

GENOA CHARTER TOWNSHIP BOARD

Regular Meeting

May 6, 2024

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) *:

Approval of Consent Agenda:

1. Payment of Bills: May 6, 2024
2. Request to approve the April 15, 2024 regular meeting minutes.

Approval of Regular Agenda:

3. Consideration of a recommendation for approval of an environmental impact assessment dated March 19, 2024 associated with a site plan for a proposed building addition and related façade, parking and site improvements for an existing multi-tenant shopping center. The property is located at 3599 and 3669 Grand River Avenue, north side of Grand River Avenue, west of Latson Road. The request is petitioned by Symmetry Management.
4. Consideration of a recommendation for approval of an environmental impact assessment dated April 9, 2024 associated with a site plan amendment for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. The request is petitioned by Chestnut Development.
5. Request for approval of **Resolution #5D**, the fourth (4th) amendment to Resolution #5 for the Pine Creek Ridge Road Improvement Special Assessment District to increase the assessment amount to include legal fees, and to move the project from the Summer 2024 to the Winter 2024 tax roll. (Roll Call)
6. Request for approval of a Cropland Agreement for 2024 with Cathy and Tim Esper to maintain the historical agricultural use of 51 acres of fields located on parcel 4711-23-100-005 with revenue to be placed in Parks and Recreation Fund line item #208-000-434-001.
7. Discussion regarding Great Start Livingston StoryWalk installation at the Township park.

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.

BOARD PACKET

CHECK REGISTERS FOR TOWNSHIP BOARD MEETING

MEETING DATE: May 6, 2024

All information below through May 1, 2024

TOWNSHIP GENERAL EXPENSES	\$	96,444.41
April 12, 2024 Bi Weekly Payroll	\$	125,154.74
OPERATING EXPENSES DPW (503 FN)	\$	16,643.89
OPERATING EXPENSES Oak Pointe (592FN)	\$	126,349.59
OPERATING EXPENSES Lake Edgewood (593FN)	\$	72,602.45
TOTAL	\$	<u>437,195.08</u>

FNBCK Check Register

Check Date	Check	Vendor Name	Amount
Bank FNBCK CHECKING ACCOUNT			
04/10/2024	38848	MACALLISTER RENTAL Void Reason: WRONG MAILING ADDRESS	1,550.85 V
04/11/2024	38849	COMCAST	945.57
04/17/2024	38850	AMERICAN AQUA	60.00
04/17/2024	38851	AMERICAN PLANNING ASSOCIATION	790.00
04/17/2024	38852	BLUE CROSS & BLUE SHIELD OF MI	55,167.46
04/17/2024	38853	CONSUMERS ENERGY	564.62
04/17/2024	38854	ETNA SUPPLY COMPANY	195.00
04/17/2024	38855	ICMA	958.75
04/17/2024	38856	KITCH ATTORNEYS & COUSELORS	7,425.00
04/17/2024	38857	OFFICE EXPRESS INC.	232.50
04/17/2024	38858	SEWARD HENDERSON PLLC	1,273.00
04/17/2024	38859	US BANK EQUIPMENT FINANCE	2,213.31
04/17/2024	38860	VERIZON WIRELESS	406.71
04/23/2024	38861		0.00 V
Void Reason: PRINTED ON BY ACCIDENT			
04/23/2024	38862	AMERICAN AQUA	52.80
04/23/2024	38863	BS&A SOFTWARE	11,592.00
04/23/2024	38864	COMCAST	296.35
04/23/2024	38865	DELTA DENTAL	4,204.98
04/23/2024	38866	ELECTION SOURCE	830.90
04/23/2024	38867	LIVINGSTON PRESS & ARGUS	500.00
04/23/2024	38868	MICHIGAN OFFICE SOLUTIONS	264.15
04/23/2024	38869	MUTUAL OF OMAHA	3,083.51
04/23/2024	38870	PITNEY BOWES, INC	135.75
04/23/2024	38871	PRINTING SYSTEMS	369.95
04/29/2024	38872	MACALLISTER RENTAL	1,550.85
04/29/2024	38873	CAPITAL ONE	624.63
04/29/2024	38874	DTE ENERGY	34.12
04/29/2024	38875	PERFECT MAINTENANCE CLEANING	1,212.50
04/29/2024	38876	TETRA TECH INC	1,460.00
FNBCK TOTALS:			
Total of 29 Checks:			97,995.26
Less 2 Void Checks:			1,550.85
Total of 27 Disbursements:			96,444.41

April 26, 2024 Bi Weekly Payroll

04/30/2024 10:13 AM PAYROLL REGISTER REPORT FOR GENOA CHARTER TOWNSHIP Page 35 of 35
 Payroll ID: 279
 Pay Period End Date: 04/19/2024 Check Post Date: 04/26/2024 Bank ID: FNBCK
 * YTD values reflect values AS OF the check date based on all current adjustments, checks, void checks

	0.00	0.00	0.00	2,516.80
VACATION PTIME	0.00	0.00	0.00	2,516.80
WELL IQ	0.00	0.00	59.66	2,642.06
ZBA CHAIR	1.00	0.00	221.58	652.72
ZBA MINUTES	1.00	0.00	188.91	915.51
ZBA MINUTES OT	0.00	0.00	0.00	0.00
ZBA PER DIEM	5.00	0.00	1,057.90	3,295.85

Gross Pay This Period	Deduction Refund	Ded. This Period	Net Pay This Period	Gross Pay YTD	Dir. Dep.
124,058.78	0.00	36,656.82	87,401.96	1,115,303.96	87,401.96

04/30/2024 10:14 AM Check Register Report For Genoa Charter Township Page 1 of 1
 For Check Dates 04/26/2024 to 04/26/2024

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
04/26/2024	FNBCK	EFT922	FLEX SPENDING (TRSC)	1,013.16	1,013.16	0.00	Open
04/26/2024	FNBCK	EFT923	INTERNAL REVENUE SERVICE	29,229.98	29,229.98	0.00	Open
04/26/2024	FNBCK	EFT924	PRINCIPAL FINANCIAL	5,371.00	5,371.00	0.00	Open
04/26/2024	FNBCK	EFT925	PRINCIPAL FINANCIAL	2,138.64	2,138.64	0.00	Open
Totals:				37,752.78	37,752.78	0.00	
Total Physical Checks:							
Total Check Stubs:				4			

Direct Deposit \$87,401.96
 Physical Check Amount \$37,752.78
TOTAL \$125,154.74

503FN Check Register

Check Date	Check	Vendor Name	Amount
Bank 503FN DPW-UTILITIES #233			
04/12/2024	6065	UNITED STATES POSTAL SERVICE	1,677.47
04/16/2024	6066	CHASE CARD SERVICES	4,617.70
04/16/2024	6067	DELL MARKETING L.P.	885.92
04/16/2024	6068	MYERS AUTOMOTIVE	176.29
04/16/2024	6069	PORT CITY COMMUNICATIONS, INC.	245.80
04/16/2024	6070	RED WING BUSINESS ADVANTAGE ACCOUNT	202.49
04/16/2024	6071	SENSUS USA, INC	1,949.94
04/16/2024	6072	TETRA TECH INC	4,290.00
04/16/2024	6073	VERIZON WIRELESS	689.71
04/16/2024	6074	WINDSTREAM	56.53
04/22/2024	6075	HOME DEPOT CREDIT SERVICES	1,757.04
04/24/2024	6076	STATE OF MICHIGAN	95.00
503FN TOTALS:			
Total of 12 Checks:			16,643.89
Less 0 Void Checks:			0.00
Total of 12 Disbursements:			16,643.89

592FN Check Register

Check Date	Check	Vendor Name	Amount
Bank 592FN OAK POINTE OPERATING FUND #592			
04/16/2024	6070	AT&T	181.70
04/16/2024	6071	COMPLETE BATTERY SOURCE	424.20
04/16/2024	6072	CONSUMERS ENERGY	448.69
04/16/2024	6073	DELL MARKETING L.P.	885.92
04/16/2024	6074	DUBOIS-COOPER	3,825.00
04/16/2024	6075	GENOA TOWNSHIP DPW FUND	27,716.30
04/16/2024	6076	VEGA AMERICAS, INC.	4,739.58
04/17/2024	6077	BRIGHTON ANALYTICAL LLC	1,100.00
04/17/2024	6078	DELL MARKETING L.P.	1,771.84
04/17/2024	6079	GENOA TOWNSHIP DPW FUND	22,357.74
04/17/2024	6080	HACH COMPANY	1,056.25
04/17/2024	6081	HAVILAND PRODUCTS COMPANY	2,218.22
04/17/2024	6082	HYDROCORP	299.25
04/17/2024	6083	MICHIGAN CAT	506.68
04/22/2024	6084	CONSUMERS ENERGY	364.83
04/22/2024	6085	MHOG UTILITIES	40,988.87
04/23/2024	6086	AMERICAN CONCRETE PRODUCTS, INC	1,564.52
04/23/2024	6087	GENOA TOWNSHIP G/O NEW USER FUND	15,900.00
592FN TOTALS:			
Total of 18 Checks:			126,349.59
Less 0 Void Checks:			0.00
Total of 18 Disbursements:			126,349.59

593FN Check Register

05/01/2024 11:52 AM
 User: denise
 DB: Genoa Township

CHECK REGISTER FOR GENOA TOWNSHIP
 CHECK NUMBERS 4432 - 5000

Page: 1/1

Check Date	Check	Vendor Name	Amount
Bank 593FN LAKE EDGEWOOD OPERATING FUND #590			
04/11/2024	4432	CITY OF BRIGHTON	39,239.12
04/11/2024	4433	CONSUMERS ENERGY	337.77
04/16/2024	4434	BRIGHTON ANALYTICAL LLC	335.00
04/16/2024	4435	COMPLETE BATTERY SOURCE	212.10
04/16/2024	4436	CONSUMERS ENERGY	16.00
04/16/2024	4437	GENOA TOWNSHIP DPW FUND	12,382.00
04/16/2024	4438	KENNEDY INDUSTRIES	2,915.00
04/16/2024	4439	OAK POINTE OPERATING S/W	1,316.35
04/16/2024	4440	PVS NOLWOOD CHEMICALS, INC	2,154.00
04/16/2024	4441	TETRA TECH INC	13,670.00
04/23/2024	4442	MHOG UTILITIES	25.11
593FN TOTALS:			
Total of 11 Checks:			72,602.45
Less 0 Void Checks:			0.00
Total of 11 Disbursements:			<u>72,602.45</u>



Manage your account online at : www.chase.com/cardhelp

Customer Service: 1-800-945-2028

Mobile: Download the Chase Mobile® app today

May 2024						
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
\$4,617.70
 Minimum Payment Due
\$46.00
 Payment Due Date
05/01/24

INK CASH(SM) POINT SUMMARY

Previous points balance	4,815
+ 1 Point per \$1 earned on all purchases	4,618
+ 2Pts/\$1 gas stns, reints, o/c sply, hm Impr	379
Total points available for redemption	9,812

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	\$4,531.11
Payment, Credits	-\$5,090.75
Purchases	+\$5,177.34
Cash Advances	\$0.00
Balance Transfers	\$0.00
Fees Charged	\$0.00
Interest Charged	\$0.00
New Balance	\$4,617.70
Opening/Closing Date	03/08/24 - 04/07/24
Credit Limit	\$45,500
Available Credit	\$40,882
Cash Access Line	\$2,275
Available for Cash	\$2,275
Past Due Amount	\$0.00
Balance over the Credit Limit	\$0.00

All Sys - 233-000-084-990
 UTILITY DEPT.

APR 12 2024

RECEIVED

[Signature]
 4/15/24

000001 FIS33339 C 1
 0309

N Z 07 24/04/07

Page 1 of 2

05688 MA DA 30332 0981000010463038201



P.O. BOX 15123
 WILMINGTON, DE 19850-5123
 For Undeliverable Mail Only

Make your payment at
chase.com/paycard

Payment Due Date: **05/01/24**
 New Balance: **\$4,617.70**
 Minimum Payment Due: **\$46.00**

Account number: [REDACTED]

\$ _____ Amount Enclosed
 Make/Mail to Chase Card Services at the address below:

30332 BEX Z 09824 C
 GREG TATARA
 MHOOG SEWER & WATER AUTH
 2911 DORR RD
 BRIGHTON MI 48116-9436



CARDMEMBER SERVICE
 PO BOX 6294
 CAROL STREAM IL 60197-6294



⑆ 5000 160 28⑆ 9869 10 2449 74 78⑆



ACCOUNT ACTIVITY

Date of Transaction	Merchant Name or Transaction Description	\$ Amount
03/19	BOULLION SALES INC. DEXTER MI	-366.68 ✗
03/10	AMZN Mktp US*RN6IG2732 Amzn.com/bill WA <i>h.o</i>	35.99 ✓
03/13	AMZN Mktp US*R65V04ID0 Amzn.com/bill WA <i>h.o</i>	27.63 ✓
03/15	BOULLION SALES INC. 734-426-8527 MI <i>h.o</i>	366.68 ✓
03/15	BOULLION SALES INC. DEXTER MI	366.68 ✗
03/19	HARBOR FREIGHT TOOLS 630 HOWELL MI <i>OPS</i>	9.00 ✓
04/04	EGLE DW TRAIN AND CERT 517-7533850 MI <i>DPW prof dev.</i> JAMES AULETTE TRANSACTIONS THIS CYCLE (CARD) \$534.30	95.00 ✓
03/23	HIRE MOJO INC 800-395-2805 CA <i>Sense Trip.</i> KIMBERLY LANE TRANSACTIONS THIS CYCLE (CARD) \$602.00	602.00
03/16	Payment ThankYou Image Check	-4,531.11
03/10	GoToCom*GoToConnect goto.com MA <i>mhog</i>	249.68 ✓
04/04	RINGBELL INC 888-898-4591 CA <i>DPW phone</i> TRANSACTIONS THIS CYCLE (CARD) \$4215.46	65.97 -
INCLUDING PAYMENTS RECEIVED		
03/26	IN *MICHIGAN SECTION AWWA 517-2922912 MI <i>DPW Prof dev</i>	310.00 ✓
04/04	AMZN Mktp US*FT9A80PX3 Amzn.com/bill WA <i>mhog</i>	30.88 ✓
04/05	STAPLES 00107730 BRIGHTON MI <i>mhog</i> ALEX CHIMPOURAS TRANSACTIONS THIS CYCLE (CARD) \$521.07	180.19 ✓
03/08	LANDS END BUS OUTFITTERS DODGEVILLE WI <i>101-261-750-000</i>	-53.96
03/12	FSP*WINGMAN PEST CONTROL, SOUTH LYON MI <i>101-265-934-060</i>	-139.00
03/09	AMZN Mktp US*R654Q7E60 Amzn.com/bill WA <i>101-261-751-000</i>	199.99
03/10	AMZN Mktp US*RN4GT61D1 Amzn.com/bill WA <i>101-261-751-000</i>	- 5.53
03/13	ADOBE INC 408-536-6000 CA <i>101-261-751-000</i>	1,525.76
03/19	PROPET DISTRIBUTORS 866-3644768 FL <i>208-906-956-000</i>	282.10
03/21	YOURMEMBERSHIP 727-827-0046 FL <i>101-261-955-000</i>	150.00
03/21	AMZN Mktp US*RH5724H82 Amzn.com/bill WA <i>101-261-751-000</i>	129.99
03/24	Amazon.com*RH81C1P01 Amzn.com/bill WA <i>101-261-751-000</i>	94.04
03/27	IN *MICHIGAN SOLAR SOLUTI 248-3975527 MI <i>101-265-934-060</i> KELLY VANMARTER TRANSACTIONS THIS CYCLE (CARD) \$2644.68	450.23

2024 Totals Year-to-Date	
Total fees charged in 2024	\$0.00
Total interest charged in 2024	\$0.00

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	18.49%(v)(d)	- 0 -	- 0 -
CASH ADVANCES			
Cash Advances	29.99%(v)(d)	- 0 -	- 0 -
BALANCE TRANSFERS			
Balance Transfers	18.49%(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.

