

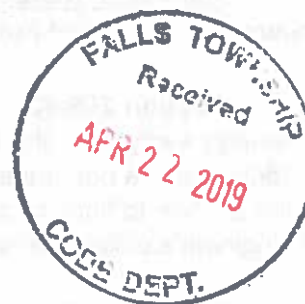


GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

April 22, 2019

File No. 12-07083

Peter Gray
Falls Township, Manager
188 Lincoln Highway, Suite 108
Fairless Hills, PA 19030



Reference: Elcon Recycling Services
Revised Preliminary Land Development Submission
Response to Received Comments

Dear Peter:

On behalf of our Client, Elcon Recycling Services, please find below responses to comments received on our initial Preliminary Land Development submission. The letter review letters are referenced in each heading and the responses are numbered to correspond to the comments in each letter:

A. Letter from Jones Engineering Associates dated March 14, 2019.

ZONING ORDINANCE:

(1) **Section 209-30(D):** The plans show dimensions, areas and ratios in the zoning data table that are based on one lot (T.M.P. 13-051-001-005) however the Bucks County Parcel Viewer shows there are two lots that encompass the overall site area. The applicant must provide evidence that the two lots were formally consolidated, or the plans must be revised to include a Subdivision/ Lot Consolidation Plan. Additionally, the zoning data table must be updated with corrected information based on 209 Attachment 8, Table 5 of the Zoning Ordinance.

Applicant Response: See enclosed Minor Subdivision Plan and enclosed Lot 1 Combined Plan & Easement Plan, each prepared by Showalter & Associates and dated March 29, 2006, and recorded in the office of the Bucks County Record of Deeds on June 6, 2006, to Instrument No. 2006062298, which memorialize the consolidation of T.M.P. 13-051-001-005 and a portion of T.M.P. 13-051-001-012 encompassing approximately 8.61 acres for a total consolidated parcel of 32.30 acres.

(2) **Section 209-30(E); 209-43 (A thru I):** The plans must be revised to include a note to the effect that the operations at this facility will comply with all of the performance standard requirements from these sections of the ordinance in perpetuity. Section (I) contains specific requirements for "Storage and Waste Disposal", the compliance with which cannot be determined from the site plans submitted. It is unclear what materials will be stored, processed and handled at this facility as well as which storage areas are being proposed within buildings and which are open storage and containment areas. Certain materials storage may be required to be fully enclosed within a building.

Applicant Response: See the "Notes Pertaining to Storage and Waste Disposal" added to Sheet 1 of 15 in the revised preliminary land development plan set.

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(3) **Section 209-30(F); 209-34(E):** The plans must be revised to remove the guard house, fence(s) and gate system that are located within the front yard area or a zoning variance will be required.

Applicant Response: See enclosed revised preliminary land development plan set, which shows that the guard house, fence and gate have been relocated outside of the front yard area.

(4) **Section 209-38:** The plans must be revised to add grading improvements that clearly show positive drainage away from the proposed retaining wall and to natural drainage ways or local storm sewer systems. Additionally, a note must be added to the record plan that states that all material to be imported and used to bring the site to final grades will be comprised of Clean Fill and or Topsoil as determined by the Falls Township Engineer's office and the Pennsylvania Department of Environmental Protection.

Applicant Response: Top and bottom of wall elevations have been added to the Grading Plan to demonstrate positive drainage away from the wall, as requested. Additionally, the requested Clean Fill note has been added to the Record Plan.

(5) **Section 209-42(B)(I):** The plans must be revised to provide clustered plantings of dense plant material not less than four feet in height which shall be provided and maintained between the off-street parking areas and any lot line or street line. The four-foot height of the plant material must be measured from the elevation of the parking areas.

Applicant Response: See Sheet 13 of 15 in the revised preliminary land development plan set, which provide for clustered plants of dense plant material not less than four feet in height between the off-street parking areas and lot lines / street lines.

(6) **Section 209-42(E):** The plans must be revised to provide a maximum driveway width of thirty feet (30.0') at the street line which shall be measured at the straight portion of driveway prior to the radii or a zoning variance will be required.

Applicant Response: The plans have been revised accordingly.

(7) **Section 209-42(H)(22):** The required parking space calculations must be revised to conform with this section of the ordinance where 1.25 parking spaces are required for each employee I personnel on the major shift with 2 parking spaces provided for each managerial personnel and one additional parking space for each business-related vehicle.

Applicant Response: The Parking Calculation on Sheet 2 of 15 has been updated.

(8) **Section 209-42(I):** The plans must provide and identify area(s) intended for loading of any materials that will be leaving the property in terms of process byproducts as well as area(s) for loading and unloading of office products and materials and materials other than process materials.

Applicant Response: The plans have been revised to identify the areas for loading of materials leaving the property. The by-product materials that will leave the plant are salt and sludge, which are the residues from the waste treatment process. These materials are solid and will be stored inside the warehouse building in Supersacks, totes, or similar containers. The containers will be loaded just outside of the warehouse building labeled on the Record Plan sheet.

(9) **Section 209-43(D):** The plans must be revised to include information in sufficient detail to assure there will be zero light intensity at the property lines. This is mentioned due to the proposed development being elevated by retaining walls where elevated driveways and parking spaces requiring illumination are in close proximity to property lines.

Applicant Response: See Sheet 13 of 15 in the revised preliminary land development plan set, which confirms that there will be zero light intensity at the property lines. The pole mounted fixtures will contain cutoff features to project light downward.

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE:

(1) **Section 191-29(D):** This section of the ordinance requires that certain natural features, including waterways, be preserved by every means and to the fullest extent possible. The drainage easement that contains a waterway as defined by § 191-5 of this ordinance, which runs along the Dean Sievers Place property frontage is subject to this requirement. The plans must be revised to eliminate the substantial amount of fill proposed within this waterway in order to construct the automobile parking facility or a waiver from this requirement must be requested.

Applicant Response: See Sheet 5 of 15 in the revised preliminary land development plan set, which confirms the elimination of fill from within the drainage area located along the dean Sievers Place property frontage.

(2) **Section 191-29(E):** It appears that the design of the improvements will require the import of material in excess of 70,000 C.Y. in order to construct the site improvements at the elevations proposed, which are presumably to elevate the project to a predetermined elevation above the relevant floodplain elevations.

Applicant Response: Comment only. No response required.

(3) **Section 191-29(H):** This section of the ordinance requires that all construction details to be in accordance with the Falls Township Design Details and Practices, Appendix A of Chapter 191-Subdivision and Land Development Ordinance. The plans must include a note to this effect and add compliant constructible details for all relevant improvements.

Applicant Response: See Sheet 1 of 15 in the revised preliminary land development plan set, which provides for the note referencing the Falls Township Design Details and Practices contained in Appendix A of Chapter 191 – Subdivision and Land Development Ordinance. In addition, constructible details for all relevant improvements are shown on Sheets 11, 12 & 15 of 15 in the revised preliminary land development plan set.

(4) **Section 191-30(I):** Comments related to the Traffic Impact Study are deferred to the Township Traffic Engineer.

Applicant Response: Comment only. See responses under Section B of this letter to the Remington & Vernick Engineers letter dated March 6, 2019.

(5) **Section 191-31(A); 191-31(D)(2):** This section of the ordinance shows that a forty-foot (40') wide paved cartway is appropriate for the depicted right-of-way width of Dean Sievers Place, which is currently paved to a thirty-six feet (36') wide cartway.

Applicant Response: The referenced section of the SALDO states that "Collector Streets" are to have a cartway width of 36'-wide, which is the current dimension of Dean Sievers Place.

(6) **Section 191-36(A); 191-34(D)(1)(f):** The plans must be revised to show the required five hundred-foot (500.0') sight distance lines for each driveway intersection with Dean Sievers Place.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(7) **Section 191-35(B):** The plans must be revised to include truck turning templates around the Dean Sievers Place cul-de-sac to assure there is an adequate paved radius for the trucks anticipated for this site to have the ability to turn around without the need to reverse or to enter another property for this purpose.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 7 of 15.

