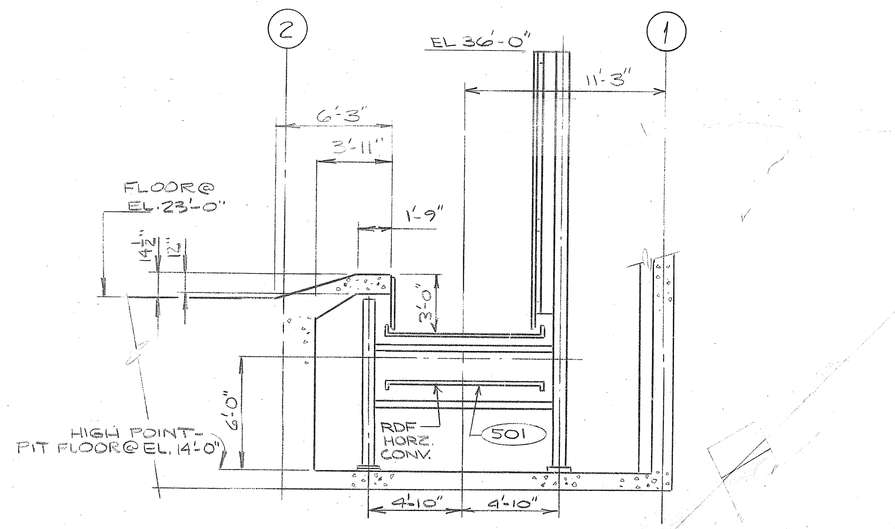
KEY PLAN
REF. DWG MC30-11E0105



SECT. C-C



SECT. A-A

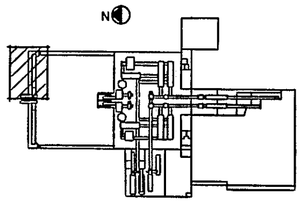


SECT. B-B

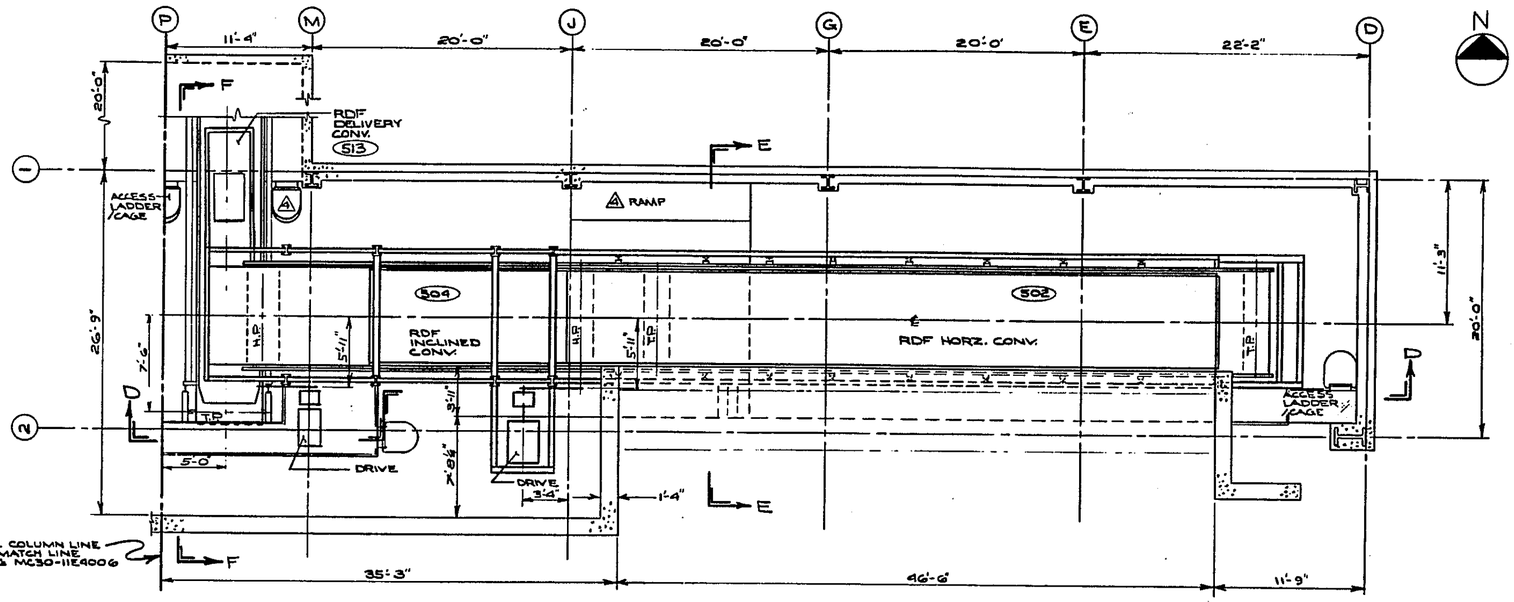
MASTER COPY

A ROTO 9-10-85 BENSON 9-25-85 Drawn By Date	This drawing is the property of Resource Recovery Systems Combustion Engineering, Incorporated, Windsor, Connecticut 06095 and is not to be reproduced or used in whole or in part for any purpose or for making of drawings or apparatus except where provided for by agreement with such company.	