GENOA CHARTER TOWNSHIP BOARD
Regular Meeting
April 15, 2024

MINUTES

Supervisor Rogers called the regular meeting of the Genoa Charter Township Board to order at 6:30 pm at the Township Hall. The following members were present constituting a quorum for the transaction of business: Bill Rogers, Paulette Skolarus, Jean Ledford, Terry Croft, Robin Hunt, Diana Lowe and Jeff Dhaenens. Also present was Township Manager Kelly VanMarter and 13 people in the audience.

The Pledge of Allegiance was recited.

The call to the public was opened at 6:31 pm.

Ms. Melanie Johnson of 3990 Chilson Road stated the microphones should be moved to ensure that the applicants are able to be heard. Also, two minutes for the call to the public is not long enough. She would like it to be increased.

Ms. Susan Nichols of 4935 Fairways Drive was happy to see all of the kids and families at the playground today. Tonight's agenda has an item to reappoint members of the Planning Commission. Due to the public's disappointment on how the Commission and Board have allowed such a large development, she recommends the Supervisor choose people from the public. Matt Hurley submitted a letter of interest. He would be a valuable edition and a fresh perspective. She wants to have this tabled and have the public review the letters of interest that have been submitted.

Ms. Tracey Pardiac 4312 Rurik Drive stated that when the PUD was unanimously approved in a virtual meeting, Glynis, Jeff and Maryanne voted in favor of it. One member has told her that they feel bad for voting for the PUD as they didn't understand it. The public did not understand it either. If this has been planned for 10 years, how does a Planning Commissioner not know. All of the Commissioners did not have a problem with the expansion, but Mr. Rauch did. Why did the Supervisor not appoint Mr. Hurley? She would like the Supervisor to appoint others who have expressed interest and would make excellent commissioners.

The call to the public was closed at 6:35 pm.

Approval of Consent Agenda:

Moved by Skolarus, supported by Hunt, to move item #2 to the Regular Agenda. **The motion carried unanimously.**

Moved by Lowe, supported by Leford, to approve the Consent Agenda as amended. **The motion carried unanimously.**

1. Payment of Bills: April 15, 2024

~~2. Request to approve April 1, 2024 regular meeting minutes.~~

Approval of Regular Agenda:

Moved by Lowe, supported by Hunt, to approve the Regular Agenda as amended. **The motion carried unanimously.**

2. Request to approve April 1, 2024 regular meeting minutes. (moved from Consent Agenda)

Mr. Dhaenens noted there is a typo.

Ms. Skolarus would like to add "In 39 years no one was ever denied correcting the minutes. The action of the Board is unprecedented". Ms. Lowe asked if that was actually stated at the meeting. Ms. Skolarus said she wanted something added to the minutes from the previous meeting, but Ms. VanMarter denied that request. Ms. VanMarter stated she had issue with being asked to add something to the minutes that was not said in the meeting.

Moved by Skolarus, supported by Hunt, to approve the April 1, 2024 regular meeting minutes as amended. **The motion carried unanimously.**

3. Request to approve a project agreement with the Livingston County Road Commission for the Challis Road and Bauer Road Roundabout Construction and Road Relocation project together with the necessary related work with the Township's cost not to exceed \$500,000 from Road Improvement Fund #401-446-812-006.

Ms. Skolarus stated that the township's cost of \$500,000 is well spent.

Ms. Hunt asked if there was an approximate start date. Ms. Van Marter does not have an exact date, but she will ask the County and advise the board. Supervisor Rogers stated they have started with the land clearing. They want to have it completed before the I-96 project begins.

Moved by Skolarus, supported by Lowe, to approve a project agreement with the Livingston County Road Commission for the Challis Road and Bauer Road Roundabout Construction and Road Relocation together with the necessary related work with the Township's cost not to exceed \$500,000 from Road Improvement Fund #401-446-812-006. **The motion carried unanimously.**

4. Consideration of a request to ratify the 2014 METRO Act Right-of-Way Telecommunications Permit with Advanced Communications & Data (ACD.net) and to extend the current permit from August 11, 2024 to August 11, 2029.

Ms. VanMarter stated there was an original permit approved by the Clerk in 2014, and then extended by the Board in 2019. She is unable to find a copy of Board approval for the permit that was the original from 2014. She would like to ratify the 2014 agreement for record-keeping purposes and extend the permit until 2029.

Moved by Dhaenens, supported by Lowe, to ratify the 2014 METRO Act Right-of-Way Telecommunications Permit with Advanced Communications & Data (ACD.net) and to extend the current permit from August 11, 2024 to August 11, 2029. **The motion carried unanimously.**

5. Request for approval to reappoint Glynis McBain to the Planning Commission, Bill Rockwell to the Zoning Board of Appeals, and Marianne McCreary to the Planning Commission and Zoning Board of Appeals with a term ending June 30, 2027 as recommended by the Township Supervisor.

Mr. Dhaenens responded to Ms. Pardiac's comment regarding having Matt Hurley appointed to the Planning Commission. He is a board member who "came up through the ranks". He started as an alternate at the ZBA, then became a permanent member, then moved to the Planning Commission, and then to the board. It is important to learn the processes and move up from one board to the other. Mr. Rockwell, Ms. McBain, and Ms. McCreary are all great to work with and do a great job in their positions each bringing value from their experience. Supervisor Rogers agreed with Mr. Dhaenens comments.

Ms. Hunt stated these residents were willing and able to serve on the boards many years ago. They have experience and do a good job.

Ms. Skolarus stated that there is an alternate member position available on the ZBA so perhaps Mr. Hurley would be interested in that.

Moved by Hunt, supported by Dhaenens, to reappoint Glynis McBain to the Planning Commission, Bill Rockwell to the Zoning Board of Appeals, and Marianne McCreary to the Planning Commission and Zoning Board of Appeals for a term ending on June 30, 2027 as recommended by the Township Supervisor. **The motion carried unanimously.**

Correspondence

A letter was received from Sheila Czornij of 6457 Grand Circle Drive expressing her opposition to the proposed Latson PUD development. This development is not compatible with the

surrounding area and would allow for a surge of industrial and commercial developments. She lives here for a tranquil bedroom community away from urban sprawl

A letter was received from Zenon Czornij of 6457 Grand Circle Drive expressing her opposition to the proposed Latson PUD development. Genoa Township is already overdeveloped. She is concerned about the destruction and pollution of the wetlands and the threatened or endangered species.

Member Discussion

Mr. Dhaenens appreciates Ms. VanMarter's follow up and finding the answers to his questions regarding the W.O.W. work that is being done in the township.

Ms. Hunt asked if the responses required by the ACLU have been completed as they were due today. Ms. Skolarus stated they are not complete. She is currently working with the ACLU.

Adjournment

Moved by Lowe, supported by Dhaenens, to adjourn the meeting at 6:52 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas
Recording Secretary

Approved: Paulette Skolarus, Clerk
Genoa Charter Township

Bill Rogers, Supervisor
Genoa Charter Township



MEMORANDUM

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

TO: Honorable Board of Trustees
FROM: Amy Ruthig, Planning Director
DATE: May 1, 2024
RE: Grand River Plaza building façade and site improvement
Environment Impact Assessment

Please find attached the project case file for a proposed building addition and façade, parking and site improvements to an existing multi-tenant commercial center. The project is located at 3599 and 3669 Grand River Avenue, north side of Grand River Avenue, west of Latson Road. The property is zoned Regional Commercial District.



Procedurally, the Planning Commission has review and approval authority over the site plan, and the Township Board has the final approval authority over the Environmental Impact Assessment. The Environmental Impact Assessment was recommended for approval to the Township Board and the site plan was approved by the Planning Commission on April 8, 2024. Based on the review of the revised submittal, I offer the following for your consideration:

ENVIRONMENTAL IMPACT ASSESSMENT

Moved by _____, Supported by _____ to **APPROVE** the Environmental Impact Assessment dated March 19, 2024 for Symmetry Management for proposed façade improvements and addition to an existing multi-tenant shopping center. The property is located at 3599 and 3669 Grand River Avenue, north side of Grand River Avenue, west of Latson Road, based on the following conditions:

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens


MANAGER

Kelly VanMarter

1. The applicant shall comply with the Township Engineer's concerns as stated in the April 1, 2024 letter.
2. The drive aisle parking and runoff easements between the two properties shall be put in place and shared with the Township prior to land use permit issuance.
3. The applicant shall obtain a variance from the ZBA for the nine-foot high retaining wall.
4. Township staff shall be given physical samples of material samples vs. photographs.

If you should have any questions, please feel free to contact me.

Best Regards,

A handwritten signature in blue ink that reads "Amy Ruthig". The signature is written in a cursive, flowing style.

Amy Ruthig, Planning Director



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Symmetry Management, 812 South Main St, Ste 200, Royal Oak, MI 48067
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Howell Family Ventures LLC, 29592 Beck Road, Wixom, MI 48393

SITE ADDRESS: 3599 & 3669 Grand River Ave PARCEL #(s): 4711-05-400-031 & -032

APPLICANT PHONE: (248) 465-0200 OWNER PHONE: ()

OWNER EMAIL: fjarbou@symmetrymgmt.com

LOCATION AND BRIEF DESCRIPTION OF SITE: The site is currently known as the Grand River Plaza and sits on the north side of Grand River just west of Latson Road, adjacent to Meijer. Plaza contains a mixed use of big box stores and smaller retail/commercial spaces.

BRIEF STATEMENT OF PROPOSED USE: Site and facade improvements are proposed for the existing portion of the Plaza. A building addition is also proposed on the west side of the plaza. A future development area is also indicated near the Grand River frontage.

THE FOLLOWING BUILDINGS ARE PROPOSED: A 23,715 sft building addition at the west side of the existing shopping plaza as well as building facade improvements.

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: Frank Jarbou

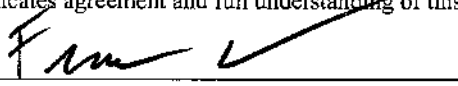
ADDRESS: 812 South Main Street, Suite 200, Royal Oak, MI 48067

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

1.) Scott Tousignant, PE of Boss Engineering at scottt@bosseng.com
Name Business Affiliation E-mail Address

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.

SIGNATURE:  DATE: 2/15/2024
PRINT NAME: Frank Jarbou PHONE: 248-465-0200
ADDRESS: 812 South Main Street, Suite 200, Royal Oak, MI 48067

- The township engineer shall review and approve the plans.
- The Impact Assessment shall be reviewed for the corrections and approved by township staff.
- The project shall be completed from north to south
- A performance guarantee shall be submitted prior to land use permit issuance.

The motion carried unanimously.

Moved by Commissioner Rassel, supported by Commissioner McCreary, to approve the Amended Site Plan dated April 3, 2024 for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive, with the following conditions:

- Review by staff prior to submission to the Township Board.

The motion carried unanimously.

NEW BUSINESS:

OPEN PUBLIC HEARING #3...Consideration of a site plan application and environmental impact assessment for a proposed façade improvement and addition to an existing multi-tenant shopping center. The property is located at 3599 and 3669 Grand River Avenue, north side of Grand River Avenue, west of Latson Road. The request is petitioned by Symmetry Management.

- A. Recommendation of Environmental Impact Assessment (3-19-24)
- B. Recommendation of Site Plan (3-19-24)

Mr. Brent Lavanway of Boss Engineering; Mr. Frank Jarbou of Symmetry Management, the property owner; and Mr. Robert Jordan from Serenity Architecture were present.

Mr. LaVanway provided a review of the proposal. They will be adding landscape islands and landscaping, adding a boulevard entrance where the current traffic signal is located, adding a 20,000 building addition on the far west portion of the site, expanding the detention basin, planting an addition 90 trees and 200 shrubs, adding a paved driveway to connect the two parcels, and adding two out lots. They are reducing the number of parking spaces from 900 to 680, which must be approved by the Planning Commission; however, the ordinance does allow for shared parking.

Mr. Jarbou provided a history of his company. They are a redevelopment company that transforms and adds value to existing properties. They have secured a large tenant and have serious interests in the other locations. He reviewed the updates that will be made to the building and the site.

Black and white elevations and colored material example photos were presented. Commissioner McCreary would like to see sample materials and not a photograph.

Mr. Borden stated that the Planning Commission can approve the site plan. It does not have to go before the Township Board. He reviewed his letter dated April 2, 2024.

