

GENOA CHARTER TOWNSHIP BOARD

Regular Meeting

December 6, 2021

6:30 p.m.

AGENDA

Call to Order:

Pledge of Allegiance:

Call to the Public (Public comment will be limited to two minutes per person)*:

Consent Agenda:

1. Payment of Bills: December 6, 2021
2. Request to approve Minutes: November 15, 2021
3. Request to approved the attached schedule of meetings and holidays for 2022.

Regular Agenda:

4. Consideration of a recommendation for approval of a rezoning (adoption of Ordinance Z-21-02) from Industrial (IND) to Planned Industrial District (PID), Planned Unit Development Agreement, Environmental Impact Assessment and Conceptual Planned Unit Development site plan for a proposed asphalt plant at 3080 Toddiem Drive, located at Victory Drive and Toddiem Drive intersection. The rezoning includes the following parcels: 4711-08-100-009 and 4711-05-303-015. The request is petitioned by Net Least Associates North and South, LLC.

- A. Request for approval and adoption of Ordinance Z-21-02 to rezone parcels 4711-08-100- 009 and 4711-05-303-015 from IND to IND/PID (requires roll call vote)
- B. Disposition of Planned Unit Development Agreement dated December 1, 2021
- C. Disposition of Environmental Impact Assessment dated November 24, 2021
- D. Disposition of Conceptual Planned Unit Development Site Plan revised on September 21-2021

5. Request for approval of Resolution 5A (amending the Special Assessment Roll) for the Darlene Drive Road Improvement Project Amendment for a project cost reduction of \$30,558.49. Roll call vote.

6. Request for approval of an intergovernmental agreement for cooperative paid assessment intern, mentoring and training. Roll call vote.

Correspondence

Member Discussion

Adjournment

*Citizen's Comments- In addition to providing the public with an opportunity to address the Township Board at the beginning of the meeting, opportunity to comment on individual agenda items may be offered by the Chairman as they are presented.

CHECK REGISTERS FOR TOWNSHIP BOARD MEETING

DATE: December 6, 2021

TOWNSHIP GENERAL EXPENSES: Wednesday December 1, 2021	\$206,184.07
November 23, 2021 Longivity Annual Payroll	\$35,907.79
November 26, 2021 Bi Weekly Payroll	\$95,789.40
OPERATING EXPENSES: Through December 1, 2021	\$476,645.50
TOTAL:	<u>\$814,526.76</u>

Check Date	Check	Vendor Name	Amount
Bank FNBCK CHECKING ACCOUNT			
11/12/2021	37123	AMERICAN AQUA	1,099.00
11/12/2021	37124	BUSINESS IMAGING GROUP	829.52
11/12/2021	37125	COMCAST	710.68
11/12/2021	37126	LINDHOUT ASSOCIATES ARCHITECTS INC	129.00
11/12/2021	37127	SAFEBUILT STUDIO	1,968.32
11/16/2021	37128	BLUE CROSS & BLUE SHIELD OF MI	46,618.45
11/16/2021	37129	CONSUMERS ENERGY	253.23
11/16/2021	37130	ETNA SUPPLY COMPANY	14,910.00
11/16/2021	37131	GENOA TWP DPW FUND	120.32
11/16/2021	37132	LIVINGSTON COUNTY TREASURER ASSOC	75.00
11/16/2021	37133	MASTER MEDIA SUPPLY	633.86
11/16/2021	37134	MICHIGAN OFFICE SOLUTIONS	749.99
11/16/2021	37135	TETRA TECH INC	735.00
11/16/2021	37136	US BANK EQUIPMENT FINANCE	2,037.41
11/16/2021	37137	VERIZON WIRELESS	433.25
11/23/2021	37138	COMCAST	267.63
11/23/2021	37139	DELTA DENTAL	3,611.92
11/23/2021	37140	FEDERAL EXPRESS CORP	44.92
11/23/2021	37141	LIVINGSTON PRESS & ARGUS	1,635.00
11/23/2021	37142	MICHIGAN OFFICE SOLUTIONS	179.74
11/23/2021	37143	MUTUAL OF OMAHA	2,101.25
11/23/2021	37144	PRINTING SYSTEMS	220.59
11/23/2021	37145	ROCKET ENTERPRISE INC	140.00
11/23/2021	37146	TERRY CROFT	54.88
11/23/2021	37147	WASTE MANAGEMENT CORP SERVICES, INC	114,283.56
12/01/2021	37148	CAPITAL ONE	116.40
		Void Reason: PRINTING PROBLEMS	
12/01/2021	37149	CHASE CARD SERVICES	2,901.15
		Void Reason: PRINTING PROBLEMS	
12/01/2021	37150	DTE ENERGY	27.00
		Void Reason: PRINTING PROBLEMS	
12/01/2021	37151	MHOG WATER AUTHORITY	392.00
12/01/2021	37152	NETWORK SERVICES GROUP, L.L.C.	50.00
12/01/2021	37153	PFEFFER, HANNIFORD, PALKA	8,855.00
12/01/2021	37155	CAPITAL ONE	116.40
12/01/2021	37156	CHASE CARD SERVICES	2,901.15
12/01/2021	37157	DTE ENERGY	27.00
FNBCK TOTALS:			
Total of 34 Checks:			209,228.62
Less 3 Void Checks:			3,044.55
Total of 31 Disbursements:			206,184.07

Check Date	Check	Vendor Name	Amount
Bank 503FN DPW-UTILITIES #503			
11/15/2021	5405	ADVANCE AUTO PARTS Void Reason: REFUND IN DIFFERENT VENDOR, DID NOT SHOW ON THIS CHECK	433.97 V
11/15/2021	5406	AUTO-LAB OF LIVINGSTON	492.39
11/15/2021	5407	BOB'S TIRE & AUTO SERVICE, INC	130.00
11/15/2021	5408	CORRIGAN TOWING	98.25
11/15/2021	5409	GIFFELS WEBSTER	1,110.00
11/15/2021	5410	HUTSON, INC	28.65
11/15/2021	5411	TETRA TECH INC	2,470.00
11/15/2021	5412	ULINE	124.65
11/15/2021	5413	USA BLUEBOOK	693.19
11/15/2021	5414	UNITED STATES POSTAL SERVICE	317.25
11/15/2021	5415	ADVANCE AUTO PARTS	403.97
11/15/2021	5416	CHASE CARD SERVICES	1,554.46
11/22/2021	5417	GENOA TOWNSHIP	300,000.00
11/22/2021	5418	HOME DEPOT CREDIT SERVICES	1,790.79
11/22/2021	5419	VERIZON WIRELESS	702.67
11/30/2021	5420	SPIRIT OF LIVINGSTON	1,069.08

503FN TOTALS:

Total of 16 Checks:	311,419.32
Less 1 Void Checks:	433.97
Total of 15 Disbursements:	<u>310,985.35</u>

Check Date	Check	Vendor Name	Amount
Bank 592FN OAK POINTE OPERATING FUND #592			
11/12/2021	5389	AT&T LONG DISTANCE	56.51
11/17/2021	5390	AMERICAN AQUA	2,132.09
11/17/2021	5391	AT&T	145.84
11/17/2021	5392	COMPLETE BATTERY SOURCE	360.41
11/17/2021	5393	CONSUMERS ENERGY	320.29
11/17/2021	5394	COOPER'S TURF MANAGEMENT LLC	1,295.00
11/17/2021	5395	CORRIGAN OIL COMPANY	1,189.97
11/17/2021	5396	DUBOIS-COOPER	546.00
11/17/2021	5397	ETNA SUPPLY COMPANY	1,333.40
11/17/2021	5398	FERGUSON WATERWORKS #3386	480.60
11/17/2021	5399	GENOA TOWNSHIP D.P.W. FUND	1,042.61
11/17/2021	5400	GENOA TWP DPW FUND	20,175.32
11/17/2021	5401	GENOA TWP DPW FUND	23,409.94
11/17/2021	5402	GRAINGER	343.20
11/17/2021	5403	HACH COMPANY	495.46
11/17/2021	5404	HAVILAND PRODUCTS COMPANY	2,900.00
11/17/2021	5405	HYDROCORP	226.87
11/17/2021	5406	LOREA TOPSOIL & AGGREGATE	105.00
11/17/2021	5407	STATE OF MICHIGAN	1,340.28
11/17/2021	5408	TLS CONSTRUCTION	2,636.00
11/17/2021	5409	UIS SCADA	679.50
11/23/2021	5410	AT&T LONG DISTANCE	64.04
11/24/2021	5411	GENOA TWP OAK POINTE SEWER BOND	88,936.50
12/01/2021	5412	BRIGHTON ANALYTICAL LLC	200.00

592FN TOTALS:

Total of 24 Checks:	150,414.83
Less 0 Void Checks:	0.00
Total of 24 Disbursements:	<u>150,414.83</u>

Check Date	Check	Vendor Name	Amount
Bank 593FN LAKE EDGEWOOD OPERATING FUND #593			
11/15/2021	4044	BRIGHTON ANALYTICAL LLC	536.00
11/15/2021	4045	COMPLETE BATTERY SOURCE	169.60
11/15/2021	4046	CONSUMERS ENERGY	203.44
11/15/2021	4047	COOPER'S TURF MANAGEMENT LLC	963.00
11/15/2021	4048	CSM MECHANICAL, LLC	725.00
11/15/2021	4049	DTE ENERGY	148.79
11/15/2021	4050	GENOA TWP DPW FUND	12,432.49
11/30/2021	4051	BRIGHTON ANALYTICAL LLC	67.00
593FN TOTALS:			
Total of 8 Checks:			15,245.32
Less 0 Void Checks:			0.00
Total of 8 Disbursements:			15,245.32

310,985.35+
150,414.83+
15,245.32+
476,645.50+



December 2021						
S	M	T	W	T	F	S
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

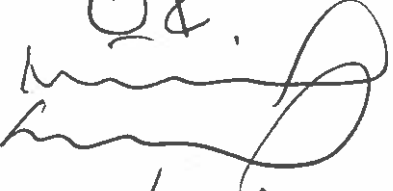
New Balance
\$2,901.15
 Minimum Payment Due
\$580.00
 Payment Due Date
12/10/21

Late Payment Warning: If we do not receive your minimum payment by the due date, you may have to pay a late fee, and existing and new balances may become subject to the Default APR.

Minimum Payment Warning: Enroll in Auto-Pay and avoid missing a payment. To enroll, go to www.chase.com

ACCOUNT SUMMARY

Account Number:	[REDACTED]
Previous Balance	\$194.13
Payment, Credits	-\$194.13
Purchases	+\$2,901.15
Cash Advances	\$0.00
Balance Transfers	\$0.00
Fees Charged	\$0.00
Interest Charged	<u>\$0.00</u>
New Balance	\$2,901.15
Opening/Closing Date	10/17/21 - 11/16/21
Credit Limit	\$20,000
Available Credit	\$17,098
Cash Access Line	\$1,000
Available for Cash	\$1,000
Past Due Amount	\$0.00
Balance over the Credit Limit	\$0.00

OK.

 11/23/2021



ACCOUNT ACTIVITY

Date of Transaction	Merchant Name or Transaction Description	\$ Amount
10/23	Payment ThankYou Image Check	-194.13
10/21	Amazon.com*2Y6Y44JX2 Amzn.com/bill WA	25.20 <i>KAM</i>
10/25	EIG*CONSTANTCONTACT.COM 855-2295506 MA	168.00 <i>KAM</i>
10/27	AMZN Mktg US*2Y74U37D2 Amzn.com/bill WA	423.00 <i>KAM</i>
10/28	MACEO 586-5744610 MI	25.00 <i>KAM</i>
11/01	STATE TAX COMMISSION 517-3353429 MI	175.00 <i>DIC</i>
11/01	STATE TAX COMMISSION 517-3353429 MI	175.00 <i>DIES</i>
11/01	STATE TAX COMMISSION 517-3353429 MI	175.00 <i>DUES</i>
11/05	REALTOR ASSOCIATION/MLS 312-329-8245 IL	563.00 <i>DUES</i>
11/11	LANDS END BUS OUTFITTERS 800-332-4700 WI MICHAEL C ARCHINAL TRANSACTIONS THIS CYCLE (CARD 3223) \$2707.02 INCLUDING PAYMENTS RECEIVED	1,171.95 <i>CS</i>

2021 Totals Year-to-Date	
Total fees charged in 2021	\$39.00
Total interest charged in 2021	\$22.87

Year-to-date totals do not reflect any fee or interest refunds you may have received.

INTEREST CHARGES

Your Annual Percentage Rate (APR) is the annual interest rate on your account.

Balance Type	Annual Percentage Rate (APR)	Balance Subject To Interest Rate	Interest Charges
PURCHASES			
Purchases	13.24%(v)(d)	- 0 -	- 0 -
CASH ADVANCES			
Cash Advances	19.24%(v)(d)	- 0 -	- 0 -
BALANCE TRANSFERS			
Balance Transfer	13.24%(v)(d)	- 0 -	- 0 -

31 Days in Billing Period

(v) = Variable Rate

(d) = Daily Balance Method (including new transactions)

(a) = Average Daily Balance Method (including new transactions)

Please see Information About Your Account section for the Calculation of Balance Subject to Interest Rate, Annual Renewal Notice, How to Avoid Interest on Purchases, and other important information, as applicable.

draft

GENOA CHARTER TOWNSHIP BOARD
Regular Meeting
November 15, 2021

MINUTES

Supervisor Rogers called the Regular Meeting of the Genoa Charter Township Board to order at 6:30 p.m. at the Township Hall with the Pledge of Allegiance. The following members were present constituting a quorum for the transaction of business: Bill Rogers, Paulette Skolarus, Robin Hunt, Terry Croft, Jim Mortensen and Diana Lowe. In addition there were Assistant Manager Kelly VanMarter and two persons in the audience.

A Call to the Public was made with the following response: Melanie Johnson – Consider moving future meetings to U-Tube meetings after tonight.

Consent Agenda:

Moved by Lowe and supported by Hunt to approve items 1 and 2 and moving the Minutes to the Regular Agenda for discussion. The motion carried unanimously.

1. Payment of Bills: November 15, 2021

3. Request Board approval to adjust the 2021 Winter tax roll as well as the Refuse Special Assessment Roll, X0012, to reflect eight additional homes at \$157.00/per home as submitted by the Township Treasurer.

Regular Agenda:

Moved by Lowe and supported by Croft to approve for action all items under the Regular Agenda with the addition of the Minutes. The motion carried unanimously.

2. Request to Approve Minutes: November 1, 2021

Moved by Lowe and supported by Mortensen to approve the Minutes with changes regarding comments from board members replacing Croft's name with Lowe's and other minor corrections. The motion carried unanimously.

4. Request to introduce proposed rezoning ordinance number Z-21-02 and to set the meeting date for the purpose of considering the proposed ordinance for adoption before the Township Board on Monday, December 6th, 2021. The properties proposed for rezoning are located on the east side of Victory Drive, north and south of Toddiem Drive involving parcels 4711-08-100-009 and 4711-05-303-015. The request is petitioned by Net Lease Associates to be rezoned from Industrial (IND) to Planned Industrial Development (PID).

Moved by Hunt and supported by Croft to introduce proposed rezoning ordinance number Z-21-02 and to set the meeting date for the purpose of considering the proposed ordinance for adoption before the Township Board on Monday December 6th, 2021. The motion carried unanimously.

Correspondence:

- A letter from Rogers and Archinal to the City Manager and Mayor of the City of Howell concerning Padnos Shredding Operation with regard to the 425-land transfer agreement and the City's failure to provide quality economic development.
- An e-mail from Rob McColl thanking the board for the internet buildout.
- A letter from Comcast ceasing operations of the NBC sport network.
- A memo from MiSignal outlining phases of their construction plan. Hunt – MiSignal will post a map at the end of the week outlining phases of the development.

Member Discussion:

- Skolarus – The Big Red Barrel collection generated 30 # of pills and 35# of sharps on the 23rd. This past Saturday we collected 19# of pills and 21 # of sharps/needles. We handed out brochures to residents dropping leaves and many people returned to the office with the drugs and needles.
- Skolarus – We were concerned Saturday with the noxious odor in the Township foyer and perhaps a fire hazard. It was thought to be related to double pronged 9-volt batteries. Hunt – Batteries were thrown around the parking lot.
- Mortensen provided corrections to the comment cards that will be used for large groups in attendance at the meetings.
- VanMarter – Through the Township website, the Planning Commission seeks residents' input regarding community attributes, focusing on, "What defines Genoa Township?"

Moved by Mortensen and supported by Hunt to adjourn the regular meeting of the board at 7:00 p.m. The motion carried unanimously.



Paulette A. Skolarus, Clerk
Genoa Charter Township

Bill Rogers, Supervisor
Genoa Charter Township

December 6, 2021

Genoa Charter Township Board:

Please approve the attached schedule of meetings and holidays for the Calendar year 2022.

These dates were reviewed and approved by all Boards and Commissions.

Signed: Bill Rogers, Polly Skolarus and Robin Hunt

**GENOA TOWNSHIP
SCHEDULE OF MEETINGS
January 1, 2022 thru December 31, 2022**

Meetings will be held at the Genoa Township Hall located at 2911 Dorr Road. The Township Board meets at 6:30 p.m., the Zoning Board of Appeals meet at 6:30 p.m. The Planning Commission meets at 6:30 p.m.

Regular meetings of the Township Board are generally scheduled for the first and third Monday of every month. The Planning Commission generally meets the second and if necessary, the fourth Monday; and the Zoning Board of Appeals usually meets the third Tuesday of each month. Holidays will occasionally disrupt the meeting schedules.

TOWNSHIP BOARD SCHEDULE

January 3, 2022	July 18, 2022
February 7 & 21, 2022	August 1 & 15, 2022
March 7 & 21, 2022	September 19, 2022
April 4 & 18, 2022	October 3 & 17, 2022
May 2 & 16, 2022	November 7 & 21, 2022
June 6 & 20, 2022	December 5, 2022

PLANNING COMMISSION SCHEDULE

January 10, 2022	July 11, 2022
February 14, 2022	August 8, 2022
March 14, 2022	September 12, 2022
April 11, 2022	October 11, 2022(Tuesday)
May 9, 2022	November 14, 2022
June 13, 2022	December 12, 2022

ZONING BOARD OF APPEALS SCHEDULE

January 18, 2022	July 19, 2022
February 15, 2022	August 16, 2022
March 15, 2022	September 20, 2022
April 19, 2022	October 18, 2022
May 17, 2022	November 15, 2022
June 21, 2022	December 13, 2022

BOARD OF REVIEW

March 8, 2022	July 19, 2022
March 14 & 15, 2022	Dec. 13, 2022

Signed: Paulette A. Skolarus
Genoa Township Clerk

Notice Posted on Front Display
Dec. 6, 2021 thru Dec. 31, 2022

(Policy/schedule of meetings 2022)

Date: Dec. 6, 2021

To: Genoa Township Staff

From: Polly Skolarus, Robin Hunt, and Bill Rogers

For your records the following holidays are scheduled for 2022:

Floating Holiday	Anytime
Martin Luther King Day	January 17, 2022
Good Friday	April 15, 2022
Memorial Day	May 30, 2022
Independence Day	July 4, 2022
Labor Day	September 5, 2022
Columbus Day	October 10, 2022
Veteran's Day	November 11, 2022
Thanksgiving Day	November 24, 2022
Friday following Thanksgiving	November 25, 2022
Christmas Eve	December 23, 2022 (falls on Saturday)
Christmas Day	December 26, 2022 (falls on Sunday)
New Years Eve	December 30, 2022 (falls on Saturday)

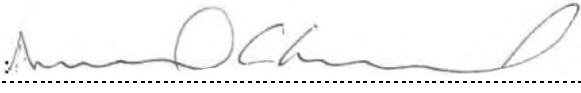
Policy/holidays 2022



2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director
DATE: December 1, 2021
RE: **Capital Asphalt – Victory/Toddiem Drive PID Rezoning and Conceptual PUD Ordinance No. Z-21-02**

MANAGERS REVIEW: 

In consideration of the approval recommendations by the Township Planning Commission on October 11, 2021 and the Livingston County Planning Commission on November 17, 2021 please find the attached proposed rezoning ordinance and conceptual planned industrial development agreement, plan and impact assessment for your consideration. The proposed rezoning involves two properties located on the east side of the southern end of Victory Drive both north and south of Toddiem Drive. The larger 11-acre parcel (4711-08-100-009) is located south of Toddiem Drive at 3080 Toddiem Drive and is currently occupied by a scrap metal business. The smaller 5.2-acre parcel (4711-05-303-015) is vacant and located east of Victory Drive and north of Toddiem Drive.

The rezoning requested is from Industrial District (IND) to a Planned Industrial Development (PID) overlay district. The proposal is for a new asphalt production plant, including multiple buildings and structures, as well as outdoor storage of materials. The existing scrap metal business would be discontinued and the existing building would be repurposed for the new use.

The conceptual Planned Industrial Development agreement maintains the permitted and special land uses of both the industrial and office zoning districts and the proposed use is planned to remain as a special land use. The primary components of the planned development agreement include the following:

- Applicant commitment to construct and pave Toddiem Drive to county standards, which will provide a roadway connection between Victory Drive and Grand Oaks Drive. This will provide access to the Latson interchange without adding truck traffic on Grand River. The applicant seeks a deviation through the PUD to allow the asphalt use to exist in this location despite not being located on a county primary or a roadway with 86' feet of right of way.
- Applicant commitment to extend municipal water with fire hydrants along Toddiem Drive from Grand Oaks Drive to Victory Drive.
- Clean up of the site to removal the outdoor scrap metal and trailer storage.

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lowe

MANAGER

Michael C. Archinal

December 1, 2021

Capital Asphalt – Victory/Toddiem Drive PID Rezoning & Conceptual PUD

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- Applicant seeks relief on buffer zone requirements due to preservation of existing woodlands and topography.
- Applicant seeks relief on building height to allow 86 feet instead of the required 30 feet and to allow building materials to exceed the 25% maximum allowance for metal exterior finish.
- While maintaining the requirement for a special land use authorization, the development agreement seeks to increase the storage capacity amounts for above ground storage tanks.

Procedurally, the applicant is at the last step of the rezoning and conceptual PUD approval phase. If granted conceptual approval, the applicant may then proceed to the required final PUD phase which shall include special land use review for the asphalt plant and the storage of fuel/hazardous materials.

My review of the revised submittal was focused on compliance with the conditions of the Planning Commission recommendation and form the basis for the motions presented below for your consideration. Please note that I have added an optional condition under the impact assessment to help ensure that the environmental and health concerns recently raised by the community are appropriately addressed at the final stage.

REZONING – REQUIRES ROLL CALL VOTE

Moved by _____, Supported by _____ to **APPROVE AND ADOPT** Ordinance No. Z-21-02. This approval is made because the proposed amendment to the Zoning Map and reclassification as a Planned Industrial District (PID) with the related development agreement, impact assessment and conceptual plan has been found to comply with the qualifying conditions and the criteria stated in Sections 10.07.01 and 22.04 of the Township Zoning Ordinance.

PUD AGREEMENT

Moved by _____, Supported by _____ to **APPROVE** the PUD Agreement revised on December 1, 2021.

IMPACT ASSESSMENT

Moved by _____, Supported by _____, to **APPROVE** the environmental impact assessment dated November 24, 2021 as submitted.

Optional condition - In addition to the required Pollution Incident Prevention Plan (PIPP), the final PUD/ special land use impact assessment shall provide an analysis by an air quality expert to address any potential pollution impacts including airborne emissions and odors. This analysis shall also detail and recommend mitigation and control measures.

December 1, 2021

Capital Asphalt – Victory/Toddiem Drive PID Rezoning & Conceptual PUD

Page 3 of 3

CONCEPTUAL PUD PLAN

Moved by _____, Supported by _____, to APPROVE the Conceptual PUD Plan dated 9/21/21 with the following conditions:

1. The final site plan shall include a lighting plan and all other items as required by Section 10.06 as required by ordinance.
2. The landscape plan shall include tree protection fencing around the dripline of areas to be protected during construction.
3. The proposed use will require special land use and final PUD site plan review and unless otherwise indicated in the development agreement, the special land use standards of Section 19.03, and the use requirements of Section 8.02.02(a) and Section 13.07 will be applied.
4. All conditions of the Township Engineer, the Brighton Area Fire Authority, the Livingston County Road Commission, the Livingston County Drain Commission, the Livingston County Health Department, and both the MHOG water and GO sewer authorities shall be addressed.
5. As provided by Section 10.04.02 approval of the conceptual PUD site plan confers upon the owner the right to proceed through the subsequent planning phase for a period not to exceed 2 years from the date of approval unless an extension request is approved by the Board prior to the expiration date.

Should you have any questions concerning this matter, please do not hesitate to contact me.

Sincerely,



Kelly VanMarter

Assistant Township Manager/Community Development Director

ORDINANCE NO. Z-21-02

AN ORDINANCE TO AMEND THE ZONING MAP OF THE CHARTER TOWNSHIP OF GENOA BY REZONING PARCEL 4711-08-100-009 (11 ACRES) AND 4711-05-303-015 (5.2 ACRES) FROM INDUSTRIAL (IND) TO A PLANNED INDUSTRIAL OVERLAY DISTRICT (PID).

THE CHARTER TOWNSHIP OF GENOA HEREBY ORDAINS that the Zoning Map, as incorporated by reference in the Charter Township of Genoa's Zoning Ordinance, is hereby amended as follows:

Real property containing approximately 11 acres with parcel ID number 4711-08-100-009 located at 3080 Toddiem Drive on the south side of Toddiem Drive, east of Victory Drive and real property containing approximately 5.2 vacant acres with parcel ID number 4711-05-303-015 located on the east side of Victory Drive north of Toddiem Drive both of which are more particularly described as follows:

Parcel 4711-08-100-009 (3080 Toddiem Drive, Howell, MI 48843)

A part of the Northwest 1/4 of Section 8, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the North 1/4 corner of said Section 8; thence South 87°12'58" West along the North line of said Section, 1817.08 feet to the point of beginning of the parcel to be described; thence South 02°06'23" East 720.64 feet; thence South 88°02'55" West 384.26 feet to the Northeasterly right-of-way line of the C & O Railroad; thence North 49°45'12" West along said right-of-way line 506.19 feet to the West line of said Section (as monumented); thence North 02°15'06" West along and West line 369.60 feet to the Northwest corner of said Section; thence North 87°12'58" East along the North line of said Section, 759.32 feet to the point of beginning. Subject to and including the use of a 66 foot wide private road easement for ingress and egress, the North line of which is described as: Part of the Northwest 1/4 of Section 8, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the North 1/4 corner of said Section 8; thence South 87°12'58" West along the North line of said Section 496.99 feet to the Westerly right-of-way line of Grand Oak Drive and the point of beginning of said easement; thence South 87°12'58" West 2079.41 feet to the point of ending of said easement.

Parcel 4711-05-303-015 (vacant land, Victory Drive, Howell, MI 48843)

Lot 15, Grand Oaks West Industrial Park, according to the plat thereof, as recorded in Liber 30 of Plats, Pages 1, 2, 3, 4, and 5, Livingston County Records.

shall be rezoned from the Industrial (IND) district to a Planned Industrial Development District Overlay (PID) zoning classification. The Township Planning Commission and Township Board, in strict compliance with the Township Zoning Ordinance and with Act 184 of the Public Acts of 1943, as amended, reclassified the Property as Planned Industrial District (PID) finding that such classification properly achieved the purposes of Section 10.07.01 and 22.04 of the Township's Zoning Ordinance (as amended).

Severability If any provision of this Ordinance is found to be invalid, then the remaining portions of this Ordinance shall remain enforceable.

Effective Date This Ordinance shall be effective upon publication in a newspaper of general circulation as required by law.

On the motion to adopt the Ordinance the following vote was recorded:

Yeas:

Nays:

Absent:

I hereby approve the adoption of the foregoing Ordinance this ____ day of _____, 2021.

Paulette A. Skolarus
Township Clerk

Bill Rogers
Township Supervisor

Township Board First Reading: November 15, 2021
Date of Publication of Proposed Ordinance: November 28, 2021
Township Board Second Reading and Adoption: proposed December 6, 2021
Date of Publication of Ordinance Adoption:
Effective Date:

PUBLIC COMMENT LETTERS THAT WERE RECEIVED AFTER THE PLANNING COMMISSION MEETING ARE AVAILABLE IN THE PACKET AFTER THE PUD CONCEPT PLAN.

CLICK LINK HERE TO ADVANCE TO THOSE LETTERS: [Public Comments](#)

Commission meeting to allow the applicant to address the comments made by the Planning Commission this evening. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2... A request of a rezoning from Industrial (IND) to Planned Industrial District (PID), Planned Industrial Development Agreement, Environmental Impact Assessment and Conceptual PID site plan for a proposed asphalt plant at 3080 Toddiem Drive, located at Victory Drive and Toddiem Drive intersection. The rezoning includes the following parcels: 4711-08-100-009 and 4711- 05-303-015. The request is petitioned by Net Least Associates South, LLC.

- A. Recommendation of Rezoning and PUD Application
- B. Recommendation of PID Agreement
- C. Recommendation of Impact Assessment (9-1-2021)
- D. Recommendation of Conceptual PUD Plan (9-21-2021)

Ms. Abby Cooper, the attorney for the applicant, Mr. Wayne Perry, the engineer, Mr. Daren Zimmerman and Mr. Chris Smith, representing the applicant, Ms. Kathleen Gunkle, an environmental engineer, and the sellers of the abutting properties were present.

Ms. Cooper stated they are proposing to develop a state-of-the art asphalt plant on this site. The applicant runs an asphalt plant in Lansing and would like to operate one here in Livingston County. She noted that the use and the project are compatible with the surrounding neighborhood. The applicant will be bringing Toddiem Drive up to Livingston County Road Commission standards. Municipal water and a new stormwater management system will be installed and the existing outdoor storage of metal scrap will be removed as part of this project.

Mr. Perry reviewed the site plan, detailing the paving plan, building locations, site access, and the process and operations of the asphalt plant. He explained where the material is brought in and through the site to the stockpile locations. They are requesting that the Buffer Zones B requirement be waived for three sides of the property. They will meet the requirements along Toddiem Drive. Due to the existing topography, existing foliage and surrounding uses, additional plantings would be unnecessary. They are also requesting approval to store liquids on the site.

Commissioner McCreary asked if there will be a maintenance agreement for Toddiem Drive after it is paved. Mr. Perry stated it is a private drive so a maintenance agreement would need to be made between all four of the adjacent property owners.

Mr. Zimmerman showed a photograph of his existing plant. They pave the site so that they can use dust control measures. It is also swept multiple times per day. He explained the environmental requirements they must follow with the State of Michigan.

Commissioner Rauch stated that this site is the best one in the Township for this type of use. While the residential areas are not in the near vicinity to this site, he asked what the impact is on

them. Mr. Zimmerman said that they very rarely work at night or on weekends. Ms. Gunkle stated that air quality permits are required and for that permit, they need to assess the emissions from the site. If the odor does become a problem, a remedy could be put in place. She noted that due to the location of the residential neighborhoods and the prevailing winds, they would not be impacted by the odor or the dust. Commissioner Rauch requested to have the Impact Assessment contain language stating that if odor does become an issue for the residents, a remedy would be put in place. Mr. Smith stated they will include that.

Commissioner McBain is concerned with the impact on the adjacent public roads. Mr. Archinal stated that having Toddiem Drive paved will allow for other businesses off of Victory Drive to use it to access I-96 and this will ease the traffic and impact on Grand River. Mr. Borden noted that the Livingston County Road Commission has to provide their approval at the time of final approval.

Mr. Zimmerman stated that this plant will employ 30 plus people.

Mr. Borden reviewed his letter dated October 5, 2021

- The proposal generally meets the Planned Unit Development (PUD) qualifying conditions, provided the following are addressed:
 - The Township authorizes a reduction in the conventional lot area requirement;
 - The applicant extends public water to serve the site; and
 - The applicant addresses any concerns raised by the Township Engineer, Utilities Director or Fire Authority.
- Rezoning to the PID overlay is consistent with the Master Plan and Future Land Use Map, and generally meets the rezoning criteria for a PUD.
- The applicant seeks deviations via the PUD for building/structure height and materials, as well as from use requirements related to roadway access for an asphalt plant, and size of storage tanks for fuel.
- If approval is granted, the applicant will need to apply for review and approval of special land uses and a final PID site plan. A PIP Plan will also be required.
- The parking calculations note that 23 spaces are provided; however, the plan depicts only 19.
- The final site plan submittal must include a full lighting plan.
- There are discrepancies between the landscape plan and planting table with respect to quantities.
- We suggest the Township require tree protection fencing around the dripline of areas to be protected during construction activities.
- The applicant requests deviations from Buffer Zone “B” requirements in multiple locations due to existing site conditions (existing wooded areas, adjacency to a railroad, and significant topographic changes).
- The applicant must address any concerns raised by the Township Engineer, Utilities Director or Brighton Area Fire Department.

Commissioner McCreary questioned the deviations that are being requested. She asked if the Township should revise the height requirements in this zoning district Mr. Borden stated the PID allows for the Township to approve the deviations and this is a good tool for this type of project in this zoning.

Mr. Markstrom reviewed his letter dated October 6, 2021.

- The final site plan submittal should include more detail such as dimensioning of drives and parking, detention basin details, and curb and gutter. Additional detail will also need to be provided for the improvements to Toddiem Drive.
- The proposed improvements will need to be approved by the Brighton Area Fire Authority. This approval should be obtained and provided to the Township prior to site plan approval.
- A soil erosion and sedimentation control plan should be submitted as required by Genoa Township Engineering Design Standards for sites with more than one acre of disturbance.
- A traffic plan should be submitted with the final site plan as required by Genoa Township Zoning Ordinance. The traffic plan will need to show access to the site and detail the projected amount of truck traffic.
- The Livingston County Drain Commissioner will need to review and approve the proposed storm plan, as the proposed detention basin will outlet to their system. This approval should be provided to the Township prior to site plan approval.
- The petitioner is proposing to connect to the existing water main on Grand Oaks Drive. We suggest the water main be looped to the main north of the site in Victory Drive. The size of the pipe to Grand Oaks as well as to Victory Drive should be discussed with MHOG to confirm it matches the Authority's Master Plan for utilities in this area. The petitioner should provide information on their expected water uses to better understand the water improvements needed for the site.
- After site plan approval, water main and sanitary sewer construction plans must be submitted to MHOG for their review and approval, along with permitting through EGLE. The construction plans will need to include more detail on the proposed connections and include plan and profile.
- It is possible that the petitioner will be required to pay connection fees to connect to municipal water and sanitary sewer prior to obtaining a land use permit. This fee would be determined using Genoa Township's REU Table.

Chairman Grajek noted that BAFA

The call to the public was made at 8:50 pm with no response.

Commissioner Dhaenens asked if different materials could be used for the building as it does not meet the ordinance. Mr. LeClair said they were not planning on changing any of the materials of the existing buildings.

Moved by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Rezoning and PUD Application for a proposed asphalt plant at 3080 Toddiem Drive, located at Victory Drive and Toddiem Drive intersection for Net Least Associates South, LLC because the Planning Commission finds that the PUD proposal generally meets the PUD qualifying conditions. This recommendation is conditioned upon the following:

- The reduction of lot size requirements is acceptable as the application will extend the water main to their site
- The applicant shall address concerns from the Township Engineer, Brighton Area Fire Authority
- The Planning Commission acknowledges that the applicant seeks the following deviations as noted in the Site Plan and PUD Application
 - Building/structure height and materials
 - Use requirements related to roadway access for an asphalt plant
 - Size of storage tanks for fuel.
- The petition will take into account the opportunity to make improvements to the existing building.

The motion carried unanimously.

Moved by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Environmental Impact Assessment September 1, 2021 for a proposed asphalt plant at 3080 Toddiem Drive, located at Victory Drive and Toddiem Drive intersection for Net Least Associates South, LLC with the future inclusion of text stating that if odor is an issue in the future for adjacent residential properties remedies as mentioned this evening will be added to the facility operations. **The motion carried unanimously.**

Moved by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Conceptual PUD Plan dated September 21, 2021 for a proposed asphalt plant at 3080 Toddiem Drive, located at Victory Drive and Toddiem Drive intersection for Net Least Associates South, LLC, based on the following conditions:

- The parking calculation discrepancy will be updated
- The final site plan will include a lighting plan, a landscape plan with tree protection measures outlined
- The applicant's request for deviations from Buffer Zone #B are acceptable due to the existing site conditions, such as existing wooded areas, adjacency to a railroad, and significant topographic changes.
- The applicant shall address concerns from the Township Engineer, Brighton Area Fire Authority, and MHOG

The motion carried unanimously.

ADMINISTRATIVE BUSINESS

Staff Report

Mr. Archinal had nothing to report this evening.

Approval of the September 13, 2021 Planning Commission meeting minutes

Needed changes were noted.

Moved by Commissioner McCreary, seconded by Commissioner Dhaenens, to approve the minutes of the September 13, 2021 Planning Commission Meeting with the corrections noted. **The motion carried unanimously.**

Member Discussion

Commissioner Dhaenens may not be in attendance at November's meeting.

Mr. Archinal stated they have a potential replacement for Commissioner Rickard.

Adjournment

Moved by Commissioner Mortensen, seconded by Commissioner McCreary, to adjourn the meeting at 9:08 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary



Livingston County Department of Planning

November 19, 2021

Genoa Charter Township Board of Trustees
c/o Polly Skolarus, Township Clerk
Genoa Charter Township Hall
2911 Dorr Road
Brighton, MI 48116

Kathleen J. Kline-Hudson
AICP, PEM
Director

Robert A. Stanford
AICP, PEM
Principal Planner

Scott Barb
AICP, PEM
Principal Planner

**Re: Planning Commission Review of Zoning Amendment Z-37-21, IND
Industrial to PID Planning Industrial District in Sections 5 and 8**

Dear Board Members:

The Livingston County Planning Commission met on Wednesday, November 17, 2021 and reviewed the zoning amendment referenced above. The Livingston County Planning Commissioners made the following recommendation:

Z-37-21 Approval. The proposed rezoning from Industrial to Planned Industrial Development (PID) overlay is compatible with surrounding planning, zoning and current land uses. The proposed asphalt plant is a specially permitted use in PID and property improvements associated with this development will benefit Genoa Township and the industries of the Victory Lane/ Grand Oaks Boulevard industrial area.

Copies of the staff review and draft Livingston County Planning Commission meeting minutes are enclosed. Do not hesitate to contact our office should you have any questions regarding this county action.

Sincerely,

Kathleen J. Kline-Hudson

Kathleen J. Kline-Hudson
Director

Enclosures

c: Chris Grajek, Chair Genoa Charter Township Planning Commission
Kelly VanMarter, Assistant Township Manager/Community Development
Director, Genoa Charter Township

Meeting minutes and agendas are available at:
<https://www.livgov.com/plan/Pages/meetings.aspx>

Department Information

Administration Building
304 E. Grand River Avenue
Suite 206
Howell, MI 48843-2323

(517) 546-7555
Fax (517) 552-2347

Web Site
co.livingston.mi.us



**LIVINGSTON COUNTY PLANNING DEPARTMENT
REZONING REQUEST - | -
STAFF REPORT**

**CASE NUMBER:
Z-37-21**

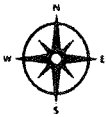
COUNTY CASE NUMBER:	Z-37-21	TOWNSHIP:	Genoa
REPORT DATE:	November 1, 2021	SECTION NUMBER:	5 and 8
STAFF ANALYSIS BY:	Kathleen Kline-Hudson	TOTAL ACREAGE:	16.2

APPLICANT / OWNER:	Net Lease Associates/ 10-20 Investments & Leasing
LOCATION:	Intersection of Victory Drive and Toddiem Drive
LAND USE:	Metal Scrap Yard

CURRENT ZONING:	REQUESTED ZONING:
IND Industrial District	PID Planned Industrial District
PERMITTED/SPECIAL USES (Not all inclusive):	PERMITTED/SPECIAL USES (Not all inclusive):
<u>Permitted:</u> (not all inclusive) Manufacturing; bakeries; contractor's offices and buildings with only indoor storage of equipment and machinery; electronic equipment manufacturing; furniture and fixtures manufacturing; print shops and book publishing; and warehousing establishments.	<u>Permitted:</u> (not all inclusive) Uses permitted in the Industrial and Office-Service Districts.
<u>Special:</u> (not all inclusive) Automotive assembly or manufacturing; bottling and packaging; breweries, distilleries and wineries; Cement, concrete, gypsum, plaster and nonmetallic mineral products manufacturing; chemicals and allied products manufacturing; and contractors yards.	<u>Special:</u> (not all inclusive) Special land uses of the Industrial and Office-Service Districts.
<u>Minimum Lot Area:</u> 1 Acre	<u>Minimum Lot Area:</u> Minimum lot area shall be two (2) acres except up to twenty five percent (25%) of the total number of lots may be between one and one-half (1-1/2) and two (2) acres in area.

TOWNSHIP PLANNING COMMISSION RECOMMENDATION AND PUBLIC COMMENTS:	ESSENTIAL FACILITIES AND ACCESS:
Approval; there were no public comments at the October 12 public hearing.	Water: Private well Sewer: Public sewer Access: Access to the property is via Victory Lane.

EXISTING LAND USE, ZONING AND MASTER PLAN DESIGNATION:

	Land Use:	Zoning:	Master Plan:	
Subject Site:	Metal Scrap Yard (southern parcel) and mostly vacant (northern parcel)	IND Industrial District	Industrial	
	To the North:	Commercial	IND Industrial District	
	To the East:	Industrial and Vacant	IND Industrial District	
	To the South:	Railroad and Vacant	IND Industrial District and PID Planned Industrial District	Industrial and Regional Commercial
	To the West:	Industrial and Vacant	IND Industrial District and High Density Residential	Industrial, Research and Development, Public/ Institutional/ Utilities
			Industrial, Research and Development	
			Industrial, High Density Residential	

ENVIRONMENTAL CONDITIONS:

Soils / Topography:	Primarily well-drained Miami Loam soils are present on nearly level to gently rolling topography. An area of Tawas Muck soils are present near the northern boundary of the northern parcel. This soil type presents some limitations for nonfarm development.
Wetlands:	The National Wetland Inventory notes one small marshy, emergent wetland at the northern boundary of the northern parcel where Tawas Muck soil is present.
Vegetation:	Woods, and shrub/scrub brush.
County Priority Natural Areas:	According to the map "Livingston County's High Quality Natural Areas", there are no Priority 1,2,or 3 Natural Areas on-site.

TOWNSHIP MASTER PLAN DESIGNATION:

The Future Land Use Plan of the Genoa Township Master Plan (2013) designates the site as Industrial. The intent of this designation is to develop industrial uses such as research, wholesale and warehouse activities and light industrial operations which manufacture, compound, process, package, assemble and/or treat finished or semi-finished products from previously prepared material. The processing of raw material for shipment in bulk form, to be used in an industrial operation at another location is found only in very defined and limited portions of this area.

The site is also in a designated Primary Growth Area of Genoa Township, along Grand River Avenue/ I-96 corridor between Brighton and Howell. Primary growth areas are currently served or available to be served by public sewer and water. These areas include single family and multiple family residential at higher densities with public water and sewer, commercial centers, industrial parks and mixed-use centers.

COUNTY COMPREHENSIVE PLAN:

The 2018 Livingston County Master Plan does not direct future land use patterns, or development within Livingston County. Alternatively, it offers a county-wide land use perspective when reviewing potential rezoning amendments. The Land Use & Growth Management chapter of the plan includes decision-making recommendations regarding potential land use conflicts and promoting good land governance.

COUNTY PLANNING STAFF COMMENTS:

The petitioner is requesting a rezoning from Industrial (IND) to Planned Industrial District (PID); an overlay district of the Industrial District that allows flexible land use design. The site consists of two parcels that total 16.2 acres in size, and PID sites must have a minimum acreage of 20 acres of contiguous land. The Genoa Township Zoning Ordinance allows for a 5 acre reduction in the minimum lot size of a PID from 20 acres to 15 acres for sites served by public sewer and water; this site has access to these public utilities. The petitioner is proposing to develop an asphalt plant on the site, similar to the one that he operates in Lansing; this will entail multiple buildings and structures as well as outdoor storage of materials. There is one existing building on the southern site that will remain (15,040 sq. ft.). As part of the PID application, the petitioner proposes the following property improvements:

1. Construction and paving of Toddiem Drive per LCRC standards resulting in an improved road and linkage between Victory Drive and Grand Oaks Drive for public use and emergency vehicles.
2. Construction of a storm water management system per LCDC standards (the site has none).
3. Extension of municipal water to the site (currently private well).
4. Elimination of outdoor storage of scrap metal (current use of south parcel).
5. Elimination of onsite trailer storage (current use of north parcel).

The permitted and specially permitted uses of the PID are the same as the Industrial District. The specially permitted uses of "cement, concrete, gypsum, plaster and nonmetallic mineral products manufacturing" apply to the proposed asphalt plant use. If PID zoning is granted, the applicant must apply for review and approval of a special land use and final PID site plan.

The proposed rezoning to PID is consistent with the Genoa Township Master Plan designation of Primary Growth Area, and Future Land Use map designation of Industrial. The proposed use of an asphalt plant is compatible with the surrounding industrial uses on Victory Lane and Grand Oaks Boulevard, as well as the railway and highway use to the south.

COUNTY PLANNING STAFF RECOMMENDATION:

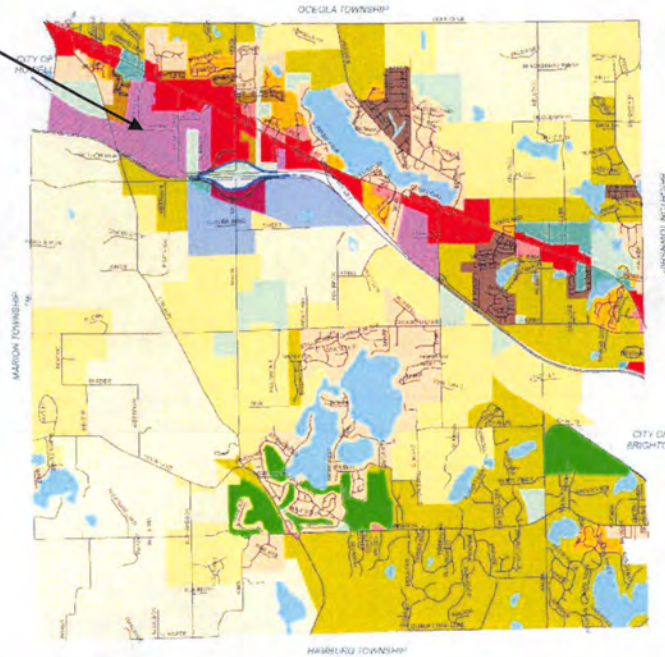
APPROVAL; The proposed rezoning from Industrial to Planned Industrial Development (PID) overlay is compatible with surrounding planning, zoning and current land uses. The proposed asphalt plant is a specially permitted use in PID and the property improvements associated with this development will benefit Genoa Township and the industries of the Victory Lane/ Grand Oaks Boulevard industrial area.

EXISTING LAND USE MAP:



FUTURE LAND USE MAP:

SITE



MAP 7
Future Land Use
Master Plan Update
Genoa Township
Livingston County, MI

- AGRICULTURE/COUNTRY ESTATE - 5 acres per unit
- LARGE LOT RURAL RESIDENTIAL - 2 acres per unit
- LOW DENSITY RESIDENTIAL - 1 acre per unit
- SMALL LOT SINGLE FAMILY RESIDENTIAL - 2 to 3 units per acre
- MEDIUM DENSITY RESIDENTIAL - 5 units per acre
- HIGH DENSITY RESIDENTIAL - 8 units per acre
- MANUFACTURED HOUSING
- NEIGHBORHOOD COMMERCIAL
- GENERAL COMMERCIAL
- REGIONAL COMMERCIAL
- MIXED USE TOWN CENTER
- CHURCH
- INDUSTRIAL
- RECREATION AND DEVELOPMENT
- PUBLIC/INSTITUTIONAL/UTILITIES
- PRIVATE RECREATION
- INTERCHANGE CAMPUS
- INTERCHANGE COMMERCIAL

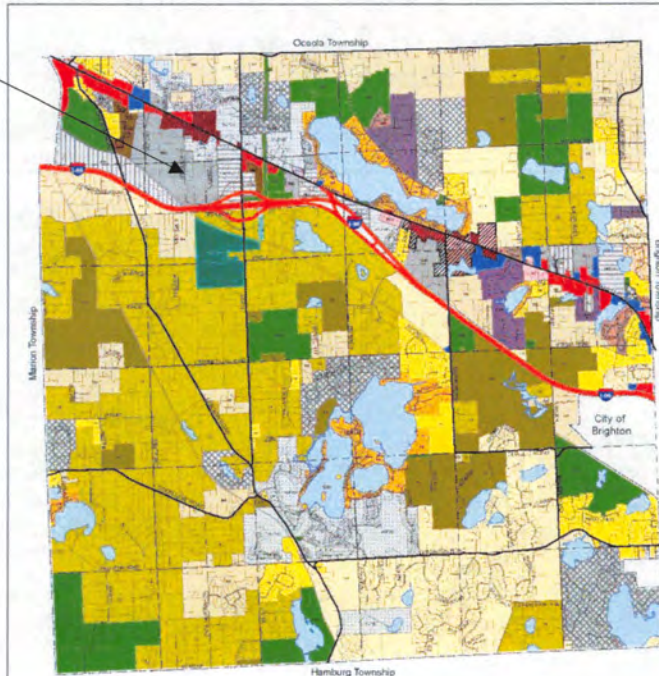
December 2018

Scale: 0 300 600 Feet
Genoa, MI 49735 Livingston County, Genoa, MI

L.S.I. Planning
Livingston County, Michigan

TOWNSHIP ZONING MAP:

SITE

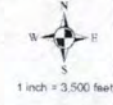


Zoning Map
Genoa Charter Township
Livingston County, Michigan

Legend

AG	GC
CE	NS
RR	OS
LDR	NRPUD
SR	IND
LRR	PID
UR	PRF
MDR	MUPUD
HDR	RDPUD
RPUD	Town Center
MHP	CAPUD
RC	ICPUD

Genoa Charter Township
Livingston County, Michigan
Zoning Ordinance
Chapter 150
Genoa Charter Township
Livingston County, Michigan
Zoning Ordinance
Chapter 150
Genoa Charter Township
Livingston County, Michigan
Zoning Ordinance
Chapter 150



Official Zoning Map
Adopted May 13, 2003; Revised June 4, 2003
Created by L.S.I. Planning
Revised by L.S.I. Planning
Livingston County, Michigan

SITE PHOTOS:



Subject Site



Subject Site



View Looking West from Site



West - Lakeshore Village Apartments



View Looking North from Site



East - ISO on Grand Oaks

MEDIUM DENSITY RESIDENTIAL: This designation primarily refers to moderate-density single-family uses, including single-family homes on existing small lots and some two-family attached condominiums. Areas designated as Medium Density Residential were selected where historic patterns of development near commercial nodes and around many of the lakes in the southern and western portions of the Township have resulted in medium density areas. Other areas of existing moderate density development were also categorized as Medium Density, as well as areas where a transition is needed between lower density areas and multiple-family or neighborhood commercial areas. These areas are expected to be developed at densities of two to three dwelling units per acre, and are generally located within close proximity to major thoroughfares and commercial areas, and where the existence of larger parcels of land that can accommodate this type of development. The majority of the Medium Density Residential areas are found within areas that are served, or may be served by public water and sewer.

County Comprehensive Plan:

The 2018 Livingston County Master Plan does not direct future land use patterns, or development within Livingston County. Alternatively, it offers a county-wide land use perspective when reviewing potential rezoning amendments. The Land Use & Growth Management chapter of the plan includes decision-making recommendations regarding potential land use conflicts and promoting good land governance.

Township Planning Commission Recommendation: Approval. The Brighton Charter Township Planning Commission recommended Approval of this Rezoning at its October 11, 2021 Public Hearing.

Staff Recommendation: Approval. The proposed rezoning is fairly consistent with the Master Plan for the subject parcel and would generally be compatible with the retail/office/service nature of the surrounding area. County Planning concurs with the Township in that the proposed mixed-use PUD offers a benefit to the Township in terms of open space. The PUD also allows for the necessary flexibility needed to efficiently and effectively site the proposed plan within a small, unique parcel.

Commission Discussion: Commissioner Anderson asked if there were lake privileges and the applicant stated there are not. Commissioner Funk asked if the owners are individuals or entities. The applicant stated there are no restrictions to prevent common occupancy of the units. Commissioner Ikle inquired about the limited parking, access, and open space.

Public Comment: Patrick Cleary from Boss Engineering clarified the project for the Commissioners.

Commission Action:

Commissioner Action: IT WAS MOVED BY COMMISSIONER BOWDOIN TO RECOMMEND APPROVAL, SECONDED BY COMMISSIONER ANDERSON.

Motion passed: 6-0

**Yea: Prokuda [X] Ikle [X] Anderson [X] Bowdoin [X] Funk [X] Call [X]
Nay: None.**

E. Z-37-21: GENOA CHARTER TOWNSHIP – REZONING

Current Zoning: IND-Industrial

**Proposed Zoning: PID Planned Industrial Development
Sections 5 & 8**

Township Master Plan:

The Future Land Use Plan of the Genoa Township Master Plan (2013) designates the site as Industrial. The intent of this designation is to develop industrial uses such as research, wholesale and warehouse activities and light industrial operations which manufacture, compound, process, package, assemble and/or treat

finished or semi-finished products from previously prepared material. The processing of raw material for shipment in bulk form, to be used in an industrial operation at another location is found only in very defined and limited portions of this area. The site is also in a designated Primary Growth Area of Genoa Township, along Grand River Avenue/ I-96 corridor between Brighton and Howell. Primary growth areas are currently served or available to be served by public sewer and water. These areas include single family and multiple family residential at higher densities with public water and sewer, commercial centers, industrial parks and mixed-use centers.

County Comprehensive Plan:

The 2018 Livingston County Master Plan does not direct future land use patterns, or development within Livingston County. Alternatively, it offers a county-wide land use perspective when reviewing potential rezoning amendments. The Land Use & Growth Management chapter of the plan includes decision-making recommendations regarding potential land use conflicts and promoting good land governance.

Township Planning Commission Recommendation: Approval. The Genoa Charter Township Planning Commission recommended Approval of this Rezoning at its October 12, 2021 Public Hearing.

Staff Recommendation: Approval. The proposed rezoning from Industrial to Planned Industrial Development (PID) overlay is compatible with surrounding planning, zoning and current land uses. The proposed asphalt plant is a specially permitted use in PID and the property improvements associated with this development will benefit Genoa Township and the industries of the Victory Lane/ Grand Oaks Boulevard industrial area.

Commission Discussion: Commissioner Prokuda inquired about the extra truck traffic.

Public Comment: Wayne Perry of Desine, Inc. responded that paving Toddiem Drive provides access to Grand Oaks Blvd. and the Latson Road interchange of I-96.

Commission Action:

Commissioner Action: IT WAS MOVED BY COMMISSIONER ANDERSON TO RECOMMEND APPROVAL, SECONDED BY COMMISSIONER CALL.

Motion passed: 6-0

Yea: Prokuda [X] Ikle [X] Anderson [X] Bowdoin [X] Funk [X] Call [X]

8. OLD BUSINESS:

- A. Visits to local Planning Commission meetings:** Township PC visits were discussed for Ocoola and Green Oak Townships.
- B. Planning Commission Vacancies:** Interviews went well and resulted in 2 names being forwarded to the Board of Commissioners for consideration – John Belcher and Jason Schrock.

9. NEW BUSINESS

- A. Airport Zoning Board of Appeals – Ikle and Call:** Ikle and Call are both still interested in being on the Airport Zoning Board of Appeals.



**GENOA CHARTER TOWNSHIP APPLICATION
Planned Unit Development (PUD)**

APPLICANT NAME: Net Lease Associates South, LLC and Net Lease Associates North, LLC

APPLICANT EMAIL: jonsawyer@icloud.com

APPLICANT ADDRESS & PHONE: P.O. Box 5467, Saginaw, MI 48605 . (989) 245-6973

OWNER'S NAME: See attached authorization

OWNER ADDRESS & PHONE: See attached . ()

TAX CODE(S): 4711-08-100-009 and 4711-05-303-015

QUALIFYING CONDITIONS (To be filled out by applicant)

1. A PUD zoning classification may be initiated only by a petition.
2. It is desired and requested that the foregoing property be rezoned to the following type of PUD designation:
 - Residential Planned Unit Development (RPUD)
 - X Planned Industrial District (PID)
 - Mixed Use Planned Unit Development (MUPUD)
 - Redevelopment Planned Unit Development (RDPUD)
 - Non-residential Planned Unit Development (NRPUD)
 - Town Center Planned Unit Development (TCPUD)
3. The planned unit development site shall be under the control of one owner or group of owners and shall be capable of being planned and developed as one integral unit.

EXPLAIN The applicants identified above are affiliated entities with the same member owning 100% membership in each company.

4. The site shall have a minimum area of twenty (20) acres of contiguous land, provided such minimum may be reduced by the Township Board as follows:
 - A. The minimum area requirement may be reduced to five (5) acres for sites served by both public water and public sewer.
 - B. The minimum lot area may be waived for sites zoned for commercial use (NSD, GCD or RCD) where the site is occupied by a nonconforming commercial, office or industrial building, all buildings on such site are proposed to be removed and a new use permitted within the underlying zoning district is to be established. The Township Board shall only permit the PUD on the smaller site where it finds that the flexibility in dimensional standards is necessary to allow for innovative design in redeveloping the site and an existing blighted situation will be eliminated. A parallel plan shall be provided showing how the site could be redeveloped without the use of the PUD to allow the Planning Commission to evaluate whether the modifications to dimensional standards are the

minimum necessary to allow redevelopment of the site, while still meeting the spirit and intent of the ordinance.

- C. The PUD site plan shall provide one or more of the following benefits not possible under the standards of another zoning district, as determined by the Planning Commission:
 - preservation of significant natural or historic features
 - a complementary mixture of uses or a variety of housing types
 - common open space for passive or active recreational use
 - mitigation to offset impacts
 - redevelopment of a nonconforming site where creative design can address unique site constraints.

- D. The site shall be served by public sewer and water. The Township may approve a residential PUD that is not served by public sewer or water, provided all lots shall be at least one (1) acre in area and the requirements of the County Health Department shall be met.

Size of property is Approximately 16.2 acres.

DESCRIBE BELOW HOW THE REQUESTED PUD DESIGNATION COMPLIES WITH AFOREMENTIONED MINIMUM LOT SIZE REQUIREMENTS.

See Attachment.

STANDARDS FOR REZONING TO PLANNED UNIT DEVELOPMENT (RESPOND HERE OR WITHIN THE IMPACT STATEMENT)

- 1. How would the PUD be consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subarea or corridor studies. If conditions have changed since the Master Plan was adopted, the consistency with recent development trends in the area;

See Attachment for 1-4.

- 2. The compatibility of all the potential uses in the PUD with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, nature of use, traffic impacts, aesthetics, infrastructure and potential influence on property values;

See Attachment for 1-4.

- 3. The capacity of infrastructure and services sufficient to accommodate the uses permitted in the requested district without compromising the "health, safety and welfare" of the Township;

See Attachment for 1-4.

4. The apparent demand for the types of uses permitted in the PUD;

See Attachment for 1-4.

AFFIDAVIT

The undersigned says that they are the Applicant/Purchaser (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

BY: 

ADDRESS: P.O. Box 5467, Saginaw, MI 48605

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

Abby H. Cooper of Attorney for Applicant at abby@crlaw.biz
Name Business Affiliation E-mail

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

PROJECT NAME: Toddiem/Victory Drive PID

PROJECT LOCATON & DESCRIPTION: Asphalt Manufacturing Plant and Storage on approx. 16.2 acres
located on the NE & SE corner of Toddiem Dr & Victory Dr currently operating as Advance Metal Alloys.

SIGNATURE: 

DATE: August 31, 2021

PRINT NAME: Don Sawyer

PHONE: 989-245-6973

COMPANY NAME & ADDRESS: Net Lease Associates South, LLC & Net Lease Associates North, LLC



GENOA CHARTER TOWNSHIP
Application for Re-Zoning

Net Lease Associates North, LLC, AND

APPLICANT NAME: Net Lease Associates South, LLC ADDRESS: P.O. Box 5467 Saginaw, 48603

OWNER NAME: See attached authorization ADDRESS: See attached

PARCEL #(s): 4711-08-100-009 and 4711-05-303-015 PRIMARY PHONE: 989-245-6973

EMAIL 1: jonsawyer@icloud.com EMAIL 2: _____

We, the undersigned, do hereby respectfully make application to and petition the Township Board to amend the Township Zoning Ordinance and change the zoning map of the township of Genoa as hereinafter requested, and in support of this application, the following facts are shown:

A. REQUIRED SUBMITTAL INFORMATION

1. A legal description and street address of the subject property, together with a map identifying the subject property in relation to surrounding properties;
2. The name, signature and address of the owner of the subject property, a statement of the applicant's interest in the subject property if not the owner in fee simple title, and proof of consent from the property owner;
3. It is desired and requested that the foregoing property be rezoned from:

Industrial to Planned Unit Development (PID)

4. A site plan illustrating existing conditions on the site and adjacent properties; such as woodlands, wetlands, soil conditions, steep slope, drainage patterns, views, existing buildings, sight distance limitations, relationship to other developed sites. and access points in the vicinity;
5. A conceptual plan demonstrating that the site could be developed with representative uses permitted in the requested zoning district meeting requirements for setbacks, wetland buffers access spacing, any requested service drives and other site design factors;
6. A written environmental impact assessment, a map of existing site features as described in Article 18 describing site features and anticipated impacts created by the host of uses permitted in the requested zoning district;
7. A written description of how the requested rezoning meets Sec. 22.04 "Criteria for Amendment of the Official Zoning Map."
8. The property in question shall be staked prior to the Planning Commission Public Hearing.

B. DESCRIBE HOW YOUR REQUESTED RE-ZONING MEETS THE ZONING ORDINANCE CRITERIA FOR AMENDING THE OFFICIAL ZONING MAP:

1. How is the rezoning consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subareas or corridor studies. If not consistent, describe how conditions have changed since the Master Plan was adopted?

See Attachment for 1-8.

2. Are the site's physical, geological, hydrological and other environmental features suitable for the host of uses permitted in the proposed zoning district?

See Attachment for 1-8.

3. Do you have any evidence that a reasonable return on investment cannot be received by developing the property with one (1) of the uses permitted under the current zoning?

See Attachment for 1-8.

4. How would all the potential uses allowed in the proposed zoning district be compatible with surrounding uses and zoning in terms of views, noise, air quality, the environment, density, traffic impacts, drainage and potential influence on property values?

See Attachment for 1-8.

5. Are infrastructure capacity (streets, sanitary sewer, water, and drainage) and services (police and fire protection, etc.) sufficient to accommodate the uses permitted in the requested district?

See Attachment for 1-8.

6. Is there a demonstrated demand in Genoa Township or the surrounding area for the types of uses permitted in the requested zoning district? If yes, explain how this site is better suited for the zoning than others which may be planned or zoned to accommodate the demand.

See Attachment for 1-8.

7. If you have a particular use in mind, is another zoning district more appropriate? Why should the Township re-zone the land rather than amend the list of uses allowed in another zoning district to accommodate your intended use?

See Attachment for 1-8.

8. Describe any deed restrictions which could potentially affect the use of the property.

See Attachment for 1-8.

C. AFFIDAVIT

The undersigned says that they are the Applicant/Purchaser (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

BY: Net Lease Associates South, LLC & Net Lease Associates North, LLC

ADDRESS: P.O. Box 5467, Saginaw, MI 48603

SIGNATURE: 

The following contact should also receive review letters and correspondence:

Name: Abby H. Cooper Email: abby@crlaw.biz

Business Affiliation: Attorney for Applicant

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

PROJECT NAME: Toddiem/Victory Drive PID

PROJECT LOCATON & DESCRIPTION: Asphalt Manufacturing Plant and Storage on approx. 16.2 acres located on the NE & SE corner of Toddiem Dr & Victory Dr currently operating as Advance Metal Alloys.

SIGNATURE: 

DATE: August 31, 2021

PRINT NAME: Jon Sawyer

PHONE: 989-245-6973

COMPANY NAME & ADDRESS: Net Lease Associates South, LLC & Net Lease Associates North, LLC

ATTACHMENT TO RE-ZONING APPLICATION, AUGUST 31, 2021

TODDIEM/VICTORY DRIVE PID

4711-08-100-009 & 4711-05-303-015

B. DESCRIBE HOW YOUR REQUESTED RE-ZONING MEETS THE ZONING ORDINANCE CRITERIA FOR AMENDING THE OFFICIAL ZONING MAP:

1. How is the rezoning consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subareas or corridor studies. If not consistent, describe how conditions have changed since the Master Plan was adopted?

The rezoning request to PID is entirely consistent with the Master Plan. The subject property is currently zoned Industrial and the applicant is seeking a rezoning to PUD for a Planned Industrial Park (PID), which is an overlay district of the Industrial District and includes supplementary standards which apply simultaneously, or replace, standards of the underlying district. Section 10.01.02 explains the purpose of the PID overlay is to provide a “design option to permit flexibility in the regulation of land development;...promote efficient provision of public services and utilities; minimize traffic impacts; and to encourage the use and improvement of existing sites.”

The Future Land Use Map is consistent with the current zoning and likewise identifies the subject property as intended for an “Industrial” use. When a rezoning request is made the Township is directed to reference the “growth boundary” articulated in the Master Plan. Master Plan Executive Summary, p. 2. A “primary growth area” is identified as the area within the Grand River/I-96 corridor and “industrial parks” that are served or available to be served by public sewer and water with adequate buffers from other land uses. Master Plan Executive Summary, pp. 2-3. See also Master Plan, p 5-10.

The subject property is located squarely in the middle of the largest industrial area identified on the Future Land Use Map, surrounding Victory Drive and Grand Oaks Drive, north of the railroad tracks and I-96. The Master Plan indicates this area comprises 200 acres of the 351 acres of developed industrial land in the Township. Master Plan, p. 4-3. No residential uses or planned uses are anywhere nearby on the existing or future land use map.

The Master Plan outlines the importance of infrastructure and public water to service industrial land uses. Master Plan, p. 5-1. The PUD/PID proposal would not only add these improvements for the subject property, but also for industrial owners in this corridor. See outline of benefits in answer to #5, below.

2. Are the site’s physical, geological, hydrological and other environmental features suitable for the host of uses permitted in the proposed zoning district?

Yes, the site is suitable with the added public infrastructure and site improvements proposed by the applicant. See answer to #5, below.

3. Do you have any evidence that a reasonable return on investment cannot be received by developing the property with one (1) of the uses permitted under the current zoning?

The proposed rezoning to PID is an overlay to the current Industrial Zoning. The overlay includes supplementary standards which apply simultaneously, or replace, standards of the underlying district. The overlay is intended to give both the developer and the Township flexibility of design subject to plan approval of the Planning Commission and Township Board. Zoning Ordinance, sect. 10.01.03.

4. How would all the potential uses allowed in the proposed zoning district be compatible with surrounding uses and zoning in terms of views, noise, air quality, the environment, density, traffic impacts, drainage and potential influence on property values?

The site and all surrounding property is zoned Industrial, with any current uses being industrial and industrial use identified for the entire area on the Future Land Use Map. The PUD/PID is an overlay district to the Industrial District allowing the same uses. With the approval of the Rezoning and PUD plan, the subject property will be greatly improved as far as access to public water, drainage, and traffic. No adverse noise or air quality impacts will be experienced by neighbors. The applicant shall be utilizing a state of the art new facility with an advanced air filtration system which meets and exceeds applicable air quality and safety standards. Moreover, this type of use is highly regulated by EGLE including frequent oversight and reporting.

5. Are infrastructure capacity (streets, sanitary sewer, water, and drainage) and services (police and fire protection, etc.) sufficient to accommodate the uses permitted in the requested district?

Approval of the applicant's requests for Rezoning, PUD/PID, and Site Plan, will significantly improve the infrastructure and services utilized by the site and the surrounding industrial neighbors. Currently, the subject property is serviced by a sanitary sewer and a private well. Toddiem Drive is essentially a two-track, unimproved road. The south parcel is currently used as a scrap metal yard, with no storm water management system, and the north parcel is used for outside trailer storage.

As part of its PUD/PID proposal, the applicant is planning to add the following improvements to the subject property and the surrounding industrial area:

- a. Construction and paving of Toddiem Drive per LCRC standards resulting in an improved road between Victory Drive and Grand Oaks Drive for public use and emergency vehicles (currently no link exists between these roads).**

- b. Construction of a storm water management system per LCDC standards (the south site currently does not have any storm water management).**
- c. Extension of municipal water system to the site (existing site is on a private well as well as many other surrounding industrial properties).**
- d. Elimination of outdoor storage of scrap metal (current use of the south parcel).**
- e. Elimination of onsite trailer storage (current use of the north parcel).**

6. Is there a demonstrated demand in Genoa Township or the surrounding area for the types of uses permitted in the requested zoning district? If yes, explain how this site is better suited for the zoning than others which may be planned or zoned to accommodate the demand.

The subject property is planned for this exact use both under the current Zoning Ordinance and in the Master Plan. See answers to #1, #7. There is demand for an asphalt plant in Livingston County, specifically, because the area continues to grow rapidly. MDOT, county road commissions, other governmental agencies, industrial owners, commercial owners, and residential owners all need asphalt. Trucking asphalt in from other counties adds unnecessary cost and delay. It is expensive to move from far away locations and it takes time. Livingston County Road Commission in particular could benefit from the availability and cost savings of having high quality, ready to use asphalt in its own back yard. There is one known asphalt plant in the area on the eastern border of Livingston County off of Kensington Road. Competition can likewise drive down prices.

7. If you have a particular use in mind, is another zoning district more appropriate? Why should the Township re-zone the land rather than amend the list of uses allowed in another zoning district to accommodate your intended use?

As an overlay to the Industrial zoning classification, the PID permits uses that are also permitted in the Industrial District. Zoning Ordinance, sect. 10.03. The current proposed use is allowed in the Industrial District. Table 8.02 provides the following is a permitted use with special approval: *“Cement and concrete product or ready-mix operations requiring elevator storage tanks, conveyors and batching equipment and asphalt batch plant, asphalt mixing, batching or paving plants.”*

8. Describe any deed restrictions which could potentially affect the use of the property.

The applicant is currently in the process of obtaining and reviewing title commitments for the subject property.



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Net Lease Associates South, LLC & Net Lease Associates North, LLC
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: See attached authorization

SITE ADDRESS: 3080 Toddiem Dr. and VL Victory Drive PARCEL #(s) 4711-08-100-009 and 4711-05-303-015

APPLICANT PHONE: (989) 245-6973 OWNER PHONE: (See attached)

OWNER EMAIL: advancemetal@earthlink.net

LOCATION AND BRIEF DESCRIPTION OF SITE: Approximately 16.2 acres located on the NE & SE corner of Toddiem Drive and Victory Drive currently operating as Advance Metal Alloys (metal scrap yard).

BRIEF STATEMENT OF PROPOSED USE: Asphalt manufacturing plant and storage for governmental, commercial, and residential end users.

THE FOLLOWING BUILDINGS ARE PROPOSED: Continued use of existing building, plus additional plant improvements as noted on the conceptual site plan, attached (i.e. storage tanks, scale house, bag house, material feed hopper, and drum mixer).

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: 


ADDRESS: P.O. Box 5467 Saginaw, MI 48603

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1. Abby H. Cooper of Attorney for Applicant at abby@crlaw.biz
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

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SIGNATURE:  DATE: August 31, 2021
PRINT NAME: Jon Sawyer PHONE: 989-245-6973
ADDRESS: P.O. Box 5467 Saginaw, MI 48603

General Factors Supporting the Capital Asphalt Plant – Genoa Township

- General
- Conformance to Comprehensive Plan
- Impact on Neighboring Area and alternatives
- Setbacks
- Market Necessity

General

- There seems to be every reason to approve the application to allow the Capital Asphalt plant on the subject property
- Conditions required by all controlling authorities are met in the application
- That the asphalt industry is heavily environmentally regulated is a positive for the surrounding area. See comments regarding potential site uses for comparison
- Capital Asphalt is a "good neighbor" and has taken every precaution to insure that they pose no threat to the surrounding area in environment or operating conditions
- The Capital plant expands the competition for asphalt supply in the area resulting in an improved competitive environment

Conformity and Impact

- The acceptance of the Capital asphalt plant offers a highly regulated usage positively insuring no environmental threat to the surrounding area
- Other potential alternative uses of the site allow a higher potential for both air quality impacts and for traffic impacts than the proposed plant
- The following slides identify Industrial District allowable uses with the potential for greater, and less regulated, environmental and traffic impacts
- Clearly the asphalt batch plant is less intrusive than many of the allowable Industrial District uses, many of which would not require a public hearing

Discussion of Alternative Uses

- It is not unusual to get public reaction to an asphalt plant being considered in an area – and often this reaction is without consideration of the alternatives to the plant. Objections often include emissions, noise and traffic.
- Asphalt production is heavily regulated by all levels of government. This alone insures a clean and safe environment. Few industries are so heavily regulated. Environmental regulations exist at the local, the state (many agencies) and the federal level all of which require compliance to the highest environmental standards before, during and after operation. Long gone are the days of process or fugitive emissions. And gone are the days of noise impacts to the surrounding area.
- But – if a plant were to not be accepted, what could be put on an industrial site as an alternative? This must be a consideration for objections to an asphalt plant. And what is found is that the alternatives to an asphalt plant allow far more negative impacts than an asphalt plant in either emissions or traffic impacts.

Other potential site uses having potential negative environmental impacts:

Source Genoa Township Zoning Ordinance Table 8.02

- Miscellaneous manufacturing (P)
- Cement, gypsum and nonmetallic minerals manufacturing
- Chemical and allied products manufacturing
- Ready mix concrete operations
- Chemical and paint manufacturing
- Lumber mill
- Metal Work including grinding and cutting
- Wood product manufacturing (P)
- Composting Center

(P) Denotes a use not requiring any special conditions

Potential site uses having high traffic impacts include:
Source Genoa Township Zoning Ordinance Table 8.02

- Bakeries
- Bottling and Packaging
- Food processing
- Print shops
- Truck terminals
- Warehousing establishments
- Vehicle leasing and renting

Setbacks – A practical note

- The application provides for all setbacks as required by existing ordinances. These prescribed setbacks, however, do not fully describe the minimal impact that the plant will have on surrounding area. The actual distances to the existing neighbors' facilities reinforces that there is minimal impact of the proposed plant.
- Distance from Asphalt Plant to:
 - Altec Service Center 970'+
 - Ovidon Manufacturing 940'+
 - Precision Stamping 900'+
 - Michigan Rod Products 750'+

Additionally the distance from the plant site to the closest "sensitive receptor" is over 2000'

Market Area

- Capital Asphalt, as noted, wants to be a good neighbor and to provide its products to the Genoa Area: The site being proposed not only fits proscribed intent of the industrial site, but fits the asphalt supply needs of the area.
- The headquarters and the main asphalt plant of Capital Asphalt is at Lansing. The economic, and in the case of hot mix asphalt also the maximum, distance is approximately 40 miles. The direct distance between the proposed Genoa plant and the Lansing Plant is 40 miles, making the site not only appropriate but also economically excellent.
- The map on the following page shows how the plant can provide proximity service to the areas to the west of Genoa, particularly between Highways 23 and 127 to the north and south
- The Genoa location clearly satisfies a market need.

Conclusion:

- The Capital Asphalt Genoa Plant will meet and exceed all requirements of Genoa Township, other local applicable directives, all state and federal regulations in the application for and construction and operations of the plant.
- Capital Asphalt asserts that the use of the site for an asphalt plant is in keeping with the intent of the Industrial zoning of the site and the PID overlay and that the plant poses no threat to any existing business in the locale of the plant site. Further, the plant is a more environmentally sensitive and responsive use of the site than would be other uses allowed by the Genoa Township Zoning Ordinance.
- Capital Asphalt asserts that the proposed asphalt plant is responsive to market needs and provides a benefit to the area, a real benefit that certainly mitigates and counters any perceived negative externalities of the plant and its operations, of which there appear to be none given the state of restrictive regulation of the industry.
- Capital Asphalt is proud to apply for approval of the PID and the approval of the asphalt plant in Genoa as a benefit to the township and to the community which has no downside but rather provides tangible benefits to the area.



Lakeshore Village
Apartments
Residential

Cleary
University
Cleary University

Proposed Plant Site

Genoa Plant and surroundings showing distances to closest
business, closest residences and Sensite Receptors

Isco Ind.
After Service
Center

Consumers Energy

Hoddiem

Ovidon Eng.

Precision
Stamping

Michigan Rod
Products

Walmart Supercenter

Grider Woods Early
Childhood Preschool

Chilson Rd

Victory Dr

E Grand River Ave

Cleary Dr

Fendit Dr

Latson Rd

S Latson Rd

Grand Oaks Dr

Chilson Meadows

Chilson Rd

Beck Rd

96

96



Sound Data Comparison

Distance	Starjet	Megastar
0 Feet	106-112	94-96
10 Feet	100-106	88-90
20 Feet	94-100	82-85
50 Feet	86-92	74-76
100 Feet	80-86	68-70

Decibel Level Comparison Chart

Environmental Noise	<i>dBA</i>
Jet engine at 100'	140
Pain Begins	<i>125</i>
Pneumatic chipper at ear	120
Chain saw at 3'	110
Power mower	107
Subway train at 200'	95
Walkman on 5/10	94
<i>Level at which sustained exposure may result in hearing loss</i>	<i>80-90</i>
City Traffic	85
Telephone dial tone	80
Chamber music, in a small auditorium	75-85
Vacuum cleaner	75
Normal conversation	60-70
Business Office	60-65
Household refrigerator	55
Suburban area at night	40
Whisper	25
Quiet natural area with no wind	20
Threshold of hearing	0

Note: dBA = Decibels, A weighted

Current Lansing Operation Compared to Our New Facility

	Current	New
0 ft	107	95
10 ft	96	89
20 ft	88	83
50 ft	84	75
100 ft	80	69
Road Side	60	



Fabric Data Sheet

Item: F5070-SLC
 Description: Affinity mARAMID 13.5oz 460gsm self supp SLC (5402)
 Finish: Singed Light 1 Side, Calendared

Properties	Imperial		UNITS	SI		UNITS	TEST METHOD	
	Min	Max		Min	Max			
Fabric Basis Weight:	13	14.1	oz/yd ²	441	478	g/m ²	ASTM D3776	
Thickness	0.070	0.090	in	1.8	2.3	mm	ASTM D1777	
Permeability	25	35	cfm	76	106	L/dm ² /min	ASTM D737	
Mullen Burst	450	*	psi	3103	*	kPa	ASTM D3786	
Tensile Strength	LW:	176	*	lbf	785	*	N	ASTM D5035
	XW:	176	*	lbf	785	*	N	ASTM D5035
Thermal Shrinkage	LW:	Max 1.5				%	15mins @ 204°C / 400°F	
	XW:	Max 1.5				%	15mins @ 204°C / 400°F	

Notes:

Blank Field | Stars means no value applied.
 N/A means not applicable to the product.



