From: <u>Thavong, Souts</u>
To: <u>Broadwell, Steve</u>

Cc: <u>Witkowski, Brian; Sieben, Ed; Schroth, Kenneth</u>

Subject: Aurora Metal Recycle- E New York- Rezoning Request (COA # 2023-127)

Date: Monday, March 13, 2023 5:42:00 PM
Attachments: SWM Permit Application 2022.pdf

Cursory Review of Drainage Area-in house only.pdf

Hi Steve

Thank you for allowing us to comment on the proposed rezoning of the vacant property at E. New York Street (west of R.R) for Aurora Metal Recycling LLC with a parcel number of 15-21-177-024. No known address is assigned to this parcel. Below we offer the following comments:

- 1. An address should be requested by the owner, so that an address can be assigned to this property.
- 2. With the site being required to be paved for material/vehicle storage, there will be an increase in new impervious (paved area) area. Kane County Stormwater Ordinance required detention for net new impervious area equal or greater than 25,000 SF. This site does not required detention since the net new impervious area is less than 25,000 SF, however it does require stormwater mitigation/best management practices (BMPs) on site to address stormwater runoff. An example of BMPs are rain garden, infiltration basin, permeable paver, and dry well. A site plan showing the BMPs and stormwater permit application will need to be submitted Engineering for review and approval.
- 3. The City has updated the Standard Specification for public improvements. The updated specification is available on the City website. https://www.aurora-il.org/858/New-Development

Stormwater permit application for reference and drainage review.