1. The two separate parcels should be combined as part of this project; however, the applicant seeks to keep them separate. Mr. Jarbou stated they can have two different debts if the parcels are separate and shared access and parking can be accomplished with easements. Ms. Ruthig noted keeping the properties separate could affect the setbacks for the two proposed out lots.
2. The façade improvements do not include three of the existing tenant spaces. Future changes to these spaces will be subject to review and approval by the Township.
3. Building design, including materials and color, are subject to review and approval by the Planning Commission.
4. Crosswalk striping should be added across the drive aisle connection to Dave's Hot Chicken. Mr. Jarbou agreed to add this.
5. The Commission may reduce the amount of parking required based on different peak usage for the variety of businesses included in the development. He noted that they are not asking for the largest amount of parking reduction as is allowed.
6. The three light poles in the northwest corner of the property must be reduced in height to not more than 20 feet high. They are currently 30 feet.
7. The landscape plan is slightly deficient in greenbelt and buffer zone plantings; however, the Commission may modify requirements since numerous existing, mature trees are being preserved. He noted that it has four separate frontages so it is difficult to identify locations for additional plantings.
8. There are three evergreen trees on the landscape plan that are unaccounted for in the plant list.
9. The gate on the waste receptacle enclosure must be changed from chain link fencing to wood per the ordinance.
10. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority, including any comments on the traffic study.

Mr. Barber reviewed his letter dated April 1, 2024.

They have addressed his previous concerns, but he noted that after final site plan approval, the water main and sanitary sewer construction plans must be provided to MHOG Sewer and Water Authority for their review and approval and permitting with EGLE.

He reviewed the Traffic Impact Study, although the pass-by rates used in the trip generation forecast are not the latest information available from ITE (pass-by rates within the 11th edition of Trip Generation should be used, not those from the Handbook which is older information), the trip generation forecast for the site would be considered conservative, as it does not consider internal capture reductions. He does not see much gain from a corrected report and finds this to be acceptable.

The Brighton Area Fire Marshal's letter dated March 27, 2024 states, "Based on the submitted documents, all required revisions have been corrected for compliance except for the clear width dimension of the rear access drive. The applicant is field verifying the bollard and transformer pad locations along with drive dimensions. They have committed to making the appropriate revisions to provide the proper clear 20' width along the rear."

Mr. Jarbou believes that the amount of parking they are proposing is sufficient for the types of tenants they anticipate occupying these spaces.

Commissioner Dhaenens asked why the applicant did not agree to the shared access agreement with the owner of Arby's. Mr. Jarbou stated that when his company first purchased this property, he reached out to the Arby's owners on many occasions to work on the shared parking agreement and they never responded. Those owners then needed the agreement so they contacted him, but he did not want to help.

The call to the public was made at 9:39 pm.

Ms. Amy Sheehy of 3560 Snowden Lane stated her property backs up to the old Elder Beerman building. She would like the drainage to be repaired. Their property gets flooded. She is happy with the plans.

The call to the public was closed at 9:41 pm.

Mr. Jarbou stated he has spoken to Ms. Sheehy regarding the drainage. He advised Ms. Ruthig that they purchased the property so they own it and they own the drainage problem.

There was a discussion regarding the proposed nine-foot- high retaining wall on the rear of the site. The maximum height allowed is six feet, so a variance is going to be needed.

Moved by Commissioner Dhaenens, supported by Commissioner Rassel, to approve the Site Plan dated March 19, 2024 for Symmetry Management for proposed façade improvement and addition to an existing multi-tenant shopping center. The property located at 3599 and 3669 Grand River Avenue, north side of Grand River Avenue, west of Latson Road, based on the following conditions:

- The drive aisle parking and runoff easements between the two properties shall be put in place and shared with the township
- Crosswalk striping shall be added on the Dave's Hot Chicken Driveway
- Three light poles on the northwest side of the site are to be compliant with the township ordinance
- The discrepancy of three evergreens shall be corrected and approved by staff
- The waste receptacle gate shall be updated to comply with the township ordinance
- The applicant shall obtain a variance from the ZBA for the nine-foot high retaining wall.
- Township staff shall be given physical samples of material samples vs. photographs.

The motion carried unanimously.

Moved by Commissioner Dhaenens, supported by Commissioner Rassel to recommend to the Township Board approval of the Environmental Impact Assessment dated March 19, 2024 for Symmetry Management for proposed façade improvement and addition to an existing multi-tenant shopping center. The property located at 3599 and 3669 Grand River Avenue, north side of Grand River Avenue, west of Latson Road, based on the following condition:

- The applicant shall comply with the township engineer's concerns.

The motion carried unanimously.

ADMINISTRATIVE BUSINESS:

Staff Report

Ms. Ruthig stated there will be five cases on the May meeting agenda.

The developer of the Latson PUD is requesting to amend the uses proposed. The township and the consultants are reviewing the proposal.

Approval of the March 11, 2024 Planning Commission meeting minutes

Needed changes were noted.

Moved by Commissioner McCreary, seconded by Commissioner Rassel, to approve the minutes of the March 11, 2024 Planning Commission Meeting as amended. **The motion carried unanimously.**

Member Discussion

Commissioner McCreary stated that planning training says the site plan approval should be obtained prior to seeking a variance. Mr. Borden said that a site plan review should be done prior to obtaining a variance; it does not need to be approved, just reviewed.

Adjournment

Moved by Commissioner Rassel, seconded by Commissioner McCreary, to adjourn the meeting at 10:04 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary



April 2, 2024

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Grand River Plaza – Site Plan Review #2
Location:	3599 and 3669 Grand River Avenue – north side of Grand River Avenue, west of Latson Road
Zoning:	RCD Regional Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised site plan submittal for site and façade improvements, as well as a building addition, to the existing multi-tenant commercial center (plans dated 3/19/24).

A. Summary

1. The 2 separate parcels should be combined as part of this project; however, the applicant seeks to keep them separate.
2. The façade improvements do not include 3 of the existing tenant spaces. Future changes to these spaces will be subject to review and approval by the Township.
3. Building design, including materials and color, are subject to review and approval by the Planning Commission.
4. Crosswalk striping should be added across the drive aisle connection to Dave’s Hot Chicken.
5. The Commission may reduce the amount of parking required based on different peak usage for the variety of businesses included in the development.
6. The 3 light poles in the northwest corner of the property must reduced in height to not more than 20’ (currently 30’).
7. The landscape plan is slightly deficient in greenbelt and buffer zone plantings; however, the Commission may modify requirements since numerous existing, mature trees are being preserved.
8. There are 3 evergreen trees on the landscape plan that are unaccounted for in the plant list.
9. The gate on the waste receptacle enclosure must be changed from chain link fencing to wood.
10. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority, including any comments on the traffic study.

B. Proposal/Process

The applicant proposes site improvements (to the property and building) and a building expansion (20,600 square feet) for the existing multi-tenant shopping center.

Table 7.02 allows retail and shopping centers with uses up to 60,000 square feet of area as principal permitted uses in the RCD. (The largest use in the existing center is 55,110 square feet.)

As a side note, the plans also identify a future outlot development area; however, development in this area is not part of the current project or this review.

Procedurally, the Planning Commission is to review the site plan and Environmental Impact Assessment. The Commission has review/approval authority over the site plan, though the Township Board has approval authority over the Impact Assessment.



Aerial view of site and surroundings (looking north)

C. Site Plan Review

1. Dimensional Requirements. The site plan has been reviewed for compliance with the with the dimensional requirements of the RCD, as follows:

	Min. Lot Req.		Minimum Yard Setbacks (feet)				Max. Lot Coverage (%)	Max. Height
	Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking Lot		
RCD	2	200	75	20	50	20 front 10 side/rear	35% building 75% impervious	45' 3 stories
Proposal	26.6 (2 parcels)	455 (total)	305	50 (E) 89 (W)	49.5	150 front 25 side (E) 43 side (W) 20 rear	21% building 75% impervious	32' 1 story

The development site is comprised of 2 separate parcels. Our initial review suggested combination of these parcels to mitigate nonconforming conditions – the common side lot line between the 2 parcels runs directly through one of the main access points, the parking lot/drive aisles and the building.

The revised submittal materials state that the applicant wishes to maintain the 2 separate parcels. This warrants further discussion, in our opinion.

The drawing depicts a slightly deficient rear yard setback for the existing building (49.5’ provided; 50’ required); however, the proposed building expansion and site improvements comply with current standards, and the established nonconformity is not being altered.

2. Building Design and Materials. Much of the building will be re-faced with new materials (3 tenant spaces are not included in the façade improvements, though painting and work consistent with the rest of the building are noted for these spaces).

It is important to note that any changes proposed for the 3 tenant spaces not included in the current proposal, are subject to review and approval by the Township.

New materials include a mix of brick, split-faced CMU, EIFS, metal panels and engineered wood siding. Calculations on the revised plans demonstrate compliance with the material requirements of Section 12.01.

Building materials and colors are subject to review and approval by the Planning Commission. The applicant should be prepared to present material and color samples at the Commission meeting.

- 3. Pedestrian Circulation.** There is an existing sidewalk along Grand River that crosses the site and adjacent properties.

The site plan includes a connection between the public sidewalk and developed portion of the property within the easterly frontage. Crosswalk striping has been added across one of the drive aisles; however, additional striping should be added across the other drive aisle (connection to Dave's Hot Chicken).

The development currently provides a large sidewalk along the front of the building, including an extension in front of the building addition.

- 4. Vehicular Circulation.** The existing site has 3 drive connections to/from Grand River. Other than improvement to the existing pavement, no changes to these drives are proposed.

Nearly all of the pavement will be replaced, which is a significant improvement to the property.

Internally, drive aisles meet or exceed the minimum width for two-way travel.

There is also an emergency access drive behind the building in the northwest portion of the property that will provide one-way circulation.

The plan also identifies a future drive connection between the subject site and the adjacent Meijer development.

The submittal includes a traffic impact study, which includes recommendations on signal timing.

The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority with respect to vehicular circulation, including any comments on the traffic study.

- 5. Parking.** Based on parking requirements for shopping centers, the project requires 900 parking spaces, while 680 are provided.

Section 14.02.04 allows the Planning Commission to reduce the parking requirement by up to 30% for shared usage since peak usage will occur at different periods of time given the variety of businesses included in the shopping center.

Based on gross floor area, the proposal entails a reduction of approximately 25%, though the case can be made that the overall parking requirement is less than 900 on a tenant by tenant basis (which would lessen the extent of the reduction needed).

The design and dimensions of the main drive aisles and parking spaces comply with Ordinance standards, and the number of barrier-free spaces is more than met.

- 6. Exterior Lighting.** The lighting plan identifies 39 light poles (with 1, 2, 3, and 4 fixtures) and 6 wall mounted fixtures.

The revised plan includes fixture details, which note the use of downward directed, cut-off LEDs, save for 6 ornamental fixtures along the main drive aisle.

Mounting heights range from 15' to 30'. Per Section 12.03.03, mounting height cannot exceed 20' where adjacent to residential. As such, the 3 light poles (labeled "D") must be reduced in height to not more than 20'. The applicant has acknowledged this and is currently preparing a revised lighting plan to address this requirement.

Maximum photometric readings (both on-site and along property lines) comply with Ordinance standards, including 0.0 readings adjacent along the northerly property line, which is adjacent to residential.

7. Landscaping. The landscape plan has been reviewed for compliance with the standards of Section 12.02, as follows:

Standard	Required	Proposed	Comments
Front yard greenbelt	20' width 12 canopy trees	25' width 6 existing trees 2 canopy trees (new) 2 evergreen trees (new)	Deficient by 2 trees
Buffer Zone B (N)	20' width 6' wall OR 3' berm 43 canopy trees 43 evergreen trees 172 shrubs	20' width Partial 6' screen fence 34 existing trees* 18 evergreen trees (new) 80 shrubs	Deficient by full wall/berm
Buffer Zone B (NE)	20' width 6' wall OR 3' berm 12 canopy trees 12 evergreen trees 46 shrubs	20' width Existing berm 4 canopy trees (new) Existing canopy trees* 19 existing evergreen trees 46 shrubs	In compliance
Buffer Zone C (E)	10' width 46 trees OR 183 shrubs	10' width 15 existing trees* 6 evergreen trees (new) 44 shrubs	In compliance; however, 3 new evergreen trees are not accounted for in the plant list
Buffer Zone C (W)	10' width 27 trees OR 108 shrubs	10' width 8 existing trees* 2 evergreen trees (new) 36 shrubs	In compliance
Parking lot	50 canopy trees 5,000 SF landscaped area	49 canopy trees 30,325 SF landscaped area	In compliance
Detention pond	21 trees 210 shrubs	Existing mature vegetation	PC may allow existing plantings to remain

* Preservation of existing mature trees within buffer zones count as 2 trees in terms of planting requirements.

The Commission has the authority to modify landscaping requirements based on existing vegetation, topography, and adjacent land uses, per Section 12.02.13.

8. Waste Receptacle. The site plan notes a “dumpster enclosure” in the northwest corner of the property, as well as a trash compactor within the truck loading dock area.

Details include the required masonry enclosure and concrete base pad; however, a chain link fence gate is noted, while Section 12.04 requires a wooden gate.

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

Respectfully,
SAFE BUILT



Brian V. Borden, AICP
 Michigan Planning Manager



April 1, 2024

Ms. Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: Grand River Plaza
Site Plan Review No. 2**

Dear Ms. Ruthig:

Tetra Tech conducted a review of the proposed Grand River Plaza site plan last dated March 19, 2024. The plan was prepared by Boss Engineering on behalf of Symmetry Management. The development is located on the north side of Grand River Avenue west of the Meijer store. The Petitioner is proposing to demolish the existing parking lot and parking islands, provide new pavement and parking lot configuration, a 20,600 square foot building addition, modifications to the storm sewer system, water and sewer lead to the building addition and enlarging the existing detention basin.

The Petitioner submitted site plan drawings on February 20, 2024, and we prepared a site plan review letter dated March 12, 2024. The drawings have been revised to address each of our comments. The Petitioner has met with the Livingston County Drain Commission and has made the recommended improvements to the stormwater management system. Additionally, the Petitioner has appeared to address the review comments from the Brighton Area Fire Authority.