(8) **Section 191-36(D):** The plans must be revised to include curbs along all driveways or a waiver from this requirement must be requested.

Applicant Response: The revised preliminary land development plan set has been revised accordingly. See Sheet 5 of 15.

(9) **Section 191-37(B):** The plans must be revised to provide a dimension between the eastern driveway and the adjacent property line which shows a minimum distance of twelve-feet (12'). A dimension must be provided between the parking area and the adjacent building which shows a minimum distance of fifteen-feet (15'). Additionally, the plans must be revised to include safety measures for protection against truck traffic impacts to buildings and/or containment walls.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15 and Sheet 2 of 15.

(10) **Section 191-37(C):** The plans must be revised to include dimensions for the parallel parking spaces along the looped driveway that are labeled "Contractor Parking by Permit".

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(11) **Section 191-37(D):** The proposed driveway accessing the vehicular parking area and the overall site entrance layout indicate potential conflicting vehicular/ truck movements considering where the gated facility access is proposed. The plans must provide operational notes or a flow diagram that indicates vehicles can enter/ exit the parking space area when trucks are queued at the entrance gate and weigh station. The flow diagram must also address potential vehicular conflicts at the outgoing weigh station,

driveway and the adjacent intersecting driveway. Additionally, the truck stacking configuration must be revised since two trucks are simultaneously situated on the incoming weigh station scale.

Applicant Response: The preliminary land development plan set has been revised to address traffic circulation within the site, along with signage related to same. In addition, the layout has been modified to allow for appropriate truck stacking. See Sheet 2 of 15.

(12) **Section 191-37(E):** The plans must be revised to include a dimension between the off-street parking area and the right-of-way of Dean Sievers Place that indicates a minimum distance of five-feet (5').

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(13) **Section 191-37(G)(1):** The plans must be revised to include curbed raised planting beds within the parking area as well as at the ends of parking rows or a waiver from this requirement must be requested. Additionally, the raised planting beds must be alternating on each side of the parking area.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 5 of 15.

(14) **Section 191-37(G)(2):** The plans must be revised to include shade trees for all curbed raised planting beds. Proposed shade tree species must be selected from the approved shade tree listing in section 191-48 (H) of Chapter 191-Subdivision and Land Development Ordinance.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 13 of 15.

(15) **Section 191-38(A):** The plans must be revised to include the required lighting improvements required by this section of the ordinance. Lighting must be provided for all walkways and driveways in addition to the off-street parking area.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 13 of 15.

(16) **Section 191-38(B):** The lighting plan must show a minimum of 0.3 footcandle in the areas to be illuminated.

Applicant Response: The preliminary land development plan set has been revised to provide additional lighting. An iso foot-candle plan will be provided with the next revised plan submission so that the 0.3 foot-candle requirement can be confirmed. See Sheet 13 of 14.

(17) **Section 191-38(C):** The lighting improvements must be shown in sufficient detail to allow determination of the effects on neighboring properties, traffic safety and overhead sky glow.

Applicant Response: The preliminary land development plan set has been revised accordingly. An iso foot-candle plan will be provided with the next revised plan submission. See Sheet 13 of 15.

(18) **Section 191-39(D):** The plans must be revised to include sufficient detail to evaluate compliance with this section of the ordinance that relates to ADA Accessibility. It appears there are internal walkways that require pedestrian safety measures and it is unclear how pedestrian traffic is intended throughout the site processing areas and between buildings. Additionally, the proposed retaining wall will require guards that are designed in accordance with the effective building codes, the location of which must be added to the plans.

Applicant Response: The preliminary land development plan set has been revised to provide an ADA accessible route from the parking area to the production plant. The next revised plan submission will provide greater detail for pedestrian accessways between buildings.

(19) **Section 191-44(C)(3):** The waste handling facility is bounded on three sides by 1,766 +/- lineal feet of retaining wall ranging from 0' to 7. 7' (+/-) in height. The calculations supporting the design must be submitted with the signature and seal of the engineer who is responsible for the design prior to final approval. Due to the significance that this wall will have on the safety of the site, the applicants engineer prior to design, must confer with the Township Engineer who will set the design standards, design considerations and acceptable assumptions for the design of the wall. Additionally, since this wall will provide support for the driveways, concrete pads, concrete containment areas, walkways and other necessary infrastructure improvements it is recommended that the applicant be required enter into an inspection and maintenance agreement with the Township. The inspection and maintenance agreement must be in a form acceptable to the Township Solicitor and be recorded with the property deed prior to issuance of a certificate of occupancy. The location and of the retaining wall in proximity to the site infrastructure and the adjoining properties will be subject to the Township Fire Marshal's approval. There appears to be limited space between the retaining wall and the northeast property line for future repairs and/or maintenance.

Applicant Response: Design drawings and structural calculations supporting the proposed design for the retaining wall have been included in this resubmission. The Applicant will agree to enter into an inspection and maintenance agreement with the Township, in a form acceptable to the Township solicitor, with respect the retaining wall. Applicant will agree to record the inspection and maintenance agreement against the property at the time the land development plans are recorded. Applicant will await a draft inspection and maintenance agreement from the Township solicitor for review. See Subsection C of this Letter for responses to the comments received from the Township Fire Marshal.

(20) **Section 191-44(D):** The plans must be revised to include an easement for disturbance on the adjacent property, T.M.P. 13-51-001-006, since the limit of disturbance extends onto that property. Additionally, a waiver will be required from this section of the ordinance due to that disturbance.

Applicant Response: The preliminary land development plan set has been revised accordingly to remove any disturbance of the adjacent property and, as a result, no waiver is required. See Sheet 5 of 15.

(21) **Section 191-44(E):** The plans must be revised to provide the required minimum lawn slope of two percent (2%) and shall be in accordance with Chapter 187, Stormwater Management.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 5 of 15.

(22) **Section 191-44(F):** The plans must be revised to provide additional spot elevations to assure compliance with this section of the ordinance requiring grading improvements that assure adequate site drainage. Additionally, proposed bottom and top of wall elevations must be added along the length of the proposed retaining wall.

Applicant Response: Top/bottom of wall elevations and additional spot elevations have been added to the plans as requested.

(23) **Section 191-44(G)(1):** The plans must be revised to provide ground slopes (positive drainage) away from the outside of the proposed retaining wall.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 5 of 15.

(24) **Section 191-44(G)(5):** The plans must be revised to include notes that address the management of dust and tracked mud during the grading and overall construction operations.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 9 of 15.

(25) **Section 191-45:** This section of the ordinance requires drainage easements to be free of permanent structures yet the design proposes to place fill within the twenty-foot (20') drainage easement that runs along the property frontage along Dean Sievers Place. The proposed fill comprises an earthen embankment to support the proposed vehicular parking area. A waiver must be requested for the placement of this fill, and if granted, a condition of which should be an analysis of the drainage swale considering all flow inputs into the swale, which must be redesigned in accordance with Chapter 187, Stormwater Management of the Falls Township Code and shown to be acceptable for the anticipated and emergency flow conditions.

Applicant Response: See Sheet 5 of 15 in the revised preliminary land development plan set, which confirms the elimination of fill from within the drainage area located along the dean Sievers Place property frontage. As such, no waiver is required.

(26) **Section 191-48(A):** The plans must be revised to include street trees for the entire property frontages. If existing trees are to be counted as serving this purpose they must be identified by size and species on the landscape plan.

Applicant Response: The plans propose street trees along the impacted portion of the Dean Sievers Place frontage. A site visit reveals existing vegetation along the balance of Dean Sievers Plan and Steel Road that we believe exceeds the required frequency of street tree plantings. The existing trees to remain along the frontages are called out on Sheet 3 of 15.

(27) **Section 191-48(B):** Street trees must be planted at least forty-feet (40') apart, or an equivalent number shall be planted in an informal arrangement acceptable to the Falls Township Board of Supervisors. Additionally, the plans must be revised to include a calculation that indicates the required number of street trees.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 13 of 15.

(28) **Section 191-48(D):** The plans must be revised to provide a distance of fifteen-feet (15') between street trees and all driveways.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 13 of 15.