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Albarrie Canada Limited
 85 Morrow Road, Barrie,
 Ontario, Canada
 L4N 3V7

www.albarrie.com
 Toll Free: 1-866-269-8275
 Tel: 705-737-0551
 Fax: 705-737-4044

Print. Date: 2021-09-10
 Rev. Date: 2020-08-28

Test protocol

Filter test

customer:	test laboratory:
project:	tester: Hongli Cao
order number:	date of test: 11/15/2010

Filter parameter

test dust: A2	tank pressure: 0.5 MPa
raw gas concentration: 5 g/m ³	valve opening time: 100 ms
air-to-cloth ratio: 180 m ³ /(m ² /h)	temperature: 20 °C
relative air humidity: 50 %	atmospheric pressure: 1013 hPa

Filter medium

manufacturer: ALBARRIE	surface treatment: SL1
model: 5402	batch number:
type of filter:	condition: new
type of fiber: ARAMID	permeability to air at 200 Pa: 2500 m/h
weight of the medium: 496.5 g/m ²	thickness: 2 mm

Test result

test segment	Begin of test	Phase 2	Phase 3	Phase 4
number of cycles	60	-	-	-
cycle duration during aging in s	-	-	-	-
press. drop prior to pulse-jet clean. in Pa	1200	-	-	-
initial pressure drop in Pa	44	-	-	-
residual press. drop of the last cycle in Pa	239.2	-	-	-
test duration in hh:mm	04:46	-	-	-
residual dust in g/m ²	149.72	-	-	-
dust penetration in mg	13.1	-	-	-
clean gas concentration in mg/m ³	1.072	-	-	-

Notes

33.2 cfm @ 125 Pa
 Standard 5402
 Sample from Chris



CAPACITIES

MEGASTAR™ BURNER NATURAL GAS & LIGHT OIL MS-50 – MS-150

MEGASTAR		BURNER MODEL				
GAS SPECIFICATIONS		50	75	100	125	150
Capacity	(MMBTU/hr)	54	89	108	146	166
	(MW)	14.7	24.2	29.3	39.6	45.2
Main Air Flow	(scfh)	636,600	1,050,000	1,270,000	1,720,000	1,960,000
	(nm ³ /hr)	17,100	28,100	34,000	46,100	52,500
Main Air Pressure	(in.w.c.)	14.3	12.6	15.3	13.8	14.5
	(mbar)	35.6	31.3	38.1	34.3	36.1
Gas Flow Rate	(scfh)	52,300	86,200	104,300	141,300	161,000
	(nm ³ /hr)	1,400	2,300	2,800	3,800	4,300
Capacity with Flue Gas Recirc	(MMBTU/hr)	40.5	62	82	103	124
	(MW)	11.0	16.8	22.2	27.9	33.6
Flame Length @ 30° Spin	(ft)	12	14	9	11	15
	(m)	3.7	4.1	2.7	3.4	4.6
Flame Diameter @ 30° Spin	(ft)	4	7	5	8	7
	(m)	1.2	2.0	1.5	2.4	2.1

MEGASTAR		BURNER MODEL				
LIGHT OIL SPECIFICATIONS		50	75	100	125	150
Capacity	(MMBTU/hr)	53	82	100	135	153
	(MW)	14.3	22.3	27.2	36.5	41.5
Main Air Flow	(scfh)	643,300	1,030,000	1,270,000	1,720,000	1,960,000
	(nm ³ /hr)	17,200	27,600	34,000	46,100	52,500
Main Air Pressure	(in.w.c.)	14.3	12.0	16.2	13.7	144.0
	(mbar)	35.6	29.9	40.3	34.1	358.3
Primary Air Flow	(scfh)	46,500	46,500	46,500	46,500	46,500
	(nm ³ /hr)	1,200	1,200	1,200	1,200	1,200
Primary Air Pressure	(in.w.c.)	62	62	62	62	62
	(mbar)	154	154	154	154	154
Oil Flow Rate	(gal)	370	580	710	950	1,080
	(lph)	1,400	2,200	2,690	3,600	4,090
Flame Length @ 30° Spin	(ft)	10	12	12	10	12
	(m)	3.1	3.7	3.7	3.1	3.7
Flame Diameter @ 30° Spin	(ft)	4	5	5	4	5
	(m)	1.2	1.5	1.5	1.2	1.5

(Application Notes on Reverse Side)

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62 **MS-2**

6

Asphalt Application Notes:

1. Burner capacity is based on 60Hz power and scfh (nm^3/hr) 60°F (0°C) air at sea level. Correction factors must be applied for variations in altitude, temperature, or frequency; consult Hauck. An altitude correction table is available in Hauck Application Sheet GJ75.
2. Natural gas capacities based on higher heating value of 1,034 Btu per cubic foot (lower heating value of 36.74 MJ/ nm^3), 2-4 psig (138 – 276 mbar) manifold pressure, 25% excess air, and stoichiometric ratio of 9.74:1.
3. No. 2 fuel oil capacities based on higher heating value of 141,146 Btu per gallon (lower heating value of 36.99 MJ/liter), 35% excess air, and stoichiometric ratio of 1371.1 cubic feet air/gallon of No. 2 oil (9.7 nm^3 air/liter).
4. Liquid propane capacities based on higher heating value of 90,912 Btu per gallon (lower heating value of 23.83 MJ/liter), 35% excess air, and stoichiometric ratio of 864 cubic feet air/gallon of liquid propane (6.1 nm^3 air/liter).
5. The exhaust fan must be able to provide a slight negative pressure, suction in the range of 0.25 to 1" wc (.6 to 2.5 mbar), at the burner breech plate to exhaust the products of combustion.
6. MegaStar™ Burner airflow can be accurately monitored using the body pressure tap on either side of the burner air plenum. An accurate device capable of reading up to 15" wc (75 mbar) will be required for this measurement.
7. All burner fuel manifolds are supplied with fuel flow measuring devices. Liquid fuel manifolds are equipped with an inline flow meter. Gaseous fuel manifolds are equipped with a gas orifice meter that can be accurately checked for gas flow by measuring the differential pressure across the orifice meter with a U-tube device (manometer) capable of reading in the range of 0 to 20"wc (0 to 50 mbar).
8. Low pressure atomizing air, used for firing low pressure fuel oil or LP, is provided by a 36 osi (155 mbar) Hauck high efficiency Turbo Blower. The low pressure air is used to not only atomize liquid fuels, but also improve mixing speed in the combustion zone.
9. High pressure compressed air, used for firing heavy oils or any fuel oil at high elevations, must be supplied by the customer at a nominal 60 psig (4140 mbar) to the burner nozzle for optimum fuel oil atomization.



CAPACITIES

MEGASTAR™ BURNER LIQUID PROPANE & COMPRESSED AIR MS-50 – MS-150

MEGASTAR		BURNER MODEL				
LIQUID PROPANE SPECIFICATIONS		50	75	100	125	150
Capacity	(MMBTU/hr)	P e n d i n g	80	97	128	145
	(MW)		21.7	26.4	34.6	39.3
Main Air Flow	(scfh)		980,000	1,200,000	1,590,000	1,810,000
	(nm ³ /hr)		26,300	32,100	42,600	48,500
Main Air Pressure	(in.w.c.)		12.8	18.5	15.0	18.3
	(mbar)		31.8	46.0	37.3	45.5
Primary Air Flow	(scfh)		46,500	46,500	46,500	46,500
	(nm ³ /hr)		1,200	1,200	1,200	1,200
Primary Air Pressure	(in.w.c.)		62	62	62	62
	(mbar)		154	154	154	154
Propane Flow Rate	(gal)	880	1,070	1,400	1,590	
	(lph)	3,330	4,050	5,300	6,020	
Flame Length @ 30° Spin	(ft)	14	15	13	15	
	(m)	4.3	4.6	4.0	4.6	
Flame Diameter @ 30° Spin	(ft)	5	5	6	6	
	(m)	1.5	1.5	1.8	1.8	

MEGASTAR		BURNER MODEL				
COMPRESSED AIR SPECIFICATIONS		50	75	100	125	150
Capacity	(MMBTU/hr)	N o t A v a i l a b l e	79	100	130	150
	(MW)		21.4	27.2	35.3	40.7
Main Air Flow	(scfh)		1,030,000	1,310,000	1,700,000	1,960,000
	(nm ³ /hr)		27,600	35,100	45,500	52,500
Main Air Pressure	(in.w.c.)		12.0	16.2	13.2	14.4
	(mbar)		29.9	40.3	32.8	35.8
Compressed Air Flow	(scfh)		3,600	3,600	5,400	5,400
	(nm ³ /hr)		100	100	100	100
Compressed Air Pressure	(psig)		60	60	60	60
	(bar)		4	4	4	4
Oil Flow Rate	(gal)	560	710	920	1,060	
	(lph)	2,120	2,690	3,480	4,010	
Flame Length @ 30° Spin	(ft)	9	9	10	10	
	(m)	2.7	2.7	3.1	3.1	
Flame Diameter @ 30° Spin	(ft)	5	5	5	5	
	(m)	1.5	1.5	1.5	1.5	

(Application Notes on Reverse Side)

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64 **MS-2.1**

8

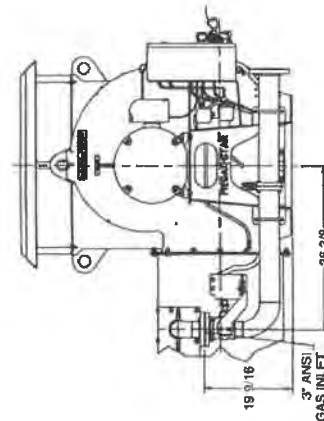
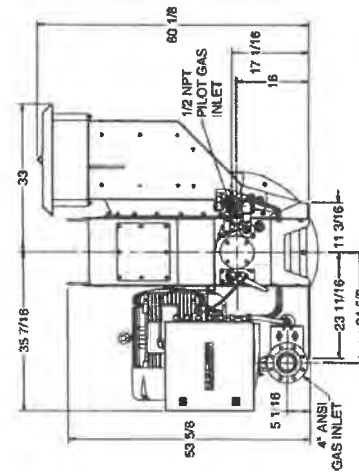
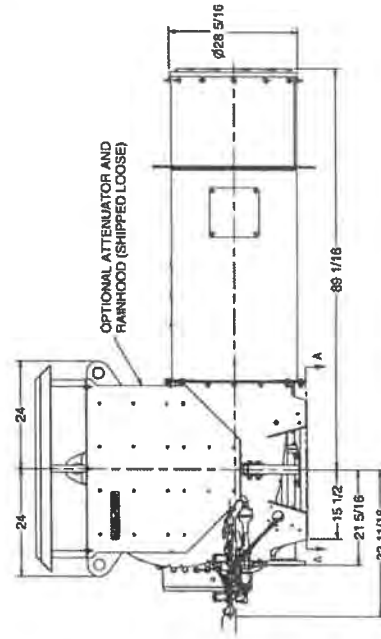
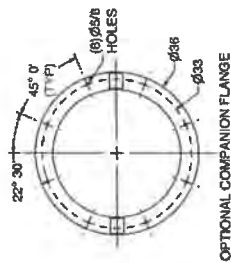
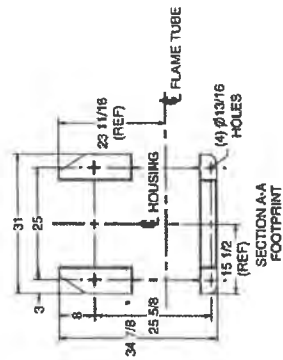
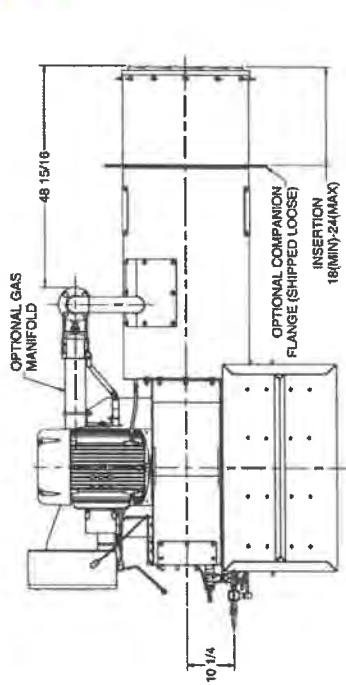
Asphalt Application Notes:

1. Burner capacity is based on 60Hz power and scfh (nm^3/hr) 60°F (0°C) air at sea level. Correction factors must be applied for variations in altitude, temperature, or frequency; consult Hauck. An altitude correction table is available in Hauck Application Sheet GJ75.
2. Natural gas capacities based on higher heating value of 1,034 Btu per cubic foot (lower heating value of 36.74 MJ/ nm^3), 2-4 psig (138 – 276 mbar) manifold pressure, 25% excess air, and stoichiometric ratio of 9.74:1.
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DIMENSIONS

MEGASTAR™ / GAS MANIFOLD MS-50



Y8947 Sht. 1
(NOT TO SCALE)

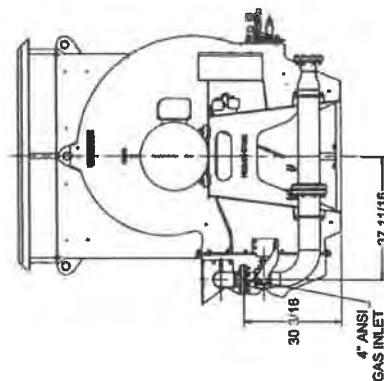
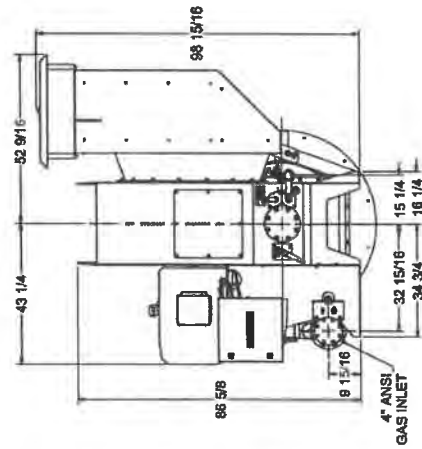
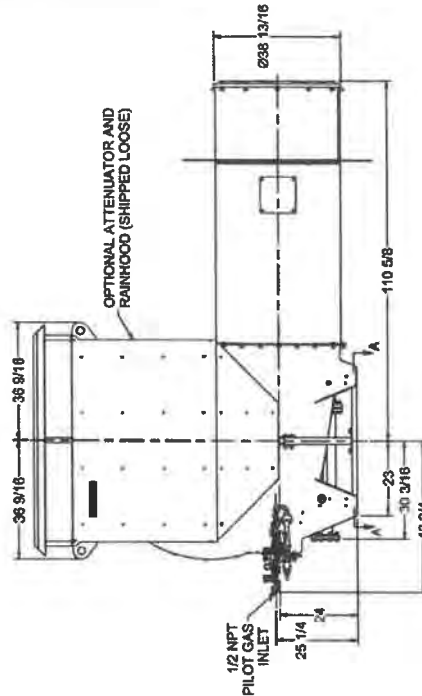
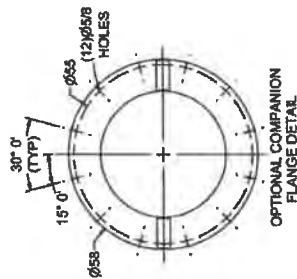
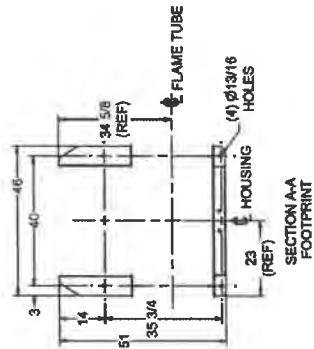
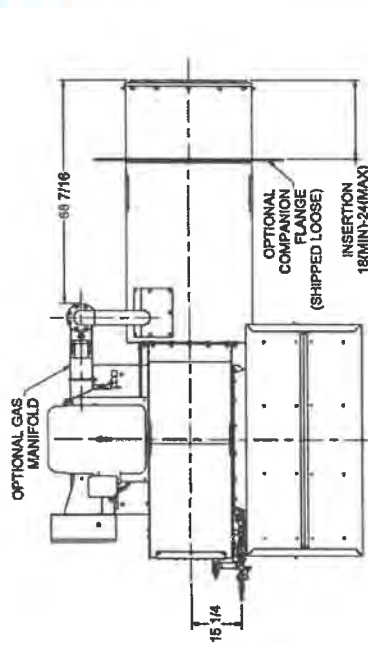
In accordance with Hauck's commitment to Total Quality Improvement, Hauck reserves the right to change the specifications of products without prior notice.

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DIMENSIONS

MEGASTAR™ / GAS MANIFOLD MS-75



Y8998 Sht. 1
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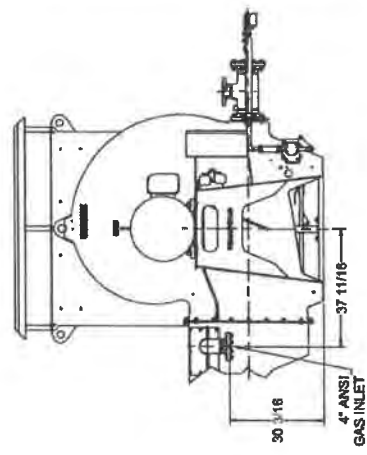
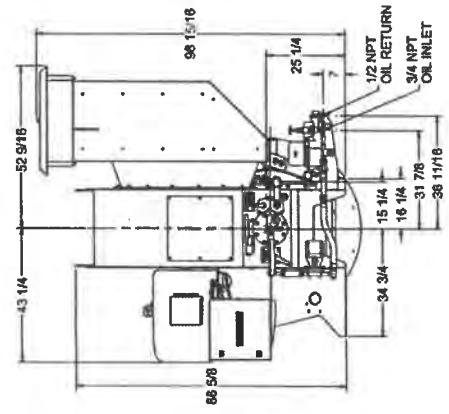
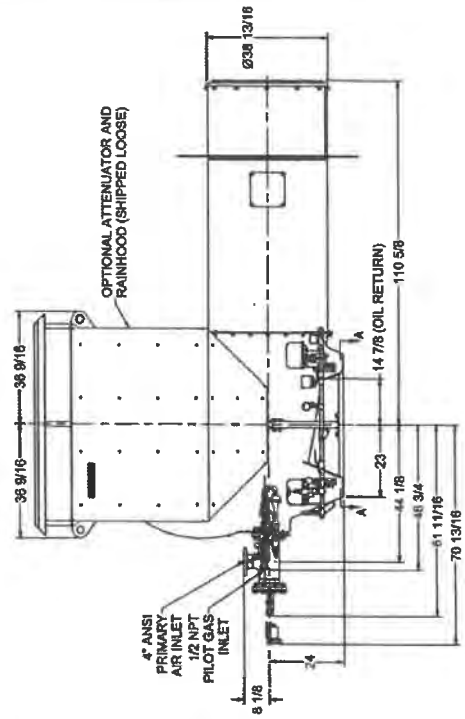
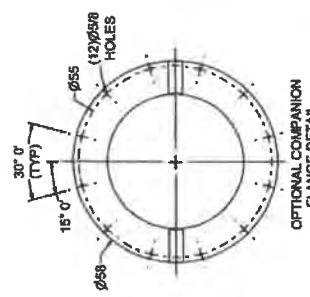
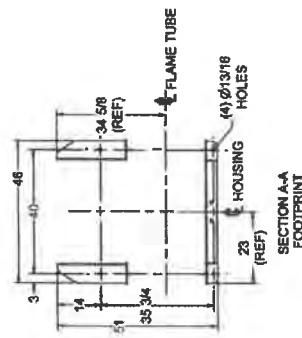
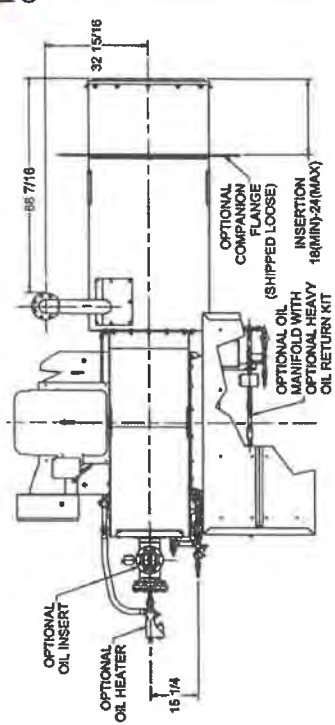
68 MS-3.2

12



DIMENSIONS

MEGASTAR™ / OIL MANIFOLD MS-75



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(NOT TO SCALE)

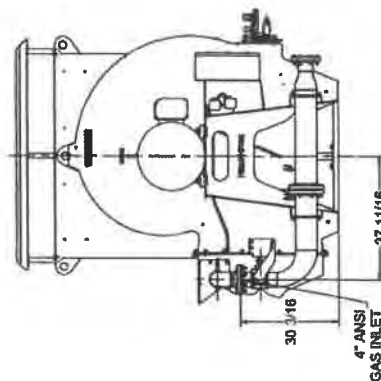
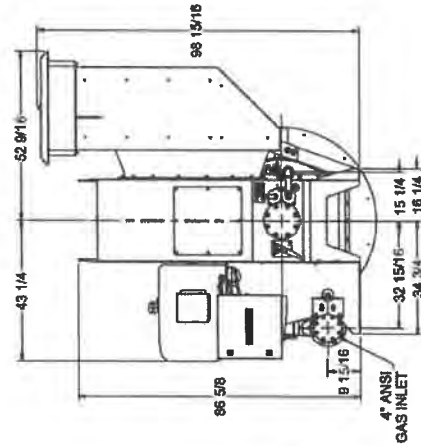
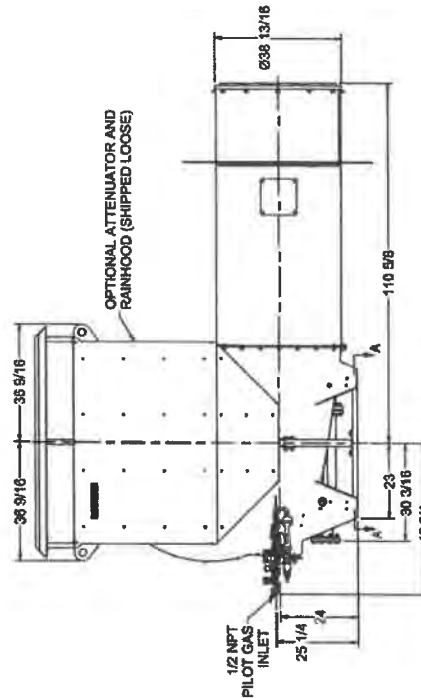
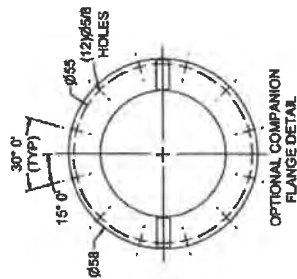
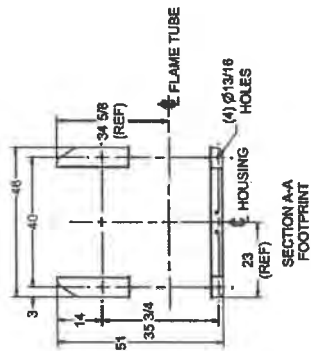
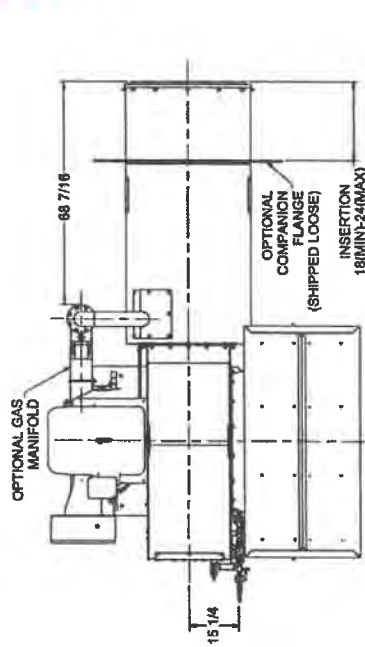
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DIMENSIONS

MEGASTAR™ / GAS MANIFOLD MS-100



Y8998 Sht. 1
(NOT TO SCALE)

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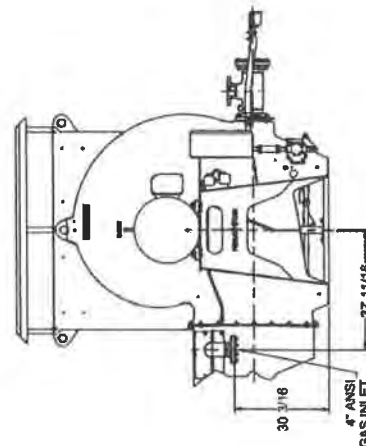
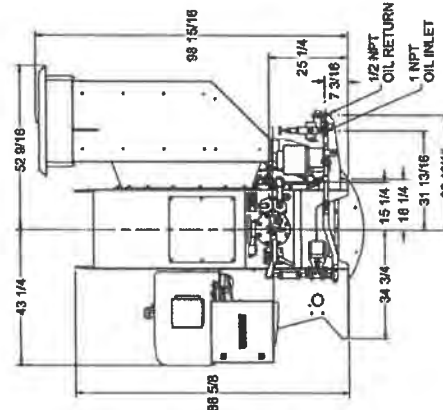
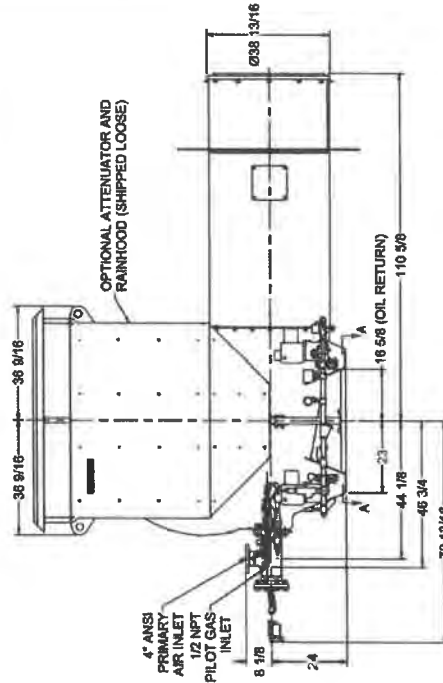
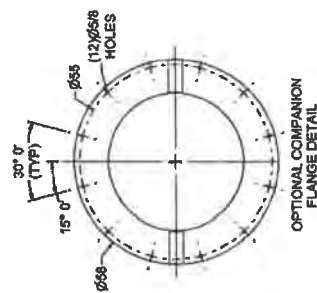
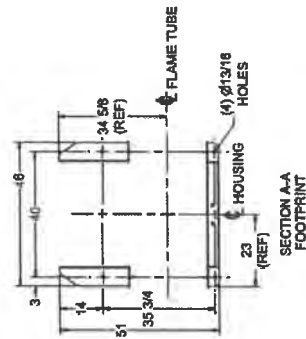
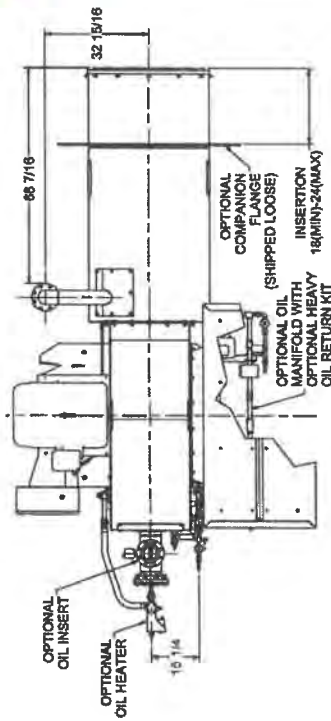
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124



DIMENSIONS

MEGASTAR™ / OIL MANIFOLD MS-100



Y8998 Sht. 3
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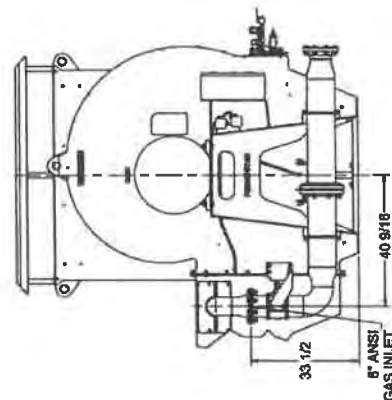
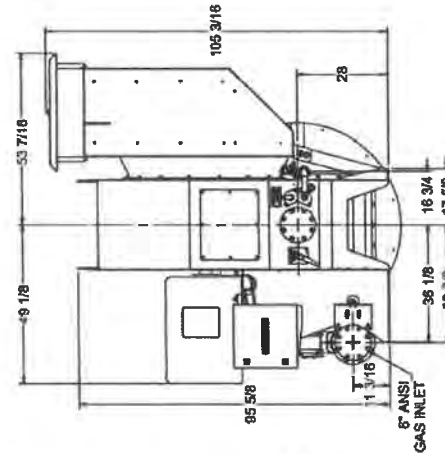
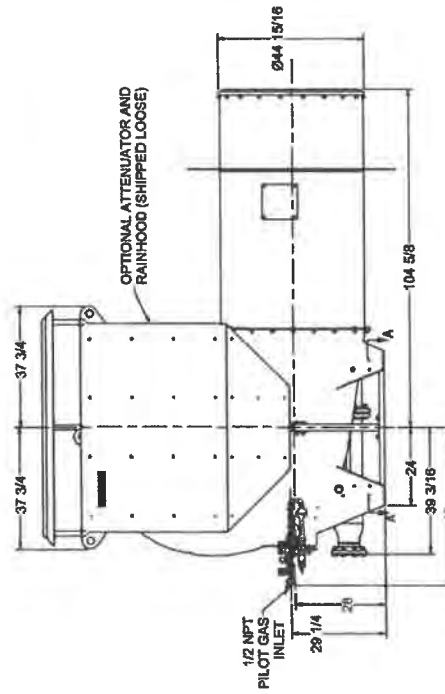
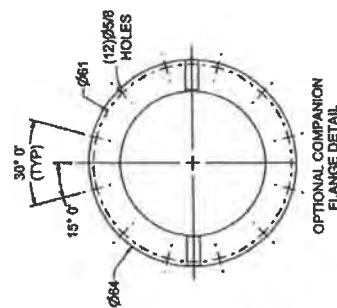
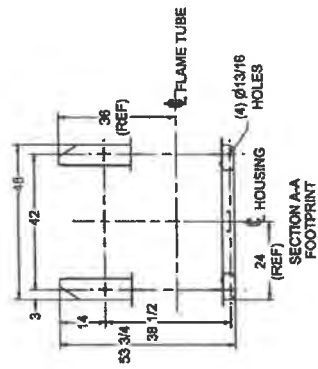
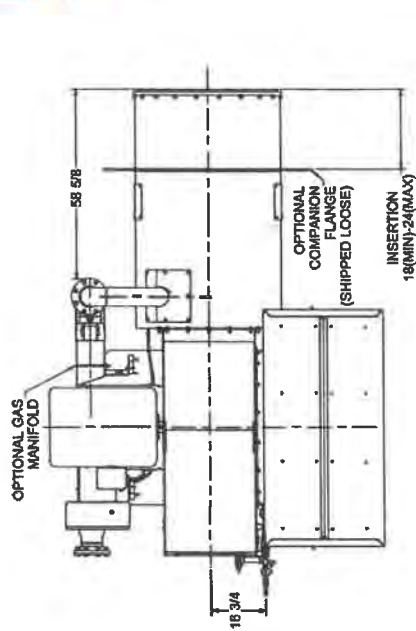
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DIMENSIONS

MEGASTAR™ / GAS MANIFOLD MS-125 & 150



Y9004 Sht. 1
(NOT TO SCALE)

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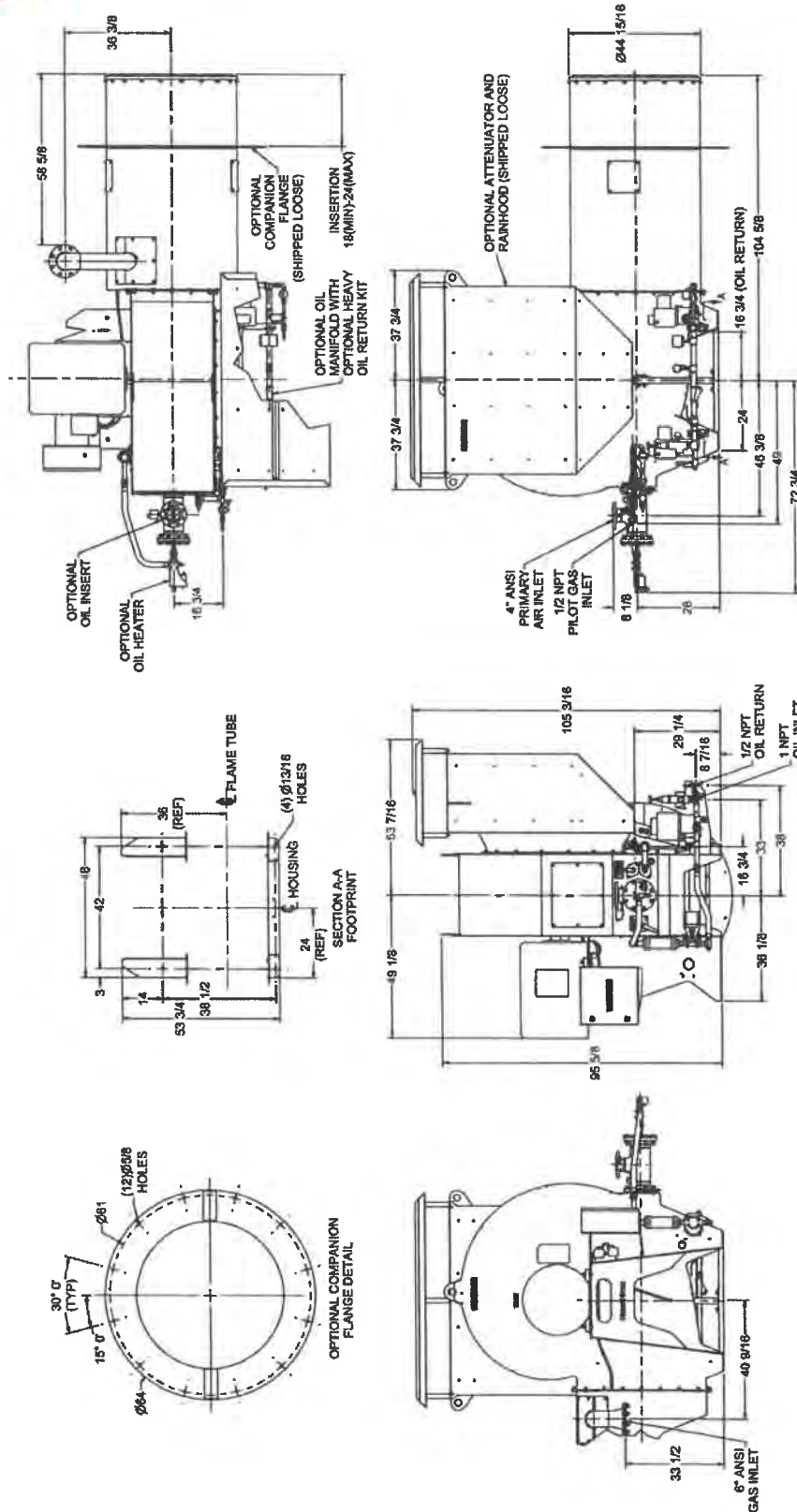
72 MS-3.6

16



DIMENSIONS

MEGASTAR™ / OIL MANIFOLD MS-125 & MS-150



Y9004 Sht. 2
(NOT TO SCALE)

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SUPPLEMENTAL DATA

**MEGASTAR™ BURNER
ORDERING INFORMATION**

	<u>MS</u>	<u>50-</u>	<u>O-</u>	<u>H-</u>	<u>C-</u>	<u>LO-</u>	<u>R-</u>	<u>H</u>
Burner Type MegaStar								
Size 50 75 100 125 150								
Fan O – ODP T – TEFC								
VFD H – Hauck Supplied X – Not Supplied								
Fuel Manifold G – Gas C – Combination O – Oil/LP Only								
Combination Fuel LO – Low Pressure Oil CA – Compressed Air/Oil LP – Liquid Propane XX – Gas Manifold								
Oil Return Kit R – Oil Return Kit X – Not Supplied								
Insert Heater H – Heater X – Not Supplied								

18

Test protocol

Filter test according to VDI 3926 Part 1

customer:	test laboratory:
project:	tester: Hongli Cao
order number:	date of test: 11/15/2010

Filter parameter

test dust: A2	cycle duration during aging: 5 s
raw gas concentration: 5 g/m ³	tank pressure: 0.5 MPa
face velocity: 180 m/h	valve opening time: 100 ms
press. drop prior to pulse-jet cleaning: 1200 Pa	temperature: 20 °C
relative air humidity: 50 %	atmospheric pressure: 1013 hPa
test procedure in cycles: 60 (aging)	

Filter medium

manufacturer: ALBARRIE	surface treatment: SL1
model: 5402	batch number:
type of filter:	condition: new
type of fiber: ARAMID	permeability to air at 200 Pa: 2500 m/h
weight of the medium: 496.5 g/m ²	thickness: 2 mm

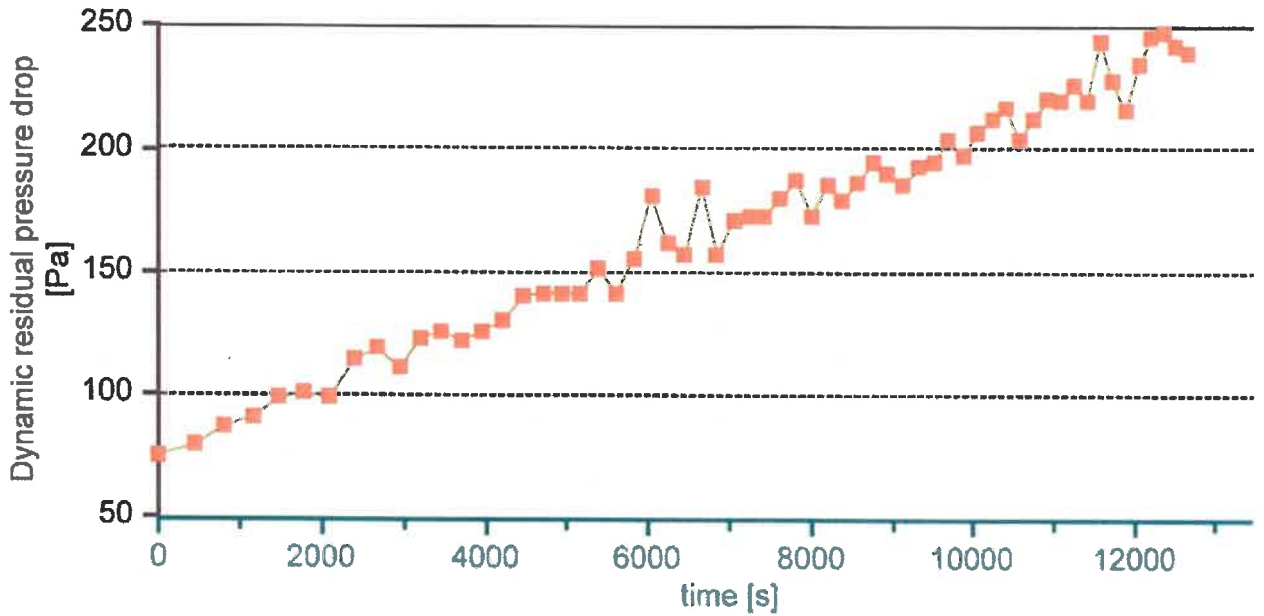
Test result

experimental stage/cycle	0	60	Aging: 0 pulses cleaning	0	-
residual pressure drop in Pa	44	239.2		-	-
residual dust in g/m ²	0	149.72		-	-
cycle duration in s	-	162		-	-
test segment	first 60 Zyklen			-	
dust penetration in mg	13.1			-	
test duration in hh:mm	04:47			-	
clean gas concentration in mg/m ³	1.072			-	

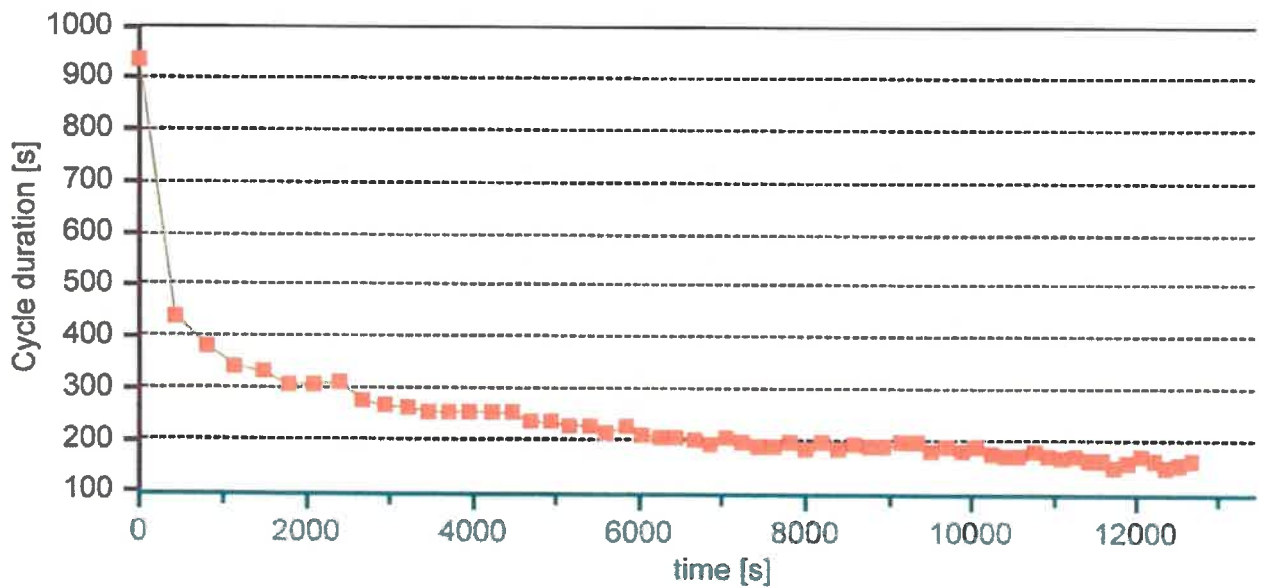
Notes
 33.2 cfm @ 125 Pa
 Standard 5402
 Sample from Chris

Graphical representation of the test results, Medium: 5402

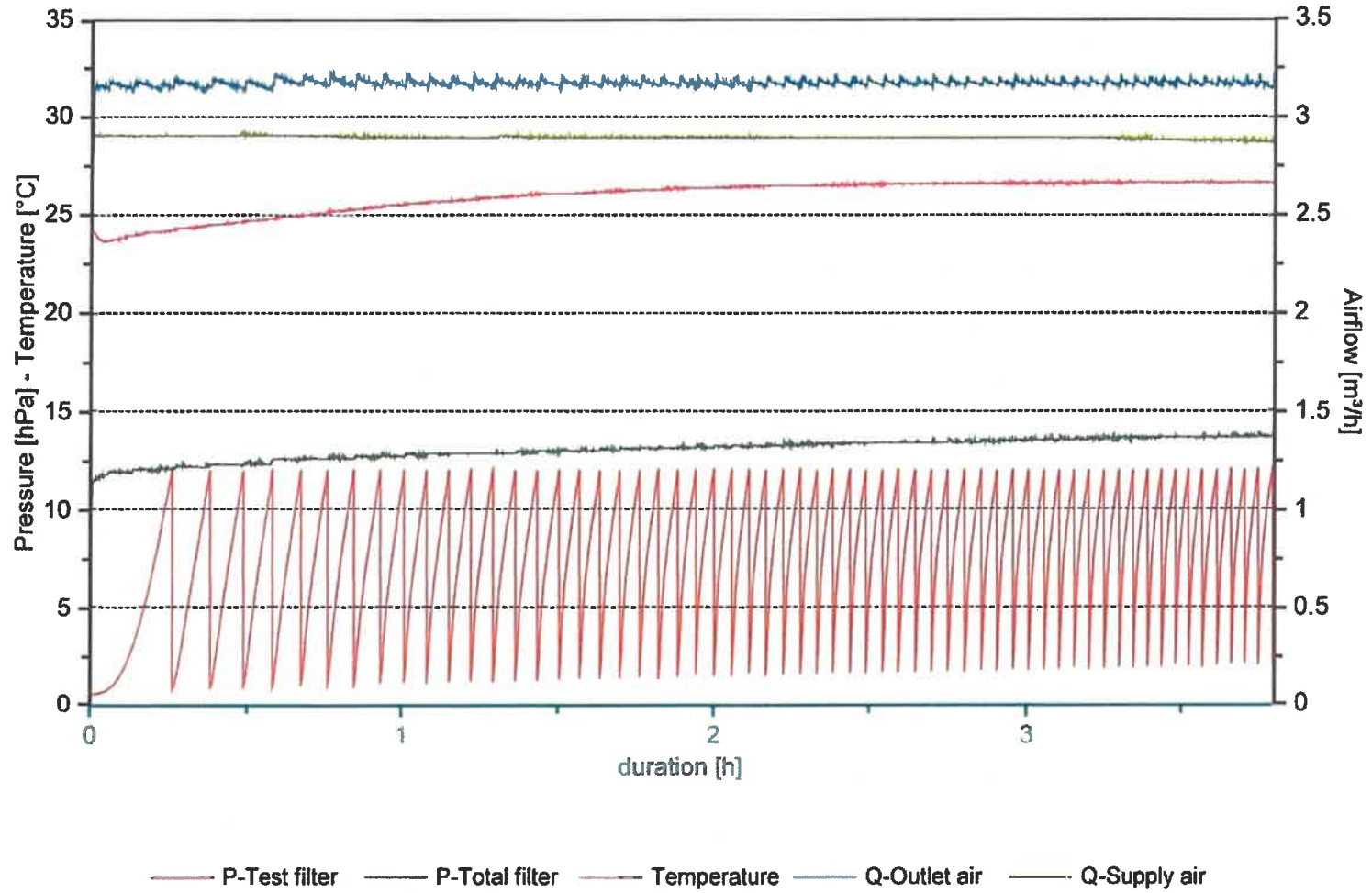
Course of dynamic residual pressure drop



Cycle duration



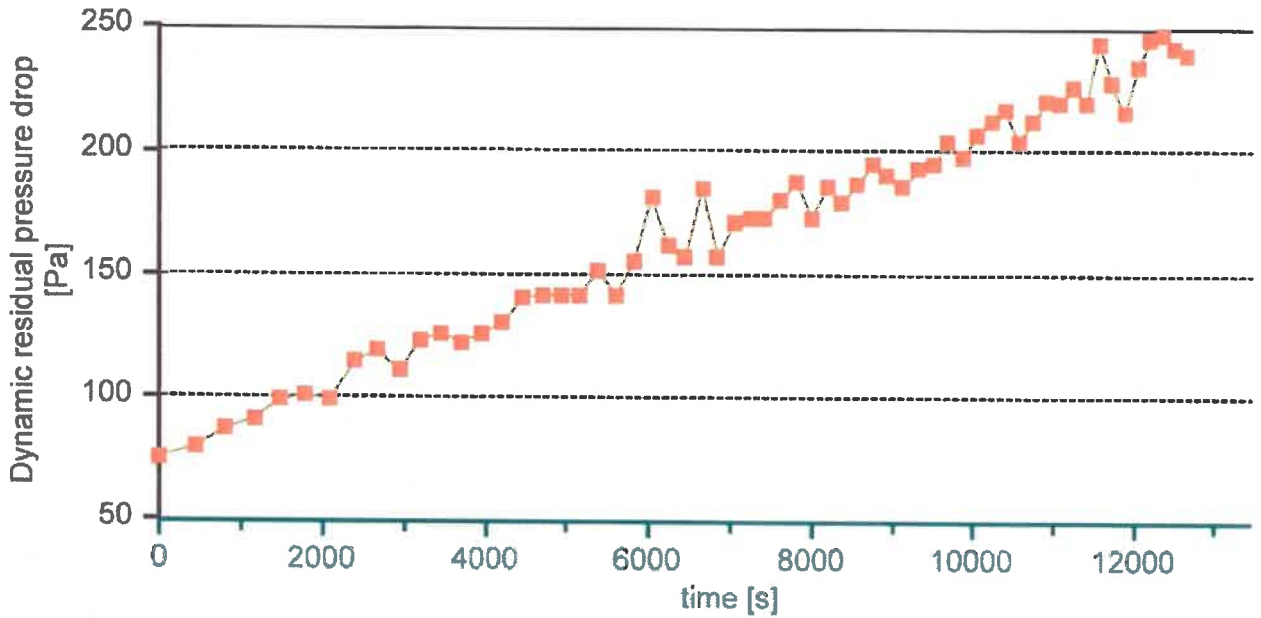
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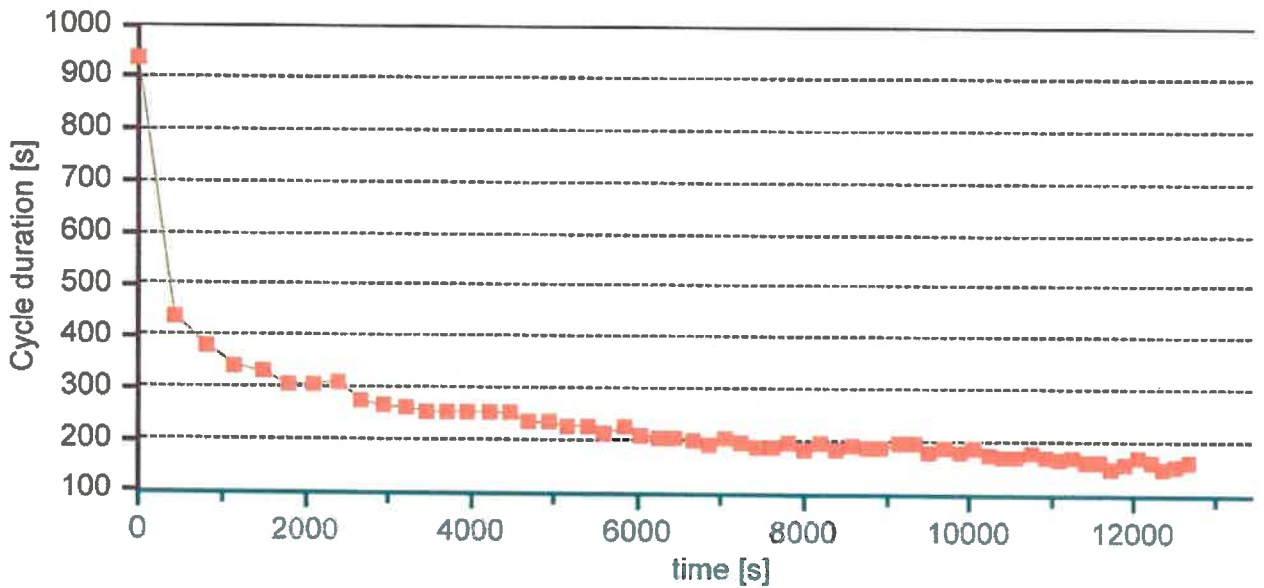
21

Graphical representation of the test results

Course of dynamic residual pressure drop



Cycle duration





69

AERIAL CAPITAL LANSING

S Canal Rd

S Canal Rd

Capital Asphalt LLC Capital Asphalt



79

MISC ASPHALT USE PHOTOS























October 5, 2021

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
Subject:	Toddiem-Victory Drive PID – PID Review #2
Location:	Southerly terminus of Victory Drive, at the intersection with Toddiem Drive
Zoning:	IND Industrial District

Dear Commissioners:

At the Township’s request, we have reviewed the proposed rezoning, conceptual site plan (most recently dated 9/21/21), draft PUD Agreement and associated Impact Assessment (dated September 1, 2021).

The 16.2-acre site is comprised of 2 parcels separated by Toddiem Drive, and currently contains a 15,040 square foot industrial building (that is to remain). The site and surrounding properties are zoned IND.

We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance.

A. Summary

1. The proposal generally meets the Planned Unit Development (PUD) qualifying conditions, provided the following are addressed:
 - a. the Township authorizes a reduction in the conventional lot area requirement;
 - b. the applicant extends public water to serve the site; and
 - c. the applicant addresses any concerns raised by the Township Engineer, Utilities Director or Fire Authority.
2. Rezoning to the PID overlay is consistent with the Master Plan and Future Land Use Map, and generally meets the rezoning criteria for a PUD.
3. The applicant seeks deviations via the PUD for building/structure height and materials, as well as from use requirements related to roadway access for an asphalt plant, and size of storage tanks for fuel.
4. If approval is granted, the applicant will need to apply for review and approval of special land uses and a final PID site plan. A PIP Plan will also be required.
5. The parking calculations note that 23 spaces are provided, though the plan depicts only 19.
6. The final site plan submittal must include a full lighting plan.
7. There are discrepancies between the landscape plan and planting table with respect to quantities.
8. We suggest the Township require tree protection fencing around the dripline of areas to be protected during construction activities.
9. The applicant requests deviations from Buffer Zone “B” requirements in multiple locations due to existing site conditions (existing wooded areas, adjacency to a railroad, and significant topographic changes).
10. The applicant must address any concerns raised by the Township Engineer, Utilities Director or Brighton Area Fire Department.



Aerial view of site and surroundings (looking north)

B. Proposal

The applicant requests establishment of a Planned Industrial Development (PID) for the subject site. The proposal is for a new asphalt production plant, including multiple buildings and structures, as well as outdoor storage of materials. As previously noted, the existing 15,040 square foot building on the south side of Toddiem Drive will remain.

C. Process

The review and approval process is outlined below. The applicant is at Step 1 in the process.

1. The Township Planning Commission makes a recommendation to the Township Board on the rezoning (PID overlay), conceptual PUD plan, draft PUD Agreement and Environmental Impact Assessment following a public hearing.
2. The County Planning Commission reviews the rezoning and provides comments for consideration by the Township Board.
3. The Township Board acts on the rezoning, conceptual PUD plan, PUD Agreement and Impact Assessment.

D. PUD Qualifying Conditions

Section 10.02 identifies the following qualification requirements for all planned unit developments, including the PID overlay:

1. **Single Ownership.** The material submitted states that the site will be owned by affiliated entities under the same ownership – Net Lease Associates South, LLC and Net Lease Associates North, LLC.
2. **Initiated by Petition.** The request has been properly initiated by the submittal of applications for rezoning, PUD qualification, and Site Plan Review.
3. **Minimum Site Area.** The minimum lot area to qualify for a PUD is 20 acres; however, the Township Board may reduce this standard for sites served by both public water and sanitary sewer.

The 16.2-acre subject site is served by public sanitary sewer, and the project includes an extension of public water. As such, the Township may allow establishment of a PUD on this site.

4. **Benefits.** The PUD site plan shall provide one or more of the following benefits not possible under the standards of conventional zoning, as determined by the Planning Commission:

- preservation of significant natural or historic features;
- a complementary mixture of uses or a variety of housing types;
- common open space for passive or active recreational use;
- mitigation to offset impacts; or,
- redevelopment of a nonconforming site where creative design can address unique site constraints.

As outlined in the application materials, as part of this project the applicant will:

- construct and pave Toddiem Drive to County standards, which will provide an actual roadway connection between Victory Drive and Grand Oaks Drive;
- construct necessary stormwater improvements, per County standards;
- extend municipal water to the subject site; and
- clean the site of outdoor scrap metal and trailer storage.

5. **Sewer and Water.** As noted above, the project includes extension of public water to the subject site.

It is our understanding the site already has access to public sanitary sewer; however, we defer to the Township Engineer for any technical comments under this criterion.

6. **Rezoning Standards.**

a. **How is the rezoning consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subareas or corridor studies. If not consistent, describe how conditions have changed since the Master Plan was adopted.**

The Master Plan identifies the site and surrounding area as Industrial. The subject site is also within a Primary Growth Area of the Township's Growth Boundary given its access to infrastructure.

The PID overlay allows the same uses as the IND and OSD, and use of the PID allows the Township and applicant to negotiate a PUD Agreement with specific uses included (or excluded), as well as design considerations (on and off site) to help mitigate any potential impacts.

Furthermore, the infrastructure improvements proposed as part of this PID (roadway construction/connection, and water extension) are consistent with the growth boundary and development goals.

b. **The compatibility of all the potential uses in the PUD with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, nature of uses, traffic impacts, aesthetics, infrastructure, and potential influence on property values.**

The subject site and surrounding properties are currently zoned IND. Use of the PID overlay keeps these uses in place (and also allows OSD uses) for the subject site. As such, the current host of allowable uses versus those allowed upon PID rezoning (if granted) are essentially the same; thus, we find them compatible.

The specific proposal is for an asphalt plant, which is allowed as a special land use in the IND.

If PID rezoning is granted, and the concept plan is approved, the applicant may apply for special land use and final site plan review of the project.

At that time, the special land use standards of Section 19.03, and the use requirements of Section 8.02.02(a) (asphalt plant) and 13.07 (storage of fuel/hazardous substances) will be applied to ensure compatibility of the use.

Based on a cursory review of these requirements, Section 8.02.02(a) requires that outdoor storage meet setback requirements, a Buffer Zone “B” be provided along all lot lines (including the road frontages), and all means of access be from a County Primary roadway with at least 86 feet of right-of-way. The roadway standard is not met, though the applicant requests to deviate from this requirement via the PUD.

Additionally, Section 13.07 provides size limits on fuel/hazardous materials storage, requires a Pollution Incident Prevention (PIP) plan, and requires permits from all applicable outside agencies.

The submittal notes that a PIP plan will be provided with final site plan submittal, while the revised submittal requests to deviate from the allowable size for above ground storage tanks.

c. The capacity of infrastructure and services sufficient to accommodate the uses permitted in the requested district without compromising the “health, safety, and welfare” of the Township.

As previously noted, the site has access to public sanitary sewer, while an extension is proposed to bring public water to the site.

The project also includes improvement to Toddiem Drive, such that a roadway up to County standards will now connect Victory Drive and Grand Oaks Drive, which are two of the primary roadways in the area designated for industrial uses.

Any concerns noted by the Township Engineer, Utilities Director or the Brighton Area Fire Authority under this criterion must be addressed.

d. The apparent demand for the types of uses permitted in the PUD.

The submittal materials identify a need for this use within the County due to continued growth, and the need for infrastructure improvements. The materials note only one known existing asphalt plant elsewhere in the County.

Furthermore, the materials describe the increased costs and time associated with trucking asphalt in from outside of the area.

E. Conceptual PUD Site Plan Review

1. PID Standards:

a. Dimensional standards. Use of the PID overlay requires compliance with the minimum dimensional standards of the IND.

The site data table on the conceptual PUD plan demonstrates compliance with these standards, including setbacks and lot coverage (both by buildings and impervious surfaces).

The only item in need of consideration for a dimensional deviation via this PID is the maximum building height. The IND allows buildings and structures up to 30 feet in height; however, the draft PUD Agreement seeks to allow buildings and structures up to a height of 86 feet.

b. Lot areas. The PID overlay requires lots of not less than 2 acres in area for future development. The two parcels that comprise the subject site both exceed this standard.

While not anticipated at this time, the applicant should be aware that any future division of land shall result in lots of not less than 2 acres in area.

c. Design standards. The conceptual PUD plan includes a landscape plan depicting new trees along Toddiem Drive, and within the property itself.

By Ordinance, buildings are to be comprised primarily of masonry materials with a 25% limitation on metal paneling and plain CMU.

The draft PUD Agreement requests deviations from the building material standards for the existing building and proposed asphalt plant buildings and structures.

- 2. Vehicular Circulation.** Existing vehicular access is provided via Victory Drive and unimproved Toddiem Drive. As previously noted, the project includes improving this roadway to County standards.

The conceptual site plan depicts two access points to the north and south sides via improved Toddiem Drive.

The main driveways and internal drive aisles meet or exceed dimensional standards (24' wide minimum).

The applicant must address any concerns/comments raised by the Township Engineer or Brighton Area Fire Authority.

- 3. Parking.** The conceptual site plan includes 19 parking spaces, though the parking calculations provided note the need for 23.

The parking spaces are double striped, and drive aisles and parking spaces will all be paved, per Ordinance requirements; however, we are unable to locate the 4 additional spaces noted.

- 4. Lighting.** The submittal does not include any details regarding exterior site lighting.

If approval is granted, the applicant must provide a detailed lighting plan, including all of the information required by Section 12.03, as part of the final site plan submittal.

- 5. Landscaping.** The submittal includes a landscape plan (Sheet LA). The plan includes street trees along Toddiem Drive, buffer zone plantings, and detention pond landscaping.

Aside from the evergreen trees, the plan and planting table do not match in terms of quantities. The applicant must correct these discrepancies.

Additionally, there are a number of mature trees and wooded areas that will be protected and preserved as part of the project. We suggest the Township require tree protection fencing around the dripline of areas to be protected during construction activities. (The applicant has indicated they will depict tree protection fencing on the construction drawings.)

Lastly, the use requirements for asphalt plants require a Buffer Zone "B" along all property lines, including road frontages.

The landscape plan provides for a Buffer Zone "B" along the road frontages and the east side of the northerly parcel.

The applicant requests deviations in the following locations:

- The north side of the northerly parcel due to the presence of an existing wooded wetland;
- The west side of the southerly parcel due to an existing wooded area adjacent to a stormwater easement;
- The south side of the southerly parcel due to its location along a railroad with significant topographic changes; and
- The east side of the southerly parcel due to an existing wooded area with significant topographic changes.

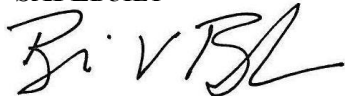
6. **Signage.** Any future signage will be subject to review and approval in accordance with the current provisions of Article 16 of the Township Zoning Ordinance.

7. **Impact Assessment.** The submittal includes an Impact Assessment (dated September 2, 2021).

In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses, or traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,
SAFEBUILT



Brian V. Borden, AICP
Michigan Planning Manager

October 6, 2021

Mrs. Kelly Van Marter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: Capital Asphalt PID Rezoning
Conceptual Site Plan Review No. 2**

Dear Mrs. Van Marter:

Tetra Tech conducted a second review of the proposed Capital Asphalt PID Rezoning site plan last dated September 21, 2021. The plans were completed by Desine Inc. on behalf of Net Lease Associates North, LLC and Net Lease Associates South, LLC. The existing site is on the end of Victory Drive and includes an existing 15,040 square foot building and is used as a metal scrap yard. The Petitioner is proposing to rezone the two parcels on the south and east side of the Victory Drive cul-de-sac from industrial to Planned Industrial District (PID). The Petitioner is proposing to improve the southernmost parcel as an asphalt manufacturing plant. The proposed improvements will include the construction and paving of Toddiem Drive, extension of municipal water and sanitary sewer to the site, onsite storm sewer and detention, and parking improvements.

After reviewing the site and impact assessment we offer the following:

GENERAL

1. The final site plan submittal should include more detail such as dimensioning of drives and parking, detention basin details, and curb and gutter. Additional detail will also need to be provided for the improvements to Toddiem Drive.
2. The proposed improvements will need to be approved by the Brighton Area Fire Authority. This approval should be obtained and provided to the Township prior to site plan approval.
3. A soil erosion and sedimentation control plan should be submitted as required by Genoa Township Engineering Design Standards for sites with more than one acre of disturbance.
4. A traffic plan should be submitted with the final site plan as required by Genoa Township Zoning Ordinance. The traffic plan will need to show access to the site and detail the projected amount of truck traffic.

DRAINAGE AND GRADING

1. The Livingston County Drain Commissioner will need to review and approve the proposed storm plan, as the proposed detention basin will outlet to their system. This approval should be provided to the Township prior to site plan approval.

UTILITIES

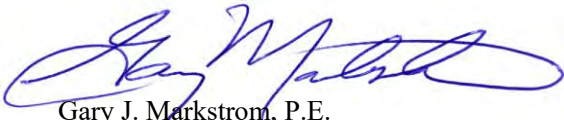
1. The Petitioner is proposing to connect to the existing water main on Grand Oaks Drive. We suggest the water main be looped to the main north of the site in Victory Drive. The size of the pipe to Grand Oaks as well as to Victory Drive should be discussed with MHOG to confirm it matches the Authority's Master Plan for utilities

in this area. The Petitioner should provide information on their expected water uses to better understand the water improvements needed for the site.


2. After site plan approval, water main and sanitary sewer construction plans must be submitted to MHOG for their review and approval, along with permitting through EGLE. The construction plans will need to include more detail on the proposed connections and include plan and profile.
3. It is possible that the Petitioner will be required to pay connection fees to connect to municipal water and sanitary sewer prior to obtaining a land use permit. This fee would be determined using Genoa Township's REU Table.

We recommend the petitioner revise the site plan to address the above comments prior to approval. Please call or email if you have any questions.

Sincerely,



Gary J. Markstrom, P.E.
Vice President



Shelby Byrne
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

October 5, 2021

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Capital Asphalt PID Rezoning - Conceptual
Toddiem-Victory Drive PID
3080 Toddiem Dr.
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on September 23, 2021 and the drawings are dated September 21, 2021 with latest revisions dated September 21, 2021. The project is based on a proposed PID to redevelop an existing parcel from a metal recycling facility as well as an adjacent vacant parcel to a new asphalt plant and materials yard. The site consists of an existing 15,040 square foot building that will be repurposed for the new operation. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

All previously stated requirements or concerns have been addressed by the applicant. Based on the recently submitted drawings, the Fire Authority has no additional comments related to the proposed project.

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). The applicant is reminded that the fire authority must review the fire protection systems submittals (sprinkler & alarm) prior to permit issuance by the Building Department and that the authority will also review the building plans for life safety requirements in conjunction with the Building Department.

If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, CFPS
Fire Marshal

cc: Amy Ruthig amy@genoa.org

**TODDIEM-VICTORY DRIVE PID
Genoa Township, Michigan
PID Plan Application**

IMPACT ASSESSMENT

Owner:

Net Lease Associates North, LLC
and Net Lease Associates South, LLC
3888 South Canal Road
Lansing, Michigan

Prepared by:

DESINE INC.
2183 Pless Drive
Brighton, Michigan 48114

A. INTRODUCTION

This impact assessment has been prepared pursuant to Article 18 – SITE PLAN REVIEW of the Zoning Ordinance for the Township of Genoa, Livingston County, Michigan. This assessment addresses the impact of the proposed industrial development on the surrounding community and the economic condition and social environment of the Township.

This Impact Assessment has been prepared under the direction of Wayne Perry, P.E., DESINE INC., 2183 Pless Drive, Brighton, Michigan 48114. Mr. Perry is a licensed Civil Engineer, providing professional engineering services in Livingston County since 1988 with experience in private and municipal development including projects within Genoa Township and Livingston County.

B. SITE LOCATION / DESCRIPTION

The development property is comprised of two parcels, containing a total of 16.20 acres. The Southerly parcel, containing 11.0 acres of land, is bordered on the North by Toddiem Drive, the railroad along the Southwest, and vacant industrial property to the East and West. The Northerly parcel, containing 5.20 acres, described as Lot 15 of the Grand Oaks West Industrial Park, is bordered on the West by Victory Drive and on the South by Toddiem Drive, as shown on Figure 1. All adjacent property surrounding the two parcels is zoned Industrial.

The Southerly parcel currently contains an existing building and related site improvements. The Existing Conditions Plan provides a detailed overview of the existing site features.

The Toddiem-Victory Drive PID development plan depicts proposed site improvements to be constructed on the site. Proposed improvements consist of a hot mix asphalt production plant, material loading bins, conveyor systems, a drum type mixer, a dust control and collection system, liquid asphalt binder storage tanks, product storage silos and truck loading and weight measuring systems.

Material stockpiles will be maintained on the property containing various aggregate, recycled asphalt and sand materials meeting the specifications required to produce hot mix bituminous products.

Additionally, the plan includes parking areas, access drives, a storm water management system, lighting, landscaping and related site improvements.

Access to the property, currently from Victory Drive, will be improved as a part of the development plan for the property. Toddiem Drive, between Victory Drive and Grand Oaks Drive, will be improved as a paved road, open ditch cross-section, connecting Victory Drive to Grand Oaks Drive. Truck access to the site will be from Latson Road, West on Grand Oaks Drive, to Toddiem Drive. A Transportation access plan has been prepared to identify the truck access route for the property.

A plan depicting the proposed site improvements is provided in Figure 2.

C. **IMPACT ON NATURAL FEATURES**

Natural features on the development property consist of re-established woods and shrub/scrub brush. Existing topography of the site is generally sloping, the South parcel slopes from East to West, and the North parcel slopes from South to North. Elevation of the property varies from an elevation of 970 at the Easterly property line, to approximately 948 along the West and North parcel limits. Surface water drainage on the property generally flows to the West and North.

Existing soils on the property are primarily Miami loam, with small areas of Conover Loam and Fox-Boyer Complex near the boundaries. An area of Tawas Muck is present in the North half of the Norther parcel. The loam soils are generally moderately drained and moderately permeable. Soil classifications are prepared by the United States Department of Agriculture, Soil Conservation Service, and "Soil Survey of Livingston County". The Soils Map, shown in Figure 3, shows the locations of specific soil types as classified.

The proposed construction and improvements will require earthwork including excavation and grading on the Southerly parcel, and filling on the North parcel. Grading for this project will maintain the general character of the existing site. Development of this project will require earthwork to construct the proposed detention basin and modify site grades with useable materials from the site, and is not anticipated to require the import or export of soil. The proposed elevations and grading of the site mesh with the existing grades at the property lines.

Surface drainage characteristics on the property will be affected by the construction of the proposed improvements and paved surfaces. Construction of the improvements will reduce the permeable area of the property resulting in an increase in the surface water runoff generated. A storm water management system has been designed to collect and control the surface water runoff, reducing the discharge rate from the developed portion of the property to the agronomic rate and allowing for the infiltration of surface water runoff generated.

The proposed changes and modifications to the surface drainage conditions will not significantly impact local aquifer characteristics or groundwater recharge capacity. All surface water runoff from the site will be directed into the proposed detention basin. Reduction in the surface permeability will affect onsite infiltration, surface water flow path and duration. Surface water runoff from the development will be controlled and no significant impact to adjacent properties are anticipated from the proposed re-development.

Upland wildlife habitats on the property are minimal and consist of primarily of the re-established wooded and shrub/scrub brush areas. Wildlife supported in these areas are generally smaller field animals and birds. Existing industrial use of the property, adjacent existing industrial uses limits the existing upland habitat.

The project site does not currently support any significant wildlife habitat and the proposed construction will not have a significant impact on overall habitat quality. No significant adverse impact to natural features is anticipated due to the proposed re-development of this property.

D. IMPACT ON STORM WATER MANAGEMENT

Excavation and grading proposed on the property to construct the proposed stormwater detention basin. Earthwork will be required to direct storm water flow into the storm water collection system. This system will discharge surface water runoff generated by development of the property to the proposed sedimentation basin and detention basin. Site grading will mesh with existing grades on adjoining properties. No adverse impact to adjoining properties is anticipated due to the construction and grading of the property.

Soil erosion and sedimentation are controlled by the Soil Erosion Control Act No. 347 of the Public Acts of 1972, as amended and is administered by the Livingston County Drain Commissioner. Silt fencing will be installed around a majority of the site during construction. The Contractor shall comply with all regulations including control during and after construction.

Impact on adjoining properties due to the construction of this site will be minimized by implementing soil erosion control methods. No adverse impact to adjacent properties due to surface water runoff will be created as a result of the proposed improvements.

E. IMPACT ON SURROUNDING LAND USES

Surrounding land uses consist of industrial uses and vacant property. The Genoa Township Future Land Use Plan designates this property as Industrial. The proposed use depicted on the development plan is consistent with existing development in the area and is consistent with the long-term planning within the Township.

Existing ambient noise levels on and around the property are largely generated by vehicle traffic on adjacent roads and activities associated with the existing use of the site as a scrap metal recycling facility.

Noise from the proposed hot mix asphalt plant will be generated from a number of sources including burner and blower systems, exhaust fans, drum mixer drive systems, cold feed bin vibrators as well as truck and loader operations. All new production plants are equipped with internal blowers and sound dampening systems to minimize the noise produced by the facility. The proposed plant and operations will conform to the requirements of Section 13.05.06 of the Genoa Township Zoning Ordinance.

All site lighting shall meet the requirements of the Zoning Ordinance. Proposed building mounted fixtures and pole mounted site lighting will be shielded and down directed on the site. General site lighting, excluding safety and emergency lighting, shall normally be energized between the times from dusk to 10:00 p.m. and from 5:00 a.m. to dawn.

The hot mix asphalt production process requires drying of the aggregate materials resulting in the exhausting of water vapor and typical combustion byproducts from the natural gas burners during the drying process. The proposed use of the property does not create any significant emissions of smoke, airborne solids, odors, gases, vibrations or glare discernable and substantially annoying or injurious to person and/or property beyond the lot lines. Should significant, repeated odors from the hot mix asphalt production process

impact adjacent properties, the owner shall install a system to remedy the problem.

Truck access routes and materials stockpile areas on the property will be paved to control dust created during normal operations. The Contractor shall be responsible for initiating and maintaining adequate dust control measures during and after construction until the project site is fully stabilized and a vegetative cover established. Dust control measures used during construction may consist of site watering, mulching of completed areas, installation of windbreak fencing, and application of chemical dust control materials. The site will comply with the performance standards contained in Section 13.05 of the Township Zoning Ordinance.

F. IMPACT ON PUBLIC FACILITIES AND SERVICES

The Livingston County Sheriff and Michigan State Police will provide Police protection. Public safety services required to accommodate the proposed use are anticipated to be minor.

The Brighton Area Fire Department, as a part of an existing governmental agreement, will provide fire protection service. Two fire hydrants will be constructed on the property with additional hydrants constructed within the Toddiem Drive Right-of-way to provide adequate fire protection capabilities. A Knox box and required address labeling meeting the Fire Departments requirements will be installed. No significant increase in fire protection services are anticipated as a result of the proposed use.

The property is accessed from Grand Oaks Drive and Victory Drive, providing adequate access for emergency vehicles.

The proposed uses will not create any direct adverse impact on the public schools.

G. IMPACT ON PUBLIC UTILITIES

The property is not presently within municipal water and/or sewer districts. Existing building is serviced by an onsite well and septic tank / disposal field.

Water service to the site is proposed to be provided from a new water main extension from Grand Oaks Drive to the property, and through the property to provide service to hydrants. A water service lead will be constructed. An easement for repair, maintenance and access are provided for this connecting water main. Capacity is available within the existing water system to provide adequate service to this site.

The site is currently serviced by electric, gas, phone and cable systems located Grand Oaks Drive and Victory Drive.

All solid wastes will be properly disposed of through a licensed disposal firm on a regular basis. A dumpster enclosure will be located on the West side of the existing building.

Large vehicles accessing the site will be capable of maneuvering on the proposed access drives around the building and for loading and unloading purposes.

H. STORAGE AND HANDLING OF ANY HAZARDOUS MATERIALS

The proposed use of the site will require storage of liquid asphalt binder, liquid asphalt emulsion products and diesel fuel. All liquid asphalt materials used in the production of plant mix bituminous products will be stored within a secondary containment enclosure.

A Pollution Incident Prevention plan (PIPP) for the proposed use is being prepared and will be provided with the final PID plan for review and approval.

I. TRAFFIC IMPACT STUDY

The proposed re-development of the property is not anticipated to meet the conditions requiring a Traffic Impact Study, generating less than 50 directional trips during peak hours and less than 750 trips in an average day. A traffic impact study for the development has not been prepared.

No significant adverse impact on traffic in the area is anticipated as a result of developing the proposed project.

J. HISTORIC AND CULTURAL RESOURCES

The existing building on the property does not have any major historic significance on a local, regional or state level.

K. SPECIAL PROVISIONS

No special provisions or requirements are currently proposed for this facility.

FIGURE 1

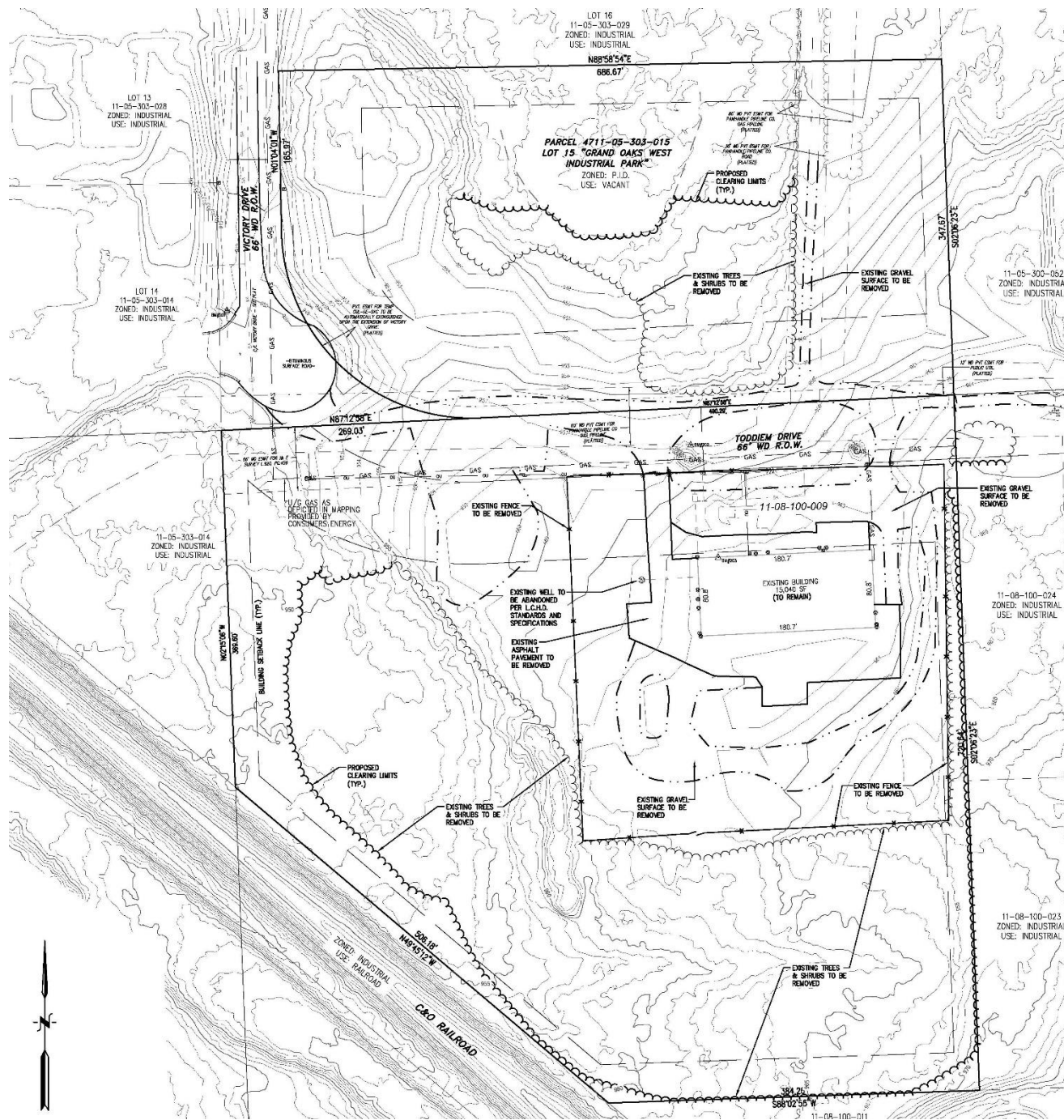


FIGURE 2
PHOTO DEPICTING SITE IMPROVEMENTS
NOT TO SCALE



FIGURE 3
SOILS MAP
(NOT TO SCALE)



Map Unit Symbol	Map Unit Name
BitB	Boyer-Oshtemo loamy sands, 2 to 6 percent slopes
BitC	Boyer-Oshtemo loamy sands, 6 to 12 percent slopes
BitE	Boyer-Oshtemo loamy sands, 18 to 25 percent slopes
BwA	Bronson loamy sand, 0 to 2 percent slopes
CvA	Conover loam, 0 to 2 percent slopes
FrB	Fox-Boyer complex, 2 to 6 percent slopes
FrC	Fox-Boyer complex, 6 to 12 percent slopes
FrD	Fox-Boyer complex, 12 to 18 percent slopes
FrE	Fox-Boyer complex, 18 to 25 percent slopes
Ho	Houghton muck
MoB	Miami loam, 2 to 6 percent slopes
W	Water

PLANNED UNIT DEVELOPMENT AGREEMENT
TODDIEM/VICTORY DRIVE PID

This Agreement for the Toddiem/Victory Planned Unit Development (“Agreement”) is by and between 10-20 Investments & Leasing, Inc. (“10-20 Investments”), a Michigan corporation as authorized by its shareholder, Net Lease Associates South, LLC (“Net Lease South”), Net Lease Associates North, LLC (“Net Lease North,” and collectively with 10-20 Investments, “Developer”), a Michigan limited liability companies whose address is P.O. Box 5467, Saginaw, MI 48605, E & B Property Holdings, LLC (“E & B Holdings”), a Michigan limited liability company whose address is 3056 E. Coon Lake Road and Genoa Charter Township (“Township”), a Michigan municipal corporation, whose address is 2911 Dorr Road, Brighton, MI 48116.