The concern about runoff from the north side of the parking lot entering into the Rolling Ridge #1 Subdivision will be alleviated with curb and gutter and a storm drainage system.

The Petitioner has indicated that they will continue to coordinate with MHOG for the abandonment of fire pump as part of this project and shall meet any of their requirements.

After final site plan approval, the water main and sanitary sewer construction plans should be provided to MHOG Sewer and Water Authority for their review and approval and permitting with EGLE.

In our review of the Traffic Impact Study, although the pass-by rates used in the trip generation forecast are not the latest information available from ITE (pass-by rates within the 11th edition of *Trip Generation* should be used, not those from the Handbook which is older information), the trip generation forecast for the site would be considered conservative, as it does not take into account internal capture reductions. We do not see much gain from a corrected report and find this to be acceptable.

We have no further engineering related concerns regarding the proposed site plan documents. If you have any questions please call us.

Sincerely,

A handwritten signature in blue ink that reads 'John Y. Barber'.

John Y. Barber, PE
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

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

March 27, 2024

Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Grand River Plaza Redevelopment
3599 & 3669 Grand River
Genoa Twp., MI

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on March 20, 2024 and the drawings are dated February 20, 2024 with latest revisions dated March 19, 2024. The project is based on the proposed site improvements, 27,715 square foot addition and two future planned outlot concepts to an existing commercial complex. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

Based on the submitted documents, all required revisions have been corrected for compliance except for the clear width dimension of the rear access drive. The applicant is field verifying the bollard and transformer pad locations along with drive dimensions. They have committed to making the appropriate revisions to provide the proper clear 20' width along the rear.

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

**GENOA TOWNSHIP IMPACT ASSESSMENT
Grand River Plaza – Shopping Center**

Prepared for:

**Applicant
Symmetry Management
812 S Main St., Suite 200
Royal Oak, MI 48067**

Prepared by:

Scott Tousignant, P.E.



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

**February 20, 2024
Revised: March 19, 2024**

DISCUSSION ITEMS

- A. Name(s) and address(es) of person(s) responsible for preparation of the Impact Assessment and a brief statement of their qualifications.

Prepared by:

Scott Tousignant, P.E.
Professional Engineer/Project Manager
Boss Engineering
3121 E Grand River
Howell, MI 48843

Prepared for:

Owner:

Symmetry Management/Frank Jarbou
812 S. Main St, Ste 200
Royal Oak, MI 48067

Applicant:

Howell Family Ventures, LLC
29592 Beck Road
Wixom, MI 48393

- B. Description of the site, including existing structures, man-made facilities, and natural features, all-inclusive to within 10' of the property boundary.***

The project site is on parcels # 4711-05-400-031 and # 4711-05-400-032 in Section 5, Genoa Township, Livingston County, MI.

The subject site is bordered:

- On the north is the Rolling Ridge #1 Subdivision which is zoned MUPUD.
- On the east is a MUPUD zoned property containing Meijers and other MUPUD outlots as well as a single RCD zoned parcel along Grand River containing McDonalds.
- On the west is GCD zoned parcels containing "Dog Town & Kitty City".
- On the south of the subject parcels are additional RCD zoned outlots fronting Grand River Ave (on the north side of Grand River Ave). These are Mattress Firm, Arby's, Taco Bell and Dave's Hot Chicken. On the south side of Grand River Avenue are additional RCD zoned parcels containing uses such as Speedway, Harbor Freight Tools, and Belle Tire.

MHOG sanitary currently services the shopping plaza. The sanitary main is located at the southern portion of the site within the parking lot. See the Existing Conditions for locations.

The subject site is the Grand River Plaza. The site is primarily building and paved parking spaces. The parking lot will be reconfigured to add additional landscape islands and provide improved circulation within the site. There are currently three commercial drive approaches accessing Grand River, one of which is signalized. All three approaches will remain.

C. Impact on natural features: A written description of the environmental characteristics of the site prior to development, i.e., topography, soils, vegetative cover, drainage, streams, creeks or ponds.

The site currently sits developed as a shopping plaza. The southern half of the site is primarily all paved parking surfaces. The north half of the site is the shopping plaza and there is an existing detention basin at the northeast corner of the site.

The soils consist of Miami Loam with 2 to 6% slopes. The site drains via surface flow and subsurface storm pipe from south to north to the existing development detention basin. No wetlands/streams/creeks or other water bodies are located on site.

D. Impact on storm water management: description of soil erosion control measures during construction.

The existing shopping plaza currently has a stormwater management system. The site stormwater management system consists of an existing detention basin at the northeast corner of the site as well as a network of storm structures and pipes facilitating the drainage for the existing buildings and parking lots. The proposed plan maintains the amount of impervious surface on the site, so as to not have any volume impact on the existing detention system. The existing detention basin is proposed to be regraded on the east side which would provide approximately an additional 40,000 cft of basin storage.

Detailed construction plans will be reviewed by the Township Engineer and the Soil Erosion Control plans will be reviewed and permit issued by the Livingston County Drain Commissioners office prior to construction commencing. Ongoing/periodic soil erosion inspections will occur per County requirements to ensure soil erosion is managed proactively.

E. Impact on surrounding land use: Description of proposed usage and other man-made facilities; how it conforms to existing and potential development patterns. Effects of added lighting, noise or air pollution which could negatively impact adjacent properties.

Proposed uses on this Regional Commercial site are consistent with its current shopping plaza use. The building currently has a number of vacancies and the aim is to rejuvenate the site with improved parking areas and a building facelift to attract new tenants to occupy the space. Additionally, a building addition on the west side of the shopping plaza is proposed. The shopping plaza provides a mix of big box leasable space as well as smaller tenant spaces for a mix of users. The proposed uses conform to existing and potential development patterns and will not negatively impact adjacent properties with added lighting, noise or air pollution. The uses proposed do not impact adjacent properties with noise, light or air pollution as the proposed use is consistent with the current use. The proposed project will improve the function and appearance of the existing shopping plaza.

No proposed modifications are proposed along Grand River or on the east side of the site, simply selective site repaving. The only modification to the north side of the site is the paving of a fire access and truck circulation drive between the northern face of the building and the northern property line. There currently is a gravel drive in this location. The current access drive at the rear of the building does currently attract loiterers. Filling the plaza vacancies will provide relief on that condition. A retaining wall with a 6' high screen fence is proposed at the north side of the site to help screening adjacent to the residences to the north. The retaining

wall will aid in preserving existing trees along the northern property line. The west side of the site is currently a dilapidated parking lot and a green space containing the original water supply system for the shopping plaza. The parking lot will be replaced and the certain unused components of the original water supply system will be properly abandoned and other components reconfigured to accommodate the proposed site modifications.

F. Impact on public facilities and services: Description of number of residents, employees, patrons, and impact on general services, i.e., schools, police, fire.

There is no impact to schools, police or fire as this is a redevelopment of an existing shopping plaza. These site improvements will improve tenant occupancy and increase jobs within the Township. Fire truck circulation is improved with these proposed site improvements, with the primary improvement being a paved fire access drive at the rear(north) of the site.

G. Impact on public utilities: description of public utilities serving the project, i.e., water, sanitary sewer, and storm drainage system. Expected flows projected in residential units.

Storm water will be detained on-site via the use of existing at-grade detention system. The storm water will be discharged through an existing outlet control structure. There is no change to the sites impervious surfaces due to this redevelopment as well as plans to expand the basin volume which improves the downstream conditions. Detailed construction plans would be reviewed by the Township Engineer and the Soil Erosion Control permit would be reviewed and issued by the Livingston County Drain Commissioner. MHOG sanitary sewer runs along the south side of the site and services the existing shopping plaza. There is a building addition that will send additional wastewater to the existing sanitary sewer. The proposed use of the additional spaces is a larger retail space which has minimal wastewater generated.

MHOG water currently runs around the entire site. The domestic water is hooked up to MHOG water. The building fire suppression system is currently a private system and utilizes a fire booster pump within the existing wellhouse at the northwest corner of the site. There are a number of public fire hydrants surrounding the site that are on MHOG water. The fire suppression system will be evaluated for possible dedication to MHOG's system. The shopping plaza already utilizes the MHOG water and the only anticipated change is additional flow for the additional building space on the west side of the plaza. There is no anticipated water supply issues with this proposed project. Additional fire hydrants are being added to improve the hydrant coverage of the building which is an improvement on the public utilities and overall safety of the site.

H. Storage or handling of any hazardous materials: Description of any hazardous materials used, stored, or disposed of on-site.

No storing or handling of any hazardous materials is expected for this development.

I. Impact on traffic and pedestrians: Description of traffic volumes to be generated and their effect on the area.

A traffic study has been performed. It is prepared under separate cover and submitted to the Township and Livingston County Road Commission. In summary of the Traffic Impact Study performed by Colliers Engineering & Design, the three existing commercial drives on Grand River Ave adequately support the existing shopping plaza and proposed improvements for the site. Signal timing improvements can be made at the Grand River Ave and Latson Road signal as well as at the Grand River Avenue and Grand River Plaza Drive signal. Coordination and permitting will occur through MDOT for any proposed signal timing improvements or any additional ROW improvements MDOT may require for this project.

J. Special provisions: Deed restrictions, protective covenants, etc.

See existing conditions sheet for any existing easements on site.

K. Description of all sources:

- Genoa Township Zoning Ordinance
- "Soil Survey of Livingston County Michigan" Soil Conservation Services, USDA
- Traffic Impact Study by Colliers Engineering & Design dated February 16, 2024



Engineering
& Design

Traffic Impact Study

February 16, 2024

Grand River Plaza Redevelopment Genoa Township, Livingston County, Michigan

Prepared for:

Mr. Travis Sokana
Symmetry Management
812 South Main Street, Suite 200
Royal Oak, MI 48067

Colliers Engineering & Design
20700 Civic Center Drive, Suite 170
Southfield, MI 48076
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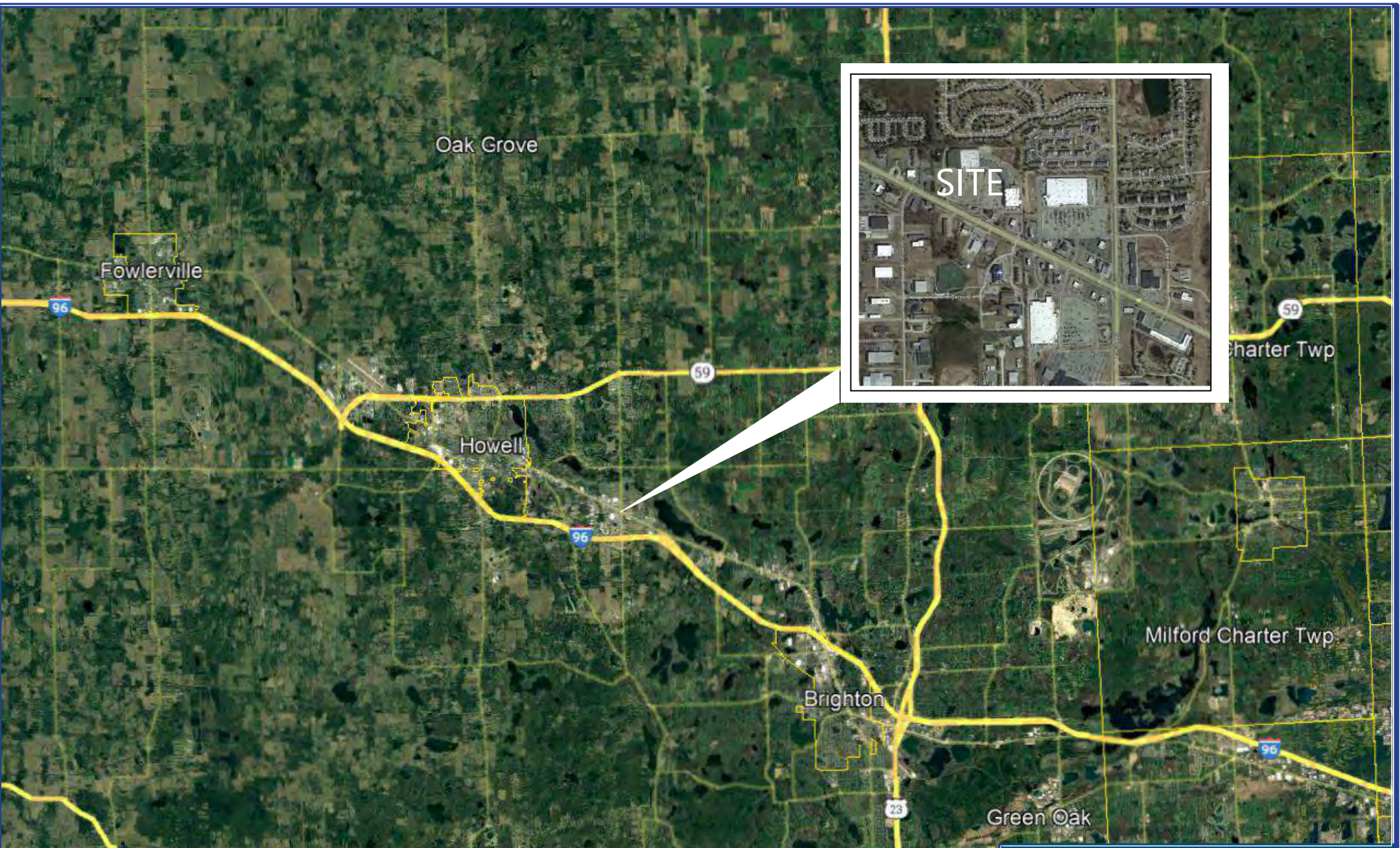
Introduction

This report presents the methodologies, analyses, results, and recommendations of a Traffic Impact Study (TIS) for the proposed Grand River Plaza redevelopment project in Genoa Township, Livingston County, Michigan. The project site is located on the north side of Grand River Avenue (I-96 BL) approximately ½ mile west of Latson Road as shown on **Figure 1** and currently includes approximately 225,000 square feet (SF) of retail and restaurant space. The proposed redevelopment plans would construct two new fast-food with drive-through uses within the existing parking lot, along with 20,600 SF of additional retail space.