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Souts Thavong, P.E., CFM

City of Aurora- Engineering Division

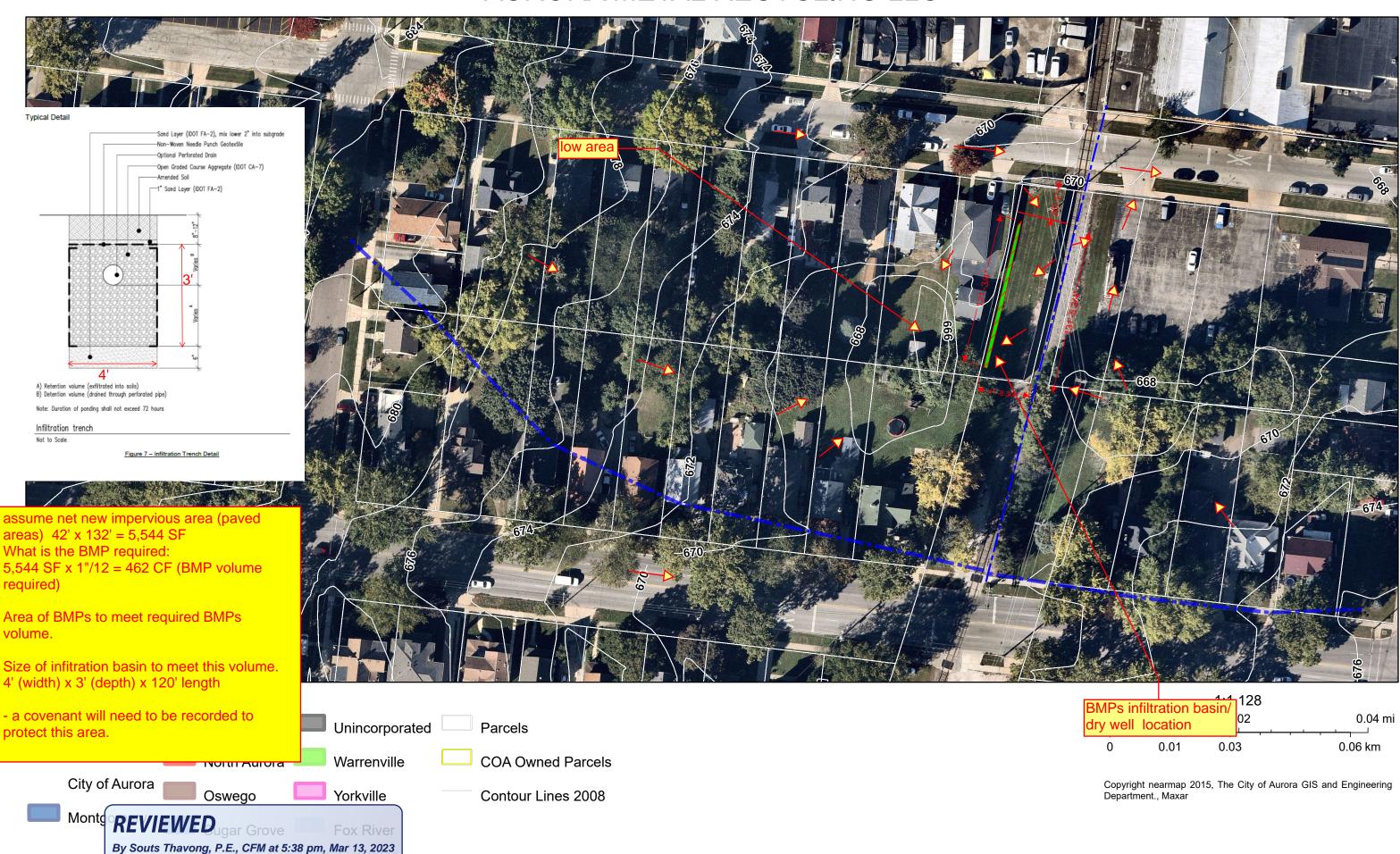
Email: thavongS@aurora.il.us

Phone: 630/256-3207 Website: www.aurora.il.us

Physical Address: 77 S. Broadway, Aurora, IL 60505 Mailing Address: 44 E. Downer Place, Aurora, IL 60507

Please see City website for updated Standard Specifications.

AURORA METAL RECYCLING LLC



STORMWATER MANAGEMENT PERMIT WORKSHEET

City of Aurora

Public Works | Engineering

44 East Downer Place | Aurora, IL 60507

Phone: (630) 256-3200 | Fax: (630) 256-3229 | Web: www.aurora-il.org



Please refer to Kane County and City of Aurora Stormwater Management Ordinances for definitions of technical terms in bold and referenced Ordinance sections for additional information.

Step 1:

Is a Stormwater Management Permit Required (Section 9-28 A):

- A. Does the project disturb more than 5,000 sq. ft. of ground or involve 250 CY of material or more?
- B. Is the project in a **Floodplain** or is there **Floodplain** on the **Site** (including renovations or repairs to existing structures in the **Floodplain**)?
- C. Does the project impact a Wetland?
- D. Does the site have an existing **Detention Storage Facility** and new **Impervious Area** is being added that is not accounted for in the **Detention Storage Facility?**

If you answered YES to any of the above questions PROCEED TO STEP 2.

If you answered NO to all of the above questions, a **Stormwater Management Permit** is NOT required, however, **Erosion and Sedimentation Control Practices** (Article III) are required for all projects regardless of whether a permit is required or not.

Step 2:

Coloulate Stermington Management Macaura Triggers (Toble 0.94):	
Calculate Stormwater Management Measure Triggers (Table 9-81):	
A. Total area of Site	acre(s)
B. Hydrologically Disturbed Area (proposed as part of this application)	acre(s)
C. New Impervious Area since Jan 1, 2002 (existing)	sq. ft.
D. New Impervious Area (proposed as part of this application)	sq. ft.
E. CALCULATE total New Impervious Area (SUM C+D=E)	sq. ft.
Redevelopment Only:	
F. Existing Impervious Area to be removed (as part of this application)	sq. ft.
G. CALCULATE Net New Impervious Area (SUBTRACT E-F=G)	sq. ft.
PROCEED TO STEP 3.	

Step 3:

Stormwater Mitigation/BMP Submittal (Article V):

- A. Is there an existing flooding or drainage issue in the immediate vicinity of the project? Y or N
- B. Is the New or Net New Impervious Area (proposed as part of this application Step 2 E or Step 2 G) greater than 5,000 sq. ft.? Y or N
- C. Linear projects: is the New or Net New Impervious Area (proposed as part of this application- Step 2 E or Step 2 G) > 43,560 sq. ft.? Y or N
- D. Is the Hydrologically Disturbed Area greater than 3 acres? Y or N
- E. Is the Total Impervious Area on the Site greater than 50% (for a Site <1 acre)? Y or N

If you answered YES to any of the above questions, a Stormwater Mitigation/BMP should be submitted with Tab 1 from the attached Stormwater Management Permit Application.

PROCEED TO STEP 4.

Stormwater
Mitigation/BMP
Submittal

Yes
No

Step 4:

otop	
Stormwater Submittal (Article IV):	
A. Is the New or Net New Impervious (Step 2 E or Step 2 G) greater than 25,000 sq. ft.? Y or N	
B. Linear projects: is the New or Net New Impervious (Step 2 E or Step 2 G) > 43,560 sq. ft. and width >AA	SHTO? Y or N
C. Is the Hydrologically Disturbed Area greater than 3 acres? Y or N	Stormwater
If you answered YES to any of the above questions, a Stormwater Submittal and Detention Storage Facility should be submitted with Tab 1 from the attached Stormwater Management Permit Application.	Submittal □ Yes □ No
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PROCEED TO STEP 5.