RECITALS

WHEREAS, 10-20 Investments owns real property located in the Charter Township of Genoa, County of Livingston, State of Michigan, more particularly described on Exhibit A attached hereto as “Toddiem,” and, by virtue of closing on a shareholder purchase agreement with its prior shareholder Bruce Hundley, at the time of this Agreement now has as its only shareholder Net Lease South. Net Lease North holds a vendee’s land contract interest and E & B Holdings holds a vendor’s land contract interest in real property located in the Charter Township of Genoa, County of Livingston, State of Michigan, and more particularly described on Exhibit A attached hereto as “Victory.” Toddiem and Victory shall herein be referred to as the “Property.”

WHEREAS Toddiem is an 11 acre parcel that is currently the site of a scrap metal yard and Victory is an 5.2 acre parcel that is currently vacant. Developer intends to develop the Property as a Planned Unit Development in accordance with Article 10 of the Township Zoning Ordinance for use as an asphalt plant and storage of materials.

WHEREAS, Developer has submitted to the Township a request for rezoning of the Property to Planned Industrial District (“PID”), an application for PUD, and an application for Site Plan, including all conceptual submittal items set forth in Section 10.05 of the Township Zoning Ordinance, including, but not limited to, proof of ownership of the Property and owner authorization; completed applications and application fee; an impact assessment meeting the requirements of Article 18 of the Township Zoning Ordinance, a copy of which is attached hereto as Exhibit B (“Impact Assessment”); this Agreement; drawings of at least 24" x 36", containing a Cover Sheet, Existing Conditions and Demolition Plan, Site Plan, Grading and Paving Plan, Utility Plan, Watershed Plan & Storm Water Management System Calculations, Landscape Plan, Site Development Notes and Details, Transportation Plan, Stationary Plant 500 TPH Layout, Floor Plan, and Exterior Elevations, a copy of which drawings are attached to this Agreement as Exhibit C (“PID Plan”).

WHEREAS, the Charter Township of Genoa Planning Commission ("GPC") has reviewed the request for rezoning and the PID Plan, conducted a public hearing on _____, and recommended approval of the Conceptual PID Site Plan to the Charter Township of Genoa Board of Trustees ("Township Board") and Livingston County Planning Commission ("LCPC") on _____.

WHEREAS, on _____, the LCPC conducted a public hearing on the requested Conceptual PUD Site Plan, and recommended approval to the Township Board on _____.

WHEREAS, Developer made revisions to _____, and submitted revised copies of _____ to the Township.

WHEREAS, the Township Board conducted a public hearing on the PUD rezoning, PUD Plan and PUD Agreement on _____, and provided conceptual approval of these documents pursuant to Section 10.04.01 of the Township Zoning Ordinance on _____.

WHEREAS, Developer has submitted to the Township all Final PUD Site Plan submittal items set forth in Section 10.06 of the Township Zoning Ordinance, including, but not limited to, the PUD Plan containing all materials required by Article 18 of the Township Zoning Ordinance; an Impact Statement; _____, a final copy of this Agreement (collectively the "Final Plan"), and all required fees.

WHEREAS, the GPC and Township Board actions set forth above have been taken in compliance with the Township Zoning Ordinance and with the Michigan Zoning Enabling Act, 110 PA of 2006, and have rezoned the Property to PUD/PID, finding that such classification properly achieved the purposes of Article 10 of the Township's Zoning Ordinance, including the encouragement of innovation in land use, compatibility with adjacent uses, the promotion of efficient provision of public services and utilities, the reduction of adverse traffic impacts, and the provision of adequate employment. Further, the GPC and Township Board find the PID, the PID Plan, and this Agreement are consistent with the adopted Master Plan.

WHEREAS, the Township Board has found and concluded that the uses and future development plans and conditions shown on the approved PID Plan and as set forth herein are reasonable and promote the public health, safety and welfare of the Township, and that they are consistent with the plans and objectives of the Township and consistent with surrounding uses of land for reasons including, but not limited to, the following:

- a. The proposed use set forth in the PID Plan is permitted as a special land use within the underlying zoning Industrial Zoning District;
- b. The Township has determined that flexibility in dimensional standards is necessary to allow for innovative design in redeveloping a site and where a clear public benefit is being derived in the form of extension of public water to the Toddiem/Victory Drive areas and west of Grand Oaks Drive and the creation of a connection from Grand Oaks Drive to Victory Drive by way of Toddiem Drive that is improved to Livingston County Road Commission ("LCRC") standards, among other benefits as set forth below;
- c. To encourage flexibility and creativity consistent with the intent of the PUD, the Township is permitting specific departures from the requirements of the Township Zoning Ordinance as a part of the approval process;

- d. For all deviations, the Township has found that the deviation shall result in a higher quality of development than would be possible using conventional zoning standards;
- e. The permitted deviations are consistent with the intent of the Township's PUD ordinance.

NOW, THEREFORE, the parties identified above, in consideration of the mutual promises contained in the Agreement, HEREBY AGREE AS FOLLOWS:

SECTION 1.
GENERAL TERMS OF AGREEMENT

- A. The parties acknowledge and represent that the recitations set forth above are true, accurate and binding on the respective parties.
- B. The Township acknowledges and represents that the zoning of the Property as PUD/PID, regulated by the PID Plan and this Agreement may be relied upon for future land use and development of the Property by Owner, its successors, assigns and transferees. This Agreement is for the benefit of the Property, and shall run with the Property, and shall bind and inure to the benefit of the successors, assigns and transferees of the parties to this Agreement.
- C. The PID Plan, attached as Exhibit C, has been approved by the Township in accordance with its authority granted by the Genoa Charter Township Zoning Ordinance, and The Michigan Zoning Enabling Act, subject to the terms of this Agreement.
- D. Deviations from the Township Zoning Ordinance shall be permitted as set forth in this Agreement or the PUD Plan, or as otherwise be agreed upon by the Township and Developer. Changes to the PID Plan and/or PUD Agreement shall be processed as set forth in the Zoning Ordinance and this Agreement.
- E. All improvements constructed in accordance with this Agreement and the PID Plan shall be deemed to be conforming under the Township Zoning Ordinance and in compliance with all other ordinances of the Township.
- F. The approval of the PID Plan shall be subject to the conditions set forth herein, inclusive of Exhibits.
- G. All site features, such as walkways, signs, lighting and landscaping, will be maintained by Developer.
- H. The construction, improvement and maintenance of all streets and necessary utilities (including public water, wastewater collection and treatment) to mitigate the impacts of the PID project through construction shall be performed by Developer.

SECTION 2.
LAND USE AUTHORIZATION

- A. In addition to the uses set forth in the PID Plan, uses listed in the Industrial zoning classification of the Township Zoning Ordinance shall be allowed subject to the applicable permitted or special land use regulations.
- B. The PID Plan identifies the location and configuration of the currently-proposed structures that may be developed on the Property.
- C. Developer shall determine the timing of development in compliance with the Charter Township of Genoa Code of Ordinances.

SECTION 3.
TRANSPORATION IMPROVEMENTS AND UTILITIES

- A. Construction and paving of Toddiem Drive per LCRC standards resulting in an improved road between with open ditch cross-section connecting Victory Drive to Grand Oaks Drive for public use and emergency vehicles.

- B. One of the means of access to the Property (Toddiem Drive) shall be permitted to be from a road having a right-of-way of 66 feet.
- C. The internal system of private roads or drives shall be as identified on the PUD Plan. Interior drives shall provide circulation around the building. Stacking or queuing depth at site access points shall be sufficient to accommodate expected peak hour volumes to minimize conflict with inbound or internal circulation.
- D. Developer will extend public water to the Property and connect the Development to the public water system from Grand Oaks Drive as set forth on the PID Plans. The Township represents the public water system is able to be extended to the Property as proposed by Developer and there is sufficient capacity in the water system to service the Development.
- E. Three fire hydrants will be constructed on the Property and a Knox box provided.

SECTION 4.
DRAINAGE

- A. The Development shall install a storm water management system per Livingston County Drainage Commission standards as set forth in the PID Plan.

SECTION 5.
SITE IMPROVEMENTS

- A. Owner shall cease the outdoor storage of scrap metal currently occurring on the Property.
- B. There shall be a coordination of site improvements within the overall Property, with the objective of creating site improvements that are integrated and mutually supportive among the respective components of the Development, including the utilities, landscaping and lighting, as more specifically set forth in the PID Plan.
- C. Buffer Zone B shall be provided along the road frontage of the Toddiem parcel, the road frontage of the Victory parcel, and the east side of the Victory parcel. Waivers from this requirement have been approved on the remaining sides of the two parcels as follows:
 - 1. North side of the Victory parcel due to existing wooded wetland along this side of the parcel.
 - 2. West side of the Toddiem parcel due to an existing wooded buffer adjacent to the public storm water easement in Grand Oaks West Industrial Park.
 - 3. South side of the Toddiem parcel which is adjacent to the railroad and the is grade approximately 15 feet higher than the site.
 - 4. East side of the Toddiem parcel which is wooded and the grade is approximately 6 feet higher than the site.
- D. Township shall grant to Developer and its contractors and subcontractors all Township permits and authorizations necessary to bring and/or construct all utilities necessary to service the Property and to otherwise develop and improve the Property in accordance with the PID Plan, provided the Developer has complied with any and all legally-applicable requirements for such permits and authorizations, including paying any required fees and granting any necessary easements. Any applications for permits or authorizations from the Township shall be processed by the Township in the customary manner.
- E. All trees and woodlands will be preserved as shown on the PID Plan, or replaced on a caliper-for-caliper basis, as more fully set forth in the PID Plan.

SECTION 6.

DIMENSIONAL AND DESIGN STANDARDS

- A. All buildings, structures, accessory structures, and parking meet the minimum set back standards of the Industrial District as shown in the PID Plan.
- B. The maximum building height shall be permitted to be 86 feet instead of a maximum height of 30 feet or two stories otherwise required by the Township Zoning Ordinance.
- C. Design standards requiring high quality architecture including a maximum of 25% metal panel shall be reduced to permit the existing building & proposed asphalt plant components and structures as set forth on the PID Plan. Otherwise, the architecture, building materials, colors and shapes of all buildings shall be consistent the Township Zoning Ordinance.
- D. Above ground storage tanks may include the following capacities:
 - 1. Fuel storage tank: 1,000 gallons.
 - 2. Tack storage tank: 2,000 gallons.
 - 3. Liquid asphalt tanks (2): 1,504,000 gallons.
- E. All signs shall be permitted as authorized in the Zoning Ordinance. Any permitted sign shall have a base constructed of materials that coordinate with and are consistent with the architecture of the building, unless mounted directly on the building.

SECTION 7. **MISCELLANEOUS PROVISIONS**

- A. This Agreement may not be modified, replaced, amended or terminated without the prior written consent of the parties to this Agreement. Amendments and deviations, whether minor or major, shall be made in compliance with the procedures set forth in the Charter Township of Genoa Code of Ordinances at the time the amendment or deviation is sought. Nothing whatsoever provided in this Agreement shall be construed so as to prevent Developer or Owner from seeking major and/or minor changes to the PUD Plan in accordance with the applicable provisions of the Zoning Ordinance.
- B. Reference in this Agreement to Owner or Developer in relation to development is intended to include Developer or Owner's successors, transferees, and assigns unless specified to the contrary.
- C. In the event of any direct conflict between the specific terms and provisions of this Agreement (including the attached PID Plan) and the provisions of the Township Zoning Ordinance, or other Township ordinances, rules or regulations, the provisions of this Agreement shall control. To the extent that this Agreement is silent as to an issue, that issue shall be governed by the provisions of the Township Zoning Ordinance.
- D. Any violation of the terms of this Agreement shall be a violation of the Township Zoning Ordinance. The remedies of the Township for a violation shall be such remedies as are provided by equity and law. Nothing contained herein shall diminish any rights Owner may have at law or in equity with respect to a breach of this Agreement by Township.
- E. In the event a portion of the Property is submitted for site plan approval, and such approval is denied, the party submitting such site plan shall be entitled to appeal such decision to the Zoning Board of Appeals as provided by law.
- F. The undersigned parties acknowledge that the conditions imposed upon the development of the Property are reasonable conditions necessary to ensure that public services and facilities affected by the proposed land use or activity will be capable of accommodating increased service and facility loads caused by the land use or activity, to protect the natural environment and conserve natural resources and energy, to ensure compatibility with adjacent uses of land, and to promote the use of

land in a socially and economically desirable manner. Further, it is acknowledged that the conditions meet all of the requirements of MCL 125.3503.

G. This Agreement shall be effective as of _____.

THE PARTIES have executed this Agreement on the dates set below and agree to be bound.

[SIGNATURES CONTAINED ON THE FOLLOWING PAGES]

DRAFT

10-20 Investments & Leasing, Inc.

By Net Lease Associates South, LLC

/s/ _____
By: Jon Sawyer
Its: Member

Net Lease Associates North, LLC

/s/ _____
By: Jon Sawyer
Its: Member

STATE OF MICHIGAN)
COUNTY OF LIVINGSTON) ss.

The foregoing instrument was acknowledged before me this ___ day of _____, 2021, by Jon Sawyer, Member of Net Lease Associates South, LLC and Net Lease Associates North, LLC, Michigan limited liability companies.

Notary Public

County, Michigan
My commission expires: _____
Acting in the County of _____

E & B Property Holdings, LLC

/s/ _____
By: Elizabeth A. Hundley
Its: Member

STATE OF MICHIGAN)
COUNTY OF LIVINGSTON) ss.

The foregoing instrument was acknowledged before me this ___ day of _____, 2021, by Elizabeth A Hundley, Member of E & B Property Holdings, LLC, Michigan limited liability companies.

Notary Public

County, Michigan
My commission expires: _____
Acting in the County of _____

EXHIBIT A

LEGAL DESCRIPTION OF PROPERTY

Land situated in the Township of Genoa, County of Livingston, State of Michigan, and more particularly described as follows:

TODDIEM

Parcel 3:

A part of the Northwest 1/4 of Section 8, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the North 1/4 corner of said Section 8; thence South 87°12'58" West along the North line of said Section, 1817.08 feet to the point of beginning of the parcel to be described; thence South 02°06'23" East 720.64 feet; thence South 88°02'55" West 384.26 feet to the Northeasterly right-of-way line of the C & O Railroad; thence North 49°45'12" West along said right-of-way line 506.19 feet to the West line of said Section (as monumented); thence North 02°15'06" West along and West line 369.60 feet to the Northwest corner of said Section; thence North 87°12'58" East along the North line of said Section, 759.32 feet to the point of beginning.

Subject to and including the use of a 66 foot wide private road easement for ingress and egress, the North line of which is described as: Part of the Northwest 1/4 of Section 8, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the North 1/4 corner of said Section 8; thence South 87°12'58" West along the North line of said Section 496.99 feet to the Westerly right-of-way line of Grand Oak Drive and the point of beginning of said easement; thence South 87°12'58" West 2079.41 feet to the point of ending of said easement.

Commonly known as: 3080 Toddiem Drive, Howell, MI 48844

Parcel Identification #4711-08-100-009

VICTORY

Lot 15, Grand Oaks West Industrial Park, according to the plat thereof, as recorded in Liber 30 of Plats, Pages 1, 2, 3, 4, and 5, Livingston County Records.

Commonly known as: Vacant Land, Victory Drive, Howell, MI 48843

Parcel Identification #4711-05-303-015

EXHIBIT B
IMPACT ASSESSMENT

DRAFT

EXHIBIT C

PID PLAN

DRAFT

PRELIMINARY SITE PLAN FOR TODDIEM - VICTORY DRIVE PID 13080 TODDIEM DRIVE

**LOT 15 OF GRAND OAKS WEST INDUSTRIAL PARK
AND PART OF NW 1/4 OF SECTION 8, T.2N.-R.5E.
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN**

LEGAL DESCRIPTION

PARCEL No. 4711-05-303-015
LOT 15 OF "GRAND OAKS WEST INDUSTRIAL PARK," AN INDUSTRIAL SUBDIVISION OF PART OF THE NORTHWEST FRACTIONAL 1/4 OF SECTION 5, SOUTHWEST 1/4 OF SECTION 5, SOUTHEAST 1/4 OF SECTION 6 AND THE NORTHEAST 1/4 OF SECTION 7, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN LIBER 30 OF PLATS, PAGES 1 THROUGH 5 INCLUSIVE, LIVINGSTON COUNTY RECORDS. ALSO KNOWN AS: VACANT, VICTORY DRIVE, BRIGHTON, MICHIGAN

PARCEL No. 4711-08-100-009
REFERENCE: CERTIFIED LAND SURVEY No. 2446 AS RECORDED IN LIBER 920, PAGE 459, LIVINGSTON COUNTY RECORDS
PARCEL "3":

A PART OF THE NORTHWEST 1/4 OF SECTION 8, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTH 1/4 CORNER OF SECTION 8; THENCE S87°12'58"W ALONG THE NORTH LINE OF SAID SECTION, 1817.08 FEET TO THE POINT OF BEGINNING OF THE PARCEL TO BE DESCRIBED; THENCE S02°06'23"E 720.64 FEET; THENCE S88°02'55"W 384.26 FEET TO THE NORTHEASTERLY RIGHT-OF-WAY LINE OF THE C.&O. RAILROAD; THENCE N49°45'12"W ALONG SAID RIGHT-OF-WAY LINE 506.19 FEET TO THE WEST LINE OF SAID SECTION (AS MONUMENTED); THENCE N02°15'06"W ALONG SAID WEST LINE 369.60 FEET TO THE NORTHWEST CORNER OF SAID SECTION; THENCE N87°12'58"E ALONG THE NORTH LINE OF SAID SECTION 759.32 FEET TO THE POINT OF BEGINNING. SUBJECT TO AND INCLUDING THE USE OF A 66 FOOT WIDE PRIVATE ROAD EASEMENT FOR INGRESS AND EGRESS AS DESCRIBED BELOW.

66 FOOT WIDE PRIVATE ROAD EASEMENT FOR INGRESS AND EGRESS, THE NORTH LINE OF WHICH IS DESCRIBED AS BEING A PART OF THE NORTHWEST 1/4 OF SECTION 8, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 8; THENCE S87°12'58"W ALONG THE NORTH LINE OF SAID SECTION 496.99 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF GRAND OAK DRIVE AND THE POINT OF BEGINNING OF SAID EASEMENT; THENCE S87°12'58"W 2079.41 FEET TO THE POINT OF ENDING OF SAID EASEMENT

ALSO KNOWN AS: 3080 TODDIEM DRIVE, BRIGHTON, MICHIGAN

BENCHMARK

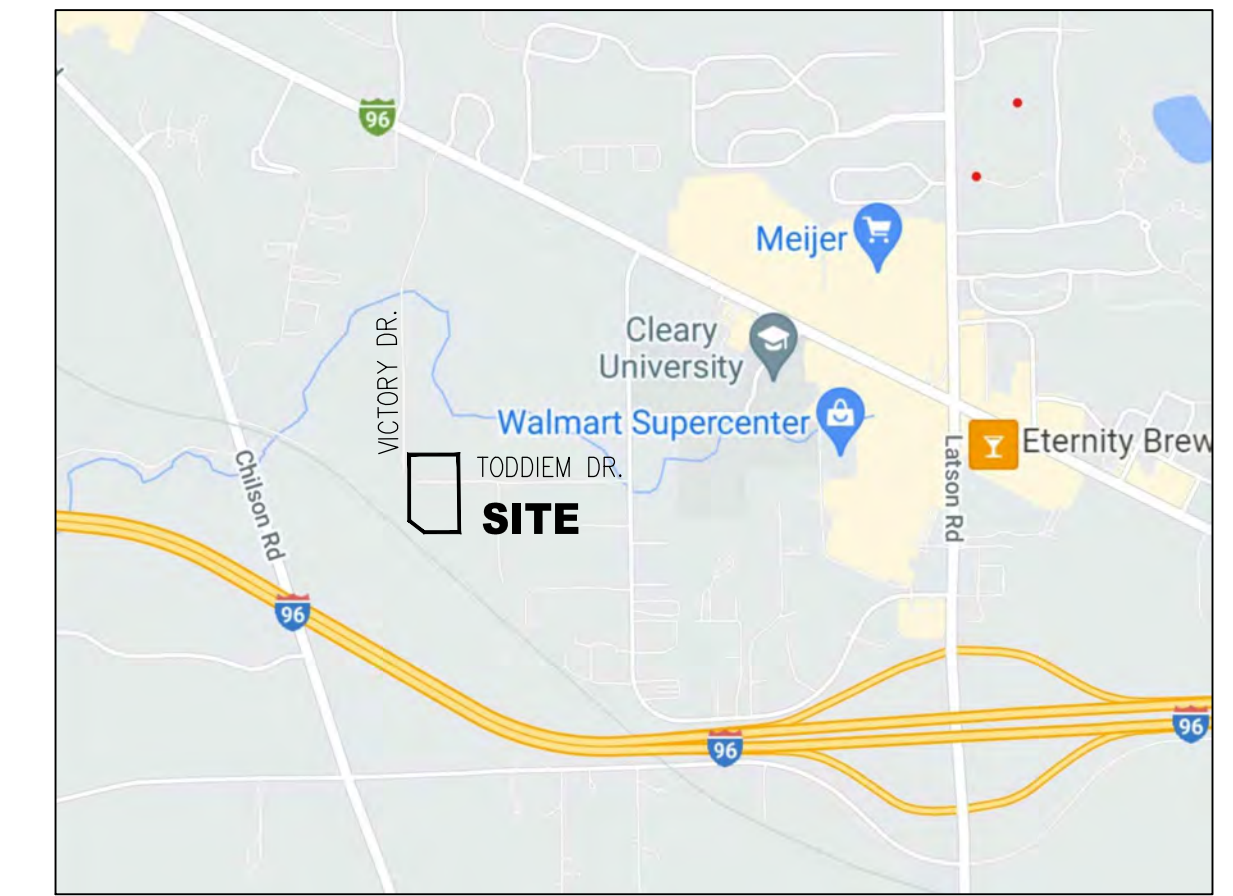
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BENCHMARK #201
CHISELED "M" IN THE TOP OF A CONCRETE CULVERT, LOCATED NEAR THE NW SIDE OF CUL-DE-SAC OF VICTORY DRIVE.
ELEVATION = 949.53 (NAVD 88)

BENCHMARK #202
RR SPIKE IN THE NORTHERLY SIDE OF A 12" TWIN ASH TREE, LOCATED NEAR THE EAST SIDE OF GRAVEL ENTRANCE OF #3080 TODDIEM.
ELEVATION = 959.175 (NAVD 88)

BENCHMARK #203
FINISH FLOOR ELEVATION IN OFFICE ENTRANCE, LOCATED NEAR THE NORTHWEST CORNER OF #3080 TODDIEM.
ELEVATION = 963.47 (NAVD 88)

BENCHMARK #204
ARROW ON HYDRANT, LOCATED NEAR THE NWLY QUAD OF THE INTERSECTION OF GRAND OAK RD AND TODDIEM DR.
ELEVATION = 975.77 (NAVD 88)



LOCATION MAP

NOT TO SCALE

SHEET INDEX

EX	EXISTING CONDITIONS AND DEMOLITION PLAN
SP	SITE PLAN
GR	GRADING & PAVING PLAN
UT	UTILITY PLAN
RD1	TODDIEM DRIVE EXTENSION PLAN
WS	WATERSHED PLAN & STORM WATER MANAGEMENT SYTEM CALCULATIONS
LA	LANDSCAPE PLAN
DT1	SITE DEVELOPMENT NOTES & DETAILS
T	TRANSPORTATION PLAN
1	STATIONARY PLANT 500 TPH LAYOUT
3	FLOOR PLAN - 1988
4	EXTERIOR ELEVATIONS - 1988

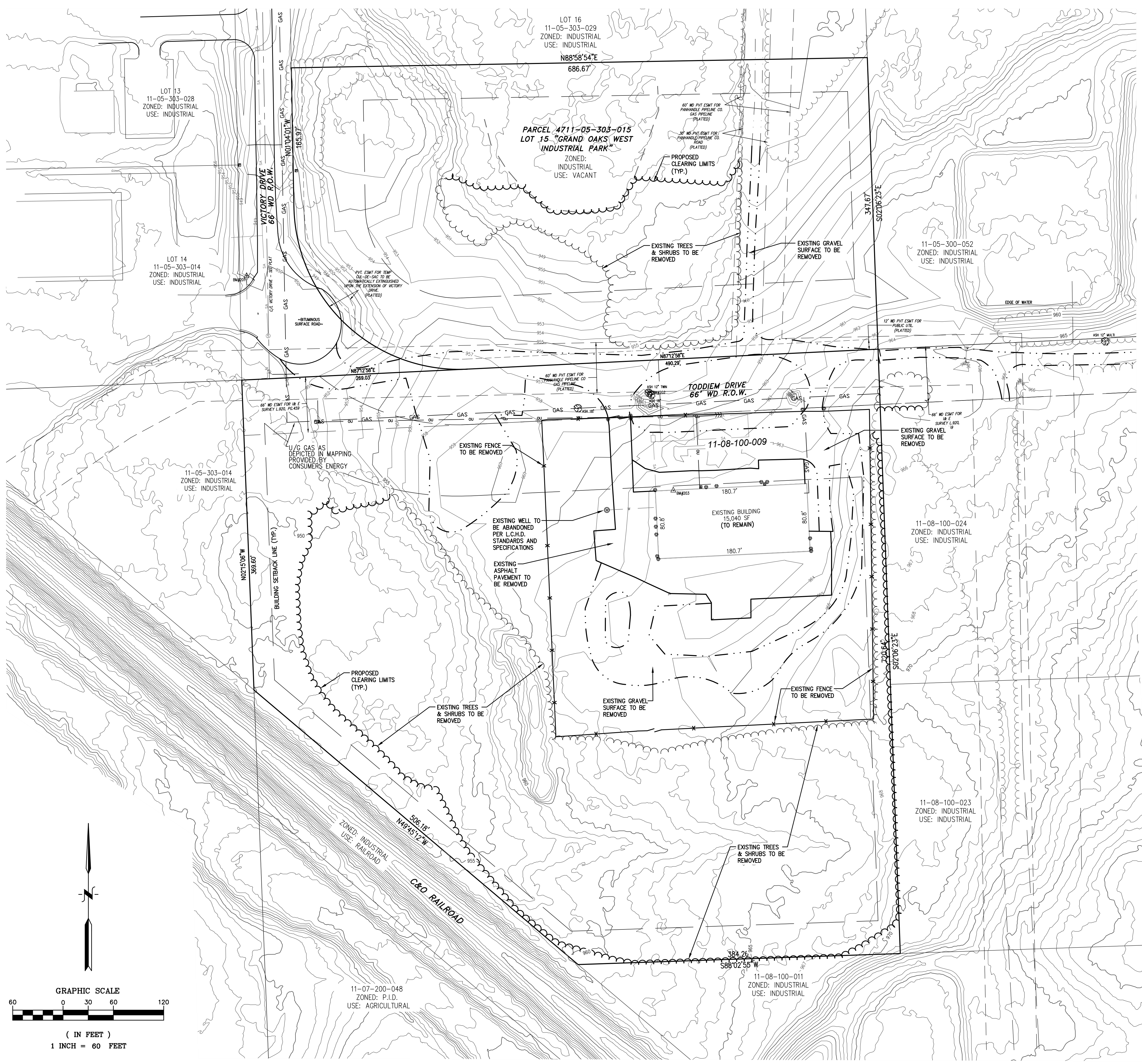


DEVELOPER
NET LEASE ASSOCIATES NORTH, LLC
NET LEASE ASSOCIATES SOUTH, LLC
3988 S. CANAL ROAD
LANSING, MI.
(517) 322-0800

CIVIL ENGINEER/LAND SURVEYOR
DESINE INC.
2183 PLESS DRIVE
BRIGHTON, MI. 48114
(810) 227-9533

DESINE INC.
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

REVISED	SCALE: N/A
09-21-21	PROJECT No.: 9214101
	DWG NAME: 4101-COV
	PRINT: SEPT. 21, 2021



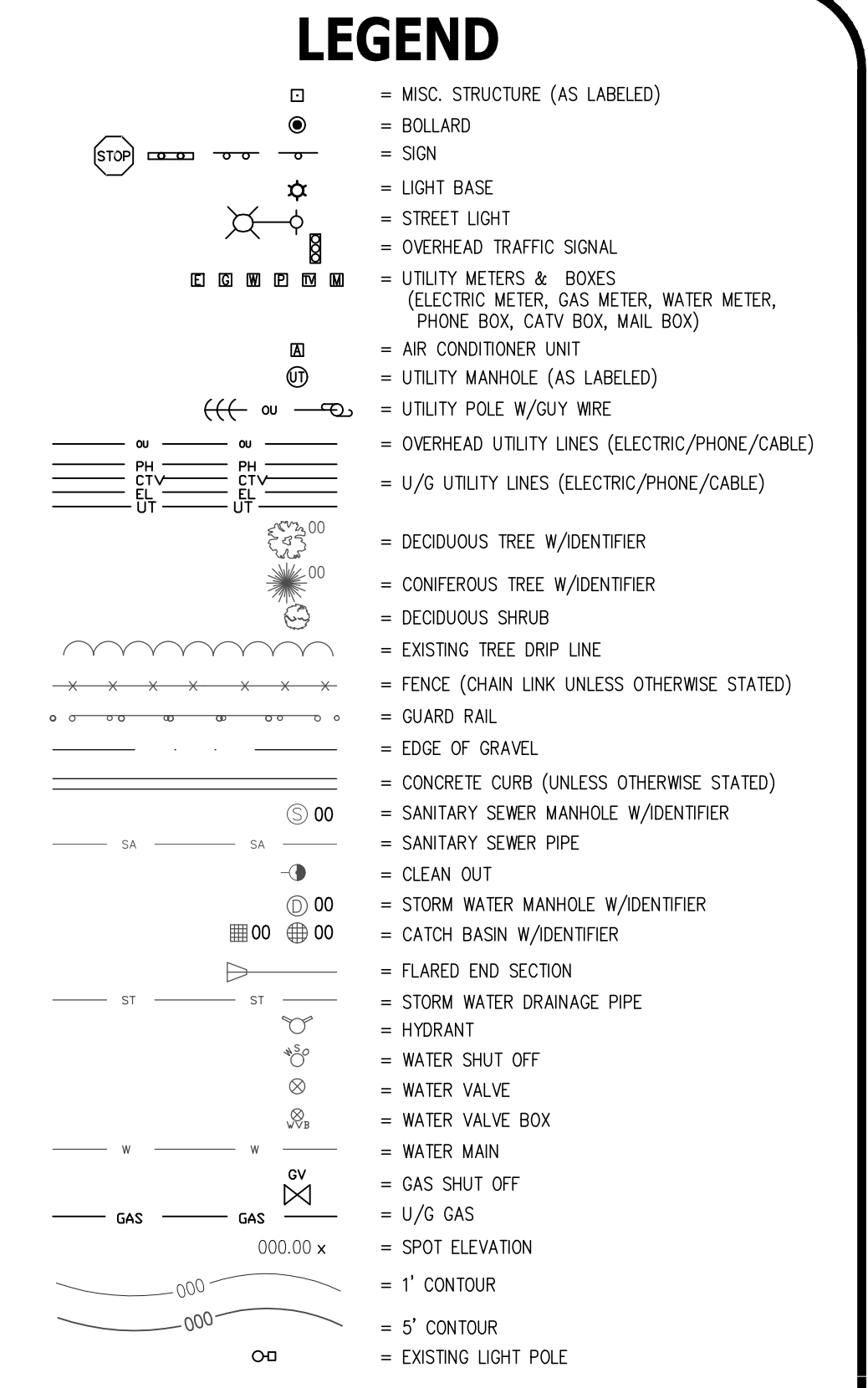
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BENCHMARK #201
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BENCHMARK #202
 RR SPIKE IN THE NORTHERLY SIDE OF A 12" TWIN ASH TREE, LOCATED NEAR THE EAST SIDE OF GRAVEL ENTRANCE OF #3080 TODDIEM. ELEVATION = 958.75 (NAVD 88)

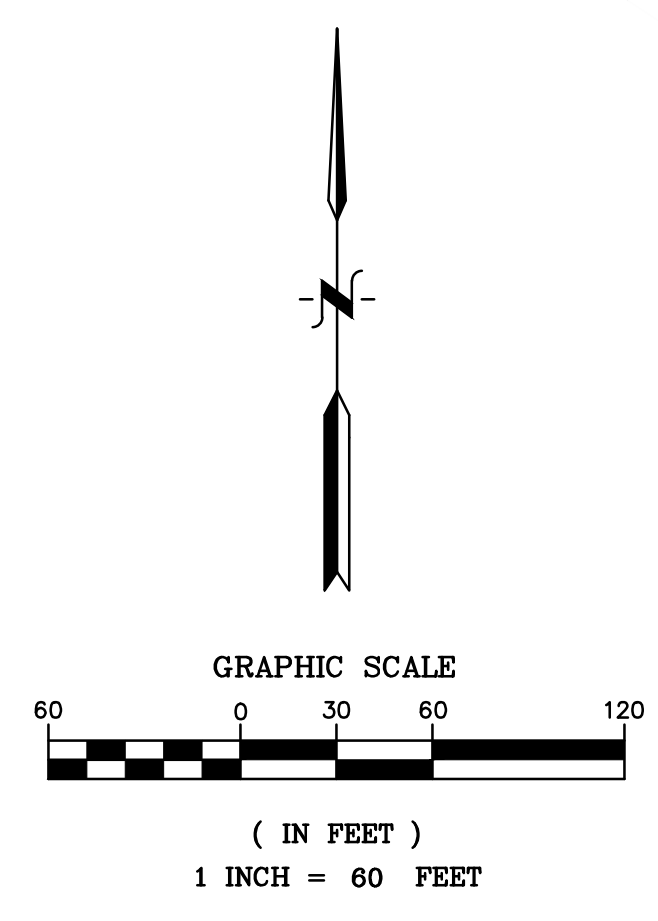
BENCHMARK #203
 FINISH FLOOR ELEVATION IN OFFICE ENTRANCE, LOCATED NEAR THE NORTHWEST CORNER OF #3080 TODDIEM. ELEVATION = 963.47 (NAVD 88)

BENCHMARK #204
 ARROW ON HYDRANT, LOCATED NEAR THE NWLY QUAD OF THE INTERSECTION OF GRAND OAK RD AND TODDIEM DR. ELEVATION = 975.77 (NAVD 88)



DEMOLITION NOTES:

- The demolition specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
- Contractor shall contact the 811 Underground Public Utility Locating System or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to performing demolition work. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
- Contractor shall contact the appropriate Agencies to coordinate disconnect of the electric, gas, phone, cable and other public utilities as necessary prior to performing demolition work.
- Contractor shall contact the appropriate Agencies to coordinate removal and/or relocation of any underground and/or overhead public utility lines as necessary prior to performing demolition work.
- Contractor shall recycle and/or dispose of all demolition material and debris in accordance with the appropriate Local, County, State and Federal regulations.
- All bituminous and concrete pavement to be removed shall be saw cut at the limits of removal to provide for a clean straight edge for future abutment.
- All existing irrigation lines to be removed shall be terminated at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Ends of pipe shall be capped and the location of marked for future connection.
- All existing water main and sanitary sewer to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent plugs shall be installed in the ends of pipe in accordance with the appropriate Agency. The Contractor shall record the location of all permanent plugs and provide the location information to the appropriate Agency.
- All existing storm sewer to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent bulkheads shall be installed in the ends of pipe and/or openings in terminating structures in accordance with the appropriate Agency. The Contractor shall record the location of all permanent bulkheads and provide the location information to the appropriate Agency.
- All existing light sources to be removed shall have their power cables removed up to the power source or properly terminated for future connection at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Removal and termination of power cables shall be performed in accordance with local electric codes.
- All existing utility meters to be removed shall be properly removed to allow for reuse. Any existing utility meters that are not to be reused as a part of this project shall be returned to the appropriate Agency.
- All trenches and/or excavations resulting from the demolition of underground utilities, building foundations, etc., that are located within the 1 on 1 influence zone of proposed structures, paved areas and/or other areas subject to vehicular traffic shall be backfilled with MDOT Class III granular material (or better) to the proposed subgrade elevation. Backfill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, Modified Proctor).



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 BRIGHTON, MICHIGAN 48114

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: L.F.						
CHECK: WMP						

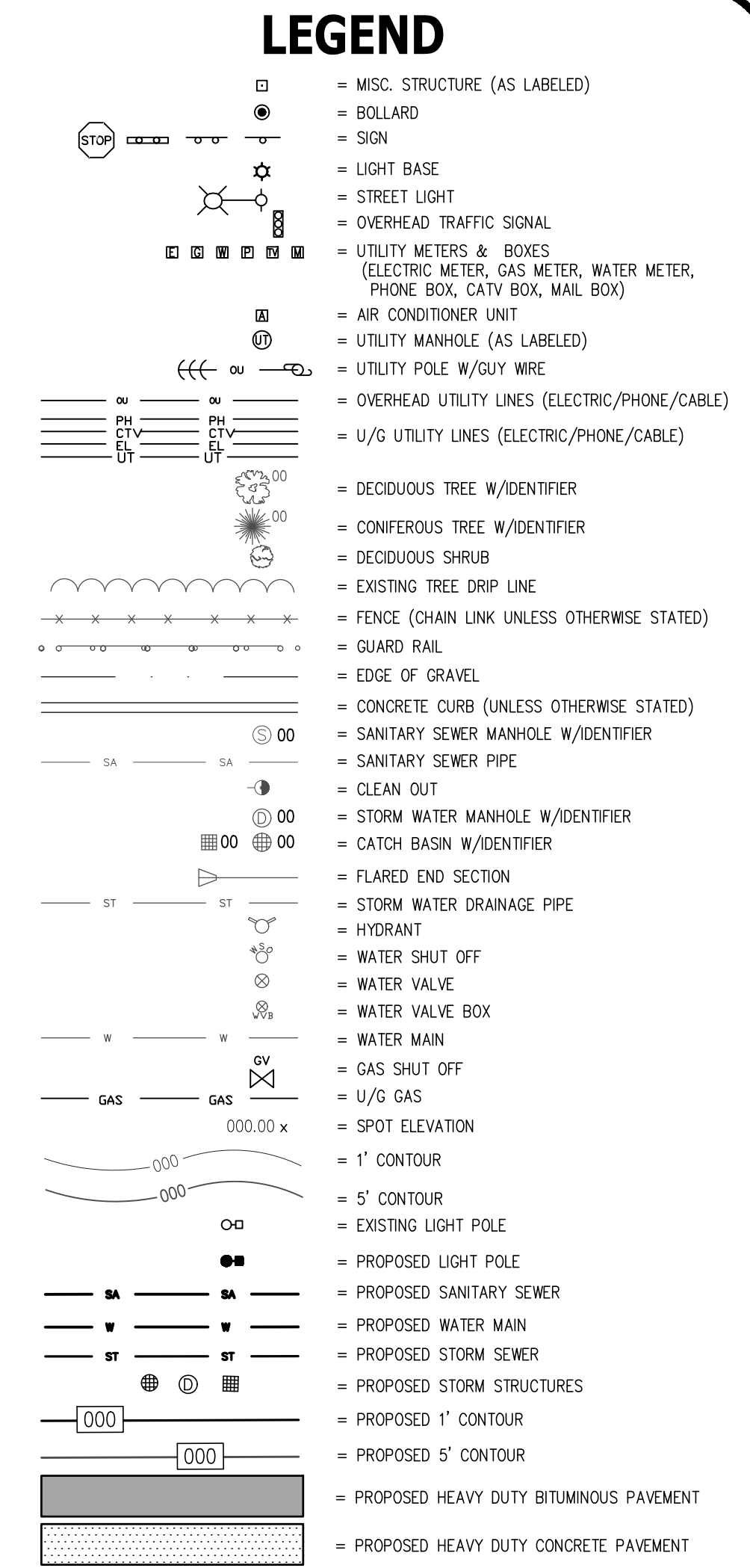
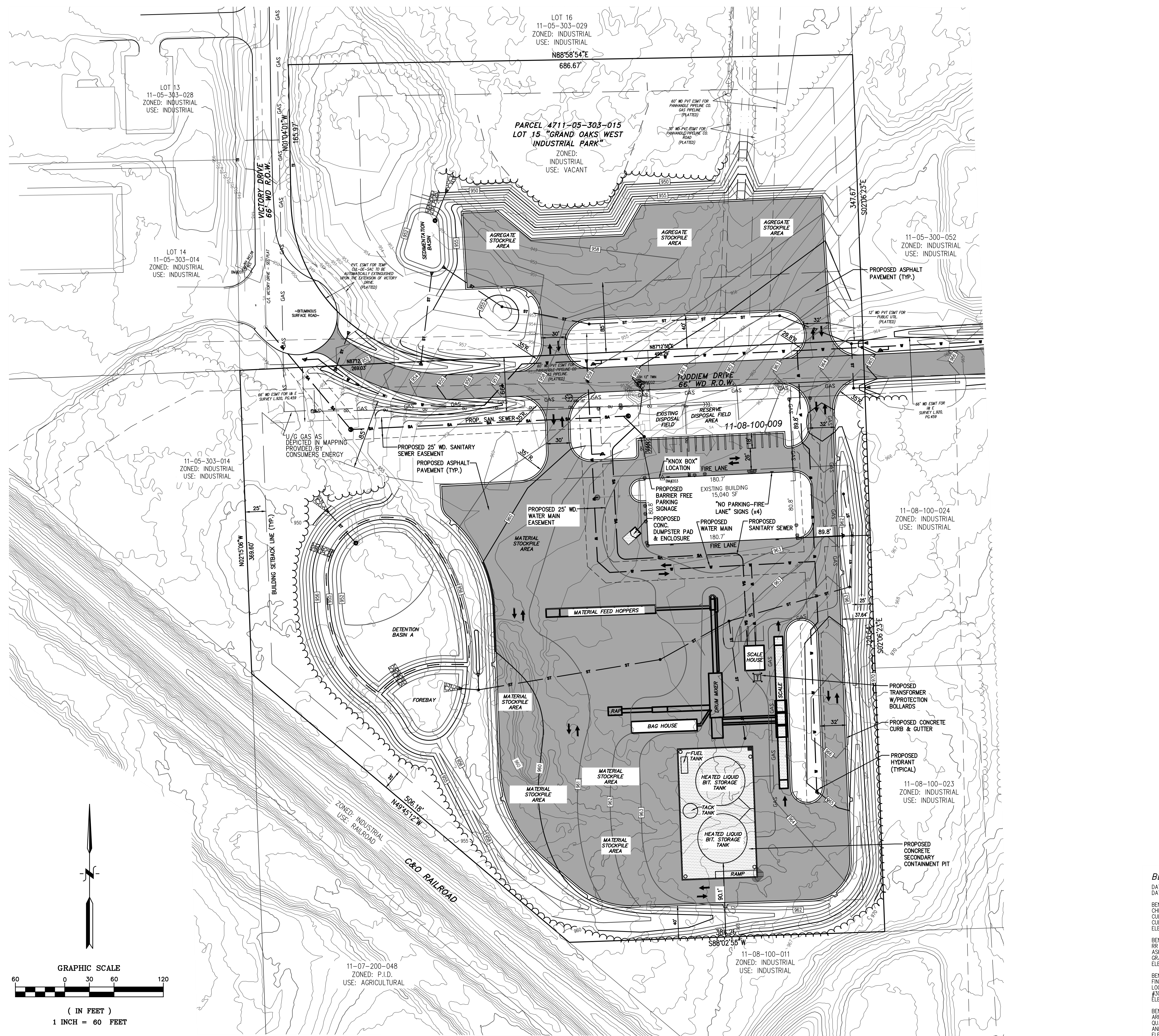
TODDIEM-VICTORY DRIVE PID

EXISTING CONDITIONS DEMOLITION PLAN

CLIENT:
 Net Lease Associates North, LLC
 Net Lease Associates South, LLC
 3888 S. CANAL ROAD
 LANSING, MICHIGAN
 517-322-0800

SCALE: 1"=60'
 PROJECT No.: 9214101
 DWG NAME: 4101-EX
 ISSUED: SEPT. 21, 2021

EX



SITE DATA:

PROJECT AREA: 11-05-303-015 5.20 AC.
 11-08-100-009 11.00 AC.

CURRENT ZONING: INDUSTRIAL
 PROPOSED USE: ASPHALT PLANT

	PERMITTED	PROPOSED
SITE AREA:	5 AC. (MIN.)	16.20 AC.
WIDTH:	150 FEET	30 FEET
BUILDING HEIGHT:	30 FEET	1 STORY / 22 FEET
STORAGE SILO HEIGHT:		86 FEET
LOT COVERAGE (BLDG):	40%	3.0%
IMPERVIOUS COVERAGE:	85%	42.9%
SETBACKS: FRONT	85 FT.	89.8'
SIDE	25 FT.	89.8'
REAR	40 FT.	90.1'
PARKING: FRONT	20 FT.	40.0'
SIDE & REAR	10 FT.	37.64'
EXISTING BUILDING AREA:	15,040 sq.ft.	
TANK VOLUMES:	FUEL	1,000 GALLONS
	TACK	2,000 GALLONS
	LIQUID ASPHALT	1,504,000 GALLONS EACH

PARKING REQUIREMENTS:
 INDUSTRIAL:
 1.5 SPACES PER 1,000 SQ. FT.
 15,040 SQ. FT. / 1,000 (1.5) = 23 SPACES
 PROVIDED PARKING: = 23 SPACES
 EMPLOYEES = 10 (ESTIMATED)

BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED AUGUST 11, 2021 AT 9:01 AM

BENCHMARK #201
 CHISELED "S" IN THE TOP OF A CONCRETE CULVERT, LOCATED NEAR THE NW SIDE OF CUL-DE-SAC OF VICTORY DRIVE. ELEVATION = 949.53 (NAVD 88)

BENCHMARK #202
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 FINISH FLOOR ELEVATION IN OFFICE ENTRANCE, LOCATED NEAR THE NORTHWEST CORNER OF #3080 TODDIEM. ELEVATION = 963.47 (NAVD 88)

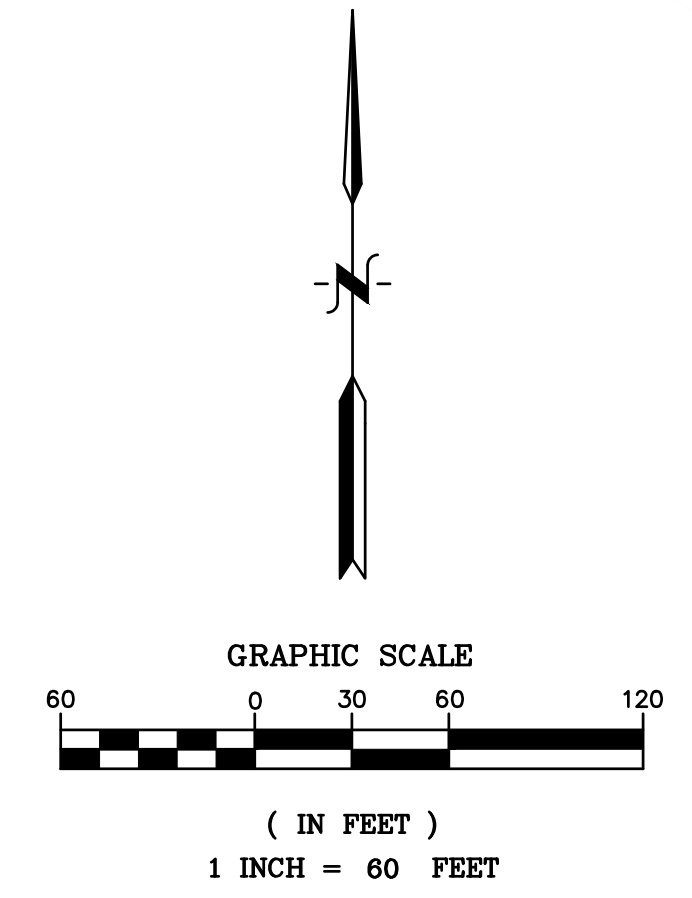
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 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114



REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
1	09-21-21	REVISED PER REVIEW COMMENTS			

DESIGN: WMP
 DRAFT: L.F.
 CHECK: WMP

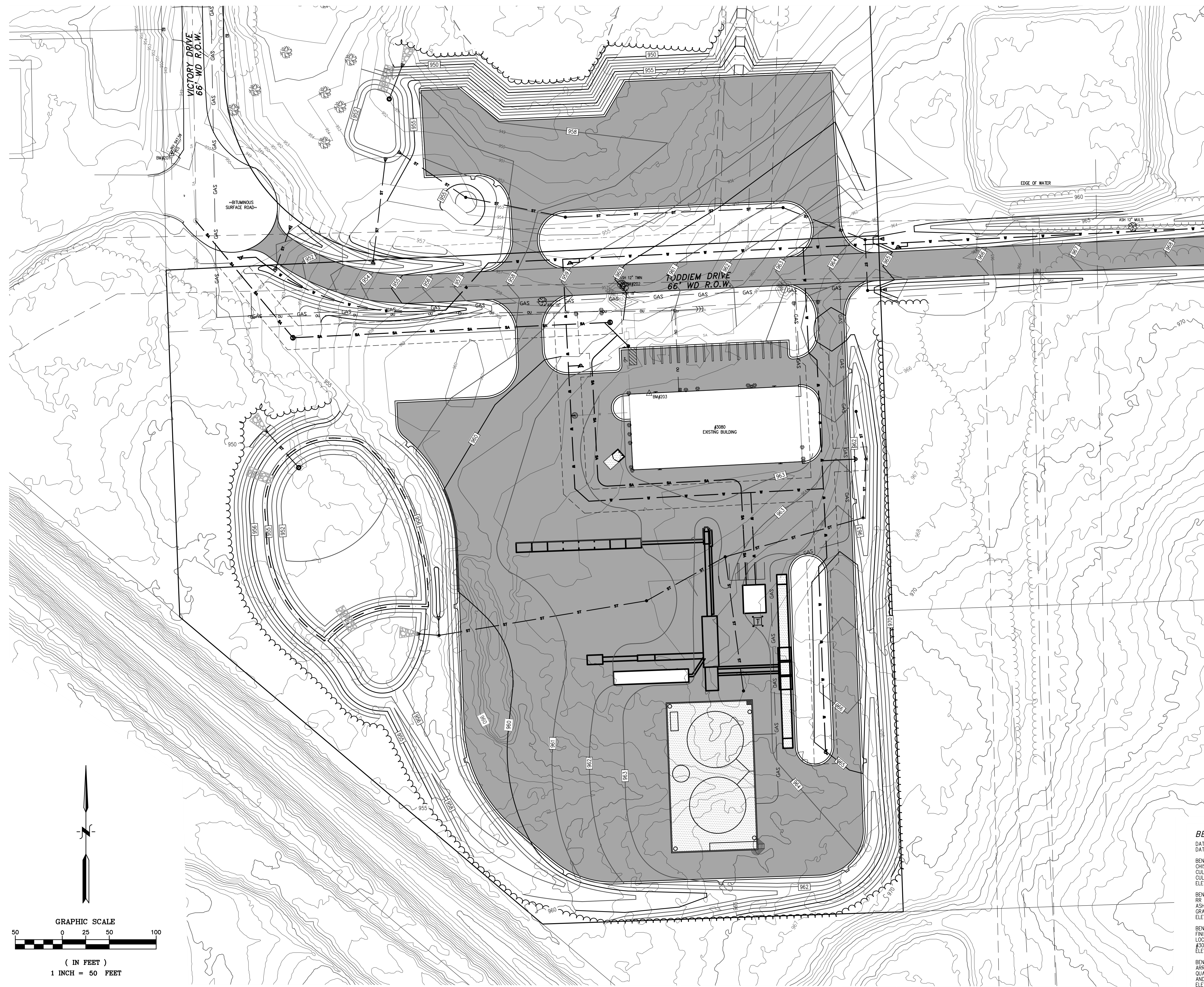
TODDIEM-VICTORY DRIVE PID

SITE PLAN

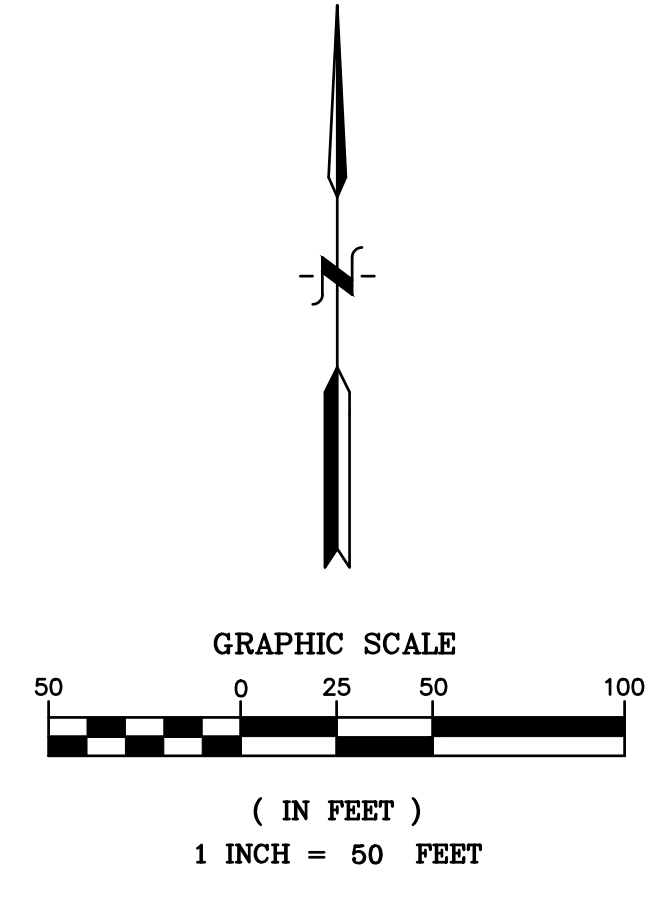
CLIENT:
 Net Lease Associates North, LLC
 Net Lease Associates South, LLC
 3888 S. CANAL ROAD
 LANSING, MICHIGAN
 517-322-0800

SCALE: 1"=60'
 PROJECT No.: 9214101
 DWG NAME: 4101-SP
 ISSUED: **SEPT. 21, 2021**

SP



- ### LEGEND
- = MISC. STRUCTURE (AS LABELED)
 - = BOLLARD
 - = SIGN
 - = LIGHT BASE
 - = STREET LIGHT
 - = OVERHEAD TRAFFIC SIGNAL
 - = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
 - = AIR CONDITIONER UNIT
 - = UTILITY MANHOLE (AS LABELED)
 - = UTILITY POLE W/GUY WIRE
 - = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - = DECIDUOUS TREE W/IDENTIFIER
 - = CONIFEROUS TREE W/IDENTIFIER
 - = DECIDUOUS SHRUB
 - = EXISTING TREE DRIP LINE
 - = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 - = GUARD RAIL
 - = EDGE OF GRAVEL
 - = CONCRETE CURB (UNLESS OTHERWISE STATED)
 - = SANITARY SEWER MANHOLE W/IDENTIFIER
 - = SANITARY SEWER PIPE
 - = CLEAN OUT
 - = STORM WATER MANHOLE W/IDENTIFIER
 - = CATCH BASIN W/IDENTIFIER
 - = FLARED END SECTION
 - = STORM WATER DRAINAGE PIPE
 - = HYDRANT
 - = WATER SHUT OFF
 - = WATER VALVE
 - = WATER VALVE BOX
 - = WATER MAIN
 - = GAS SHUT OFF
 - = U/G GAS
 - = SPOT ELEVATION
 - = 1' CONTOUR
 - = 5' CONTOUR
 - = EXISTING LIGHT POLE
 - = PROPOSED LIGHT POLE
 - = PROPOSED SANITARY SEWER
 - = PROPOSED WATER MAIN
 - = PROPOSED STORM SEWER
 - = PROPOSED STORM STRUCTURES
 - = PROPOSED 1' CONTOUR
 - = PROPOSED 5' CONTOUR
 - = PROPOSED HEAVY DUTY BITUMINOUS PAVEMENT
 - = PROPOSED HEAVY DUTY CONCRETE PAVEMENT



BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED AUGUST 11, 2021 AT 9:01 AM

BENCHMARK #201
 CHISELED "X" IN THE TOP OF A CONCRETE CULVERT, LOCATED NEAR THE NW SIDE OF CUL-DE-SAC OF VICTORY DRIVE. ELEVATION = 949.53 (NAVD 88)

BENCHMARK #202
 RR SPIKE IN THE NORTHERLY SIDE OF A 12" TWIN ASH TREE, LOCATED NEAR THE EAST SIDE OF GRAVEL ENTRANCE OF #3080 TODDIEM. ELEVATION = 958.175 (NAVD 88)

BENCHMARK #203
 FINISH FLOOR ELEVATION IN OFFICE ENTRANCE, LOCATED NEAR THE NORTHWEST CORNER OF #3080 TODDIEM. ELEVATION = 963.47 (NAVD 88)

BENCHMARK #204
 ARROW ON HYDRANT, LOCATED NEAR THE NWLY QUAD OF THE INTERSECTION OF GRAND OAK RD AND TODDIEM DR. ELEVATION = 975.77 (NAVD 88)

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 BRIGHTON, MICHIGAN 48114

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: L.F.	1	09-21-21	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

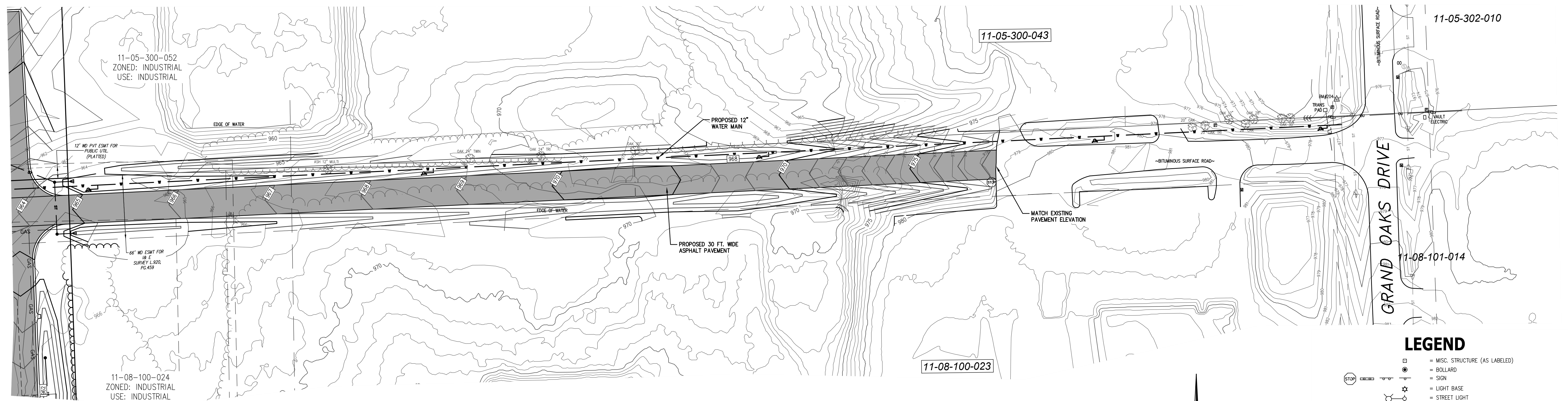
TODDIEM-VICTORY DRIVE PID

GRADING & PAVING PLAN

CLIENT:
 Net Lease Associates North, LLC
 Net Lease Associates South, LLC
 3888 S. CANAL ROAD
 LANSING, MICHIGAN
 517-322-0800

SCALE: 1"=50'
 PROJECT No.: 9214101
 DWG NAME: 4101-GR
 ISSUED: SEPT. 21, 2021





BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED AUGUST 11, 2021 AT 9:01 AM

BENCHMARK #201
 CHISELED "X" IN THE TOP OF A CONCRETE CULVERT, LOCATED NEAR THE NW SIDE OF CUL-DE-SAC OF VICTORY DRIVE.
 ELEVATION = 949.53 (NAVD 88)

BENCHMARK #202
 RR SPIKE IN THE NORTHERLY SIDE OF A 12" TWIN ASH TREE, LOCATED NEAR THE EAST SIDE OF GRAVEL ENTRANCE OF #3080 TODDIEM.
 ELEVATION = 958.75 (NAVD 88)

BENCHMARK #203
 FINISH FLOOR ELEVATION IN OFFICE ENTRANCE, LOCATED NEAR THE NORTHWEST CORNER OF #3080 TODDIEM.
 ELEVATION = 963.47 (NAVD 88)

BENCHMARK #204
 ARROW ON HYDRANT, LOCATED NEAR THE NWLY QUAD OF THE INTERSECTION OF GRAND OAK RD AND TODDIEM DR.
 ELEVATION = 979.77 (NAVD 88)

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DRAFT: L.F.						
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TODDIEM-VICTORY DRIVE PID

TODDIEM DRIVE EXTENSION PLAN

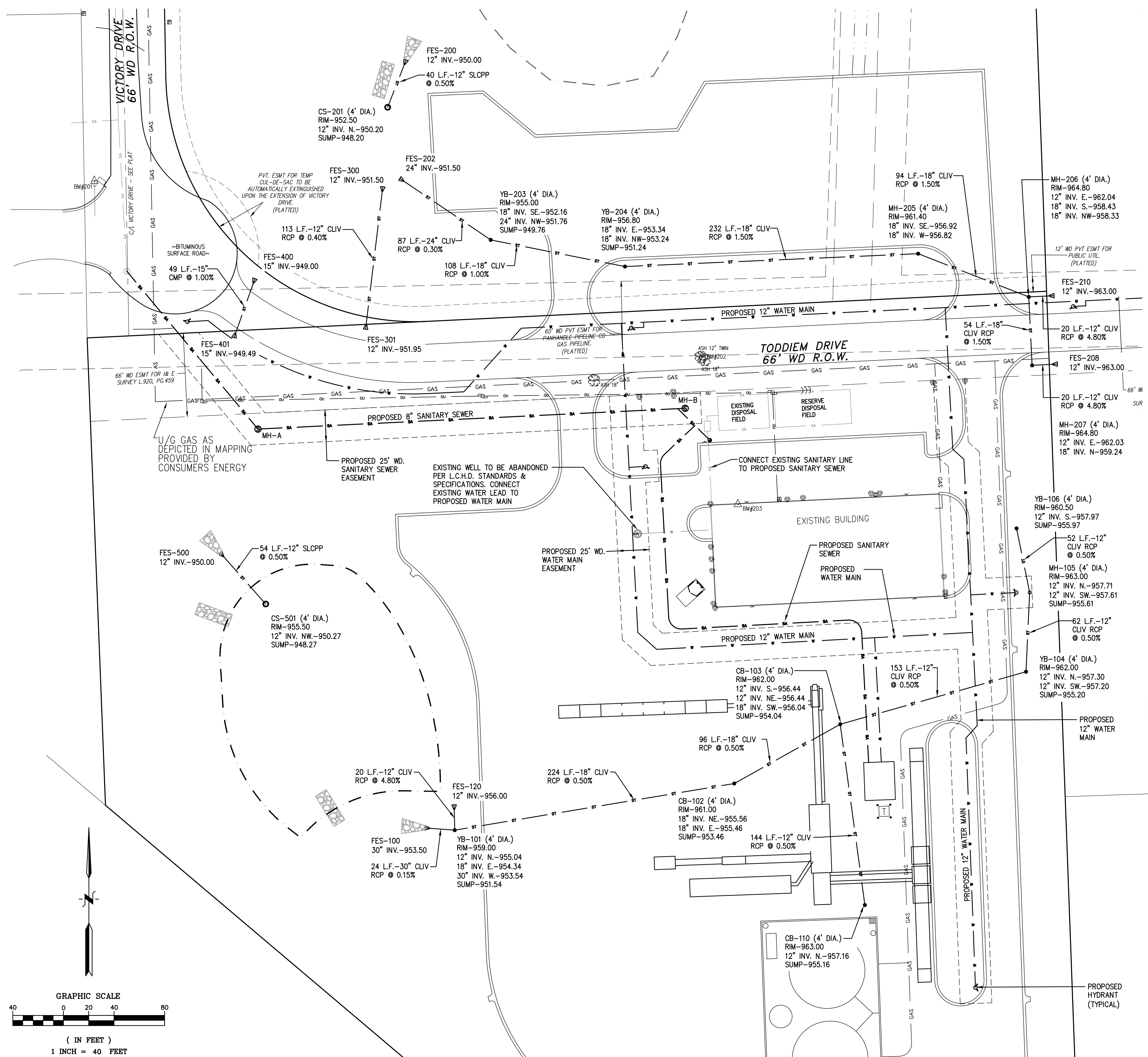
CLIENT:
 Net Lease Associates North, LLC
 Net Lease Associates South, LLC
 3888 S. CANAL ROAD
 LANSING, MICHIGAN
 517-322-0800

SCALE: 1"=50'
 PROJECT No.: 9214101
 DWG NAME: 4101-RD1
 ISSUED: SEPT. 21, 2021

RD1

LEGEND

- = MISC. STRUCTURE (AS LABELED)
- = BOLLARD
- = SIGN
- = LIGHT BASE
- = STREET LIGHT
- = OVERHEAD TRAFFIC SIGNAL
- = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX)
- = AIR CONDITIONER UNIT
- = UTILITY MANHOLE (AS LABELED)
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = SANITARY SEWER PIPE
- = CLEAN OUT
- = STORM WATER MANHOLE W/IDENTIFIER
- = STORM WATER DRAINAGE PIPE
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = STORM WATER DRAINAGE PIPE
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = WATER MAIN
- = GAS SHUT OFF
- = U/G GAS
- = PROPOSED SANITARY SEWER
- = PROPOSED WATER MAIN
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES

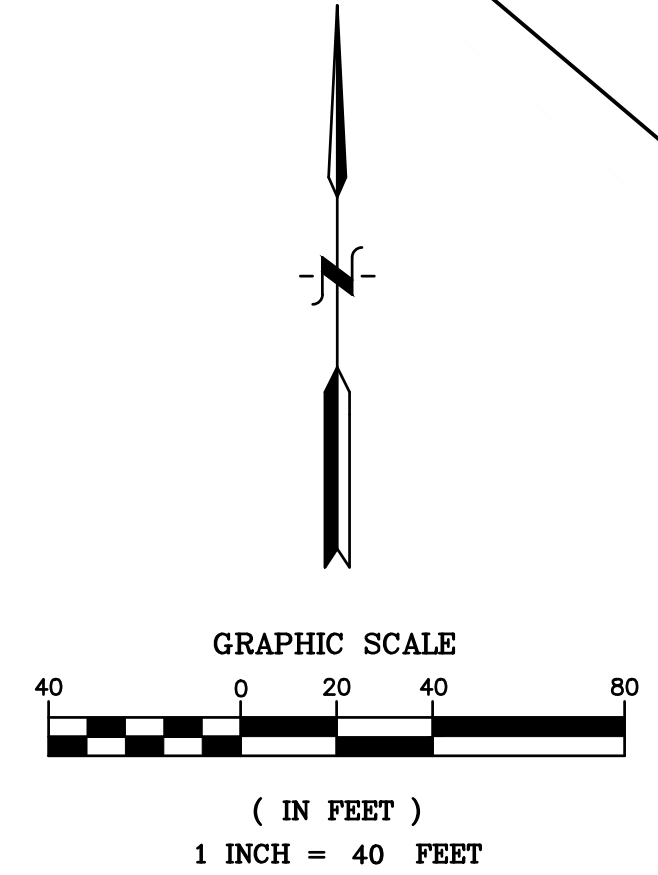


TODDIEM DRIVE	
Water Main Basis of Design	August 16, 2021
TSV TO HYD	
Design Factors:	
Equivalent length of pipe	L = 2075 feet
Hazen-Williams roughness constant	C = 110
Design flow volume	Q = 3000 gpm
Pipe diameter	Dia = 12.0 inches
Calculated Pressure Loss	
friction head loss (feet per 100 feet)	f = 2.70 ft / 100 ft
friction head loss (psi per 100 feet)	f = 1.16 psi / 100 ft
Calculated Flow Velocity	
Flow velocity	V = 8.51 ft/s
Resultant Pressures	
Pressure at WTR Main*	P1 = 70.0 psi
Calculated pressure at HYD "N"	P2 = 45.9 psi

BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED AUGUST 11, 2021 AT 9:01 AM
 BENCHMARK #201
 CHISELED "X" IN THE TOP OF A CONCRETE CULVERT, LOCATED NEAR THE NW SIDE OF CUL-DE-SAC OF VICTORY DRIVE. ELEVATION = 949.53 (NAVD 88)
 BENCHMARK #202
 RR SPIKE IN THE NORTHERLY SIDE OF A 10" TWIN ASH TREE, LOCATED NEAR THE EAST SIDE OF GRAVEL ENTRANCE OF #3080 TODDIEM. ELEVATION = 958.175 (NAVD 88)
 BENCHMARK #203
 FINISH FLOOR ELEVATION IN OFFICE ENTRANCE, LOCATED NEAR THE NORTHWEST CORNER OF #3080 TODDIEM. ELEVATION = 963.47 (NAVD 88)
 BENCHMARK #204
 ARROW ON HYDRANT, LOCATED NEAR THE NWLY QUAD OF THE INTERSECTION OF GRAND OAK RD AND TODDIEM DR. ELEVATION = 975.77 (NAVD 88)

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DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
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CHECK: WMP						

TODDIEM-VICTORY DRIVE PID

UTILITY PLAN

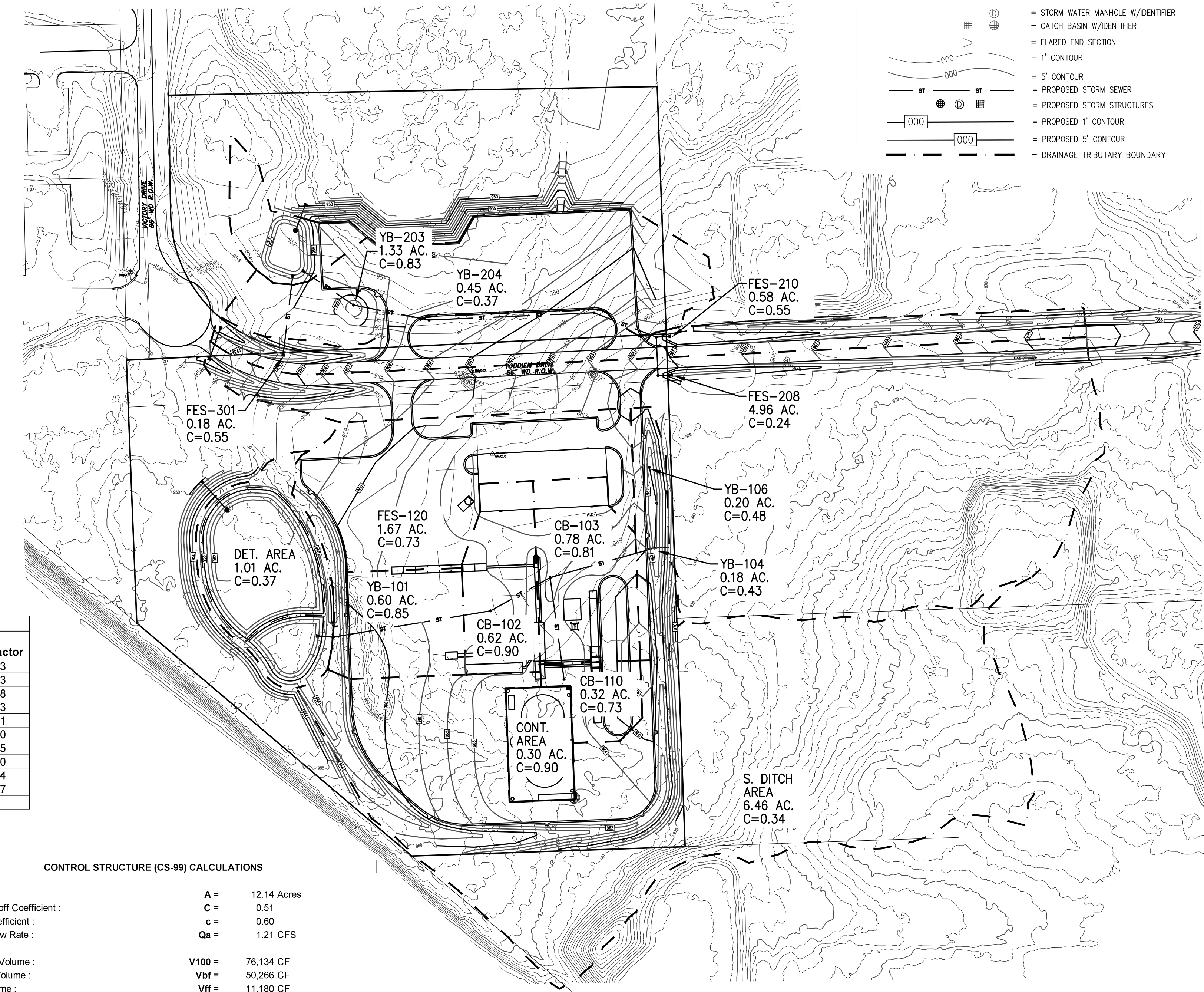
CLIENT:
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 Net Lease Associates South, LLC
 3888 S. CANAL ROAD
 LANSING, MICHIGAN
 517-322-0800

SCALE: 1"=40'
 PROJECT No.: 9214101
 DWG NAME: 4101-UT
 ISSUED: **SEPT. 21, 2021**

UT

LEGEND

- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED 1' CONTOUR
- = PROPOSED 5' CONTOUR
- = DRAINAGE TRIBUTARY BOUNDARY



Design Criteria: 10 year event (I = 175t + 25) RCP n= 0.013 HDPE n= 0.013

From MH# CB# FES#	To MH# CB# FES#	Inc. Acres	Eqv. Area 100% CA	Total Area 100% CA	T Time Min.	I Inch Per Hour	Q (CIA) c.f.s.	Dia. of pipe inch	Slope pipe %	Slope H.G. %	Length of line ft.	Vel. Flow full ft./sec.	Time of flow min.	Cap of pipe c.f.s.	H.G. Elev. upper end	Ground Elev. Upper end	Ground Elev. Lower end	Invert Elev. Upper end	Invert Elev. Lower end	
301	300	0.18	0.55	0.10	0.10	15.0	4.38	0.43	12	0.40	0.01	113	2.87	0.7	2.25	952.52	951.95	951.50	951.95	951.50
210	206	0.58	0.55	0.32	0.32	15.0	4.38	1.40	12	4.80	0.15	20	9.94	0.0	7.81	963.07	963.00	964.80	963.00	962.04
208	207	4.96	0.24	1.20	1.20	15.0	4.38	5.23	12	4.80	2.15	20	9.94	0.0	7.81	963.47	963.00	964.80	963.00	962.04
207	206	0.00	0.00	0.00	1.20	15.0	4.37	5.22	18	1.50	0.25	54	7.28	0.1	12.86	960.06	964.80	964.80	959.24	958.43
206	205	0.00	0.00	0.00	1.51	15.2	4.36	6.60	18	1.50	0.39	94	7.28	0.2	12.86	958.79	964.80	961.40	956.33	956.92
205	204	0.00	0.00	0.00	1.51	15.4	4.33	6.56	18	1.50	0.39	232	7.28	0.5	12.86	956.82	961.40	956.80	956.82	953.34
204	203	0.45	0.37	0.17	1.68	15.9	4.28	7.19	18	1.00	0.47	108	5.94	0.3	10.50	954.24	956.80	955.00	953.24	952.16
203	202	1.33	0.83	1.11	2.79	16.2	4.25	11.84	24	0.30	0.27	87	3.94	0.4	12.39	953.74	955.00	951.50	951.76	951.50

SEDIMENTATION BASIN VOLUME CALCULATIONS

BASIN B				
POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	951.00	2,317	0	0
1.0	952.00	3,327	2,807	2,807
2.0	953.00	3,776	3,549	6,356
		4494		
LOWER	ELEV 952.00	VOLUME 2,807	VOLUME REQ. 1,856	ELEVATION 951.73
HIGHER	ELEV 953.00	VOLUME 6,356		

PROPOSED DRAINAGE AREAS - NORTH

"Area"	ACRES				"C" Factor
	Pavement	Building	Lawn	Water	
FES-301	0.09	0.00	0.09	0.00	0.18
FES-210	0.29	0.00	0.29	0.00	0.58
FES-208	0.29	0.00	4.67	0.00	4.96
YB-204	0.11	0.00	0.34	0.00	0.45
YB-203	1.20	0.00	0.13	0.00	1.33
Sedimentation Area	0.10	0.00	0.65	0.05	0.80
TOTAL AREA =				8.30	ACRES
RUN-OFF COEFFICIENT =				0.38	

CONTROL STRUCTURE (CS-201) CALCULATIONS

Tributary Area: A = 8.30 Acres
 Compound Runoff Coefficient: C = 0.38
 Orifice Flow Coefficient: c = 0.60
 Allowable Outflow Rate: Qa = 0.83 CFS
 First Flush Volume: Vff = 1,856 CF
 Low Water Level: LWL = 951.00
 First Flush Elevation: Xff = 951.73

FIRST FLUSH:
 Qff = Vff * (1 / 24 hrs) * (1 / 3600 sec) = 0.021 CFS
 Hff = (2 / 3) * (Xff - LWL) = 0.49 FT
 Aff = Qff / (c * SQRT(2 * 32.2 * Hff)) = 0.0064 SF
 Nff = Aff / 0.0055 = 1.2 1.0" Holes

Use Nff = 1 1.0" Holes at Elevation = 951.00

PROPOSED DRAINAGE AREAS - SOUTH

"Area"	ACRES				"C" Factor
	Pavement	Building	Lawn	Water	
FES-120	1.09	0.17	0.41	0.00	1.67
YB-110	0.24	0.00	0.08	0.00	0.32
YB-106	0.08	0.00	0.12	0.00	0.20
YB-104	0.06	0.00	0.12	0.00	0.18
CB-103	0.57	0.11	0.10	0.00	0.78
CB-102	0.55	0.07	0.00	0.00	0.62
YB-101	0.56	0.00	0.04	0.00	0.60
Containment	0.30	0.00	0.00	0.00	0.30
South Ditch Area	1.28	0.00	5.18	0.00	6.46
Detention Area	0.00	0.00	0.79	0.22	1.01
TOTAL AREA =				12.14	ACRES
RUN-OFF COEFFICIENT =				0.51	

100 YEAR STORM DETENTION - BASIN A

1	2	3	4	5	6	7
Duration (Minutes)	Duration (Seconds)	Intensity (100-yr Storm) (in / hr)	Col. 2 * Col. 3 (Inches)	Inflow Volume = Col. 4 * K1 (Cubic Feet)	Outflow Volume = Col. 2 * Qo (Cubic Feet)	Storage Volume = Col. 5 - Col. 6 (Cubic Feet)
5	300	9.17	2750	16940	364	16576
10	600	7.86	4714	29040	728	28312
15	900	6.88	6188	38115	1093	37022
20	1200	6.11	7333	45173	1457	43717
30	1800	5.00	9000	55440	2185	53255
60	3600	3.24	11647	71746	4370	67376
90	5400	2.39	12913	79544	6556	72989
120	7200	1.90	13655	84116	8741	75375
180	10800	1.34	14488	89245	13111	76134
240	14400	1.04	14943	92051	17482	74570

Note: Figures in Columns (3) and (4) are computed by the formula $I = 275 / (t + 25)$ (i.e. 100-yr Curve);
 * Allowable outflow rate Qo is computed by one of the following cases:
 Case 1: Qo = capacity of existing discharge conduit or channel.
 Case 2: Qo = q * A where q = Permissible discharge rate per acre of tributary area = 0.10 cfs / Acre

Bankfull Volume: (8160)(A)(C) = 50266 cf
First Flush Volume: (1815)(A)(C) = 11180 cf
Forebay Volume (5% of 100 year Volume): = 3769 cf