Site access is currently provided via three driveways to Grand River Avenue with the middle site driveway operating under signalized control and is not proposed to change as part of the redevelopment plans. A representation of the site plan is shown on **Figure 2**. Grand River Avenue is under jurisdiction of the Michigan Department of Transportation (MDOT); whereby access permitting will be subject to MDOT review and standards. In accordance with Section 1.2.4 of the MDOT *Geometric Design Guidance*, a Traffic Impact Study (TIS) is required for site access permitting and project approvals. Additionally, the project is subject to Township review and approval as part of the site plan review process.

The purpose of this study is to identify the traffic related impacts, if any, of the proposed project on the adjacent road network. This study therefore includes analysis of the site access points as well as key off-site intersections surrounding the site. Analysis of the site access points will determine appropriate lane configurations as well as traffic control to process site traffic safely and efficiently. Key off-site intersections are analyzed to determine if new site-generated traffic passing through these locations would require improvements to mitigate any impacted traffic operations.

The scope of this study was developed based on Colliers Engineering & Design (CED) knowledge of the study area, understanding of the development program, accepted traffic engineering practice, and information published by the Institute of Transportation Engineers (ITE). Additionally, CED solicited input regarding the proposed scope of work from MDOT. The study analyses were completed using Synchro and SimTraffic, Version 11 traffic analysis software and in accordance with the methodologies and practices published by ITE and the applicable requirements of MDOT and the Township. This report is intended for use by MDOT and the Township to guide decisions related to development project approvals, access permitting, and identifying future roadway improvement needs.



Grand River Plaza TIS
Genoa Township, MI

Figure 1
Study Area Map



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Roadway Data

Road Network

Vehicle transportation for the proposed development will be provided primarily via Grand River Avenue and Latson Road. The study intersections are identified below, and further details on the study roadways are summarized in **Table 1**.

Table 1: Roadway Summary

Roadway Data	Grand River Avenue	Latson Road
Functional Class	Principal Arterial	Minor Arterial
Direction	E-W	N-S
Speed Limit (mph)	50	50
Jurisdiction	MDOT	LCRC
Cross Section	5-Lane	5-Lane
AADT	31,000	22,000
AM Peak Hour Volume	1,525	995
PM Peak Hour Volume	2,505	1,880

Study Intersections

Grand River Avenue & Latson Road

At the intersection of Grand River Avenue & Latson Road, all approaches have dual left-turn lanes, two through lanes, and an exclusive right-turn lane. The intersection is traffic signal controlled with leading protected only left-turn phasing, and right-turn overlap phasing provided for all approaches. Dynamic “No Turn on Red” signs are also provided for all approaches to prohibit right-turns during the opposing approaches protected left-turn phase. Vehicle and pedestrian actuation are provided for all approaches and movements and marked crosswalks are provided for crossing all legs.

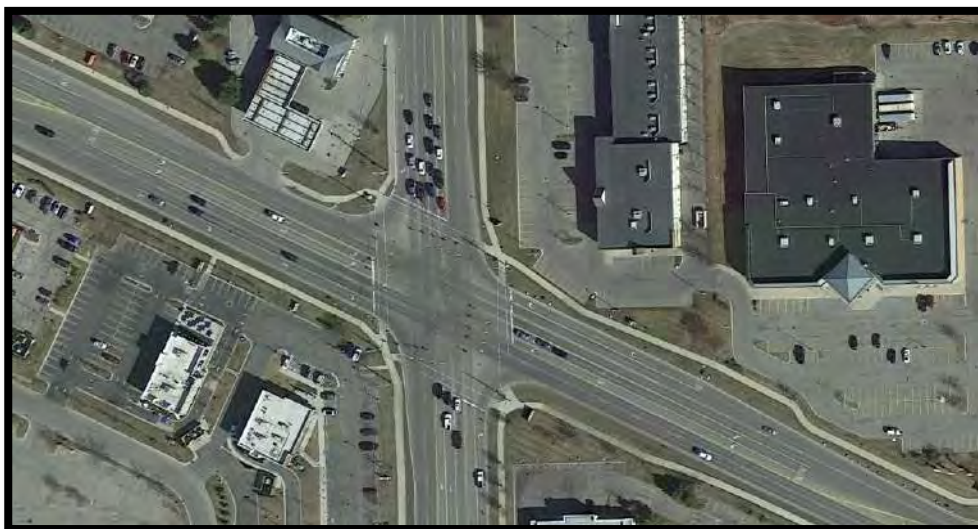


Figure 3: Grand River Avenue & Latson Road Intersection

Grand River Avenue & Meijer Drive / Wal-Mart Drive

Grand River Avenue & Meijer Drive / Wal-Mart Drive has an exclusive left-turn lane and shared through/right-turn lane on the NB and SB approaches while the EB and WB approaches have an exclusive left-turn lane, two through lanes, and exclusive right-turn lane. The intersection is traffic signal controlled with a two-phase operation. Vehicle actuation is provided for the minor driveway approaches. No marked crosswalks or pedestrian signals are provided at the intersection.



Figure 4: Grand River Avenue & Meijer Drive / Wal-Mart Drive Intersection

Grand River Avenue & Grand River Plaza Drive

Grand River Avenue & Grand River Plaza Drive has an exclusive left-turn lane and shared through/right-turn lane on the NB and SB approaches while the EB and WB approaches have an exclusive left-turn lane, two through lanes, and exclusive right-turn lane. The intersection is traffic signal controlled with a two-phase operation. Vehicle actuation is provided for the minor driveway approaches. There are no marked crosswalks at the intersection; however, pedestrian signals are provided for all legs of the intersection with pushbuttons provided for crossing Grand River Avenue.



Figure 5: Grand River Avenue & Grand River Plaza Drive Intersection

Grand River Avenue & Grand Oaks Drive

Grand River Avenue & Grand Oaks Drive has an exclusive left-turn lane and shared through/right-turn lane on the NB and SB approaches while the EB approach has an exclusive left-turn lane, two through lanes, and exclusive right-turn lane and WB approach has an exclusive left-turn lane, through lane, and shared through/right-turn lane. The intersection is traffic signal controlled with a two-phase operation. Vehicle actuation is provided for the minor road and driveway approaches. There are marked crosswalks and pedestrian signals provided for all legs of the intersection with pushbuttons provided for crossing Grand River Avenue.



Figure 6: Grand River Avenue & Grand Oaks Drive Intersection

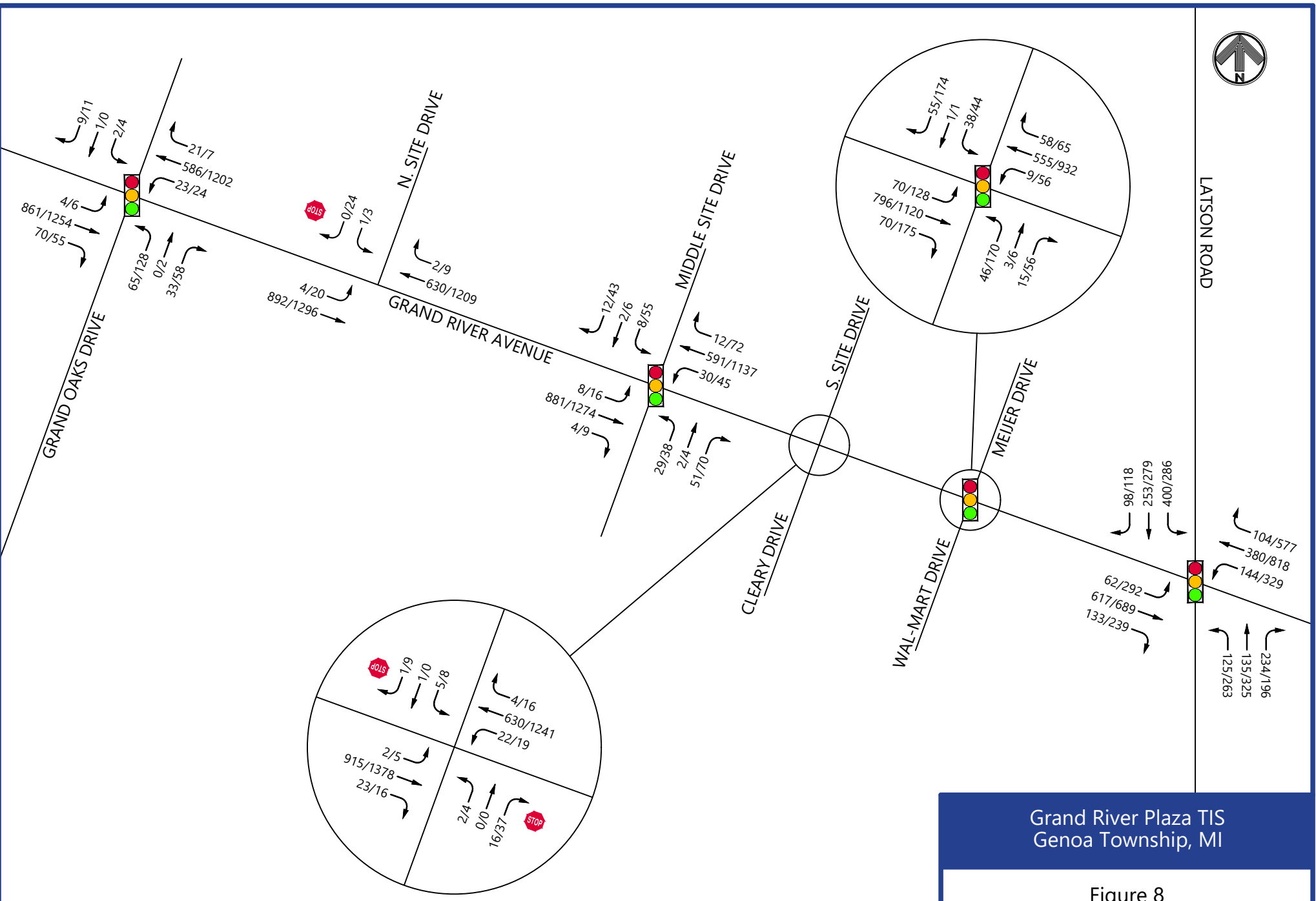
Existing Traffic Data

Existing weekday AM (7:00 to 9:00) and PM (4:00 to 6:00) peak hour turning movement counts were collected by CED subconsultant Quality Counts (QC) at the study intersections on Tuesday January 30th, 2024, and Thursday February 1st, 2024. Data were collected in 15-minute intervals to establish the current peak hour traffic volumes. Major weather events, holidays, and other local special events were avoided.

During collection of the manual intersection turning movement counts, pedestrian data and commercial truck percentages were also recorded and used in the traffic analysis. Peak hour factors (PHFs) and commercial truck percentages were calculated by approach based on the requirements of MDOT's *Electronic Traffic Control Device Guidelines*. Traffic volumes along Grand River Avenue were balanced upward between Grand Oaks Drive and the Meijer / Wal-Mart intersection. Between Latson Road and the Meijer / Wal-Mart intersection, a dummy node was utilized to account for the large amount of traffic that turns in and out of the commercial driveways located between the intersections. All relevant traffic volume data are included in **Appendix A** and the resulting 2024 baseline peak hour volumes utilized for this study are summarized on **Figure 8**.



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###/###

AM/PM PEAK HOUR VOLUME

Grand River Plaza TIS Genoa Township, MI

Figure 8
Existing Traffic Volumes

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2024 Existing Conditions

Analysis Methodologies

The performance of the study intersections was evaluated through a qualitative measure of operating conditions called Levels of Service (LOS). Six LOS are defined with letter designations from A to F with LOS A representing minimal delay, and LOS F indicating failing conditions. Typically, LOS D is considered acceptable in suburban/urban areas.

The LOS measurement for both signalized and unsignalized intersections is average control delay, which is quantified in terms of seconds of delay per vehicle. Control delay includes deceleration delay, stopped delay, queue move-up delay, and acceleration delay. The LOS criteria for unsignalized and signalized intersections taken from the HCM are included in Appendix B.

The LOS and delay calculations are based on the procedures and methodologies outlined in the Transportation Research Board's Highway Capacity Manual, 6th Edition (HCM6) which sets forth nationally accepted standards regarding traffic operations and capacity analysis. Traffic signal timings were modeled per traffic signal timing permits provided by LCRC.

Simulations of the study network were also observed using SimTraffic in order to identify potential issues related to vehicle queuing, traffic flow between intersections, and the overall study network. The existing conditions SimTraffic models were calibrated in accordance with the procedures outlined in the MDOT *Electronic Traffic Control Device Guidelines*.

Existing Traffic Conditions

Existing peak hour vehicle delays and LOS were calculated at the study intersections based on the existing lane configurations and traffic control shown on **Figure 7**, the existing traffic volumes shown on **Figure 8**, and the methodologies presented in the HCM. The results of the analysis of existing conditions are presented in **Appendix B**, summarized in **Table 2** and described in further detail below.

The results of the existing conditions analysis indicate that all approaches and movements at the study intersections are currently operating acceptably at a LOS D or better with the exception of the NB and SB left-turn movements at the signalized intersection of Grand River Avenue & Latson Road which currently operate at a LOS E during the AM peak hour. Additionally, the STOP controlled Cleary Drive and E. Grand River Plaza Drive currently operate at a LOS E or F during both peak hours.

Observation of peak hour simulations indicates acceptable traffic operations during both peak hours and significant vehicle queues are not observed. At the signalized intersections, vehicle queues are observed to be processed during each signal cycle with minimal residual queueing or backups. On the STOP controlled E. Grand River Plaza Drive and Cleary Drive approaches, 95th percentile queue lengths are calculated to be 55 feet (2 vehicles) or less during the peak periods, which is not significant.