(29) **Section 191-48(G):** All proposed street trees species are subject to the Falls Township Shade Tree Commission's approval/ recommendations.

Applicant Response: Comment only. Applicant awaits approval / recommendations from the Falls Township Shade Tree Commission.

(30) **Section 191-51(H)(1):** The plans must be revised to include an outdoor collection station(s) for garbage, recycling and trash removal.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(31) **Section 191-51(H)(2):** The plans must provide adequate screening measures for the outdoor collection stations.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(32) **Section 191-52:** Measures used to control erosion and reduce sedimentation shall, at a minimum, meet the standards and specifications of the Bucks County Conservation District and the Pennsylvania Department of Environmental Protection. The applicant must obtain a letter of adequacy from the Bucks County Conservation District. Additionally, since the Limit of Disturbance is over one acre an NPDES Permit will be required.

Applicant Response: Applicant agrees that the grant of preliminary plan approval will be subject to the Applicant obtaining erosion and sediment approval and the NDPES permit prior to final plan approval.

(33) **Section 191-52.1(A):** The overall existing features plan must include the natural resources table.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 3 of 15.

(34) **Section 191-52.1(B)(2)(a):** The plans show a delineated wetland area on the western side of the project site which appear to be taken from a reference plan that is dated in 2006. The applicant must provide confirmation, from a qualified soils scientist, that the historic delineation remains valid or provide an updated delineation performed in accordance with this section of the ordinance. Additionally, the qualified soils scientist must certify by signing the record plan for this development indicating the confirmation of the existing delineation or for the updated delineation. The wetland margin must be adjusted accordingly.

Applicant Response: Included with this resubmission package is a jurisdictional determination issued by the Army Corps of Engineers, dated January 5, 2015, which is valid for a period of five (5) years following the issuance of the letter.

(35) Section 191-52.1(B)(2)(b): This project may require a General Permit from the Pennsylvania Department of Environmental Protection for the basin discharge pipe at the wetlands. Additionally, a Chapter 105, dam safety permit may be required for the stormwater management basin berm since the basin could contain fluids other than stormwater. The design must include a means for shut-off of the basin discharge control structure in the case of a spill that, due to the configuration of the site, would cause contaminated fluids to enter the stormwater management facility. The shut-off valve and process for operating the valve must be included in the applicants PPC Plan for the operation of the site as well as noted on the Post Construction Stormwater Management Plan. The basin design must be revised to accommodate access for maintenance vehicles and equipment as well as access for personnel to operate the shut-off mechanism.

Applicant Response: The basin design has been revised to incorporate a level spreader at the basin outlet and the discharge pipe is no longer within the wetland area; therefore we believe a General Permit from PADEP is not required.

The proposed stormwater management basin does not meet the regulatory definition of a dam in accordance with 25 PA Code Chapter 105.3 or Section 302 of the Flood Plain Management Act for the following reasons:

- (1) The contributory drainage area does not exceed 100 acres. The proposed drainage area that is captured by the stormwater management basin is approximately 10.8 acres.
- (2) The maximum depth of water measured by the upstream toe of the dam at maximum storage elevation does not exceed 15 feet. The estimated depth is no more than 6.5 feet.
- (3) The impounding capacity at maximum storage does not exceed 50 acre-feet. The proposed storage volume of the stormwater management basin is approximately 5.6 acre-feet (up to elevation 18 ft.).

Therefore, the proposed stormwater management basin does not require a dam safety permit under Chapter 105.

Regarding the comment that the basin could contain fluids other than stormwater, the proposed stormwater management basin is designed to handle stormwater only. All regulatory-required secondary containment areas are provided outside of the stormwater management basin area. The stormwater basin will be equipped with a valve that can be closed in the event of a low probability, catastrophic failure of all regulatory-required secondary containment. Furthermore, a stormwater management basin that does not meet the definition of a dam under Chapter 105.3 would not be subject to regulation as a dam simply because it could contain fluids other than stormwater. If this were true, then most of the stormwater management basins in the Commonwealth would be regulated as dams if the stormwater management facilities have any connectivity to parking areas or other areas where vehicles could spill fuel or motor oil or other fluids that could potentially be transported by stormwater into the basin. Clearly, Chapter 105 does not require this. The stormwater management basin will be equipped with a sluice-type shut off valve. The valve will normally be in the open position, except under emergency circumstances; the valve would be actuated by Elcon staff to impound stormwater. The plan sheets have been revised to include the identification of the location of the proposed valve. In addition, the detail sheet has a schematic of the type of valve that is proposed. Prior to plant operation, the facility's' PPC plan will be amended to include a standard operating procedure to explain how the valve will be operated.

(36) **Section 191-52.1(3):** The plans must be revised to depict the steep slope areas accounted for within the natural resource table.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 3 of 15. There are no naturally occurring steep slopes that are not within a natural resource of greater protection level.

(37) **Section 191-52.1(4):** The plans must be revised to depict the woodland areas accounted for within the natural resource table.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 3 of 15.

(38) **Section 191-52.1(7):** In addition to the relevant comments above, watercourses shall not be altered, regraded, filled, piped, diverted or built upon except where design approval is obtained from Falls Township and, if required, from the Pennsylvania Department of Environmental Protection. (See comment § 191-45).

Applicant Response: See Sheet 5 of 14 in the revised preliminary land development plan set, which confirms the elimination of fill from within the drainage area located along the Dean Sievers Place property frontage. As such, no such approval from PADEP or Falls Township for such fill is required.

(39) **Section 191-52.1(8):** The proposed disturbance to the wetland margin must be quantified and included within the table of natural resources, including any disturbance related to maintenance and/or repair.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 3 of 15.

(40) **Section 191-60(A):** Monuments shall be placed at key points agreed upon between the Township Engineer and the Developer's Engineer.

Applicant Response: Monuments will be placed at points agreed upon by the Township & Developer's Engineer. The monument locations will be depicted on the plans upon revised plan resubmission.

(41) **Section 191-64(A):** The plans must be revised to include additional detail related to the proposed water distribution system to assure adequate service to each building and for firefighting purposes.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 6 of 15. Calculations for both the proposed water distribution and fire protection system are attached.

(42) **Section 191-69:** The applicant must provide a service letter from the appropriate authority indicating adequate sanitary sewer service and adequate water service is available for this project and provide additional details to assure adequate sanitary sewer service is provided to each building within the development requiring service.

Applicant Response: A will serve letter will be provided upon receipt. Calculations for sanitary sewer system capacity are attached.

(43) **Section 191-78(A)(1):** The plans must be revised to include an overall site plan for recording purposes that shows the entire property with all site improvements. Additionally, the overall existing features plan is unreadable and must be revised to provide clarity.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(44) **Section 191-78(B)(4):** The record plan must be revised to show the adjoining property owners and their respective zoning designations.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(45) **Section 191-78(C)(1):** The plans must be revised to include two coordinate points along the boundary that are referenced to the Pennsylvania State Plane Coordinate System (NAD83).

Applicant Response: This comment will be addressed with the next revised plan submission.

(46) **Section 191-78(C)(2):** The plans must be revised to include all existing features including the location, names, and widths of streets; the location and names of railroads; the location of property lines, the names of adjacent property owners and the Bucks County Tax Map Parcel Number of each property; and the location of watercourses, sanitary sewers, storm drains and similar features within 200 feet of any part of the land to be subdivided or developed or a waiver must be requested from this requirement.

Applicant Response: The next revised plan submission will include an aerial plan depicting the existing features and satisfaction of the referenced 200-foot requirement.

(47) **Section 191-78(C)(4):** The plans must be revised to include the metes and bounds for all easements and the ultimate delineation of the wetlands.

Applicant Response: A metes and bounds table for the wetland area will be provided on the next revised plan submission.

(48) **Section 191-78(C)(5):** The plans must be revised to include detailed information to determine the drainage patterns throughout the site and on the adjoining properties. There are many existing contours that are not shown on the various design plans and must be included for review of the proposed grading improvements.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 5 of 15. Greater level of detail has been added to the grading plan to demonstrate drainage patterns will not be adversely affected by the project.