CONTROL STRUCTURE (CS-99) CALCULATIONS

Tributary Area: A = 12.14 Acres
 Compound Runoff Coefficient: C = 0.51
 Orifice Flow Coefficient: c = 0.60
 Allowable Outflow Rate: Qa = 1.21 CFS
 100 Year Flood Volume: V100 = 76,134 CF
 Bankfull Flood Volume: Vbf = 50,266 CF
 First Flush Volume: Vff = 11,180 CF
 Low Water Level: LWL = 951.00
 First Flush Elevation: Xff = 952.69
 Bankfull Flood Elevation: Xbf = 954.52
 100 Year Flood Elevation: X100 = 955.42
 (Use available high water elevation for X100)

FIRST FLUSH:
 Qff = Vff * (1 / 24 hrs) * (1 / 3600 sec) = 0.129 CFS
 Hff = (2 / 3) * (Xff - LWL) = 1.13 FT
 Aff = Qff / (c * SQRT(2 * 32.2 * Hff)) = 0.0253 SF
 Nff = Aff / 0.01227 = 2.1 1.5" Holes

Use Nff = 2 1.5" Holes at Elevation = 951.00

BANKFULL FLOOD:
 H = (2 / 3) * (Xbf - LWL) = 2.348 FT
 Qbw = c * Nff * 0.01227 * SQRT(2 * 32.2 * H) = 0.1811 CFS
 Vprovided = Qbw * 24 hrs * (3600 sec / 1 hr) = 15,645 CF
 Vneeded = Vbf - Vprovided = 34,621 CF
 Qbf = Vneeded * (1 / 16 hrs) * (1 / 3600 sec) = 0.6011 CFS
 Hbf = (2 / 3) * (Xbf - Xff) = 1.22 FT
 Abf = Qbf / (c * SQRT(2 * 32.2 * Hbf)) = 0.1131 SF
 Nbf = Abf / 0.02182 = 5.2 2.0" Holes

Use Nbf = 5 2.0" Holes at Elevation = 952.69

100 YEAR FLOOD:
 Qff + Qbf = [c * Nff * 0.01227 * SQRT(2 * 32.2 * (X100 - LWL))] + [c * Nbf * 0.02182 * SQRT(2 * 32.2 * (X100 - Xff))] = 1.116 CFS
 Qa - (Qff + Qbf) = 0.0983 CFS
 H100 = HWL - Xbf = 0.90 FT
 A100 = Q100 / (c * SQRT(2 * 32.2 * H100)) = 0.0215 SF
 N100 = A100 / 0.0218 = 1.0 2.0" Holes

Use N100 = 1 2.0" Holes at Elevation = 954.61

DETENTION BASIN VOLUME CALCULATIONS

BASIN A				
POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	951.00	0	0	0
1.0	952.00	9,600	3,200	3,200
2.0	953.00	20,050	14,512	17,712
3.0	954.00	22,730	21,381	39,093
4.0	955.00	25,576	24,139	63,233
5.0	956.00	36,116	30,695	93,927

Detention Storage Elevation Calculation:

ELEV.	VOLUME	VOLUME REQ.	ELEVATION
LOWER 955.00	63,233	76,134	955.42
HIGHER 956.00	93,927		

Bankfull Storage Elevation Calculation:

ELEV.	VOLUME	VOLUME REQ.	ELEVATION
LOWER 953.00	17,712	50,266	954.52
HIGHER 954.00	39,093		

First Flush Storage Elevation Calculation:

ELEV.	VOLUME	VOLUME REQ.	ELEVATION
LOWER 953.00	17,712	11,180	952.69
HIGHER 954.00	39,093		

Forebay Storage Calculation:

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	953.00	3,774	0	0
1.0	954.00	5,060	4,401	4,401
2.0	955.00	6,410	5,722	10,123
LOWER	ELEV 954.00	VOLUME 4,401	VOLUME REQ. 3,807	ELEVATION 953.90
HIGHER	ELEV 955.00	VOLUME 10,123		

Design Criteria: 10 year event (I = 175t + 25) RCP n= 0.013 HDPE n= 0.013

From MH# CB# FES#	To MH# CB# FES#	Inc. Acres	Eqv. Area 100% CA	Total Area 100% CA	T Time Min.	I Inch Per Hour	Q (CIA) c.f.s.	Dia. of pipe inch	Slope pipe %	Slope H.G. %	Length of line ft.	Vel. Flow full ft./sec.	Time of flow min.	Cap of pipe c.f.s.	H.G. Elev. upper end	Ground Elev. Upper end	Ground Elev. Lower end	Invert Elev. Upper end	Invert Elev. Lower end	
106	105	0.20	0.48	0.10	0.10	15.0	4.38	0.42	12	0.50	0.01	52	3.21	0.3	2.52	958.72	960.50	963.00	957.97	957.71
105	104	0.00	0.00	0.10	0.10	15.3	4.35	0.42	12	0.50	0.01	62	3.21	0.3	2.52	958.31	963.00	962.00	957.61	957.30
104	103	0.18	0.43	0.08	0.17	15.6	4.31	0.75	12	0.50	0.04	153	3.21	0.8	2.52	957.50	962.00	962.00	957.20	956.44
110	103	0.32	0.73	0.23	0.23	15.0	4.38	1.02	12	0.50	0.08	144	3.21	0.7	2.52	957.55	963.00	962.00	957.16	956.44
103	102	0.78	0.81	0.63	1.04	16.4	4.23	4.39	18	0.50	0.17	96	4.20	0.4	7.43	957.22	962.00	961.00	956.04	955.56
102	101	0.62	0.90	0.56	1.60	16.8	4.19	6.69	18	0.50	0.41	224	4.20	0.9	7.43	956.93	961.00	959.00	955.46	954.34
120	101	1.67	0.73	1.22	1.22	15.0	4.38	5.32	12	4.80	2.23	20	9.94	0.0	7.81	956.48	956.00	959.00	956.00	955.04
101	100	0.60	0.85	0.51	3.32	17.7	4.10	13.64	30	0.15	0.11	24	3.24	0.1	15.89	956.03	959.00	953.50	953.54	953.50

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: L.F.	1	09-21-21	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

TODDIEM-VICTORY DRIVE PID

WATERSHED & STORM WATER MANAGEMENT SYSTEM CALCULATIONS

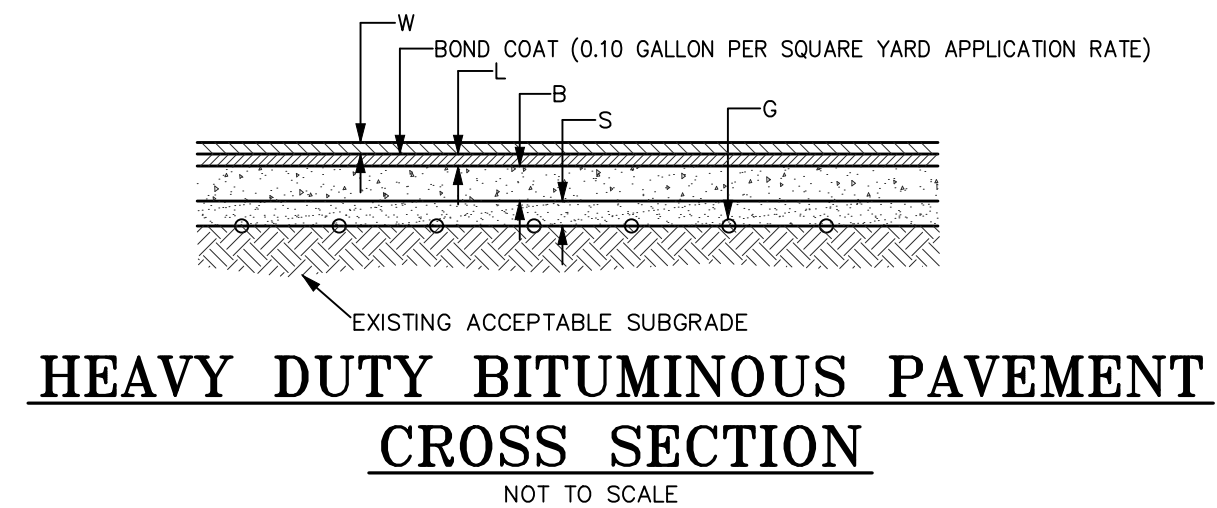
CLIENT: Net Lease Associates North, LLC
 Net Lease Associates South, LLC
 3888 S. CANAL ROAD
 LANSING, MICHIGAN
 517-322-0800

SCALE: 1"=100'
 PROJECT No.: 9214101
 DWG NAME: 4101-WS
 ISSUED: SEPT. 21, 2021

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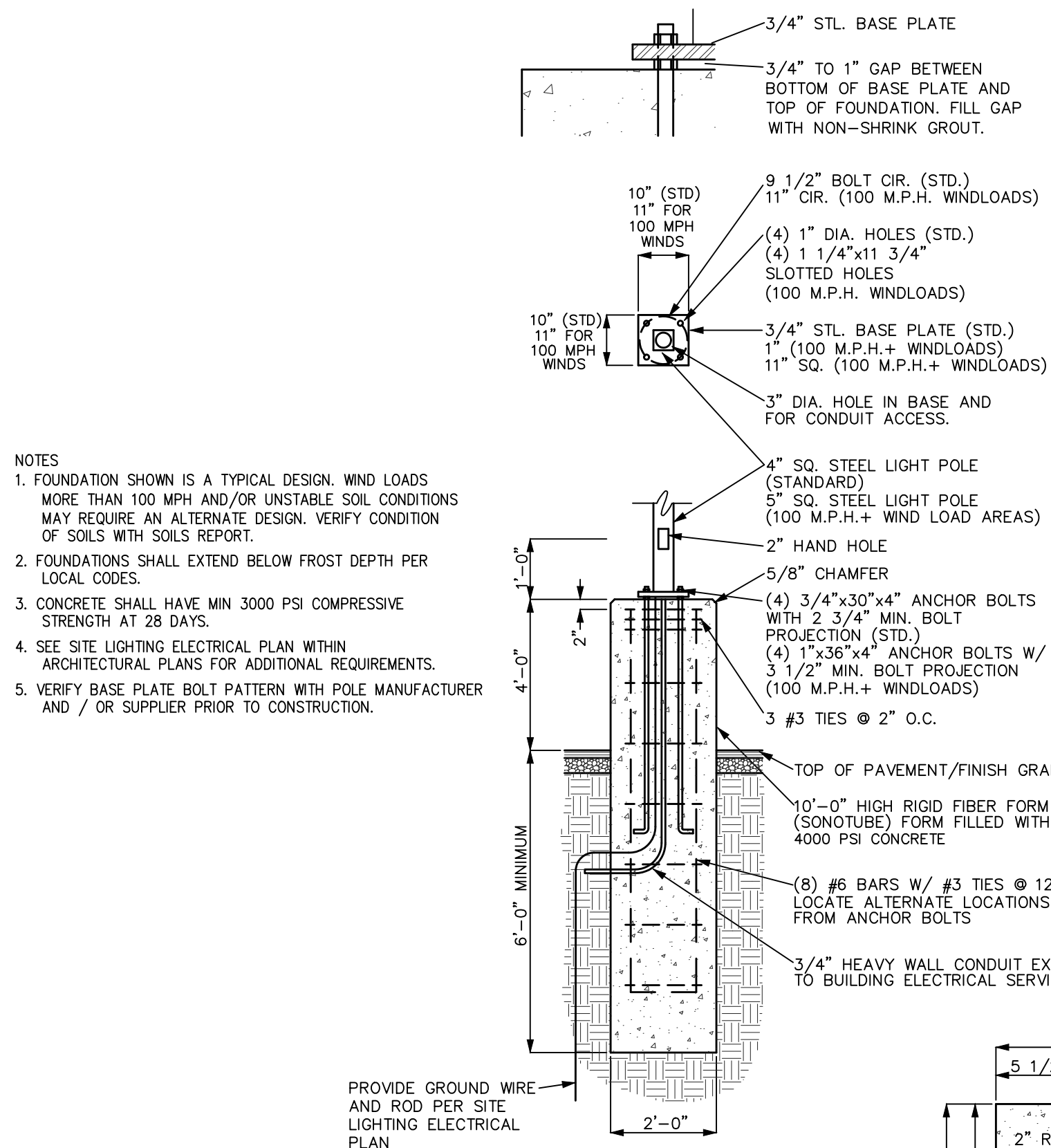




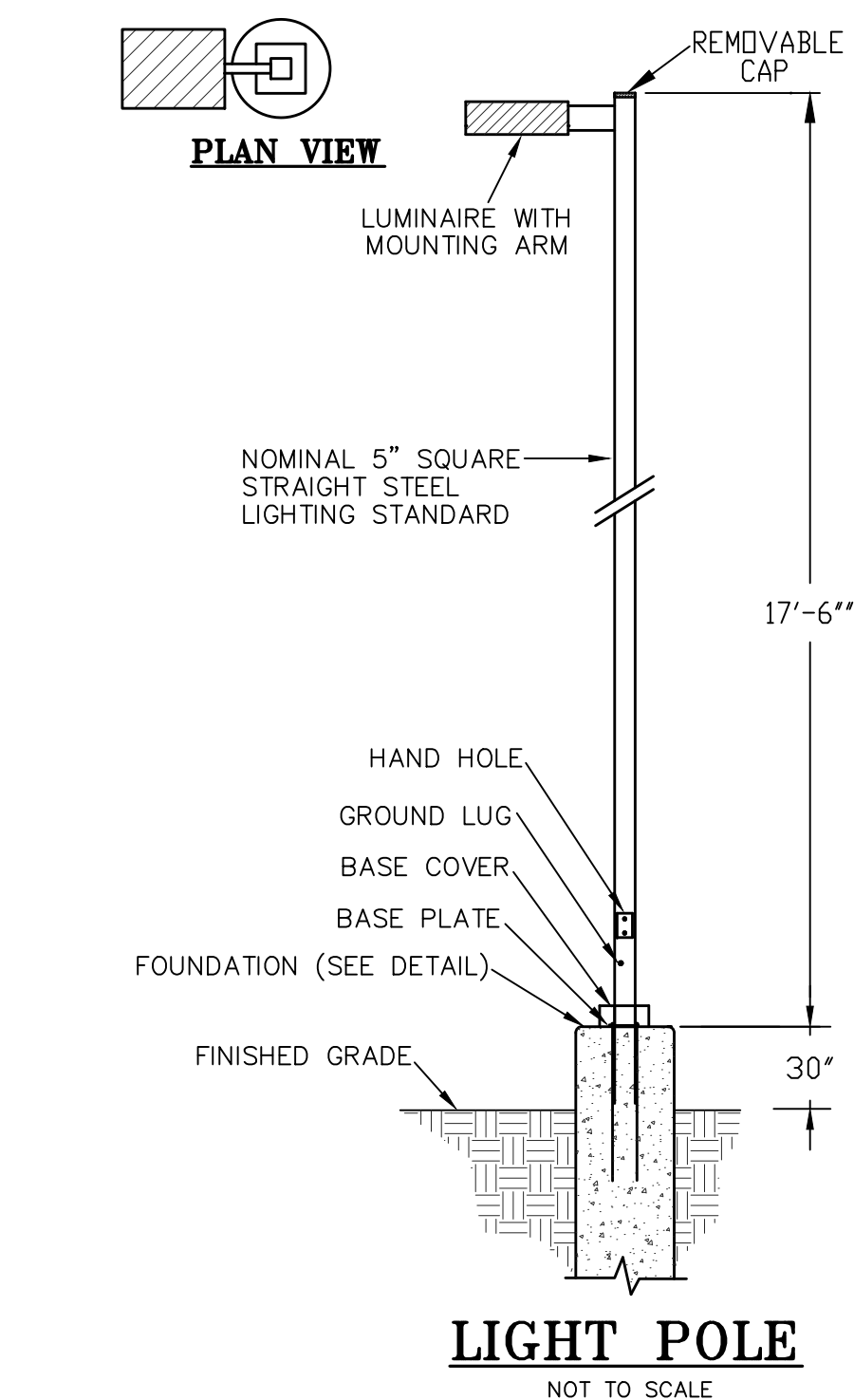
KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 36A	1.5"
L	LEVELING COURSE	MDOT 13A	4"
B	AGGREGATE BASE	MDOT 22A	8"
S	GRANULAR SUBBASE	MDOT CLASS II	6"
G	GEORID	N/A	N/A

BITUMINOUS PAVEMENT CROSS SECTION NOTES:

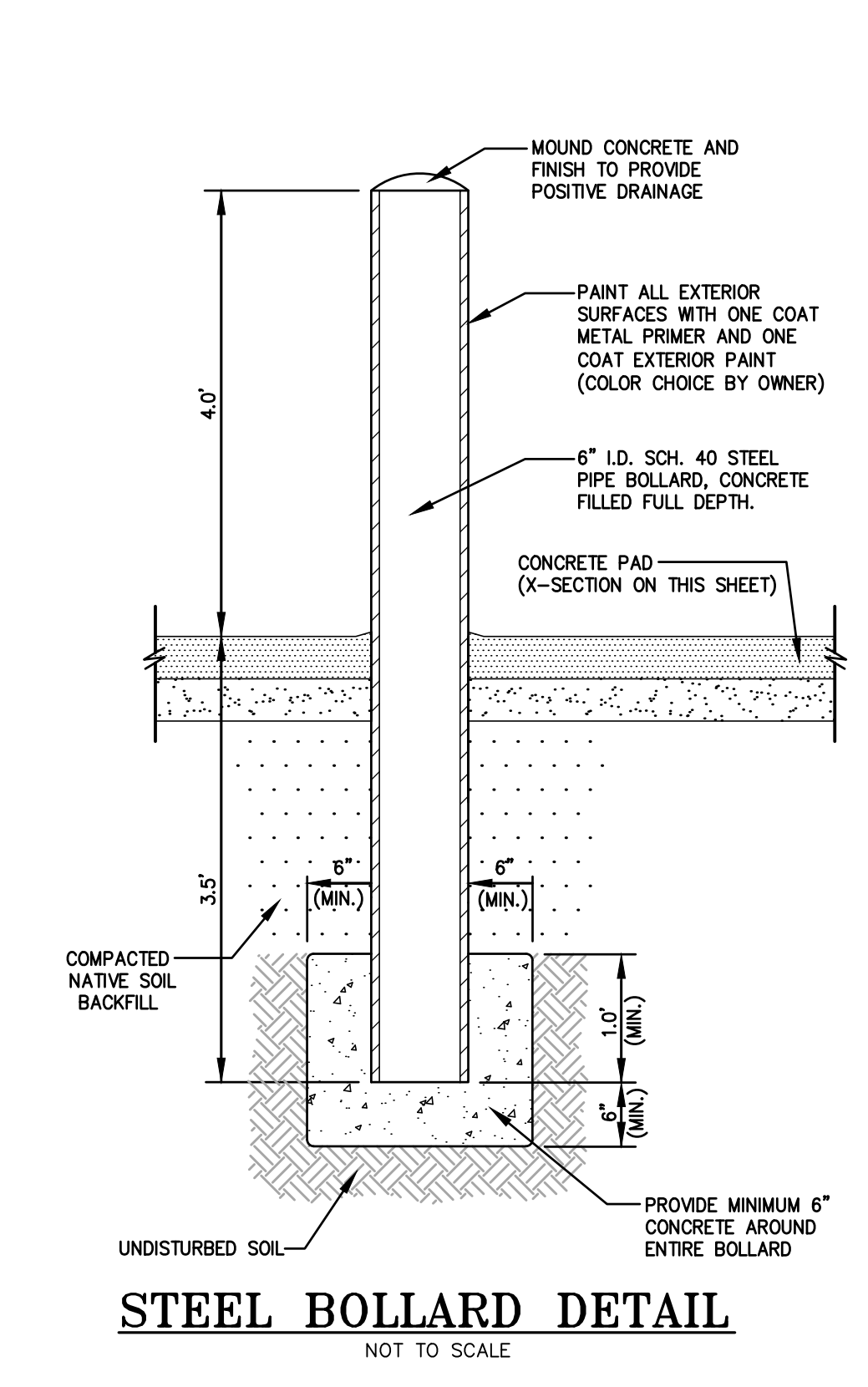
- The construction specifications of the Local Municipality are a part of this work. Refer to the General Notes and the Bituminous Pavement Cross Section Details on the Project Plans for additional requirements. Construction of the bituminous pavement cross section is subject to inspection by the ALDI Representative and/or Project Engineer. The Contractor shall be responsible for contacting the ALDI Representative at each stage of construction of the bituminous pavement cross section to schedule the necessary inspections.
- The Geotechnical Evaluation Report for the project site is a part of this work. The General Contractor, Earthwork Subcontractor, and Bituminous Pavement Subcontractor shall obtain, review, and become familiar with the Geotechnical Evaluation Report.
- The bituminous pavement cross section specifications are based on typical weather conditions during the June through September Construction Season. If the bituminous parking area and/or bituminous driveways are to be constructed during any other time of the year and/or if weather conditions are unseasonably wet, then modifications to the bituminous pavement cross section specifications may be necessary. If either of these conditions exists, then contact the Material Testing Engineer and/or the Project Engineer for additional requirements.
- The existing subgrade soils shall be prepared in accordance with the Geotechnical Evaluation Report. Unsuitable soils found within the 1 on 1 influence zone of the proposed pavement areas, such as muck, peat, topsoil, marl, silt or other unstable materials shall be excavated and replaced with structural fill. Structural fill shall be MDOT Class II granular material placed in accordance with the General Notes on the Project Plans and the Geotechnical Evaluation Report.
- The bituminous pavement subgrade shall be prepared and proof rolled in accordance with the Geotechnical Evaluation Report. The Material Testing Engineer and/or the Project Engineer shall observe the subgrade proof roll. Areas of subgrade that do not pass a proof roll inspection shall be undercut in accordance with the Subgrade Undercut Notes and Details on the Project Plans. Alternative means of subgrade stabilization may be considered when recommended by the Material Testing Engineer. Alternative methods shall not be performed without receipt of the Owner's Authorization.
- The bituminous pavement granular subbase material shall be MDOT Class II sand. No granular subbase material substitutions shall be permitted without prior written approval of the Project Engineer and receipt of the Owner's Authorization. The granular subbase shall be compacted to a minimum of 95% of the maximum unit weight, Modified Proctor.
- The bituminous pavement aggregate base material shall be MDOT 21AA crushed angular limestone or crushed angular natural stone aggregate material. Crushed concrete shall NOT be utilized for the standard or heavy duty bituminous pavement aggregate base. No aggregate base material substitutions shall be permitted without prior written approval of the Project Engineer and receipt of the Owner's Authorization. The aggregate base shall be compacted to a minimum of 95% of the maximum unit weight, Modified Proctor.
- The bituminous pavement leveling course material shall be MDOT 13A bituminous material placed in 1 lift. The bituminous pavement wearing course material shall be MDOT 4E3 bituminous material placed in 1 lift. The bituminous pavement leveling and wearing courses shall NOT be combined into a single course. No bituminous material substitutions shall be permitted without prior written approval of the Project Engineer and receipt of the Owner's Authorization. Compaction of the leveling course shall be achieved prior to placement of the wearing course. Any sediment, soil, debris and other foreign materials that accumulate on the leveling course shall be removed prior to placement of the wearing course. The bond coat shall be sprayed on the leveling course within 24 hours of placement of the wearing course. The bituminous pavement material shall be compacted to a minimum of 95% of the 50-blow Marshall Density.
- Placement of the bituminous pavement leveling course and bituminous pavement wearing course shall be performed in two separate mobilizations. Placement of the bituminous pavement wearing course shall be postponed as directed by the General Contractor and/or the Owner until the majority of the construction activities are complete. Repair of the bituminous leveling course may be necessary due to construction traffic and/or any delay in placement of the bituminous wearing course. The bituminous leveling course shall be repaired as directed by Material Testing Engineer and/or Owner prior to placement of the bituminous wearing course.
- Bituminous mix designs shall be developed in accordance with the MDOT HMA Production Manual. The Contractor shall submit the bituminous pavement mix designs to the Material Testing Engineer for review and approval a minimum of 3 business days prior to use. Bituminous pavement work shall not commence without receipt of the Material Testing Engineer's approval of the bituminous mix designs. The bituminous pavement mix design shall be a virgin mix. RAP mixtures shall not be utilized without prior written approval of the Material Testing Engineer and receipt of the Owner's authorization. RAP mixtures, if authorized, shall be designed and produced in accordance with MDOT Tier I or Tier II RAP Mixture Specifications. In no instance shall MDOT Tier III or non-MDOT RAP mixtures be permitted or utilized.



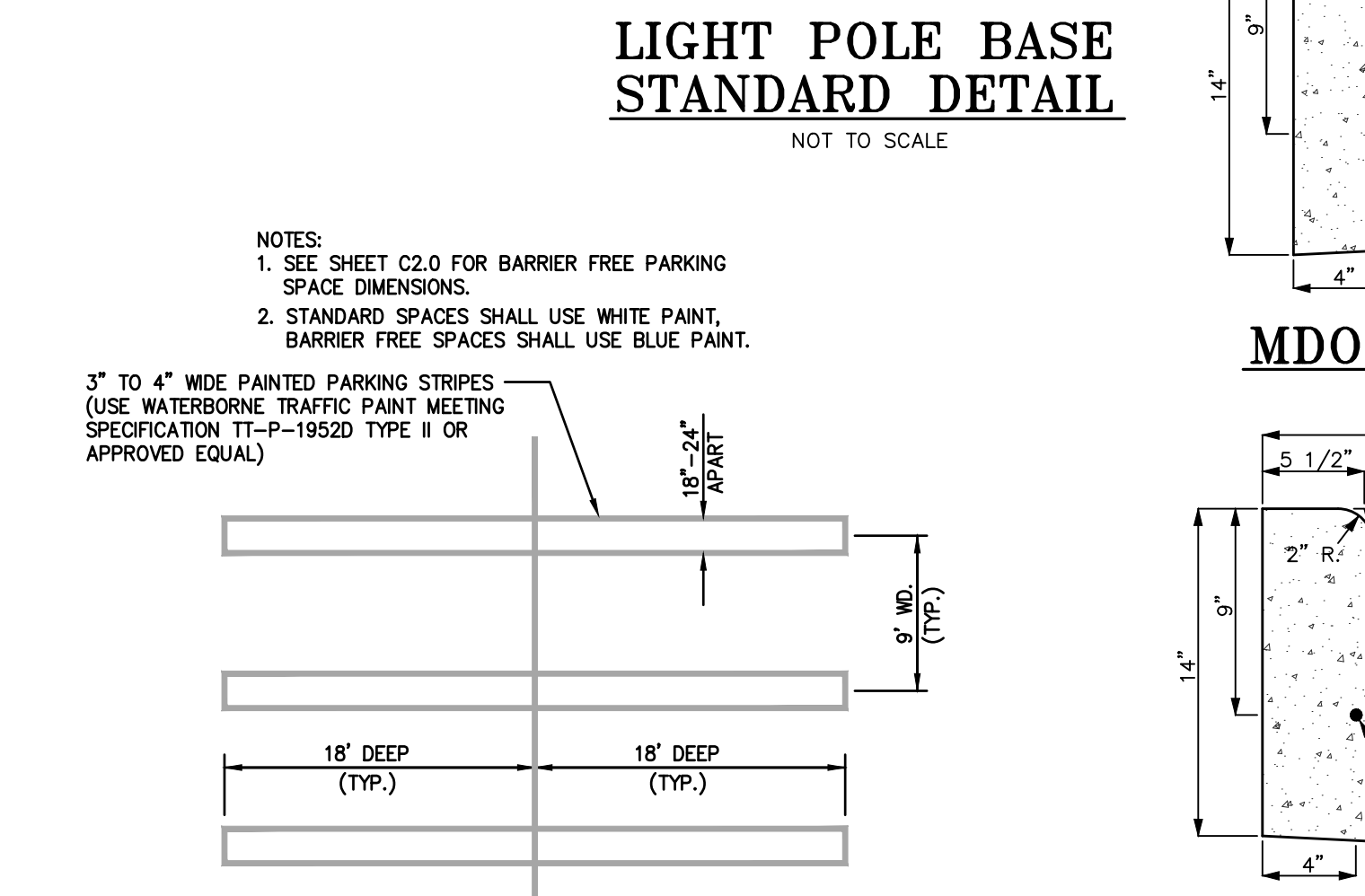
- NOTES:**
- FOUNDATION SHOWN IS A TYPICAL DESIGN. WIND LOADS MORE THAN 100 MPH AND/OR UNSTABLE SOIL CONDITIONS MAY REQUIRE AN ALTERNATE DESIGN. VERIFY CONDITION OF SOILS WITH SOILS REPORT.
 - FOUNDATIONS SHALL EXTEND BELOW FROST DEPTH PER LOCAL CODES.
 - CONCRETE SHALL HAVE MIN 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
 - SEE SITE LIGHTING ELECTRICAL PLAN WITH ARCHITECTURAL PLANS FOR ADDITIONAL REQUIREMENTS.
 - VERIFY BASE PLATE BOLT PATTERN WITH POLE MANUFACTURER AND / OR SUPPLIER PRIOR TO CONSTRUCTION.



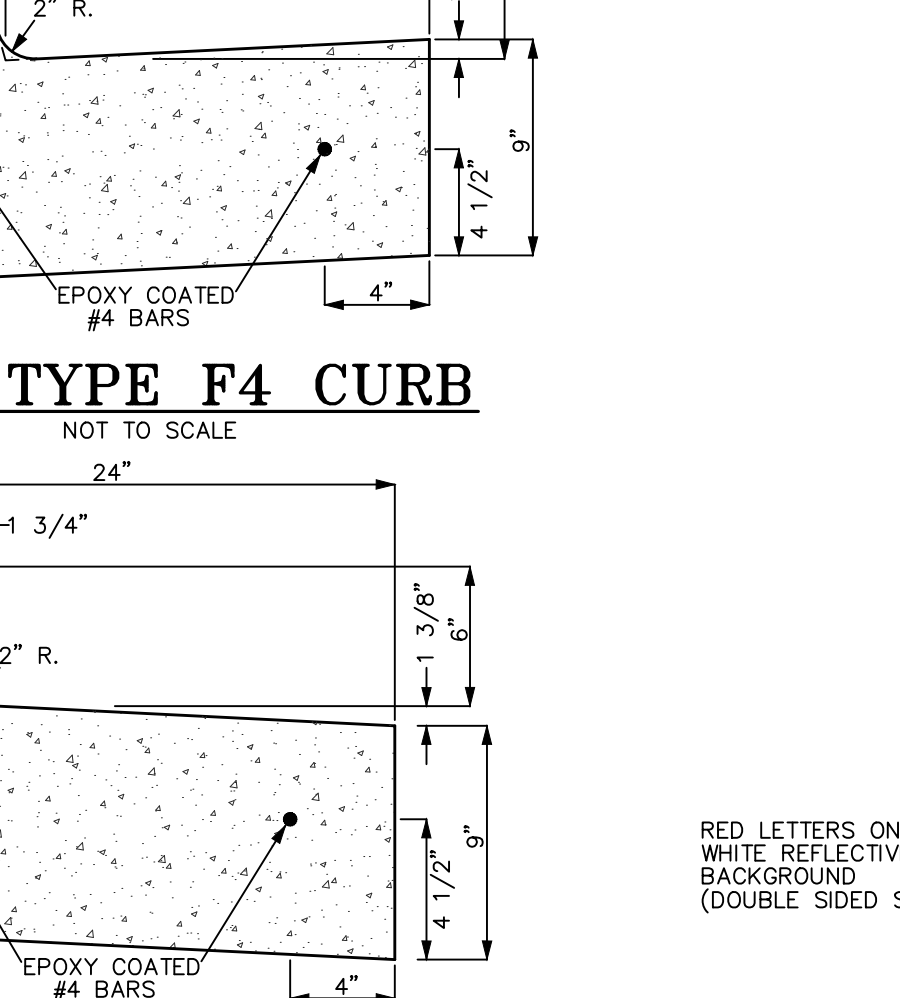
LIGHT POLE
NOT TO SCALE



STEEL BOLLARD DETAIL
NOT TO SCALE



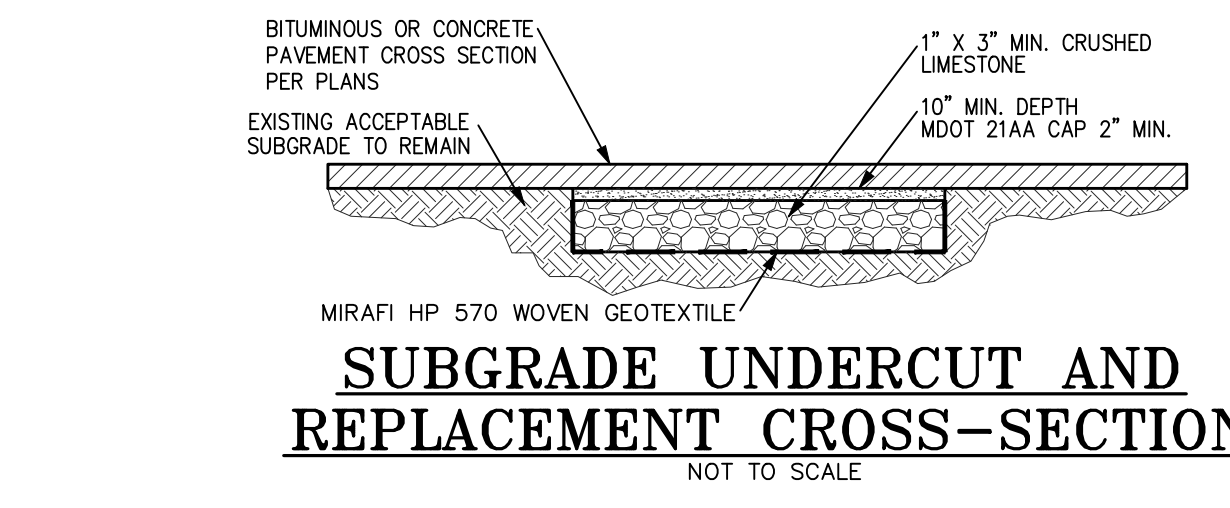
PARKING SPACE STRIPING DETAIL
NOT TO SCALE



MDOT TYPE F4 CURB REVERSE PITCH
NOT TO SCALE

PAVEMENT SUBGRADE UNDERCUT NOTES:

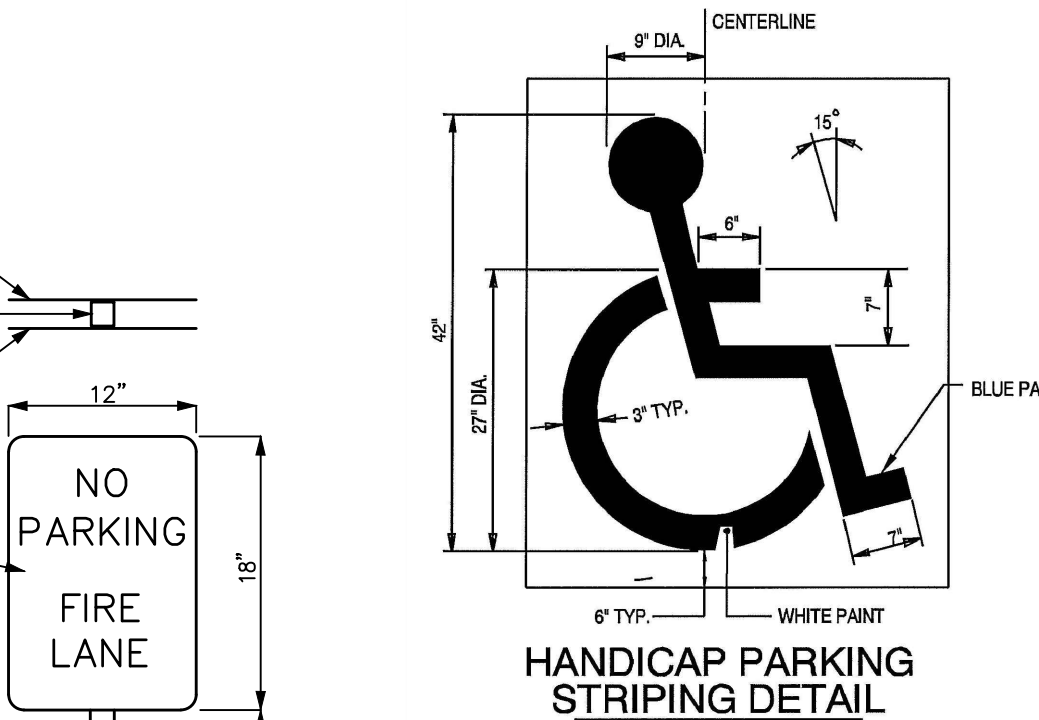
- Areas of pavement subgrade that do not pass a proof roll inspection shall be undercut when directed by the Material Testing Engineer and/or Project Engineer. All undercut work shall be witnessed and field measured by the Material Testing Engineer and/or Project Engineer. Copies of the field notes depicting the field measurements of the undercut areas shall be provided to the General Contractor and/or Earthwork Subcontractor and ALDI Inc.
- Undercut areas shall be excavated to a depth of 12" below the proposed subgrade elevation using an Excavator or Backhoe with a Smooth Edged Ditching Bucket so as not to scarify the underlying soils. Undercut areas shall remain free of all construction traffic and equipment to avoid rutting and/or tracking of the underlying soils.
- Mirafi HP 570 Woven Geotextile Fabric (or approved equal) shall be placed over all undercut areas per the Manufacturer's specifications. Overlap all seams a minimum of 12" unless specified otherwise by the Manufacturer.
- Backfill the undercut areas with 1" x 3" minimum size crushed angular limestone up to the proposed subgrade elevation. Crushed concrete material shall NOT be substituted for crushed limestone material. The backfill material shall be spread with a Wide Track Dozer to minimize loading on the underlying soils. Static roll the backfill material with a large smooth drum roller.
- Construct the appropriate Bituminous or Concrete Pavement Cross Section over the undercut areas per the Project Plans.
- The General Contractor and/or Earthwork Subcontractor shall provide ALDI Ine with unit pricing to perform subgrade undercut work per square yard (SY) of undercut area. Undercut Unit Pricing SHALL include excavation, loading, hauling and offsite disposal of excess spoils, placement of geotextile fabric and backfill including all labor, equipment and materials necessary to complete pavement subgrade undercut work as specified on the Project Plans.



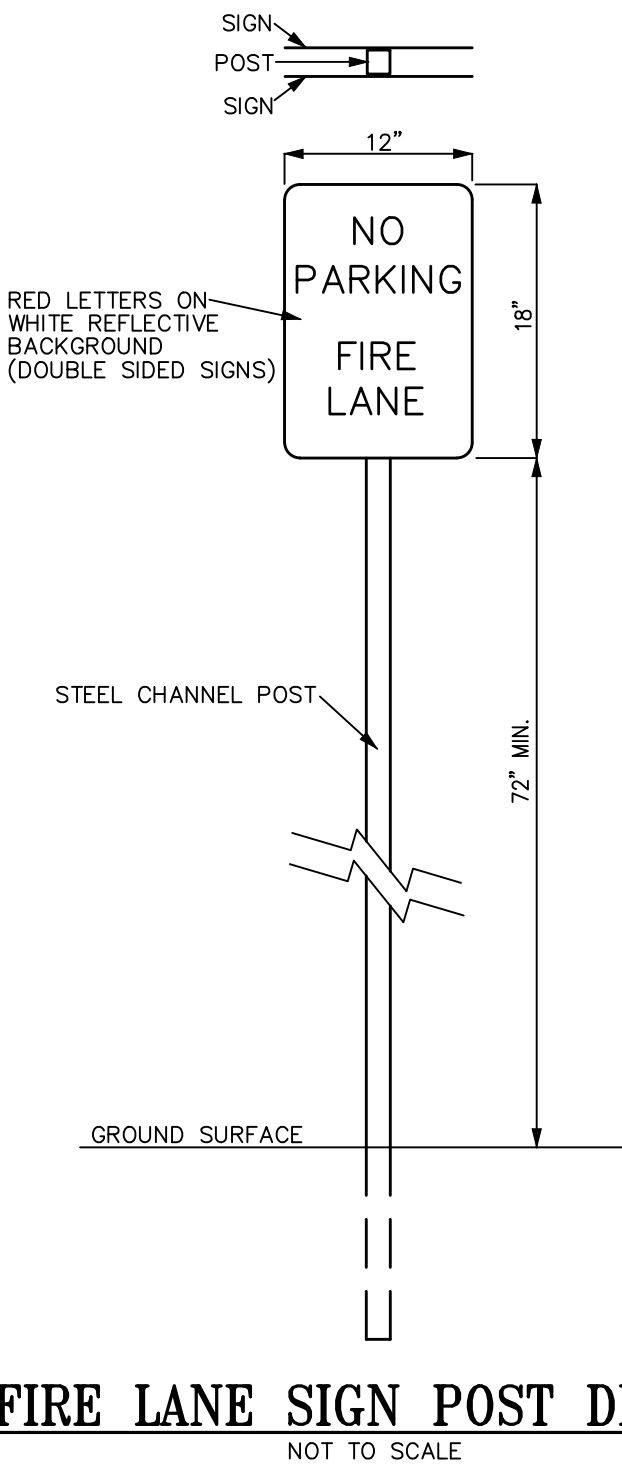
SUBGRADE UNDERCUT AND REPLACEMENT CROSS-SECTION
NOT TO SCALE

CONCRETE CURB NOTES:

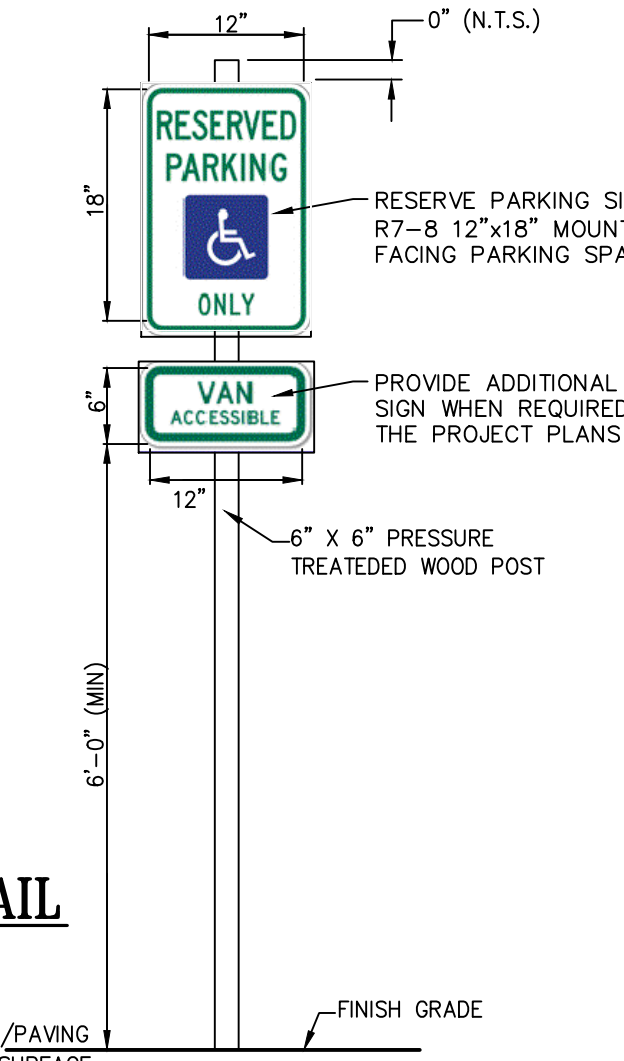
- Refer to the project plans for the proposed locations of the specific curb types.
- The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the General Notes and Curb Cross Section Details on the project plans for additional requirements.
- Extend the base and/or subbase material of the appropriate adjacent pavement cross-section horizontally to 1 foot behind the back of curb. Concrete curb shall be constructed on no less than 6" of combined depth of compacted base/subbase material.
- Concrete material shall be MDOT P1 (I-A) 6.0 sack concrete pavement mixture with a minimum 28 day design compressive strength of 4,000 PSI and 6.5% (+/-1.5%) entrained air. Contractor shall submit concrete mix design and aggregate mechanical analysis report to the Local Municipality and Engineer for review and approval prior to use.
- Install transverse contraction control joints in concrete curb with 1" minimum depth at 10' on center. Tool joints in fresh concrete or saw cut within 8 hours.
- Install transverse expansion control joints in concrete curb as follows: 400' maximum on center, at spring points of intersecting streets and within 10' on each side of catch basins. Transverse expansion control joints shall be 1" thick asphalt fiber joint filler matching entire curb cross section.
- Provide 1" asphalt fiber control joint between back of curb and all other concrete structures, such as concrete sidewalks and concrete driveways.
- Curb Contractor shall provide final adjustment of catch basin castings in curb line. Castings shall be tucked pointed to structure water tight with concrete or mortar inside and outside of casting.
- Install curb cuts for all existing and proposed sidewalks and pedestrian ramps in accordance with the American Disabilities Act and the Barrier Free Design requirements of the appropriate Local, County and/or State Agency. Refer to MDOT Standard Plan R-28, latest revision. Install curb cuts for all existing and proposed vehicular ramps and drives as noted on the project plans.



HANDICAP PARKING STRIPING DETAIL



FIRE LANE SIGN POST DETAIL
NOT TO SCALE



BARRIER FREE PARKING SIGN DETAIL
NOT TO SCALE

- GENERAL NOTES:**
- Contractor shall perform the work in accordance with the requirements of the appropriate Local, County and State Agencies and all other Government and Regulatory Agencies with jurisdiction over the project. Contractor shall notify the appropriate Agencies in advance of each stage of work in accordance with each Agency's requirements.
 - Contractor shall comply with all permit, insurance, licensing and inspection requirements associated with the work. Prior to construction, Contractor and Owner/Developer shall determine who is responsible for obtaining each required permit. Contractor shall verify that the each required permit has been obtained prior to commencement of the stage of work associated with the required permit(s).
 - Contractor shall furnish liability insurance and property damage insurance to save harmless the Owner, Developer, Architect, Engineer, Surveyor and Government Agencies for any accident occurring during the construction period. Refer to the appropriate Local, County and State Agencies for additional requirements. Copies of insurance certifications shall be made available to the Owner/Developer.
 - Contractor shall conduct and perform work in a safe and competent manner. Contractor shall perform all necessary measures to provide for traffic and pedestrian safety from the start of work and through substantial completion. Contractor shall determine procedures and provide safety equipment such as traffic controls, warning devices, temporary pavement markings and signs as needed. Contractor shall comply with the safety standards of the State Department of Labor, the occupational health standards of the State Department of Health and safety regulations of the appropriate Local, County, State and Federal Agencies. Refer to the safety specifications of the appropriate Regulatory Agencies. The Contractor shall designate a qualified employee with complete job site authority over the work and safety precautions; said designated employee shall be on site at all times during the work.
 - Contractor shall coordinate scheduling of all work in the proper sequence, including work by Subcontractors. Additional costs due to improper planning by Contractor or work done out of sequence as determined by standard acceptable construction practices, shall be Contractor's responsibility.
 - Contractor shall contact the 811 Underground Public Utility Locating System or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to construction. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
 - Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of work.
 - The Local Municipality, County and/or State in which the project is located may require an Engineer's Certification of construction of the proposed site improvements. Contractor shall verify the certification requirements with Engineer prior to commencement of work. Contractor shall coordinate construction staking, testing, documentation submittal and observation with the appropriate Agency, Surveyor and/or Engineer as required for Engineer's Certification and Government Agency Acceptance. All materials used and work done shall meet or exceed the requirements of certification and acceptance, the contract documents and the material specifications noted on the project plans. Any materials used or work done that does not meet said requirements, contract documents and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.
 - Engineer may provide subsurface soil evaluation results, if available, to Contractor upon request. Subsurface soil evaluation results, soils maps and/or any other documentation does NOT guarantee existing soil conditions that sufficient, acceptable on-site granular material is available for use as structural fill, pipe bedding, pipe backfill, road subbase or use as any other granular material specified on the project plans. On-site granular material that meets or exceeds the material specifications noted on the project plans may be used as structural fill, pipe bedding, pipe backfill and/or road subbase material. On-site granular material shall be stockpiled and tested as acceptable to the appropriate Agency and/or Engineer prior to use.
 - During the performance of their work, Contractor shall be solely responsible for determining soil conditions and appropriate construction methods based on the actual field conditions. Contractor shall furnish, install and maintain sheeting, shoring, bracing and/or other tools and equipment and/or construction techniques as needed for the safety and protection of the workers, pedestrians and vehicular traffic and for protection of adjacent structures and site improvements.
 - Contractor shall install temporary and permanent soil erosion and sedimentation control devices at the appropriate stages of construction in accordance with the appropriate regulatory Agencies. Refer to Soil Erosion and Sedimentation Control Plans and Notes on the project plans.
 - Structural fill shall be placed as specified on the project plans and within the 1 on 1 influence zone of all structures, paved areas and other areas subject to vehicular traffic. Structural fill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor). Fill material shall meet or exceed the specifications noted on the project plans or as directed by Engineer when not specified on the project plans.
 - All existing monuments, property corners, ground control and benchmarks shall be protected and preserved; and if disturbed by Contractor, shall be restored at Contractor's expense. Contractor shall notify Surveyor of any conflicts between existing monuments, property corners, ground control and/or benchmarks and the proposed site improvements.
 - Contractor shall notify Owner/Developer and Engineer immediately upon encountering any field conditions, which are inconsistent with the project plans and/or specifications.
 - When noted on the project plans for demolition and/or removal, Contractor shall remove existing structures, building and debris and recycle and/or dispose of in accordance with Local, County, State and Federal regulations.
 - Contractor shall remove excess construction materials and debris from site and perform restoration in accordance with the project plans and specifications. Disposing of excess materials and debris shall be performed in accordance with Local, County, State and Federal regulations.
 - Construction access to the site shall be located as acceptable to the Owner/Developer and to the appropriate Local, County and/or State Agency with jurisdiction over the road(s) providing access to the site. Construction access shall be maintained and cleaned in accordance with the appropriate Local, County and/or State Agencies and as directed by Owner/Developer and/or Engineer.
 - Contractor shall take necessary precautions to protect all site improvements from heavy equipment and construction procedures. Damage resulting from Contractor actions shall be repaired at Contractor's expense.

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: L.F.	1	09-21-21	REVISED PER REVIEW COMMENTS
CHECK: WMP			

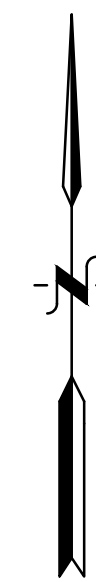
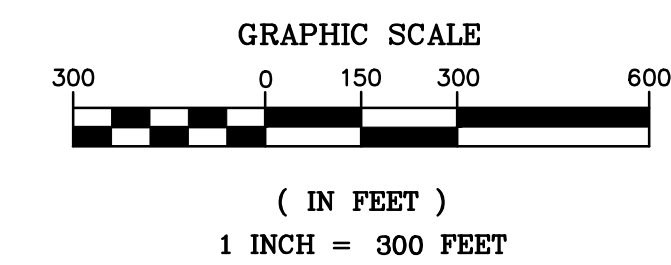
REVISION #	DATE	REVISION-DESCRIPTION

TODDIEM-VICTORY DRIVE PID

SITE IMPROVEMENT NOTES & DETAILS

CLIENT: Net Lease Associates North, LLC Net Lease Associates South, LLC 3888 S. CANAL ROAD LANSING, MICHIGAN (517) 322-0800	SCALE: N/A PROJECT No.: 9214101 DWG NAME: 4101-DT ISSUED: SEPT. 21, 2021
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DT1



LEGEND:
 PRIMARY TRUCK ACCESS ROUTE
 SECONDARY TRUCK ACCESS ROUTE
 (FOR LOCAL AREA TRAFFIC ONLY)

DESIGN INC
 (810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: L.F.						
CHECK: WMP						

TODDIEM-VICTORY
 DRIVE PID

TRANSPORTATION PLAN

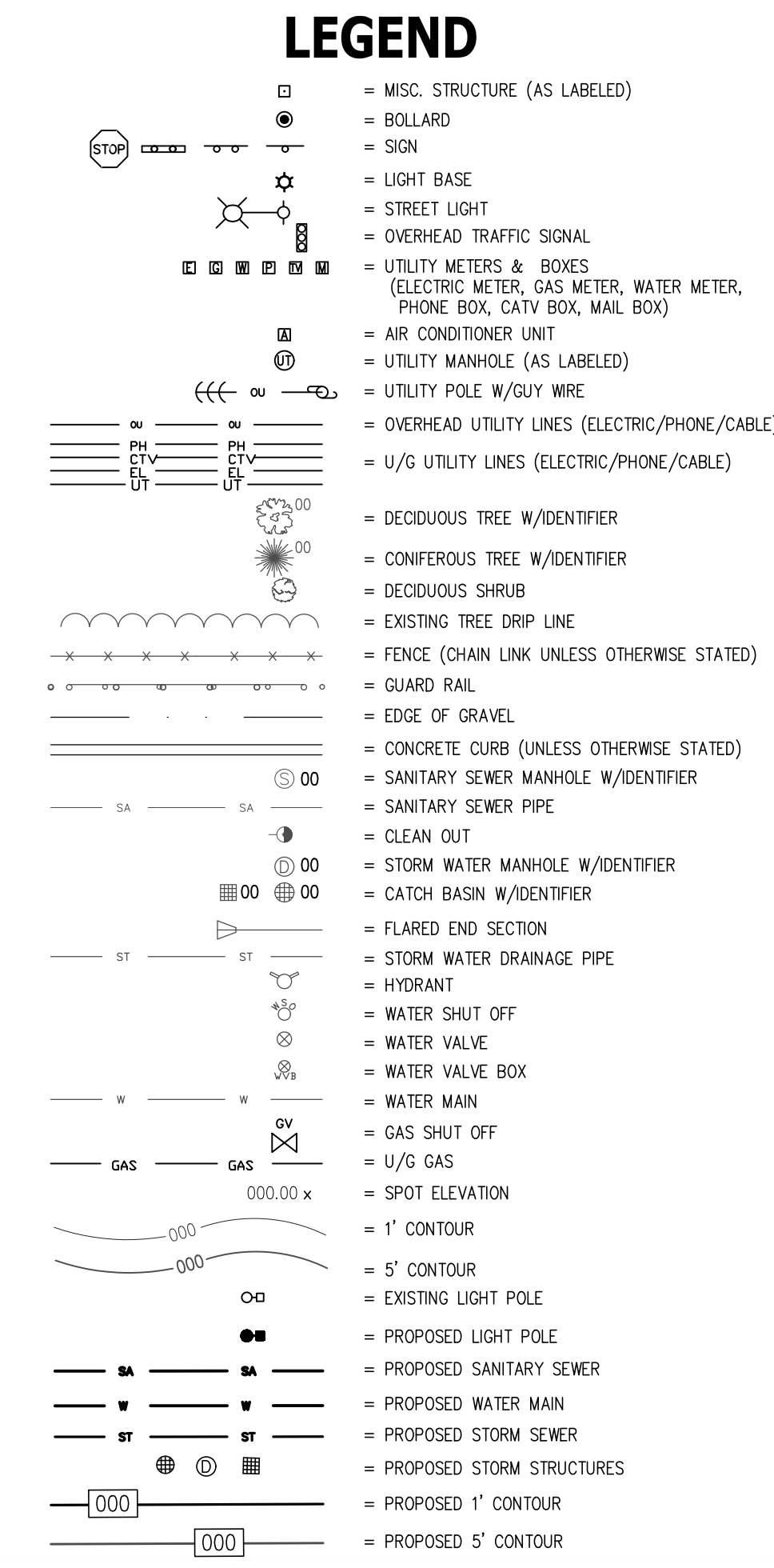
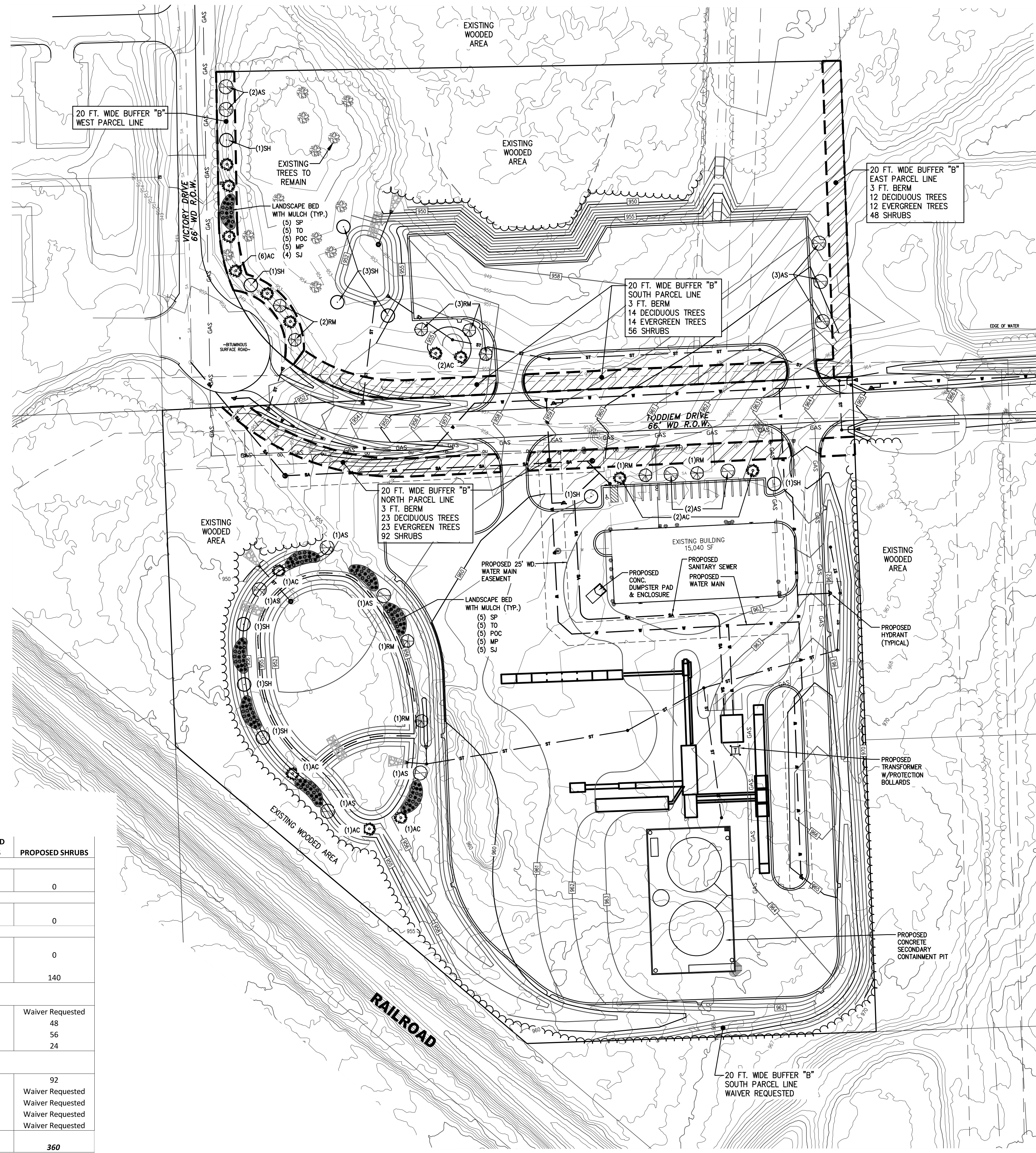
CLIENT:
 Net Lease Associates North, LLC
 & Net Lease Associates South, LLC
 3888 S. CANAL ROAD
 LANSING, MICHIGAN
 517-322-0800

SCALE: 1"=300'
 PROJECT No.: 9214101
 DWG NAME: 4101-T
 ISSUED: **SEPT. 21, 2021**

T

LANDSCAPING NOTES:

- All minimum planting sizes specified on the Project Plans shall be at the time of planting.
- All landscape materials shall be as specified on the Project Plans or approved equal. Substitutions shall not be made without prior written approval from the Project Engineer and receipt of the Owner's Authorization.
- All plant material shall be free of disease and insects and shall conform to the American Standard of Nursery Stock of the American Association of Nurserymen.
- All landscape plantings shall be planted and maintained in a healthy condition and shall be guaranteed by the Landscape Contractor and/or Supplier for a minimum period of 1 year from the time of planting. Any plantings that die or become diseased during the guarantee period shall be removed and replaced by the Landscape Contractor and/or Supplier at no cost to the Owner.
- Excavations for container or balled plantings shall be no deeper than the root ball or container and shall be at least twice the diameter of the root ball or container.
- Excavations for bare root plantings shall be no deeper than the longest roots and shall be at least twice the diameter of the root spread.
- The sides of planting excavations in heavy and/or wet soils shall be scarified with a fork, pick or shovel to eliminate glazing.
- Landscape planting backfill shall consist of a prepared mixture of peat moss, composted manure and topsoil or suitable excavated native soil material mixed with the appropriate soil conditioners that are compatible with the native soil and plant species. The type and mixture ratio of soil conditioners shall be in accordance with the Landscape Supplier's recommendations.
- The Landscape Contractor shall stake and reinforce all trees to prevent wind damage. The Landscape Contractor shall remove all tree reinforcement and stakes upon expiration of the guarantee period.

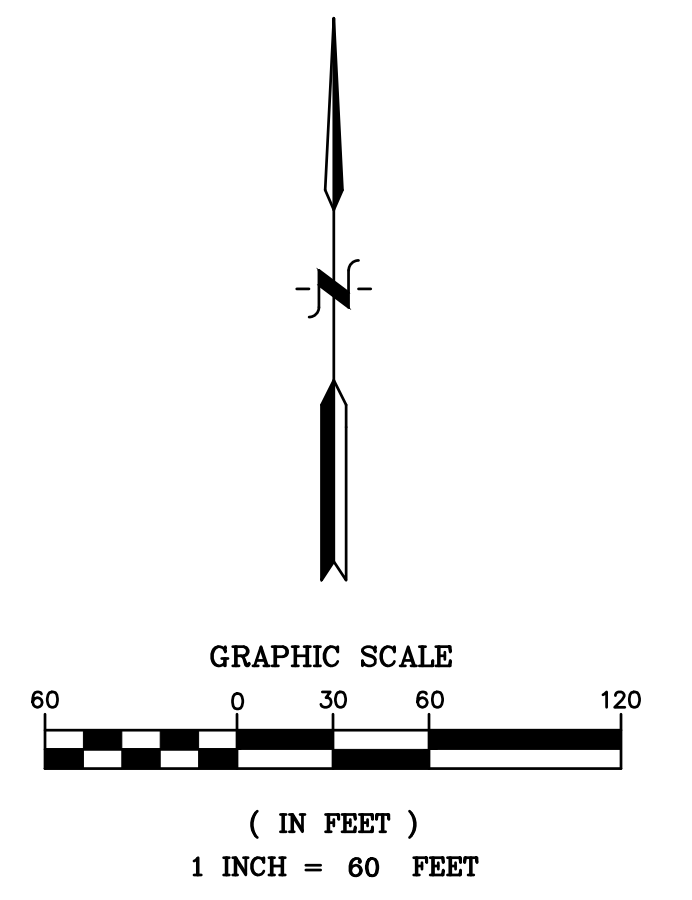


PROPOSED LANDSCAPE PLANTING LEGEND

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	ROOT
DECIDUOUS TREES					
RM	25	<i>Acer rubrum</i>	Red maple	2.5" Caliper	B & B
AS	29	<i>Acer s. 'Green Mountain'</i>	Green Mountain Sugar Maple	2.5" Caliper	B & B
SH	26	<i>Gleditsia 'Triacanthos 'Sunburst'</i>	Sunburst Honey Locust	2.5" Caliper	B & B
EVERGREEN TREES					
AC	63	<i>Abies Concolor</i>	Concolor Fir	4' Height	B & B
DECIDUOUS SHRUBS					
SP	72	<i>Syringa p. 'Miss Kim'</i>	Miss Kim Dwarf Korean Lilac	24" Height	Container
TO	72	<i>Thuja occidentalis 'Nigra'</i>	Dark Green Arborvitae	24" Height	Container
POC	72	<i>Physocarpus o. 'Coppertina'</i>	Coppertina Ninebark	24" Height	Container
MP	72	<i>Myrica pennsylvanica</i>	Northern Bayberry	24" Height	Container
SJ	72	<i>Spirea japonica 'Neon Flash'</i>	Neon Flash Spirea	24" Height	Container

TODDIEM-VICTORY DRIVE PID LANDSCAPE CALCULATIONS

CATEGORY / CALCULATION	REQUIRED TREES	EXISTING TREES	PROPOSED TREES	REQUIRED SHRUBS	PROPOSED SHRUBS
PARKING AREA (SOUTH OF TODDIEM DRIVE)					
1 TREE per 2,000 sq. ft. PAVED PARKING					
15,665 sq.ft. / 2,000 =	8	0	8	0	0
PARKING AREA (NORTH OF TODDIEM DRIVE)					
1 TREE per 2,000 sq. ft. PAVED PARKING					
21,040 sq.ft. / 2,000 =	11	0	11	0	0
DETENTION BASIN "A"					
1 TREE PER 50 LF OF BASIN PERIMETER					
696.4 lf / 50 =	14	0	14	0	0
10 SHRUBS PER 50 LF OF BASIN PERIMETER					
696.4 lf (10 / 50) =	0	0	0	140	140
NORTH PARCEL - BOUNDARY BUFFER ZONE B					
1 canopy tree, 1 evergreen & 4 shrubs per 30 LF.					
North parcel line (686.67 / 30 = 23)	46	0	Waiver Requested	92	Waiver Requested
East parcel line (347.67 / 30 = 12)	24	0	24	48	48
South parcel line (490.29 - 70 / 30 = 14)	28	0	28	56	56
West parcel line (165.97 / 30 = 6)	12	0	12	24	24
SOUTH PARCEL - BOUNDARY BUFFER ZONE B					
1 canopy tree, 1 evergreen & 4 shrubs per 30 LF.					
North parcel line (759.32 - 70 / 30 = 23)	46	0	46	92	92
East parcel line (720.64 / 30 = 24)	48	0	Waiver Requested	96	Waiver Requested
South parcel line (384.26 / 30 = 13)	26	0	Waiver Requested	52	Waiver Requested
West parcel line (369.60 / 30 = 13)	26	0	Waiver Requested	52	Waiver Requested
Southwest parcel line (506.18 / 30 = 17)	34	0	Waiver Requested	68	Waiver Requested
TOTALS =	323	0	143	720	360



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DESIGN INC.
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: L.F.	1	09-21-21	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

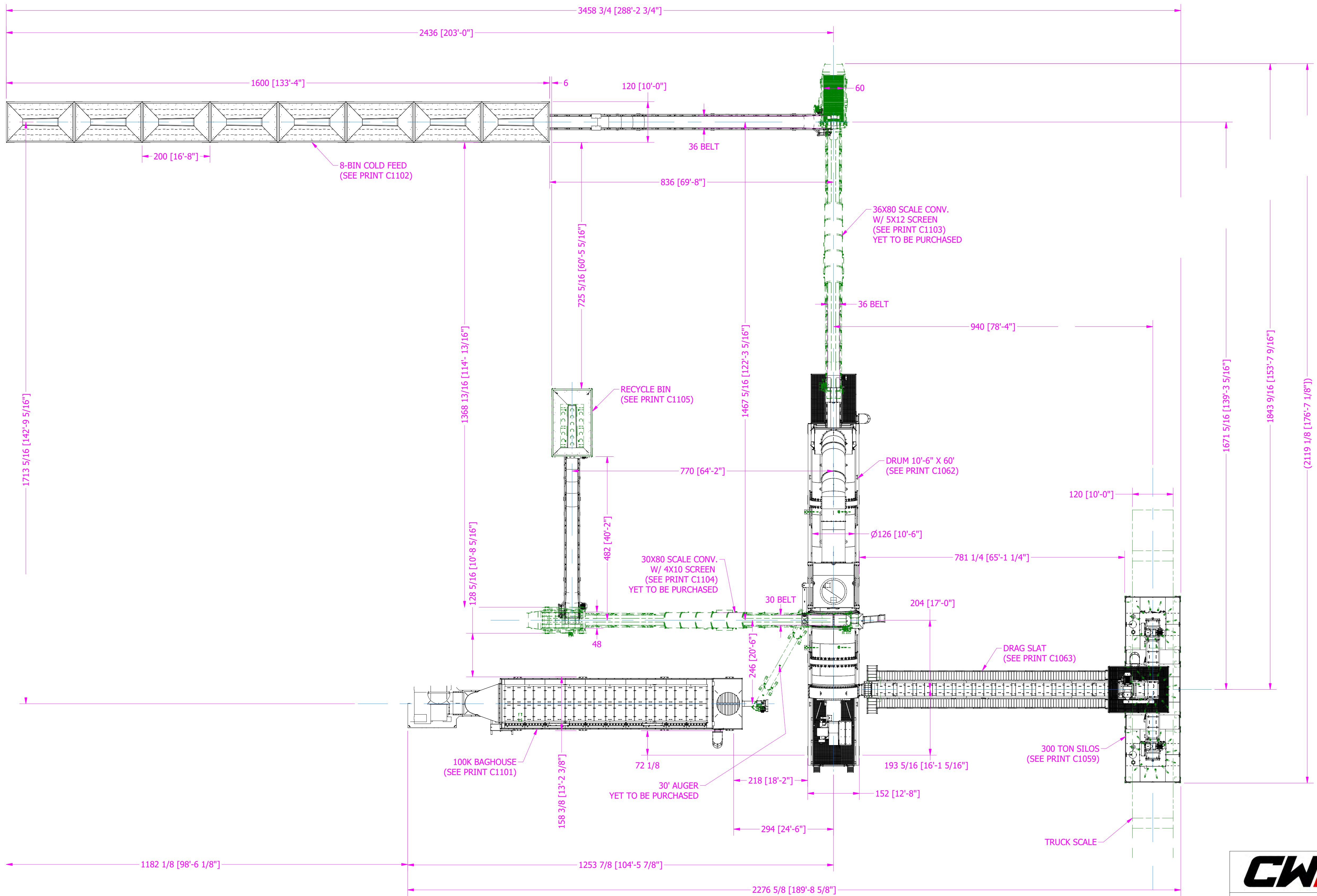
TODDIEM-VICTORY DRIVE PID

LANDSCAPE PLAN

CLIENT:
Net Lease Associates North, LLC
Net Lease Associates South, LLC
3888 S. CANAL ROAD
LANSING, MICHIGAN
517-322-0800

SCALE: 1"=60'
PROJECT No.: 9214101
DWG NAME: 4101-LA
ISSUED: SEPT. 21, 2021

LA



		CWMF CORPORATION 701 JULEP ROAD WAITE PARK, MN 56387-1863 PHONE (320) 251-1306	
		DESCRIPTION STATIONARY PLANT 500 TPH LAYOUT CAPITAL ASPHALT	
TOLERANCES UNLESS OTHERWISE SPECIFIED FABRICATING: ± 1/16" MACHINING: ± 0.015" FRACTION: ± 1/16" ANGLE: ± 1/2° DO NOT SCALE DRAWING	DRAWN RJJ DATE 2/15/2021 MASS 802889.4 lbmass	SIZE D	DWG NO C1040
NOTICE THE INFORMATION CONTAINED HEREIN IS PROPRIETARY TO CWMF CORP. AND SHALL NOT BE REPRODUCED OR DISCLOSED IN WHOLE OR IN PART, NOR USED FOR ANY DESIGN OR MANUFACTURING PURPOSE UNLESS AUTHORIZED IN WRITING BY CWMF CORP.		REV	

From: [Mary Christina Beyers](#)
To: [Amy Ruthig](#)
Subject: Proposed rezoning
Date: Sunday, November 28, 2021 7:55:45 PM

Hi Amy,

Jeff and I are in Georgia and cannot attend the December 6th board meeting. Could you please take our input against this asphalt plant being in the proposed area. We are worried about the prevailing west winds bring the odor/pollution to our springs fed natural and beautiful Lake Chemung.

Thank you in advance for your help in this matter,

Jeffrey and Mary Christina Beyers
5373 Wildwood Dr.
Howell, MI 48843
7347886976

Sent from my iPad

Kelly VanMarter

From: Hubert Mortensen <jmortens1@aol.com>
Sent: Wednesday, December 1, 2021 3:24 PM
To: Kelly VanMarter
Subject: Fwd: Asphalt Plant

Follow Up Flag: Follow up
Flag Status: Flagged

Sent from my iPhone

Begin forwarded message:

From: Jim Mortensen <jmortens1@aol.com>
Date: December 1, 2021 at 11:39:10 AM EST
To: Kelly@genoa.org
Subject: Fwd: Asphalt Plant
Reply-To: Jim Mortensen <jmortens1@aol.com>

-----Original Message-----

From: Pamela Beach <pamelabeach1@sbcglobal.net>
To: jim@genoa.org <jim@genoa.org>
Sent: Tue, Nov 30, 2021 6:11 pm
Subject: Asphalt Plant

Good Evening Jim,

I was very alarmed to hear that you wanted to put an asphalt plant North off I96 and west of Latson Rd. This is too close to people. You have people: families and children. This will have an adverse effect on their lives and their health. The asphalt emits harmful cancer causing agents and toxins that will affect their health and quality of life. It would need to be built where it will not harm people. I am against this.

Sincerely,
Pamela Beach
A Howell resident

From: [Dawn](#)
To: [Bill Rogers](#); [Polly](#); [Robin Hunt](#); [Jean Ledford](#); [Jim Mortensen](#); [Terry Croft](#); [Diana Lowe](#); [Kelly VanMarter](#)
Cc: [Macey Bruce](#)
Subject: December 6th Meeting_Capital Gas
Date: Tuesday, November 30, 2021 8:59:44 AM
Attachments: [04-15-21_Proposed_Rezoning_and_Construction_of_a_Hot-Mix_Aspphalt+Plant_An_Overview_of+Relevant_Risks_v1.0.pdf](#)

Good morning,

I am president of our HOA Board for Rolling Ridge I, a resident as well as owning another home (both residences within 1.5-2 miles of this proposed location.) I as well as some of our residents will be in attendance for the December 6th meeting, however wanted to have this research report recorded. I do understand we are further along in the process than Tyrone was at the completion of their report but the documentation and effects remain the same. As it was completed less than a year ago, within our county and Capital Gas was also the proposed site occupier, the research and information were completed by environmental consultants in the asphalt industry, toxicologists and engineers.

Livingston County already has several asphalt plants operating at less than 50% capacity. The demand does not warrant another location within the county, especially our township. If you have passed by their location in Lansing in warm months, you are very aware of the odors emitted. The difference between Lansing and our location is that it is in an industrial area near an auto plant. This asphalt plant can decrease our home values, create toxic fumes as well as increase the traffic in an area already that already has several accidents.

Unfortunately, during the planning meeting, my kids contracted Covid and I could not attend, I obviously deeply regret this after seeing it was approved. I am concerned that this was approved without extreme research into the effects of running such a plant. Hopefully after reading the attached report, you will understand negative effects allowing Capital to move into our township. While I understand the existing business technically isn't any better for our community, they are not emitting toxic fumes endangering our residents/families.



Thank you for taking the time to read my correspondence as well as the research report.

Regards,

Dawn Condon

3466 Snowden Lane

Howell, MI 48843



Proposed Rezoning and Construction of a Hot-Mix Asphalt Plant: An Overview of Relevant Risks

Residents for Community Preservation

APRIL 15, 2021

Presented to Tyrone Township Board
& Tyrone Township Planning Commission

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Versioning History

Version #	Date	Author(s)	Notes
1.0	4/13/2021	Residents for Community Preservation	Original Document. (Please note that the document's file name does not indicate any version number.)
2.0	4/14/2021	Residents for Community Preservation	Minor spelling corrections; revisions to Part 6.

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Statement of Purpose

The purpose of the information presented herein is to provide a brief and easy-to-read ‘fact sheet’ that highlights potential risks associated with granting a rezone request for 124 acres of residential farmland to become M2 heavy industrial space within our residential community, and the subsequent construction of an asphalt plant. This document was developed with the intent to assist the Tyrone Township Planning Commission & Board in becoming as informed as possible prior to making a decision as to how to proceed with the aforementioned request for rezone.

Please note: The contents of this ‘fact sheet’ are a compilation of relevant information as prepared by several residents who have professional training and expertise in the areas of Education, Exposure Assessment, Toxicology, Environmental Studies & Consultation, Health & Safety Regulation, Environmental Law, Engineering and Epidemiology. These individuals collectively have decades of work experience in industry, including the asphalt industry, and academia and are willing to provide any assistance you may need to assist with the decision-making process both now and over the coming weeks. As with information provided that may be attributed to works from federal and state agencies, links to abstracts of peer-reviewed papers published in scientific journals have been included. If interested in reviewing full manuscripts, please don’t hesitate to request copies.

Our hope is that you carefully consider the information presented with the weight it deserves in your decision-making process, and further make an ethical decision that protects the people and community whose logo states an aim to live “In harmony with nature”.

Part 1:
Potential Impact of a Reclassification to M2
- Heavy Industrial

1. Summary of Request

The seller has requested for rezoning of 124 acres, including 2 parcels of land that is currently zoned farming/residential land. Only 30 acres of that space pertain to the special land use request for the proposed construction of an asphalt plant. While information is provided relative to the known human health and environmental hazards associated with the hotmix asphalt industry, there is concern over the use of remaining land and potential additive/cumulative effects of pollutants emitted from those facilities as the remaining land would then be zoned heavy industrial. Industries included in this classification include, but are not limited to, petroleum processing, chemical production plants, leather product manufacture, dry cleaning, hazardous substance handling and disposal, and food animal processing facilities (slaughterhouses).

Upon critical review of the published Master Plan or Plan for Future Land Use, the Master Plan requires new construction/industry to develop permitted areas to be consistent with a “campus like setting” and PIRO type zoning that is more in line with a Planned Unit Development. It is intended to seamlessly fit within our existing community, the surrounding environment, and to do so in a way that does not create a nuisance to our residents. Rezoning 124 acres to M2-Heavy Industrial, in part or in its entirety, is in stark conflict to the vision of this community.

Part 2: Characteristic Emissions from Hot Mix Asphalt Plants

1. Background

Hazards associated with multi-media emissions (air, water, waste) of characteristic pollutants from asphalt plants are well known. The Center for Disease Control's (CDC) Agency for Toxic Substances and Disease Registry (ATSDR), whose mission it is to 'prevent or mitigate the adverse human health effects and diminished quality of life that result from exposure to hazardous substances in the environment' has conducted multiple investigations focused on communities in close-proximity to hot mix asphalt plants since 1999. These investigations were performed in response to concerns by community members and were focused on airborne emissions of pollutants known to be associated with adverse human health effects and nuisance odors. The Environmental Protection Agency (EPA) has also published a [report](#)¹ which focuses on emissions from these facilities.

In an attempt to combine human health impacts and an indicator of economic viability in communities surrounding industrial facilities emitting 'toxic' pollutants, [Currie et al. \(2015\)](#)² published a study in which they evaluated change in housing values coupled with environmental health risks in response to the opening and closing of 1600 plants across 5 states, including Michigan, known to emit 'toxic' pollutants. Investigators report a decline in housing values of 11% for homes located within a ½ mile radius of the facility and an increase in the probability of low birthweight (an indicator of impact on human-health) within a 1-mile radius of a facility. Interestingly, authors note that housing values did not increase after plant closure due to concerns over reopening, 'persistent visual disamenities and concerns about local contamination'.

Please note that the information provided below is limited to ambient (environmental) release and exposures to characteristic pollutants associated with hot mix asphalt plants. Workplace exposures to chemicals specific to these facilities have been studied extensively with adverse health outcomes in workers published in the medical literature. The Occupational Safety and Health Administration (OSHA) has established specific exposure limits for chemicals involved in asphalt manufacture and working with hot melt asphalt (road paving, roofing, other construction activity, etc.), and the National Institute for Occupational Safety and Health (NIOSH), the research arm of OSHA, conducts ongoing investigations aimed at providing recommendations for meaningful exposure mitigation strategies that are readily implementable in the workplace environment. If township officials are interested in learning about workplace exposures associated with the asphalt industry, please click on this [link](#)³ as a starting point to obtain additional information.