COMBUSTION ENGINEERING RDF STORAGE & FEED AREA PLAN & SECTIONS MID-CONNECTICUT RESOURCE RECOVERY AUTH. MID-CONNECTICUT PROJECT
Checked By Date Approved By Date	SCALE ½"=1'-0" COMP. CODE	DWG. NO. MC30-11E 4006 REV. 03 SHEET GA.18

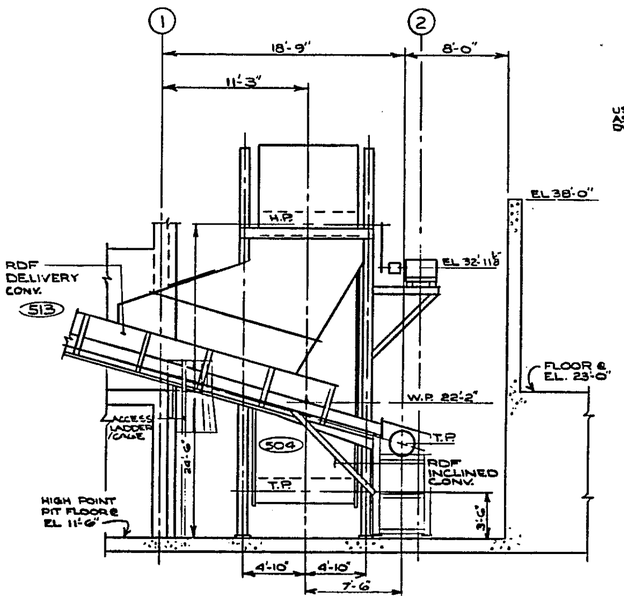
MC30-11E4007	Revisions	1	UPDATED & REDRAWN 4-14-86 A HOTO	2	ADDED SECT CALLOUT AR 5-7-86	03	ADDED ACCESS LADDER AR 7-23-86	APPROVED FOR CONSTRUCTION 8-11-86	04	UPDATED PER FIELD REVISIONS A.R. 3-22-89