(49) **Section 191-78(C)(6):** The plans must be revised to include the location and character of existing buildings (including building dimensions), species of large trees standing alone, the outline of wooded areas, slopes equal to or over fifteen (15) percent and any areas subject to inundation.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 & 3 of 15.

(50) **Section 191-78(D)(3):** The plans must be revised to include the dimensions of all buildings, containment areas, and provide dimensions between these elements on the site plan. Additionally, the plans must include multiple Site Sections throughout the processing area to better understand these components of the overall site design.

Applicant Response: The preliminary land development plan set has been revised to provide greater detail as requested. Required "site sections" will be provided as part of the next revised plan submission.

(51) **Section 191-78(D)(5):** The plans must be revised to include dimensions that are perpendicular or radial to all property lines or street lines from the corners of buildings, structural containment areas, tank farm areas and equipment.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 2 of 15. Tie distances have been added to the plans and are perpendicular to the property lines.

(52) **Section 191-78(D)(7):** The plans must be revised to include the zoning data for this lot based on the current zoning ordinance.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 2 of 15.

(53) **Section 191-78(D)(10):** The plans must be revised to show the location and size of all existing and proposed water mains, sanitary sewers, waterways and the location of the nearest fire hydrant. Additionally, a note must be added to the Record Plan stating that a sewage planning module mailer has been submitted to the Department of Environmental Protection and provide verification of the submission including the date submitted.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 6 of 15.

STORMWATER MANAGEMENT:

(1) **Section 187-8(C):** The stormwater management design must include an analysis that concludes there will not be an increase in runoff to the adjacent property, T.M.P. 13-51001-006 due to the construction of the retaining wall. Additionally, the design must include a downstream hydraulic capacity analysis for the multiple culvert systems between this project site and Biles Creek. The downstream analysis must be completed in accordance with §187-8 (K) and consider stormwater peak rate and volume changes as well as the physical condition of the culverts and the overall impacts to this site due to the flood stage(s) of the Delaware River.

Applicant Response: The stormwater management design complies with the peak rate reductions of the current Falls Township Stormwater Ordinance and will comply with the volume requirements of the NPDES permit. Additionally, the stormwater report has been revised to show no increase in runoff to the adjacent properties or the drainage way along Dean Sievers Place.

(2) **Section 187-8(G):** The applicant must obtain a determination as to whether a permit from the Pennsylvania Department of Environmental Protection is required for the location of the stormwater management basin and basin discharge pipe adjacent to the wetlands. Additionally, an analysis must be submitted that addresses the potential for adverse effects to the local wetland environment due to the proposed concentration of site runoff within the proposed stormwater management basin and the discharging of the runoff to a concentrated location within the wetland area, whereas the existing site runoff reaches the wetland area in a diffused manner.

Applicant Response: The basin outlet pipe has been revised and is no longer within the wetland; therefore, no DEP permit is required. Additionally, the basin outlet has been revised to incorporate a level spreader to more closely mimic the existing flow conditions from the site into the wetland.

(3) **Section 187-8(O):** The stormwater management design must include water quality protection measures and calculations designed and quantified in accordance with § 187-17.

Applicant Response: The stormwater management design has been revised accordingly.

(4) **Section 187-8(T):** The plans must be revised to eliminate the fill embankment within the watercourse that runs along the frontage of Dean Sievers Place and provide protective measures against existing stream bank erosion.

Applicant Response: See Sheet 5 of 15 in the revised preliminary land development plan set, which confirms the elimination of fill from within the drainage area located along the dean Sievers Place property frontage. As such, no such approval from PADEP or Falls Township for such fill is required.

(5) **Section 187-8(U)(3):** The stormwater management facility, due to its proximity to the wetlands, appears to be subject to permit by PADEP under 25 Pennsylvania Code Chapter 105.

Applicant Response: The outlet pipe discharge location has been revised.

(6) **Section 187-8(U)(5):** Since the stormwater management basin could impound fluids other than water, the applicant must determine if the stormwater management berm constitutes a dam and is therefore subject to permit by PADEP under 25 Pennsylvania Code Chapter 105.

Applicant Response: The proposed stormwater management basin does not meet the regulatory definition of a dam in accordance with 25 PA Code Chapter 105.3 or Section 302 of the Flood Plain Management Act for the following reasons:

- (1) The contributory drainage area does not exceed 100 acres. The proposed drainage area that is captured by the stormwater management basin is approximately 10.8 acres.
- (2) The maximum depth of water measured by the upstream toe of the dam at maximum storage elevation does not exceed 15 feet. The estimated depth is no more than 6.5 feet.
- (3) The impounding capacity at maximum storage does not exceed 50 acre-feet. The proposed storage volume of the stormwater management basin is approximately 5.6 acre-feet (up to elevation 18 ft.).

Therefore, the proposed stormwater management basin does not require a dam safety permit under Chapter 105.

(7) **Section 187-11(B)(1):** The plans must include a clear and legible Existing Resource and Site Analysis Map for the overall site and include the natural resource table. The plans contain an overall Existing Features Plan apparently for this purpose however the plan does not provide the requisite clarity.

Applicant Response: The overall existing features plan within the preliminary land development plan set has been revised accordingly. See Sheet 3 of 15. If greater detail is required, multiple existing features plans at a greater scale can be provided with the next revised plan submission.

(8) **Section 187-12:** The subject site is located within the five-hundred (500) year floodplain according to the effective F.I.R.M. for this area and therefore not subject to the regulatory requirements pertaining to the Special Flood Hazard Area contained in Chapter 131. However, the applicant must consider the potential effects of inundation at this project site based on the existing conditions, culverts and drainage channels in the vicinity of the ultimate discharge point from this property, and design all site and stormwater management improvements accordingly.

Applicant Response: Elcon investigated potential inundation of the site as part of the Phase I RCRA siting application submitted to PaDEP and compiled a voluminous amount of information in this regard. The basic questions Elcon needed to address were:

- “Is the facility a treatment or incineration facility and is all or part of the facility located in the 100 year floodplain or a larger area that the flood of record has inundated?”
- If so, was the industrial use on the proposed site in existence as of the effective date of the Pennsylvania Flood Plain Management Act, Act of October 4, 1978 (P.L. 851, No. 166)?”

Based upon the information submitted to PADEP as part of the Phase RCRA siting application, PADEP concurred that the site was not inundated by the flood of record and approved the Phase I siting application, which allowed Elcon to proceed with submitting the RCRA Part B application.

Nonetheless, Elcon understands that the Township wants to confirm that the plans have been designed for existing conditions for inundation. Based on information obtained from the Delaware River Basin Commission (DRBC), the flood of record for the proposed Elcon site and surrounding areas occurred in August 1955, following back-to-back Hurricanes Connie and Diane. A U.S. Geological Survey (USGS) gauging station in Trenton, New Jersey shows the gauge data from the 1955 flood had the highest reading since monitoring began at this gauge in 1902. This gauge information was obtained through the USGS National Water Information System. Hurricane Connie impacted the Bucks County area on August 13, 1955, dropping approximately 4 inches of rain in Falls Township. Hurricane Diane moved into the area on August 18 and 19, 1955, dropping additional rain on already saturated ground. The combined total of rain from the two events was approximately 10 inches in the Falls Township area. Higher storm totals occurred north of Falls Township. For

example, areas in the Poconos received in excess of a foot of rain from Hurricane Diane alone. The combined rain events caused the heaviest flooding in areas north of Trenton.

Construction of the U.S. Steel facility began in 1951. At that time, the flood-of-record occurred in 1903. The peak elevation of the U.S. Geological Survey (USGS) Trenton gauge (approximately 4 miles upstream from the proposed Elcon site) during the 1903 flood was 28.5 feet above sea level. The current flood-of-record occurred in August 1955, following Hurricanes Connie and Diane. The peak elevation of the USGS Trenton gauge during the flood of 1955 was 28.6 feet above sea level, only one-tenth of a foot higher than the flood that U.S. Steel was preparing for by elevating the site to an average of 20.5 feet above sea level. Since the 1955 Flood, a number of flood control measures have been implemented in the Delaware River Basin to reduce flooding in Bucks County.