2. Atmospheric Release of Pollutants

Pollutants may be released into the atmosphere via natural (e.g., volcano, forest fire) and man-made means (e.g., industrial pollutant release via point source (stacks),

¹ <https://www3.epa.gov/ttnchie1/ap42/ch11/related/ea-report.pdf>

² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4847734/>

³ <https://www.cdc.gov/niosh/topics/asphalt/default.html>

vehicle emissions (mobile source, etc.). These contaminants may be released directly into air and water, and potentially via waste streams through use of inadequate disposal practices. Pollutants may settle onto ground surfaces and subsequently be washed into stormwater reservoirs during rain events, barriers of which have the potential to be breached resulting in release to surrounding lands and waterways.

It is important to recognize that, depending on the pollutant of interest, important exposures may be additive in nature, such that while an individual company may be in compliance with permitted emission limits (e.g., Capital Asphalt permitted to release 320 tons/year), additive or aggregate emissions from multiple entities (multiple pollutant emitting facilities in a given area, consider existing and future industry) in concert with unrecognized/non-quantified emissions (e.g., fugitive emissions) as well as mobile source emissions (e.g., vehicle exhaust, roadway dusts) have the potential to negatively impact the surrounding community. Similar examples can be made of the impact of stormwater runoff on surrounding waterways and residential water sources (wells).

3. Air Emissions

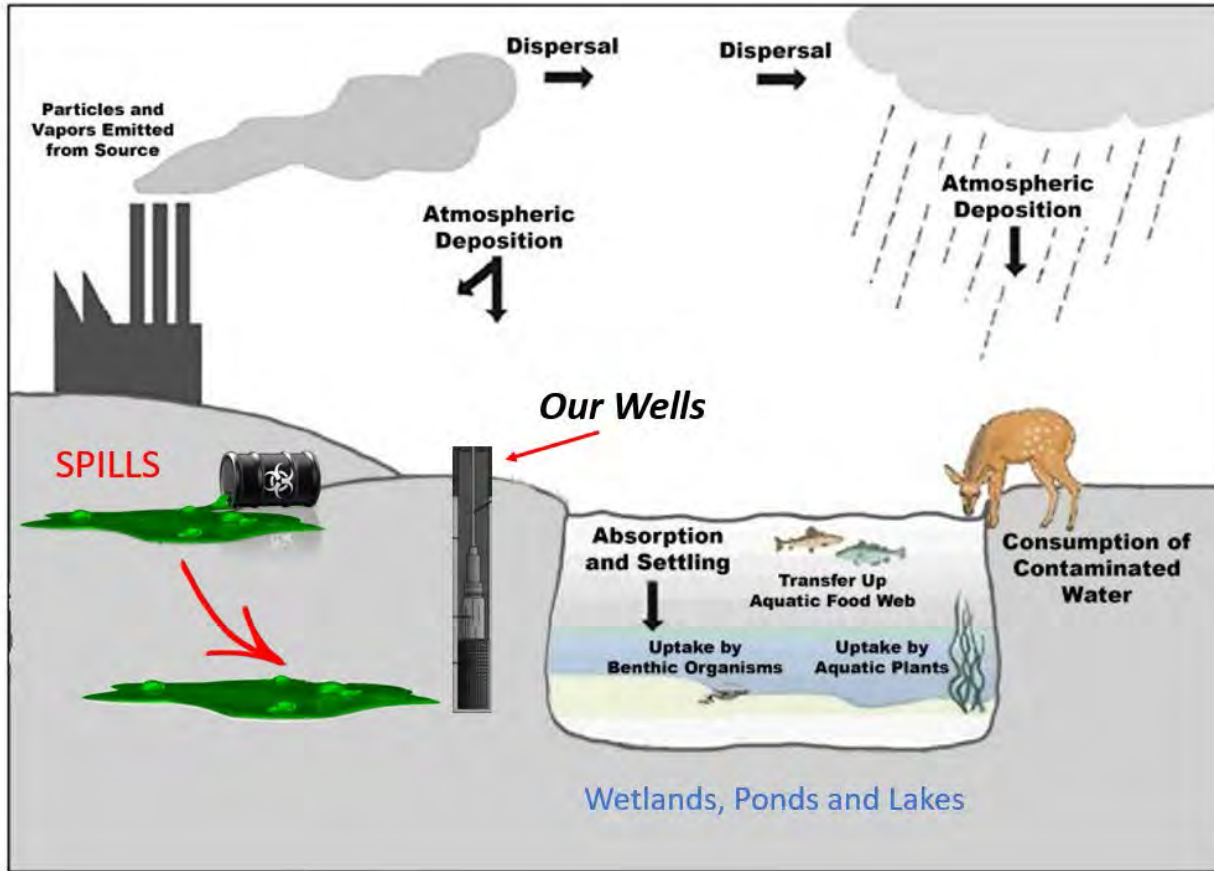
As mentioned previously, there are known and permitted releases to air from hot mix asphalt plants. These pollutants may be grouped into major categories, including but not limited to particulate matter (PM), Sulfur Oxides (SO_x), Nitrogen Oxides (NO_x), and Hazardous Air Pollutants (HAPs), including Polycyclic Aromatic Hydrocarbons (PAHs) and metals. Upon review of [individual emission components](#)⁴, many are readily recognized as irritants, some as neurotoxins and others as carcinogens, each with its own unique mechanism of action. Even at lower concentrations following plumes of pollutants transported well beyond the property lines of the facility, adverse effects of exposures to these chemicals have been recognized.

[Particulate matter](#)⁵ (PM) in the context of emissions from industrial facilities are those in the size-range(s) not visible to the naked-eye. Classified as having very small aerodynamic diameters, particles are generally grouped into two size categories: PM₁₀ (particulates 10 microns in diameter and smaller) and PM_{2.5} (particulates 2.5 microns in diameter and smaller). As a point of reference, a single red blood cell is roughly 4 microns in diameter. ‘Larger’ particles (PM₁₀) tend to get trapped in the conducting airways, akin to ductwork in a ventilation system, while ‘smaller’ particles (PM_{2.5}) have the potential to travel deep into the lungs into what’s termed the ‘gas exchange region’ and can even cross into the bloodstream and affect multiple organ systems. It is well-known that increases in exposure to environmental PM in the size ranges emitted from industrial facilities have been [linked](#)⁶ to adverse respiratory and cardiovascular effects, worsening of pre-existing lung disease (e.g., COPD, asthma), premature birth, lost school and workdays, increases in hospital admissions, and depending on composition, environmental PM has been linked to cognitive impairments and other morbidities.

⁴ <https://www3.epa.gov/ttnchie1/ap42/ch11/related/ea-report.pdf>

⁵ <https://www3.epa.gov/ttnchie1/ap42/ch11/related/ea-report.pdf>

⁶ <https://pubmed.ncbi.nlm.nih.gov/31774324/>



Chemicals and other substrates utilized in the production of asphalt are heated, and with mechanical action or by volatilization become airborne. Process exhaust systems capture these contaminants and direct them through treatment technologies before dispersing into the atmosphere through a ‘stack’. The types of pollutants listed above are those that have the potential to bypass emission control technologies in whole or in-part and are [recognized](#)⁷ as pollutants released into the atmosphere by hot mix asphalt plants. Deposition of these pollutants on surfaces, up to several miles from the source due to prevailing winds, occurs as a result of cooling, impaction and capture (e.g., rain event) (see Figure 1). and once ‘settled’ have the potential for ‘re-uptake’ into soils, plants, residential wells and runoff into waterways.

⁷ <https://www3.epa.gov/ttnchie1/ap42/ch11/related/ea-report.pdf>

4. Permitted Emissions and Testing

- As previously stated, Capital Asphalt – a facility referred to as similar to what is proposed – is permitted to emit 320 tons of pollutants per year.
- The Michigan Department of Environment, Great Lakes and Energy (EGLE) does not monitor emissions daily, rather industries are required to report emissions annually per provisions of air permits, or more frequently in the event of emissions control failures.
- Daily emission tracking is a standard requirement of air emission permits but are not submitted to the Air Quality Department unless requested. As mentioned above, this typically happens once per year or once per 3 years dependent on the industry and permit parameters.
- Alternate emission sources from hot mix asphalt (HMA) operations include the recognizable “blue smoke” from the loading of HMA trucks, that which escapes from silos, particulate and diesel exhaust emissions from truck traffic, front-end loaders, dusts from storage piles, etc.
- Pollution controls. Baghouse filtration systems are designed to capture particulate matter and are specific to particle size. Particulates that escape the filtration system agglomerate quickly once leaving the stack. These systems do not filter out volatilized material. System efficiencies are dependent upon rigorous preventative maintenance programs.

5. Nuisance Odors

- HMA plants in Michigan are not required to monitor odors daily. Compounding this issue is the highly variable nature of personal sensitivity to odors. Particularly to chemicals that have exceedingly low odor thresholds (e.g., hydrogen sulfide gas).
- If nuisance orders are reported to EGLE, it is highly unlikely that an immediate (same day) response/investigation is possible. As such, and due to highly variable weather conditions, odors may not be recognizable at the location initially indicated. It often takes multiple reports and several visits, and often odor complaints go unresolved but remain a persistent issue.

6. Truck Traffic and Road Conditions

- The addition of an asphalt plant at the proposed location increases traffic in the area by as many as 75 additional asphalt trucks per day. This amounts to a truck arriving every at the location every 7.2 (seven-point-two) minutes. This calculation does NOT include delivery of raw materials, worker traffic, etc.
- Construction of the proposed facility will result in increased truck traffic on Old US-23, Clyde Road, Center Road, White Lake Road and Runyan Lake Road. These

include very heavy trucks that will increase deterioration of roadways and result in traffic jams.

7. Noise Pollution

- The Township will be responsible to address complaints specific to noise pollution.

Sources of noise include open/closing of transfer gates, rotating drums, beeping trucks, truck engines, conveyor belts, crushing asphalt remnants during the recycling process, dropping loads into haul trucks, PA Systems, etc.

8. Contamination

Over time, and often after only a few years, control systems fail and result in contamination of the surrounding environment. Please see: **Part 3: Demonstration of Potential for Environmental Contamination.**

9. Summary

The proposed request for rezone blatantly defies our Master Plan and jeopardizes residents' ability to live "In harmony with nature" as our Tyrone Township logo proudly states.



Figure 1: Township Logo "In harmony with nature"

Heavy industrial development comes with a cost far greater than potential revenue. There are certainly more marketable, and responsible ways to develop land in the area that would have long lasting economic benefits without the potential for devastating consequences.

The Residents for Community Preservation are not against asphalt plants as a rule. However, consideration for construction of these facilities in appropriate locations must be the main consideration in addition to need.

The Residents for Community Preservation would like to stress their concern that voting in favor of this proposal has the potential to be detrimental to the health, safety, and well-being of our residents, the community in which we reside, and our surrounding environment.

Part 3:
Demonstration of Potential for
Environmental Contamination

1. Case Study

ENVIRONMENTAL CONTAMINATION RISK CASE STUDY - CAPITAL ASPHALT, LLC & ASPHALT REAL ESTATE, LLC 3888 S. CANAL STREET, LANSING, MICHIGAN

On January 16, 2019, Asphalt Real Estate, LLC and Capital Asphalt, LLC requested that AKT Peerless Environmental Services conduct a Baseline Environmental Assessment (BEA) in anticipation of the company purchasing the operations, equipment, and land from Superior Asphalt, Inc. located at 3888 S. Canal Street, Eaton County, in the City of Lansing, Michigan. This is per Part 201 of the Natural Resources & Environmental Protection Act (NREPA) of 1994, as amended. The purpose of utilizing this regulation is to exempt the new owner of liability from previous environmental contamination that occurred on a property prior to a new purchase.

Synopsis:

1. AKT Peerless conducted a Phase I Environmental Site Assessment (ESA) on December 20, 2018.
2. Through their investigation of the property, research of available records on the property, site reconnaissance and other professional inquiry they found two Recognized Environmental Concerns (REC).
3. Those concerns were:
 - a. Superior Asphalt, Inc. owned and operated a hot mix asphalt facility at this location from 2012 until the pending sale in January 2019. Note: Prior to Superior Asphalt purchasing the property. Superior Asphalt conducted a Phase I ESA on the property in March 2011 prior to them purchasing and operating the HMA plant. There were no previous environmental liens on the property.
 - b. The adjoining property to the south was a salvage yard. Historically speaking, salvage yards have the potential to contaminate soil and ground water due to the nature of their operations.
4. This prompted a Phase II Environmental Site Assessment to conduct subsurface ground water and soil sampling to determine if contaminants were present. On January 4, 2019, AKT Peerless conducted a Phase II ESA site investigation to determine the nature, extent, magnitude and materiality of the RECs in question.
5. Six soil borings were conducted along with 1 temporary installation of a groundwater monitoring well. The samples were tested for Volatile Organic Compounds (VOC), Polynuclear Aromatic Hydrocarbons (PNA) and the 10 Michigan Metals in soils. The ground water sample was tested for PNA and VOC.

6. The samples showed exceedances of the Michigan GSIP (Groundwater Surface Interface Pathway) Criteria in 2 soil samples and one groundwater sample. The contaminants were Chromium, Selenium found in soils and Benzo(k)fluoranthene found in the groundwater.
7. Other metals such as Arsenic, Barium, Cadmium, Zinc, Lead, Mercury, and Copper were found in soil samples but not above the Michigan GSIP Criteria.
8. Four samples were taken around the perimeter of the property. Two were taken toward the interior of the property. Every sample had some level of contamination found whether that was PNA, VOC or metals or a combination of all three categories.
9. Due to the contamination found on the property during the AKT Peerless investigations, the property was classified as a “facility” under Part 201 NREPA 1994, as amended. On January 16, 2019, Mr. Jon Sawyer signed the documents for the Part 201 documents to be filed with Michigan EGLE.
10. Capital Asphalt has owned and operated the HMA plant located at 3888 S. Canal Street ever since.

The following 2 pages (Figure 2 and Figure 3) represent a letter from the Michigan Department of Environmental Quality (Michigan EGLE) confirming they had received and recorded the results of this Baseline Environmental Assessment for the Lansing plant property at the time of purchase by Mr. Jon Sawyer.

A complete copy of the BEA referenced here will be provided to the Tyrone Township Supervisor, Mike Cunningham.



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING DISTRICT OFFICE



LIESL EICHLER CLARK
DIRECTOR

February 4, 2019

**ACKNOWLEDGEMENT OF RECEIPT OF A BASELINE ENVIRONMENTAL
ASSESSMENT**

BEA ID: 23001074-BEA-1

Legal Entity: Asphalt Real Estate LLC, 3888 South Canal Road, Lansing,
Michigan 48917

Property Address: 3888 South Canal Road, Lansing, Eaton County

On February 1, 2019, the Department of Environmental Quality (DEQ) received a Baseline Environmental Assessment (BEA) dated January 16, 2019, for the above legal entity and property. This letter is your acknowledgement that the DEQ has received and recorded the BEA. The DEQ maintains an administrative record of each BEA as received.

This BEA was submitted pursuant to Section 20126(1)(c) of Part 201, Environmental Remediation, and/or Section 21323a(1)(b) of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A BEA is submitted for the purpose of establishing an exemption to liability for a new owner or operator of property that has been demonstrated to be a facility or property as defined by Section 20101(1)(s) of Part 201, Environmental Remediation, and/or property as defined by Section 21303(d) of Part 213, Leaking Underground Storage Tanks, of the NREPA. Pursuant to Sections 20126(1)(c) and 21323a(1)(b), the conditions of this exemption require the legal entity to disclose the BEA to a subsequent purchaser or transferee of the property.

The BEA is only for the legal entity and property identified in the BEA and on the BEA Submittal Form. Each new legal entity that becomes the owner or operator of this facility must submit their own BEA.

The DEQ is not making any findings about the adequacy of the submittal or whether the submitter is liable or is eligible to submit. The submitted BEA does not alter liability with regard to a subsequent release, threat of release, or exacerbation of existing conditions that is the responsibility of the legal entity submitting the BEA.

The legal entity, as the owner and/or operator of a facility or property, may have Due Care responsibilities under Section 20107a of Part 201, Environmental Remediation, and/or Section 21304c of Part 213, Leaking Underground Storage Tanks, of the NREPA.

CONSTITUTION HALL • 525 WEST ALLEGAN STREET • P.O. BOX 30242 • LANSING, MICHIGAN 48909-7742
www.michigan.gov/deq • (517) 284-6651

Figure 2: Page 1 of 2, Baseline Environmental Assessment

Asphalt Real Estate LLC

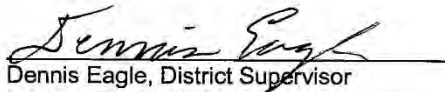
2

February 4, 2019

The legal entity may also have responsibility under applicable state and federal laws, including, but not limited to, Part 201, Environmental Remediation; Part 111, Hazardous Waste Management; Part 211, Underground Storage Tank Regulations; Part 213, Leaking Underground Storage Tanks; Part 615, Supervisor of Wells, of the NREPA; and the Michigan Fire Prevention Code, 1941 PA 207, as amended.

Pursuant to Section 20112a(6) of Part 201, Environmental Remediation, the property(s) identified in the BEA will be placed on the inventory of facilities, which is updated daily and posted on the DEQ's website: <https://secure1.state.mi.us/FacilitiesInventoryQueries>.

Authorized signature:



Dennis Eagle, District Supervisor
Lansing District Office
Remediation and Redevelopment Division
Department of Environmental Quality
525 West Allegan Street
P.O. Box 30242
Lansing, Michigan 48909
517-614-8544
eagled@michigan.gov

Enclosure
cc: AKT Peerless Environmental Services

Revision 05/28/2014

Figure 3: Page 2 of 2, of Baseline Environmental Assessment

Part 4:
Asphalt Plants in Proximity to Tyrone
Township

1. Assessing Demand - Asphalt Plants Near Tyrone Township

The following table demonstrates that we have several operational asphalt plants serving Tyrone Township, and furthermore, those asphalt plants are operating at well below half of their permitting capacity. Our needs are already easily being met with existing facilities.

Proposed Rezoning and Construction of a Hot-Mix Asphalt Plant: An Overview of Relevant Risks

Table 1: Asphalt Plants Near Tyrone Township

Company Name	Address	County	Permitted Annual Tonnage	Actual Tonnage Produced in 2018	Actual Tonnage Produced in 2019	Actual Tonnage Produced in 2020	Distance to Tyrone Township Proposed Asphalt Plant	Comments
Ace Asphalt	16255 Tindall Rd. Davisburg, MI 48374	Oakland	985,000	255,562	293,450	320,725	17 miles Northeast	
Ace Asphalt	4190 Jimbo Dr. Burton, MI 48529	Genesee	800,000	258,427	291,388	301,844	22 miles North	
Cadillac Asphalt	4751 White Lake Rd. Clarkston, MI 48346	Oakland	895,000	304,507	392,531	387,091	18 miles East	
Cadillac Asphalt	51777 W. 12 Mile Rd. Wixom, MI 48393	Oakland	895,000	351,562	408,093	329,824	27 miles Southeast	
Ajax Materials Corp.	5792 Kensington Rd. Brighton, MI 48114	Livingston	895,000	277,738	317,311	320,000	17 miles South	
Proposed New Plant	Genesee Township Flint, MI	Genesee	895,000 estimated	NA	NA	NA	33 miles North	This plant is supposed to be operational by April 1, 2022
Yaeger Asphalt	Saginaw, MI	Saginaw	500,000	59,655	70,480	79,000 estimate	55 miles North	Yaeger Asphalt advertises that they can deliver Hot Mix Asphalt to Fenton
Notes: There were also several other plants in the area that have shut down in recent years due to overlapping territories and lack of jobs. This includes a plant in Milford and one in Whitmore Lake off Old US 23. These plants have been decommissioned.								

Part 5: Inaccurate Statements

1. Addressing Inaccurate Responses to Questions by the Panel

The following table addresses inaccuracies presented as they pertain to the application for Special Land Use Permit for an asphalt mixing plant.

Table 2: Air Emissions

Air Emissions	
Inaccurate responses to panel questions, as addressed by John Sawyer and Abby Cooper at the Township meeting on 2/9/2021.	Facts
<i>“Air Quality Department requires that there is no pollution emitted out of the production of the hot mix asphalt.”</i>	<p>Asphalt Plants apply for a permit when opening that specifies estimates of production and emission output. This becomes the threshold by which emissions are measured. They have to demonstrate that they can operate under that threshold of air emissions in order to be granted a permit for operation.</p> <p>The fact that this permitting process is in place, is proof that air emissions are present.</p> <p>The Lansing location of Capital Asphalt is currently permitted for 320 tons of airborne pollutants (heavy metals & known carcinogens) per year!</p>
<i>“The State of Michigan, they have an Air Quality Division that monitors the emissions on an almost daily basis.”</i>	<p>EGLE Air Quality Division does not monitor emissions on a daily basis. Emissions are tested at the startup of the plant after construction is complete, typically within the first 6 months of production. This is called a stack test and is required by the permit.</p>

Air Emissions	
Inaccurate responses to panel questions, as addressed by John Sawyer and Abby Cooper at the Township meeting on 2/9/2021.	Facts
<i>“...There are daily reports submitted to the Air Quality Department that require that there is no pollution emitted out of the production of the hot mix asphalt, “Nothing coming out of the baghouse except air and steam.”</i>	<p>Daily reporting is a requirement of the permit, but it is not submitted to the Air Quality Department unless they request it. This typically happens once per year or once per 3 years. The records do not prove that “no” pollution is emitted. In fact, it proves that there are daily emissions of pollutants. This is calculated in a pound of pollutant per ton of asphalt mix produced. (Ex: CO is calculated at .20 lbs./ton, that gets multiplied by the number of tons produced and that is your daily emissions for that particular pollutant.</p> <p>The baghouse filter only filters particulate. There are other pollutants that exit the stack (CO, Nitrogen Oxides, Sulfur Dioxides, Lead, Benzene, Ethylbenzene Toluene, Xylene, Naphthalene, Metals, and Hydrogen Chloride to name a few).</p>
<i>“The only exhaust out of that stack is the all hot air that goes through the filtered baghouse. There’s nothing released from that stack that doesn’t go through the bag house that takes out any particulate dust or contaminant before the exhaust.” Anything that goes up that stack is subject to the State of Michigan air quality subject to inspection.”</i>	<p>The emissions generated in the mixing drum do go through the baghouse, this is considered inherent to the process. However, there are other emission sources from the plant including the “blue smoke” from the loading of HMA trucks, the blue smoke that escapes from the top of the silos, particulate emissions from truck traffic, the front-end loader, the storage piles, etc. The State is also requiring emission capture systems on these pieces of equipment, but they are largely ineffective at capturing 100% of the emissions. This is a common source of odors.</p>

Table 3: Odors

Odors	
<p>Inaccurate responses to panel questions, as addressed by John Sawyer and Abby Cooper at the Township meeting on 2/9/2021.</p>	<p>Facts</p>
<p><i>“The main concern for the neighbors, in my opinion, would be the air quality and that is “severely regulated by the State of MI”. They have a department that handles all asphalt plants and they are very receptive to any violation that might occur or might not be in compliance with their rules and regulations.”</i></p> <p><i>“They have a daily report to monitor.”</i></p>	<p>No HMA plant in Michigan is required to monitor odors daily. EGLE will get complaints called in, it will take a day or two to figure out what District Office should handle the complaint and who the assigned inspector is for the plant. Then it could take up to several weeks for the department to come out and try to verify the odors. By then the odors could be gone, moved, shifted, or lack an intensity that the Department thinks is sufficient for a violation. The residents have no leg to stand on. Typically, these odor investigations are like trying to hunt down a child lost at Disney.</p> <p>Rarely do odor investigations result in Letters of Violation, but if they do, they hardly ever result in any escalated enforcement.</p>

Table 4: Hazardous Materials & Waste

Hazardous Materials & Waste	
Inaccurate responses to panel questions, as addressed by John Sawyer and Abby Cooper at the Township meeting on 2/9/2021.	Facts
<i>"...if there's any waste that there would be there would be normal that would go into a regular dumpster and normal waste disposal container. Those products are really limited like any other business, the papers, the trash, the pop cans and newspaper, those items are removed on a regular basis."</i>	<p>Waste is a part of this process and cannot be denied.</p> <p>In other documents we have outlined the potential and typical types of wastes generated at an HMA plant.</p>
<i>"No hazardous materials on site."</i>	<p>Liquid Asphalt Cement (typically in large above ground steel storage tanks and the biggest volume of product stored).</p> <p>Heat Transfer Oil (contained in a closed loop piping system that heats the liquid asphalt cement).</p> <p>Motor oils, lubricants, hydraulic oils.</p> <p>Off road No. 2 diesel fuel (to fuel the front-end loader that transfers sand and stone to bins).</p> <p>On road No. 2 diesel fuel (for paving crew equipment that goes out to job sites).</p> <p>Asphalt Emulsion (this product is used on the paving jobs to adhere one layer of asphalt to another).</p> <p>Quality control laboratory chemicals (solvents).</p> <p>*The above-named hazardous materials require specific foam and hazardous fire teams to address hazardous events.</p>

Table 5: Dust

Dust	
<p>Inaccurate responses to panel questions, as addressed by John Sawyer and Abby Cooper at the Township meeting on 2/9/2021.</p>	<p>Facts</p>
<p><i>“If you park in our yard there would be no dust on your vehicle in our yard unless there was wind blowing excessively from the gravel pile. The gravel pile and the sand pile if you had excessive wind and you parked next to the gravel pile your car might be dusty when you went home at night.” Bill Wood wanted clarification if there would be any dust from that stack. Jon Sawyer replied, “none, none whatsoever.”</i></p>	<p>Absolutely not true. There will be plenty of dust.</p> <p>There is a limit to the amount of fugitive dust that can be generated on site from truck traffic, HMA haul vehicles, front end loaders, etc. The limit is 20% opacity, in general.</p> <p>Employees on site are supposed to be trained on how to spot fugitive dust and there must be a monitoring plan. This is a plan that is SELF-POLICED!</p>

PART 6: Conclusion

1. Conclusion

Knowing all these risks, having predisposed knowledge of the consequences for our health and safety, makes you, our Tyrone Township officials, responsible for making an ethical decision on the request to rezone 124 acres to heavy industrial space within a residential community. The future of our community rests on the Township Board and Planning Commission's full understanding of the risks at stake. For this reason, we entrust that you share this document at minimum, with the Township Board, Trustees, and Planning Commission.

We sincerely hope our efforts put forth in this document contribute to establishing a body of knowledge that enables you to be more informed on these complex issues. Furthermore, we invite you to ask questions about our work, and request any further studies relevant to the cause that we can provide.

It is our collective, professional opinion that granting approval of this request will undoubtedly bring irreparable harm to the health and safety of our residents, and the surrounding environment. Our community is closely watching and counting on you as our leaders to make a decision that is in the best interest of the residents.

Appendix 1: Abbreviations

Table 6: Abbreviations

Abbreviation	Definition
ATSDR	Agency for Toxic Substances and Disease Registry
BEA	Baseline Environmental Assessment
CDC	Center for Disease Control
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
GSIP	Groundwater Surface Interface Pathway
HAPS	Hazardous Air Pollutants
HHS	Health and Human Services
HMA	Hot Mix Asphalt
Michigan EGLE	Michigan Department of Environment, Great Lakes and Energy
NIOSH	National Institute for Occupational Safety and Health
NOx	Nitrogen Oxides
NREPA	Natural Resources & Environmental Protection Act
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PM	Particular matter
PNA	Polynuclear Aromatic Hydrocarbons
REC	Recognized Environmental Concerns
SOx	Sulfur Oxides
VOC	Volatile Organic Compounds

From: [Sandy Dixon](#)
To: [Amy Ruthig](#)
Subject: Asphalt plant
Date: Tuesday, November 30, 2021 11:42:14 AM

Ms Ruthig:

As a resident of Genoa Twp I would like to express my many concerns regarding the asphalt facility being considered in the area. Over the last 10 years the township has encouraged growth with homesteads, companies and restaurants. They have done a great job of maintaining growth and still keeping the area feel like a small town. Please help keep the air, noise and traffic as clean as you can. We can't have it all. If you want people to move here we need to not encourage industrial pollution near their homes. Please consider the many concerns that residents have regarding this facility. Thank you!

Sandy Dixon

Sent from my iPhone

From: [Anika Domanico](#)
To: [Mike Archinal](#)
Subject: Proposed re-zoning to build the asphalt facility
Date: Wednesday, December 1, 2021 12:53:13 AM

To whom it may concern at Genoa Township,

My family and I are residents of Genoa Township. I am emailing to voice not only my concerns but my opposition in the proposed re-zoning to build the asphalt facility. To keep this to the point my concerns are as follows;

The industrial emissions of harmful carcinogenic toxins that will be released as a result that will compromise the integrity of the quality of the air that we will be breathing for not only human being but all that residents of the surrounding areas, effecting creatures and the delicate ecosystems of the many lakes near by. This will have severe environmental consequences and be hazardous and detrimental to public health and safety.

I feel Allocation of this new zoning can hinder future growth. the re-zoning of this plot of land that's proposed to be used in this intended manner, surely does not promote the highest and best use for the land that is on the doorstep of the immediate residential area and is currently residential and itself. It is my understanding that the purpose of zoning is to segregate land uses that might be incompatible. It is my belief that in this specific location if re-zoning is granted and this intended plant is built that it would in deed be incompatible.

Furthermore, a study performed by blue Ridge Environmental Defense league was brought to my attention and shows that having an asphalt plant nearby negatively affects property values by 56% As property owner, plummeting values would be a financial hardship to myself and others to endure, not to mention a burden to live near.

In additions to these concerns I would like to know with the increase of traffic and large truck that will be frequently transporting materials to and from this facility and combined with increased commuting traffic, How will the influx and flow of traffic will be resolved and mitigated as a result if this re-zoning is approved?

Thank you for taking the time to read my concerns and I am looking forward to your response addressing my concerns and questions.

Sincerely,
Anika Domanico

[Sent from Yahoo Mail for iPhone](#)

Rezoning Proposal near Toddiem/Victory Drive

Janine Iyer <janine4freedom@gmail.com>

Sun 11/28/2021 6:07 PM

To: Bill Rogers <Bill@genoa.org>; Polly <pskolarus@genoa.org>; Robin Hunt <Robin@genoa.org>; Jean Ledford <Jean@genoa.org>; Jim Mortensen <Jim@genoa.org>; Terry Croft <Terry@genoa.org>; Diana Lowe <diana@genoa.org>;

Dear Genoa trustees,

I understand that Net Lease Associates of Saginaw MI has petitioned the board of trustees to rezone (IND to PID) an area in Genoa Township east of Victory Drive at Toddiem Drive for the industrial development of an asphalt plant and that this rezoning will be considered at the next board meeting on Dec. 6th.

As a resident of Genoa Township living within 5 miles of this site, I oppose the rezoning and development and operation of an asphalt plant on this site. The smokestack emissions are toxic or carcinogenic to humans and atmospheric deposition will poison the surrounding environment. As a cancer survivor, I chose to live in Genoa Township near state land and away from industrial areas to greatly decrease my exposure to carcinogenic emissions. Residents like myself who chose to reside in the natural setting of our township call on you to protect the rural and residential character of our area. Besides the obvious health risks to residents, the operation of an asphalt plant will also certainly decrease the home values in the area. If this rezoning is approved, my family would certainly move out of Genoa Township. Please oppose the rezoning and industrial development of this land.

Thank you for your consideration and service to the community.

Sincerely,

Janine V. Iyer
Genoa Township resident
2396 Brighton Rd.
Howell, MI 48843

WIND:
West to East

Kelly VanMarter

From: Seth Melrose <sethmelrose@gmail.com>
Sent: Thursday, December 2, 2021 10:57 AM
To: Kelly VanMarter; Diana Lowe; Terry Croft; Jim Mortensen; Jean Ledford; Robin Hunt; Bill Rogers; Polly
Subject: Long term negative economic effects of asphalt plants -
Attachments: 2021.09.21_flint_group_comments_ajax_pti_permit (1).pdf

Short term economic growth from an asphalt plant opening soon near to valuable homes and businesses will be a disaster nearly immediately.

Declining property values (in some cases up to 56 percent) will lead to a sharp decline in tax revenue coming into the counties and townships. The added stress on infrastructure will also be a cost passed on to the tax payers. It will be an economic catastrophe which will likely lead to an unrecoverable decline for the entire area.

The cities that are often home to asphalt plants are not bastions of economic growth, they're quite the opposite.

On top of the economic impacts that the surrounding area will suffer are long term and short term pollution that are unavoidable.

The city of Flint fought a proposal for AMC to build an asphalt plant in their town and put together an extremely compelling case for why asphalt plants shouldn't be near the homes of people, many with children. Please take the time to read this important document.



September 22, 2021

Submitted via Email: EGLE-AQD-PTIPublicComments@michigan.gov

Re: Ajax Materials Corporation Permit to Install Application No. APP-2021-0019

To Whom It May Concern:

The following comment is in regard to a Permit to Install (PTI) application submitted by Ajax Materials Corporation. The corporation seeks to construct a hot mix asphalt plant on a proposed site located at 5088 Energy Drive, Flint, Michigan. Before the Department of Environment, Great Lakes, and Energy (EGLE) grants a PTI request, members of the public must have the opportunity to submit written comments on the application. EGLE must consider all public comments received in determining whether to grant a PTI.

The Great Lakes Environmental Law Center and Earthjustice submit this comment on behalf of their clients: Flint Rising, the Environmental Transformation Movement of Flint, and the St. Francis Prayer Center. We urge EGLE to deny the permit for the reasons explained in the attached comment.

Sincerely,

/s/ Andrew Bashi

Andrew Bashi
Nick Leonard
Great Lakes Environmental Law Center
Attorney for Flint Rising
and the Environmental Transformation
Movement of Flint
4444 Second Avenue
Detroit, MI 48201
313-782-3372
andrew.bashi@glelc.org

/s/ Debbie Chizewer

Debbie Chizewer
Earthjustice
Attorney for St. Francis Prayer Center
311 S. Wacker Dr., Suite 1400
Chicago, IL 60606
773-484-3077
dchizewer@earthjustice.org

I. INTRODUCTION

Nowhere in the state are cumulative risk assessments more necessary for protecting the health of residents than for proposed actions in our largest, poorest, and most segregated cities. Simultaneously, more so than any other city, the name of one has become a universal synonym for “environmental injustice.” Flint.

Renowned biologist Eugene Odum once succinctly described environmental degradation from cumulative effects as “the tyranny of small decisions.”¹ Seemingly independent small decisions, when viewed in their totality, create large-scale ill effects over time. Forty years after Odum’s observations were published, evidence that some of the most egregious health effects of air pollution result not merely from the direct effects of one large action continues to mount. Instead, it is often the combination of a multitude of comparatively minor actions, further inflamed by societal inequalities, that pose significant risks to vulnerable communities.² The United States Environmental Protection Agency (EPA) calls these “combined risks from aggregate exposures to multiple agents or stressors” *cumulative risks*.³

¹ William E. Odum, Environmental Degradation and the Tyranny of Small Decisions, *BioScience*, Volume 32, Issue 9, October 1982, Pages 728–729, <https://doi.org/10.2307/1308718>

² E.g. Chen, Edith et al. “Chronic traffic-related air pollution and stress interact to predict biologic and clinical outcomes in asthma.” *Environmental health perspectives* vol. 116,7 (2008): 970-5.

doi:10.1289/ehp.11076; Morello-Frosch, Rachel et al. “Understanding the cumulative impacts of inequalities in environmental health: implications for policy.” *Health affairs (Project Hope)* vol. 30,5 (2011): 879-87. doi:10.1377/hlthaff.2011.0153; Solomon, Gina M et al. “Cumulative Environmental Impacts: Science and Policy to Protect Communities.” *Annual review of public health* vol. 37 (2016): 83-96.

doi:10.1146/annurev-publhealth-032315-021807; Briggs, David. “Environmental pollution and the global burden of disease.” *British medical bulletin* vol. 68 (2003): 1-24. doi:10.1093/bmb/ldg019; Clougherty, Jane E et al. “Synergistic effects of traffic-related air pollution and exposure to violence on urban asthma etiology.” *Environmental health perspectives* vol. 115,8 (2007): 1140-6. doi:10.1289/ehp.9863

³ U.S. EPA. Framework for Cumulative Risk Assessment. U.S. Environmental Protection Agency, Office of Research and Development, Center for Public Health and Environmental Assessment (CPHEA), formerly known as the National Center for Environmental Assessment (NCEA), Washington Office, Washington, DC, EPA/600/P-02/001F, 2003, available at <https://www.epa.gov/risk/framework-cumulative-risk-assessment>.

Traditional assessments of human health risks associated with air pollution are extraordinarily narrow in scope, “focus[ing] on single cause-effect pathways that involve a single chemical and single identified adverse effect,” and “limiting their applicability to the ‘real world.’”⁴ Where air pollution standards are based solely on the adverse health effects of one pollutant and monitoring often focuses on the emissions of one pollutant from a single source, they ignore the reality that combined emissions often work to amplify deleterious effects.⁵ This methodology allows areas to exist where air quality is technically in compliance with each pollutant’s respective standards even though their impact, when taken cumulatively, results in overall low air quality.⁶

The EPA, in its risk characterization policy and guidance, suggests that risk assessments should instead “address or provide descriptions of [risk to]... important subgroups of the population, such as highly exposed or highly susceptible groups.”⁷ The EPA’s guidance on planning and scoping for cumulative risk assessments recognizes the potential importance of other social, economic, behavioral, or psychological stressors that may contribute to adverse health effects, stressing the importance of “defining the characteristics of the population at risk, which include individuals or sensitive subgroups....”⁸ It is this more holistic and accurate approach to risk assessment that has made cumulative effects analysis critical to the attainment of environmental justice.

The EPA’s comment letter regarding EGLE’s draft permit for the Ajax Asphalt Plant highlights “the environmental conditions already facing this community, and the

⁴ National Research Council. *Science and Decisions: Advancing Risk Assessment*. National Academy Press; Washington, DC, USA: 2009.

⁵ Dominici, Francesca et al. “Protecting human health from air pollution: shifting from a single-pollutant to a multipollutant approach.” *Epidemiology (Cambridge, Mass.)* vol. 21,2 (2010): 187-94. doi:10.1097/EDE.0b013e3181cc86e8

⁶ *Id.*

⁷ U.S. EPA. *Framework for Cumulative Risk Assessment*, *supra note 3*.

⁸ *Id.*

potential for disproportionate impacts.”⁹ As such, EPA “recommends a cumulative analysis of the projected emissions from all emission units at the proposed facility, fugitive emissions from the proposed facility, and emissions from nearby industrial facilities, to provide a more complete assessment of the ambient air impacts of the proposed facility on this community.”¹⁰ At the same time, EPA made clear that “the siting of this facility may raise civil rights concerns,” necessitating an assessment by EGLE of “its obligations under civil rights laws and policies.”¹¹

As is demonstrated in the coming pages, the rules governing Michigan’s Department of Environment, Great Lakes, and Energy (EGLE) and its air permitting programs allow for a cumulative impact analysis on a case-by-case basis. Simultaneously, federal civil rights laws demand it. Nowhere in the state are cumulative risk assessments more necessary for protecting the health of residents than for proposed actions in our largest, poorest, and most segregated cities.

EGLE’s failure to utilize its power to conduct a cumulative effects analysis perpetuates a long history of societal disenfranchisement, disinvestment, and disregard for communities of color. The confluence of environmental and social impacts, when combined, must trigger this heightened level of scrutiny applied to permit decisions for facilities near these large historically marginalized communities.

II. BACKGROUND

A. The Proposed Site

The subject of this comment is a proposed permit prepared by EGLE and made available to the public for comment. In December 2020, Ajax submitted an application

⁹ U.S. EPA, Detailed Permit Comments Ajax Materials Corporation PTI APP-2021-0019. Exhibit 1.

¹⁰ *Id.*

¹¹ *Id.*

for a permit to install (PTI), which would authorize the construction of a hot mixed asphalt plant at 5088 Energy Drive in Flint.¹²

Plant construction would include installation of:

- 500 ton per hour counter-flow drum mixer
- baghouse rated to 100,000 Cubic Feet per Minute
- recycled asphalt product feed bins
- eight storage silos
- truck load out area
- six asphalt cement tanks
- hydrocarbon gas fueled heater.

The proposed site is located on a large wooded parcel that is home to Riskin Drain, an Impaired Stream covered by the statewide Polychlorinated Biphenyls (PCBs) TMDL.¹³ Water from Riskin flows into the Flint River until it combines with the Shiawassee River, which then empties into Lake Huron.¹⁴ The DEQ, in its communications to the EPA regarding the statewide PCB TMDL, determined that “atmospheric gas phase concentration is the primary pathway for PCBs into the Michigan water bodies covered by the TMDL,” waterways that include Riskin Drain.¹⁵

As is outlined further in II.B, the site of the proposed facility is close in proximity to large residential housing developments and numerous community gathering centers. At the same time, the area is heavily populated with heavy industrial facilities, including Universal Coating Inc, Genesee Power Station, Ace-Saginaw Paving Company, Buckeye Terminals, Superior Materials, RJ Industrial Recycling, Genesee

¹² Ajax’s Permit to Install Application. Exhibit 2.

¹³ https://www.michigan.gov/documents/deq/wrd-sw-as-pcbtmdl-appA_415364_7.pdf, 040802040409-01

¹⁴ <https://www.canr.msu.edu/michiganlakes/uploads/files/Leonardi%20and%20Gruhn%202001.pdf>, 118

¹⁵ https://ofmpub.epa.gov/waters10/attains_impaired_waters.show_tmdl_document?p_tmdl_doc_blobs_id=80424, 14

Recycling, Environmental Rubber Recycling, Emterra Environmental USA, and Lake State Railway Company.

B. The Community

Surrounding these facilities are a slew of communities and the respective neighborhoods to which they belong; 2,970 people live within a 1-mile radius of the proposed site.¹⁶ Two low-income public housing buildings, River Park and Ridgecrest Village, are located directly to the south and southwest of the proposed site. Four mobile home parks are located within a 1-mile radius of the site along with three children's parks, a public beach, a county recreation area, a community garden, five churches, and an assisted living center.

The proposed plant will be located in an environmental justice community. Of the 2,970 people living within 1-mile of the proposed plant, 86% of the population identify as people of color, including 77% of the population identifying as Black and 10% of the population identifying as Hispanic.¹⁷ Forty-three percent of households have incomes of less than \$15,000 a year. The area's per capita income in 2018 was \$14,991.¹⁸

Data compiled by the EPA and accessed through its EJSCREEN tool confirms a stark contrast between the characteristics of the area around the proposed site compared to the rest of the state. The EJSCREEN report below combines demographic and environmental indicators in the area encompassed within a 1-mile radius of the proposed site to provide EJ Indexes. Each EJ Index combines demographic factors with a single environmental factor.

¹⁶ United States Environmental Protection Agency. 2020 version. EJSCREEN. Retrieved September 20, 2021, from <https://ejscreen.epa.gov/mapper/demogreportpdf.aspx?report=acs2018>. U.S. Census Bureau, American Community Survey (ACS) 2013-2017.

¹⁷ *Id.*

¹⁸ *Id.*



Selected Variables	Percentile in State
EJ Indexes	
EJ Index for Particulate Matter (PM 2.5)	94
EJ Index for Ozone	96
EJ Index for NATA* Diesel PM	89
EJ Index for NATA* Air Toxics Cancer Risk	94
EJ Index for NATA* Respiratory Hazard Index	94
EJ Index for Traffic Proximity and Volume	85
EJ Index for Lead Paint Indicator	94
EJ Index for Superfund Proximity	92
EJ Index for RMP Proximity	87
EJ Index for Hazardous Waste Proximity	94
EJ Index for Wastewater Discharge Indicator	91

An EJ Index is highest in areas with high environmental indicator values combined with large numbers of mainly low-income and minority residents. Higher percentiles indicate a confluence of a high concentration of people of color as well as a high percentile of environmental risks compared to state averages. When an area has a high EJ Index, it is a warning sign that there is likely an environmental justice community that is disproportionately subjected to elevated levels of environmental risks. The communities around the proposed site for this facility are among the highest percentiles in the state for every index, ranging from the 85th percentile to the 96th percentile compared to Michigan as a whole.

III. LEGAL BACKGROUND

The primary air pollution regulations setting the standards that must be met in emitting facility licensing actions taken by EGLE include:

- At the federal level, the Clean Air Act (CAA), as amended, and its rules.¹⁹

¹⁹ *Clean Air Act (CAA)*, 42 U.S.C. 7401 et seq.

- At the state level, Part 55 Air Pollution Control of the Michigan Natural Resources and Environmental Protection Act (NREPA), as amended, and its rules.²⁰

First passed by the United States Congress in 1970, the CAA serves as the foundation for regulating air pollution throughout the country. Under the CAA, the EPA is required to regulate the emission of pollutants that “endanger public health and welfare.”

A primary means of regulating air pollution sources through the CAA has historically been through state enforcement of emission limits in State Implementation Plans (SIPs). Each SIP is an enforceable collection of environmental regulations approved by the EPA and used by the respective state to administer air pollution control programs fulfilling the requirements of the CAA. States are not allowed to have weaker air pollution controls than those outlined in the CAA. States are, however, allowed to have pollution controls stronger than those outlined by the CAA.

In Michigan, the authority to implement the CAA is granted to EGLE’s Air Quality Division (AQD) through Part 55 (Air Pollution Control) of Michigan’s NREPA, as amended. EGLE’s Part 55 Air Rules, approved by the EPA, regulate air emissions, and require permits for major sources of pollutants. Specifically, Rule 201 of the Michigan Air Pollution Control Rules requires a person to obtain an approved Permit to Install for any potential source of air pollution unless the source is exempt from the permitting process.²¹

A. Michigan’s Air Toxic Rules

To receive a permit to install, a permit applicant must submit data demonstrating that the emissions from the process will not have an unacceptable air quality impact in

²⁰ *Natural Resources and Environmental Protection Act (NREPA)*, 1994 PA 451.

²¹ Mich. Admin. Code, R 336.1201.

relation to all federal, state, and local air quality standards.²² State air quality standards include Michigan’s Air Toxic Rules. These rules require two main things of permit applicants. First, permit applicants may not allow the emission of a toxic air contaminant from the proposed new or modified emission unit over the maximum allowable emission rate based on the best available control technology for toxics.²³ Second, the permit applicant must demonstrate that it will not cause or allow the emission of any toxic air contaminant from the proposed new or modified emission unit above the maximum allowable emission rate that will result in a predicted maximum ambient impact that is more than an initial threshold screening level or an initial risk screening level.²⁴

Importantly, EGLE is granted latitude to require even lower emission rates on a *case-by-case basis* for specific toxic air contaminants. Specifically, Rule 228 grants EGLE the authority to do so where the Department determines that the requirements specified by Best Available Control Technology for Toxics (T-BACT) or the health-based screening level may not provide adequate protection of human health or the environment in a particular instance.²⁵ “In this case, the department shall establish a maximum allowable emission rate considering relevant scientific information, such as exposure from routes other than direct inhalation, synergistic or additive effects from other toxic air contaminants, and effects on the environment.”²⁶

B. Review of Permit Decisions

Article VI, Sec 28 of the Michigan Constitution requires administrative decisions to be, at a minimum, “authorized by law; and... supported by competent, material and

²² Mich. Admin. Code, R. 336.1203(1)(h).

²³ Mich. Admin. Code, R. 336.1224(1).

²⁴ Mich. Admin. Code, R. 336.1225(1).

²⁵ Mich. Admin. Code, R 336.1228

²⁶ *Id.*

substantial evidence.”²⁷ Similarly, the Michigan Administrative Procedure Act reiterates that decisions must not be “in violation of the constitution or a statute” and must be “supported by competent, material and substantial evidence on the whole record.”²⁸ It provides further specificity by also barring administrative decisions deemed “arbitrary, capricious, or clearly an abuse or unwarranted exercise of discretion.”²⁹

C. Title VI of the Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 (Title VI) is a federal law that prohibits any federally funded program or activity from discriminating on the basis of race, color, or national origin, and provides a statutory basis for relief for victims. Section 602 of Title VI requires agencies distributing federal funds to issue regulations implementing the prohibition of discrimination.³⁰ It also requires these agencies to create mechanisms for processing complaints of discrimination based on race, color, and national origin.

Agency regulations implementing Title VI, as well as agency authority under other laws, are subject to the environmental justice goals of Presidential Executive Order 12898, which requires each Federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”³¹ Federal agencies may implement policies that affect their funding activity to accomplish the goals of EO 12898.³² Agencies can use their Title VI authority, when appropriate, as well as their authority under various laws to achieve the

²⁷ Const. 1963, Art. VI, § 28, Eff. Jan. 1, 1964.

²⁸ Administrative Procedures Act of 1969, 24.306, Sec. 106.

²⁹ *Id.*

³⁰ 42 U.S.C. 2000d-1

³¹ Executive Order 12898, <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>.

³² U.S. EPA, “Title VI EJ Comparison” accessed July 10, 2020, <https://www.epa.gov/sites/production/files/2015-02/documents/title-vi-ej-comparison.pdf>.

Executive Order.³³ “Agency Title VI enforcement and compliance authority *includes* the authority to ensure that the activities they fund that affect human health and the environment do not discriminate based on race, color, or national origin.”³⁴

D. Title VI Implementation in the Environmental Context

For the EPA, Title VI is implemented by 40 CFR Part 7, “Nondiscrimination in Programs or Activities Receiving Federal Assistance from EPA.”³⁵ “Every EPA grant recipient, including each state environmental agency receiving financial assistance from EPA, is subject to the terms of 40 CFR Part 7.”³⁶ As a recipient of EPA financial assistance, EGLE submitted assurance that it would comply with EPA’s Title VI implementing regulations along with its funding applications.³⁷ Accepting EPA funds also served as EGLE’s acceptance of the obligation to comply with the agency’s Title VI implementing regulations.³⁸

Under EPA’s Title VI implementing regulations, EGLE is prohibited from using “*criteria or methods of administering its program which have the effect of subjecting individuals to discrimination because of their race, color, [or] national origin.*” Central to the EPA’s Title VI implementing regulations is the *consequence* of agency policies and decisions, not their *intent*. As such, they include prohibitions against both intentional and unintentional discrimination by EGLE and other EPA funded agencies.³⁹

Unintentional discrimination includes those actions that have a disproportionate adverse effect on individuals of a certain race, color, or national origin. Despite not

³³ *Id.*

³⁴ *Id.* emphasis in original.

³⁵ “40 CFR § 7.35 - Specific Prohibitions.,” LII / Legal Information Institute, accessed July 2, 2020, <https://www.law.cornell.edu/cfr/text/40/7.35>.

³⁶ U.S. EPA, “Draft Title VI Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs”, https://19january2017snapshot.epa.gov/sites/production/files/2013-09/documents/frn_t6_pub06272000.pdf

³⁷ *Id.*

³⁸ *Id.*

³⁹ “40 CFR § 7.35 - Specific Prohibitions.”

being formalized in writing, a neutral policy or decision understood as a “standard operating procedure,” a failure to act, or a failure to proactively adopt an important policy can also constitute a violation of Title VI.⁴⁰ Recipients of federal financial assistance are prohibited from utilizing criteria or methods of administration that have the effect, *even if unintentional*, of subjecting individuals to discrimination because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the program’s objectives.⁴¹

While neutral on their face, environmental laws, policies, public participation practices, and decisions can still produce unintentional discriminatory effects that violate Title VI.⁴² For this reason, EGLE’s “Title VI obligation is layered upon its separate, but related obligations under the Federal or state environmental laws governing its environmental permitting program.”⁴³ Therefore, the mere fact that a state agency such as EGLE can demonstrate their actions comply with relevant federal and state environmental laws “does not constitute per se compliance with Title VI.”⁴⁴

Similarly, the “question of whether or not individual facility operators are in violation of [environmental laws] is distinct from whether the permitting agencies’ decision to grant permits to the operators had a discriminatory impact on the affected communities.”⁴⁵

⁴⁰ See, e.g., *Maricopa Cty.*, 915 F. Supp. 2d at 1079 (disparate impact violation based on national origin properly alleged where recipient “failed to develop and implement policies and practices to ensure [limited English proficient] Latino inmates have equal access to jail services” and discriminatory conduct of detention officers was facilitated by “ broad, unfettered discretion and lack of training and oversight” resulting in denial of access to important services).

⁴¹ “40 CFR § 7.35 - Specific Prohibitions.”

⁴² <https://www.govinfo.gov/content/pkg/FR-2000-06-27/pdf/00-15673.pdf>, 39690

⁴³ Draft Title VI Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs.

⁴⁴ *Id.*

⁴⁵ *Californians v. United States EPA*, 2018 U.S. Dist. LEXIS 56105, *35

E. Permitting Decisions Under Title VI

Per 40 CFR 7.35(b), EGLE and other recipients of EPA funding are responsible for ensuring that the activities authorized by their environmental permitting decisions do not have discriminatory effects, regardless of whether the agency selects the site or location of permitted sources. The fact that the recipient, EGLE, does not select the site in a permit application does not relieve the recipient of the responsibility of ensuring that its actions in issuing permits for such facilities do not have a discriminatory effect.⁴⁶ Within the context of Title VI, the issuance of a permit by EGLE or any other recipient of EPA funding is the “necessary act that allows the operation of a source. that could give rise to adverse disparate effects on individuals.” To operate, the owners of a facility must both: 1) “comply with local zoning requirements,” and 2) “obtain the appropriate environmental permit.” An EPA funding recipient’s operation of a permitting program is independent of local government zoning activities.

IV. COMMENTS

A. EGLE Can And Must Use Its Authority To Assess Cumulative Impacts Regarding Air Emissions From The Proposed Plant As Well As Other Nearby Sources Of Air Pollution

EPA has stated that a cumulative impact analysis is relevant for considering whether a Title VI violation may be present. Yet, EGLE has neither required the Permit Applicant to perform any such analysis, nor has it performed such an analysis itself, despite the fact that Title VI demands a cumulative impact study in this case and multiple regulatory provisions support the use of this requirement.

The demographic data for the communities living in close proximity to the proposed site immediately gives rise to concerns regarding Title VI compliance: 86% of

⁴⁶ 40 CFR § 7.35(c).

individuals living in the communities within a 1-mile radius of the facility are minorities. These concerns are heightened given the results of the EJ Screen analysis discussed in section II.B above, which showed that the community within a 1-mile radius of the proposed plant were not only people of color and lower income but were also subject to disproportionately high levels of a wide variety of environmental risks when compared to state averages. Adding another source of air pollution to this community may contribute to a disproportionate adverse impact in violation of Title VI, particularly when cumulative impacts on the community are considered.

EGLE has the authority to require a cumulative impact assessment regarding any toxic air contaminant pursuant to Mich. Admin. Code R. 336.1228 (Rule 228) and Mich. Admin. Code R. 336.1901. In addition, the Michigan Environmental Policy Act, MCL 324.1705(2), requires that EGLE consider the effect of the proposed permit on the environment and should not authorize conduct that will pollute, impair or destroy the air, water or other natural resources if "there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare. (Rule 901). Rule 228 specifically allows the Department to "determine, on a case-by-case basis, that the maximum allowable emission rate... does not provide adequate protection of human health or the environment."⁴⁷ Rule 228 compels EGLE to require a lower emissions rate than specified in the administrative code wherever this determination is made, stating that it "shall establish a maximum allowable emission rate considering relevant scientific information."⁴⁸ It goes on to explicitly include examples of a wide array of scientific information considered relevant to the determination of the maximum allowable emission rate. They include, but are not limited to, "exposure from routes other than direct inhalation, synergistic or additive

⁴⁷ Mich. Admin. Code R. 336.1228 (Rule 228) (emphasis added)

⁴⁸ *Id.*

effects from other toxic air contaminants, and effects on the environment.”⁴⁹ In short, Rule 228 permits EGLE to conduct what the EPA defines as a cumulative risk assessment for toxic air contaminants: “An analysis, characterization, and possible quantification of the combined risks to health or the environment from multiple agents or stressors.”⁵⁰ As such, Rule 228 provides EGLE with a tool to address Title VI-related cumulative impact concerns in the context of permitting.

Rule 901(a) also provides EGLE with the authority to require a cumulative impacts analysis. Rule 901 provides—

[A] person shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other contaminants, either of the following:

- a. injurious effects to human health or safety, animal life, plant life of significant economic value or property, or
- b. unreasonable interference with the comfortable enjoyment of life and property.⁵¹

In order to determine whether the proposed asphalt plant will comply with Rule 901(a), a permit term, EGLE must have a better understanding of how the permit will contribute to the injurious effects to human health or safety.

Residents in this community already experience disproportionately high rates of asthma and other health conditions that reflect the known high rates of exposure to air pollution. According to the Michigan Inpatient Database, the asthma hospitalization rate in the area in zip code 48505—where the proposed Plant is to be located—is 43.04

⁴⁹ *Id.*

⁵⁰ U.S. EPA. Framework for Cumulative Risk Assessment. U.S. Environmental Protection Agency, Office of Research and Development, Center for Public Health and Environmental Assessment (CPHEA), formerly known as the National Center for Environmental Assessment (NCEA), Washington Office, Washington, DC, EPA/600/P-02/001F, 2003.

⁵¹ Mich. Admin. Code R336.1901 (Rule 901).

per 10,000 people, which is over three times the state average of 12.54 per 10,000 people.⁵² A cumulative impact study is a needed step to understand how this proposed permit will contribute to the overall health effects.

As noted above, EPA's Title VI regulations prohibit both intentional and unintentional acts of discrimination. An unintentional act of discrimination can include a failure to act. In cases such as this when a Title VI issue may be present based on the demographics of the residents living nearby the proposed Plant, a cumulative impact analysis is *required* in order for EGLE to determine whether or not its decision to issue the permit will violate the EPA's Title VI regulations.

Even if the department did not have existing authority in its air quality rules for conducting a cumulative impact analysis, EGLE's Title VI obligation "exists *in addition* to the Federal or state environmental laws governing its permitting program."⁵³ However, in this case EGLE *does* have the authority to address cumulative impacts regarding toxic air contaminant emissions.

The Commenters are not the only parties concerned about cumulative impacts and a potential Title VI violation. The risk of this occurring was highlighted by the EPA itself in a recent letter to EGLE regarding the Ajax permit application. The Agency states that:

because the proposed site for the Ajax facility is in an area with identified air quality concerns in EJSCREEN, EPA recommends a cumulative analysis of the projected emissions from all emission units at the proposed facility, fugitive emissions from the proposed facility, and emissions from nearby industrial facilities, to provide a more complete assessment of the ambient air impacts of the proposed facility on this community.⁵⁴

⁵² Michigan Inpatient Data Base, 2012-2014, available at https://www.michigan.gov/documents/mdch/Michigan-and-Detroit-Asthma-Hosp-Rates_498682_7.pdf

⁵³ U.S. EPA Title VI Guidance, at 39,680. Emphasis added.

⁵⁴ U.S. EPA, Detailed Permit Comments Ajax Materials Corporation PTI APP-2021-0019

Yet, while EGLE's existing rules allow it to conduct a cumulative impact analysis via Rule 228, Rule 901, and the EPA's Title VI guidance, and while the EPA has explicitly encouraged EGLE to perform such an analysis regarding this proposed permit, it has thus far failed to do so. The permit will contribute to emissions in communities made up of some of the highest percentages of minorities in the state. The large number of minorities living within the vicinity of the proposed site immediately raises the prospect of a Title VI complaint based on disparate impact. A violation will occur if this decision, combined with cumulative impacts of the entirety of this and other facilities, results in a significant adverse effect. By abdicating its responsibility to conduct a cumulative impact assessment, EGLE is left with no means of knowing whether the cumulative impacts that include those arising from this permit will have a significant adverse effect. The agency cannot then know whether it is complying with its Title VI obligations in the process of issuing these permits.

B. EGLE's Draft Permit Fails To Prevent Violations Of Rule 901

EGLE's draft permit expressly incorporates Rule 901 of the Michigan Air Pollution Rules but fails to require sufficient measures designed to prevent the violation of Rule 901(b). Rule 901(b) requires EGLE and Ajax to ensure that emissions do not cause "unreasonable interference with the comfortable enjoyment of life and property."⁵⁵ As explained in EGLE's guidance, "Application of Rule 901(b) in the Permit to Install Review Process" ("Rule 901(b) Guidance"), the Air Quality Divisions staff and the source of pollution have the responsibility to proactively reduce the likelihood that the facility will generate a nuisance. The incorporation of Rule 901(b) in permits aims to prevent odors and fugitive dust from becoming a nuisance to the surrounding community. The Rule 901(b) Guidance expressly includes asphalt plants in the list of

⁵⁵ Mich. Admin. Code R 336.1901(b) (Rule 901).

odorous sources.⁵⁶ EGLE directs its permitting staff to identify methods that can be used to help minimize nuisance situations.

1. Odors

Despite the fact that odors are a very common complaint from residents living near asphalt plants,⁵⁷ including at Ajax's other asphalt plants,⁵⁸ EGLE's draft permit pays scant attention to the importance of odor prevention. As a preliminary matter, Ajax's permit application passingly mentions nuisance odors and dust, but fails to explain how the asphalt plant's design or operations will prevent the release of odors that will cause an unreasonable interference with comfort and enjoyment of life and property for its neighboring community. EGLE's draft permit also includes no requirement that Ajax take proactive measures to manage odors, but rather indicates that EGLE may require odor testing upon request.⁵⁹

The siting of the Ajax asphalt plant in this environmental justice community is inappropriate considering the harms that can be caused by the odor and other harmful emissions. As drafted, EGLE's draft Permit fails to proactively address the high likelihood of odor issues. This is especially problematic considering that EGLE has previously received odor complaints for Ajax's other asphalt plants in Michigan. It has also issued multiple notices of violations for odor for at least three of Ajax's Michigan plants. In response to a notice of violation for its Auburn Hills asphalt plant, Ajax indicates that it has increased its stack height from 60' to 100' and then to 120' feet as a

⁵⁶ *Id.*

⁵⁷ <http://chej.org/wp-content/uploads/Asphalt-Plants-PUB-131.pdf> look at p. 64/182

⁵⁸ See EGLE Violation Notices:

https://www.deq.state.mi.us/aps/downloads/SRN/B4138/B4138_VN_20160615.pdf.

https://www.deq.state.mi.us/aps/downloads/SRN/B1956/B1956_VN_20151207.pdf

https://www.deq.state.mi.us/aps/downloads/SRN/B1956/B1956_VN_20191202.pdf

⁵⁹ See EGLE Draft Permit, 10 (The verification and quantification of odor emissions from EUHMAPLANT, by testing at owner's expense, in accordance with Department requirements may be required for continued operation.)

proactive way to prevent odor issues.⁶⁰ Yet, in Flint, Ajax is only proposing to build a stack at a height of 80'. Nothing in the permit suggests why the 80' stack height is appropriate or will prevent odors.

EGLÉ has the authority to deny a permit based on Rule 901. For instance, in the predominantly white community of Rochester Hills, Michigan, the Department of Natural Resources ("DNR") refused to issue a permit to construct a landfill based on its proximity to residential homes and the inadequacy of the proposal to control odors on the site; in upholding the DNR's permit denial, the Court deemed consideration of "the broad concerns regarding air quality enunciated under Rule 901" an appropriate exercise of regulatory discretion.⁶¹

We urge EGLÉ to deny Ajax's permit application because the very nature of the asphalt plant operations make it likely to cause a nuisance for the surrounding community, considering its close proximity to the nearby homes. At the very minimum, EGLÉ should require Ajax to take significant steps to reduce the potential odor issues: (1) require Ajax to raise the stack height; (2) require Ajax to install systems that will reduce the likelihood that emissions will escape the facility; and (3) require Ajax to prepare an odor mitigation plan that will detail operations and maintenance systems designed to prevent odors.

⁶⁰ See Letter from Mark Boden, Vice President, Ajax to Robert Joseph, Environmental Engineer, Air Quality Division, EGLÉ (December 20, 2019),

http://www.deq.state.mi.us/Aps/downloads/SRN/B1956/B1956_RVN_20191220.pdf

⁶¹ See *Southeastern Oakland County Incinerator Authority v. Department of Natural Resources*, 440 N.W.2d 649, 653-654 (Michigan Ct. of Appeals 1989); see also *Subject: Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 Pa 451, As Amended Petition of Air Quality Division To Revoke the Permit To Install Issued To Tobian Metals, Inc.*, 2005 WL 996013 (upholding DEQ's decision to withdraw an air permit, based in part on Rule 901, where residents could not run air conditioning or open their windows due to odors from the nearby industrial facility).

2. Fugitive Dust Emissions Control

Ajax's Asphalt Plant and Yard will generate fugitive dust from the plant roadways, plant yard, material storage piles, silos, and material handling operations. As acknowledged by EGLE's Rule 901(b) Guidance, permits to install should include provisions designed to prevent fugitive dust from creating a nuisance. Further, under the Michigan SIP, the permit must include a fugitive dust plan.⁶²

Nothing in the draft permit demonstrates that EGLE or Ajax took adequate measures to prevent fugitive dust emissions. EGLE's draft permit's Appendix A is a very high level, one-page document that does not provide details appropriate for a fugitive dust plan. Control measures should be in place for all transfer points, transport by truck, roadways, and outdoor storage piles.⁶³ EGLE should require the following:

Transfer Points:

- Require total enclosure of materials during transfer, including for truck loading and unloading.
- For transfers of materials that cannot be enclosed, as determined by EGLE, require a water spray system either through direct application, mobile misters (appropriate for materials that should get too wet), or dry foggers (which are appropriate during freezing temperatures).
- For transfer of materials that cannot be enclosed, minimize material drop heights.
- Consider wind speeds and plan ahead and do not conduct transfer operations during wind speeds over 12 miles per hour.

Truck Transport:

⁶² MCL 324.5524; Mich. Admin. Code, R 336.1901.

⁶³ See Chicago, Control of Emissions from Handling and Storing Bulk Materials (January 2019) as a guide to some measures that can be taken to control fugitive dust.

https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/Control_EmissionsfromHandling&StoringBulkMaterials_January2019.pdf

- All vehicles should be subject to 10 mph or less speed limit and signage should be posted.
- All outgoing material transport trucks are cleaned so no loose material is on the exterior tire surface and the removed material is collected.
- All outgoing material transport trucks go through a wheel wash station and pass over rumble strips.
- Transport trucks should not be able to access unpaved areas.
- Trucks carrying materials out of the facility should be covered.

Roadways:

- All internal roads used for transporting or moving material shall be paved or maintained so that they are not susceptible to become windborne.
- All internal roads should be swept with a street sweeper with a water spray and vacuum system multiple times per day and records of this work should be maintained.
- External truck routes within one mile of the facility should be cleaned with a street sweeper with a water spray and vacuum system at least once per day.

Outdoor storage piles:

- For any piles that EGLE determines cannot be covered or enclosed, pile heights must be limited to no more than 10 feet.
- Disturbance of outdoor storage piles must be suspended during wind conditions that exceed 12 miles per hour.
- Dust suppressant systems—including water sprayers, misters, or water trucks, or chemical stabilizers--should be in place and operable throughout the entire year.

Runoff management:

- Prevent runoff from piles onto public ways, neighboring parcels, or waterways.

- Obtain discharge permits for any runoff that will enter any stormwater collection systems.
- Grade site so that proper drainage occurs.
- Develop written plan for spills and/or migration of pollutants onsite or offsite.

C. Risk of Further PCB Contamination to Imperiled Waterway Must Be Assessed to Satisfy Rule 901

The proposed site for this permit to install is home to an Impaired Stream covered by the statewide Polychlorinated Biphenyls (PCBs) TMDL. Riskin Drain is a tributary of the Flint River, which carries waters and contaminants from Riskin to Lake Huron. Furthermore, the site is in close proximity to bodies of water with substantial surface area, including the 684-acre C.S. Mott Lake.

In its 2017 review of an MDEQ report on PCB TMDLs, the EPA assessed and agreed with the MDEQ’s assertion that “atmospheric gas phase concentration is the primary pathway for PCBs into the Michigan waterbodies covered by the TMDL.” Asphalt products are widely recognized as common sources of PCB contamination.⁶⁴ As such, EGLE must review the injurious effects or unreasonable interferences siting a hot mix asphalt plant near already impaired waterways may exacerbate.

EGLE should ensure that Ajax obtains whatever stormwater permits are needed as well as prepares the appropriate stormwater management plans.

D. The Material Limits Described in EUHMAPLANT, Condition II.5,6 Conflict with Limits Used in the Permit Application

The proposed permit limits the amount of hot mix asphalt that may be processed to 600 tons per hour. As noted below, these limits do not reflect those utilized by the Permit Applicant in its application.

⁶⁴ Hoag, George. Polychlorinated Biphenyls in Bituminous Materials. American Society of Civil Engineers., U.S. EPA. PCBs in Building Materials. May 2021 https://www.epa.gov/sites/default/files/2021-05/documents/final_pcb_buildings_fact_sheet_05-10-2021_to_upload.pdf. Daniel Cargil. PCBs from Building Materials and Other Sources in the Urban Environment. 2014.

Table 3 of the Applicant's permit application describes the estimated maximum short-term emissions and annual emissions for toxic air contaminants from the Plant's hot mix asphalt counter-flow drum dryer. These estimates were calculated using a material usage limit of 500 tons of hot mix asphalt processed per hour.⁶⁵ Likewise, the Permit Applicant determined the proposed Plant will have the potential to emit 16.2 tons per year of particulate matter.⁶⁶ In calculating the Plant's potential to emit particulate matter, the Permit Applicant assumed the Plant would be limited to processing 500 tons of HMA paving materials per hour.⁶⁷

As a result of this disconnect, the maximum short-term emissions estimates, and annual emissions estimates provided in the permit application, do not accurately reflect the proposed permit's conditions. This is particularly problematic for the maximum short-term emissions provided in the permit application. By utilizing a lower material limit of 500 tons of HMA processed per hour—as opposed to the limit of 600 tons of HMA processed per hour which is described in the proposed permit—the Permit Applicant has underestimated the maximum short-term emissions of toxic air contaminants and particulate matter from its HMA counter-flow drum dryer.

As a result of underestimating the Plant's short term toxic air contaminant emissions, the Permit Applicant has failed to comply with Rule 225. That rule requires the permit applicant to demonstrate that the toxic air contaminant emissions from its proposed Plant will not exceed health-based screening levels. The short-term emissions described in Table 3 were utilized to demonstrate compliance with the health-based screening levels in Table 12. Since Permit Condition EUHMAPLANT, II.5,6 does not reflect the assumptions relied on to calculate the estimated amount of short term and long-term toxic air contaminant emissions described in Table 3 of the permit

⁶⁵ Permit Application, Table 3, page 27.

⁶⁶ *Id.*

⁶⁷ *Id.*

application, the Permit Applicant has failed to demonstrate how its Plant will comply with Rule 225.

Similarly, by utilizing lower material usage limits in its permit application compared to the proposed permit, the Permit Applicant has failed to provide an accurate description of the proposed Plant's potential to emit particulate matter. As a result, EGLE cannot accurately determine whether the proposed Plant will interfere with the attainment or maintenance of the particulate matter national ambient air quality standard.

The Permit Applicant should be required to calculate the short term and long-term toxic air contaminant emissions and particulate matter emissions based on the actual conditions in the proposed permit and to perform a new air quality modeling analysis for toxic air contaminants based on the new short term and long-term emissions estimates. If such an analysis is performed, the Commenters request that EGLE make this information publicly available and provide at least 60 days for an additional public notice and comment period. Alternatively, the proposed permit could be amended to lower the material usage limit from 600 tons of HMA processed by hour to 500 tons of HMA processed per hour.

E. An Emissions Limit for Cobalt Should Be Required

As described in Table 12 of the permit application, the proposed Plant will emit a significant amount of cobalt which will consume 83.1% of the Initial Risk Screening Level. The Initial Risk Screening Level is the concentration of a possible, probable, or known human carcinogen in ambient air which has been calculated to produce an estimated upper-bound lifetime cancer risk of 1 in 1,000,000.⁶⁸ Cobalt has shown to cause cancer in animals who were exposed to it through the air.⁶⁹ As such, the

⁶⁸ Mich. Admin. Code, R 336.1109(c).

⁶⁹ <https://www.atsdr.cdc.gov/ToxProfiles/tp33-c1-b.pdf>

International Agency for Research on Cancer has determined that cobalt is possibly carcinogenic to humans.⁷⁰

Given that the Permit Applicant's own modeling analysis has predicted that the maximum ambient concentration of cobalt emissions from the Plant will be close to the Initial Risk Screening Level, the Commenters request that the permit include an emissions limit for cobalt as well as a requirement for the owner of the facility to regularly conduct emissions testing for cobalt at the Plant.

F. An Emission Limit for Volatile Organic Compounds Should Be Required in the EUHMAPLANT Emission Unit Conditions

The permit application states that the HMA dryer will have the potential to emit 28.4 tons of volatile organic compounds per year.⁷¹ Rule 702 requires a person who is responsible for any new source of volatile organic compound emissions shall not cause emissions in excess of the lowest maximum emissions rate established by the Rule. Here, the permit applicant determined its maximum allowable emissions rate based on the application of the best available control technology. Ajax determined that the best available control technology was "good combustion controls."⁷² The use of "good combustion practices" is inadequate here and an VOC emission limit must be imposed.

1. The Selection of Good Combustion Practices as the Best Available Control Technology for VOC Emissions has not been Adequately Supported by the Permit Applicant

EGLE's policy regarding permit to install applications states that a "Rule 702 BACT analysis is very similar to a top-down BACT analysis," which is required for permits subject to the Prevention of Significant Deterioration program.⁷³ A "top-down" approach consists of a permit applicant providing all available control technologies

⁷⁰ *Id.*

⁷¹ Permit Application, Table 1, pdf page 23.

⁷² Permit Application, pdf page 15.

⁷³ https://www.michigan.gov/documents/deq/DEQ-AOD-PTI-Admin_Comp_Inst_356118_7.pdf at 6.

ranked in order of descending control effectiveness.⁷⁴ EGLE's PSD Workbook specifies what must be included in a top-down BACT analysis. It consists of a five-step analytical methodology to identify and analyze all available options for reducing emissions.⁷⁵

The five steps in the top-down BACT analysis are as follows:⁷⁶

Step 1: Identify all available control technologies;

Step 2: Eliminate technically infeasible options;

Step 3: Rank the remaining control technologies by control effectiveness;

Step 4: Evaluate the most effective controls and document the results;

Step 5: Select the best available control technology.

A top-down BACT analysis is commonly at least a few pages long and specifically documents the permit applicant's analysis for each of the five steps described above.⁷⁷ Here, the Permit Applicant's BACT analysis consisted of a short paragraph, and it did not follow the top-down BACT analysis methodology as described in EGLE's PSD Workbook. Most significantly, it did not provide any evaluation of the most effective controls and document the results, as required by Step 4. Instead, it merely stated that there "has been significant discussion between the HMA industry and regulators regarding whether newer plant designs, such as counter-flow or dual drum, represent BACT for HMA plants," and that "[d]ata supporting such conclusions is generally subjective rather than objective and quantifiable."⁷⁸ It then went to select good combustion practices as the BACT. As noted by EGLE in its PSD

⁷⁴ PSD Workbook page 85.

⁷⁵ <http://www.deq.state.mi.us/aps/downloads/permits/PSD%20Workbook.pdf> at 85.

⁷⁶ *Id.*

⁷⁷ *See*, DTE permit application, Blue Water Energy Center

⁷⁸ Permit Application, pdf page 15.

Workbook, the evaluation of the available control technologies must include an analysis of “all energy, environmental and economic impacts associated with the list of available control technologies.” No such analysis was provided by the Permit Applicant. Since the Permit Applicant has provided an insufficient BACT analysis regarding its VOC emissions, the Commenters believe that the permit does not comply with Rule 702 and must be denied.

2. The Permit Must Contain a VOC Emissions Limit

While the Permit Applicant has failed to provide an adequate BACT analysis, the Permit also fails to provide a VOC emissions limit, which is plainly required. EGLE’s PSD Workbook defines “BACT” as “an emission limit that is determined from a case by case review of all appropriate control options.”⁷⁹ It goes on to state that while the BACT analysis is primarily about the evaluation of applicable control options, BACT “is an emission limit for each emissions unit.”⁸⁰ Indeed, the plain language of Rule 702 clarifies that a person shall not cause the emission of volatile organic compounds in excess of the “lowest maximum emission rate” determined based on the application of the best available control technology. The proposed permit contains no volatile organic compound emissions limit as plainly required by EGLE guidance and Rule 702.

G. Particulate Matter Modeling Demonstrations, Emissions Limits, and Monitoring Requirements Must Account for Condensable Particulate Matter

Rule 116 defines particulate matter as “any air contaminant existing as a finely divided liquid or solid...”⁸¹ As such, it includes both filterable and condensable particulate matter. It’s unclear from the permit application whether the applicant included condensable particulate matter in its potential to emit calculations and

⁷⁹ EGLE PSD Workbook, pdf page 90.

⁸⁰ *Id.*

⁸¹ Mich. Admin. Code R. 336.1116(c).

ambient impact modeling analysis. The Commenters believe the permit application must account for condensable particulate matter emissions from the plant in these two respects. Further, the permit's emission limits, and monitoring requirements do not clearly account for condensable particulate matter emissions. The Commenters believe this is required.

H. The Permit Applicant Has Failed to Demonstrate That the Permit Will Not Interfere with Attainment or Maintenance of any National Ambient Air Quality Standards

One of the most basic requirements of a permit to install is to ensure that emissions from a proposed facility will not interfere with the attainment or maintenance of any national ambient air quality standard. If a permit is unable to comply with this requirement, then EGLE must deny the permit.⁸²

In its permit application, the applicant notes that the predicted ambient impacts that will result from the Plant's emissions will be above the applicable significant impact levels for NO₂, SO₂, and PM_{2.5}. As such, it performed additional analyses to assess whether or not the proposed Plant will interfere with the attainment or maintenance of any NAAQS.

This additional analysis is deficient in two respects. First, the additional analysis only considered one additional source's sulfur dioxide emissions. It is unclear from the permit application and proposed permit why the Permit Applicant and EGLE decided to limit the additional analysis to only include sulfur dioxide emissions from the Genesee Power Station. There are a number of emitting sources located in the area that also contribute to local air pollution. Even the Genesee Power Station emits a significant amount of nitrogen oxides, which were not accounted for in the additional analysis conducted by the Permit Applicant. Second, the additional analysis relied on air quality data to establish background concentrations of air pollution to be used in the air quality

⁸² Mich. Admin. Code R. 336.1207(1)(b).

modeling analysis. While the PM_{2.5} data was collected by an air quality monitor in Flint, PM₁₀ and NO₂ data was collected from air quality monitors in Lansing and Grand Rapids. It is improper to utilize air quality data collected in Lansing and Grand Rapids to establish the background concentrations of air quality in the area where the proposed Plant is to be located given the far distance these monitors are from the proposed Plant and given that the proposed Plant is to be located in a multisource area. Further, ambient air quality data regarding sulfur dioxide concentrations should have been collected in the area where the proposed Plant is to be located to ensure the Plant's emissions won't interfere with maintenance of the sulfur dioxide NAAQS. In accordance with EPA guidance, since the proposed Plant is in a multisource area, air quality data used to establish background concentrations for determining whether a proposed source will interfere with the maintenance or attainment of a national ambient air quality standard must be collected within 10 kilometers of the proposed Plant or within or not farther than 1 kilometer from either the area of maximum air pollutant concentration from existing sources or the area of the combined maximum impact from existing and proposed sources.⁸³ If monitors meeting these requirements do not already exist, then the Permit Applicant must install additional monitors to gather such air quality data to establish background concentrations.

I. Opacity Testing Requirements Lack Adequate Specificity

EGLE's draft permit should be strengthened with regard to the opacity requirements. EGLE should add continuous opacity testing, including the implementation of the digital camera opacity technique to ensure frequent and more accurate testing of opacity. EPA's comment letter recommends the use of digital cameras to measure opacity, and EPA has increasingly recognized the value of digital

⁸³ U.S. EPA, Ambient Monitoring Guidelines for Prevention of Significant Deterioration, at 6-7, May 1987, available at <https://www.epa.gov/sites/default/files/2015-07/documents/monguide.pdf>

monitors.⁸⁴ While EPA regs and EGLE regs currently only require the use of Method 9 opacity testing, as set forth in 40 CFR 60.93, Method 9 is often poorly performed and is essentially an “eyeball” test.