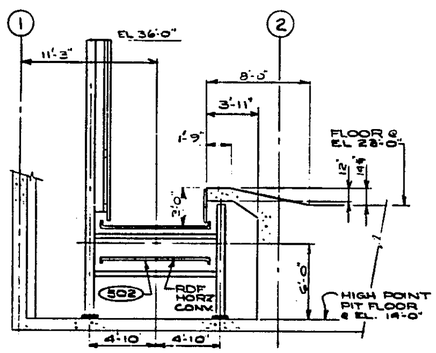
KEY PLAN
REF DWG MC30-11E0105



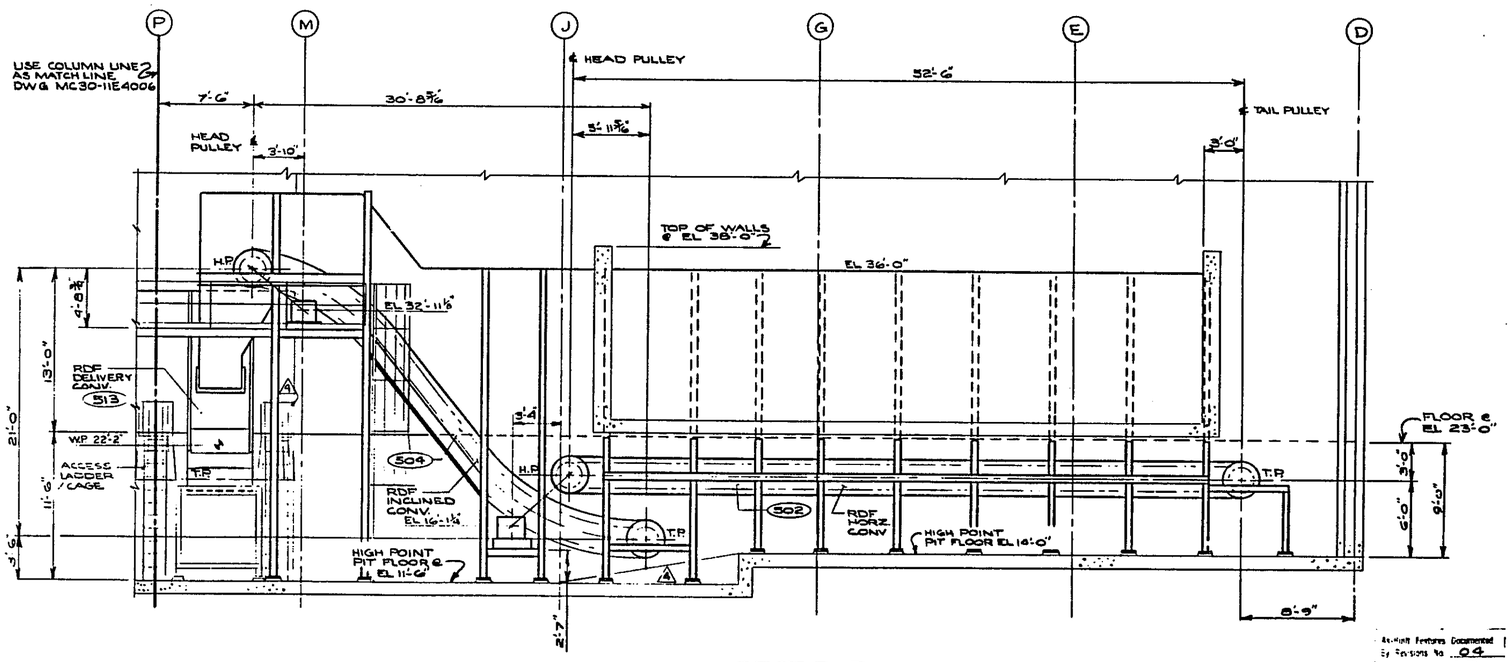
PLAN VIEW



SECT. F-F



SECT. E-E



SECT. D-D

As-Built Features Documented by Revisions No. 04
Were noted by A.R.
Dated the [illegible] of
CT Resource Recovery Authority
Signed Unsigned

J.B. [illegible] A.R. 4-14-86	AS-BUILT	CONSTRUCTION
T.T. 8-7-86		RDF STORAGE & FEED AREA PLAN & SECTION
[illegible] 8/11/86		CONNECTICUT RESOURCES RECOVERY AUTHORITY MID CONNECTICUT PROJECT
[illegible] 3/1/89	SCALE 1/8"-1'0"	DWG NO. MC30-11E4007 REV 04 SHEET GA19