After a thorough review of available information, Elcon has reached the following conclusions:

- (1) There is no evidence that the site was inundated during the flood-of-record, i.e., the 1955 Flood.
- (2) Delaware River floods since 1955, including those in 2004, 2005, 2006, and 2011, did not impact the site.
- (3) No impacts from a flood of the approximate magnitude of the flood-of-record will impact the proposed Elcon property:
 - (a) The crest of the flood-of-record in the Delaware River at its closest point was 17.1 feet based on Army Corp of Engineers data.
 - (b) Without grading, the area of the site that will include the process operations is above the crest at a distance of more than a mile away.
 - (c) The process area of the site will be graded to an elevation of 19+ feet.
 - (d) Additional building foundations and secondary containment structures will add 3 to 5 feet of elevation.
- (4) Various flood control measures have been implemented in the Delaware River Basin since the 1955 flood.

Based upon all of the above, the Applicant believes that the site improvements and stormwater management improvements have been designed appropriately.

(9) Section 187-12(G): The plans must include notes that ensure compliance with this section of the ordinance requiring fill to be compacted to ninety-five percent (95%) of the materials maximum dry density as determined by the standard proctor test and provide for embankment fill materials being keyed into virgin soil.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 5 of 15.

(10) Section 187-12(J): The plans must be revised to include energy dissipating devices at all conduit outlet locations. Additionally, the stormwater management design report must contain the design of each riprap apron.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 5 of 15.

(11) Section 187-12(L): The stormwater management report must include an analysis of the emergency spillway such that there will be one foot of free board through the spillway for the post development one-hundred-year storm flow routed through the spillway. Additionally, the elevation of the spillway will be subject to the comment above related to potential site inundation (see 187-12 (D)).

Applicant Response: The stormwater management design has been updated accordingly.

(12) **Section 187-12(M):** A note shall be added to the plan that states all stormwater detention facilities and erosion and sedimentation control measures shall be in place prior to the creation of any impervious surface.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(13) **Section 187-12(R):** The plans and design must provide additional detail regarding the trench drain within the truck off-loading area/ containment area, indicating how open containment areas and walled outside storage areas will be drained during rainfall events. It is recommended that the design of the parking lot be revised to accumulate runoff along a curb line at the edges of pavement and sloped to inlets as opposed to collection in low points located in the middle of the access driveway where pedestrians will walk to access the office building.

Applicant Response: The parking lot design has been revised as recommended. Additionally, greater grading detail is provided within the truck unloading area. Drainage detail within walled outside storage areas will be provided on the next revised plan submission.

(14) **Section 187-13(A-D):** The plans must be revised to include profile views of all proposed storm sewers and trench drains to assure compliance with this section of the ordinance. Additionally, all pipes must have a minimum of eighteen inches (18") of cover over the pipe and since the majority of the storm sewer pipes are contained in a filled area bounded by retaining walls, all pipes must be constructed water tight. Inlet spread calculations must be included to assure pedestrian walkways will not be in a ponded condition, buildings/ walls will not be subjected to ponding/ icing nor the driveways be subjected to excessive ponding/ icing. The plans must be revised to include some detail related to the Future Expansion Area adjacent to the Maintenance Building for review of the proposed infrastructure.

Applicant Response: Profile views and inlet spread calculations will be provided with the next revised plan submission. The plans have been revised to provide a minimum 18" of cover over the pipe as requested.

(15) **Section 187-13(E):** The plans must be revised to include profile views of the watercourse that runs along the frontage of Dean Sievers Place. Additionally, this channel and the proposed driveway culverts must be analyzed / designed for flow from all contributory drainage areas including those from the spillway of the stormwater management basin on the property adjacent to the northeast corner of the property, T.M.P. 13-51-001-006 and the multiple culverts along Dean Sievers Place.

Applicant Response: An analysis has been added to the stormwater design to show that no flow increase to the drainage channel along Dean Sievers Place will occur as a result of the project.

(16) **Section 187-14(C):** The stormwater management analysis must be revised to consider all pre-development cover conditions as "Meadow" in good condition unless the natural ground cover generates a lower curve number. Additionally, the plans and report must contain the time of concentration assumptions and calculations. The assumption of a five-minute pre-development time of concentration is unacceptable.

Applicant Response: The stormwater design has been revised accordingly.

(17) **Section 187-21(B)(2)(d):** The plans must be revised to show the overland flow path used in time-of-concentration calculations for the pre-development condition.

Applicant Response: The drainage maps provided within the stormwater management report have been updated accordingly.

(18) **Section 187-21(B)(2)(e):** The plans must be revised to include the referenced owner/ applicant's acknowledgement that the stormwater management facility to be a permanent fixture that can be altered or removed only after approval of a revised plan by the Township of Falls.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 5 of 15.

(19) **Section 187-32(A):** The applicant shall sign operations and maintenance agreement with the Township covering all stormwater controls and BMPs that are to be privately owned. The maintenance agreement shall be transferred with transfer of ownership and will be provided to the applicant for execution. The operations and maintenance plan, and operations and maintenance agreements shall be recorded in the Office of the Recorder of Deeds for Bucks County along with the Record Plan.

Applicant Response: Upon receipt of preliminary and final land development plan approval, Elcon will enter into the necessary operation and maintenance agreement with the Township covering all stormwater controls and BMPs that are to be privately owned. This agreement will be recorded against the property at the time the land development plans are recorded.

FLOODPLAIN MANAGEMENT ORDINANCE:

(1) **Section 131-7:** The applicant must obtain a permit from the floodplain manager and it is noted that this project will be subject to applicable requirements of this chapter of the Falls Township Code.

Applicant Response: Acknowledged.

(2) **Section 131-9(C)(2)(f); 131-19:** The Floodplain Permit Application must include to information contained in this section of the ordinance including, bodies of water or watercourses and, if available, information pertaining to the flow of water including direction and velocities.

Applicant Response: Acknowledged.

(3) **Section 131-9(C)(3)(b):** The plans must identify the Base Flood Elevation(s) for this project site.

Applicant Response: Applicable FEMA map is referenced in General Note #6 on Sheet

TREE PROTECTION STANDARDS:

(1) **Section 199-4(A)(1-7):** The plans must include a tree survey plan containing the information required by these sections of the ordinance.

Applicant Response: Species for stand along trees within the limit of disturbance are now provided on Sheet 3 of 15.

(2) **Section 199-4(B)(6):** The tree survey plan must include a tree replacement calculation in accordance with this section of the ordinance where the required replacement trees are shown and noted on the Landscape Plan.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 14 of 15.

(3) **Section 199-4(B)(8):** The Landscape Plan shall note that all replacement plantings shall be guaranteed and maintained in a healthy and/or sound condition for at least eighteen (18) months or shall be replaced by the applicant.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 14 of 15.

GENERAL COMMENTS:

(1) All comments from the Township Fire Marshal must be addressed.

Applicant Response: See Section C of this Letter for responses to the letter received from the Township Fire Marshal.

(2) All comments from the Township Traffic Engineer must be addressed.

Applicant Response: See Section B of this Letter for responses to the letter received from the Township Traffic Engineer.

(3) Notes must be added to the plans that states that no operational, storage nor construction activities are allowed outside of the buildable area, as defined by the Falls Township Code and as presented on this site plan, without prior approval of the Falls Township Board of Supervisors.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(4) Notes must be added to the plans that state that the future expansion area is not subject to this approval or the plans must be revised to show future improvements in sufficient detail for review.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(5) The following Constructible Details must be added to the plans at this time:

- Weigh Stations Schematics,
- Schematic Retaining Wall / w Proper Guards,
- PennDOT Type DW Endwall (all pipe outlets),
- OCS Shut-off Valve,
- Backflow Preventer for Concrete Endwalls,
- Concrete Paving- Off-Loading Area,
- Trench Drain,
- Open Containment Areas w / wall details & elevations,
- ADA Compliant Curb Ramps w/ DWS dimensions & details,
- Sanitary Sewer Lateral / Manhole / Trench & Backfill,
- Water System Type & Size/ Fire Hydrant / Fire System Distribution

Applicant Response: Details have been added to sheets 11, 12, 13 and 15 of 15. Any additional details required, will be provided with the next revised plan submission.