At a minimum, the permit should prescribe a schedule—at least quarterly—and plan for opacity testing and the testing must be conducted by a trained and certified professional under a range of weather conditions to ensure coverage of representative conditions.⁸⁵ The results of this opacity testing should be made publicly available on an accessible website. In addition, the draft permit should be edited for clarity; currently, the opacity requirements are only included in the general conditions for EHUMAPLANT, in contrast to the way that the EUYARD opacity provisions are treated as part of the permit terms.

J. EGLE’s Public Participation Process Continues To Be Problematic And Raises Civil Rights Issues

EGLE has continued its history of failing to provide adequate public participation opportunities in its permitting processes. The need for EGLE to provide a more robust and accessible public participation process in the permitting of the Ajax Materials air permit is particularly concerning when the agency’s record of EPA issued Title VI violations are brought to bear. One such violation was due to EGLE’s inadequate and discriminatory public participation practices when issuing a permit for the Genesee Power Station, located on the same street, less than 700 meters from the proposed Ajax site. In a January 19, 2017, letter from EPA to EGLE’s precursor, MDEQ,

⁸⁴ See, e.g., EPA, Federal Register Vol. 80, No. 125, June 30, 2015, available at <http://www.gpo.gov/fdsys/pkg/FR-2015-06-30/pdf/2015-15038.pdf>; see also Air Force Research Laboratory, An Alternative to EPA Method 9 – Field Validation of the Digital Opacity Compliance System (DOCS), available at <https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-andPlatforms/Noise-and-Emissions/Air-Emissions/WP-200119>

⁸⁵ EPA Method 9 (“The opacity of emissions from stationary sources is determined visually by a qualified observer.”), available at <https://www.epa.gov/sites/production/files/2016-06/documents/m-09.pdf>

the agency determined that EGLE violated Title VI of the Civil Rights Act through “[a] finding of discriminatory treatment of African-Americans by [EGLE] in the public participation process for the GPS (Genesee Power Station) permit considered and issued from 1992 to 1994.”⁸⁶

In the same civil rights enforcement letter, EPA provided clear actions required of EGLE to resolve the civil rights violation. These included:

(1) improving MDEQ's public participation program to reduce the risk of future disparate treatment; (2) improving MDEQ's development and implementation of a foundational non-discrimination program that establishes appropriate procedural safeguards while addressing civil rights complaints as well as policies and procedures for ensuring access for persons with disabilities and limited-English proficiency to MDEQ programs and activities; and (3) ensuring that MDEQ has an appropriate process in place for addressing environmental complaints. In addition, in this letter EPA makes specific recommendations to MDEQ regarding the GPS facility.⁸⁷

In 2019, the resolution process for two additional Title VI complaints alleging discrimination during the public participation processes of facilities permitted in Genesee County permitting polluting facilities resulted in the EPA entering into two resolution agreements—one with EGLE and one with Genesee County—to resolve the complaints.⁸⁸ In the resolution agreements, EPA called on EGLE and Genesee County to improve their respective public participation processes. The agreement between EPA and EGLE provides that, from that point forward:

⁸⁶ January 19, 2017, MDEQ Closure Letter for Administrative Complaint No. 01R-94-R5, <https://www.epa.gov/sites/default/files/2017-01/documents/final-genesee-complaint-letter-to-director-grether-1-19-2017.pdf>.

⁸⁷ *Id.* at 2.

⁸⁸ December 4, 2019 Resolution Agreement Letter for Complaint No. 17RD-I 6-R5, https://www.epa.gov/sites/default/files/2019-12/documents/resolution_letter_and_agreement_for_complaint_17rd-1-6-r5.pdf

⁸⁸ See EGLE LEP Plan, https://www.michigan.gov/documents/egle/Limited_English_Proficiency_Plan_710255_7.pdf.

EGLE will ensure its public involvement process is available to all persons regardless of race, color, national origin (including limited-English proficiency), age, disability, and sex. In addition, EGLE will ensure that the factors used to determine the appropriate time, place, location, duration, and security at public meetings are developed and applied in a nondiscriminatory manner.⁸⁹

The public participation process in the Ajax permitting process has not safeguarded against discriminatory practices. EGLE's own internal policy recognizes that their decision-making process should be "transparent, occur in steps, and in a time frame that is understood and predictable by involved parties."⁹⁰ In this case, however, EGLE did not engage the public early in the process, while also failing to identify the methods of engagement most likely to meet the needs of the community and afford them the opportunity for meaningful participation.

A community needs assessment, as stated in EGLE policy, begins with the identification of needs and services for those that are with LEP and/or disabled.⁹¹ Whether EGLE took steps to identify the needs of the community beyond listing an email address to request language interpretation or other accommodations on in a letter that not every community member received is unclear.

Flint is one of the nation's most stark examples of the growing digital divide. Roughly 40% of city residents lack access to broadband internet, double the percentage

⁸⁹ December 4, 2019 Resolution Agreement Letter for Complaint (EGLE) No. 17RD-I 6-R5, https://www.epa.gov/sites/default/files/2019-12/documents/resolution_letter_and_agreement_for_complaint_17rd-1-6-r5.pdf; December 19, 2019 Resolution Agreement Letter for Complaint (Genesee County) https://www.epa.gov/sites/default/files/2019-12/documents/19-12-19_final_resolution_letter_and_agreement_recipient_-_genesee_county_18rd-16-r5.pdf. See EGLE LEP Plan, https://www.michigan.gov/documents/egle/Limited_English_Proficiency_Plan_710255_7.pdf. In the aftermath of the EPA Title VI letters, EGLE has committed on paper to an improved public participation process and has developed a Limited English Proficiency ("LEP") plan. Note that St. Francis Prayer Center was one of the groups that signed on to collective comments on the draft LEP plan.

⁹⁰ EGLE Public Participation Policy, https://www.michigan.gov/documents/egle/EGLE_Policy_09-007_679780_7.pdf

⁹¹ *Id.*

of households lacking access statewide.⁹² Nearly 25% live in households without access to a computer.⁹³ Given the specific characteristics of the population within one mile of the proposed site, the aforementioned lack of access is likely underestimated.

This lack of access means impacted residents also lack the ability to receive electronic notification of meetings. Even where notice is achieved, virtual meetings place an unreasonably high burden on the substantial numbers of residents lacking broadband or computer access entirely. Community elders often lack the technical literacy to determine meeting locations and times or to successfully join an online meeting. At the same time, while the printed notices that successfully arrived at the mailboxes of some community members were dated July 1, 2021, they were not actually received until weeks later. In addition, EGLE did not directly send public notice information (e.g. the Project Summary) to nearly 400 River Park Apartments and Ridgcrest Townhouses families. Instead, they sent two notices – to the management of each low-income housing complex. Several community members reported learning of their right to provide comment only through concerned neighbors or by word of mouth at community demonstrations. Many other impacted residents received no notice at all. Each of these factors reduced the ability of residents to participate in a decision-making process that could impact the health of their community substantially.

EGLE's initial failure to assess the community's needs later led to conflicting messages, confusing residents attempting to understand how best to participate in public meetings and through written comments. In response to pressure from a coalition of environmental justice activists, EGLE extended the comment period and provided additional hearings to account for communication problems. However, inconsistent information was posted in the various public documents visible on the

⁹² U.S. Census Bureau, American Community Survey (ACS) and Puerto Rico Community Survey (PRCS), 5-Year Estimates.

⁹³ *Id.*

website. Documents were not updated, potentially leading some residents to see only the original August comment period deadline. Not realizing the comment period was extended, residents may have been led to believe their opportunity to provide public comment had been foreclosed.

Community members have been made to feel unheard and ignored, particularly upon the observation that some construction related activities have already begun taking place at the proposed site. One community member stated that activity around the plant site made it feel like “[EGLE and Ajax] are ready to continue no matter what we say here today.”⁹⁴ These many factors have resulted in a palatable sense of futility and uncertainty regarding the meaningfulness of their participation in the permitting process.

Ultimately, the lack of clarity within the public participation process for this site did not meet the EPA or EGLE’s own expectations that the process “promotes and seeks active participation by the public in EGLE activities.”⁹⁵

V. CONCLUSION

The Genesee Power Station, which sits just to the north of the proposed facility, was the subject of a Title VI complaint. In its investigation, the EPA concluded that African-Americans were treated less favorably in the permitting process than non-African-Americans. Decades later, EGLE faces a similar test to its DEQ predecessor. As detailed in this comment, EGLE’s decision to allow the proposed Plant to locate in an environmental justice community already heavily burdened by high levels of environmental risks and asthma hospitalizations presents serious environmental justice

⁹⁴ Dylan Goetz, “Flint Residents Unhappy With Proposed Asphalt Plant Near City’s Border”, *MLive*, August 12, 2021, <https://www.mlive.com/news/flint/2021/08/flint-residents-unhappy-with-proposed-asphalt-plant-near-citys-border.html>

⁹⁵ https://www.michigan.gov/egle/0,9429,7-135-3306_70585-381847--,00.html

and Title VI issues. For the reasons described above, we believe EGLE must deny the Permit as it currently drafted and must require a cumulative impact analysis to ensure compliance with its Title VI obligations.

**ADDITIONAL SIGN-ONS TO THE FLINT RISING, ENVIRONMENTAL
TRANSFORMATION MOVEMENT OF FLINT AND ST. FRANCIS PRAYER
CENTER COMMENT LETTER**

- Bishop Bernadel Jefferson, Citizens Advocating United Together Inform Organize for New Direction (CAUTION)
- Sandra S. Jones, Executive Director, R L Jones Community Outreach Center Campus, Greater Holy Temple Church
- Geraldine Redmond, President, Flint Housing Commission
- Arthur Woodson, Concerned Resident
- Laura M. Sager, Co-Founder, National Network for Justice
- Benjamin Pauli, Associate Professor of Social Sciences, Kettering University
- Patrick Levine Rose, Esq. (acting a public citizen), former Appointed Special Genesee County Prosecutor for the Flint Water Investigation
- Judy Alexander, Tri-Chair, Michigan Poor People Campaign
- Elena LB Hawkins, Flint resident
- Pastor Roshanda Womack, Flint Central Church of the Nazarene and The Underground
- Carma Lewis, President, Flint Neighborhoods United
- Sonyita & Dwayne Clemons, Total Life Prosperity LLC
- Mark Richardson, Esq., Former Appointed Genesee County Special Prosecutor on the Flint Water Investigation Team
- Antony Paciorek, Michigan United
- Michigan United

EXHIBIT 1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

Mary Ann Dolehanty
Air Quality Division
Michigan Department of
Environment, Great Lakes and Energy
535 West Allegan Street
P.O. Box 30473
Lansing, Michigan 48909-7973

Dear Ms. Dolehanty:

This letter is in regard to Michigan Department of Environment, Great Lakes and Energy's (EGLE's) draft Permit to Install (PTI) for Ajax Materials Corporation (Ajax) – PTI Application No. 2021-0019. The PTI would allow Ajax to install and operate a new hot mix asphalt plant at 5088 Energy Drive in Genesee Township, near the Flint border. Ajax intends to accept permit limits to ensure that emissions from the proposed facility would not exceed the major source threshold. The U.S. Environmental Protection Agency (EPA) has reviewed the draft PTI and associated permit files.

EPA is committed to advancing environmental justice and incorporating equity considerations into all aspects of our work. This commitment includes improving our assessment and consideration of the impacts of permits on communities already overburdened by pollution. As described below in more detail, we appreciate that EGLE shares this commitment and has taken steps to mitigate potential impacts from the proposed facility.

The neighborhood around the proposed asphalt plant has some of the highest levels in the State of Michigan for many pollution indicators used by EPA's environmental justice screening tool, EJSCREEN. EJSCREEN is a mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. It is a useful first step in understanding or highlighting locations that may have environmental justice concerns.

Like EPA, EGLE recognizes the challenges faced by this community. The Environmental Justice Index for eight of the eleven EJSCREEN indicators in the one-mile area around the proposed Ajax site exceeds the 90th percentile in the State of Michigan, including indices for

particulate matter of less than 2.5 microns in diameter, ozone, air toxics cancer risk, respiratory hazard, lead paint, Superfund proximity, hazardous waste, and wastewater discharge. The population of the people who live in the area around the proposed asphalt plant is disproportionately low income, people of color, and includes persons with limited English proficiency. The proposed Ajax site is in an area that is already heavily populated by industrial facilities along Dort highway and is in close proximity to residential housing and community centers.

EPA acknowledges the work EGLE has already undertaken on this permitting action, work that may go beyond what is usually required in Michigan for issuing a minor source air pollution control construction permit. EGLE required the applicant to conduct dispersion modeling for multiple air pollutants, including toxic cancer-causing compounds, to assess the potential impacts of this air pollution permit. EGLE has provided an extended opportunity for public comment, held both a virtual information session and hearings, and an in-person comment session, as part of its enhanced public outreach efforts to the community. EGLE also accepted comments via regular mail, voicemail, email, and in-person.

Our concerns, comments, and recommendations are included in the attachment to this letter. We highlight a few key comments here. First, because the proposed site for the Ajax facility is in an area with identified air quality concerns in EJSCREEN, EPA recommends a cumulative analysis of the projected emissions from all emission units at the proposed facility, fugitive emissions from the proposed facility, and emissions from nearby industrial facilities, to provide a more complete assessment of the ambient air impacts of the proposed facility on this community. Next we strongly encourage EGLE to assess the use of opacity cameras and other practically enforceable continuous compliance measures to assure that Ajax is meeting its permitted limits and following industry best practices. We also recommend that if the proposed asphalt plant is permitted, data regularly generated by Ajax to comply with the permit be made publicly available on an easily accessible website. The transparency of such data will promote public engagement and help build trust among all stakeholders.

Finally, because of the environmental conditions already facing this community, and the potential for disproportionate impacts, the siting of this facility may raise civil rights concerns, so it is important that EGLE assess its obligations under civil rights laws and policies. We understand that EGLE requested Ajax to consider alternative sites for this asphalt plant, but that the company declined to do so. Any of the additional analyses EPA is recommending may provide additional information in support of EGLE's evaluation of whether the proposed construction will cause adverse and disproportionate impacts for nearby residents. If so, we encourage the company, EGLE, and local authorities to consider again whether construction at an alternative site would avoid the potential for such impacts. We further encourage Ajax and EGLE to engage with the local community to address community concerns that may not be within the scope of the air permit.

Thank you again for the opportunity to work with you on this draft permit. EPA remains committed to working together with EGLE to address our shared environmental priorities,

advance equity, and reduce potential environmental and health impacts on communities such as this one.

Sincerely,

Cheryl L. Newton
Acting Regional Administrator

Enclosures

Detailed Permit Comments
Ajax Materials Corporation
PTI APP-2021-0019

EPA has reviewed the draft PTI and associated permit files, including the technical fact sheet and permit application materials made available by EGLE during the public comment period, and has the following comments and recommendations:

1. We recommend that you evaluate whether additional nearby stationary sources and fugitive sources from the proposed facility should be included as part of the air quality modeling EGLE has required for this permit. The cumulative impacts analysis only considered the impacts associated with the proposed project. Neither nearby sources nor fugitives from the proposed facility were included in the modeling. We observe that Ajax is proposing to construct in an area where other stationary sources are already located and may be impacting the local community. Additionally, the toxic air contaminant (TAC) modeling does not consider all sources of stack and fugitive emissions. We recommend this analysis include an assessment of whether the source-wide TAC emissions from both fugitive and non-fugitive sources exceed EGLE's initial threshold screening level (ITSL) or initial risk screening level (IRSL).
2. 40 CFR 60.92(a)(2) establishes an opacity requirement applicable to each hot mix asphalt facility. This opacity requirement does not appear within the draft permit. EGLE should include the necessary opacity limit in the permit and incorporate opacity testing requirements consistent with 40 CFR 60.93. To ensure ongoing compliance and practical enforceability of this limit, EGLE should also establish a periodic (at least quarterly) opacity testing requirement applicable to the affected facility.
3. EUHMAPLANT Special Condition (SC) V.2 – V.4 lists the general test methods Ajax is to use to ensure compliance with the applicable permit conditions. The current draft permit only contains general citations to the appendices containing relevant test methods for Parts 60, 61, and 63. We recommend that EGLE specify in the permit the particular test method protocols for each pollutant that Ajax will be using to ensure compliance once the facility is constructed and operating. The permit can include a provision that requires EGLE approval of the test plan submitted by the permittee prior to testing, but approval of modifications to EPA test methods, as found in the appendices to Parts 60, 61, and 63, can only be done by EPA. EPA is available to assist EGLE in determining the appropriate test methods for each pollutant in order for Ajax to ensure compliance with the permit limit conditions.
4. EUHMAPLANT SC V.5 requires particulate matter testing pursuant to 40 CFR Part 60 Subparts A and I. Although this condition incorporates the testing required by the federal requirement, permit condition SC V.5 does not require periodic testing to determine compliance with the particulate matter emission limit in 40 CFR 60.92. To ensure ongoing compliance with the emission limit and improve enforceability of the NSPS Subpart I PM limit, we request that the permit include periodic PM testing performed according to the procedures included within 40 CFR 60.93.

5. FGFACILITY SC I.3 and I.4 contains facility-wide general limits on hazardous air pollutants (HAPs) for individual and aggregate HAPs of less than 8.9 and 22.5 tons per year, respectively, on a 12-month rolling average. The monitoring and recordkeeping requirements for these conditions (FGFACILITY SC VI.2) only state that the permittee is required to use emission calculation records to ensure compliance with the limits. We request the permit specify the methodology Ajax will use to demonstrate compliance with the HAP limits, and that the permit record include an explanation of how this methodology will ensure that HAP emissions remain below the major source threshold.
6. EUHMAPLANT SC V.1 and V.2 requires the permittee to verify via stack testing carbon monoxide (CO) and toxic air pollutant emissions upon EGLE's request. This condition does not require periodic testing to determine compliance with the hourly CO emission limit established in SC I.8, nor does it require periodic testing to determine compliance with the air toxics emission limits established in SCs I.14 through I.25. We request that you require periodic testing to determine compliance with the emission limits in SCs I.8 and I.15 through I.25. Periodic testing would help ensure that the source is complying with its CO and air toxics emission limits, which improves the practical enforceability of each limit and further ensures that the local community is not subjected to emissions exceeding the corresponding limit.
7. EUHMAPLANT SC V.3 requires a one-time test to verify PM₁₀, PM_{2.5}, NO_x, and lead emissions from the plant. EUHMAPLANT SC V.4 is a similar requirement that applies when the source combusts recycled used oil (RUO) and includes testing for SO₂ emissions. It is not clear whether a one-time test ensures that each emission limit is enforceable as a practical matter, however, as it is unclear whether emissions vary over time or with the type of asphalt being produced or fuel being combusted, suggesting that periodic testing may be appropriate to ensure ongoing compliance with each limit. We request that you revise SC V.3 and V.4 to require periodic testing to better ensure that the PM₁₀, PM_{2.5}, NO_x, lead, and SO₂ emission limits are enforceable as a practical matter. For any pollutant where EGLE determines one-time testing is sufficient, we request that EGLE provide justification as part of the permit record.
8. EUYARD SC I.2 restricts all visible emissions from the pile when winds are below 12 miles per hour (mph) and limits opacity to 20% when winds exceed 12 mph. Since the modeling analysis relies on a windspeed threshold that exceeds approximately 11.50 mph,¹ we recommend that you revise this condition to apply to winds that are below 11.50 mph. Also, the draft permit does not require the permittee to perform periodic visible emissions monitoring when winds are below 12 mph nor to quantify opacity when winds are at least 12 mph. To ensure ongoing compliance with the visible emissions requirements and to ensure practical enforceability of the opacity limit, we request that you incorporate periodic visible emissions monitoring and periodic opacity monitoring to evaluate and quantify fugitive dust emissions.
9. The fugitive dust control plan in Appendix A requires the permittee to maintain piles to prevent fugitive dust consistent with EUYARD SC I.1 (see Appendix A, condition 7.b). As

¹ 5.14 m/s ≈ 11.50 mph.

written, it is unclear what fugitive dust control measures will be implemented to prevent fugitive dust emissions from the pile. EUYARD SC I.1 appears to apply to all roads and unpaved travel surfaces, not the piles. To ensure the enforceability of the fugitive dust control plan and SC III.1, we request that you specify the measures that will be employed to control fugitive dust from the mineral aggregate piles. We request that you require each material storage pile to be covered or enclosed to mitigate potential fugitive dust emissions. In addition to reducing fugitive particulate emissions, covered piles may also require less water to control fugitives, potentially reducing the amount of fuel required to dry aggregate and other materials to specification. For any uncovered piles, we request that you specify the conditions which require the application of water or other chemical wetting agents or other methods that may be required to control fugitive emissions. For active piles, we request that the fugitive dust control plan specify the measures the permittee will employ to minimize fugitive dust emissions. Once these control measures have been identified, the fugitive dust control plan should be updated to require recordkeeping to ensure any fugitive dust control measures have been implemented.

10. EUYARD SC IV.1 requires the applicant to monitor wind speeds to determine compliance with the applicable visible emissions requirement in SC I.2. However, neither the fugitive dust control plan in Appendix A nor the draft permit section EUYARD require the permittee to implement fugitive dust control measures when winds are measured at or above 12 mph. To ensure fugitive dust is minimized when winds are above 12 mph and to better ensure compliance with the opacity limit in SC I.2, we request that you require the implementation of fugitive dust control measures when measured winds exceed 12 mph. We further recommend implementing fugitive dust control measures when measured winds are near, but do not exceed, 12 mph to mitigate potential fugitive dust emissions and further ensure compliance with the opacity limit.
11. The PM₁₀ and PM_{2.5} modeling analyses consider one year of meteorological data instead of five years and considers emissions from the larger pile when winds for a particular hour exceed 5.14 m/s (approximately 11.50 mph). We are concerned that the applicant's modeling analysis may underestimate ambient particulate impacts associated with this project. We recommend reevaluating the modeling analysis to ensure that the project's ambient PM₁₀ and PM_{2.5} impacts are not underestimated.
12. EUHMAPLANT SC V.1 requires the permittee to verify and quantify odor emissions upon EGLE's request. We recommend that EGLE evaluate whether recurring odor emission testing is appropriate pursuant to R 336.2001(1)(c). Recurring odor emission testing would allow EGLE to better determine compliance with R 336.1901 and more readily address the local community's potential odor concerns.
13. We recommend that EGLE consider whether it has the authority or discretion to include in the permit a requirement that the results of recurring compliance testing be made available to the public on an easily accessible website. The public posting of, e.g., the results of odor and opacity testing, virgin aggregate/RAP continuous monitoring (required by EU HMAPLANT SC VI.2), particulate and HAP emission testing, and wind speed measurements (required by EU HMAPLANT SC VI.1), would ensure transparency for the affected community.

14. Additional justification should be provided in the permit record to support the air quality analysis and the applicant's use of wind speed thresholds as it applies to the storage pile. Although the applicant cites Wisconsin's Air Dispersion Modeling Guideline as support, we note that Wisconsin's guideline does not provide justification for the approach and is nonbinding on other air permitting authorities. EGLE, as the air permitting authority for this action, has the discretion and authority to request certain air quality analyses for minor NSR permit applications. Michigan's R 336.1241, a requirement approved into Michigan's state implementation plan, requires EGLE to follow procedures and measures listed in the *Guideline on Air Quality Models* at 40 CFR Part 51 Appendix W (Appendix W). In addition to establishing certain requirements and recommendations applicable to NAAQS compliance demonstrations, Appendix W Section 1.0 encourages the use of sound scientific judgment in an air quality analysis and considers the judgment of meteorologists, scientists, and analysts essential. For this permit action, the analysis EGLE conducted and the judgment it exercised as part of the decision-making process should be fully documented within the permit record. Should EGLE choose to allow this approach for any proposed pile, the approach should be evaluated on a case-specific basis that is well documented within the permit record.
15. For all pollutants, the dispersion modeling conducted for this permit relies on one year of National Weather Service (NWS) meteorology collected from Bishop International Airport. Appendix W Section 8.4.2(e) recommends acquiring enough meteorological data to ensure that worst case meteorological conditions are adequately represented in the model results and requires the use of 5 years of representative NWS data. We request that you conduct the criteria pollutant and TAC analysis using 5 years of meteorological data. We recognize that R 336.1241 provides EGLE discretion to allow the use of only 1 year of NWS data for nonmajor PTIs.² The PM₁₀ and PM_{2.5} analyses restrict the hours that the pile may emit fugitives based on hourly wind speeds, suggesting that a larger meteorological database may be necessary to capture worst case meteorological conditions. The TAC analysis may also be improved to capture worst case meteorological conditions that may not be present in one year of NWS data. Modeling based on 5 years of meteorological data increases the likelihood that the worst-case meteorological conditions are considered as part of this analysis and would be consistent with NAAQS analyses conducted for other regulatory purposes.
16. Dispersion modeling for particulate emissions relies on a critical wind speed threshold of approximately 11.50 mph for the purpose of considering fugitive emissions from the pile. From information included in the permit record, it appears that the applicant analyzed the daily fastest mile and daily surface friction velocity. However, it is unclear whether the analysis considers hourly wind speeds and sub-hourly gusts. It is not clear whether the modeling excludes emissions from the pile during hours where gusts exceed the critical wind speed threshold. AP-42 Section 13.2.5.2, a document cited by the applicant, suggests that "estimated emissions should be related to the gusts of the highest magnitude" and that "peak

² R 336.1241 states in relevant part that "[...] the demonstration may be based on the maximum ambient predicted concentration using the most recent calendar year of meteorological data from a representative national weather service [...] station."

winds can significantly exceed the daily fastest mile.”³ This suggests that gusts play a large role in fugitive dust emissions and should be evaluated as part of this analysis. The meteorology used in the modeling analysis is based on 1-minute National Weather Service (NWS) data, enabling an analysis of sub-hourly winds. We recommend that the applicant analyze the 1-minute data to determine whether certain hours contain sub-hourly gusts exceeding the critical wind threshold to further ensure that the analysis does not underestimate ambient PM₁₀ and PM_{2.5} impacts.

17. The applicant cites several documents suggesting that the critical wind speed threshold for the pile is 12 mph. However, it is unclear whether and to what extent the stockpiles analyzed in each document are representative of the applicant’s proposed pile. Although the information provided in each document may be helpful to estimate emissions for applicability purposes, it is less clear whether this information is sufficient to determine the critical wind threshold for the proposed stockpile. None of the documents appear to analyze asphalt plants in particular. Would the applicant’s proposed pile contain material with the same particle size distribution as that analyzed within each cited document? Are there other asphalt plant pile parameters that may affect the critical wind speed threshold that are not reflected in the cited documents, such as moisture content or how well each pile is mixed? We recommend that the applicant evaluate the composition of the proposed pile to further justify whether the comparison is adequate. Lack of a case-specific analysis of the composition of the proposed pile at the source may understate fugitive particulate emissions from the pile, potentially underestimating the modeled impacts attributed to the pile.
18. It is not clear whether the modeling considered other activities that may generate fugitive emissions from the pile. The analysis offered by the applicant appears to focus solely on wind-blown emissions without considering how working the pile may affect the generation of fugitive particulate emissions. We recommend that the applicant address potential fugitive emissions that may be generated while the source works the pile and evaluate whether the current analysis adequately evaluates emissions generated at these times. The permit does not otherwise restrict the applicant from working the pile, suggesting that fugitive emissions associated with working the pile should be included as part of the analysis.
19. The modeling analysis excludes receptors within the proposed property line. Section 6.1.3.1 of the December 21, 2020 application states that the applicant will “prevent access to the property by the general public through a combination of fencing, berms, trees, and shrubs” around the property line. Given the lack of further detail in the application, it is unclear whether this combination of measures as stated within the application would be effective in precluding access to the land by the general public. Appendix W section 9.2.2 recommends the placement of receptors throughout the modeling domain. The December 2, 2019 Revised Policy on Exclusions from Ambient Air⁴ states that receptors may be excluded over land owned or controlled by the stationary source “where the source employs measures, which may include physical barriers, that are effective in precluding access to the land by the

³ AP-42 Chapter 13.2.5 – Industrial Wind Erosion is available online at https://www.epa.gov/sites/default/files/2020-10/documents/13.2.5_industrial_wind_erosion.pdf.

⁴ The Revised Policy on Ambient Air is available online at https://www.epa.gov/sites/default/files/2019-12/documents/revised_policy_on_exclusions_from_ambient_air.pdf.

general public.” We recommend that the applicant identify where each proposed measure will be employed so that EGLE can evaluate whether the proposed measures effectively preclude the general public’s access to land owned or controlled by the proposed source.

20. The proposed fugitive dust controls described by the applicant include “the presence of berms (approximately 7 feet tall), trees on top of those berms (approximately an additional 7 feet tall when planted), and the fence next to the berm.” We support the implementation of berms and windbreaks to mitigate fugitive dust emissions from the source. However, neither the draft permit nor fugitive dust control plan requires the applicant to install and maintain berms, windbreaks, and covered piles to control fugitive dust emissions. We recommend that EGLE include enforceable permit conditions requiring the source to implement and maintain the selected fugitive dust control measures such as berms, windbreaks, and covered piles.
21. The TAC analysis uses the results of generic TAC modeling to estimate the TAC impacts in relation to the appropriate ITSL or IRSL. The generic TAC modeling result is based on modeled impacts from the drum dryer stack. Although most TAC emissions are emitted from the drum dryer stack, TACs are also emitted from the silo heater, silo filling and loadout processes, and the asphalt cement storage tank. We recommend that you consider modeling each process or emission unit that does not exhaust to the drum dryer stack to avoid underestimating TAC impacts. Dispersion characteristics may differ depending upon the process, potentially resulting in underestimated TAC impacts where a given process has worse dispersion characteristics than the drum dryer stack.
22. Although the NAAQS and PSD increment analysis considers the impact of fugitive emissions from several sources, it is unclear whether the TAC analysis considers fugitive emissions from similar sources. Are there any fugitive TAC emissions that should be considered as part of the TAC analysis? We suggest that you either revise the TAC analysis to include fugitive TACs not already considered or provide justification explaining why fugitive emissions do not need to be included in the analysis.
23. EUHMAPLANT SC II.4 limits recycled asphalt pavement (RAP) to a maximum of 50 percent on a monthly average. We recommend EGLE require compliance with this limit on a shorter-term basis than monthly (such as daily). We note that the draft permit requires the source to continuously monitor the RAP feed rate (see EUHMAPLANT SC VI.2), suggesting that the permittee would already collect data that can be used to determine compliance with the limit on a shorter-term basis. AP-42 section 11.1.1.3 suggests that RAP can be processed at ratios up to 50 percent with little or no observed effect upon emissions. AP-42 is silent with respect to emissions above the 50 percent ratio and does not differentiate between averaging times.
24. EUHMAPLANT SC I.4 through I.7 include a reference to footnote c. However, footnote c does not appear to be included within the emission limit table. We request that you specify footnote c or revise each special condition to remove the reference to this footnote.
25. EUHMAPLANT SC I.4 and I.6 each cite 40 CFR 52.21 (c) and (d) as an underlying applicable requirement. We recommend that you verify whether each special condition cites

the appropriate underlying authority. We note that Michigan has a SIP-approved version of each requirement at R 336.2803 and R 336.2804, respectively.

26. EUHMAPLANT SC II.1 allows the permittee to burn recycled used oil (RUO). We recommend that the permittee consider not using RUO as a fuel for the proposed source. Although EGLE has established requirements that apply when combusting RUO,⁵ eliminating the use of RUO as a fuel could reduce air toxics and sulfur impacts on the local community. Should the permittee choose to combust RUO as part of this process, we recommend that the permittee or EGLE analyze the additional impact combusting RUO could have on the local community over the impact of using other fuels such as natural gas.
27. EUHMAPLANT SC IV.1 requires continuous pressure drop monitoring for the proposed baghouse. We request that EGLE consider the use of a bag leak detection system (BLDS). BLDS would help verify that the fabric filters are not leaking or developing a leak. A BLDS, combined with the requirement to operate the baghouse in a satisfactory manner, would help ensure that the baghouse is operating properly, enable the permittee to react promptly to leaking bags, and further ensure compliance with the particulate matter special conditions.

⁵ See EUHMAPLANT SC II.2, SC III.4, SC V.4, and the RUO compliance monitoring plan in Appendix D.

EXHIBIT 2

**PERMIT TO INSTALL APPLICATION**

For authority to install, construct, reconstruct, relocate, or modify process, fuel-burning or refuse burning equipment and/or control equipment. Permits to install are required by administrative rules pursuant to Section 5505 of 1994

FOR EGLE USE
APPLICATION NUMBER

Please type or print clearly. The "Application Instructions" and "Information Required for an Administratively Complete Permit to Install Application" are available on the Air Quality Division (AQD) Permit Web Page at www.deq.state.mi.us/aps/nsr_information.shtml. Please call the AQD at 517-284-6804 if you have not been contacted within 15 days of your application submittal.

RECEIVED

DEC 28 2020

AIR QUALITY DIVISION

1. FACILITY CODES: State Registration Number (SRN) and North American Industry Classification System (NAICS)			
SRN		NAICS	3 2 4 1 2 1
2. APPLICANT NAME: (Business License Name of Corporation, Partnership, Individual Owner, Government Agency) Ajax Materials Corporation			
3. APPLICANT ADDRESS: (Number and Street) 1957 Crooks Road, Suite A			MAIL CODE:
CITY: (City, Village or Township) Troy	STATE: MI	ZIP CODE: 48084	COUNTY: Oakland
4. EQUIPMENT OR PROCESS LOCATION: (Number and Street - If different than Item 3) Northeast Corner of Carpenter Road and Energy Drive			
CITY: (City, Village or Township) Genesee Charter Township		ZIP CODE: 48505	COUNTY: Genesee
5. GENERAL NATURE OF BUSINESS: Hot mix asphalt manufacturer			
6. EQUIPMENT OR PROCESS DESCRIPTION: (A Description MUST Be Provided Here. Include Emission Unit IDs. Attach additional sheets if necessary; number and date each page of the submittal.) Ajax is proposing to install a new Hot Mix Asphalt Plant to include a 500 tph counter-flow drum mix plant, 100,000 cfm baghouse, six asphalt cement tanks with a small natural gas heater, eight HMA storage silos, RAP and aggregate feed bins.			
7. REASON FOR APPLICATION: (Check all that apply.) <input checked="" type="checkbox"/> INSTALLATION / CONSTRUCTION OF NEW EQUIPMENT OR PROCESS <input type="checkbox"/> RECONSTRUCTION / MODIFICATION / RELOCATION OF EXISTING EQUIPMENT OR PROCESS - DATE INSTALLED: <input type="checkbox"/> OTHER - DESCRIBE			
8. IF THE EQUIPMENT OR PROCESS THAT WILL BE COVERED BY THIS PERMIT TO INSTALL (PTI) IS CURRENTLY COVERED BY ANY ACTIVE PERMITS, LIST THE PTI NUMBER(S): N/A			
9. DOES THIS FACILITY HAVE AN EXISTING RENEWABLE OPERATING PERMIT (ROP)? <input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> PENDING APPLICATION <input type="checkbox"/> YES PENDING APPLICATION OR ROP NUMBER:			
10. AUTHORIZED EMPLOYEE: Mark E. Boden		TITLE: Vice President	PHONE NUMBER: (Include Area Code) 248.244.3300
SIGNATURE: 		DATE: 12/22/2020	E-MAIL ADDRESS: mboden@ajaxpaving.com
11. CONTACT: (If different than Authorized Employee. The person to contact with questions regarding this application) Stephanie A. Jarrett Kathleen T. Anderson		PHONE NUMBER: (Include Area Code) 248.324.2146 810.845.3925	
CONTACT AFFILIATION: Fishbeck Ajax Materials Corporation, In House Consultant		E-MAIL ADDRESS: sjarrett@fishbeck.com kanderson@ajaxpaving.com	
12. IS THE CONTACT PERSON AUTHORIZED TO NEGOTIATE THE TERMS AND CONDITIONS OF THE PERMIT TO INSTALL? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
FOR EGLE USE ONLY - DO NOT WRITE BELOW			
DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:			
DATE PERMIT TO INSTALL APPROVED:		SIGNATURE:	
DATE APPLICATION / PTI VOIDED:		SIGNATURE:	
DATE APPLICATION DENIED:		SIGNATURE:	
A PERMIT CERTIFICATE WILL BE ISSUED UPON APPROVAL OF A PERMIT TO INSTALL			

**Permit to Install Application
Hot Mix Asphalt Plant**

**Ajax Materials Corporation – Genesee Township Plant
Energy Drive
Genesee Charter Township, Michigan**

**December 21, 2020
Project No. 201405**

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List of Abbreviations/Acronyms

- acfm actual cubic feet per minute
 AER allowable emission rates
 AERMET AERMOD Meteorological Preprocessor
 AERMOD American Meteorological Society/Environmental Protection Agency Regulatory Model
 AQD Air Quality Division
 AQD-22 Dispersion Modeling Guidance for Federally Regulated Pollutants
 ARM Ambient Ratio Method
 BACT Best Available Control Technology
 BPIP Prime Building Profile Input Program Prime
 Btu British thermal units
 CAA Clean Air Act
 CAIR Clean Air Interstate Rules
 cfm cubic feet per minute
 CFR Code of Federal Regulations
 CO carbon monoxide
 CO₂ carbon dioxide
 CO₂e carbon dioxide equivalent
 °F degrees Fahrenheit

EGLE	Michigan Department of Environment, Great Lakes, and Energy
GEP	good engineering practice
gr/dscf	grains per dry standard cubic foot
HAP	hazardous air pollutant
HCl	hydrochloric acid
HMA	hot mix asphalt
hr/day	hours per day
hr/yr	hours per year
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
km	kilometer(s)
LAER	lowest achievable emission rate
lb	pound(s)
lb/hr	pounds per hour
lb/MMBtu	pounds per million Btus
MACT	Maximum Achievable Control Technology
µg/m ³	micrograms per cubic meter
MDEQ	Michigan Department of Environmental Quality (became EGLE April 22, 2019)
MMBtu/hr	million Btus per hour
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAD83	North American Datum of 1983
NED	National Elevation Dataset
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
O ₃	ozone
PAI	Predicted Ambient Impact
PAC	polynuclear aromatic compounds
Pb	lead
PM	particulate matter
PM _{2.5}	fine particulate matter less than 2.5 microns
PM ₁₀	fine particulate matter less than 10 microns
ppm	parts per million
PSD	prevention of significant deterioration
PTE	potential to emit
PTI	Permit to Install
RAP	recycled asphalt product
RUO	recycled used oil
ROP	Renewable Operating Permit
SCC	Source Classification Code
sf	square foot/feet
SDS	Safety Data Sheet
SER	significant emission rate
SIL	significant impact levels
SO ₂	sulfur dioxide

TAC	toxic air contaminant
T-BACT	Best Available Control Technology for Toxics
tph	tons per hour
tpy	tons per year
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1.0 Executive Summary

Fishbeck has been retained by Ajax Materials Corporation (Ajax) to submit a request for a PTI for their proposed new HMA process to be located on Energy Drive in Genesee Charter Township, Michigan. This document contains the information required to evaluate the application for the permit, including a description of the plant, equipment, operating schedule, projected emissions characteristics, a BACT Analysis, and an air toxics demonstration.

The Ajax facility will manufacture HMA, primarily for the road construction industry. As part of this project, Ajax is proposing to install a 500 tph counter-flow drum mixer and associated 100,000 cfm baghouse, RAP and aggregate feed bins, six new asphalt cement tanks with a small natural gas heater, and eight 300 ton HMA storage silos.

The proposed project is not subject to PSD review for any criteria pollutants. The following NSPS has been determined to apply to this project: *Subpart I – Standards for Performance of Hot Mix Asphalt Facilities*.

Federal NESHAPs have been evaluated; no NESHAPs apply to this project.

A dispersion modeling analysis is provided for NO_x, SO₂, PM₁₀ and PM_{2.5}. Impacts have been demonstrated to be compliant with applicable NAAQS and PSD increments.

EGLE Rule 225 requires that the predicted maximum ambient impact from the emission of TACs from new and modified sources not exceed health-based screening levels. Compliance with these health-based screening levels have been demonstrated as the PAIs for all TACs are below the applicable air quality screening levels utilizing air dispersion modeling.

2.0 Process Overview

2.1 Process Description

Ajax will manufacture HMA paving materials, primarily for the road construction industry, using a counter-flow drum mixer/dryer process. HMA paving materials are a mixture of aggregates and asphalt cement, which is heated and mixed at metered proportions; RAP is often used to reduce the quantity of virgin aggregates required in the mix. This practice reuses a waste material and reduces the amount of new natural resources needed. As RAP also contains hardened asphalt cement, the quantity of liquid asphalt cement that must be added to the mix is also reduced. The HMA manufacturing process involves combustion of a fuel to dry and heat the aggregates. These actions are carried out in a rotating, direct-fired drum dryer/mixer. Natural gas will be used as the primary fuel at the plant; propane and fuel oils, including RUO, may also be used at the plant.

In a counter-flow drum mixer, the aggregates are moved through a rotating drum in the opposite direction as the fuel combustion products. The drum is inclined with the aggregate feed chute located at the top and the dryer burner located at the bottom. RAP is added at the approximate midpoint of the dryer drum. Asphalt cement is introduced in the lower end of the drum, usually in the last 10 to 12 feet, where rotation of the drum coats the aggregate with the asphalt cement. The asphalt cement mixing zone is located behind the burner flame zone to prevent direct contact with the flame zone.

A discharge chute for the finished product is located at the lower end of the inclined drum. HMA is conveyed to a surge bin and then to the HMA storage silos, where it is loaded into transport trucks. Exhaust gases from the dryer/mixer, including the products of combustion, exit the end of the drum and are controlled by a fabric filter collector.

The plant configuration will include eight HMA silos and a truck load out area with sides that extend toward the ground. Exhaust gases from the load out area will be routed back to the burning zone of the HMA plant or to a standalone collection system for blue smoke control.

A location map is provided as Figure 1 and a proposed site plan is presented as Figure 2.

2.2 Description of Proposed Modification

Ajax is proposing to build a new HMA plant. This plant will include installing a 500 tph counterflow drum, 100,000 cfm baghouse, RAP and feed bins, eight 300-ton HMA silos, six asphalt cement tanks with a small natural gas heater. If RUO is used in the future, an RUO tank will also be installed.

The proposed maximum operating schedule is 24 hours per day, 7 days per week, 52 weeks per year. To limit the plant's potential to emit, Ajax will agree to limit the total annual HMA production to 887,560 tpy of HMA.

3.0 Regulatory Review

3.1 Michigan Air Pollution Control Regulations

3.1.1 Rule 201 – PTI Requirements

Any process or process equipment installed after August 15, 1967, which may emit an air contaminant requires a PTI prior to installation, construction, reconstruction, relocation, alteration, or modification unless specifically exempt. The proposed plant construction will require a PTI.

3.1.2 Rules 224 to 230 – Air Toxics Requirements

Rules 224 to 230, effective November 10, 1998, apply to any proposed, new, or modified process or process equipment for which an application for a PTI is required and which emits a TAC. A TAC is defined in Michigan rules as:

... any air contaminant for which there is no National Ambient Air Quality Standard (NAAQS) and which is or may become harmful to public health or the environment when present in the outdoor atmosphere in sufficient quantities and duration.

A new or modified source of TACs is required to comply both with T-BACT and with health-based screening level requirements.

3.1.2.1 Rule 224 – T-BACT Requirement for New and Modified Sources of Air Toxics

Rule 224 requires that emissions of TACs from a new or modified source not exceed the maximum allowable emission rate that results from the application of the T-BACT.

Rule 224(2) provides exemptions from the T-BACT requirements for:

- Emission unit(s) subject to a standard for HAPs promulgated under 112(d) of the CAA, or for which a control technology determination has been made under Section 112(g) or 112(j). Section 112(d)(6) of the CAA requires the USEPA to review and revise the MACT standards, as necessary, taking into account developments in practices, processes, and control technologies. This exemption applies to both regulated HAPs and other VOCs or PM which are controlled by the same technology. [Rule 224(2)(a)].
- TACs that are carcinogens which have emission rates less than 0.1 lb/hr and an IRSL greater than 0.1 $\mu\text{g}/\text{m}^3$, or TACs that are not carcinogens which have emission rates less than 1.0 lb/hr and ITSLs greater than 200 $\mu\text{g}/\text{m}^3$. [Rule 224(2)(b)].
- Emission units(s) which only emit VOCs or PM that comply with BACT or LAER. [Rule 224(2)(c)].
- Engines, turbines, boilers, and process heaters with heat input capacities up to 100 MMBtu/hr which fire natural gas, diesel, or biodiesel, provided that the effective stack is vertical, unobstructed, and is at least 1.5 times the building height and the building setback is at least 100 feet from the property line. [Rule 224(2)(d)].

A T-BACT analysis is provided in Section 5.0.

3.1.2.2 Rules 225 To 230 – Health-Based Screening Level Requirement for New or Modified Sources of Air Toxics

Rule 225 requires that emissions of TACs not exceed the maximum allowable emission rate that results in a predicted maximum ambient impact above the ITSL, the iRSL, or both.

Rule 227 indicates that compliance with the health-based screening level provisions of Rule 225 can be determined by any of the following:

- Pursuant to Rule 227(1)(a), the emission rate of each TAC is not greater than the rates determined from the algorithms in Table 21 [of Rule 227].
- Pursuant to Rule 227(1)(b), the emission rate of each TAC is not greater than the rate determined from the Ambient Impact Ratio matrix screening methodology in Table 22 [of Rule 227] or determined by any other screening method approved by EGLE.
- The maximum ambient impact of each TAC is less than the applicable screening level determined using the maximum hourly emission rate in accordance with the air quality modeling provisions of Rule 240, 241, or both.

A dispersion modeling analysis for TACs is provided in Section 6.0.

3.1.3 Rule 301 – Standards for Density of Emissions

Rule 301 establishes limitations for the density of particulate emissions. The proposed plant is not expected to have any effect on the ability to comply with the visible emission limitations of Rule 301. Rule 301 limits visible emissions as follows:

- A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
- A limit specified by an applicable federal Standard for the Performance of NSPS. HMA plants are subject to NSPS-Subpart I, which limits opacity to 20%.
- A limit specified as a condition of a PTI or Permit to Operate.

Ajax is confident the new HMA plant will be able to comply with the opacity limitations specified in Rule 301 and NSPS-Subpart I.

3.1.4 Rule 331 – Emission of PM

Rule 331 (Table 31, F) stipulates that asphalt paving plants located outside of Priority I and II areas shall not exceed an emission rate of 0.30 lb of particulate per 1,000 lb of exhaust gas. The proposed HMA plant is subject to the NSPS Subpart I, which limits emissions to 0.04 gr/dscf, which is equivalent to approximately 0.076 lb particulate per 1,000 lb of exhaust gas; therefore, Ajax is confident the drum mixer/dryer will continue to comply with the PM limitations specified in Rule 331.

3.1.5 Rule 702 – VOC BACT

New sources of VOC are subject to Rule 702 which requires an emission limitation based upon the application of BACT. New sources are defined in Rule 701 as:

... any process or process equipment which is either placed into operation on or after July 1, 1979, or for which an application for a Permit to Install, pursuant to the provision of Part 2 of these rules, is made to the department on or after July 1, 1979, or both, except for any process or process equipment which is defined as an existing source pursuant to R336.1601 (Rule 601).

BACT for VOCs is discussed in Section 5.0, BACT Analysis, of this document.

3.1.6 Rule 901 – Nuisance Odors and Dust

Rule 901 prohibits the emissions of air contaminants in quantities that cause either:

- Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.
- Unreasonable interference with the comfortable enjoyment of life and property.

The HMA plant will include eight HMA silos and a truck load enclosure with sides that extend toward ground. Exhaust gases from the load out area will be routed back to the burning zone of the HMA plant or to a standalone collection system.

3.1.7 Part 18 – Prevention of Significant Deterioration

The primary provisions of the PSD Program require that new major stationary sources and major modifications at existing major stationary sources be carefully reviewed prior to onsite construction to ensure compliance with the NAAQS, the applicable PSD Increment provisions, and the requirement to apply BACT on the project's significant emission increases of NSR regulated pollutants. The PSD Program also requires evaluation of potential visibility impacts to federally designated Class I areas, evaluation of air quality impacts as a result of secondary growth associated with the project, and a minimum 30-day public comment process.

The Ajax facility will be located in Genesee County, which is currently in attainment with all NAAQS, which includes: PM₁₀, PM_{2.5}, SO₂, NO₂, CO, O₃, and Pb. Both NO_x and VOCs are regulated for controlling O₃ formation in the ambient air because they both participate in ambient photochemical reactions that result in O₃.

A determination must be made as to whether the PSD Program is applicable to the proposed construction. This determination is based on whether emissions at the stationary source will be greater than 250 tpy for the pollutants in attainment. As demonstrated in this application, the Ajax facility will accept enforceable emission limits and a production limit of 887,560 tpy, which will limit emissions of attainment air pollutants to less than 250 tpy. As a result, the proposed HMA plant is not subject to the PSD Program.

3.1.8 EGLE Dispersion Modeling Guidance

Policy and Procedure AQD 22, *Dispersion Modeling Guidance for Federally Regulated Pollutants*, was issued to address when dispersion modeling is required as part of the PTI Application. The intent of AQD-22 was to ensure that projects do not interfere with the NAAQS or PSD Increment. Pursuant to EGLE guidelines, this determination must be made for both *major source* and *minor source* applications.

The project emissions exceed the SER for SO₂, NO_x, PM_{2.5}, and PM₁₀; therefore, a dispersion modeling analysis for these pollutants is provided in Section 6. Pursuant to Table 2 of AQD-22, an analysis is not required for CO, as project emissions are below 100% of the SER.

3.2 Federal Regulations

3.2.1 40 CFR 60 Subpart I– NSPS

The NSPS require that new emission sources emit less pollutants than existing sources. 40 CFR 60, Subpart I, promulgated July 25, 1977, requires performance standards for HMA. The standards are in effect for equipment constructed, modified, or reconstructed after June 11, 1973. Ajax is subject to an NSPS emission limit for PM of 0.04 gr/dscf of exhaust gas specified in 40 CFR §60.92(a)(1) (the Standard). The NSPS also sets a visible emission limitation, found in 40 CFR §60.92(a)(2), of less than 20% opacity. Compliance testing will be performed following construction and commissioning of the new drum mixer/dryer using the federal reference methods specified in the Standard.

Ajax is confident the plant will comply with the PM and opacity limitations specified in NSPS, Subpart I.

3.2.2 40 CFR 61 and 63 – NESHAPS

Projects of this nature may also be subject to federal requirements for the control of HAP emissions. The first step to determining applicability is to review the pollutant- and source-specific regulations promulgated in 40 CFR §61 and §63; these regulations are collectively known as NESHAPS. The second step for determining applicability is to evaluate whether the modification will be a major source of HAPs and, therefore, subject to the case-by-case MACT requirements pursuant to Section 112(g) of the federal CAA.

NESHAPS apply to both major and area sources of HAPs. A **major source of HAPs** is defined in Section 112 of the CAA, in part as *a stationary source that has a PTE 10 tpy or more of any HAP, or 25 tpy of any combination of HAPs subject to regulation under the CAA*. The design capacity of the drum mixer/dryer, operating 24 hours per day and 365 days per year would result in a total annual production of 4,380,000 tons HMA. Based on this operational capacity, emissions of combined HAPs would be greater than 25 tpy and the facility would meet the definition of a major source of HAPs. However, Ajax will agree to an enforceable operational restriction (annual production limit) to limit the emissions of HAPs to below the major threshold levels.

The facility will be an *area source* of HAP emissions. No area source NESHAP requirements currently apply to this type of source.

3.2.3 40 CFR 70 – Title V

The Ajax HMA plant will not be subject to the Title V (Michigan's ROP) program; issuance of this PTI will not affect the status with respect to Title V.

4.0 Emission Calculations Summary

Emissions were estimated using AP-42, EGLE emission factors, and other standard industry calculations. Tables 1, 2, and 3 summarize the short-term and annual emissions of the HMA plant. The footnotes contained in these tables describe the methods used to calculate emissions.

4.1 PM Emissions

For the counter-flow HMA plant, PM emissions are calculated based on the NSPS emission limit of 0.04 gr/dscf of exhaust gas. This calculation involves the rated capacity of the exhaust fan and the amount of moisture in exhaust gases. HMA plant capacities are rated based on a specific percentage of moisture in the incoming aggregates; the average aggregate moisture content for similar sources is approximately 5%. As the moisture content of the incoming aggregates increases, the capacity of the HMA plant decreases; therefore, PM emissions are calculated based on the plant running at its rated capacity and aggregates' moisture content. The air flow must be converted from actual cubic feet per minute to dry standard cubic feet per minute, using the ideal gas law ($PV = nRT$). See Appendix 1 for the PM calculation methodology.

4.2 SO₂ Emissions

The proposed emission factor, in pounds of SO₂ per ton of HMA produced, is based on RUO sulfur content of 1% and a 43% control for SO₂ from RAP. As the plant will typically run on natural gas, the SO₂ emissions provided in Table 2 are extremely conservative.

4.3 NO_x Emissions

The proposed emission factor, in pounds of NO_x per ton of HMA produced, was based on EGLE Fact Sheet No. 9842 for HMA Plants. The emission factor for SCC 3-05-002-46 (HMA Batch Plants) was used as a conservative approach to calculate the maximum emission rate of NO_x.

4.4 CO Emissions

The proposed emission factor, in pounds of CO per ton of HMA produced, was based on the on EGLE Fact Sheet No. 9842 for HMA Plants, which is the EGLE default CO factor for HMA plants. The emission factor for SCC 3-05-002-10 (Waste Oil Heaters for HMA plants) was used as a conservative approach to calculate the maximum emission rate of CO.

4.5 VOC Emissions

The proposed emission factor, in pounds of VOC per ton of HMA produced, was taken from AP-42, Section 11.1, Table 11.1-8 for a waste oil-fired counter-flow drum mix plant. This emission factor, along with a 100% safety factor, was used to estimate the maximum emission rate of VOC.

4.6 Lead

The proposed emission factor, in pounds of Pb per ton of HMA produced, was based on maximum parts per million allowed in RUO (100 ppm) and 98% control for baghouse. The proposed emission factor was used for the calculation of the maximum emission rate of Pb.

4.7 HAPs and TACs

Emissions of sulfuric acid, nickel, manganese, benzene, formaldehyde, isomers of xylene, toluene, acrolein, and ethylbenzene are based on the current emission limits and the default allowable emission rates from a paper titled *Eliminating the Mandatory Testing Requirement for Toxic Air Contaminants for Hot Mix Asphalt Plants in Michigan* (MDEQ-AQD, June 1, 2012). All other HAP and TAC emissions were estimated using the maximum USEPA Web-fire emission factor for drum mix plants for each fuel used at the plant with a safety factor.

The proposed HCl emission factor, in pounds of HCl per ton of HMA produced, was based on maximum halogen content of RUO (1,000 ppm) and a 61% expected reduction in the HCl emissions based on the nature of an HMA drum mix plant. The proposed emission factor was used for the calculation of the maximum emission rate of HCl. See Appendix 2 for the HCl calculation methodology.

4.8 Miscellaneous Combustion Equipment

The emissions for the small natural gas asphalt cement tank heater are provided in Tables 4 and 5, and were estimated using Web-fire emission factors for SCC 1-02-006-03 (Boiler with a Heat Input Capacity of Less Than 10 MMBtu/hr). In instances where appropriate emission factors do not exist in SCC 1-02-006-03, emission factors for SCC 1-02-006-02 were used (Boiler with a Heat Input Capacity of Greater Than 10 MMBtu/hr).

5.0 BACT Analysis

5.1 Description

Emissions from the HMA dryer/mixer will be controlled by a two-part system designed primarily to control particulate emissions. The exhaust gases from the proposed counter-flow HMA plant will be controlled by a primary collector followed by a fabric filter collector (baghouse) before being exhausted to the atmosphere through a stack. All particulate matter collected by the primary collector and baghouse are returned to the mixing zone of the drum where the asphalt cement is added. This ensures the particulates adhere to the asphalt cement and are not re-entrained in the exhaust gases. The baghouse is currently the most commonly used control device for HMA facilities and is considered to represent T-BACT for new HMA facilities.

Rule 702 requires BACT for VOCs for new and modified sources. There has been significant discussion between the HMA industry and regulators regarding whether newer plant designs, such as counter-flow or dual drum, represent BACT for HMA plants. Data supporting such conclusions is generally subjective rather than objective and quantifiable. VOC emissions from all of the fuels currently used are minimized by using good combustion controls. Good combustion controls will be ensured by regular burner inspections and routine monitoring of CO using a hand-held monitor. Maintaining good combustion control is in Ajax's best interest, as good combustion control is directly related to fuel efficiency and fuel is one of the HMA industry's highest operating costs.

6.0 Air Quality Modeling and Air Toxic Evaluation

As presented in Table 1, the project emissions from the proposed project exceed the SER thresholds for NO_x, SO₂, PM_{2.5}, and PM₁₀ established pursuant to 40 CFR 52.21 and Michigan Rule 1802 (R 336.1802). Therefore, a detailed dispersion modeling analysis for the PSD Increments and compliance with the NAAQS is required as a part of the application. Federal ambient standards have been developed for criteria pollutants consisting of PSD Increments and NAAQS. Compliance with the federal ambient standards for criteria pollutants has been demonstrated through air dispersion modeling as discussed in Section 6.2.

As stated in Rule 225 (R 336.1225), EGLE requires that the ambient impact of the TACs released from a rule subject source be estimated and compared to established air quality standards. An air toxics demonstration is presented in Section 6.3.

Secondary formation analyses for PM_{2.5} and O₃ have not been included as part of the application. Pursuant to current guidance, secondary formation analyses are not required when a project is not subject to PSD regulations.

Model selection and input parameters, used for both criteria pollutant and TAC modeling analyses, are presented in Section 6.1.

6.1 Model Parameters

6.1.1 Model Selection

The model selected for the air dispersion analysis was the AERMOD, Version 19191. Effective December 9, 2005, this model was established as the USEPA-preferred air dispersion model for steady state operations. AERMOD is a modeling system that incorporates air dispersion based on planetary boundary layer turbulence, structure, and scaling concepts, including treatment of both surface and elevated sources and both simple and complex terrain.

BEE line software, which incorporates the USEPA algorithm for the AERMOD program, was used. The software, referred to as BEEST, Version 12.01, was developed by Providence Engineering and Environmental Group, LLC.

6.1.2 GEP Stack Height Analysis

Prior to running the air dispersion model, the potential for building downwash to affect the plume must be evaluated. Building downwash represents the effect that nearby structures have on the air flow near the stack. If the stack is within the area of influence of the building, the swirls and eddies caused by obstruction of the air flow near buildings can affect the plume dispersion.

A GEP analysis was performed using software developed by Providence Engineering and Environmental Group, LLC. The software includes the USEPA BPIP-Prime code for calculating projected building widths. This analysis was run for all buildings depicted in Figure 2. The highest calculated formula GEP stack height of any structure was 97.9 feet (29.84 meters). GEP stack height is the greater of GEP formula stack height or 65 meters (213.3 feet). The structure heights and stack height are listed in Tables 6 and 7, respectively. The stack height is less than the GEP stack height; therefore, direction-specific building effects calculated for each wind direction were entered into the dispersion model as described in the next section.

6.1.3 Model Input Parameters

The direction specific building dimensions calculated during the GEP stack height analysis were entered into the model.

Figure 1 illustrates the site topography. As demonstrated in the figure, the modeling area is relatively flat; however, actual terrain data was used in the model. Figure 2 identifies the stack location.

Land use in the area is predominantly rural; therefore, default rural dispersion coefficients were selected for the model.

The emission source included in this analysis is a point source, with a vertically unobstructed discharge. Model input parameters for this source are provided in Table 7.

6.1.3.1 Receptor Grids

Ajax will prevent access to the property by the general public through a combination of fencing, berms, trees, and shrubs. Therefore, receptors were placed at 25-meter intervals around the inaccessible property line. Dense grids of 25-meter and 50-meter intervals surround the property, and grids of 100 meters, 250 meters, and 500 meters cover the outlying areas to a distance of 10 kilometers. All coordinates are provided in the UTM NAD83 coordinate system.¹

Terrain elevations at receptors were obtained using the BEEST program and USGS NED 1/3 arc-second data. BEEST implements the AERMAP model (Version 18081), which includes processing routines that extract NED data to determine receptor terrain elevations for air quality model input. The NED data used in the modeling had a resolution of 10 meters (1/3 arc-second) and NAD83 datum.

6.1.3.2 Meteorological Data

The meteorological data used in the model was 1-minute data from Bishop International Airport, Flint (FNT) 2019 (Surface Station No. 14826) and White Lake, 2019 (Upper Air Station No. 4830). The meteorological data was provided by EGLE and was processed using the ADJ_U* option in AERMET (Version 18081). All criteria pollutant and TAC modeling was conducted utilizing one year of meteorological data (2019).

6.1.3.3 NO_x Transformation

Tier 1 default modeling was utilized, where 100% of NO_x is conservatively assumed to be NO₂.

6.2 Criteria Pollutant Modeling

A dispersion modeling analysis has been conducted for the criteria pollutants for which emissions are above the SER criteria. As presented in Table 1, these include NO_x, SO₂, PM_{2.5}, and PM₁₀. CO emissions are below 100% of the SER and, pursuant to AQD-22, do not require modeling.

If emissions of the modeled pollutants result in impacts that exceed the SILs, a detailed dispersion modeling impact analysis to demonstrate compliance with the federal PSD Increments and NAAQS is required as a part of the application. If impacts are less than the SILs, no additional modeling is necessary.

Emission rates for the baghouse were conservatively determined for use in the modeling demonstration and are presented in Table 7.

¹ UTM NAD83 Universal Transverse Mercator North American Datum of 1983

6.2.1 Significant Impact Analysis

A significant impact analysis is typically the first step in criteria pollutant modeling. The SIL analysis included impacts from the baghouse.

As presented in Table 8, predicted impacts from the baghouse for NO₂, SO₂, PM_{2.5}, and PM₁₀ were above the applicable SILs, except for annual PM₁₀ impacts. Therefore, additional analyses have been conducted, as discussed in Section 6.2.2.

The USEPA has revoked the previously promulgated SILs for PM_{2.5}. However, USEPA guidance (April 17, 2018)² provides SILs, which the USEPA has documented should be appropriate for all Class II Areas, as well as alternative SILs that can be selected on a case-by-case basis. The SILs recommended in this USEPA guidance have been used in the analysis. Specifically, the following SILs were utilized for the Class II analysis:

- NAAQS SIL
 - 0.2 µg/m³ for Annual PM_{2.5}
 - 1.2 µg/m³ for 24-hr PM_{2.5}
- Increment SIL
 - 0.2 µg/m³ for Annual PM_{2.5}
 - 1.2 µg/m³ for 24-hr PM_{2.5}

6.2.2 NAAQS and Increment Analyses

Because impacts from the proposed project exceed the applicable SILs (except annual PM₁₀), additional analyses have been performed for the pollutants and averaging times as follows:

- 1-hour NO₂ (NAAQS modeling; no Increment established)
- Annual NO₂ (NAAQS and Increment modeling)
- 24-hour and annual PM_{2.5} (NAAQS and Increment modeling)
- 24-hour PM₁₀ (NAAQS and Increment modeling)
- 1-hour SO₂ (NAAQS modeling; no Increment established)
- 3-hour, 24-hour, and Annual SO₂ (NAAQS and Increment modeling)

The first step in the additional analysis is typically to define the significant impact receptors for the project. These are the receptors from the SIL analysis at which the impacts from the project were determined to exceed the SIL. Although there is an SO₂ additional source to consider for NAAQS modeling, the entire SIL grid was used for all Increment and NAAQS modeling for all pollutants to simplify review.

EGLE was contacted to determine which additional sources should be considered in the Increment and NAAQS analyses, as well as appropriate background concentrations to be used in the model. EGLE determined that there was one additional SO₂ source that needed to be included for the analysis. The additional source determination and background data provided by EGLE are presented in Appendix 3.

The model was run for the proposed maximum emission rate for each pollutant from the baghouse; therefore, the model PAI is equal to the actual PAI in µg/m³. The results of the Increment and NAAQS analyses are presented in Tables 9 and 10, respectively. Compliance with Increment and NAAQS are demonstrated. The electronic model input/output files are provided in Appendix 4 (of the original EGLE application only).

² https://www.epa.gov/sites/production/files/2018-04/documents/sils_policy_guidance_document_final_signed_4-17-18.pdf

6.3 Air Toxics Modeling Demonstration

In Rule 225 (R 336.1225) of the Air Pollution Control Commission General Rules, EGLE requires that the ambient impact of the TACs released from a rule-subject source be estimated and compared to established air quality standards. To estimate the ambient air concentrations, each contaminant concentration is calculated at the stack, assuming peak loading conditions. The contaminant loading from the stack is then subjected to air dispersion modeling to simulate the effect of local meteorological conditions. The ambient concentration at hypothetical ground level receptors is then calculated and compared to the air quality screening levels as developed by EGLE.

6.3.1 Model Input Parameters

Model input is addressed in Section 6.1.3.

6.3.2 Results of TAC Modeling Analysis

The input parameter emission rate was 1 lb/hr; therefore, the model output is in units of $\mu\text{g}/\text{m}^3$ per lb/hr. To estimate the actual PAI, the model PAI was multiplied by the maximum emission rate in lb/hr. The unitized model results are included as Table 11. A flash drive containing the electronic model input/output files is provided in Appendix 4 (of the original EGLE version only).

The actual PAI in $\mu\text{g}/\text{m}^3$ is then compared to the screening level. For the polycyclic aromatic hydrocarbons designated by Footnote 5 on the screening level list, the emission rate was multiplied by the relative potency factors as described in an MDEQ memorandum dated February 7, 2017. As indicated in Table 12 the PAIs for all TACs are below the applicable air quality screening levels obtained from the EGLE-AQD *List of Screening Levels*.

7.0 Summary and Conclusion

Ajax manufactures HMA. The proposed plant identified in this permit will be located on Energy Drive, in Genesee Charter Township, Michigan. Ajax is requesting to construct a new HMA plant including the installation of a 500 tph counter-flow drum mixer, a 100,000 cfm rated baghouse, RAP and feed bins, eight storage silos, and six asphalt cement tanks with a small natural gas heater. To support the proposed construction, this application includes an analysis of state and federal air regulatory requirements applicable to the requested installations as well as the demonstration of how the plant will comply with those applicable requirements.

Michigan Rule 702 requires the application of BACT for new sources of VOCs. BACT was demonstrated for the Ajax facility.

Air toxic dispersion modeling estimated the ambient impact of a variety of HAPs and TACs predicted to be emitted from an HMA plant. The calculated maximum concentrations were compared to the ITSLs provided by EGLE-AQD. A comparison indicated that Ajax's proposed HMA plant complies with the current Michigan air toxic regulations.

AJAX Materials
Energy Drive, Genesee Charter Township, Michigan
Permit to Install
Application

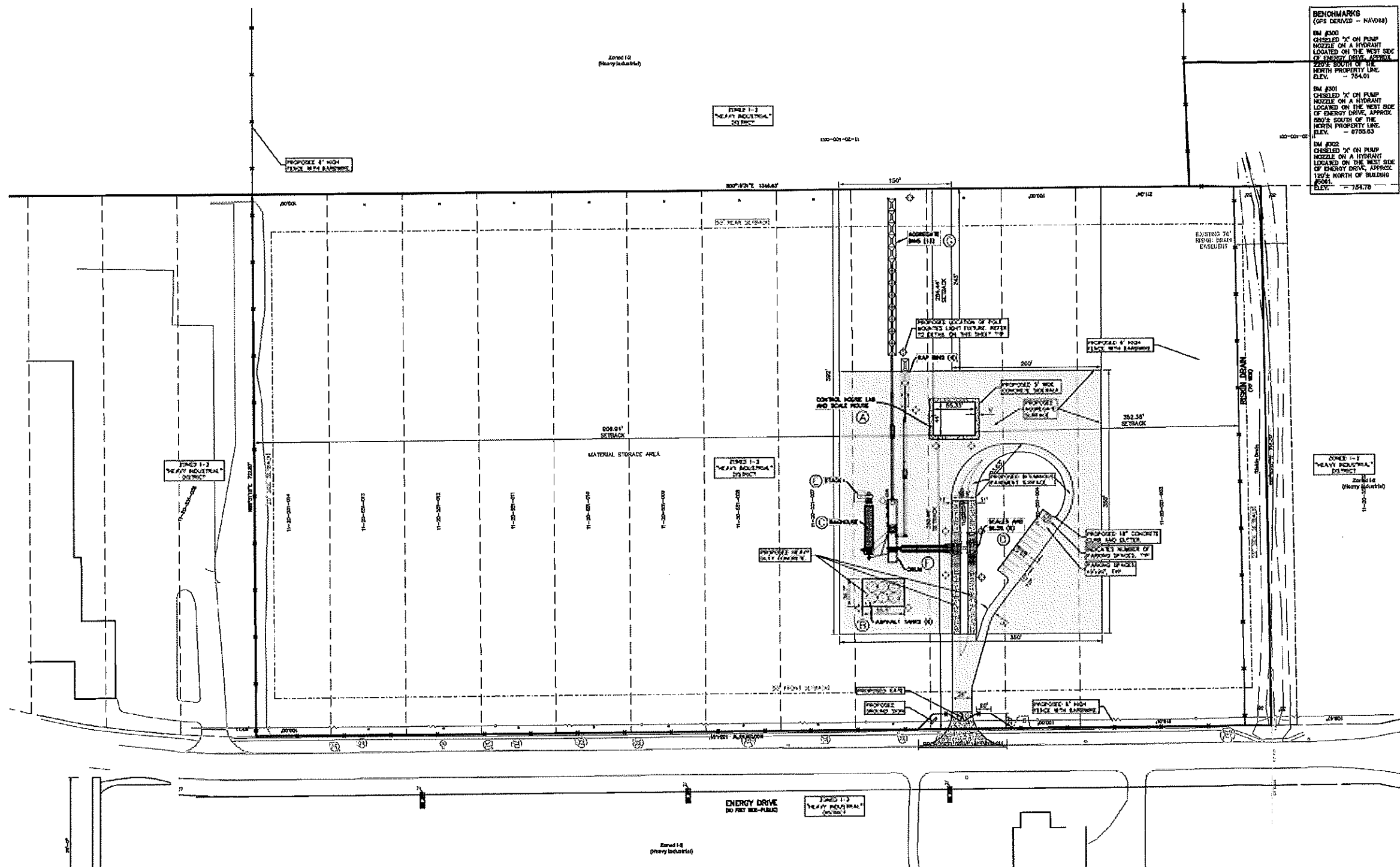
REVISIONS
NOT FOR CONSTRUCTION

Drawn By
Designer
Reviewer
Manager

Hard copy is intended to be
24"x36" when plotted. Scale(s)
indicated and graphic quality may
not be accurate for any other size.

PROJECT NO.
201405

SHEET NO.

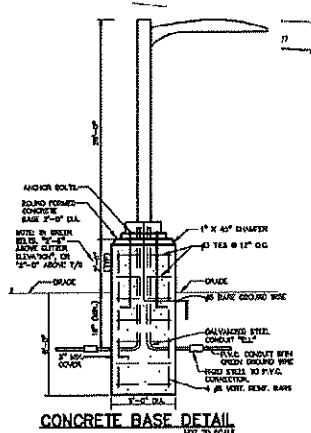


BENCHMARKS
(GPS DERIVED - NAVD83)

BM #300
CHISELED "X" ON PUMP
NOZZLE ON A HYDRANT
LOCATED ON THE WEST SIDE
OF ENERGY DRIVE, APPROX
220' SOUTH OF THE
NORTH PROPERTY LINE.
ELEV. = 754.01

BM #301
CHISELED "X" ON PUMP
NOZZLE ON A HYDRANT
LOCATED ON THE WEST SIDE
OF ENERGY DRIVE, APPROX
200' SOUTH OF THE
NORTH PROPERTY LINE.
ELEV. = 6755.63

BM #302
CHISELED "X" ON PUMP
NOZZLE ON A HYDRANT
LOCATED ON THE WEST SIDE
OF ENERGY DRIVE, APPROX
120' NORTH OF BUILDING
FOOT.
ELEV. = 754.70



STRUCTURE HEIGHT TABLE

LABEL	STRUCTURE	HEIGHT
(A)	CONTROL HOUSE LAB AND SCALE HOUSE	24'
(B)	ASPHALT TANKS	40'
(C)	BATHHOUSE	31'
(D)	SCALES AND DRUGS	60'
(E)	STACK	80'
(F)	DRUM	38'
(G)	AGGREGATE BIN	19'

* VARIANCE REQUIRED

- GENERAL NOTES**
1. ALL STORM WATER GENERATED FROM SITE DEVELOPMENT WILL BE CONTROLLED, TREATED AND DETAINED ON-SITE.
 2. SITE IS SERVED BY EXISTING 10" DIAMETER SANITARY SEWER LOCATED ALONG ENERGY DRIVE.
 3. SITE IS SERVED BY EXISTING 12" DIAMETER PUBLIC WATER MAIN LOCATED ALONG ENERGY DRIVE.
 4. PROPERTY OWNER IS PROPOSING TO INSTALL A NON-POTABLE WATER WELL FOR ON-SITE DUST SUPPRESSION AND TO FILL WATER TRUCKS FOR PAVING CREWS.

SITE DATA TABLE

SITE AREA:	86.4 ACRES (3,768,338 SF)
DEVELOPMENT AREA:	29.72 ACRES (1,294,140 SF)
CURRENT ZONING:	F-2 (HEAVY INDUSTRIAL)
BUILDING INFORMATION:	MAXIMUM ALLOWABLE BUILDING HEIGHT = 40' (5 STORIES)
PROPOSED BUILDING HEIGHT:	SEE "BUILDING HEIGHTS" TABLE (THIS SHEET)
BUILDING FOOTPRINT AREA:	4,435 SF
BUILDING LOT COVERAGE:	0.048% (AREA)
SETBACK REQUIREMENTS:	REQUIRED: 300.00'
FRONT (WEST):	20'
SIDE (NORTH):	20'
SIDE (SOUTH):	20'
REAR (EAST):	20'
PROPOSED:	300.00'
FRONT (WEST):	300.00'
SIDE (NORTH):	300.00'
SIDE (SOUTH):	300.00'
REAR (EAST):	300.00'

PARKING REQUIREMENTS
F-2 (HEAVY INDUSTRIAL)

1 SPACE PER 1.0 EMPLOYEES + 0 EMPLOYEES = 8 SPACES
1 SPACE PER 500 SF OF USABLE BUILDING SPACE = 3061 SF/500 SF = 6 SPACES

TOTAL PROPOSED PARKING SPACES = 10 SPACES

DECK SPACE (BASED UPON DEVELOPMENT AREA)

MINIMUM OPEN SPACE REQUIRED = 820'
REQUIRED OPEN SPACE = 1,294,140 SF X 0.20 = 258,828 SF
PROVIDED OPEN SPACE = 700,000 SF

A MINIMUM OF 30% OF REQUIRED OPEN SPACE SHALL BE LOCATED BETWEEN THE FRONT BUILDING LINE AND P.O.B.

30% OF 258,828 SF = 85,148 SF (NEEDS TO BE LOCATED IN FRONT YARD ALONG ENERGY DRIVE; PROVIDED 84,680 SF

DRAWING ADAPTED FROM FIGURE PROVIDED BY PEA GROUP
DECEMBER 2, 2020

NOT FOR CONSTRUCTION

Table 1 – Project Emission Summary
 Air Permit to Install
 Ajax Materials, Genesee Twp, Michigan

Pollutant	HMA Dryer Emissions (tpy)	AC Tank Heater Emissions (tpy)	Significant Emission Rate	% of SER	Exceeds SER?	PSD Major Source Threshold	Exceeds Major Source Threshold
CO	89.2	0.7	100	89.9%	No	250	No
NO _x	53.3	0.9	40	135%	Yes	250	No
PM	16.2	0.0	25	65%	No	250	No
PM ₁₀	29.5	0.1	15	197%	Yes	250	No
PM _{2.5}	29.5	0.1	10	295%	Yes	250	No
SO ₂	79.0	0.0	40	198%	Yes	250	No
VOC	28.4	0.0	40	71%	No	250	No
CO ₂	21,967	1,024.7	<i>See CO2e</i>				
CH ₄	8.0	0.0					
N ₂ O	--	0.0					
CO ₂ e	22,167	1,025.8	75,000	31%	No	NA	NA
Lead	0.01	0.0	0.6	2%	No	NA	NA
Fluorides	--	--	3.0	0.0	Yes	NA	NA
H ₂ S	--	--	10.0	0.0	Yes	NA	NA
H ₂ SO ₄	1.4	--	7	20%	No	NA	NA
Highest Single HAP (HCl)	3.3	0.0	NA	NA	NA	NA	No
Aggregate HAPs*	22.5	0.0	NA	NA	NA	NA	No

*Will limit single HAPs to 8.9 tpy, and aggregate HAPs to 22.5 tpy.

Table 2 - HMA Counter-flow Drum Dryer NSR Regulated Pollutant Estimated Emissions
Air Permit to Install
Ajax Materials, Genesee Twp, Michigan

Maximum Short Term Production	tons HMA/hr	500
Annual Production Limit	tons HMA/yr	887,562
Types of Fuel Permitted	Natural Gas, Propane, Fuel Oil 2-6, RUO	
Density of Fuel Oil (avg)	lb/gal	7.4
Fuel Oil/RUO Sulfur Content	% by weight	1.0

NSR Regulated Pollutant	Emission Factor (see notes)	Notes	Maximum Short Term Emissions (lb/hr)	Annual Emissions (tpy)
CO	0.201 lb/ton HMA	1	100.5	89.2
NO _x	0.12 lb/ton HMA	1	60.0	53.3
PM	0.04 lb/ton HMA	3	18.2	16.2
PM ₁₀	0.07 lb/ton HMA	3	33.2	29.5
PM _{2.5}	0.07 lb/ton HMA	3	33.2	29.5
SO ₂	0.18 lb/ton HMA	2	89.1	79.0
VOC	6.4E-02 lb/ton HMA	4	32.0	28.4
CO ₂	49.5 lb/ton HMA	5	24,750	21,967
CH ₄	1.8E-02 lb/ton HMA	5	9.0	8.0
N ₂ O	-- --		--	--
CO ₂ e	49.95 lb/ton HMA	6	24,975	22,167
Lead	3.0E-05 lb/ton HMA	7	0.02	0.01
Fluorides	-- --		--	--
H ₂ S	-- --		--	--
H ₂ SO ₄	3.2E-03 lb/ton HMA	8	1.6	1.4

¹ Emission factor is from the MDEQ Emission Factor Calculation Fact Sheet for HMA Plants waste oil asphalt heaters (3-05-002-10) for CO; and batch plant factor (3-05-002-46) for NOX.

² Emission factor is based on RUO sulfur content of 1% and a 43% control for SO₂ from RAP - See SO₂/RAP calculation methodology below

³ PM emissions are based on NSPS emission limit of 0.4 grains/DSCF. See Appendix 2 for particulate emission calculation data. PM₁₀ and PM_{2.5} emissions are based on PM emissions plus AP-42 condensable emissions, plus H₂SO₄ and HCL emissions, which are assumed to form condensable PM.

⁴ VOC emission factor from AP-42, Section 11.1, Table 11.1-8 for waste oil fired dryer, plus a 100% safety factor.

⁵ Emission factor is from EPA Webfire emission factor for #6 oil-fired counterflow drum mix plant (3-05-002-63); plus a 50% safety factor

⁶ CO₂e emission factor based on global warming potentials for CO₂ (1), CH₄ (25) and N₂O (298) obtained from 40 CFR 98 Subparts A and C, respectively.

⁷ Lead emission factor is based on maximum ppm allowed in RUO (100 ppm) and 98% control for baghouse, as follows:

7.4 lb/gal * 100 ppm/1e6 X 2 gal oil/ton HMA X (1-.98)

⁸ AQD Default Allowable Emission Rate from June 2012 "Eliminating the Mandatory Testing Requirement for Toxic Air Contaminants for Hot Mix Asphalt Plants in Michigan"

Table 2 - HMA Counter-flow Drum Dryer NSR Regulated Pollutant Estimated Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Emission Calculation Methods

PM

See particulate emission calculation methodology. Particulate is assumed to be less than 10 microns in diameter.