Step 5:

Wetland and Floodplain Submittal (Article VII and Article VI): A. Does the Site contain or is the Site adjacent to a Linear Watercourse, Nonlinear Waterbody or Wetlands? B. Does the Site contain Floodplain? If a Qualified Review Specialist has answered YES to either question above, a Wetland and/or Floodplain Submittal should be submitted with Tab 2 and/or Tab 3 from the attached Stormwater Management Permit Application.

PROCEED TO STEP 6.

Step 6:

What's Next?:

- A. Use the Kane County Stormwater Ordinance for additional information on required submittals. Contact the City of Aurora Engineering Division (630-256-3200) to address guestions or confirm submittal requirements.
- B. Complete the attached City of Aurora Stormwater Management Permit Application, including any tabs that may be necessary based on information provided in Steps 2-5 above and on the pages that follow. Submit the completed forms to the City of Aurora Engineering Division.
- C. Complete the submittals required for the project including the Plan Set Submittal (Article II), Soil Erosion and Sedimentation Control, Performance Security (Article VIII) and Maintenance Schedule (Article IX) in addition to submittals required above.

Disclaimer:

This worksheet provides general guidelines for determining potential requirements for a project. The worksheet includes requirements for conventional projects, however it does not address special conditions or exemptions contained within the **Ordinance** language or address complex project such as **Redevelopment** with an existing detention facility. It is recommended that **Applicants** communicate with the City of Aurora Engineering Division to confirm permit requirements. The City of Aurora Engineering Division, upon review of the project, may require additional submittals or **Stormwater Management Measures**.

City of Aurora Stormwater Management Permit Application 44. E. Downer Place Aurora, IL 60507

Please Complete the Sections Below

Name of Applicant/Owner	Name of Design Engineer
Name:	Name:
Company:	Company:
Address:	Address:
City & State & Zip	City & State & Zip:
Telephone #: Fax #	Telephone #: Fax #
Email Address:	Email Address:
Type of development. Please check the following ☐ Residential ☐ Commercial ☐ Public Road ☐ Others (5,000 SF of disturbance)/Mass Grading ONLY.	
Name of Project:	<u> </u>
Project Location:	
(Pin #, Subdivision Name,	Lot #, Address)
Flood Hazard and Wetland (check if exists on site): Property out of SFHA & No Wetland Property in Special Flood Hazard Area (SFHA) Wetland on site and/or within 100' from property. Portion of Property in Regulated Floodway Firm Panel #:	Additional Permits: IEPA NPDES (Notice of Intent) Required, site 1 ac or more IDNR-Endangered Species (EcoCat) USACOE Permit IHPA Kane County Soil and Water Conservation District (Soil Erosion and Sediment Control) Others:

Signat	ure of Applicant/Owner:	Date:
certif superv	y that the plans/documents submitted for the ab	pove referenced development have been prepared under the and specialist, as appropriate, and in accordance with the latest Kane
Signat	ure of Licensed Professional Engineer:	Date:
Signat	ure of Certified Wetland Specialist:	Date:
The	following are required with your initi	al submittal for stormwater and engineering review:
1.	Two stormwater permit worksheets.	
2. 3.		nwater report (signed and sealed) with the below items included. ering plans per City of Aurora Standard Specifications for
4.	•	HPA verification and IDNR Threatened & Endangered Species
5.	Complete and submit a copy of the application Control, if applicable.	for permit for Kane DuPage SWCD for Soil Erosion and Sediment
6.		e of Intent (NOI) if the proposed disturbed area is 1 acre or more common plan of development, when the larger common plan of nore).
City o	of Aurora Standard Specifications for	Improvements:
ht	tps://www.aurora-il.org/862/Standard-Specifica	tions-for-Improvements
Kane	County Stormwater Management Or	dinance and Technical Manual:
htt	tps://www.countyofkane.org/FDER/Pages/enviro	onmentalResources/waterResources/stormwater.aspx
		ICE USE ONLY

Application date received by the City: _____

City Review Engineer:

City Project #:_____

Tab 1- Stormwater Submittal

Minimum Requirement	Documents Provided
Narrative Provide a narrative description of the existing and proposed site conditions. Note any offsite tributary and any depressional area. Provide existing and proposed tributary areas/drainage exhibits with a routing schematic showing the location of structures and reaches numbered according to the input data.	Yes No N/A
Design Rainfall Data 75 Use ISWS, Bulletin O Appendix A for Aurora Station for Design Rainfall Data https://www.aurora-il.org/930/Section-IV-Stormwater-Management	Yes No N/A
Existing Release Rate Provide calculations to determine the existing condition release rate. If the existing condition release rate is less than 0.1 cfs/acre, the existing condition release rate should be used for design.	Yes No N/A
Provide a storage volume comparison between the Event Hydrograph Routing Method and the City Modified Rational Method. Provide the Event Hydrograph Routing Method calculations for basin storage volume, assuming that the release rate for the basin, such that the peak discharge from the basin is 0.1 cfs/acre for the hydrologically disturbed area. Provide a storage volume calculation based on the City of Aurora Modified Rational Method. City of Aurora Modified Rational Method:	

<u>Volume Reduction</u>	
Provide a calculation of the required volume reduction. See Kane County Stormwater Technical Manual for retention design. (Retention volume = new impervious area x 1.0 inches)	Yes No N/A
Summary Table	
Provide a summary table showing the comparison of the required/proposed storage volume, existing and proposed release rate (existing and proposed critical duration).	Yes No N/A
Provide Blocked Restrictor Analysis	
 Assume the primary restrictor is blocked and the stormwater basin is empty at the beginning of the storm. The total peak discharge rate from the site cannot be greater than the existing conditions 100 yr. peak discharge rate, considering all tributary area to the basin. Run the analysis to show that the discharge that would occur from the combination of the 	Yes No N/A
overflow and primary restrictor do not exceed the existing condition 100 yr rate. This analysis shall be done for all cases with existing offsite tributary area and existing onsite depressional area.	
<u>Depressional Storage</u>	
Provide documentation of the procedures/assumptions used to calculate on-site depressional storage volume. See Kane County Technical Manual for reference	Yes No N/A
Blackberry Creek & Indian Creek Watershed	
For projects that are located within these two watersheds, the required stormwater storage volume shall be (110%) of the volume required. The overflow weir shall be set to provide the additional 10% of the storage volume.	Yes No N/A
Overflow Weir	
The overflow weir shall be designed to convey the proposed critical duration 100 yr. peak flow entering the basin.	Yes No N/A
Restrictor	
Size for the required release rate. Evaluate the effect of backwater (tail water conditions downstream) on the outlet structure.	Yes No N/A

Storm Sewer Design Provide storm sewer sizing to convey the stormwater runoff. The design rainfall events should be the 10-yr return frequency and shall use ISWS Bulletin 70, Appendix A, Aurora Station. Provide a Tributary Area Map, as well as calculations for the Runoff Coefficients and Times of Concentration used.	Yes No N/A
Overland Flood Route Provide 100-yr overland flood route calculations. The lowest opening shall be 1' above the calculated HWL for tributary area less than 20 acres. For tributary area more than 20 acres, the lowest opening shall be 2' above the calculated HWL. Indicate/show cross-sections and note the HWL on the engineering plan sheet.	Yes No N/A
Long Term Management The property owner is responsible for the maintenance of the stormwater drainage system. A long term maintenance plan shall be required for stormwater drainage system. The long term maintenance plan shall identify the property owner as responsible, list the expected maintenance tasks, and reference the permit number. The maintenance tasks and permit number shall be noted on a plat of easement, if applicable, or recorded as a covenant running with the land.	Yes No N/A
Special Service Area The establishment of a Special Service Area (SSA) shall be required in case the property owner fails to maintain the stormwater drainage system. Application for the SSA can be obtained from the City Legal Dept. Include a copy of the SSA application in the submittal.	Yes No N/A
Stormwater Mitigation/Best Management Practices (BMPs) Identify whether a Category I or Category II BMP is required (refer to Table 9-107 of the Kane County Stormwater Management Ordinance). List the expected pollutants of concern based on the proposed land use (refer to Table T9-107.D of the Kane County Stormwater Technical Manual). Describe how the proposed BMP(s) will provide water quality treatment and runoff volume reduction. Identify whether on-site infiltration-based BMPs are prohibited for one of the reasons listed in 9-107.G of the Kane County Stormwater Management Ordinance. For native vegetated BMPs, provide seeding and planting locations, specifications, a schedule for installation, and maintenance/monitoring provisions.	Yes No N/A
Agricultural Subsurface Drainage Systems (Drain Tiles) A drain tile survey is required. Detention basins and nuisance flows are generally not allowed to discharge to drain tiles. Drain tiles serving off-site tributary areas that are connected to the proposed stormwater management system must be above the detention basin's design HWL. An observation structure and maintenance access shall be provided at the point(s) of connection between drain tiles and the proposed stormwater management system.	Yes No N/A