(6) Permit Requirements or Jurisdictional Determinations:

- PADEP Hazardous Waste Operating Permits

Applicant Response: This is a two-phase permit application that would allow Elcon to store and treat specifically identified types of liquid hazardous and residual (industrial) wastes following the approach identified in the application package. In Phase I of the application, Elcon provided general information about the operations, proposed wastes to be treated and stored, and information related to exclusionary siting criteria pertaining to the site. The Phase I application was approved by PADEP in November 2015, allowing Elcon to prepare and submit the Phase II application. This is a voluminous application package containing approximately 4,000 pages of technical details on the process and operations, as well as security, training, waste analysis, radiation protection, emergency plan, additional siting information, etc. The PADEP is currently conducting its technical review of the Phase II application.

- NPDES w/ PNDI Clearance

Applicant Response: A General Permit application (GP-03) was submitted to PADEP in October 2018, seeking permission to discharge stormwater associated with industrial activity. This application is under review by the PADEP. PNDI clearance has been completed. The most recent approvals, one from the Pennsylvania Fish & Boat Commission and a second from the Pennsylvania Department of Conservation and Natural Resources, are enclosed herewith. A "Herpetological Habitat Assessment and Turtle Nesting Survey Report" was completed by Pennsylvania-certified turtle and frog surveyors as part of the PNDI clearance.

- Sanitary Sewerage Planning Module

Applicant Response: Acknowledged

- PADEP GP- Endwall Adjacent to Wetlands

Applicant Response: Discharge point revised. No longer required.

- PADEP Chapter 105 - Stormwater Facility adjacent to Wetlands

Applicant Response: Permitted through Individual NDPEs permit.

- PADEP Chapter 105 - Dam Safety

Applicant Response: The proposed stormwater management basin does not meet the regulatory definition of a dam in accordance with 25 PA Code Chapter 105.3 or Section 302 of the Flood Plain Management Act for the following reasons:

- (1) The contributory drainage area does not exceed 100 acres. The proposed drainage area that is captured by the stormwater management basin is approximately 10.8 acres.
- (2) The maximum depth of water measured by the upstream toe of the dam at maximum storage elevation does not exceed 15 feet. The estimated depth is no more than 6.5 feet.
- (3) The impounding capacity at maximum storage does not exceed 50 acre-feet. The proposed storage volume of the stormwater management basin is approximately 5.6 acre-feet (up to elevation 18 ft.).

Therefore, the proposed stormwater management basin does not require a dam safety permit under Chapter 105.

- ACOE Jurisdictional Determination - Wetlands Update

Applicant Response: Included with this resubmission package is a jurisdictional determination issued by the Army Corps of Engineers, dated January 5, 2015, which is valid for a period of five (5) years following the issuance of the letter

(7) Agreements Required:

- Stormwater Operation and Maintenance
- Retaining Wall Inspection & Maintenance
- Developers Agreement
- Easement - Wetlands
- Easement – Watercourse

Applicant Response: Following receipt of preliminary and final land development plan approval, Applicant will request drafts of the above-referenced Agreements from the Township solicitor for review, comment and execution.

B. Letter from Remington & Vernick Engineers dated March 6, 2019.

(1) The transportation analysis was completed in February of 2017, and uses technical data sources that have since been updated. Specifically, the report uses *Trip Generation, Ninth Edition*, while the Tenth Edition is the current version. Similarly, Synchro 8 was utilized for capacity analysis, while Synchro 10 is now current. The Applicant shall determine what, if any, impact these newer versions will have on the analysis and submit updated analysis results, as needed.

Applicant Response: See the enclosed revised Transportation Report prepared by Traffic, Planning & Design (“TPD”), which utilizes *Trip Generation, Tenth Edition*.

(2) The total number of employees planned for the site, as proposed, and with a future plant expansion shall be clarified. The record plan notes 35 employees, 5 managerial personnel and one visitor for parking needs. However, the transportation study assumed 55 employees will depart during the AM and PM peak hours.

Applicant Response: As stated in the updated Transportation Report prepared by TPD, upon full build out of Phase 2, the proposed development will conservatively generate 135 new vehicle trips during the weekday AM peak hour and 135 new vehicle trips during the weekday PM peak hour. These trips include truck and employee vehicles. See enclosed updated Transportation Report for additional details.

(3) The crash data included in the transportation report is not current (2010 to 2014), but does show a rising crash trend at various intersections. The data in Table 6 of the report shall be updated to reflect the most recent five years of available crash data.

Applicant Response: Elcon's traffic consultant, TPD, has requested this information from the Township, but has not received a response to its request. Upon receipt of this information from the Township, Elcon will supplement the transportation report.

(4) Provide supporting data for the results in Table 6 that note "upon review of accident data, there was not 5 correctable crashes within a 12-month period." This supporting summary data should include added details (crash type, location, date, etc.) for crashes identified as being correctable and non-correctable.

Applicant Response: As stated above, Elcon's traffic consultant, TPD, has requested from the Township the information necessary to update Table 6, but has not received a response to its request. Upon receipt of this information from the Township, Elcon will supplement the transportation report and provide the supporting data provided by the Township.

(5) The projected build out year shall be clarified. The transportation study notes a build out year of 2018. The Synchro data reports included in Appendix D note a 2020 build out year. The results of the transportation study should be updated, as needed, to reflect the planned build out year.

Applicant Response: See enclosed updated Transportation Report, which confirms the projected buildout year of 2023 for Phase 2 of the project.

(6) Supporting technical data for the 1.32% annual growth rate using in the transportation study needs to be referenced and provided in the report.

Applicant Response: See enclosed updated Transportation Report, which provides supporting technical data for the annual growth rate.

(7) Appendix F Roadway Plans - No data has been provided for section of the report. Provide any pertinent data that is associated with Appendix F or remove it from the report.

Applicant Response: See enclosed updated Transportation Report.

(8) Traffic signal timing adjustments have recently been made at the intersection of the Tyburn Road and New Ford Mill Road. If the existing analysis is resubmitted the existing LOS results should be updated reflect the new signal timing operation.

Applicant Response: See enclosed updated Transportation Report, which utilizes corrected traffic signal timing.

(9) Traffic Circulation — If any particular drive isles will operate as one-way, it should be reflected on the record plan. Additionally, any signage (one-way, do not enter, stop) or pavement markings needed to support the site's traffic circulation plan should be included on the record plan.

Applicant Response: See enclosed revised preliminary land development plans, which clarify traffic circulation within the site, along with appropriate signage related thereto.

C. **Letter from Falls Township Fire Marshal dated March 15, 2019.**

(1) There are no building, fire alarm, sprinkler, suppression, or life/safety plans submitted. Based on the 2015 International Fire and Building Codes, this building will need to meet these codes based on their use group, occupancy, and square footage. Any of these systems which will be required will require 3 separate sets of signed/sealed plans submitted by a Pennsylvania registered design professional. IFC 901.4.1: Fire protection systems required by this code or the International Building Code shall be installed, repaired, operated, tested, and maintained in accordance with this code. IBC 107.1: All plans must be signed/sealed by a Pennsylvania registered design professional.

Applicant Response: The design and specifications for the building, fire alarm, sprinkler, suppression, and life/safety plans will be prepared according to the 2015 International Fire and Building Codes, based on their use group, occupancy, and square footage. Three (3) separate sets of signed/sealed plans submitted by a Pennsylvania registered design professional will be provided for each system. All fire protection systems required by International Fire Code or the International Building Code shall be installed, repaired, operated, tested, and maintained in accordance with the International Fire Code. All plans will be signed/sealed by a Pennsylvania registered design professional and submitted at the time of building permit application.