Table 2: Existing Conditions

Intersection	Control	Approach	Movement	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.5	D	40.8	D
			Thru	27.4	C	18.8	B
			Right	19.4	B	12.5	B
		WB	Left	48.2	D	45.8	D
			Thru	23.2	C	32.8	C
			Right	12.5	B	41.9	D
		NB	Left	45.7	D	56.1	E
			Thru	35.8	D	37.7	D
			Right	47.9	D	29.1	C
		SB	Left	40.5	D	60.0	E
			Thru	29.3	C	35.8	D
			Right	26.0	C	26.3	C
		Overall				32.4	C
Grand River Avenue & Meijer Drive / Wal-Mart Drive	Signal	EB	Left	12.1	B	25.9	C
			Thru	15.7	B	26.4	C
			Right	10.3	B	18.5	B
		WB	Left	2.3	A	13.8	B
			Thru	0.2	A	0.7	A
			Right	0.1	A	0.1	A
		NB	Left	42.1	D	49.3	D
			Thru/Right	35.5	D	25.9	C
		SB	Left	38.0	D	28.1	C
			Thru/Right	37.9	D	28.5	C
		Overall				12.4	B
Grand River Avenue & Grand River Plaza Middle Drive	Signal	EB	Left	0.0	A	3.0	A
			Thru	0.3	A	0.7	A
			Right	0.0	A	0.0	A
		WB	Left	0.2	A	8.0	A
			Thru	0.2	A	10.7	B
			Right	0.0	A	6.2	A
		NB	Left	41.1	D	39.3	D
			Thru/Right	43.4	D	38.7	D
		SB	Left	42.3	D	42.2	D
			Thru/Right	39.6	D	37.0	D
Overall				3.2	A	8.0	A
Grand River Avenue & Grand Oaks Drive	Signal	EB	Left	2.2	A	3.4	A
			Thru	3.1	A	5.8	A
			Right	2.3	A	3.4	A
		WB	Left	0.5	A	2.3	A
			Thru/Right	0.4	A	1.1	A
		NB	Left	42.0	D	39.9	D
			Thru/Right	40.8	D	36.4	D
		SB	Left/Thru/Right	38.8	D	34.6	C
Overall				4.9	A	6.3	A
Grand River Avenue & Grand River Plaza W. Drive	STOP (Minor)	EB	Left	9.2	A	12.1	B
			Thru/Right	Free		Free	
		WB	Thru/Right	Free		Free	
		SB	Left	16.6	C	30.0	D
Right	0.0		A	14.4	B		

Table 2: Existing Conditions (continued)

Intersection	Control	Approach	Movement	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
Grand River Avenue & Grand River Plaza E. Drive / Cleary Drive	STOP (Minor)	EB	Left	9.2	A	12.0	B
			Thru/Right	Free		Free	
		WB	Left	10.5	B	13.8	B
			Thru/Right	Free		Free	
		NB	Left	43.4	E	242.1	F
			Thru/Right	12.2	B	17.7	C
		SB	Left/Thru/Right	47.1	E	184.7	F

No-Build Conditions

No-Build Traffic Volumes

Traffic impact studies typically include an evaluation of traffic operations in the future as they would be without the proposed development. This no-build condition serves to identify any mitigation that may be required, regardless of the project, and as a baseline for comparison of future buildout conditions. This scenario is comprised of existing traffic conditions, plus ambient traffic growth, plus traffic from approved developments in the study area that have yet to be constructed. At the time of this study the following developments were identified within the study area and immediate vicinity that have yet to be constructed or were currently under construction:

1. Versa Mixed-Use Development
2. Westbury Phase II Residential Development
3. SJMHS Hospital Expansion
4. Latson Road Retail Development (Mister Car Wash)
5. Forest Ridge Residential Development
6. Pine Creek Residential Development

The vehicle trips that would be generated by the background developments were assigned to the study intersections based on the respective traffic study completed for each development. Where a traffic study was not completed for the development or the traffic study did not include the same intersections or time periods as this study, the number of vehicle trips was forecast based on data published by ITE in *Trip Generation, 11th Edition* and assigned to the study road network based on existing traffic patterns.

In addition to background developments, an ambient growth factor is applied to existing traffic volumes to account for future projects in the study area and population increases, as well as growth in regular traffic volumes due to development projects outside the study area. The recent construction of the I-96 & Latson Road interchange has resulted in significant changes in traffic patterns throughout the study area. As a result, historical traffic volumes do not provide an accurate representation of traffic growth in the area. Therefore, publicly available data from the Southeast Michigan Council of Governments (SEMCOG), including population and employment forecasts for Genoa Township were referenced.

The SEMCOG data indicates annual population and employment growths ranging from 0.35% to 1.64% between 2015 and 2045 as shown in **Table 3**. Therefore, an ambient background growth rate of 0.75% per year will be utilized for this study. The ambient growth rate and trips from the background developments were applied to the existing 2024 traffic volumes for a period of one year to forecast the no-build traffic volumes **without the proposed development**. The resultant 2025 no-build traffic volumes are summarized on **Figure 9**.

Table 3: Community Annual Growth Rate

Community	Measure	Growth
Genoa Township	Employment	0.38%
	Population	1.54%
Howell	Employment	0.35%
	Population	0.57%
Brighton	Employment	0.47%
	Population	0.69%
Brighton Township	Employment	0.63%
	Population	1.64%
Average		0.78%

No-Build Traffic Conditions

No-build peak hour vehicle delays and LOS were calculated at the study intersections based on the existing lane configurations and traffic control shown on **Figure 7**, the no-build traffic volumes shown on **Figure 9**, and the methodologies presented in the HCM. The results of the analysis of no-build conditions are presented in **Appendix C**, summarized in **Table 4**, and described in further detail below.

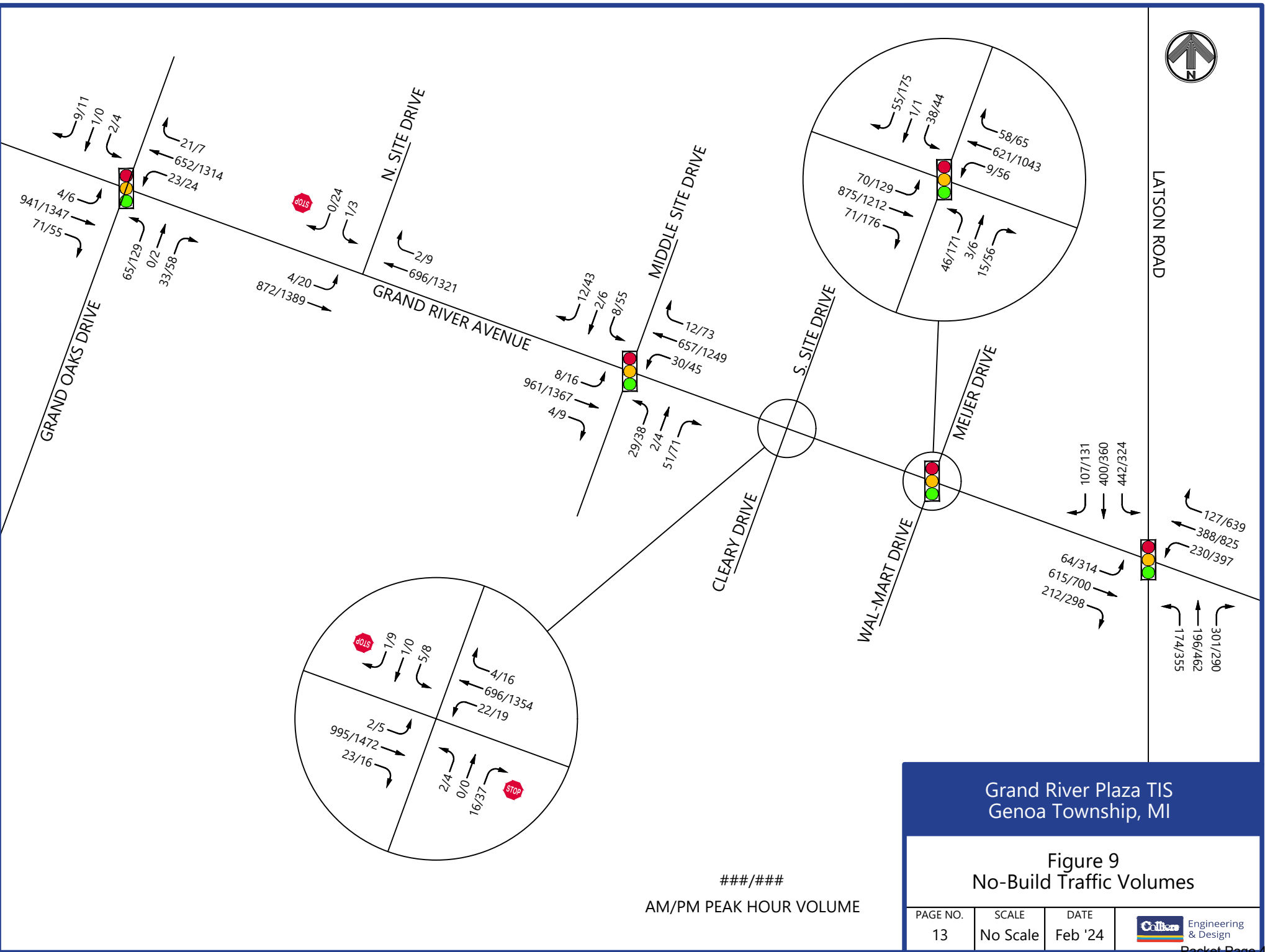
The results of the no-build conditions analysis indicate that all approaches and movements would continue to operate similar to existing conditions during both peak hours with the exception of the following:

- The WB left-turn movement and NB right-turn movement at the signalized intersection of Grand River Avenue & Latson Road which would be reduced to a LS F and LOS E during the AM peak hour, respectively. Additionally, the WB right-turn movement and NB and SB left-turn movements will be reduced to a LOS F during the PM peak hour.

Review of network simulations continue to indicate acceptable traffic operations during the AM peak hour and significant vehicle queues are not observed. During the PM peak hour, brief periods of long vehicle queues and cycle failures occur are observed for the NB left-turn movement and WB right-turn movement at the intersection of Grand River Avenue & Latson Road. On the STOP controlled E. Grand River Plaza Drive and Cleary Drive approaches, 95th percentile queue lengths are calculated to be 60 feet (2-3 vehicles) or less during the peak periods, which is not significant.



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Figure 9
No-Build Traffic Volumes

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Table 4: No-Build Traffic Conditions

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour			
				Existing		No-Build		Existing		No-Build	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.5	D	43.5	D	40.8	D	41.7	D
			Thru	27.4	C	29.4	C	18.8	B	27.4	C
			Right	19.4	B	21.3	C	12.5	B	18.5	B
		WB	Left	48.2	D	99.8	F	45.8	D	49.2	D
			Thru	23.2	C	24.2	C	32.8	C	39.0	D
			Right	12.5	B	12.9	B	41.9	D	85.2	F
		NB	Left	45.7	D	44.3	D	56.1	E	124.8	F
			Thru	35.8	D	37.6	D	37.7	D	39.6	D
			Right	47.9	D	70.3	E	29.1	C	29.6	C
		SB	Left	40.5	D	40.5	D	60.0	E	82.0	F
			Thru	29.3	C	32.6	C	35.8	D	35.1	D
			Right	26.0	C	26.9	C	26.3	C	24.4	C
		Overall				32.4	C	40.1	D	35.5	D
Grand River Avenue & Meijer Drive / Wal-Mart Drive	Signal	EB	Left	12.1	B	12.4	B	25.9	C	27.9	C
			Thru	15.7	B	16.4	B	26.4	C	27.7	C
			Right	10.3	B	10.3	B	18.5	B	18.6	B
		WB	Left	2.3	A	2.8	A	13.8	B	17.6	B
			Thru	0.2	A	0.2	A	0.7	A	0.9	A
			Right	0.1	A	0.1	A	0.1	A	0.1	A
		NB	Left	42.1	D	42.1	D	49.3	D	49.9	D
			Thru/Right	35.5	D	35.5	D	25.9	C	25.9	C
		SB	Left	38.0	D	38.0	D	28.1	C	28.1	C
			Thru/Right	37.9	D	37.9	D	28.5	C	28.5	C
		Overall				12.4	B	12.5	B	18.7	B
Grand River Avenue & Grand River Plaza Middle Drive	Signal	EB	Left	0.0	A	0.0	A	3.0	A	3.9	A
			Thru	0.3	A	0.3	A	0.7	A	0.8	A
			Right	0.0	A	0.0	A	0.0	A	0.0	A
		WB	Left	0.2	A	0.3	A	8.0	A	8.4	A
			Thru	0.2	A	0.2	A	10.7	B	11.4	B
			Right	0.0	A	0.0	A	6.2	A	6.3	A
		NB	Left	41.1	D	41.1	D	39.3	D	39.2	D
			Thru/Right	43.4	D	43.4	D	38.7	D	38.7	D
		SB	Left	42.3	D	42.3	D	42.2	D	42.2	D
			Thru/Right	39.6	D	39.6	D	37.0	D	36.9	D
Overall				3.2	A	2.9	A	8.0	A	8.2	A
Grand River Avenue & Grand Oaks Drive	Signal	EB	Left	2.2	A	2.2	A	3.4	A	3.4	A
			Thru	3.1	A	3.2	A	5.8	A	6.2	A
			Right	2.3	A	2.3	A	3.4	A	3.5	A
		WB	Left	0.5	A	0.7	A	2.3	A	2.9	A
			Thru/Right	0.4	A	0.5	A	1.1	A	1.3	A
		NB	Left	42.0	D	42.0	D	39.9	D	39.8	D
			Thru/Right	40.8	D	40.8	D	36.4	D	36.4	D
		SB	Left/Thru/Right	38.8	D	38.8	D	34.6	C	34.6	C
Overall				4.9	A	4.7	A	6.3	A	6.3	A

Table 4: No-Build Traffic Conditions (continued)

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour				
				Existing		No-Build		Existing		No-Build		
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
Grand River Avenue & Grand River Plaza W. Drive	STOP (Minor)	EB	Left	9.2	A	9.5	A	12.1	B	12.9	B	
			Thru/Right	Free		Free		Free		Free		
		WB	Thru/Right	Free		Free		Free		Free		
			SB	Left	16.6	C	17.8	C	30.0	D	34.3	D
				Right	0.0	A	0.0	A	14.4	B	15.3	C
Grand River Avenue & Grand River Plaza E. Drive / Cleary Drive	STOP (Minor)	EB	Left	9.2	A	9.5	A	12.0	B	12.8	B	
			Thru/Right	Free		Free		Free		Free		
		WB	Left	10.5	B	11.0	B	13.8	B	14.7	B	
			Thru/Right	Free		Free		Free		Free		
		NB	Left	43.4	E	52.6	F	242.1	F	342.5	F	
			Thru/Right	12.2	B	12.7	B	17.7	C	19.0	C	
		SB	Left/Thru/Right	47.1	E	59.9	F	184.7	F	292.1	F	

Build Conditions

The proposed development plan includes construction of two new fast-food with drive-through uses totaling 5,900 SF and 20,600 SF of new retail space. Site access is currently provided via three driveways to Grand River Avenue with the middle site driveway operating under signalized control and is not proposed to change as part of the redevelopment plans.