Tab 2- Special Flood Hazard Area/Floodplain Submittal

Minimum Requirements	Documents Provided
Source of Base Flood Elevation Identify and provide the floodplain limits using the best available information. Best available information may include studies and reports published by FEMA, USACOE, IDNR, USGS and ISWS. A site specific floodplain study may be required to determine the base flood elevation (BFE).	Yes No N/A
Unmapped Floodplain Where no regulatory floodplain (floodway) is shown on the FEMA DFIRM, a site specific hydrologic and hydraulic study may be required. For upstream tributary area > to 640 acres (1 square mile), the study must be submitted to IDNR/OWR for review and approval. For upstream tributary < 640 acres, the report shall be submitted to the City for review. Provide a summary of the 100 yr. flood elevation and discharge rates for existing and proposed conditions.	Yes No N/A
Compensatory Storage Volume Compensatory storage is required when a portion of the floodplain is filled, occupied by a structure or when a change in channel hydraulics reduces the existing available floodplain storage. The compensatory volume may be up to 1.5 times the volume of floodplain storage lost. The storage volume displaced between the NWL and the 10-year flood elevation must be replaced between the NWL and the 10-year flood elevation and the BFE must be replaced between the 10-year flood elevation and the BFE.	Yes No N/A
Building Protection for structure LOCATED IN the SFHA The lowest FLOOR, including basement, of a new or substantially improved building must be elevated above the floodplain protection elevation (FPE) (which is 3' above the BFE in the Fox River floodplain and 2' above the BFE in other floodplains).	Yes No N/A
Building Protection for structure LOCATED ADJACENT to the SFHA The lowest OPENING shall be built above the FPE (which is 3' above the BFE for the Fox River floodplain and 2' above the BFE for other floodplains).	Yes No N/A
Bridges and Culverts Permits involving a new crossing or modification to an existing structure will require hydraulic models. A permit from IDNR/OWR will be required for upstream tributary area ≥ 640 acres (1 square mile).	Yes No N/A
Substantial Improvements Substantial improvements to existing buildings in the floodplain must meet the building protection standards for new construction.	Yes No N/A

TAB 3- WETLAND SUBMITTAL

Minimum Requirements	Documents Provided
Statement of Opinion Provide a statement of opinion by a Qualified Wetland Review Specialist as to the presence of wetlands on or near the site. This requirement may be waived if the Design Engineer determines in writing that it is obvious from the nature of the development (or redevelopment) that wetlands cannot be located on or near the site.	Yes No N/A
Wetland Delineations Wetland delineations are required for all development that have on site Waters of the US or are adjacent to wetlands, isolated wetlands or farmed wetlands. Specific information on existing current delineations of wetlands may be available from USACOE Chicago District. A wetland delineation and report should follow the current USACOE Wetland Delineation Manual.	Yes No N/A
Off-Site Wetlands Identify location, extent, area and quality of on-site wetlands. Off-site wetlands must be evaluated to a distance of 100' beyond the property line. Provide an exhibit showing the delineated wetland.	Yes No N/A
Indirect Impacts Calculations will be required to show the development will not cause an indirect impact to wetlands on-site or within 100 feet of the site. An indirect wetland impact is caused by a development that results in the wetland hydrology falling below 80 percent or exceeding 150 percent of the existing conditions runoff volume to the wetland for the 2-year, 24-hour storm event.	Yes No N/A
 Submit for USACOE for Jurisdictional Determination (JD) of existing wetland on site (if applicable). Submit to the USACOE for permit application for wetland impact and proposed mitigation (if applicable). Submit to Kane County for permit for non-JD wetland impact and proposed mitigation (if applicable). 	Yes No N/A
 Buffer and Planting Plan Buffer widths are to be 50' wide unless they are otherwise determined using section 9-177.B.5-6 of the Kane County Stormwater Management Ordinance. Buffer widths required as part of a USACOE permit shall supersede the widths described in the Ordinance, unless the width under the Ordinance is greater. Provide and show on the engineering plans, the planting plan for the buffer area. Native vegetation, with deep-rooted vegetation should be considered. 	Yes No N/A