(2) The truck turning diagram must be submitted using a 43' straight body fire truck. IFC 503.2.4: The required turning radius of a fire apparatus road shall be determined by the fire code official.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 7 of 15.

(3) There are no fire hydrants shown on the plans. All fire hydrant to be installed on the property shall be shown and approved on the plans. IFC 507.5.1: Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet from a hydrant on a fire apparatus road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 6 of 15.

(4) The location of the fire department connection (FDC) shall be shown on the plans and approved before installation. IFC 903.3.7: The location of fire department connections shall be approved by the fire code official.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 6 of 15.

(5) Please provide the available water supply calculations for fire protection for the premises. IFC 507.1: An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

Applicant Response: The fire suppression water will be supplied from a 500,000-gallon onsite firewater storage tank. Calculations for the required water supply and fire pumps are attached.

(6) Please provide the width of the roadways throughout the complex. IFC 503.2.1: Fire apparatus access roads shall have an unobstructed width of not less than 20 feet, exclusion of shoulders, except for approved security gates....

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(7) Please provide the size of the proposed fire pump for the complex. IFC 901.2: The fire code official shall have the authority to require construction documents and calculations for all fire protection systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection system.

Applicant Response: Two 300 hp fire pumps, each with a rated capacity of 2,000 gpm are proposed for the site. One pump will be electrically powered and one will be powered by a diesel engine. If the Fire Marshal requires additional construction documents and calculations or permits to be issued in connection with the fire protection system, Elcon will comply with such requests.

(8) Please provide emergency egress stairs, at locations along the retaining wall to be determined, providing safe egress/ escape for First Responders as well as the occupants of the facility in case of an emergency event and blocked exit paths driveways. This improvement will require a paved surface to a safe zone including lighting. IFC 1028.5: The exit discharge shall provide a direct and unobstructed access to a public way.

Applicant Response: The cited section of IFC requires that clear and unobstructed access from a building to a public way be provided; if that is not available, then a safe area must be provided not less than 50 feet from the building. The preliminary land development plan set has been updated to include the plans for the required dispersal areas. In addition, the plans show an emergency access gate to Dean Siever's Place in addition to the main entrance. All areas in the facility have multiple egress pathways to either of the two street access gates. Emergency access stairs over the top of the retaining wall cannot be provided on at least two sides of the site since that would require access be provided onto an adjacent property. Upon further discussion with the Fire Marshal, additional modifications may be made the land development plans. In the meantime, dispersal areas

(meeting areas) as well as facility egress paths have been provided at the site, as set forth on the drawings included on Sheet 1 of 15 of the revised plan set, and a second site access drive has been provided for emergencies.

(9) Please provide unobstructed and demarcated fire apparatus lanes throughout the facility that do not include areas that could be blocked due to inoperable tanker trucks, weigh stations or other operational equipment from the facility including the parking area for the office buildings. IFC 503.4: Fire apparatus access roads (fire lanes) shall not be obstructed in any manner, including the parking of vehicles.

Applicant Response: Fire apparatus lanes have been provided as requested. Please see sheet 1 of 15 of the revised plans.

D. Letter from Bucks County Planning Commission dated February 26, 2019.

(1) **Proposed use** – According to Zoning Data included on Sheet 1 of the plan, the proposed use of the facility is listed as industrial. The Traffic Impact Study (TIS) submitted with the plan references transportation standards for "Hazardous Waste Siting," and the plan also identifies a "Hazardous Waste Facility Boundary" that encompasses much of the site, including the proposed buildings, structures, and the stormwater basin. However, the submission does not include a narrative or project description of any type to specifically indicate what the facility will entail. We recommend that the plan submission include a project description so that it can be determined if the proposed facility is a permitted use in this district.

The purpose of the MPM District is to "...protect the existing areas in the Township devoted to integrated, large-scale industrial production of iron, steel or other materials, processing, fabrication and related activities which utilize massive or heavy equipment, manufacture products from primary raw material sources, require larger areas for indoor and outdoor storage of equipment or machinery for manufacturing, production, processing or storage purposes, massive uses of highway, rail or water transportation, including port facilities, or exceptionally large uses of water or waste disposal facilities,..." The MPM District permits Remanufacturing as a permitted use, but specifically excludes the permanent storage, collection, sorting or disposal of mixed municipal solid waste on site (Zoning Ordinance Section 209-30.B.(5)). Township officials should determine if the proposed use meets the intent and use regulations of the MPM District, or if a different district may be more appropriate for the use. It is noted that the RR Resource Recovery District permits several uses related to the operation of municipal and residual waste processing; however, the processing of hazardous waste is prohibited in the RR District.

A project description will also help officials determine potential impacts the proposed facility may have on the site and surrounding area. While the processing of hazardous waste is not permitted in the RR District, applications for permits in the RR District are required to provide a project description detailing the proposed facilities, processes, equipment, estimated useful life, intended hours of operation, estimated costs, estimated volumes of material incoming and to be disposed of, and such other information as is necessary for the Township to evaluate the application. In addition to a project description, proposals in the RR District are also required to submit an environmental impact study, a traffic impact study (which has been included with this plan submission), and a fiscal impact study. Township officials should consider requesting this type of information in order to adequately evaluate the proposed use.

Applicant Response: See enclosed Zoning Consistency Letter addressed to the Applicant from the Township of Falls, dated August 1, 2017, providing that the proposed project meets all provisions of the local zoning ordinance. Please see also the enclosed revised Transportation Report prepared by TPD. With the next revised submission, the following documents will be included: Fiscal Impact Study prepared by Econsult Solutions, Real Estate Consulting Report prepared by Clarion/Samuels Associates and the Environmental Impact Study.

(2) **Maximum building coverage** – The plan does not indicate the proposed building coverage on the site. Table 5, as referenced through Section 209-30.D. of the zoning ordinance, permits a maximum building coverage of 40 percent in the MPM District. A notation in Table 5 indicates that the maximum building coverage figure is intended to include the area occupied by buildings, utility structures, fixed equipment not under cover, storage tanks, sheds and accessory structures. The plan should be revised to indicate the proposed building coverage, which should include all buildings, the fire water tank, the cooling tower, and the scrubbers and oxidizers, so that compliance with Section 209-30.D. can be determined.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 2 of 15.

(3) **Lot size** – Information provided on the plan indicates the site, identified as TMP #13-51-1-5, contains 32.297 acres. However, according to Board of Assessment data, TMP #13-51-1-5 contains 23.69 acres. A plan reference on Sheet 1 indicates "Lot 1 combined plan and easement plan prepared for USS Real Estate One New Fairless Hills Drive Morrisville, PA Sheet 2 of 3 prepared by Showalter and Associates dated March 29, 2006 and last revised 01-26-14." However, the submission does not include the referenced plan, nor does it include sufficient information to verify that the site area is larger than 23.2 acres. This discrepancy should be resolved.

The proposed building coverage and impervious surface ratios should be calculated on the confirmed lot area.

Applicant Response: See enclosed Minor Subdivision Plan and enclosed Lot 1 Combined Plan & Easement Plan, each prepared by Showalter & Associates and dated March 29, 2006, and recorded in the office of the Bucks County Record of Deeds on June 6, 2006, to Instrument No. 2006062298, which memorialize the consolidation of T.M.P. 13-051-001-005 and a portion of T.M.P. 13-051-001-012 encompassing approximately 8.61 acres for a total consolidated parcel of 32.30 acres.

(4) **Site capacity calculations** – Section 191-52.1.0 of the subdivision and land development ordinance (SALDO) requires site capacity calculations to be submitted with all subdivisions and land developments. The plan should be revised to submit the required calculations so that compliance with the natural resource protection standards in Section 191-52.1.B. can be verified.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(5) **Wetlands:**

(a) **Wetlands delineation** – Plan notations indicate that wetlands information for the site has been taken from "Lot 1 combined plan and easement plan prepared for USS Real Estate One New Fairless Hills Drive Morrisville, PA Sheet 2 of 3 prepared by Showalter and Associates dated March 29, 2006 an last revised 01-26-14." Based on these notations, the wetlands delineation is based on information that is 5 to 13 years old. Since wetlands boundaries can change over time due to various factors, we recommend a more current wetlands delineation be conducted by a qualified professional.