Site Trip Generation

The number of AM and PM peak hour vehicle trips that will be generated by the proposed development expansion will be forecast based on the rates and equations published by ITE in *Trip Generation, 11th Edition*. In addition, to the new proposed retail and fast-food with drive-through uses, approximately 87,000 SF of the existing shopping center is currently vacant. Therefore, this space was also included in the trip generation forecast for build conditions.

The existing/proposed uses were matched to the ITE land use category that most closely matches their proposed operation. For this study, ITE *Land Use #821, Shopping Plaza* was utilized for the retail space and *Land Use #934, Fast-Food Restaurant with Drive-Through*, was utilized for the proposed fast-food restaurants.

As is typical of most retail and restaurant uses, a portion of the site-generated trips are already present on the adjacent road network and are interrupted to visit the site. These trips are known as 'pass-by' trips, which create turning movements at the site driveways, but do not increase traffic volumes on the adjacent road network or off-site intersections. ITE publishes pass-by rates for various commercial land uses in the *Trip Generation Handbook*. For Land Use #821 and #934, 34% and 50% of trips are expected to be pass-by in nature. The number of pass-by vehicle trips was subtracted from the total number of site-generated trips to determine the number of new peak hour trips for the overall development. The resultant trip generation forecast for the proposed development is shown in Table 5.

Table 5: Site Trip Generation

Land Use	ITE Code	Amount	Units	ADT	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Shopping Plaza	821	107,793	SF	7,278	115	71	186	274	285	559
		<i>Pass-By (34% PM)</i>		2,475	0	0	0	95	95	190
		New Trips		4,803	115	71	186	179	190	369
High-Turnover (Sit-Down) Restaurant	934	5,900	SF	2,758	134	129	263	101	94	195
		<i>Pass-By (49% AM, 50% PM)</i>		1,379	64	64	128	49	49	98
		New Trips		1,379	70	65	135	52	45	97
Total		Total Trips		10,036	249	200	449	375	379	754
		Pass-By Trips		3,854	64	64	128	144	144	288
		New Trips		6,182	185	136	321	231	235	466

Trip Distribution

The vehicle trips that would be generated by the proposed development were assigned to the study road network based on existing peak hour traffic patterns at the site driveways, local population densities, and ITE methodologies. These methods indicate that pass-by trips enter and exit the development in their original direction of travel and new trips will return to their direction of origin. Peak hour traffic volumes on Grand River Avenue and Latson Road were reviewed together with local population densities to determine the origin and destinations of new site-generated traffic. Pass-by traffic was assumed to follow existing traffic patterns along Grand River Avenue. The resultant site trip distribution is summarized in **Table 6**. Site-generated trips were assigned to the site driveways based on the existing traffic percentages at each driveway summarized in **Table 7**.

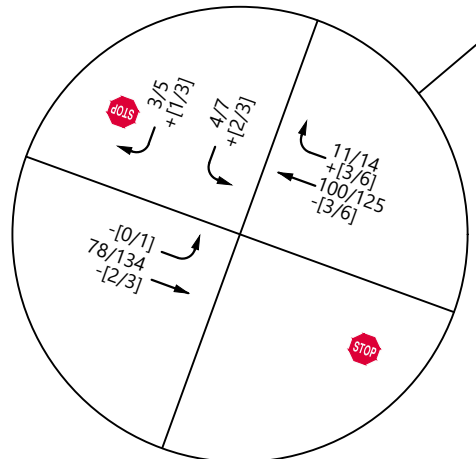
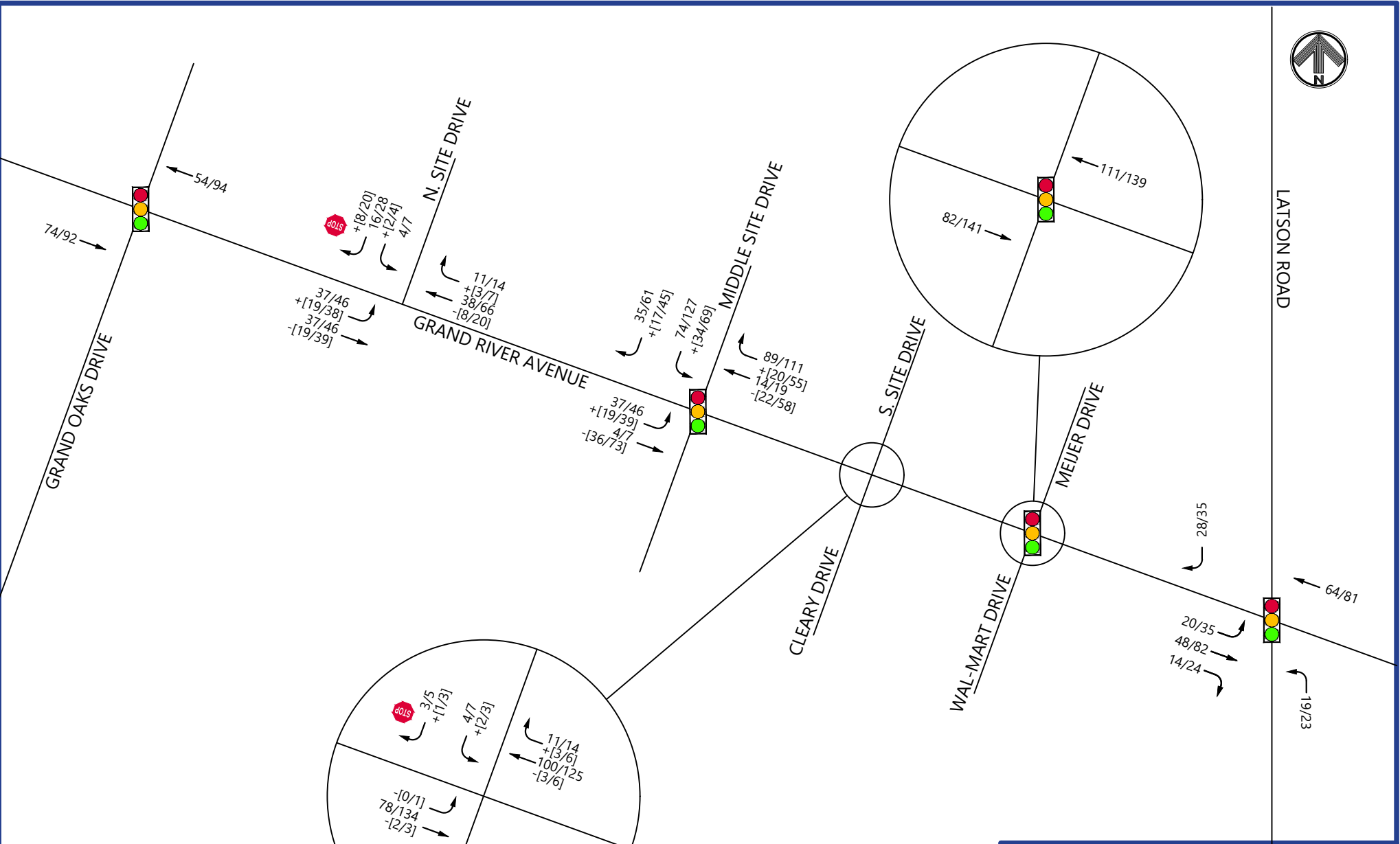
Table 6: Site Trip Distribution

NEW TRIPS			PASS-BY TRIPS				
To/From	Via	AM/PM	From	To	Via	AM	PM
North	Latson Road	15%	East	West	Grand River Avenue	40%	47%
South	Latson Road	10%	West	East	Grand River Avenue	60%	53%
East	Grand River Avenue	35%					
West	Grand River Avenue	40%					
Total		100%	Total			100%	100%

Table 7: Site Driveway Percentages

To/From	Via	AM/PM	
		In	Out
East	N. Site Drive	10%	5%
	Middle Site Drive	80%	90%
	S. Site Drive	10%	5%
West	N. Site Drive	50%	30%
	Middle Site Drive	50%	65%
	S. Site Drive	0%	5%

The site-generated vehicle trips were assigned to the study network as shown on **Figure 10**. These trips were added to the 2025 no-build traffic volumes shown on **Figure 9** to calculate the future build traffic volumes shown on **Figure 11**.



###/###
 NEW AM/PM PEAK HOUR TRIPS
 +/-[###/###]
 PASS-BY AM/PM PEAK HOUR TRIPS

Grand River Plaza TIS
 Genoa Township, MI

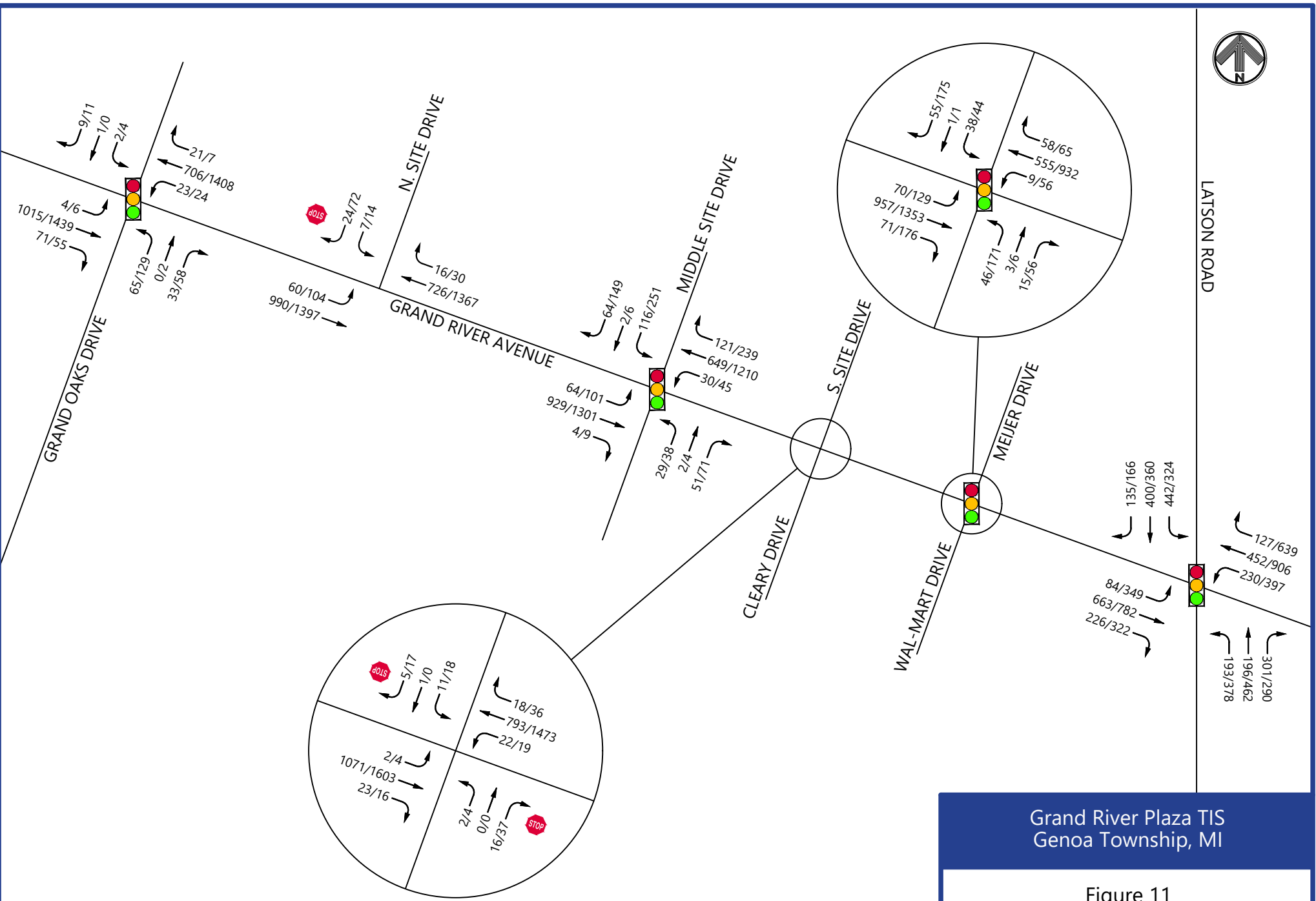
Figure 10
 Site-Generated Traffic Volumes

PAGE NO.	SCALE	DATE	
17	No Scale	Feb '24	

Packet Page 50



LATSON ROAD



###/###
AM/PM PEAK HOUR VOLUME

Grand River Plaza TIS Genoa Township, MI

Figure 11 Build Traffic Volumes

PAGE NO.	SCALE	DATE	
18	No Scale	Feb '24	

Build Conditions

Future build peak hour vehicle delays and LOS with the proposed development were calculated based on existing lane configurations and traffic control shown on **Figure 7**, build traffic volumes shown on **Figure 11**, and HCM methodologies. SimTraffic simulations were also utilized to evaluate traffic flow and vehicle queues throughout the study network. The build conditions results are included in **Appendix D** and summarized in **Table 8**.