SO₂ (RAP)Design Capacity Emissions (lb/hr) = [Design Material Usage (ton of HMA/hr) x Unit Fuel Consumption (gal/ton) x Fuel Density (lb/gal) x (Sulfur Content (% by Weight)/100) x 64 (lb SO₂)/32 (lb S)] x (1 - (43 (% SO₂ control for RAP)/100))Potential Emissions (lb/hr) = [Permit Limit Material Usage (ton of HMA/hr) x Unit Fuel Consumption (gal/ton) x Fuel Density (lb/gal) x (Sulfur Content (% by Weight)/100) x 64 (lb SO₂)/32 (lb S)] / (1/2000 (lb/ton)) x (1 - (43 (% SO₂ control for RAP)/100))Expected Emissions (lb/hr) = [Expected Material Usage (ton of HMA/hr) x Unit Fuel Consumption (gal/ton) x Fuel Density (lb/gal) x (Sulfur Content (% by Weight)/100) x 64 (lb SO₂)/32 (lb S)] / (1/2000 (lb/ton)) x (1 - (43 (% SO₂ control for RAP)/100))NO_x, CO, VOC

Design Capacity Emissions (lb/hr) = Design Material Usage (ton of HMA/hr) x Emission Factor (lb/ton)

Potential Emissions (ton/yr) = Permit Limit Material Usage (ton of HMA/yr) x Emission Factor (lb/ton) x 1/2000 (ton/lb)

Expected Emissions (ton/yr) = Expected Material Usage (ton of HMA/yr) x Emission Factor (lb/ton) x 1/2000 (ton/lb)

CO₂eCO₂e (lb/hr) = CO₂ (lb/hr) x 1 + CH₄ (lb/hr) x 25 + N₂O (lb/hr) x 298 $E_{ST} = \text{Maximum Short Term HMA Production (ton HMA/hr)} \times EF$ $E_A = E_F \times \text{Annual Production Limit (ton HMA/yr)} / 2,000 \text{ lb/ton}$

where:

 $E_{ST} = \text{Short Term Emissions (lb/hr)}$; $E_A = \text{Annual Emissions (tpy)}$; $EF = \text{emission factor (lb/ton HMA)}$

Table 3 - HMA Counter-flow Drum Dryer TAC Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Material Usage	tons/hr	500
Annual Production Limit	tons HMA/yr	887,562

Toxic Air Contaminant	CAS No.	Emission Factor (see notes)	Note	Maximum Short Term Emissions (lb/hr)	Annual Emissions (tpy)	HAP?
Ethylbenzene	100-41-4	1.0E-03 lb/ton HMA	1	5.00E-01	0.44	Yes
Benzaldehyde	100-52-7	2.2E-04 lb/ton HMA	5	1.10E-01	0.10	No
Quinone	106-51-4	3.5E-04 lb/ton HMA	3	1.76E-01	0.16	Yes
n-Butane	106-97-8	1.3E-03 lb/ton HMA	5	6.70E-01	0.59	No
Acrolein	107-02-8	1.0E-03 lb/ton HMA	1	5.00E-01	0.44	Yes
Toluene	108-88-3	6.0E-03 lb/ton HMA	1	3.00E+00	2.66	Yes
N-Pentane	109-66-0	4.2E-04 lb/ton HMA	5	2.10E-01	0.19	No
1-Pentene	109-67-1	4.4E-03 lb/ton HMA	5	2.20E+00	1.95	No
N-Hexane	110-54-3	2.0E-03 lb/ton HMA	3	1.01E+00	0.90	Yes
Valeraldehyde	110-62-3	1.3E-04 lb/ton HMA	5	6.70E-02	0.06	No
Anthracene	120-12-7	6.8E-06 lb/ton HMA	3	3.41E-03	3.03E-03	Yes
Propionaldehyde	123-38-6	2.9E-04 lb/ton HMA	3	1.43E-01	0.13	Yes
Butyraldehyde	123-72-8	3.2E-04 lb/ton HMA	5	1.60E-01	0.14	No
Pyrene	129-00-0	6.6E-06 lb/ton HMA	3	3.30E-03	0.00	Yes
Isomers of xylene	1330-20-7	1.0E-03 lb/ton HMA	1	5.00E-01	0.44	Yes
Heptane	142-82-5	1.9E-02 lb/ton HMA	5	9.40E+00	8.34	No
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	4.6E-13 lb/ton HMA	3	2.31E-10	2.05E-10	Yes
Chromium (VI)	18540-29-9	3.0E-06 lb/ton HMA	2	1.50E-03	1.33E-03	Yes
Benzo (g,h,i) perylene	191-24-2	8.8E-08 lb/ton HMA	3	4.40E-05	3.91E-05	Yes
Benzo (e) pyrene	192-97-2	2.4E-07 lb/ton HMA	3	1.21E-04	1.07E-04	Yes
Indeno(1,2,3-cd)pyrene	193-39-5	1.5E-08 lb/ton HMA	3	7.70E-06	6.83E-06	Yes
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	2.2E-12 lb/ton HMA	3	1.08E-09	9.57E-10	Yes
Perylene	198-55-0	1.9E-08 lb/ton HMA	3	9.68E-06	8.59E-06	Yes
Benzo (b) fluoranthene	205-99-2	2.2E-07 lb/ton HMA	3	1.10E-04	9.76E-05	Yes
Fluoranthene	206-44-0	1.3E-06 lb/ton HMA	3	6.71E-04	0.00	Yes
Benzo (k) fluoranthene	207-08-9	9.0E-08 lb/ton HMA	3	4.51E-05	4.00E-05	Yes
Acenaphthylene	208-96-8	4.8E-05 lb/ton HMA	3	2.42E-02	0.02	Yes
Chrysene	218-01-9	4.0E-07 lb/ton HMA	3	1.98E-04	1.76E-04	Yes

Table 3 - HMA Counter-flow Drum Dryer TAC Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Material Usage	tons/hr	500
Annual Production Limit	tons HMA/yr	887,562

Toxic Air Contaminant	CAS No.	Emission Factor (see notes)	Note	Maximum Short Term Emissions (lb/hr)	Annual Emissions (tpy)	HAP?
Octachlorodibenzo-p-dioxins, total	3268-87-9	5.9E-09 lb/ton HMA	3	2.97E-06	2.64E-06	Yes
Hexachlorodibenzo-p-dioxins, total	34465-46-8	1.2E-11 lb/ton HMA	3	5.94E-09	5.27E-09	Yes
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	7.5E-11 lb/ton HMA	3	3.74E-08	3.32E-08	Yes
Octachlorodibenzofurans, total	39001-02-0	1.1E-11 lb/ton HMA	3	5.28E-09	4.69E-09	Yes
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	9.2E-13 lb/ton HMA	3	4.62E-10	4.10E-10	Yes
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	6.8E-13 lb/ton HMA	3	3.41E-10	3.03E-10	Yes
2-Butenal	4170-30-3	1.7E-04 lb/ton HMA	5	8.60E-02	0.08	No
Formaldehyde	50-00-0	1.0E-02 lb/ton HMA	1	5.00E+00	4.44	Yes
Benzo (a) pyrene	50-32-8	2.2E-08 lb/ton HMA	3	1.08E-05	9.57E-06	Yes
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	2.1E-12 lb/ton HMA	3	1.07E-09	9.47E-10	Yes
2-Methyl-2-butene	513-35-9	1.2E-03 lb/ton HMA	5	5.80E-01	0.51	No
2,2,4-Trimethylpentane	540-84-1	8.8E-05 lb/ton HMA	3	4.40E-02	0.04	Yes
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	5.9E-12 lb/ton HMA	3	2.97E-09	2.64E-09	Yes
Benzo (a) anthracene	56-55-3	4.6E-07 lb/ton HMA	3	2.31E-04	2.05E-04	Yes
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	1.8E-12 lb/ton HMA	3	9.24E-10	8.20E-10	Yes
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	9.5E-12 lb/ton HMA	3	4.73E-09	4.20E-09	Yes
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	2.6E-12 lb/ton HMA	3	1.32E-09	1.17E-09	Yes
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	2.9E-12 lb/ton HMA	3	1.43E-09	1.27E-09	Yes
Isovaleraldehyde	590-86-3	6.4E-05 lb/ton HMA	5	3.20E-02	0.03	No
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	3.5E-12 lb/ton HMA	3	1.76E-09	1.56E-09	Yes
Hexanal	66-25-1	2.2E-04 lb/ton HMA	5	1.10E-01	0.10	No
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	2.4E-11 lb/ton HMA	3	1.21E-08	1.07E-08	Yes
Acetone	67-64-1	1.7E-03 lb/ton HMA	5	8.30E-01	0.74	No
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	1.2E-11 lb/ton HMA	3	5.94E-09	5.27E-09	Yes
Benzene	71-43-2	1.0E-03 lb/ton HMA	1	5.00E-01	0.44	Yes
1,1,1-Trichloroethane	71-55-6	1.1E-04 lb/ton HMA	3	5.28E-02	0.05	Yes
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	1.8E-11 lb/ton HMA	3	9.24E-09	8.20E-09	Yes
Manganese	7439-96-5	5.0E-05 lb/ton HMA	1	2.50E-02	0.02	Yes

Table 3 - HMA Counter-flow Drum Dryer TAC Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Material Usage	tons/hr	500
Annual Production Limit	tons HMA/yr	887,562

Toxic Air Contaminant	CAS No.	Emission Factor (see notes)	Note	Maximum Short Term Emissions (lb/hr)	Annual Emissions (tpy)	HAP?
Mercury	7439-97-6	1.0E-06 lb/ton HMA	8	5.20E-04	4.62E-04	Yes
Nickel	7440-02-0	1.0E-04 lb/ton HMA	1	5.00E-02	0.04	Yes
Silver	7440-22-4	1.9E-06 lb/ton HMA	9	9.60E-04	8.52E-04	No
Thallium	7440-28-0	8.8E-06 lb/ton HMA	6	4.40E-03	3.91E-03	No
Antimony	7440-36-0	7.2E-07 lb/ton HMA	8	3.60E-04	3.20E-04	Yes
Arsenic	7440-38-2	3.0E-06 lb/ton HMA	2	1.50E-03	0.00	Yes
Barium	7440-39-3	1.0E-03 lb/ton HMA	6	5.00E-01	0.44	No
Beryllium	7440-41-7	0.0E+00 lb/ton HMA	8	0.00E+00	0.00	Yes
Cadmium	7440-43-9	1.0E-06 lb/ton HMA	2	5.00E-04	0.00	Yes
Chromium	7440-47-3	3.0E-06 lb/ton HMA	2	1.50E-03	0.00	Yes
Cobalt	7440-48-4	6.0E-05 lb/ton HMA	7	3.00E-02	0.03	Yes
Copper	7440-50-8	6.8E-04 lb/ton HMA	6	3.40E-01	0.30	No
Zinc	7440-66-6	7.2E-04 lb/ton HMA	6	3.60E-01	0.32	No
Ethylene	74-85-1	1.4E-02 lb/ton HMA	5	7.00E+00	6.21	No
Acetaldehyde	75-07-0	2.9E-03 lb/ton HMA	3	1.43E+00	1.27	Yes
2-Methyl-1-pentene	763-29-1	8.0E-03 lb/ton HMA	5	4.00E+00	3.55	No
Hydrogen chloride	7647-01-0	7.4E-03 lb/ton HMA	10	3.71E+00	3.29	Yes
Phosphorus (yellow or white)	7723-14-0	4.8E-03 lb/ton HMA	7	2.40E+00	2.13	Yes
Selenium	7782-49-2	9.6E-06 lb/ton HMA	7	4.80E-03	0.00	Yes
Methyl ethyl ketone	78-93-3	4.0E-05 lb/ton HMA	5	2.00E-02	0.02	No
Acenaphthene	83-32-9	3.1E-06 lb/ton HMA	3	1.54E-03	0.00	Yes
Phenanthrene	85-01-8	5.1E-05 lb/ton HMA	3	2.53E-02	0.02	Yes
Fluorene	86-73-7	2.4E-05 lb/ton HMA	3	1.21E-02	0.01	Yes
Naphthalene	91-20-3	1.0E-03 lb/ton HMA	1	5.00E-01	0.44	Yes
2-Methyl Naphthalene	91-57-6	3.7E-04 lb/ton HMA	3	1.87E-01	0.17	Yes
3-Methylpentane	96-14-0	4.2E-04 lb/ton HMA	5	2.09E-01	0.19	No
Heptachlorodibenzofurans, total		8.4E-11 lb/ton HMA	5	4.18E-08	3.71E-08	Yes
Heptachlorodibenzo-p-dioxins, total		1.6E-10 lb/ton HMA	5	7.81E-08	6.93E-08	Yes

Table 3 - HMA Counter-flow Drum Dryer TAC Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Material Usage	tons/hr	500
Annual Production Limit	tons HMA/yr	887,562

Toxic Air Contaminant	CAS No.	Emission Factor (see notes)	Note	Maximum Short Term Emissions (lb/hr)	Annual Emissions (tpy)	HAP?
Hexachlorodibenzofurans, total		1.8E-11 lb/ton HMA	5	8.91E-09	7.91E-09	Yes
Pentachlorodibenzofurans, total		1.6E-10 lb/ton HMA	5	8.14E-08	7.22E-08	Yes
Pentachlorodibenzo-p-dioxins, total		4.8E-11 lb/ton HMA	5	2.42E-08	2.15E-08	Yes
Polychlorinated dibenzofurans, total		3.3E-10 lb/ton HMA	5	1.65E-07	1.46E-07	Yes
Polychlorinated dibenzo-p-dioxins and furans, total		6.6E-09 lb/ton HMA	5	3.30E-06	2.93E-06	Yes
Polychlorinated dibenzo-p-dioxins, total		6.2E-09 lb/ton HMA	5	3.08E-06	2.73E-06	Yes
Tetrachlorodibenzofurans, total		7.3E-11 lb/ton HMA	5	3.63E-08	3.22E-08	Yes
Tetrachlorodibenzo-p-dioxins, total		2.0E-12 lb/ton HMA	5	1.02E-09	9.08E-10	Yes

¹Emission factor is AQD Default Allowable Emission Rate from June 2012 *Eliminating the Mandatory Testing Requirement for Toxic Air Contaminants for Hot Mix Asphalt Plants in*

² Emission factor is based on maximum ppm allowed in RUO and 98% control for baghouse, as follows: 7.4 lb/gal * 100 ppm/1e6 X 2 gal oil/ton HMA X (1-.98). Max ppm allowed for Arsenic is 5 ppm. Max ppm allowed for Cr is 10 ppm. Max ppm allowed for Cd is 2 ppm.

³Emission factor is based on #6 Oil-Fired Counterflow Drum Mix HMA Plant (3-05-002-63); plus a Gaseous HAP safety factor of 2.2

⁴Emission factor is based on #2 Oil-Fired Counterflow Drum Mix HMA Plant (3-05-002-60); plus a Gaseous HAP safety factor of 2.2

⁵Emission factor is based on #6 Oil-Fired Counterflow Drum Mix HMA Plant (3-05-002-63); plus a Gaseous TAC safety factor of 2.0

⁶Emission factor is based on #2 Oil-Fired Counterflow Drum Mix HMA Plant (3-05-002-60); plus a Metal TAC safety factor of 4

⁷Emission factor is based on #2 Oil-Fired Counterflow Drum Mix HMA Plant (3-05-002-60); plus a Metal HAP safety factor of 4

⁸Emission factor is based on #6 Oil-Fired Counterflow Drum Mix HMA Plant (3-05-002-63); plus a Metal HAP safety factor of 4

⁹Emission factor is based on #6 Oil-Fired Counterflow Drum Mix HMA Plant (3-05-002-63); plus a Metal TAC safety factor of 4

¹⁰Hydrochloric Acid pph emissions based on 1000 ppm Halogen RUO. Assumes all Halogens are Cl and are converted to HCl with a 61% capture in process. See emission factor calculations.

Emission Calculation Methods

$E_{ST} = \text{Maximum Short Term HMA Production (ton HMA/hr)} \times EF$

$E_A = E_F \times \text{Annual Production Limit (ton HMA/yr)} / 2,000 \text{ lb/ton}$

where:

$E_{ST} = \text{Short Term Emissions (lb/hr)}$;

$E_A = \text{Annual Emissions (tpy)}$;

$EF = \text{emission factor (lb/ton HMA)}$

Table 4 - Miscellaneous Combustion Equipment - NSR Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

		AC Tank Heater
Heat Input Capacity	MMBtu/hr	2.0
Heat Input Capacity	MMcf/hr	1.96E-03
Annual Operating Hours	hr/yr	8,760
Annual Heat Input Limit or Capacity	MMBtu/yr	17,520
Fuel Heat Value	MMBtu/MMcf	1,020

NSR Regulated Pollutant	Emission Factor (See Notes)	Notes	Maximum Short Term Emissions per Unit (lb/hr)	Annual Emissions (tpy)
CO	84 lb/MMCF	1	0.2	0.72
NO _x	100 lb/MMCF	1	0.2	0.86
PM	1.9 lb/MMCF	1	0.0	0.02
PM ₁₀	7.6 lb/MMCF	1	0.0	0.07
PM _{2.5}	7.6 lb/MMCF	1	0.0	0.07
SO ₂	0.6 lb/MMCF	1	0.0	0.01
VOC	5.5 lb/MMCF	1	0.0	0.05
CO ₂	53.1 kg/MMBtu	2	234	1024.72
CH ₄	1.0E-03 kg/MMBtu	2	0.0	0.02
N ₂ O	1.0E-04 kg/MMBtu	2	0.0	0.00
CO ₂ e	53.1 kg/MMBtu	2	234	1025.78
Lead	5.0E-04 lb/MMCF	3	9.80E-07	4.29E-06

¹ Emission factors are from Web-fire for SCC 1-02-006-03 for a Boiler with a heat input capacity of less than 10 MMBtu/hr.

² CO₂e global warming potential and emission factors obtained from 40 CFR 98 Subparts A and C, respectively. The global warming potential for CH₄ (25) and N₂O (298) are consistent with the USEPA published changes on November 29, 2013.

³ Emission factors are from Web-fire for SCC 1-02-006-02 for a Boiler with a heat input capacity of greater than 10

Emission Calculation Methods

Using lb/MMCF Emission Factors

$$E_{ST} = C_{MMCF} \times EF_{MMCF}$$

Using kg/MMBtu Emission Factors

$$E_{ST} = C_{HI} \times 2.20462 \text{ lb/kg} \times EF_{kg}$$

$$E_A = E_{ST} \times \text{Annual Operating Hours} / 2,000 \text{ lb/ton}$$

where:

E_{ST} = Short Term Emissions (lb/hr);

E_A = Annual Maximum Emissions (tpy);

C_{MMCF} = Max Fuel Usage (MMCF/hr); and

EF_{MMCF} = emission factor (lb/MMCF)

C_{HI} = Heat Input Capacity (MMBtu/hr); and

EF_{kg} = emission factor (kg/MMBtu)

Table 5 - Miscellaneous Combustion Equipment - TAC Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Heat Input Capacity	MMBtu/hr	AC Tank Heater	2.0
Heat Input Capacity	MMcf/hr		1.96E-03
Annual Operating Hours	hr/yr		8,760
Annual Heat Input Limit or Capacity	MMBtu/yr		17,520
Fuel Heat Value	MMBtu/MMcf		1,020

Toxic Air Contaminant	CAS No.	Emission Factor (See Notes)	Notes	Maximum Short Term Emissions per Unit (lb/hr)	Annual Emissions (tpy)	HAP?
Formaldehyde	50-00-0	7.50E-02 lb/MMCF	1	1.47E-04	6.44E-04	Yes
Benzo (a) pyrene	50-32-8	1.20E-06 lb/MMCF	1	2.35E-09	1.03E-08	Yes
Dibenzo(a,h) anthracene	53-70-3	1.20E-06 lb/MMCF	1	2.35E-09	1.03E-08	Yes
3-Methylcholanthrene	56-49-5	1.80E-06 lb/MMCF	1	3.53E-09	1.55E-08	Yes
Benzo (a) anthracene	56-55-3	1.80E-06 lb/MMCF	1	3.53E-09	1.55E-08	Yes
Dimethylbenz(a)anthracene	57-97-6	1.60E-05 lb/MMCF	1	3.14E-08	1.37E-07	Yes
Benzene	71-43-2	2.10E-03 lb/MMCF	1	4.12E-06	1.80E-05	Yes
Acenaphthene	83-32-9	1.80E-06 lb/MMCF	1	3.53E-09	1.55E-08	Yes
Phenanthrene	85-01-8	1.70E-05 lb/MMCF	1	3.33E-08	1.46E-07	Yes
Fluorene	86-73-7	2.80E-06 lb/MMCF	1	5.49E-09	2.40E-08	Yes
Naphthalene	91-20-3	6.10E-04 lb/MMCF	1	1.20E-06	5.24E-06	Yes
2-Methyl Naphthalene	91-57-6	2.40E-05 lb/MMCF	1	4.71E-08	2.06E-07	Yes
Toluene	108-88-3	3.40E-03 lb/MMCF	1	6.67E-06	2.92E-05	Yes
N-Hexane	110-54-3	1.80E+00 lb/MMCF	1	3.53E-03	1.55E-02	Yes
Anthracene	120-12-7	2.40E-06 lb/MMCF	1	4.71E-09	2.06E-08	Yes
Pyrene	129-00-0	5.00E-06 lb/MMCF	1	9.80E-09	4.29E-08	Yes
Benzo (g,h,i) perylene	191-24-2	1.20E-06 lb/MMCF	1	2.35E-09	1.03E-08	Yes
Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06 lb/MMCF	1	3.53E-09	1.55E-08	Yes
Benzo (b) fluoranthene	205-99-2	1.80E-06 lb/MMCF	1	3.53E-09	1.55E-08	Yes
Fluoranthene	206-44-0	3.00E-06 lb/MMCF	1	5.88E-09	2.58E-08	Yes
Benzo (k) fluoranthene	207-08-9	1.80E-06 lb/MMCF	1	3.53E-09	1.55E-08	Yes
Acenaphthylene	208-96-8	1.80E-06 lb/MMCF	1	3.53E-09	1.55E-08	Yes
Chrysene	218-01-9	1.80E-06 lb/MMCF	1	3.53E-09	1.55E-08	Yes
Manganese	7439-96-5	3.80E-04 lb/MMCF	1	7.45E-07	3.26E-06	Yes
Mercury	7439-97-6	2.60E-04 lb/MMCF	1	5.10E-07	2.23E-06	Yes
Molybdenum	7439-98-7	1.10E-03 lb/MMCF	1	2.16E-06	9.45E-06	No
Nickel	7440-02-0	2.10E-03 lb/MMCF	1	4.12E-06	1.80E-05	Yes
Arsenic	7440-38-2	2.00E-04 lb/MMCF	1	3.92E-07	1.72E-06	Yes
Barium	7440-39-3	4.40E-03 lb/MMCF	1	8.63E-06	3.78E-05	No

Table 5 - Miscellaneous Combustion Equipment - TAC Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Heat Input Capacity	MMBtu/hr	AC Tank Heater	2.0
Heat Input Capacity	MMcf/hr		1.96E-03
Annual Operating Hours	hr/yr		8,760
Annual Heat Input Limit or Capacity	MMBtu/yr		17,520
Fuel Heat Value	MMBtu/MMcf		1,020

Toxic Air Contaminant	CAS No.	Emission Factor (See Notes)	Notes	Maximum Short Term Emissions per Unit (lb/hr)	Annual Emissions (tpy)	HAP?
Beryllium	7440-41-7	1.20E-05 lb/MMCF	1	2.35E-08	1.03E-07	Yes
Cadmium	7440-43-9	1.10E-03 lb/MMCF	1	2.16E-05	9.45E-05	Yes
Chromium	7440-47-3	1.40E-03 lb/MMCF	1	2.75E-05	1.20E-05	Yes
Cobalt	7440-48-4	8.40E-05 lb/MMCF	1	1.65E-07	7.21E-07	Yes
Copper	7440-50-8	8.50E-04 lb/MMCF	1	1.67E-06	7.30E-06	No
Vanadium	7440-62-2	2.30E-03 lb/MMCF	1	4.51E-06	1.98E-05	No
Zinc	7440-66-6	2.90E-02 lb/MMCF	1	5.69E-05	2.49E-04	No
Ammonia	7664-41-7	3.20E+00 lb/MMCF	1	6.27E-03	2.75E-02	No
Selenium	7782-49-2	2.40E-05 lb/MMCF	1	4.71E-08	2.06E-07	Yes
Dichlorobenzene, mixed isomers	25321-22-6	1.20E-03 lb/MMCF	1	2.35E-05	1.03E-05	No
Aggregate HAPs				3.70E-03	1.62E-02	

¹ Emission factors are from Web-fire for SCC 1-02-006-02 because no TAC factors are available for SCC 1-02-006-03.

Emission Calculation Methods

Using lb/MMCF Emission Factors

$$E_{ST} = C_{MMCF} \times EF_{MMCF}$$

$$E_A = E_{ST} \times \text{Annual Operating Hours} / 2,000 \text{ lb/ton}$$

where:

E_{ST} = Short Term Emissions (lb/hr);

E_A = Annual Maximum Emissions (tpy);

C_{MMCF} = Max Fuel Usage (MMCF/hr); and

EF_{MMCF} = emission factor (lb/MMCF)

Table 6 – Structure Heights

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Structure ID in Model	Height (ft)
CTRL_BLD	24
AC_Tank1	40
AC_Tank2	40
AC_Tank3	40
AC_Tank4	40
AC_Tank5	40
AC_Tank6	40
RUO_Tank	40

Note: This table represents the structures for which the stack is located within the downwash area of the structure ("5L"). Other equipment onsite is elevated and does not obstruct air flow; elevated equipment was not included in the model.

Refer to the model for identification of each structure.

Table 7 – Model Input Parameters

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Source	Model Name	Discharge Type	NAD 83 UTM Coordinates (m)		Base Elevation (feet)	Stack Height (feet)	Exhaust Temperature (°F)	Exhaust Flow Rate (acfm)	Exit Velocity (fps)	Stack Diameter (inches)	NO _x Emission Rate (lbs/hr)	PM ₁₀ Emission Rate (lbs/hr)	PM _{2.5} Emission Rate (lbs/hr)	SO ₂ Emission Rate (lbs/hr)
			Easting	Northing										
HMA Counterflow Drum Dryer	STACK	DEFAULT	282,851	4,772,991	752.1	80	300	100,000	66.1	68	60.0	33.2	33.2	89.1

NA Not Applicable

Table 8 – SIL Model Results Summary

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Pollutant	Maximum Predicted Impacts (2019) ($\mu\text{g}/\text{m}^3$)	SIL ($\mu\text{g}/\text{m}^3$)	SIL Averaging Period	Exceeds SIL
NO ₂	42.66	7.5	1-hr	Yes
NO ₂	1.07	1	Annual	Yes
PM ₁₀	7.30	5	24-hr	Yes
PM ₁₀	0.59	1	Annual	No
PM ₂₅	7.30	1.2	24-hr	Yes
PM ₂₅	0.59	0.2	Annual	Yes
SO ₂	84.40	7.8	1-hr	Yes
SO ₂	68.54	25	3-hr	Yes
SO ₂	26.11	5	24-hr	Yes
SO ₂	2.11	1	Annual	Yes

Note: The impact for 1-hour NO₂ represents Tier 1, where 100% of NO_x is conservatively assumed to be NO₂.

Table 9 – Increment Model Results Summary

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Pollutant	Maximum Predicted Impacts (2019) ($\mu\text{g}/\text{m}^3$)	Increment ($\mu\text{g}/\text{m}^3$)	Increment Averaging Period	Exceeds Increment
NO ₂	1.07	25	Annual	No
PM ₁₀	7.30	30	24-hr	No
PM ₂₅	7.30	9	24-hr	No
PM ₂₅	0.59	4	Annual	No
SO ₂	68.54	512	3-hr	No
SO ₂	26.11	91	24-hr	No
SO ₂	2.11	20	Annual	No

Note: The impact for 1-hour NO₂ represents Tier 1, where 100% of NO_x is conservatively assumed to be NO₂.

Table 10 – NAAQS Model Results Summary

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Pollutant	Maximum Predicted Impacts (2019) ($\mu\text{g}/\text{m}^3$)	Background Concentration ($\mu\text{g}/\text{m}^3$)	Combined Impact ($\mu\text{g}/\text{m}^3$)	NAAQS ($\mu\text{g}/\text{m}^3$)	NAAQS Averaging Period	Exceeds NAAQS
NO ₂	42.66	69.2	111.84	188	1-hr	No
NO ₂	1.07	12.2	13.27	100	Annual	No
PM ₁₀	7.30	35.0	42.30	150	24-hr	No
PM ₂₅	7.30	17.1	24.37	35	24-hr	No
PM ₂₅	0.59	7.1	7.67	12	Annual	No
SO ₂	84.40	10.7	95.14	196	1-hr	No
SO ₂	68.55	10.2	78.76	1300	3-hr	No

Note: The impact for 1-hour NO₂ represents Tier 1, where 100% of NO_x is conservatively assumed to be NO₂.

Table 11 – Unitized Model Results

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Averaging Period	Model PAI ($\mu\text{g}/\text{m}^3$)(lb/hr)
Annual	0.01777
1-HR	0.71101
8-HR	0.46745
24-HR	0.21994

The impacts presented in this table represent the unitized impact from each TAC emission source modeled at 1 lb/hr.

Table 12 - Predicted Ambient Impacts

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Toxic Air Contaminant	CAS No.	Emissions (lb/hr)	Model Results (µg/m³)/(lb/hr)	PAI (µg/m³)	Screening Level (µg/m³)	Averaging Period (µg/m³)	Basis	Percent of Screening Level	Pass/Fail	FootNote
Ethylbenzene	100-41-4	0.50	0.220	1.10E-01	1000	24 hr	ITSL	0.0%	PASS	-
			0.018	8.89E-03	0.4	annual	IRSL	2.2%	PASS	
Benzaldehyde	100-52-7	0.11	0.018	1.95E-03	0.4	annual	IRSL	0.5%	PASS	-
Quinone	106-51-4	0.18	0.467	8.23E-02	4.4	8 hr	ITSL	1.9%	PASS	-
n-Butane	106-97-8	0.67	0.467	3.13E-01	23800	8 hr	ITSL	0.0%	PASS	22
Acrolein	107-02-8	0.50	0.018	8.89E-03	0.16	annual	ITSL	5.6%	PASS	13
			0.711	3.56E-01	5	1 hr	2nd ITSL	7.1%	PASS	
Toluene	108-88-3	3.00	0.220	6.60E-01	5000	24 hr	ITSL	0.0%	PASS	-
N-Pentane	109-66-0	0.21	0.467	9.82E-02	17700	8 hr	ITSL	0.0%	PASS	-
N-Hexane	110-54-3	1.01	0.018	1.80E-02	700	annual	ITSL	0.0%	PASS	-
Valeraldehyde	110-62-3	0.07	0.467	3.13E-02	1760	8 hr	ITSL	0.0%	PASS	-
Anthracene	120-12-7	3.41E-03	0.018	6.06E-05	1000	annual	ITSL	0.0%	PASS	-
Propionaldehyde	123-38-6	0.14	0.018	2.54E-03	8	annual	ITSL	0.0%	PASS	-
Butyraldehyde	123-72-8	0.16	0.018	2.84E-03	7	annual	ITSL	0.0%	PASS	-
Pyrene	129-00-0	3.30E-03	0.018	5.86E-05	100	annual	ITSL	0.0%	PASS	-
Isomers of xylene	1330-20-7	0.50	0.018	8.89E-03	390	annual	ITSL	0.0%	PASS	2
Heptane	142-82-5	9.40	0.467	4.39E+00	3500	8 hr	ITSL	0.1%	PASS	-
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	3.30E-06 6.69E-07	0.018	5.86E-08	0.000002	annual	ITSL	2.9%	PASS	33, D
			0.018	1.19E-08	0.000000023	annual	IRSL	51.7%	PASS	
Chromium (VI)	18540-29-9	1.50E-03	0.018	2.67E-05	0.1	annual	ITSL	0.0%	PASS	-
			0.018	2.67E-05	0.000083	annual	IRSL	32.1%	PASS	
Benzo (g,h,i) perylene	191-24-2	4.40E-05	0.018	7.82E-07	13	annual	ITSL	0.0%	PASS	-
Benzo (e) pyrene	192-97-2	1.21E-04	0.220	2.66E-05	0.002	24 hr	ITSL	1.3%		A
Perylene	198-55-0	9.68E-06	0.018	1.72E-07	13	annual	ITSL	0.0%	PASS	B
Fluoranthene	206-44-0	6.71E-04	0.018	1.19E-05	140	annual	ITSL	0.0%	PASS	-
Acenaphthylene	208-96-8	0.02	0.018	4.30E-04	35	annual	ITSL	0.0%	PASS	-
2-Butenal	4170-30-3	0.09	0.711	6.11E-02	9	1 hr	ITSL	0.7%	PASS	-
Formaldehyde	50-00-0	5.00 1.02	0.220	1.10E+00	30	24 hr	ITSL	3.7%	PASS	E
			0.018	1.82E-02	0.08	annual	IRSL	22.7%	PASS	
Benzo (a) pyrene	50-32-8	1.08E-05	0.220	2.37E-06	0.002	24 hr	ITSL	0.1%	PASS	5
			0.018	1.92E-07	0.001	annual	IRSL	0.0%	PASS	
2-Methyl-2-butene	513-35-9	0.58	0.018	1.03E-02	106	annual	ITSL	0.0%	PASS	-
2,2,4-Trimethylpentane	540-84-1	0.04	0.467	2.06E-02	3500	8 hr	ITSL	0.0%	PASS	1
Isovaleraldehyde	590-86-3	0.03	0.018	5.69E-04	800	annual	ITSL	0.0%	PASS	-
Hexanal	66-25-1	0.11	0.018	1.95E-03	2	annual	ITSL	0.1%	PASS	-
Acetone	67-64-1	0.83	0.467	3.88E-01	5900	8 hr	ITSL	0.0%	PASS	-
Benzene	71-43-2	0.50	0.018	8.89E-03	30	annual	ITSL	0.0%	PASS	-
			0.220	1.10E-01	30	24 hr	2nd ITSL	0.4%	PASS	
			0.018	8.89E-03	0.1	annual	IRSL	8.9%	PASS	
1,1,1-Trichloroethane	71-55-6	0.05	0.220	1.16E-02	6000	24 hr	ITSL	0.0%	PASS	-
Manganese	7439-96-5	0.03	0.018	4.44E-04	0.3	annual	ITSL	0.1%	PASS	29
Mercury	7439-97-6	5.20E-04	0.018	9.24E-06	0.3	annual	ITSL	0.0%	PASS	7
			0.220	1.14E-04	1	24 hr	2nd ITSL	0.0%	PASS	

Table 12 - Predicted Ambient Impacts
 Air Permit to Install
 Ajax Materials, Genesee Twp, Michigan

Toxic Air Contaminant	CAS No.	Emissions (lb/hr)	Model Results (µg/m³)/(lb/hr)	PAI (µg/m³)	Screening Level (µg/m³)	Averaging Period (µg/m³)	Basis	Percent of Screening Level	Pass/Fail	FootNote
Nickel	7440-02-0	0.05	0.018	8.89E-04	0.006	annual	IRSL	14.8%	PASS	-
Silver	7440-22-4	9.60E-04	0.467	4.49E-04	0.1	8 hr	ITSL	0.4%	PASS	-
Thallium	7440-28-0	4.40E-03	0.018	7.82E-05	0.1	annual	ITSL	0.1%	PASS	-
			0.467	2.06E-03	0.2	8 hr	2nd ITSL	1.0%	PASS	
Antimony	7440-36-0	3.60E-04	0.018	6.40E-06	0.2	annual	ITSL	0.0%	PASS	-
Arsenic	7440-38-2	1.50E-03	0.018	2.67E-05	0.0002	annual	IRSL	13.3%	PASS	-
Barium	7440-39-3	0.50	0.467	2.34E-01	5	8 hr	ITSL	4.7%	PASS	35
Beryllium	7440-41-7	-	0.220	0.00E+00	0.02	24 hr	ITSL	0.0%	PASS	-
			0.018	0.00E+00	0.0004	annual	IRSL	0.0%	PASS	
Cadmium	7440-43-9	5.00E-04	0.018	8.89E-06	0.0006	annual	IRSL	1.5%	PASS	-
Chromium	7440-47-3	1.50E-03	0.018	2.67E-05	0.5	annual	ITSL	0.0%	PASS	-
Cobalt	7440-48-4	0.03 6.08E-03	0.467	1.40E-02	0.2	8 hr	ITSL	7.0%	PASS	42
			0.018	1.08E-04	0.00013	annual	IRSL	83.1%	PASS	
Copper	7440-50-8	0.34	0.467	1.59E-01	2	8 hr	ITSL	7.9%	PASS	-
Zinc	7440-66-6	0.36	0.467	1.68E-01	20	8 hr	ITSL	0.8%	PASS	C
Ethylene	74-85-1	7.00	0.018	1.24E-01	6240	annual	ITSL	0.0%	PASS	-
Acetaldehyde	75-07-0	1.43	0.018	2.54E-02	9	annual	ITSL	0.3%	PASS	-
			0.018	2.54E-02	0.5	annual	IRSL	5.1%	PASS	
Hydrogen chloride	7647-01-0	3.71	0.018	6.59E-02	20	annual	ITSL	0.3%	PASS	13
			0.711	2.64E+00	2100	1 hr	2nd ITSL	0.1%	PASS	
Phosphorus (yellow or white)	7723-14-0	2.40	0.220	5.28E-01	20	24 hr	ITSL	2.6%	PASS	32
Selenium	7782-49-2	4.80E-03	0.467	2.24E-03	2	8 hr	ITSL	0.1%	PASS	34
Methyl ethyl ketone	78-93-3	0.02	0.220	4.40E-03	5000	24 hr	ITSL	0.0%	PASS	-
Acenaphthene	83-32-9	1.54E-03	0.018	2.74E-05	210	annual	ITSL	0.0%	PASS	-
Phenanthrene	85-01-8	0.03	0.018	4.50E-04	0.1	annual	ITSL	0.4%	PASS	-
Fluorene	86-73-7	0.01	0.018	2.15E-04	140	annual	ITSL	0.0%	PASS	-
Naphthalene	91-20-3	0.50	0.018	8.89E-03	3	annual	ITSL	0.3%	PASS	-
			0.467	2.34E-01	520	8 hr	2nd ITSL	0.0%	PASS	
			0.018	8.89E-03	0.08	annual	IRSL	11.1%	PASS	
2-Methyl Naphthalene	91-57-6	0.19	0.018	3.32E-03	10	annual	ITSL	0.0%	PASS	-
3-Methylpentane	96-14-0	0.21	0.467	9.77E-02	3500	8 hr	ITSL	0.0%	PASS	-
H2SO4	7664-93-9	1.60	0.018	2.84E-02	1	annual	ITSL	2.8%	PASS	9,13
			0.711	1.14E+00	120	1 hr	2nd ITSL	0.9%	PASS	

Table 12 - Predicted Ambient Impacts

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Toxic Air Contaminant	CAS No.	Emissions (lb/hr)	Model Results (µg/m³)/(lb/hr)	PAI (µg/m³)	Screening Level (µg/m³)	Averaging Period (µg/m³)	Basis	Percent of Screening Level	Pass/Fail	FootNote
Polynuclear Aromatic Compounds with a Footnote of 5										
benzo(a)pyrene	50-32-8	1.08E-05	0.22	2.37E-06	0.002	24 hr	ITSL	0.1%	PASS	5
dibenz(a,h)anthracene	53-70-3	-								5
3-methylcholanthrene	56-49-5	-								5
benz(a)anthracene	56-55-3	2.31E-04								5
7,12-dimethylbenz(a)anthracene	57-97-6	-								5
dibenzo(a,i)pyrene	189-55-9	-								5
dibenzo(a,h)pyrene	189-64-0	-								5
dibenzo(a,l)pyrene	191-30-0	-								5
dibenzo(a,e)pyrene	192-65-4	-								5
Indeno(1,2,3-cd)pyrene	193-39-5	7.70E-06								5
benzo(j)fluoranthene	205-82-3	-								5
Benzo(b)fluoranthene	205-99-2	1.10E-04								5
Benzo(k)fluoranthene	207-08-9	4.51E-05								5
chrysene	218-01-9	1.98E-04								5
5-methylchrysene	3697-24-3	-								5
PAH TOTAL	50-32-8	0.00	0.22	1.15E-05	0.002	24 hr	ITSL	0.6%	PASS	5
			0.02	9.27E-07	0.001	annual	IRSL	0.1%	PASS	

A-compared to SL for Benzo(a)pyrene, which is conservative as Benzo(e)pyrene is not carcinogenic

B-compared to SL for benzo(g,h,i)perylene

C-compared to SL for zinc oxide

D-sum of all dioxins and furans, including totals, which is conservative. Used annual average emission rate for annual SL.

E-Used annual average emission rate for annual SL.

EGLE Referenced Footnotes

- The combined ambient impact of all petroleum hydrocarbon materials with Note #1 cannot exceed the ITSL of 3500 µg/m3 (8-hour average). If a chemical with this footnote has an ITSL other than 3,500 µg/m3, the ambient impact for that chemical also cannot exceed the chemical specific ITSL.
- The combined ambient impact of all forms of xylene with Note #2 cannot exceed the initial threshold screening level (ITSL) of 390 µg/m3 (annual average).
- The polycyclic aromatic hydrocarbons (PAHs) with this footnote are carcinogenic and have potency equivalency factors (PEFs) that quantitate their potency relative to that of benzo(a)pyrene (CAS# 50-32-8). Air emission mixtures of carcinogenic PAHs, including asphalt fumes, should be evaluated additively using these PEFs and the benzo(a)pyrene IRSL and SRSL. The ITSL for benzo(a)pyrene applies only to benzo(a)pyrene and none of the other PAHs.
- Besides the assessment of mercury ambient air impacts in comparison to the ITSLs, larger individual sources of mercury emissions undergoing permit review (e.g., greater than 5 to 10 lbs/yr) may be evaluated on a case-by-case basis
- This chemical has two ITSLs with different averaging times. Ambient air impacts cannot exceed either ITSL. Both ITSLs also apply for determinations of permit to install exemptions under R 336.1290 (Rule 290).
- The combined ambient impact of butane (CAS# 106-97-8) and isobutane (CAS# 75-28-5) should be evaluated together so that the combined impact does not exceed a hazard index value of one.
- The ITSL for manganese is 0.3 µg/m3 with an annual averaging time. This ITSL is most appropriately applied to PM10-Mn or PM2.5-Mn data rather than TSP-Mn data. This ITSL applies to "manganese and manganese compounds," therefore emissions of multiple forms of manganese must be accounted for additively to ensure that the combined ambient air impact does not exceed the manganese ITSL. This ITSL applies to ambient air impacts of the manganese atom, therefore the emissions and modeled impacts of various manganese compounds may be molecular weight-adjusted to the equivalent emission rate and ambient air impact of the manganese alone. Please note that potassium permanganate (CAS# 7722-64-7) also has a short-term ITSL = 0.6 µg/m3 (8 hour averaging time).
- The Chemical Abstract Service number (CAS#) has been changed to 12185-10-3. Since the original number 7723-14-0, is still used by many organizations, it is listed as the primary CAS#.
- With regards to the health-based screening levels for tetrachlorodibenzo(p)dioxin (CAS# 1746-01-6), Rule 336.1225(6)(a) states that all polychlorinated dibenzodioxins and dibenzofurans shall be considered as one toxic air contaminant, expressed as an equivalent concentration of 2,3,7,8-tetrachlorodibenzo(p)dioxin based on the relative potency of the isomers emitted from the emission unit or units. The current toxic equivalency factors (TEFs) for use are those recommended by the World Health Organization (WHO, 2005), as provided in: Van den Berg, M. et al., 2006. The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds. Toxicological Sciences 93(2): 223-241.
- The combined ambient impact of all selenium and inorganic selenium compounds with the CAS# 7446-08-4, 7446-34-6, 7488-56-4, 7783-00-8, 10102-18-8, and 13410-01-0 cannot exceed 2 µg/m3 (8-hour averaging time).
- The combined ambient impact of all barium and soluble barium compounds with the CAS# 543-80-6, 1304-28-5, 10022-31-8, 10361-37-2, 10553-31-8, 13477-00-4, 13718-50-8, 17194-00-2, and 21109-95-5 cannot exceed 5 µg/m3 (8-hour averaging time).

Appendix 1

Appendix 1 - Particulate Emissions

Air Permit to Install

Ajax Materials, Genesee Twp, Michigan

Plant Capacity Rating	=	500	TPH	
Amount of Aggregate	=	473	TPH	
Amount of Asphalt Cement	=	27	TPH	Average AC Content 5.35%
Yearly Production Limitation	=	887,562	TPY	
Density of Oil	=	7.40	Lbs/gal	
Oil Fuel Use	=	2.5	Gals/ton HMA Produced (#2 rounded up)	
Specific Volume of H ₂ O	=	26.799	ft ³ /lb @ 212 °F	
Moisture Content	=	5.00	%	Manufacturer's maximum moisture content
Baghouse Temperature	=	300	°F	
Baghouse Fan Rating	=	100,000	ACFM	
NSPS PM Limit	=	0.04	Grain/DSCF	

$$\begin{aligned} \text{Specific Volume of H}_2\text{O} &= \frac{[(\text{Specific Volume of H}_2\text{O}) \times (\text{Baghouse Temperature} + 460)]}{(212 + 460)} \\ &= \left[\frac{26.80 \times (300 + 460)}{(212 + 460)} \right] \\ &= 30.31 \text{ ft}^3/\text{lb @ } 249 \text{ }^\circ\text{F} \end{aligned}$$

$$\begin{aligned} \text{Amount of H}_2\text{O in Exhaust Gas} &= (\text{Moisture Content}/100) \times (\text{Amount of Aggregate} - \text{TPH}) \times (2000 \text{ Lbs}/\text{Ton}) \\ &= \left(\frac{5.00}{100} \right) \times (473 \text{ TPH}) \times (2000 \text{ lbs}/\text{ton}) \\ &= 47,300 \text{ PPH} \\ &= 788.33 \text{ Lbs./Min.} \end{aligned}$$

Total Volume of H₂O in Exhaust

$$\begin{aligned} \text{Gases} &= (\text{Amount of Aggregate}) \times (\text{Specific Volume of H}_2\text{O}) \\ &= (788.33 \text{ lbs}/\text{min}) \times (30.31 \text{ ft}^3/\text{lb}) \\ &= 23,893 \text{ ft}^3/\text{min} \end{aligned}$$

Exhaust Gas Flow Rate

$$\begin{aligned} (\text{ACFM} - \text{dry}) &= (\text{Fan Rating}) - (\text{Volume of H}_2\text{O}) \\ &= (100,000 \text{ ACFM}) - (23,893 \text{ ACFM}) \\ &= 76,107 \text{ ACFM} \end{aligned}$$

$$\begin{aligned} \text{Exhaust Gas Flow Rate (DSCFM)} &= \frac{[(\text{Exhaust Gas Flow Rate ACFM dry}) \times (70 \text{ }^\circ\text{F} + 460)]}{(300 \text{ }^\circ\text{F} + 460)} \\ &= \left[\frac{76,107 \text{ ACFM} \times (70 \text{ }^\circ\text{F} + 460)}{(300 \text{ }^\circ\text{F} + 460)} \right] \\ &= 53,075 \text{ DSCFM} \end{aligned}$$

Allowed Hourly Particulate

$$\begin{aligned} \text{Emissions} &= (\text{NSPS PM Limit}) \times (\text{Exhaust Gas Flow Rate DSCFM}) \times (1 \text{ lb}/7000 \text{ grains}) \times (60 \text{ mins}/\text{hr}) \\ &= (0.04 \text{ grain}/\text{DSCFM}) \times (53,075 \text{ DSCFM}) \times (1 \text{ lb}/7,000 \text{ grains}) \times (60 \text{ mins}/\text{hr}) \\ &= 18.20 \text{ Lbs}/\text{Hr} \end{aligned}$$

*Emission factor for H₂SO₄ is based on prior permitting modeling results

Particulate Emission Factor

$$(\text{Lbs}/\text{Ton HMA}) = \frac{(\text{Allowed Hourly Particulate Emissions})}{\text{Plant Capacity Rating}}$$

$$\begin{aligned} &= \frac{18.20 \text{ Lbs}/\text{Hr}}{500 \text{ Tons HMA}/\text{Hr}} \\ &= 0.04 \text{ Lbs}/\text{Ton HMA} \end{aligned}$$

Requested Allowed Annual

$$\begin{aligned} \text{Particulate Emissions} &= \text{Particulate Emission Factor (Lbs}/\text{Ton HMA}) \times \text{Yearly Production Limitation} \\ &= 0.036 \text{ Lbs}/\text{Ton HMA} \times 887,562 \text{ Tons HMA}/\text{Yr} \\ &= 32,302 \text{ Lbs}/\text{Yr} \\ &= 16.2 \text{ Tons}/\text{Yr} \end{aligned}$$

Appendix 2

Appendix 2 - Hydrogen Chloride Emissions
 Air Permit to Install
 Ajax Materials, Genesee Twp, Michigan

Rated Dryer Capacity	=	500	TPH
Yearly Production Limitation	=	887,562	TPY
Density of Oil	=	7.40	Lbs/gal
Maximum Halogen Content	=	1.00E-03	Lb/lb
Annual Average Halogen Content	=	1.00E-03	Lb/lb
Oil Fuel Use	=	2.5	Gals/ton HMA Produced (#2 rounded up)
Maximum Potential Oil Usage	=	1,250	Gal/hr
Molecular Weight of Chlorine	=	35.45	Moles
Molecular Weight of Hydrogen	=	1.01	Moles

Hydrogen Chloride Emission Calculations

$$\begin{aligned}
 \text{Total Chlorine Emissions} &= \text{Oil Usage (Gal/hr)} \times \text{Density of Oil (Lb/gal)} \times \text{Halogen Content (lb/lb)} \\
 &= 1,250 \text{ gal/hr} \times 7.4 \text{ lb/gal} \times 0.0010 \text{ lb halogen/lb oil} \\
 &= 9.25 \text{ lb/hr (based on 4000 ppm oil)} \\
 &= 1,250 \text{ gal/hr} \times 7.4 \text{ lb/gal} \times 0.00100 \text{ lb halogen/lb oil} \\
 &= 9.25 \text{ lb/hr (based on 3450 ppm oil)}
 \end{aligned}$$

$$\begin{aligned}
 \text{HCl Emission Factor} &= \frac{(\text{Molecular Weight of Chlorine} + \text{Molecular Weight of Hydrogen})}{\text{Molecular Weight of Chlorine}} \\
 &= \frac{(35.5 + 1.01)}{35.5} \\
 &= 1.03 \text{ lb HCl/lb Cl}
 \end{aligned}$$

$$\begin{aligned}
 \text{Maximum Potential HCl Emissions} &= \text{Total Chlorine Emissions (lbs/hr)} \times \text{HCl Emission Factor} \\
 &= 9.25 \text{ lbs Cl/hr} \times 1.03 \text{ lb HCl/lb Cl} \\
 &= 9.51 \text{ lbs/hr (based on 1000 ppm oil)}
 \end{aligned}$$

$$\begin{aligned}
 \text{HCl Emission Factor} &= \frac{\text{Maximum Potential HCl Emissions (lbs/hr)}}{\text{Rated Dryer Capacity (tons/hr)}} \\
 &= \frac{9.51 \text{ lbs/hr}}{500 \text{ tons HMA/hr}} \\
 &= 0.0190 \text{ lb HCl/ton HMA Produced (based on 1000 ppm oil)}
 \end{aligned}$$

Expected reduction in the theoretical HCl emission rate of 61%.

$$\begin{aligned}
 \text{Expected HCl Emission Factor} &= \text{HCl Emission Factor} \times (1 - \text{stack test reduction}) \\
 &= 0.019 \times (1 - 0.61) \\
 &= 0.0074 \text{ lb HCl/ton HMA Produced (based on 1000 ppm oil)}
 \end{aligned}$$

Appendix 3

Appendix 3 - EGLE Additional Source and Background Concentration Data
 Air Permit to Install
 Ajax Materials, Genesee Twp, Michigan

Year	NO2 Lansing		PM-10 Grand Rapids	PM-2.5 Flint		SO2 Grand Rapids			
	1-hr 98th pctl	Annual Avg	24-hr Max	24-hr 98th pctl	Annual Avg	1-hr 99th pctl	3-hr Max	24-hr Max	Annual Avg
2017	36.4	6.5	34.0	16.8	7.10	4.0	3.0	1.5	0.38
2018	29.9	6.5	31.0	16.9	7.33	4.4	3.9	1.1	0.12
2019	44.1	6.4	104.0	17.5	6.81	3.9	3.1	0.9	0.39
	36.8	6.5		17.1	7.1	4.1	3.9	1.5	0.39
	ppb	ppb		ug/m3	ug/m3	ppb	ppb	ppb	ppb

NAAQS MODELING BACKGROUND SUMMARY

NO2		PM-10	PM-2.5		SO2			
69.2	12.2	35.0	17.1	7.1	10.7	10.2	3.9	1.0
ug/m3	ug/m3	ug/m3 (3-yr 4th High)	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3

SRN	COMPANY	POL	Facility Emissions		SOURCE	UTM EAST	UTM NORTH	Local X Coord (meters)	Local Y Coord (meters)	Source Dist. (km)	Stack Information					
			(lb/hr)	(tpy)							Hgt. (ft)	Dia (inches)	Temp (deg F)	Flow (ACFM)	Velocity (m/s)	Discharge Type
N3570	GENESEE POWER STATION LIMITED PARTNERSHIP	SO2	4.80	21.00	NAAQS	282,650	4,773,500	-578	405	0.7	220.0	94.0	337.0	199833	21.08	Vertical
						282,670	4,773,725									

Appendix 4

Appendix 4 is provided on the enclosed flash drive in the *original* EGLE copy only.

Kelly VanMarter

From: Laura Murphy-Rizk <lauramurphy-rizk@outlook.com>
Sent: Thursday, December 2, 2021 10:29 AM
To: Bill Rogers; Polly; Robin Hunt; Jean Ledford; Jim Mortensen; Terry Croft; Diana Lowe; Kelly VanMarter
Cc: diabrizk@outlook.com
Subject: Vote No: Rezoning for Capital Asphalt

Good morning:

My name is Laura Murphy-Rizk, and I live at 426 Natanna DR. I urgently request that you vote NO on Monday, December for the request to rezone. As a Genoa Township resident, I do not support allowing Capital Asphalt to open a plant. The impact to home values, health, environment, and safety would be greatly impacted by this rezoning.

Sincerely,
Laura Murphy-Rizk

Laura Murphy-Rizk, PHR
Phone – 269.303.3925
Email – lauramurphy-rizk@outlook.com
[Click Here to View my LinkedIn Profile](#)

Bill, do not to approve the rezoning from IND to a PID overlay district!

Anna Nummy <anna.nummy@gmail.com>

Mon 11/29/2021 10:00 AM

To: Bill Rogers <Bill@genoa.org>;

Dear Genoa Township board member,

I recently became aware that the Township Planning Commission had an approval recommendation for the rezoning of an area on the north side of I-96 about 1 mile west of Latson to allow the build of an asphalt plant. I'm writing to you today to tell you to reject this rezoning. **As a township resident located within 10 miles of this proposed plant, my health, and the health of my family including 3 young children, would be directly affected by pollution from this plant.**

Sources of emissions from Asphalt Plants are neither regulated nor monitored, and they can release more than 300 tons of toxic air emissions annually. Shockingly, pollutants that are released from a facility are estimated by computers and mathematical formulas rather than by actual stack testing. These flawed tests underestimate health risks.

Did you know that according to the National Institute for Occupational Safety and Health, asphalt fumes are considered occupational carcinogens? Here are some facts for you to consider:

- The federal Environmental Protection Agency (EPA) states that Asphalt Fumes are known toxins.
- Even if an asphalt plant meets all air pollution standards, people living nearby are still exposed to cancer-causing substances that can cause long-term damage (DHHS).
- Stagnant air and local weather patterns often increase the level of exposure to local communities (downwind, low-lying and lake areas are most greatly affected).

Here's a list of just seven deadly emissions that come from asphalt plants:

- Hydrogen sulfide (H₂S)
- Benzene (C₆H₆)
- Chromium (Cr) (VI)
- Formaldehyde (CH₂O)
- Polycyclic Aromatic Hydrocarbons (PAHS)
- Cadmium (Cd)
- Arsenic (As) -inorganic

Of just these seven, and there are hundreds of others, one is considered a toxin, three are cancer causing, and three are considered *both* toxins and cancer causing.

Both spills and atmospheric deposition are causes of pollution. While safety measures can be put in place to minimize spills, they can still happen. More importantly, *there are no safety measures that can be put in place to completely control atmospheric deposition. This guarantees toxic cancer-causing pollution that myself and my children will be breathing.* While it's not my main concern, a plant like this would also negatively affect property values, no one wants to live near toxic waste.

Once again, I am writing to instruct you not to approve the rezoning from Industrial District (IND) to a Planned Industrial Development (PID) overlay district. Do not allow a known health hazard in our community.

Sincerely,
Anna Nummy

From: [Bill Rogers](#)
To: [Amy Ruthig](#)
Subject: Fw: asphalt plant concerns
Date: Monday, November 29, 2021 2:56:09 PM
Attachments: [asphalt.pdf.pdf](#)
[asphalt PP.pptx](#)

From: John Palmer <johnpalmer1955@yahoo.com>
Sent: Tuesday, November 23, 2021 7:37 AM
To: Bill Rogers
Subject: asphalt plant concerns

Bill, I was made aware the format of the attachment I sent to you may not be compatible to open.

I have attached the same document in different formats so that if you had this problem you will be able to access it.

thanks again

john palmer

Did You Know?

Did You Know?

Capital Asphalt wants to build an asphalt plant in your backyard



Did You Know?

That adding an asphalt plant to this location increases traffic in the area to as many as 75 of these...



per
DAY!

Did You Know?

What comes out of an Asphalt Plant?

Sources of emissions from Asphalt Plants are neither regulated nor monitored, and depending on the size of the asphalt operation, can release **300+ tons** of toxic air emissions annually.

Flawed Tests Underestimate Health Risks - pollutants that are released from a facility are estimated by computers and mathematical formulas rather than by actual stack testing

Did You Know?

- According to the National Institute for Occupational Safety and Health: *asphalt fumes are considered occupational carcinogens*
- The federal Environmental Protection Agency (EPA) states that, *Asphalt Fumes are Known Toxins*
- Even if an asphalt plant meets all air pollution standards, *people living nearby are still exposed to cancer-causing substances that can cause long-term damage* (DHHS)
- Stagnant air and local weather patterns often increase the level of exposure to local communities (downwind, low-lying and lake areas are most greatly affected)

Did You Know?

About the 7 Deadly Fugitive
Emissions that come from
Asphalt Plants

Hydrogen sulfide (H₂S)

- Hydrogen sulfide (after leaving the smokestack) remains in the air for about 18 hrs.
- Exposures to hydrogen sulfide may result in:
 - respiratory distress
 - pulmonary edema
 - nervous system depression
 - cardiovascular effects
 - tissue hypoxia
 - neurobehavioral effects (headaches, lack of coordination, confusion, depression, tension, trouble concentrating)



Benzene (C₆H₆)

- Benzene enters the body through the lungs, gastrointestinal tract, and through the skin
- Benzene is a known carcinogen or cancer-causing agent
- Brief exposure (5-10 minutes) to high levels of benzene in air can result in death
- Benzene exposure can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness
- Benzene can pass from the mother's blood to a developing fetus
- Studies with pregnant animals show that breathing benzene has harmful effects on the developing fetus



Chromium (Cr) (VI)

- Chromium is a known carcinogen
- Breathing chromium(VI) can cause irritation such as runny nose, nosebleeds, and ulcers and holes in the nasal septum
- Ingesting large amounts of chromium(VI) can cause stomach upsets and ulcers, convulsions, kidney and liver damage, and even death
- Skin contact with chromium(VI) compounds can cause skin ulcers
- Some people are extremely sensitive to chromium(VI) and suffer severe anaphylactic (allergic) reactions



Formaldehyde (CH₂O)

- Formaldehyde is a human carcinogen or cancer-causing agent
- Formaldehyde is an eye, skin, and respiratory tract irritant
- Inhalation of vapors can produce narrowing of the bronchi and accumulation of fluid in the lungs
- Children are more susceptible than adults to the respiratory effects of formaldehyde
- Even low concentrations of formaldehyde can produce nose and throat irritation, chest pain, shortness of breath, and wheezing
- Higher exposures can cause inflammation and accumulation of fluid in the lungs (chemical pneumonia)



Polycyclic Aromatic Hydrocarbons (PAHS)

- PAHs are expected to cause cancer
- PAHs have caused cancer in laboratory animals when they breathed air containing them (lung cancer), ingested them in food (stomach cancer) or had them applied to their skin (skin cancer)
- PAHs are found in air attached to dust particles, and can enter water through *fallout of fugitive emissions or accidental discharges* from industrial plants where they can move through soil to contaminate groundwater (wells)



Cadmium (Cd)

- Breathing air with high levels of cadmium can severely damage the lungs and may cause death
- Breathing air with lower levels of cadmium over long periods of time (for years) results in kidney disease, lung damage and fragile bones
- Studies show that rats that breathed in cadmium developed lung cancer, liver damage and changes in the immune system
- Female rats and mice that breathed high levels of cadmium had fewer litters, babies with more birth defects than usual, reduced fetal body weight and babies born with behavioral problems and learning disabilities



Arsenic (As) -inorganic

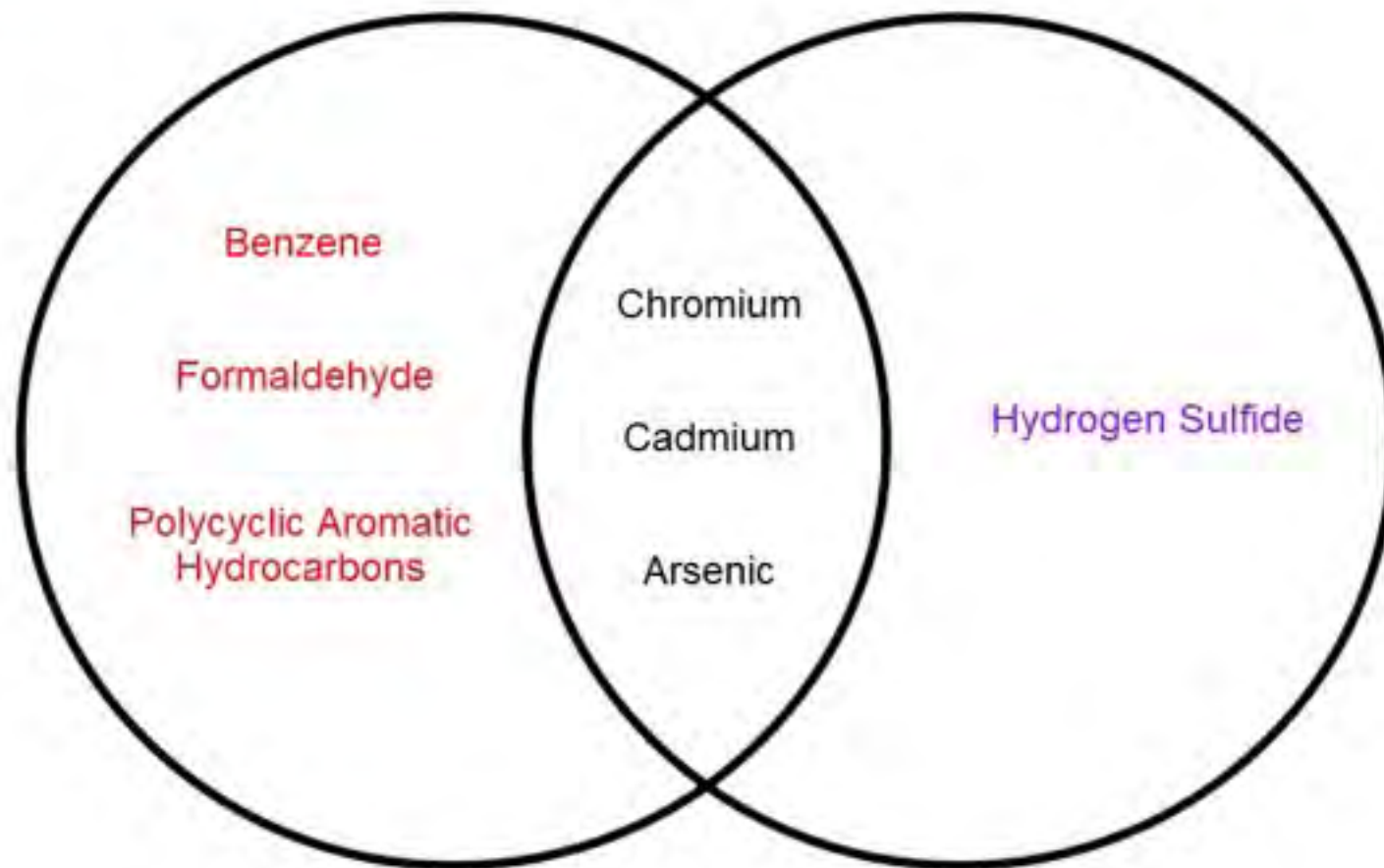
- Breathing high levels of inorganic arsenic will result in a sore throat, irritated lungs and the potential to develop lung cancer
- People who live near sites emitting inorganic arsenic have an increased risk of lung cancer
- Children may be more susceptible to health effects from inorganic arsenic than adults
- There is evidence that long-term exposure to inorganic arsenic in children may result in lower IQ scores



Cancer-causing Agent

BOTH

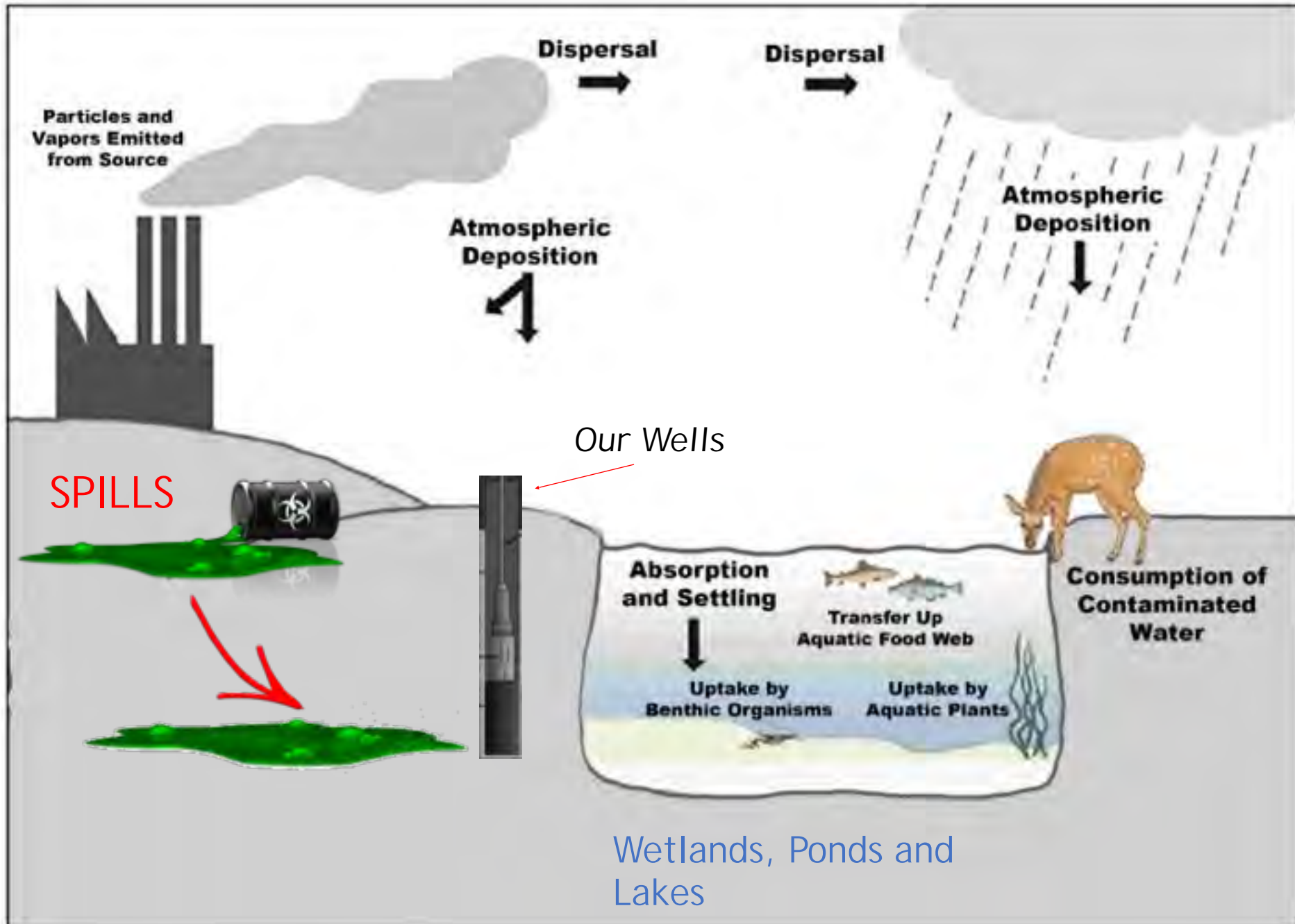
Toxin



Did You Know?

The (2) Ways These
Contaminants Get Into Our
Environment?

SPIILLS and ATMOSPHERIC DEPOSITION



*ALL toxicological information has been
extracted from:*

[Agency for Toxic Substances and Disease Registry](#)

Final Thought:

A property value study documented losses of up to 56% because of the presence of a nearby asphalt plant

-study performed by [BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE](#)

From: [Erin Stirling](#)
To: [Mike Archinal](#); [Kelly VanMarter](#); [Amy Ruthig](#); [Kathleen Murphy](#)
Subject: PLEASE DO NOT APPROVE THE ASPHALT PLANT
Date: Wednesday, December 1, 2021 2:40:05 PM

Hello,

My family and I are residents of Howell (Marion Township) and we live off of Peavy Rd. My husband is a Howell native, he has lived here his entire life. We have many relatives nearby as well. I am writing this email to ask you to **PLEASE vote AGAINST** the addition of this dangerous and harmful plant. This facility was rejected by other townships, why are we considering it here? We have a 9 month old daughter and we plan to have more children. There are many children that live in our neighborhood and surrounding neighborhoods that don't deserve the toxicity that this plant will cause. How could we possibly be okay with adding this facility that has the potential to cause cancer and contaminate our water and air? It is proven that an asphalt plant such as this one has this potential. **Ultimately, it will lead to a decrease in our home values and decrease the tax base for our city.** From every standpoint, it is not a good idea. **I am asking you to please vote no and keep our community safe.** Keep it a safe place for our children. We already have so many other issues and life obstacles to face living through this pandemic, please, please do us some good here.

Thank you,
Erin McDonald

From: [Bill Rogers](#)
To: [Amy Ruthig](#)
Subject: Fw: Proposed Asphalt Plant - Taylor
Date: Monday, November 29, 2021 2:56:56 PM

From: Douglas Taylor <taysag3@sbcglobal.net>
Sent: Monday, November 29, 2021 12:30 PM
To: Mike Archinal
Cc: Bill Rogers; Polly; Robin Hunt; Jean Ledford; Terry Croft; Diana Lowe; Jim Mortensen
Subject: Proposed Asphalt Plant - Taylor

Mr. Archinal:

I write as a concerned area resident. Odors from asphalt plants do not confine themselves to Township borders. And odors are always a by-product of asphalt production. Depending on wind direction/speed these odors can extend for miles, encompassing residential and business districts far beyond the plant's immediate environment. The Township may enjoy the revenue of a new business, but this could be, in this asphalt manufacturing business, at the expense of [quality of life](#) and property values of, and fresh air in, its and adjoining established residential and business communities.

That a business's proposal advanced in zoning reviews does not make it "right" for the community. And here I mean. not only the Genoa Township community, but also the whole geographic area around and up and down-wind of this proposed site. It is reported that two other Townships (Tyrone and Hamburg) have rejected this proposed asphalt plant locating within their jurisdiction. Genoa isn't, then, even a first or second choice ... just a softer touch target?

The welcome of potentially 30 new jobs for this plant (many likely not to be filled by Genoa residents) should not be the determinant for approval. Nor does the simple availability of a site for such a plant (without an immediate alternative use) suggest approval should be given. The offsetting negatives for all of us in the immediate and adjoining vicinity would be significant.

Genoa Township is not a poor entity struggling for added revenue from any source. I hope that the Genoa Township Board will vote for the community and not just for a business wanting entry – a business that can be injurious for all.

Douglas Taylor
Brighton Township

P.S. The October 12 minutes re this issue said that the asphalt company (Net Least Associates South ?) would address any odor problem should it occur (a “remedy could be put in place”); but the minutes did not mention what the company’s “how” would be; nor did it mention what timing of a fix would be put in place when needed or any further detail – “trust me” is not a business/municipality option these days. And if such an option exists, why would it not have been included in the original plan by the asphalt company (its strategy to go “least expensively” if possible) or be demanded by the Planning Board or any subsequent Township review/approval group before such approval to proceed would be given? Seems like an error or omission by the Planning Board.

From: Adam VanTassell
Sent: Wednesday, December 1, 2021 9:04 AM
To: Mike Archinal <Mike@genoa.org>
Subject: FW: Asphalt Plant

From: jim barton <jcrango@hotmail.com>
Sent: Tuesday, November 30, 2021 4:49 PM
To: info <info@genoa.org>
Subject: Asphalt Plant

To Genoa Twp Officials,

Please don't allow the proposed asphalt plant. The smell in asphalt is benzine. Benzin causes cancer. It caused my Lukemia.

James Barton
800 Pathway
Howell MI 48843
248-922-4942

Genoa Township Board,

As a physician and voting property owner in Genoa Township, I am shocked that this Board would even consider permitting an asphalt plant to be built in Genoa Township. Asphalt plants contaminate our air, lakes, groundwater, and even our bodies, with over 300 known toxic chemicals. These chemicals include arsenic, benzene, cadmium, and formaldehyde, to name a few. The EPA states “asphalt fumes are a known toxin”. According to the National Institute for Occupational Safety and Health, “asphalt fumes are considered an occupational carcinogen”.

A study of property values documented losses of up to 56%, because of the presence of a nearby asphalt plant, according to the Blue Ridge Environmental Defense League. A decrease in property values would not only affect Genoa’s bottom line, but the investment of many of Genoa Township’s taxpayers.

Many of us moved here to enjoy the fresh air, beautiful lakes, and green spaces. Please do not contribute to the devastation of our beautiful township and the health of its citizens, lakes, woods, and wildlife,, by allowing an asphalt plant to be built in Genoa township.

Regards,
Dr. Donnie Beasley Bettles
3430 Pineridge Ln
Brighton, MI 48116

From: [Mike Archinal](#)
To: ht1956@aol.com
Cc: [Jim Mortensen](#); [tcroft](#); [JeanLedford](#); [Diana Lowe](#); [Bill Rogers](#); [Robin Hunt](#); [Polly](#); [Kelly VanMarter](#)
Subject: FW: I live 1/4 mile West of Victory Road
Date: Thursday, December 2, 2021 12:03:50 PM

Ms. Book,

Thank you for your comments regarding the proposed Capital Asphalt project. I have forwarded your email to the Township Board of Trustees.

Best regards,

Michael Archinal, AICP
Township Manager
Genoa Charter Township
2911 Dorr Road
Brighton MI, 48116
mike@genoa.org

From: beth book <ht1956@aol.com>
Sent: Wednesday, December 1, 2021 6:33 PM
To: Mike Archinal <Mike@genoa.org>
Subject: I live 1/4 mile West of Victory Road

Mr. Archinal,
I would like to thank you ahead of time for reading this very important report below;

In a North Carolina study by the Blue Ridge Environmental Defense League (BREDL), **45% of residents!!** living within a half mile of a new asphalt plant **reported a deterioration of their health, which began after the plant opened!!**

Reported losses of up to 56% on property values!

I ask you to consider the above and vote **NO on the proposed asphalt company.**

I live in the Lakeshore Apartments located a 1/4 mile west of Victory Drive. (I will have to move if my health will be compromised.)

Thank you, Beth Book
616-481-1467

Sent from my iPhone

Please VOTE NO on proposed asphalt plant

Claudia Capos <capocomm@sbcglobal.net>

Wed 12/1/2021 11:09 AM

To: Mike Archinal <Mike@genoa.org>;

Cc: Polly <pskolarus@genoa.org>; Robin Hunt <Robin@genoa.org>; Jean Ledford <Jean@genoa.org>; Terry Croft <Terry@genoa.org>;
Diana Lowe <diana@genoa.org>; Jim Mortensen <Jim@genoa.org>; Bill Rogers <Bill@genoa.org>;

Dear Mr. Archinal and board members,

I am writing to you as a long-time Livingston County resident and school supporter to express my concern about the possible deleterious health impacts on area schoolchildren, teachers and staff if a proposed asphalt plant is allowed to be constructed on the outskirts of Howell.

The toxic pollution and possible water contamination from such a plant would be a blight on the Howell-Brighton residential community and pose a danger to all residents, including the most vulnerable -- our children and the elderly. The site's proximity to Walmart, Cleary University, shopping centers, restaurants, and new housing developments would be detrimental to local businesses and an important educational institution.

The dust and fumes could travel for miles in every direction once they became airborne. Residents' lives, health, and property values would be hard-hit by the pollution. Two other townships (Hamburg and Tyrone) have already rejected this proposed plant in their jurisdiction.

I urge you to VOTE NO on the proposal for this asphalt plant and to keep our community safe and livable.

Thank you.

Sincerely,

Claudia Capos

Request

Shannon Douglas <shandouglas19@gmail.com>

Tue 11/30/2021 9:45 AM

To Bill Rogers <Bill@genoa.org>; Polly <pskolarus@genoa.org>; Robin Hunt <Robin@genoa.org>; Jean Ledford <Jean@genoa.org>; Jim Mortensen <Jim@genoa.org>; Terry Croft <Terry@genoa.org>; Diana Lowe <diana@genoa.org>;

Good morning Genoa Township leaders,

I was unable to attend the board meeting yesterday to voice my concern and strong opposition to the proposal of an asphalt plant being placed in our community. In allowing this to be approved it will negatively impact our air quality and inevitably our health. Please make the right decision for ourselves and our children and deny this request.

Sincerely
Shannon Douglas
Concerned Genoa Township resident

Request to introduce proposed rezoning ordinance number Z-21-02 and to set the meeting date for the purpose of considering the proposed ordinance for adoption before the Township Board on Monday, December 6th, 2021. The properties proposed for rezoning are located on the east side of Victory Drive, north and south of Toddiem Drive involving parcels 4711-08-100-009 and 4711-05-303-015. The request is petitioned by Net Lease Associates to be rezoned from Industrial (IND) to Planned Industrial Development (PID).

Sent from my iPhone

Kelly VanMarter

From: Paula Gomez <paula.k.gomez@outlook.com>
Sent: Thursday, December 2, 2021 11:52 AM
To: Bill Rogers; Polly; Robin Hunt; Jean Ledford; Jim Mortensen; Terry Croft; Diana Lowe; Kelly VanMarter
Subject: NO to the Asphalt plant

As a concerned Genoa township resident, I am writing to voice my concern over the proposal for the Asphalt plant to be built near my home.

I cannot attend the 12/6 meeting but please take this into consideration.

Thanks
Paula Gomez
1094 Chemung Drive, Howell.