Applicant Response: Included with this resubmission package is a jurisdictional determination issued by the Army Corps of Engineers, dated January 5, 2015, which is valid for a period of five (5) years following the issuance of the letter.

(b) **Natural resource protection requirement** – The plan shows the proposed limit of disturbance extending slightly into the area delineated as "Wetlands Area A" for installation of a stormwater sewer pipe. Section 191-52.1.B.(2)(b) of the SALDO states that wetlands shall not be altered, regraded, developed, filled, piped, diverted or built upon except where required permits and approvals have been obtained authorizing such activities from the Pennsylvania Department of Environmental [Resources] and/or the United States Army Corps of Engineers.

Applicant Response: Stormwater design and LOD have been revised.

(6) **Floodplain** – Note 6 on Plan Sheet 1 indicates that the entire site is located within "...Zone X, 0.2% annual chance flood hazard per FEMA Map 42017C0467J effective 03-16-2015." According to county GIS information and Section 131-17.A.(1) of Chapter 131 Floodplain Management of the Falls Township Code of Ordinances, the Flood Insurance Study (FIS) and accompanying Flood Insurance Rate Maps (FIRMS), issued by the Federal Emergency Management Agency (FEMA), are dated March 21, 2017. The plan should be revised to reference the most up to date floodplain map, as well as differences, if any, in the delineated floodplain information.

Applicant Response: The preliminary land development plan set has been revised accordingly.

(7) **Emergency Management/Hazard Mitigation:**

(a) **Containment of waste** – The proposed use entails the transport of hazardous waste to the site for processing. Since waste will be trucked to the site and unloaded from tractor trailers, the township should be assured that containment is provided for in the event of leaks or spills. This would help prevent waste material from draining to the surrounding land.

Applicant Response: Notes pertaining to storage and waste disposal have been added to Sheet 1 of 15.

(b) **Emergency access** – Access to the site is provided by two driveways onto Dean Sievers Place, and an existing cul-de-sac that also serves nearby industrial uses. Consideration should be given to how emergency vehicles and responders would reach the site in the event access to the cul-de-sac were to become blocked. Township officials should determine if an emergency access should be provided, in addition to the two driveways intended for plant operation.

Applicant Response: Please see above responses #8 & #9 to the Fire Marshal review comments regarding emergency access to the site.

(c) **Emergency Management needs and responsibilities** – We strongly encourage township officials to require appropriate documentation outlining emergency management needs and responsibilities. This information should clearly identify the first responder that is expected to respond to potential emergencies at the facility and any special equipment and special training that may be needed by emergency response providers.

A stated priority in the *Bucks County 2016 Hazard Mitigation Plan Update* is to continue coordination and planning to mitigate, prepare, and respond to local hazardous materials facilities. The Plan references the Local Emergency Planning Committee (LEPC) which works to enhance community safety and preparedness, in part, through planning for hazardous materials emergency response. The LEPC meets five times a year

and works with emergency response organizations, industry, and the community. We recommend that the LEPC and local emergency response providers be included in discussions regarding emergency response for the proposed facility.

Applicant Response: Comment. No response required.

(8) Transportation impact study (TIS):

(a) Tyburn Road/New Ford Mill Road intersection – The primary route for tractor trailers and other vehicles accessing the site will be from Tyburn Road and New Ford Mill Road. A recommendation in the TIS is for the retiming of the traffic signal at the intersection of Tyburn Road and New Ford Mill Road. The study states that the recommended retiming should be done by Falls Township "as part of their routine maintenance." This issue should be discussed prior to the governing body taking action on the proposal.

Applicant Response:

(b) Study date – The TIS submitted with the current preliminary plan proposal is dated February 15, 2017, which is two years old. Upon review, it is noted that some of the data used in the study precedes 2017. We recommend that the study be revised to reference more recent data or to include an analysis demonstrating that traffic conditions have not changed since the dates of the referenced data.

Applicant Response: See enclosed updated Transportation Report.

(c) Coordination with the Pennsylvania Department of Transportation – The submission does not include correspondence or any information to indicate that the Pennsylvania Department of Transportation (Penn DOT) was consulted in the development of the transportation impact study. If PennDOT has not reviewed the TIS, we recommend that the applicant submit the study to PennDOT for their review. Any concerns identified by PennDOT should be addressed.

Applicant Response: Acknowledged.

(9) Lighting – The plan does not include a lighting plan or provide information on proposed lighting for the site. Section 209-40 of the zoning ordinance and Section 191-38.A. of the SALDO require all parking areas, walkways, and driveways serving industrial land developments to be adequately illuminated. Also, Section 191-38.C. of the SALDO requires any other outdoor lighting, such as for building and sidewalk illumination, to be shown on the lighting plan. The plan should be revised to provide this required information.

Applicant Response: Plan set has been revised to include a lighting plan.

(10) Walkway connection for contractor parking – The plan indicates an area designated for "Contractor parking by permit" along the driveway in the northern portion of the site. If individuals using these spaces will be accessing the buildings, we recommend that walkways connecting this parking area and the buildings be provided.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(11) **Curbs around parking lot** – Section 191-37.B. of the SALDO requires curbing, meeting the specifications of the Falls Township Design Details and Practices, to be installed for all parking facilities except those serving dwellings. The plan should be revised to indicate curbing around the parking lot containing 75 spaces.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 1 of 15.

(12) **Landscaping:**

(a) **Street trees** – Section 191-48.A. of the SALDO requires street trees to be planted along the side of all streets where suitable street trees do not exist. The plan should be revised to show the required street trees.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 14 of 15.

(b) **Parking lot plantings** – Section 191-37.G.(4) of the SALDO requires all parking areas to have at least one tree of 1-1/2-inch-caliper minimum for every 6 parking spaces in single rows and one tree of 1-1/2-inch-caliper for every 12 parking spaces in double-loaded rows of parking spaces. The plan should be revised to show the required parking lot plantings.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 14 of 15.

(c) **Planting between parking areas and lot lines** – Section 191-37.G.(3) of the SALDO requires a clustered planting of dense plant material not less than 4 feet in height be provided and maintained between the off-street parking areas and any lot line or street line where the distance between such area is less than 150 feet. Since parking spaces are located less than 150 feet from the street line, landscaping around the parking areas should be shown.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 14 of 15.

(13) **Tree protection** – Sheet 9 includes a tree protection detail, but the plan does not indicate the proposed location of tree protection fencing on the site. Such fencing should be provided along proposed tree lines and around individual trees intended to remain on the site.

Applicant Response: The preliminary land development plan set has been revised accordingly. See Sheet 14 of 15.

(14) **Plan requirements** – The plan should be revised to provide the following information as required in Section 191-78 of the SALDO:

- Section 191-78.C.(8) Site capacity calculations (*see Comment 4*)
- Section 191-78.D.(4) dimensions of all proposed buildings
- Section 191-78.D.(6) dimensions showing the closest distances between buildings
- Section 191-78.D.(7) the square footage of each building footprint; building coverage in square feet and percent (*see Comment 2*)
- Section 191-78.D.(14) a lighting plan (*see Comment 9*)
- Section 191-78.D.(18) a tree protection zone (*see Comment 13*)
- Section 191-78.D.(20) a plan of proposed planting (*see Comment 12*)

Applicant Response: The preliminary land development plan set has been revised accordingly.

(15) **Sewage facilities** – The applicant must submit a Sewage Facilities Planning Module Application Mailer to the Pennsylvania Department of Environmental Protection (PaDEP) to determine if an Act 537 Planning Module must be submitted for this proposed land development.

Applicant Response: Acknowledged.

If you have any questions, please feel free to contact this office.

Sincerely,



Erik Garton, P.E., Vice President
Gilmore & Associates, Inc.

cc: Kimberly A. Freimuth, Esq., Fox Rothschild
Lauren Gallagher, Esq, Township Solicitor
Zvi Elgat, Elcon Recycling Services
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