From: [Mike Archinal](#)
To: rgriewsk@comcast.net
Cc: [Jim Mortensen](#); [JeanLedford](#); [tcroft](#); [Diana Lowe](#); [Bill Rogers](#); [Robin Hunt](#); [Polly](#); [Kelly VanMarter](#)
Subject: FW: Asphalt Factory is a NO NO NO.
Date: Thursday, December 2, 2021 12:01:59 PM

Mr. Griewski,

Thank you for your comments regarding the proposed Capital Asphalt project. I have forwarded your email to the Township Board of Trustees.

Best regards,

Michael Archinal, AICP
Township Manager
Genoa Charter Township
2911 Dorr Road
Brighton MI, 48116
mike@genoa.org

From: Rgriewsk <rgriewsk@comcast.net>
Sent: Thursday, December 2, 2021 8:23 AM
To: Mike Archinal <Mike@genoa.org>
Cc: Richard Griewski <rgriewsk@comcast.net>; Claudia Capos <capocomm@sbcglobal.net>; Douglas Taylor <taysag3@sbcglobal.net>
Subject: Asphalt Factory is a NO NO NO.

Why Do we have to go through this! NO is a no brainer! Asphalt in town?!

The smell and the cost of short and term damage to Grand River avenue from the heavy trucks is enough about NO.

Down river Detroit can be our learning example.

I can already hear the trains and smell enough from Howell light industry cross Thompson lake. This will trash properly values.

Please find alternative site!

Thanks

Please don't approve the TOXIC asphalt plant!!!

Barbara Hierholzer <barbiehier@yahoo.com>

Tue 11/30/2021 9:50 AM

To Bill Rogers <Bill@genoa.org>; Polly <pskolarus@genoa.org>; Robin Hunt <Robin@genoa.org>; Jean Ledford <Jean@genoa.org>; Jim Mortensen <Jim@genoa.org>; Terry Croft <Terry@genoa.org>; Diana Lowe <diana@genoa.org>;

Dear Board members,

Please, do not allow the township (and surrounding areas!) to be ruined and poisoned by approving the proposal from Capital Asphalt!

I can not imagine or believe that this would even be under serious consideration by any of the township board. It is absolutely ridiculous! WHO would want this type of smelly, loud and toxic industrial plant right in people's back yards, right next to Cleary University, businesses and restaurants? The TOXIC fumes coming from such a plant would be enough to drive away residents (if they could even sell their homes) and would discourage businesses and customers from shopping in the area. How would any of you like to have something like this in your backyard?

THINK about this, ACT on behalf of the RESIDENTS whom you represent and DENY this company from building in this location. This type of company should not be located near homes! Absolutely ridiculous that this has even made it this far in the planning process.

Do not allow the township to become a toxic dump. Your community deserves better!

Barbara Hierholzer
Howell resident

Opposition to proposed asphalt plant

keith_kramer@aol.com

Tue 11/30/2021 1:47 PM

To Bill Rogers <Bill@genoa.org>;

I would like to register my opposition to the proposed asphalt plant and expect you as a representative to vote no on this plant.

Keith Kramer
4039 Aster Blvd
Howell, MI 48843
517-540-6092

From: [Mike Archinal](#)
To: [Jim Mortensen](#); [tcroft](#); [JeanLedford](#); [Diana Lowe](#); [Bill Rogers](#); [Robin Hunt](#); [Polly](#); [Kelly VanMarter](#)
Subject: FW: Capital Asphalt rezoning
Date: Thursday, December 2, 2021 11:53:50 AM

With attachment.

From: Adam VanTassell
Sent: Thursday, December 2, 2021 10:52 AM
To: Mike Archinal <Mike@genoa.org>
Subject: FW: Capital Asphalt rezoning

From: Mike Kupfer <mike.kupfer@gmail.com>
Sent: Thursday, December 2, 2021 10:41 AM
To: info <info@genoa.org>
Subject: Capital Asphalt rezoning

Please find attached a sunset photo of my peice of paradise in Genoa township. This is lake Chemung located about a half a mile from the Genoa Township municipal center and less than two miles east of the proposed site for Capital Asphalt . We love living in Genoa Township with its open fresh air and beautiful sunsets ,we often walk our dog in the Genoa Park next your offices. I am asking that you do not change any zoning ordinances allowing this company to build a factory in our area we do not want to live with the pollution and oder this facility would bring.

I have discovered Capital Asphalt has had several violations with the EPA in the past and do not care about our clean air and natural resources. Please do not rezone for this company.

Thank you

Mike Kupfer



Re: December 6th Meeting_Capital Gas

Bruce Macey <bgmii@yahoo.com>

Tue 11/30/2021 9:56 AM

To: Dawn <dcondon@comcast.net>;

Cc: Bill Rogers <Bill@genoa.org>; Polly <pskolarus@genoa.org>; Robin Hunt <Robin@genoa.org>; Jean Ledford <Jean@genoa.org>; Jim Mortensen <Jim@genoa.org>; Terry Croft <Terry@genoa.org>; Diana Lowe <diana@genoa.org>; Kelly VanMarter <Kelly@genoa.org>;

Nicely written Dawn, thank you.

Sent from my iPad

On Nov 30, 2021, at 8:58 AM, Dawn <dcondon@comcast.net> wrote:

Good morning,

I am president of our HOA Board for Rolling Ridge I, a resident as well as owning another home (both residences within 1.5-2 miles of this proposed location.) I as well as some of our residents will be in attendance for the December 6th meeting, however wanted to have this research report recorded. I do understand we are further along in the process than Tyrone was at the completion of their report but the documentation and effects remain the same. As it was completed less than a year ago, within our county and Capital Gas was also the proposed site occupier, the research and information were completed by environmental consultants in the asphalt industry, toxicologists and engineers.

Livingston County already has several asphalt plants operating at less than 50% capacity. The demand does not warrant another location within the county, especially our township. If you have passed by their location in Lansing in warm months, you are very aware of the odors emitted. The difference between Lansing and our location is that it is in an industrial area near an auto plant. This asphalt plant can decrease our home values, create toxic fumes as well as increase the traffic in an area already that already has several accidents.

Unfortunately, during the planning meeting, my kids contracted Covid and I could not attend, I obviously deeply regret this after seeing it was approved. I am concerned that this was approved without extreme research into the effects of running such a plant. Hopefully after reading the attached report, you will understand negative effects allowing Capital to move into our township. While I understand the existing business technically isn't any better for our community, they are not emitting toxic fumes endangering our residents/families.

Thank you for taking the time to read my correspondence as well as the research report.

Regards,

Dawn Condon

3466 Snowden Lane

Howell, MI 48843

<04-15-21_Proposed_Rezoning_and_Construction_of_a_Hot-Mix_Asphalt+Plant_An_Overview_of+Relevant_Risks_v1.0.pdf>

Asphalt plant

Joyce Matevia <jmatevia@hotmail.com>

Tue 11/30/2021 11:23 PM

To: Bill Rogers <Bill@genoa.org>;

Hi Bill, this is from Jerry and Joyce Matevia, think you might know us 😊 Just wanted to add our plea to so many others to not allow this asphalt plant into Genoa. Living on Lake Chemung and seeing the changes that have happened even since we had our house built in 2000, we cannot afford to have something so capable of adding even more pollution to the area. You and your family have always taken care to work with the land and not be intrusive on the land. We are in Florida and will not be able to attend the Board Meeting to discuss this matter. Please forward this email as our protest to allowing the asphalt plant to whoever should receive it.

Thank you.

Sent from Mail for Windows

Polly

From: Rob McColl <rob.mccoll.1964@gmail.com>
Sent: Wednesday, November 24, 2021 11:29 AM
To: Polly
Subject: Victory Lane proposed Asphalt Plant vote in December 6th meeting

Hi Polly,

I became aware of this request and topic for the next board meeting. Is this really the case? My subdivision does not support this and wondered if we could send an email to you in request to deny of this proposed zone change.

Regards,

rob

Sent from [Mail](#) for Windows

Proposed Asphalt Plant

COLLEEN QUINN <cquinn4042@comcast.net>

Mon 11/29/2021 8:17 PM

To: Bill Rogers <Bill@genoa.org>; Polly <pskolarus@genoa.org>; Robin Hunt <Robin@genoa.org>; Jean Ledford <Jean@genoa.org>; Jim Mortensen <Jim@genoa.org>; Terry Croft <Terry@genoa.org>; Diana Lowe <diana@genoa.org>;

We just became aware that the Genoa Township Planning Commission has approved and recommended the rezoning of an area on the north side of I-96 about 1 mile west of Latson to allow the build of an asphalt plant. **This will have an adverse effect on the health of residents and the environment within at least 10 miles.**

We are totally against this project and are shocked that you would entertain such a proposition. Our health is at stake. Tim has severe COPD so your project would directly impact his health. How would he be able to enjoy sitting on the patio when he would be subjecting himself to toxins? This project would also negatively impact house values. A property value study documented losses of up to 56% because of the presence of a nearby asphalt plant. Why would you turn our beautiful community into basically a junkyard full of toxins?

Tyrone Township and Hamburg have reportedly already rejected the rezoning proposed for this development in their jurisdiction due to the harm the asphalt plant would bring. They made the wise decision. There are Industrial zoning projects that would not be toxic to residents.

Below is information to support a **NO Vote** on this project:

According to the National Institute for Occupational Safety and Health: asphalt fumes are considered occupational carcinogens

- The federal Environmental Protection Agency (EPA) states that, Asphalt Fumes are Known Toxins
- Even if an asphalt plant meets all air pollution standards, people living nearby are still exposed to cancer-causing substances that can cause long-term damage (DHHS)
- Stagnant air and local weather patterns often increase the level of exposure to local communities (downwind, low-lying and lake areas are most greatly affected)

Did You Know What comes out of an Asphalt Plant?

Sources of emissions from Asphalt Plants are neither regulated nor monitored, and depending on the size of the asphalt operation, can release 300+ tons of toxic air emissions annually.

Flawed Tests Underestimate Health Risks - pollutants that are released from a facility are estimated by computers and mathematical formulas rather than by actual stack testing

Did You Know About the 7 Deadly Fugitive Emissions that come from Asphalt Plants?

Hydrogen sulfide (H₂S)

- Hydrogen sulfide (after leaving the smokestack) remains in the air for about 18

hrs.

- Exposures to hydrogen sulfide may result in:
 - respiratory distress
 - pulmonary edema
 - nervous system depression
 - cardiovascular effects
 - tissue hypoxia
 - neurobehavioral effects (headaches, lack of coordination, confusion, depression, tension, trouble concentrating)

Benzene (C₆H₆)

- Benzene enters the body through the lungs, gastrointestinal tract, and through the skin
- Benzene is a known carcinogen or cancer-causing agent
- Brief exposure (5-10 minutes) to high levels of benzene in air can result in death
- Benzene exposure can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness
- Benzene can pass from the mother's blood to a developing fetus
- Studies with pregnant animals show that breathing benzene has harmful effects on the developing fetus

Formaldehyde (CH₂O)

- Formaldehyde is a human carcinogen or cancer-causing agent
- Formaldehyde is an eye, skin, and respiratory tract irritant
- Inhalation of vapors can produce narrowing of the bronchi and accumulation of fluid in the lungs
- Children are more susceptible than adults to the respiratory effects of formaldehyde
- Even low concentrations of formaldehyde can produce nose and throat irritation, chest pain, shortness of breath, and wheezing
- Higher exposures can cause inflammation and accumulation of fluid in the lungs (chemical pneumonia)

Chromium (Cr) (VI)

- Chromium is a known carcinogen
- Breathing chromium(VI) can cause irritation such as runny nose, nosebleeds, and ulcers and holes in the nasal septum
- Ingesting large amounts of chromium(VI) can cause stomach upsets and ulcers, convulsions, kidney and liver damage, and even death
- Skin contact with chromium(VI) compounds can cause skin ulcers
- Some people are extremely sensitive to chromium(VI) and suffer severe anaphylactic (allergic) reactions

Polycyclic Aromatic Hydrocarbons (PAHS)

- PAHs are expected to cause cancer
- PAHs have caused cancer in laboratory animals when they breathed air containing them (lung cancer), ingested them in food (stomach cancer) or had them applied to their skin (skin cancer)
- PAHs are found in air attached to dust particles, and can enter water through fallout of fugitive emissions or accidental discharges from industrial plants where they can move through soil to contaminate groundwater (wells)

Cadmium (Cd)

- Breathing air with high levels of cadmium can severely damage the lungs and may cause death
- Breathing air with lower levels of cadmium over long periods of time (for years) results in kidney disease, lung damage and fragile bones
- Studies show that rats that breathed in cadmium developed lung cancer, liver damage and changes in the immune system
- Female rats and mice that breathed high levels of cadmium had fewer litters, babies with more birth defects than usual, reduced fetal body weight and babies born with behavioral problems and learning disabilities

Arsenic (As) -inorganic

- Breathing high levels of inorganic arsenic will result in a sore throat, irritated lungs and the potential to develop lung cancer
- People who live near sites emitting inorganic arsenic have an increased risk of lung cancer
- Children may be more susceptible to health effects from inorganic arsenic than adults
- There is evidence that long-term exposure to inorganic arsenic in children may result in lower IQ scores

**Did you know the (2) ways these Contaminants get into our environment?
SPILLS and ATMOSPHERIC DEPOSITION**

ALL toxicological information has been extracted from: Agency for Toxic Substances and Disease Registry

We hope you review all of this information and seriously consider our request to vote down this project. It saddens us to think that something serene and beautiful like the Padre Pio Chapel and Garden was voted down but a toxic industrial project could be in our backyards.

Please vote NO on this!

Sincerely,

Tim and Colleen Quinn
4042 Brookstone Ct.
Howell, MI 48843 Genoa Township

From: [Mike Archinal](#)
To: robred99@aol.com
Cc: [Jim Mortensen](#); [tcroft](#); [JeanLedford](#); [Diana Lowe](#); [Bill Rogers](#); [Robin Hunt](#); [Polly](#); [Kelly VanMarter](#)
Subject: FW: Against - proposed Asphalt plant requiring rezoning in Genoa Township
Date: Thursday, December 2, 2021 11:56:24 AM

Robin,

Thank you for your comments regarding the proposed Capital Asphalt project. I have forwarded your email to the Township Board of Trustees.

Best regards,

Michael Archinal, AICP
Township Manager
Genoa Charter Township
2911 Dorr Road
Brighton MI, 48116
mike@genoa.org

From: Adam VanTassell
Sent: Thursday, December 2, 2021 10:29 AM
To: Mike Archinal <Mike@genoa.org>
Subject: FW: Against - proposed Asphalt plant requiring rezoning in Genoa Township

From: Robin Redwine-Fischer <robred99@aol.com>
Sent: Thursday, December 2, 2021 10:14 AM
To: info <info@genoa.org>
Subject: Against - proposed Asphalt plant requiring rezoning in Genoa Township

Dear Board,

Please do not approve the request for the Asphalt company to build and operate in Genoa Township. This asphalt company will not add value to a community such as ours.

There are numerous of other already approved heavy industrial locations already available for operations such as this. The area does not have the zoning required and was set up as is for a reason.

This has been proposed in two other areas that are similar, smaller communities and those boards stood for the residents and it did not pass for multiple reasons. It is

concerning the company stated they will only meet minimum state requirements and depend on government monitoring. Has Genoa established local additional requirements to what the state requires to protect the local citizens and their health?

Please protect the citizens, schools and residential communities in and around Genoa Township.

Ultimately the members we elected to the Genoa Offices are accountable to and responsible for the safety and well being of current citizens, businesses, homes and schools of this community that are already here.

Thank you. We are depending on the people we voted for to protect the current community from those who have no other interest beyond finding a place to do business that is potentially harmful. Again, not zoned for such and should not be entertained to protect integrity of this overall community as a valued and high desirable Town and Country type setting.

Regards,
Robin and Patrick Fischer
5766 Long Pointe Drive
Howell MI 48843
810-623-2899

asphalt plant Genoa Twownship

Louise Simon <lts_1@yahoo.com>

Tue 11/30/2021 3:52 PM

To: Bill Rogers <Bill@genoa.org>; Polly <pskolarus@genoa.org>; Robin Hunt <Robin@genoa.org>; Jean Ledford <Jean@genoa.org>; Jim Mortensen <Jim@genoa.org>; Terry Croft <Terry@genoa.org>; Diana Lowe <diana@genoa.org>;

Dear Genoa Township board member,

I recently became aware that the Township Planning Commission had an approval recommendation for the rezoning of an area on the north side of I-96 about 1 mile west of Latson to allow the construction of an asphalt plant. I'm writing to you today to tell you to reject this rezoning. While I live outside of the 10 mile area near said site, my daughter, her husband and three grandsons all live only a few miles from the proposed site. This is a highly residential area which would expose many families with children to toxic fumes from such a plant. I am a Ph.D. with a degree in Immunology and have first-hand experience with components of asphalt and deisel emissions as a Postdoctoral Graduate working in Carcinogenesis and Toxicology at Michigan State University. Specifically, I did research on mutagenic (chemicals which cause changes in chromosome/gene composition and expression) and carcinogenic components found in asphalt and deisel emissions and their effects on human cells grown *in vitro* and on the Immune System in animal models. Components of asphalt are both mutagenic/carcinogenic and toxic to the immune system and human nerve cells, especially in children.

Sources of emissions from Asphalt Plants are neither regulated nor monitored, and they can release more than 300 tons of toxic air emissions annually. Shockingly, pollutants that are released from a facility are estimated by computers and mathematical formulas rather than by actual stack testing. These flawed tests underestimate health risks.

According to the National Institute for Occupational Safety and Health, **asphalt fumes are considered occupational carcinogens**. Here are some facts to consider:

- The federal Environmental Protection Agency (EPA) states that Asphalt Fumes are **known toxins**.
- Even if an asphalt plant meets all air pollution standards, people living nearby are still exposed to cancer-causing substances that can cause long-term damage (DHHS).
- Stagnant air and local weather patterns often increase the level of exposure to local communities (downwind, low-lying and lake areas are most greatly affected).

While there are many more components in asphalt, these seven deadly emissions from asphalt plants are especially toxic and/or carcinogenic:

- Hydrogen sulfide (H₂S) **extremely flammable and highly toxic**
- Benzene (C₆H₆) **Long-term exposure to high levels of benzene in the air can cause leukemia, cancer of the blood.**
- Chromium (Cr) (VI) inhaled, it **is a human carcinogen, resulting in an increased risk of lung cancer.**
- Formaldehyde (CH₂O) can **cause human cancer after prolonged exposure**
- Polycyclic Aromatic Hydrocarbons (PAHS) **is a toxin and carcinogen**
- Cadmium (Cd) **is a toxin and carcinogen**
- Arsenic (As) -inorganic **is a toxin and carcinogen**

Of just these seven (and there are hundreds of others) one is considered a toxin, three are cancer causing, and three are considered *both* toxins and cancer causing.

Both spills and atmospheric deposition are causes of pollution. While safety measures can be put in place to minimize spills, they can still happen. More importantly, *there are no safety measures that can be put in place to completely control atmospheric deposition. This guarantees toxic cancer-causing pollution* **those living nearby including my daughter and her family**. A plant like this would also negatively affect property values, since if residents nearby wished to sell, no one wants to live near toxic waste.

In conclusion, a highly residential area is the **WRONG PLACE** to build this asphalt plant. I am writing to instruct you not to approve the rezoning from Industrial District (IND) to a Planned Industrial Development (PID) overlay district. Do not allow a known health hazard in this community.

Sincerely,

Louise Simon Ph.D.

Asphalt Plant

Madelyn Thomas <netowlady@gmail.com>

Mon 11/29/2021 4:26 PM

To: Bill Rogers <Bill@genoa.org>; Polly <pskolarus@genoa.org>; Robin Hunt <Robin@genoa.org>; Jean Ledford <Jean@genoa.org>; Jim Mortensen <Jim@genoa.org>; Terry Croft <Terry@genoa.org>; Diana Lowe <diana@genoa.org>;

Good Afternoon,

Please vote against plans and rezoning to allow the construction of an asphalt plant in Genoa Township. I understand Hamburg and Tyrone Townships have rejected this idea for obvious reasons.

EPA studies show that these plants give off toxic fumes and gases that harm our health and environment. Regulation is by computer model only and not real actual measurements.

Please consider the safety of all residents in the area.

Thank you for your attention to this matter.

Madelyn Thomas
Brighton, MI

**Resolution No. 5A – Darlene Drive Road Improvement
Project (Winter 2021)**

GENOA CHARTER TOWNSHIP

At a regular meeting of the Township Board of the Genoa Charter Township, Livingston County, Michigan, (the “Township”) held at the Township Hall on December 6, 2021, at 6:30 p.m., there were

PRESENT:

ABSENT:

The following preamble and resolution were offered by and seconded by :

Resolution Confirming Special Assessment Roll

WHEREAS, the Board of Trustees of the Township approved a special assessment roll for the Darlene Drive Road Improvement Project (Winter 2021) within the Township on July 19, 2021 in accordance with Act No. 188, Michigan Public Acts of 1954, as amended;

WHEREAS, the Board of Trustees of the Township determined to advance the costs of the Project from Township funds and to use special assessments to raise the money necessary to reimburse the Township for the advance of such funds;

WHEREAS, the Special Assessment Roll for Darlene Drive Road Improvement Project was assessed on the Winter 2021 Tax Roll;

WHEREAS, the Township Board has now determined that the final cost of the project was \$30,558.00 less than estimated;

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Amended Roll Confirmed. In accordance with Act No. 188, Michigan Public Acts of 1954, as amended, and the laws of the State of Michigan, the Township Board hereby confirms the Amended Special Assessment Roll for the Darlene Drive Road Improvement Project (Winter 2021) (Exhibit A).

2. The Completed Road Improvement Project - Will now be amended with revised total assessments per parcel as shown in Exhibit B.

3. Future Installments - Interest. All unpaid installments shall bear 2% interest.

4. Warrant. The Township Clerk is hereby directed to attach a warrant (in the form of Exhibit C to this resolution) to the Roll and to deliver such warrant and the Roll to the Township Treasurer, who shall thereupon collect the special assessments in accordance with the terms of this resolution, the Clerk’s warrant and the statutes of the State of Michigan.

5. Refund. The Township Treasurer is directed to issue refunds to the current property owner of record for any parcels paid in full prior to this date in the amount of \$2,778.00.

5. Inconsistent Prior Resolutions. All previously adopted resolutions that are in conflict with this resolution are repealed to the extent of such conflict.

A vote on the foregoing resolution was taken and was as follows:

YES:

NO:

ABSENT:

CLERK'S CERTIFICATE

The undersigned, being the duly qualified and acting Clerk of the Township, hereby certifies that (1) the foregoing is a true and complete copy of a resolution duly adopted by the Township Board at the December 6, 2021 meeting of the Township Board, at which meeting a quorum was present and remained throughout; (2) the original thereof is on file in the records in the Township Manager's office and my office; (3) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended); and (4) minutes of such meeting were kept and will be or have been made available as required thereby.

Paulette A. Skolarus, Genoa Charter Township Clerk
Date: December 6, 2021

EXHIBIT A SPECIAL ASSESSMENT ROLL

Parcel Balances for GENOA TOWNSHIP

Population: Special Assessment District (X3184)
Spec. Population: Both Active and Inactive Parcels
All Payments Included
Current Installment Year: 2021

Parcel No. Owner	Assessment Code/Name	Assessment Amount	Assessment Cur Install	Tot Prin Pd Cur Prin Pd	Tot Intrst Pd Cur Intrst Pd	Tot Adm Pd Cur Adm Pd	Tot Pen Pd Cur Pen Pd	Tot Addtl Penlty Pd Cur Addtl Penlty Pd	Tot Cert Pd Cur Cert Pd	Tot Balance Cur Balance
4711-12-200-019 WILLIAMS SHANNON	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-004 SMITH SHAYNE & MIRANDA	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-005 PURDY MARC & DARLENE	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-006 RICHARDSON JEFFREY & EMID	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-007 HOSS DONNA M	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-008 LENFESTEY LINDA	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-009 EVELY THOMAS R & JUDITH	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-010 OKAMOTO WILLIAM & JUDY L	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-011 ALLOR KELLY	X3184 Darlene Road Improvem	3,494.72	0.00	6,272.72 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
4711-12-201-012 LOMREE INC	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
4711-12-201-013 SAYAGE, SUHAIL	X3184 Darlene Road Improvem	3,494.72	752.72	627.27 627.27	125.45 125.45	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	2,867.45 0.00
Totals For X3184 Darlene Road Improvement Unit 4711	Parcels: 11	38,441.92	7,527.20	12,545.42 6,272.70	1,254.50 1,254.50	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	28,674.50 0.00
Gr. Totals....	11	38,441.92	7,527.20	12,545.42 6,272.70	1,254.50 1,254.50	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	28,674.50 0.00

EXHIBIT B

DARLENE DRIVE ROAD IMPROVEMENT PROJECT (WINTER 2021)

**DESCRIPTION OF PROJECT
A TEN-YEAR SPECIAL ASSESSMENT DISTRICT
WITH PROJECTED COSTS AS FOLLOWS:**

- Total cost of the project: \$47,442.00
- Total parcels: 11
- Homeowners representing over 50% of property have signed petitions
- Total amount per parcel:

DARLENE ROAD 2021	
PROJECT COST	\$47,442
ADMIN.	\$2,000
TWP. CONTRIB.	(\$11,000)
TOTAL	\$38,442
INTEREST %	2
PROPERTIES	11

	YEAR	PAYMENT	TO INTEREST	TO PRINCIPAL	OUTSTANDING
1	2021	\$697.16	\$69.89	\$627.27	\$2,867.46
2	2022	\$375.96	\$57.35	\$318.61	\$2,548.85
3	2023	\$369.58	\$50.98	\$318.61	\$2,230.24
4	2024	\$363.21	\$44.60	\$318.61	\$1,911.64
5	2025	\$356.84	\$38.23	\$318.61	\$1,593.03
6	2026	\$350.47	\$31.86	\$318.61	\$1,274.43
7	2027	\$344.09	\$25.49	\$318.61	\$955.82
8	2028	\$337.72	\$19.12	\$318.61	\$637.21
9	2029	\$331.35	\$12.74	\$318.61	\$318.61
10	2030	\$324.98	\$6.37	\$318.61	\$0.00
		\$3,851.37	\$356.64	\$3,494.73	

The project (the “Project”) will consist of:

- Crush, shape and repave existing .135 mile roadway with 3.5 inches of 13A hot mix asphalt.
- Remove and replace driveway approaches to match new roadway elevation.
- Topsoil and seed along edge of existing roadway to blend into existing lawns.

Exhibit C

Warrant

WARRANT

TO: Treasurer
Genoa Township
Livingston County, Michigan

I certify that attached to this Warrant is a true copy of the special assessment roll for the Genoa Township Darlene Drive Road Improvement Project (Winter 2021) (the "Roll") confirmed by the Township Board on December 6, 2021 (the "Confirming Resolution"). You are hereby directed to proceed to collect the amounts due on such Roll in accordance with this Warrant, the Confirming Resolution and the statutes of the State of Michigan.

Paulette A. Skolarus
Genoa Charter Township Clerk

December 7, 2021

Darlene Drive Property Owner

RE: Darlene Drive Special Assessment District

Dear Sir or Madam,

I am pleased to inform you that the construction costs for your recently completed road improvement came in significantly lower than originally estimated. At a Regular Meeting of the Genoa Charter Township Board held on December 6, 2021, the Board approved a reduction to the Darlene Drive Road Improvement Special Assessment roll. The Engineer who provided the estimate assumed that extensive undercutting and base improvements would be necessary. They found that the base was in decent shape and that the road failure was primarily due to poor drainage. The original estimate was \$78,000. Construction was completed for a total of \$47,442.

The first payment for the assessment has already been levied on your December 2021 tax bill. This first levy was based on the estimate provided to you when petitions were signed and resolutions were passed by the Township Board. With the new construction total, payments for the remaining nine years will be reduced per the attached amortization schedule. For example, in 2022 the assessment payment will be reduced from \$740.18 to \$375.96.

If you have any questions please feel free to contact either myself or the Township Treasurer's office at 810.227.5225.

Best regards,

Michael Archinal, Township Manager

Memo

To: MIKE ARCHINAL
From: DUFFY ROJEWSKI
Date: 11/24/2021
Re: INTERGOVERNMENTAL AGREEMENT FOR COOPERATIVE PAID ASSESSMENT
INTERN, MENTORING & TRAINING

LIVINGSTON COUNTY ASSESSORS ASSOCIATION HAS BEEN WORKING ON THE ABOVE-MENTIONED PROGRAM WITH COUNTY EQUALIZATION TO MENTOR/TRAIN MCAT ASSESSORS AS INTERNS.

THE AGREEMENT CONSISTS OF HAVING AN INTERN FOR A 2 MONTH PERIOD, FOR 2 ½ DAYS PER WEEK AT \$15.00 AN HOUR.

THESE INTERNS WILL BE IN A PROGRAM WHERE THEY WILL BE WORKING FOR COUNTY EQ FOR 2 MONTHS A CITY FOR 2 MONTHS AND A TOWNSHIP FOR 2 MONTHS FOR A TOTAL OF A 6 MONTH TRAINING PROGRAM.

THE PLAN IS TO HOPEFULLY TRAIN 2 INTERNS PER YEAR TO HELP BUILD UP THE TALENT FOR FUTURE EMPLOYMENT FOR THE ASSESSING FIELD.

I HAVE ATTACHED THE AGREEMENT AND IF YOU HAVE ANY FURTHER QUESTIONS OR COMMENTS, PLEASE FEEL FREE TO CONTACT LAURA OR I FOR MORE INFORMATION.

THANK YOU!

**INTERGOVERNMENTAL AGREEMENT FOR COOPERATIVE
PAID ASSESSMENT INTERN, MENTORING AND TRAINING PROGRAM**

THIS INTERGOVERNMENTAL AGREEMENT FOR COOPERATIVE PAID ASSESSMENT INTERN, MENTORING AND TRAINING PROGRAM (hereinafter referred to as the “Agreement”) made and entered into on this ____ day of _____ 2021, by and between the **COUNTY OF LIVINGSTON**, a municipal corporation and political subdivision of the State of Michigan, (hereinafter referred to as the “County”), the **TOWNSHIPS OF _____** which are municipal corporations and political subdivisions of the State of Michigan, (hereinafter collectively referred to as the “Townships”) AND the **CITIES OF _____** which are municipal corporations and political subdivisions of the State of Michigan, (hereinafter collectively referred to as the “Cities”). The municipal corporations which are signatories to this Agreement are collectively referred to as the “Parties”.

WITNESSETH:

WHEREAS, the County, Townships and Cities desire to coordinate and implement a cooperative paid internship, mentoring and training program for qualified and newly certified Michigan Certified Assessing Technicians (“MCAT”) to train, mentor and otherwise assist in developing on the job working and professional development experiences for individuals seeking future permanent employment in the assessment administration field (the “Program”);

WHEREAS, the Parties desire to enter in to this Agreement to memorialize the Parties’ agreement in the selection of interns and other matters regarding administering the Program; the cooperative efforts by the Parties to work together meet the goals and objectives of the Program; and define the respective financial and contractual obligations with regards to the payment to the interns and allocation of liabilities.

NOW, THEREFORE, for and in consideration of the mutual covenants hereinafter contained, **IT IS HEREBY AGREED** as follows:

1. **Agreement Term.** This Agreement shall go into effect, and performance thereon shall commence, on the ____ day of _____ 2022 and shall continue for the terms of __ years or until terminated by a party – with our without cause -- upon 30 calendar days prior written notice before the expiration of the term.

2. **Responsibilities of the Parties.** The current intent is that the _____ Assessor’s Association will semiannually interview and select a candidate to participate in the Program. The Parties will schedule the Intern to intern with each Party on an at-will basis for not more than a six month cumulative duration, for not greater than 2.5 days per week equivalent, and subject to any reasonable requirements of the County, Townships, or Cities including, but not limited to execution by the participant in an Internship Agreement (the “Intern”).

During this six (6) month Program mentoring term, the County, Cities and Townships will provide the job working and professional development experiences to the Intern for the term approximates **two month** mentoring assignment at the location of the assigned mentoring Party.

The schedule for the Intern mentoring assignment shall be planned jointly by the Parties. Any changes in the schedule must be approved by all Parties to this Agreement prior to implementation of a new schedule.

During each two month term mentoring assignment, the assigned mentoring Party shall be solely responsible for payment to the intern in the gross sum of \$15.00 per hour (current), as well as any taxes or other deductions required by law.

The assigned mentoring Party shall both designate an individual who shall be available to the Intern to be a primary mentor and who is available answer all questions and assist in the implementation of the purposes of this Program. The Intern shall not displace regular employees of the assigned mentoring Party, but when assigned to the Party, work under the assigned mentoring Party's close observation. The assigned individual at the Party shall acquaint the Interns with the Party's rules, regulations, policies and expectations.

The assigned mentor Party, during the term of Intern's two month term mentoring assignment, shall maintain any and all liability or compensation insurance regarding the assignment of the Intern, shall maintain attendance records for the Intern; shall assure the safety of the Intern while under their supervision; and will provide the Intern with its rules, regulations, and policies that directly affect the interns placed at the Parties site. Each assigned mentoring Party here certifies that it will, as a term of this Agreement, contact the Michigan Municipal Risk Management Authority or the Party's individual insurer and confirm to its satisfaction that there is existing insurance coverages (including, but not limited to general liability and workers compensation) necessary to employ the paid Intern. The Comprehensive General Liability Insurance or its equivalent, shall provide coverage limits of at least \$1,000,000 per incident, \$3,000,000 aggregate, that covers its employees whenever the liability may exist. The other Parties to this Agreement may require proof of insurance be provided.

The County will be responsible for providing the administrative and coordination support for the operational elements of the Program. Each Party shall cooperate with the other Parties to plan, coordinate and implement the elements and expectations of the Program so as to maximize the job working and professional development experiences of the Intern.

3. **Early Termination of the Intern Mentoring Assignment or Termination From the Program.** During the term of Intern's two month term mentoring assignment, the assigned and scheduled mentoring Party shall retain the absolute authority, in its sole discretion, to terminate the Intern's placement or assignment with that Party, with or without cause but with notice to both the Intern and other Parties to this Agreement.

If an assigned and scheduled mentoring Party is considering terminating the Intern's placement or assignment is encouraged to inform the other Parties immediately if an issue develops that potentially affects the Intern's continued placement. The other Party's may elect to, but are not required to, place the Intern with another Party for the remaining duration of the mentoring Party's scheduled term; or the Parties may elect, in their sole discretion, to terminate the Intern from the remainder of the Program term.

4. **Liability.** All liability, loss, or damage as a result of claims, demands, costs, or judgements arising out of activities of the County will be the sole responsibility of the County and not the responsibility of the Townships or Cities. All liability, loss, or damage as a result of claims, demands, costs, or judgements arising out of activities of the Cities will be the sole responsibility of the Cities and not the responsibility of the County or Townships. All liability, loss, or damage as a result of claims, demands, costs, or judgements arising out of activities of the Townships will be the sole responsibility of the Townships and not the responsibility of the County or Cities. Nothing herein will be construed as a waiver of any governmental immunity, as provided by statute or modified by court decisions, by the County, Cities or Townships, or each Party's respective agencies, elected or appointed officers, and employees.

5. **Nondiscrimination.** The Parties hereto, as required by law, shall not discriminate against a person to be served or an employee or applicant for employment or for participation in the Program because of race, color, religion, national origin, age, sex, disability that is unrelated to the individual's ability to perform the duties of a particular job or position, height, weight, marital status, political affiliation or beliefs, or any other classification protected by law. Breach of this covenant shall be regarded as a material breach of this Agreement.

6. **Compliance with the Law.** The parties hereto mutually agree to comply with all applicable Federal, State and local laws, ordinances, rules and regulations in performing their obligations pursuant to the Agreement.

7. **No Third Party Beneficiary.** This Agreement is intended solely for the mutual benefit of the Parties hereto, and there is no intention, express or otherwise, to create any rights or interests for any party or person other than the County, Cities and Townships who are parties to the Agreement. Without limiting the generality of the foregoing, no rights are intended to be created for any Intern or prospective Intern, parent or guardian of any Intern or prospective Intern, employer or prospective employer of any Intern.

8. **Sole Conduct.** In the performance of their respective duties and obligations under this Agreement, the County and each Township and City are independent contractors, and neither is the agent, employee or servant of the other, and each is responsible for only its sole conduct.

9. **Venue.** This Agreement is governed by Michigan Law. Any and all suits for any breach of this Agreement may be instituted and maintained in any court of competent jurisdiction in the State of Michigan pursuant to applicable statutes and court rules.

10. **Waivers.** No failure or delay on the part of any of the parties to this Agreement in exercising any right, power or privilege hereinunder shall operate as a waiver thereof, nor shall a single or partial exercise of any right, power or privilege.

11. **Modification of Agreement.** Modifications, amendments, or waivers of any provision of this Agreement may be made only by the written mutual consent of the parties hereto.

12. **Assignment or Subcontracting.** The Parties to the Agreement may not assign, subcontractor or otherwise transfer their duties and/or obligations under this Agreement.

13. **Disregarding Titles.** The titles of the sections set for this Agreement are inserted for the convenience of reference only and shall not be disregarded when construing or interpreting any of the provisions of this Agreement.

14. **Completeness of this Agreement.** This Agreement contains all the terms and conditions agreed upon by the parties hereto, and no other agreements, oral or otherwise, regarding the subject matter of this Agreement or any part thereof, shall have any validity or binding any of the parties hereto.

15. **Invalid Provisions.** If any provision of this Agreement is held to be invalid, it shall be considered to be deleted and the remainder of this Agreement shall not be affected thereby. Where the deletion of the invalid provision would result in the illegality and/or unenforceability of the Agreement, this Agreement shall be considered to have terminated as of the date on which the provision was declared invalid.

16. **Certification of Authority to Sign Agreement.** The person signing on behalf of the parties hereto certifies by their signatures that they are duly authorized to sign this Agreement on behalf of said parties and that said parties have authorized this Agreement.

[Signature page to follow]

IN WITNESS THEREOF, the authorized representatives of the parties hereto have fully signed this Agreement on the day and year first above written.

**COUNTY OF LIVINGSTON
BOARD OF COMMISSIONERS**

, Chairperson

Date

TOWNSHIP

Date

, Department

Board Correspondence



To Board 12/66/21

November 11, 2021

Ms. Polly Skolarus, Clerk
Township of Genoa
2911 Dorr Rd.
Brighton, MI 48116

RE: Important Information—Price Changes

Dear Ms. Skolarus,

At Comcast, we are always committed to delivering the entertainment and services that matter most to our customers in Genoa, as well as exciting experiences they won't find anywhere else. We are also focused on making our network stronger in order to meet our customers' current needs and future demands. As we continue to invest in our network, products, and services, the cost of doing business rises. Rising programming costs, most notably for broadcast TV and sports, continue to be the biggest factors driving price increases. While we absorb some of these costs, these fee increases affect service pricing. As a result, starting January 1, 2022, prices for certain services and fees will be increasing, including the Broadcast TV Fee and the Regional Sports Network Fee. Please see the enclosed Customer Notice for more information.

We know you may have questions about these changes. Please feel free to contact me at 734-359-2308 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Kyle V. Mazurek".

Kyle V. Mazurek
Manager of External Affairs
Comcast, Heartland Region
41112 Concept Drive
Plymouth, MI 48170

Enclosure

Important information regarding your Xfinity services and pricing

Effective January 1, 2022

Xfinity TV	Current	New
Digital Starter	\$62.45	\$65.45
Entertainment	\$15.00	\$17.00
Choice TV Select	\$30.00	\$32.50
Choice TV Select - - with TV Box (Flex upgrade)	\$37.50	\$41.00
Broadcast TV Fee	\$14.85	\$14.80
Regional Sports Fee	\$9.10	\$9.50
Service to Additional TV	\$7.50	\$8.50

Xfinity Internet	Current	New
Connect	\$56.00	\$59.00
Connect More	\$76.00	\$79.00
Fast	\$86.00	\$89.00
Superfast	\$96.00	\$99.00
Ultrafast	\$106.00	\$109.00
Gigabit Extra	\$116.00	\$119.00

Xfinity Equipment	Current	New
TV Box	\$7.50	\$8.50

Brighton, Brighton Township, Genoa Township, Green Oak Township, Howell, Oceola Township

85291000 (2270, 2280, 2290, 2300, 2310, 2320)

P407AH22

Polly

From: Anna Nummy <anna.nummy@gmail.com>
Sent: Monday, November 29, 2021 9:54 AM
To: Polly
Subject: Polly, do not to approve the rezoning from IND to a PID overlay district!

Dear Genoa Township board member,

I recently became aware that the Township Planning Commission had an approval recommendation for the rezoning of an area on the north side of I-96 about 1 mile west of Latson to allow the build of an asphalt plant. I'm writing to you today to tell you to reject this rezoning. **As a township resident located within 10 miles of this proposed plant, my health, and the health of my family including 3 young children, would be directly affected by pollution from this plant.**

Sources of emissions from Asphalt Plants are neither regulated nor monitored, and they can release more than 300 tons of toxic air emissions annually. Shockingly, pollutants that are released from a facility are estimated by computers and mathematical formulas rather than by actual stack testing. These flawed tests underestimate health risks.

Did you know that according to the National Institute for Occupational Safety and Health, asphalt fumes are considered occupational carcinogens? Here are some facts for you to consider:

- The federal Environmental Protection Agency (EPA) states that Asphalt Fumes are known toxins.
- Even if an asphalt plant meets all air pollution standards, people living nearby are still exposed to cancer-causing substances that can cause long-term damage (DHHS).
- Stagnant air and local weather patterns often increase the level of exposure to local communities (downwind, low-lying and lake areas are most greatly affected).

Here's a list of just seven deadly emissions that come from asphalt plants:

- Hydrogen sulfide (H₂S)
- Benzene (C₆H₆)
- Chromium (Cr) (VI)
- Formaldehyde (CH₂O)
- Polycyclic Aromatic Hydrocarbons (PAHS)
- Cadmium (Cd)
- Arsenic (As) -inorganic

Of just these seven, and there are hundreds of others, one is considered a toxin, three are cancer causing, and three are considered *both* toxins and cancer causing.

Both spills and atmospheric deposition are causes of pollution. While safety measures can be put in place to minimize spills, they can still happen. More importantly, *there are no safety measures that can be put in place to completely control atmospheric deposition. This guarantees toxic cancer-causing pollution that myself and my children will be breathing.* While it's not my main concern, a plant like this would also negatively affect property values, no one wants to live near toxic waste.

Once again, I am writing to instruct you not to approve the rezoning from Industrial District (IND) to a Planned Industrial Development (PID) overlay district. Do not allow a known health hazard in our community.

Sincerely,
Anna Nummy



Livingston County Department of Planning

2022 MEETING SCHEDULE LIVINGSTON COUNTY PLANNING COMMISSION

Livingston County Planning Commission meetings are held at 6:30 p.m. on the third Wednesday of every month. The meeting location is:

Kathleen J. Kline-Hudson
AICP, PEM
Director

Livingston County Administration Building
304 E. Grand River Avenue, Howell, Michigan
Board of Commissioner's Chambers (Upper Floor)

Robert A. Stanford
AICP, PEM
Principal Planner

Please note that County Planning Commissioners and County Planning staff currently meet in-person in the County Board meeting chambers noted above. Audience participants are welcome to attend in-person or via Zoom (the Zoom link is included on all meeting agendas).

Scott Barb
AICP, PEM
Principal Planner

Livingston County will provide necessary and reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed material being considered at the meeting, to individuals with disabilities at the meeting/hearing upon a ten day notice to the Department of Planning. Any questions or concerns should be directed to the County Planning Department office: Telephone (517) 546-7555.

Meeting Date	Deadline Date for Receipt of Amendments (2 weeks prior to meeting date)
January 19, 2022	January 5, 2022
February 16, 2022	February 2, 2022
March 16, 2022	March 2, 2022
April 20, 2022	April 6, 2022
May 18, 2022	May 4, 2022
June 15, 2022	June 1, 2022
July 20, 2022	July 6, 2022
August 17, 2022	August 3, 2022
September 21, 2022	September 7, 2022
October 19, 2022	October 5, 2022
November 16, 2022	November 2, 2022
December 21, 2022	December 7, 2022

Department Information

Administration Building
304 E. Grand River Avenue
Suite 206
Howell, MI 48843-2323

•
(517) 546-7555
Fax (517) 552-2347

•
Web Site
livgov.com

Michigan Department of Treasury
4886 (Rev. 09-21)


City, Village, and Township Revenue Sharing and County Incentive Program Certification

Issued under authority of 2021 Public Act 87. Filing is mandatory to qualify for payments.

Each city/village/township/county applying for City, Village, and Township Revenue Sharing or County Incentive Program payments must:

1. Certify to the Michigan Department of Treasury (Treasury) that the local unit listed below has produced and made available to the public a Citizen's Guide, a Performance Dashboard, a Debt Service Report, and a Projected Budget Report as required by 2021 Public Act 87. The local unit must include in any mailing of general information to its citizens, the Internet website address or the physical location where all the documents are available for public viewing in the clerk's office.
2. Submit to Treasury a Citizen's Guide, a Performance Dashboard, a Debt Service Report, and a Projected Budget Report.

This certification, along with a Citizen's Guide, a Performance Dashboard, a Debt Service Report, and a Projected Budget Report, **must be received by December 1, 2021**, (or the first day of a payment month) in order to qualify for that month's payment. Postmark dates will not be considered. For questions, call 517-335-7484.

PART 1: LOCAL UNIT INFORMATION			
Local Unit Name THE CHARTER TOWNSHIP OF GENOA		Local Unit County Name LIVINGSTON	
Local Unit Code 47-1050		Contact E-Mail Address info@genoa.org	
Contact Name ROBIN HUNT	Contact Title TREASURER	Contact Telephone Number (810) 227-5225	Extension
Website Address, if reports are available online https://www.genoa.org		Current Fiscal Year End Date 3/31/2022	
PART 2: CITIZEN'S GUIDE			
Check any of the following that apply:			
<input type="checkbox"/> The local unit has elected to use Treasury's online Citizen's Guide to comply with the legislative requirements. Therefore, a copy of the Citizen's Guide will not be submitted to Treasury.			
<input type="checkbox"/> The local unit does not have any unfunded liabilities (pensions or other postemployment benefits (OPEB)).			
PART 3: CERTIFICATION			
<i>In accordance with 2021 Public Act 87, the undersigned hereby certifies to Treasury that the above mentioned local unit 1) has produced a Citizen's Guide, a Performance Dashboard, a Debt Service Report, and a Projected Budget Report and 2) will include in any mailing of general information to our citizens, the Internet website address or the physical location where all the documents are available for public viewing in the clerk's office. The Citizen's Guide, Performance Dashboard, Debt Service Report, and Projected Budget Report are attached to this signed certification, unless otherwise noted in Part 2.</i>			
Chief Administrative Officer Signature (as defined in MCL 141.422b) 		Printed Name of Chief Administrative Officer (as defined in MCL 141.422b) MICHAEL ARCHINAL	
Title TOWNSHIP MANAGER		Date 11/04/2021	

Completed and signed form (including required attachments) should be e-mailed to: **TreasRevenueSharing@michigan.gov**. If you are unable to submit via e-mail, fax to 517-335-3298 or mail the completed form and required attachments to:

Michigan Department of Treasury
Revenue Sharing and Grants Division
PO Box 30722
Lansing MI 48909

TREASURY USE ONLY		
CVTRS/CIP Eligible Y N	Certification Received	Citizen's Guide Received
Performance Dashboard Received	Debt Service Report Received	Projected Budget Report Received
Final Certification	CVTRS/CIP Notes	

Performance Dashboard

Local Unit Name: The Charter Township of Genoa	
Local Unit Code: 47-1050	

	2020	2021	Trend	Performance
Fiscal Stability				
Annual Governmental Funds' expenditures per capita	\$409	\$397	→ -2.9%	Neutral
Fund Balance as % of annual Governmental Funds' expenditures	122.8%	132.5%	↑ 8.0%	Positive
Net pension liability, as a % of annual Government Funds' revenue	0.976%	0.951%	→ -2.5%	Neutral
Debt burden per capita	\$281	\$248	↓ -11.8%	Positive
Number of services delivered via cooperative venture	9	9	→ 0.0%	Neutral
Economic Strength				
% of community with access to high speed broadband	100%	100%	→ 0.0%	Neutral
% of community age 25+ with Bachelor's degree or higher	40%	41%	→ 3.5%	Neutral
Average age of critical infrastructure (years)	12.4	13.0	→ 4.9%	Neutral
Public Safety				
Violent crimes against people per thousand	4.7	4.9	→ 3.7%	Neutral
Property crimes per thousand	15.0	15.8	↑ 5.0%	Negative
Traffic injuries or fatalities	90.0	50.0	↓ -44.4%	Positive
Quality of Life				
Miles of sidewalks and non-motorized paths/trails as a factor of total miles of local/major roads & streets	13.00%	14.00% 13.00%	→ 0.0%	Neutral
Ratio of Parks and Recreation Expenditures to Governmental Funds' Revenue	5.16%	7.20%	↑ 39.5%	Positive
Percent of community being provided with curbside recycling	100%	100%	→ 0.0%	Neutral

Projected Budget Report

Local Unit Name: Local Unit Code: Current Fiscal Year End Date: Fund Name:	Charter Township of Genoa - Livingston County, MI 47-1050 3/31/2022 General
---	---

	Fiscal Year 3/31/2022 Budget	Percentage Change	Projected Fiscal Year 3/31/2023 Budget	Assumptions
REVENUES	\$ 4,758,000	2.00 %	\$ 4,853,160	Estimated increases in taxable value and population and miscellaneous known facts about individual accounts are used to project the fiscal year 2023 budget.
EXPENDITURES	\$ 3,796,533	2.00 %	\$ 3,872,464	
Excess of revenues over (under) expenditures	\$ 961,467		\$ 980,696	
Other Financing Sources (Uses)				
Transfers in	\$ -	- %	\$ -	
Transfers (out)	\$ (1,700,000)	2.00 %	\$ (1,734,000)	
Net change in fund balance	\$ (738,533)		\$ (753,304)	
Fund balance at beginning of year	\$ 3,277,884		\$ 2,539,351	
Fund balance at end of year	\$ 2,539,351		\$ 1,786,047	

Commentary:

Debt Service Report

Local Unit Name: Charter Township of Genoa - Livingston County, MI
Local Unit Code: 47-1050
Current Fiscal Year End Date: 3/31/2022

Debt Name: Bond Premium on Oak Pointe Sewer System project, Series 2014
Issuance Date: 8/7/2014
Issuance Amount: \$91,360
Debt Instrument (or Type): Bond
Repayment Source(s): Special assessments

Years Ending	Premium Amortization	Bond Premium Balance
3/31/2022	\$ 4,153	\$ 59,521
3/31/2023	\$ 4,153	\$ 55,368
3/31/2024	\$ 4,153	\$ 51,215
3/31/2025	\$ 4,153	\$ 47,062
3/31/2026	\$ 4,153	\$ 42,909
3/31/2027	\$ 4,153	\$ 38,756
3/31/2028	\$ 4,153	\$ 34,603
3/31/2029	\$ 4,153	\$ 30,450
3/31/2030	\$ 4,153	\$ 26,297
3/31/2031	\$ 4,153	\$ 22,144
3/31/2032	\$ 4,153	\$ 17,991
3/31/2033	\$ 4,153	\$ 13,838
3/31/2034	\$ 4,153	\$ 9,685
3/31/2035	\$ 4,153	\$ 5,532
3/31/2036	\$ 4,153	\$ 1,379
3/31/2037	\$ 1,379	\$ -
Totals	\$ 63,674	

Commentary:
 Original bond premium of \$91,360 is being amortized over 22 years.

Debt Service Report

Local Unit Name: Charter Township of Genoa - Livingston County, MI
Local Unit Code: 47-1050
Current Fiscal Year End Date: 3/31/2022

Debt Name: 2001 Dorr Road Water and Sewer Improvement Project
Issuance Date: 10/1/2001
Issuance Amount: \$770,000
Debt Instrument (or Type): Bond
Repayment Source(s): Special assessments

<u>Years Ending</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
3/31/2022	\$ 45,000	\$ 1,125	\$ 46,125
Totals	\$ 45,000	\$ 1,125	\$ 46,125

Commentary:
 Interest rate: 4% - 5%

Debt Service Report

Local Unit Name: Charter Township of Genoa - Livingston County, MI
Local Unit Code: 47-1050
Current Fiscal Year End Date: 3/31/2022

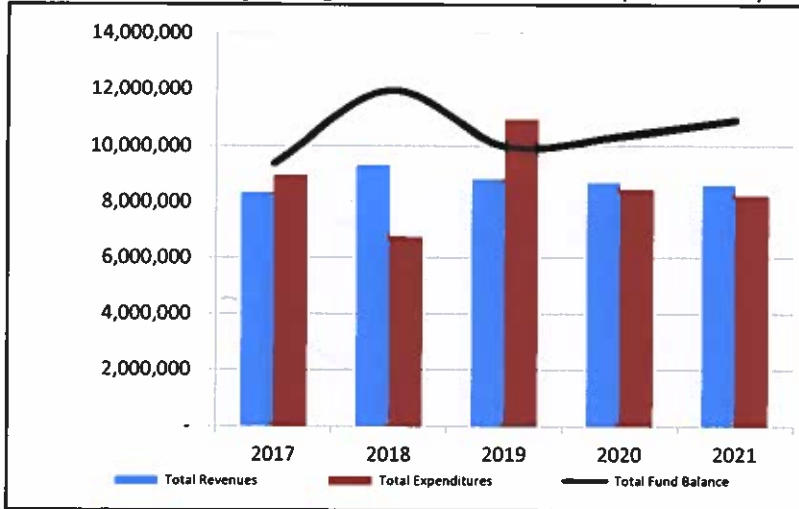
Debt Name: Oak Pointe Sewer System project, Series 2014
Issuance Date: 8/7/2014
Issuance Amount: \$6,000,000
Debt Instrument (or Type): Bond
Repayment Source(s): Special assessments

<u>Years Ending</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
3/31/2022	\$ 230,000	\$ 169,025	\$ 399,025
3/31/2023	\$ 240,000	\$ 164,425	\$ 404,425
3/31/2024	\$ 250,000	\$ 157,225	\$ 407,225
3/31/2025	\$ 260,000	\$ 149,725	\$ 409,725
3/31/2026	\$ 270,000	\$ 141,925	\$ 411,925
3/31/2027	\$ 280,000	\$ 133,925	\$ 413,925
3/31/2028	\$ 290,000	\$ 125,425	\$ 415,425
3/31/2029	\$ 300,000	\$ 116,725	\$ 416,725
3/31/2030	\$ 315,000	\$ 107,725	\$ 422,725
3/31/2031	\$ 325,000	\$ 97,488	\$ 422,488
3/31/2032	\$ 335,000	\$ 86,925	\$ 421,925
3/31/2033	\$ 350,000	\$ 75,200	\$ 425,200
3/31/2034	\$ 365,000	\$ 61,200	\$ 426,200
3/31/2035	\$ 375,000	\$ 46,600	\$ 421,600
3/31/2036	\$ 390,000	\$ 31,600	\$ 421,600
3/31/2037	\$ 400,000	\$ 16,000	\$ 416,000
Totals	\$ 4,975,000	\$ 1,681,138	\$ 6,656,138

Commentary:
 Interest rate: 2% - 4%

CITIZENS' GUIDE TO LOCAL UNIT FINANCES - Genoa Township - Livingston

1. How have we managed our governmental fund resources (fund balance)

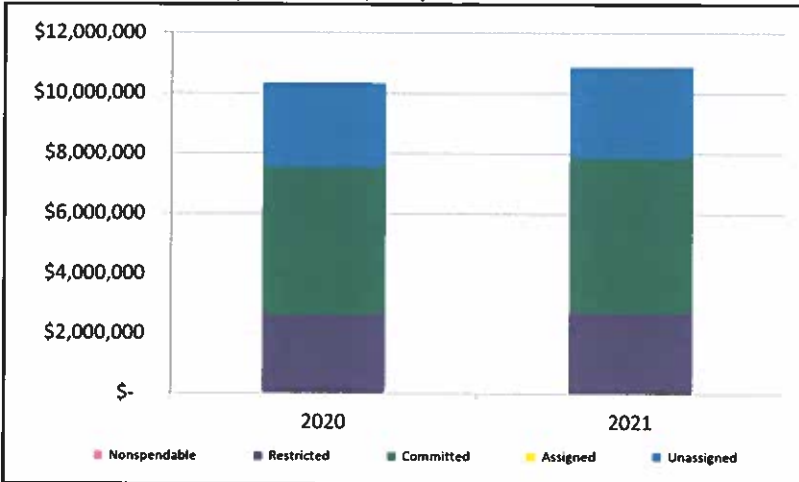


2. Compared to the prior year

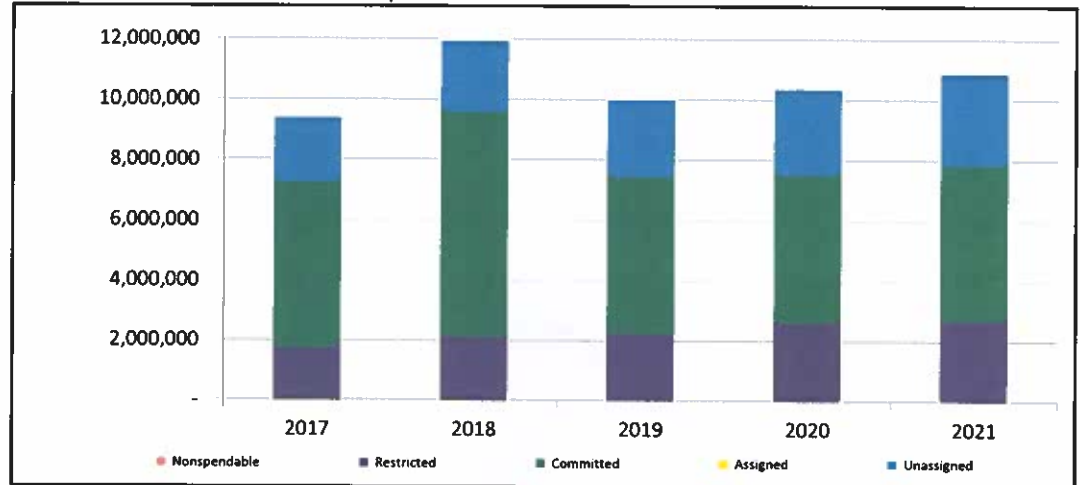
	2020	2021	Change
Revenues	\$ 8,691,208	\$ 8,591,935	-1.14%
Expenditures	\$ 8,424,683	\$ 8,211,514	-2.53%
Surplus (Shortfall)	\$ 266,525	\$ 380,421	42.73%

Fund balance, by component:	2020	2021	Change
Nonspendable	\$ 81,564	\$ 56,057	-31.27%
Restricted	\$ 2,542,396	\$ 2,631,787	3.52%
Committed	\$ 4,897,504	\$ 5,146,524	5.08%
Assigned	\$ -	\$ -	N/A
Unassigned	\$ 2,820,275	\$ 3,047,354	8.05%
Total Fund Balance	\$ 10,341,739	\$ 10,881,722	5.22%

3. Fund balance - compared to the prior year



4. Historical trends of individual components

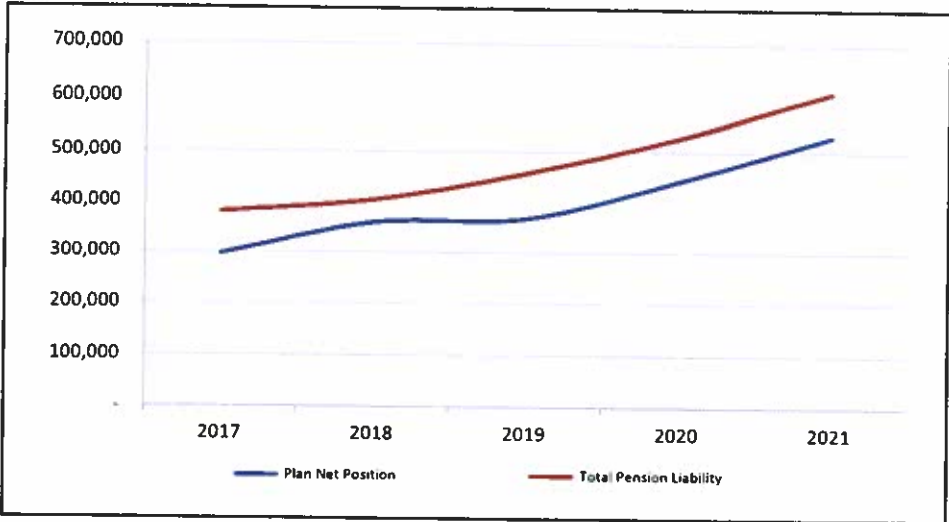


Commentary:

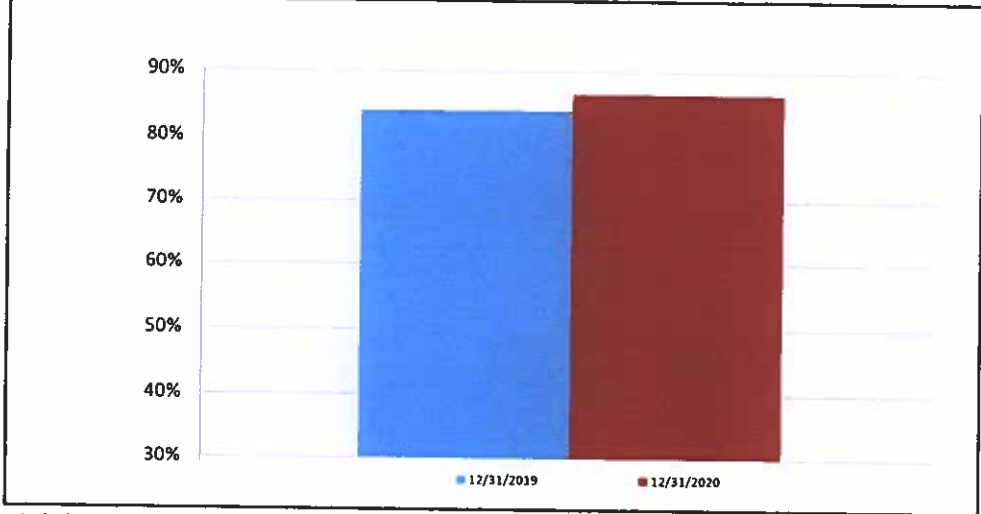
For more information on our unit's finances, contact Robin Hunt at 810-227-5225.

CITIZENS' GUIDE TO LOCAL UNIT FINANCES - Genoa Township - Livingston

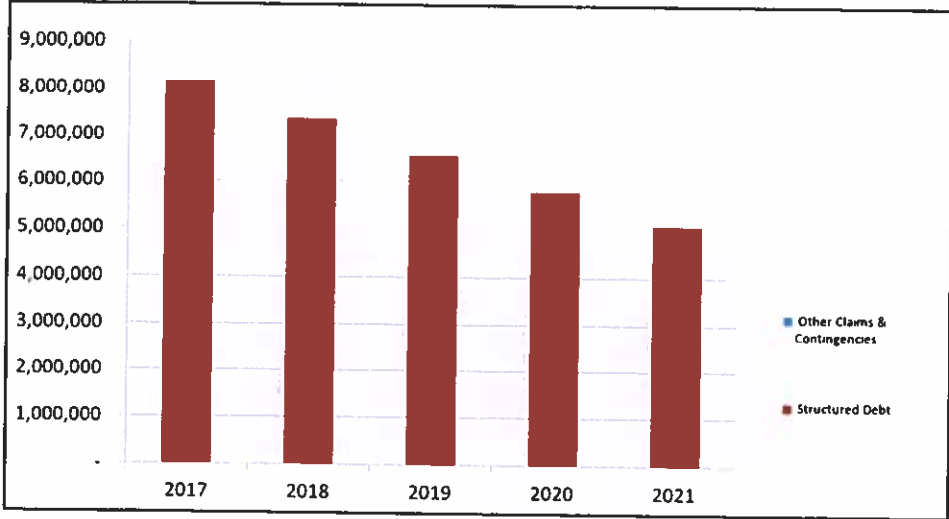
1. Pension status



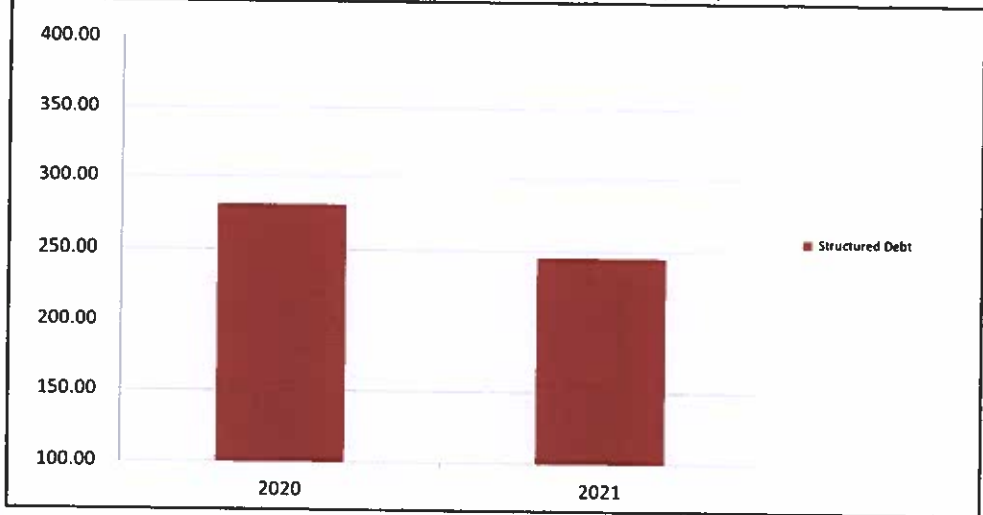
2. Plan net position as a %age of the total pension liability



3. Long Term Debt obligations:



4. Debt & other long term obligations per capita - compared to the prior year



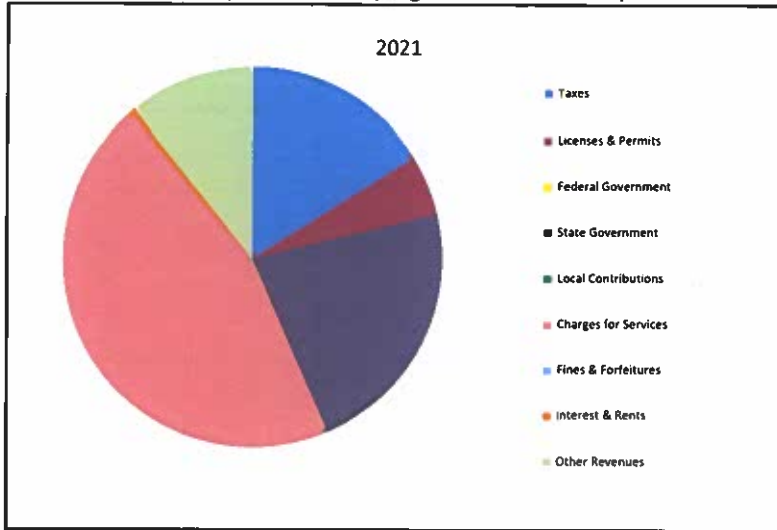
Commentary:

The Township has no Other Post-Employment Benefits (OPEB).

For more information on our unit's finances, contact Robin Hunt at 810-227-5225.

CITIZENS' GUIDE TO LOCAL UNIT FINANCES - Genoa Township - Livingston

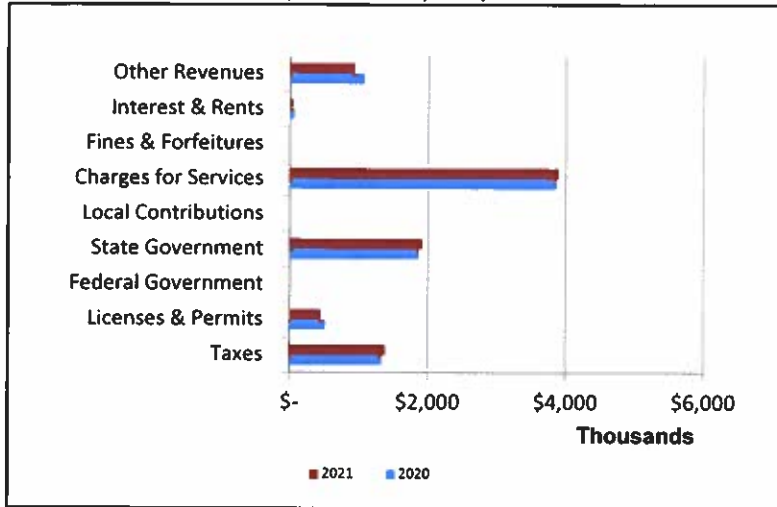
1. Where our money comes from (all governmental funds)



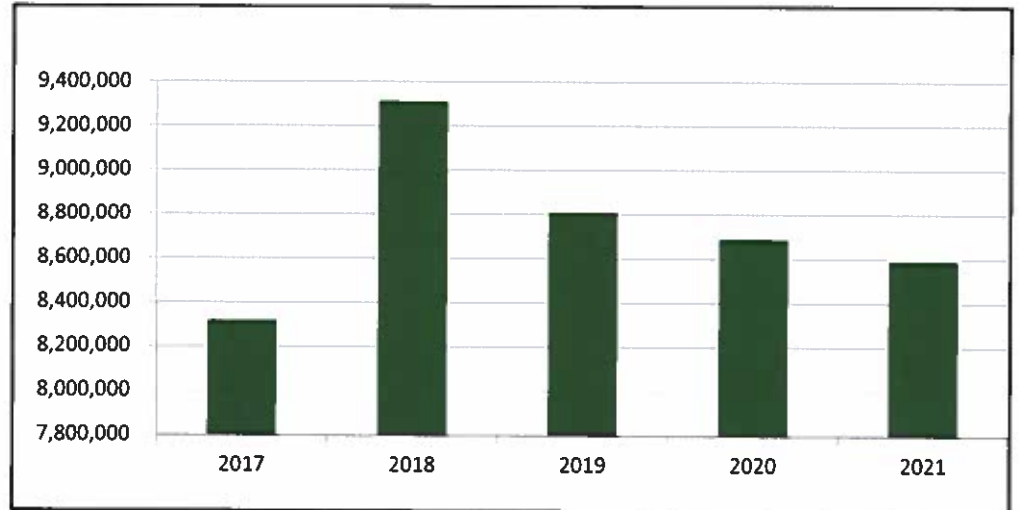
2. Compared to the prior year

	2020	2021	Change
Taxes	\$ 1,332,347	\$ 1,380,794	3.64%
Licenses & Permits	\$ 514,123	\$ 441,257	-14.17%
Federal Government	\$ -	\$ -	N/A
State Government	\$ 1,865,846	\$ 1,910,986	2.42%
Local Contributions	\$ -	\$ -	N/A
Charges for Services	\$ 3,857,026	\$ 3,892,495	0.92%
Fines & Forfeitures	\$ -	\$ -	N/A
Interest & Rents	\$ 58,949	\$ 33,747	-42.75%
Other Revenues	\$ 1,062,917	\$ 932,656	-12.26%
Total Revenues	\$ 8,691,208	\$ 8,591,935	-1.14%

3. Revenue sources - compared to the prior year



4. Historical trends of total revenues



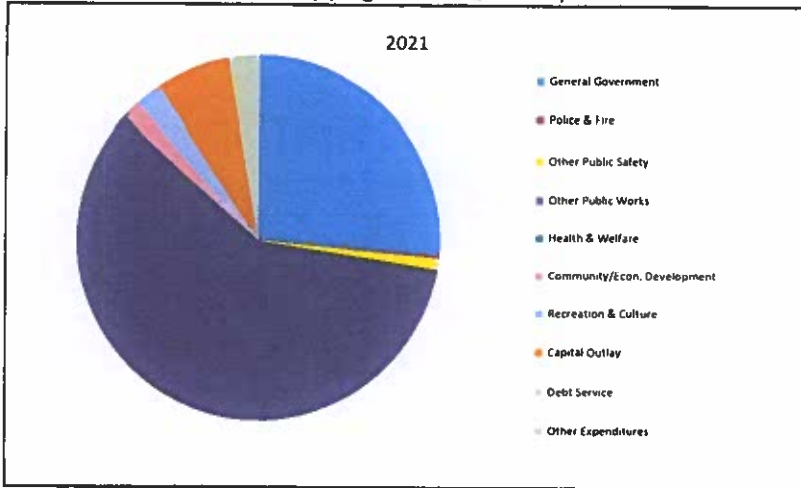
Commentary:

Revenues are shown net of interfund transfers.

For more information on our unit's finances, contact Robin Hunt at 810-227-5225.

CITIZENS' GUIDE TO LOCAL UNIT FINANCES - Genoa Township - Livingston

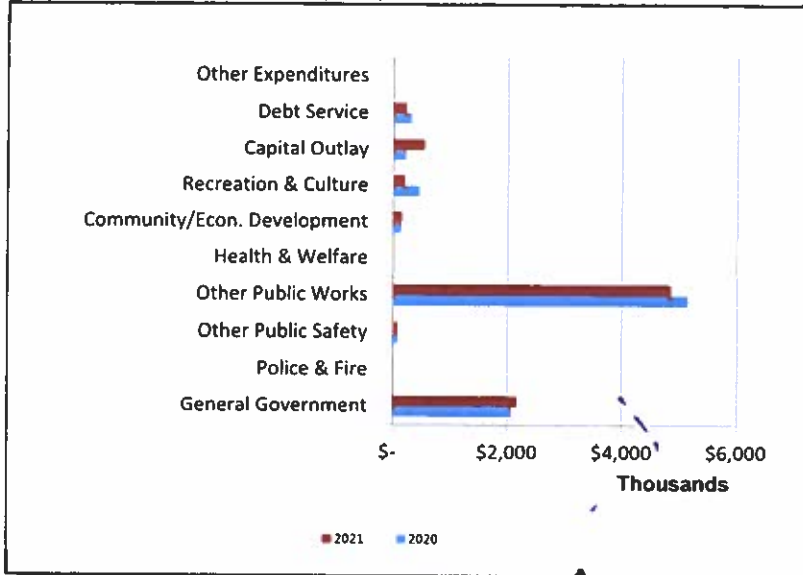
1. Where we spend our money (all governmental funds)



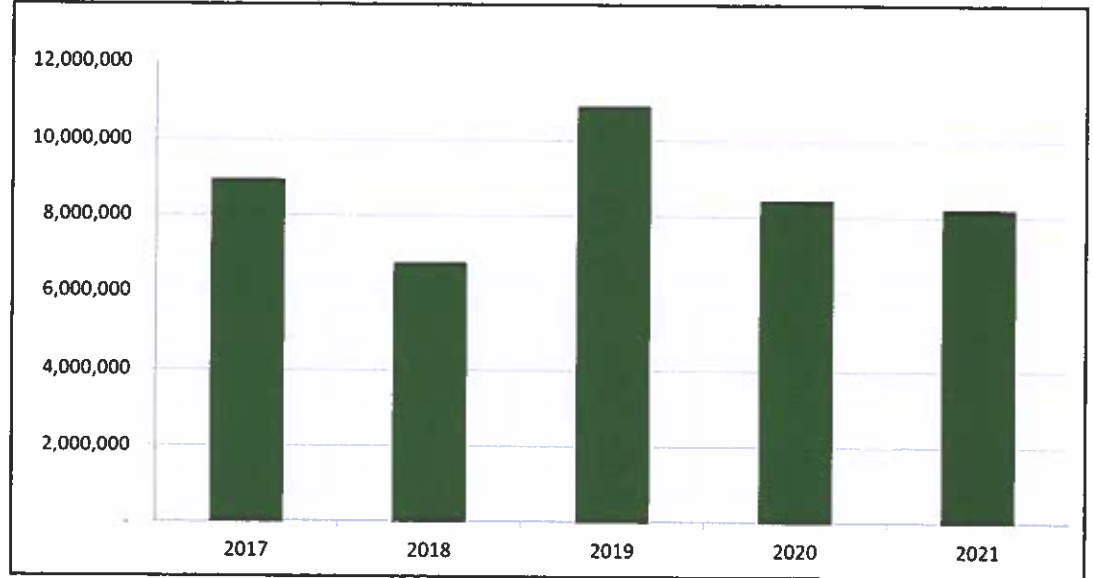
2. Compared to the prior year

	2020	2021	Change
General Government	\$ 2,075,478	\$ 2,165,919	4.36%
Police & Fire	\$ 15,873	\$ 15,873	0.00%
Other Public Safety	\$ 81,998	\$ 84,820	3.44%
Other Public Works	\$ 5,147,115	\$ 4,851,978	-5.73%
Health & Welfare	\$ -	\$ -	N/A
Community/Econ. Development	\$ 137,141	\$ 136,042	-0.80%
Recreation & Culture	\$ 446,913	\$ 194,558	-56.47%
Capital Outlay	\$ 211,892	\$ 538,396	154.09%
Debt Service	\$ 308,273	\$ 223,928	-27.36%
Other Expenditures	\$ -	\$ -	N/A
Total Expenditures	\$ 8,424,683	\$ 8,211,514	-2.53%

3. Spending - compared to the prior year



4. Historical trends of total expenditures



Commentary:
Expenditures are shown net of interfund transfers.

For more information on our unit's finances, contact Robin Hunt at 810-227-5225.



To Board 12/14/21

MEMO

TO: All Staff
FROM: Kim Lane
DATE: November 18, 2021
RE: Policy Clarification – FMLA, Vacation and Personal Time Utilization

.....

In these challenging times of required pandemic quarantines, I wanted to clarify our policies regarding using paid time off. The question has come up several times on when it would be appropriate to use unpaid time, if personal and vacation time has been exhausted by medical and/or quarantine requirements. Due to some inconsistency and confusion, going forward, we need to establish some consistency in how our FMLA, Vacation and Personal Time policies are practiced.

Sick/Personal Leave Policy:

- Personal time should not be used as an extension of vacation and has limited uses as outlined in the handbook. These are days intended to be used for the following purposes:
 1. Personal illness or physical incapacity, including pregnancy
 2. Exposure to contagious disease quarantine
 3. Illness of family member residing in the employee’s household
 4. Medical or dental examinations
 5. Personal business (banking, legal, financial or other appointments that cannot be scheduled outside of working hours)
 6. For a funeral or when bereavement leave does not apply
- Unpaid time off is allowable only in an approved medical leave or in extenuating circumstances and must be approved in advance by the head of department.

FMLA Policy:

- FMLA, in general, is an unpaid leave that runs concurrent with any disability coverage an employee may be eligible for. Going forward, employees may retain accrued paid time off up to 40 hours of vacation and 40 hours of personal leave. The intent is to allow staff to retain sufficient personal and vacation time following their leave to use later as necessary or planned.

Vacation Policy:

- Remember that time off for vacation should be planned based on the number of hours accrued and should not cause the account to go negative. In general, it is best to provide your supervisor as much notice as possible for vacation time. A good rule of thumb is at least as much notice as the requested vacation time.

While it is impossible to anticipate all possible circumstances that would be necessary for time away from work, going forward I hope this brings some clarity on when and how to use your paid leave banks. Should you unfortunately be impacted by a medical event or quarantine, it will require some planning on your part and coordination with your supervisor to maximize your benefits and possibly retain a leave balance for use later in the year. If you have any questions at all, please don’t hesitate to talk to me.

To Board 12/06/21



November 29, 2021

T2 P1 224*****AUTO**MIXED AADC 480

Genoa Township
2911 Dorr Road
Brighton, MI 48116-9436



Re: Charter Communications - Upcoming Changes

Dear Franchise Official:

Spectrum Mid-America, LLC ("Spectrum"), locally known as Spectrum, has been informed of the following changes to the Livingston, MI channel lineup serving your community effective on or around December 31, 2021:

- DIY Network on Spectrum Basic will rebrand from **DIY Network** to the **Magnolia Channel**.
- Bulldog Shopping Network on Spectrum Basic will rebrand from **Bulldog Shopping Network** to **Victory Channel**.
- **NBC Sports Network** on Spectrum Basic will cease operation.

To view a current Spectrum channel lineup visit www.spectrum.com/channels.

If you should have any questions about this change, please feel free to contact me at (810) 652-1422.

Sincerely,

Karen Coronado

Karen Coronado
Manager, State Government Affairs, Michigan
Charter Communications