Table 8: Build Traffic Conditions

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour			
				No-Build		Build		No-Build		Build	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.5	D	43.8	D	41.7	D	43.3	D
			Thru	29.4	C	30.3	C	27.4	C	34.5	C
			Right	21.3	C	21.1	C	18.5	B	19.7	B
		WB	Left	99.8	F	99.8	F	49.2	D	49.2	D
			Thru	24.2	C	25.5	C	39.0	D	52.5	D
			Right	12.9	B	13.1	B	85.2	F	95.8	F
		NB	Left	44.3	D	43.8	D	124.8	F	151.4	F
			Thru	37.6	D	37.6	D	39.6	D	39.6	D
			Right	70.3	E	70.3	E	29.6	C	29.6	C
		SB	Left	40.5	D	40.5	D	82.0	F	82.0	F
			Thru	32.6	C	33.4	C	35.1	D	35.1	D
			Right	26.9	C	28.2	C	24.4	C	24.7	C
		Overall				40.1	D	40.0	D	50.5	D
Grand River Avenue & Meijer Drive / Wal-Mart Drive	Signal	EB	Left	12.4	B	12.9	B	27.9	C	30.8	C
			Thru	16.4	B	17.2	B	27.7	C	29.7	C
			Right	10.3	B	10.3	B	18.6	B	18.6	B
		WB	Left	2.8	A	3.4	A	17.6	B	25.1	C
			Thru	0.2	A	0.3	A	0.9	A	1.1	A
			Right	0.1	A	0.1	A	0.1	A	0.1	A
		NB	Left	42.1	D	42.1	D	49.9	D	49.9	D
			Thru/Right	35.5	D	35.5	D	25.9	C	25.9	C
		SB	Left	38.0	D	38.0	D	28.1	C	28.1	C
			Thru/Right	37.9	D	37.9	D	28.5	C	28.5	C
		Overall				12.5	B	12.3	B	19.1	B
Grand River Avenue & Grand River Plaza Middle Drive	Signal	EB	Left	0.0	A	0.4	A	3.9	A	20.3	C
			Thru	0.3	A	0.3	A	0.8	A	0.9	A
			Right	0.0	A	0.0	A	0.0	A	0.0	A
		WB	Left	0.3	A	0.2	A	8.4	A	15.1	B
			Thru	0.2	A	0.2	A	11.4	B	21.4	C
			Right	0.0	A	0.2	A	6.3	A	15.1	B
		NB	Left	41.1	D	46.0	D	39.2	D	40.7	D
			Thru/Right	43.4	D	42.7	D	38.7	D	33.6	C
		SB	Left	42.3	D	202.3	F	42.2	D	140.1	F
			Thru/Right	39.6	D	62.9	E	36.9	D	37.9	D
Overall				2.9	A	19.3	B	8.2	A	22.5	C

Table 8: Build Traffic Conditions (continued)

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour			
				No-Build		Build		No-Build		Build	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Grand River Avenue & Grand Oaks Drive	Signal	EB	Left	2.2	A	2.2	A	3.4	A	3.4	A
			Thru	3.2	A	3.4	A	6.2	A	6.6	A
			Right	2.3	A	2.3	A	3.5	A	3.5	A
		WB	Left	0.7	A	0.8	A	2.9	A	3.6	A
			Thru/Right	0.5	A	0.5	A	1.3	A	1.5	A
		NB	Left	42.0	D	42.0	D	39.8	D	39.8	D
			Thru/Right	40.8	D	40.8	D	36.4	D	36.4	D
		SB	Left/Thru/Right	38.8	D	38.8	D	34.6	C	34.6	C
		Overall				4.7	A	4.6	A	6.3	A
Grand River Avenue & Grand River Plaza W. Drive	STOP (Minor)	EB	Left	9.5	A	10.1	B	12.9	B	15.9	C
			Thru/Right	Free		Free		Free		Free	
		WB	Thru/Right	Free		Free		Free		Free	
		SB	Left	17.8	C	21.0	C	34.3	D	53.8	F
			Right	0.0	A	11.5	B	15.3	C	18.3	C
Grand River Avenue & Grand River Plaza E. Drive / Cleary Drive	STOP (Minor)	EB	Left	9.5	A	10.0	A	12.8	B	13.9	B
			Thru/Right	Free		Free		Free		Free	
		WB	Left	11.0	B	11.4	B	14.7	B	16.2	C
			Thru/Right	Free		Free		Free		Free	
		NB	Left	52.6	F	68.5	F	342.5	F	555.3	F
			Thru/Right	12.7	B	13.3	B	19.0	C	21.3	C
		SB	Left/Thru/Right	59.9	F	84.3	F	292.1	F	1,144.8	F

The results of the build conditions analysis indicate that all approaches and movements at the study intersections will continue to operate in a manner similar to no-build conditions with the exception of the following:

- The signalized intersection of Grand River Avenue & Latson Road which will be reduced to a LOS E during the PM peak hour; however, LOS for all individual movements at the intersection will remain unchanged during both peak hours.
- The SB left-turn movement at the signalized intersection of Grand River Avenue & Grand River Plaza Drive which will be reduced to a LOS F during both peak hours.
- The STOP controlled left-turn movement from the W. Grand River Plaza Drive to Grand River Avenue which will be reduced to a LOS F during the PM peak hour.

Review of peak hour simulations indicate future build traffic operations which are similar to no-build conditions. Acceptable traffic operations are continued to be observed during the AM peak hour with no significant vehicle queues. During the PM peak hour, brief periods of long vehicle queues and cycle failures are continued to be observed at the intersection of Grand River Avenue & Latson Road for the NB left-turn movement and WB right-turn movement. However, these queues dissipate and are not present throughout the duration of the peak hour. On the STOP controlled E. Grand River Plaza Drive and Cleary Drive approaches, 95th percentile queue lengths are calculated to be 62 feet (2-3 vehicles) or less during the peak periods, which is not significant.

Build Improvements

In order to improve traffic operations in the build conditions, mitigation measures were investigated. At the intersection of Grand River Avenue & Latson Road, recent improvements were made as part of the I-96 & Latson Road interchange project to provide dual left-turn lanes and right turn overlap phasing on all approaches, as well as additional travel lanes along Latson Road. The intersection of Grand River Avenue & Latson Road is considered to be built out, and additional physical capacity improvements (i.e., additional lanes) are constrained by available right-of-way. Therefore, further geometric improvements at the intersection to mitigate all movements to a LOS D or better are considered to be regional and beyond the scope and context of this study.

As a result, improvements at Grand River Avenue & Latson Road are limited to signal timing and traffic control modifications. Signal cycle length and timing changes were therefore evaluated. The results of this analysis indicate that optimized timings with a 90 second cycle length during both peak hours would result in improved traffic operations; however, several intersection approaches and movements would continue to operate at a LOS E or F during the peak hours. At the intersection of Grand River Avenue & Grand River Plaza Drive, signal timing optimization during the peak hours would result in all approaches and movements operating at a LOS D or better during both peak hours. The results of the build conditions analysis with the optimized signal timings are summarized in Table 9.

Table 9: Build Traffic Conditions with Improvements

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour					
				Build		Build IMP		Build		Build IMP			
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS		
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.8	D	43.8	D	43.3	D	49.2	D		
			Thru	30.3	C	32.8	C	34.5	C	26.7	C		
			Right	21.1	C	22.7	C	19.7	B	14.3	B		
		WB	Left	99.8	F	51.6	D	49.2	D	65.4	E		
			Thru	25.5	C	25.3	C	52.5	D	46.2	D		
			Right	13.1	B	13.1	B	95.8	F	63.7	F		
		NB	Left	43.8	D	44.0	D	151.4	F	51.2	D		
			Thru	37.6	D	37.6	D	39.6	D	49.7	D		
			Right	70.3	E	53.9	D	29.6	C	36.0	D		
		SB	Left	40.5	D	41.3	D	82.0	F	47.3	D		
			Thru	33.4	C	33.5	C	35.1	D	43.5	D		
			Right	28.2	C	28.4	C	24.7	C	29.2	C		
		Overall				40.0	D	35.7	D	56.5	E	44.4	D
		Grand River Avenue & Grand River Plaza Middle Drive	Signal	EB	Left	0.4	A	0.5	A	20.3	C	27.9	C
Thru	0.3				A	0.4	A	0.9	A	1.2	A		
Right	0.0				A	0.0	A	0.0	A	0.0	A		
WB	Left			0.2	A	0.3	A	15.1	B	18.2	B		
	Thru			0.2	A	0.3	A	21.4	C	24.9	C		
	Right			0.2	A	0.2	A	15.1	B	18.2	B		
NB	Left			46.0	D	35.2	D	40.7	D	34.1	C		
	Thru/Right			42.7	D	31.6	C	33.6	C	28.2	C		
SB	Left			202.3	F	39.9	D	140.1	F	51.5	D		
	Thru/Right			62.9	E	32.6	C	37.9	D	30.0	C		
Overall				19.3	B	5.9	A	22.5	C	17.4	B		

Access Management

MDOT standards for the spacing of commercial drives outlined in Section 1.2.2 of Geometric Design Guidance were reviewed with respect to the existing site driveways along Grand River Avenue. These standards are summarized in **Table 10** and indicate that the driveway spacing between the existing driveways currently meets MDOT standards; however, it does not meet MDOT requirements from other driveways along the corridor including the Meijer / Wal-Mart Drives to the east and the Warehouse Rocks Drive to the west.

Table 10: Driveway Spacing Summary

Driveway	Adjacent Driveway	Distance	MDOT Requirement
W. Grand River Plaza Drive	Middle Grand River Plaza Drive	512	455
	Warehouse Rocks Drive	395	455
Middle Grand River Plaza Drive	E. Grand River Plaza Drive	612	455
E. Grand River Plaza Drive	Meijer Drive	302	455

Conclusions

The Conclusions related to this Traffic Impact Study and relative analyses are as follows:

1. All study intersection approaches and movements currently operate acceptably at a LOS D or better during both peak hours with the exception of the following:
 - a. The NB and SB left-turn movements at the intersection of Grand River Avenue & Latson Road which operate at a LOS E during the PM peak hour.
 - b. The STOP controlled E. Grand River Plaza Drive and Cleary Drive approaches which currently operate at a LOS E or F during both peak hours.
2. Ambient traffic growth of 0.75% was applied to establish 2025 no-build traffic volumes without the proposed development. Several background developments were also identified in the study area and included in this study.
3. No-build conditions analyses indicate that several movements at the intersection of Grand River Avenue & Latson Road will experience degraded operations.
4. Future build conditions analyses indicate that most study intersection approaches and movements will continue to operate acceptably; however, there are several movements with undesirable or failing conditions at the intersection of Grand River Avenue & Latson Road that are expected to worsen in the future if those movements operating at a LOS E or F are not improved under no-build conditions.
5. With the improvements outlined below, all study network intersections and site driveways will operate acceptably, or in a manner similar or improved compared to no-build conditions during the peak hours.

Based on the results of this study, the following should be considered to provide acceptable traffic operations with the proposed development project:

1. Optimize signal timings at the intersection of Grand River Avenue & Latson Road.
2. Optimize signal timings at the intersection of Grand River Avenue & Grand River Plaza Drive.



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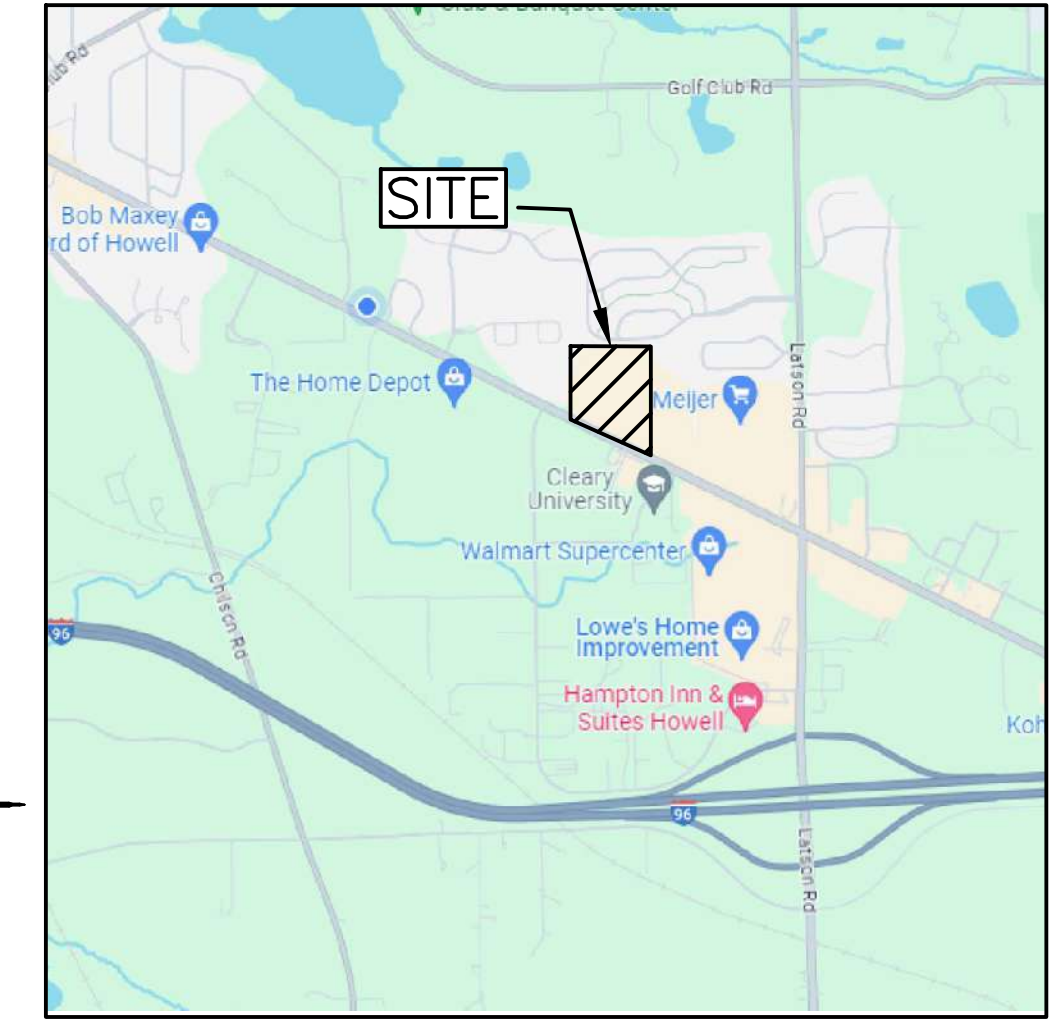
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PER BOSS ENGINEERING MORTGAGE SURVEY, JOB NO. 90542-B, LAST REVISED 7-11-91:

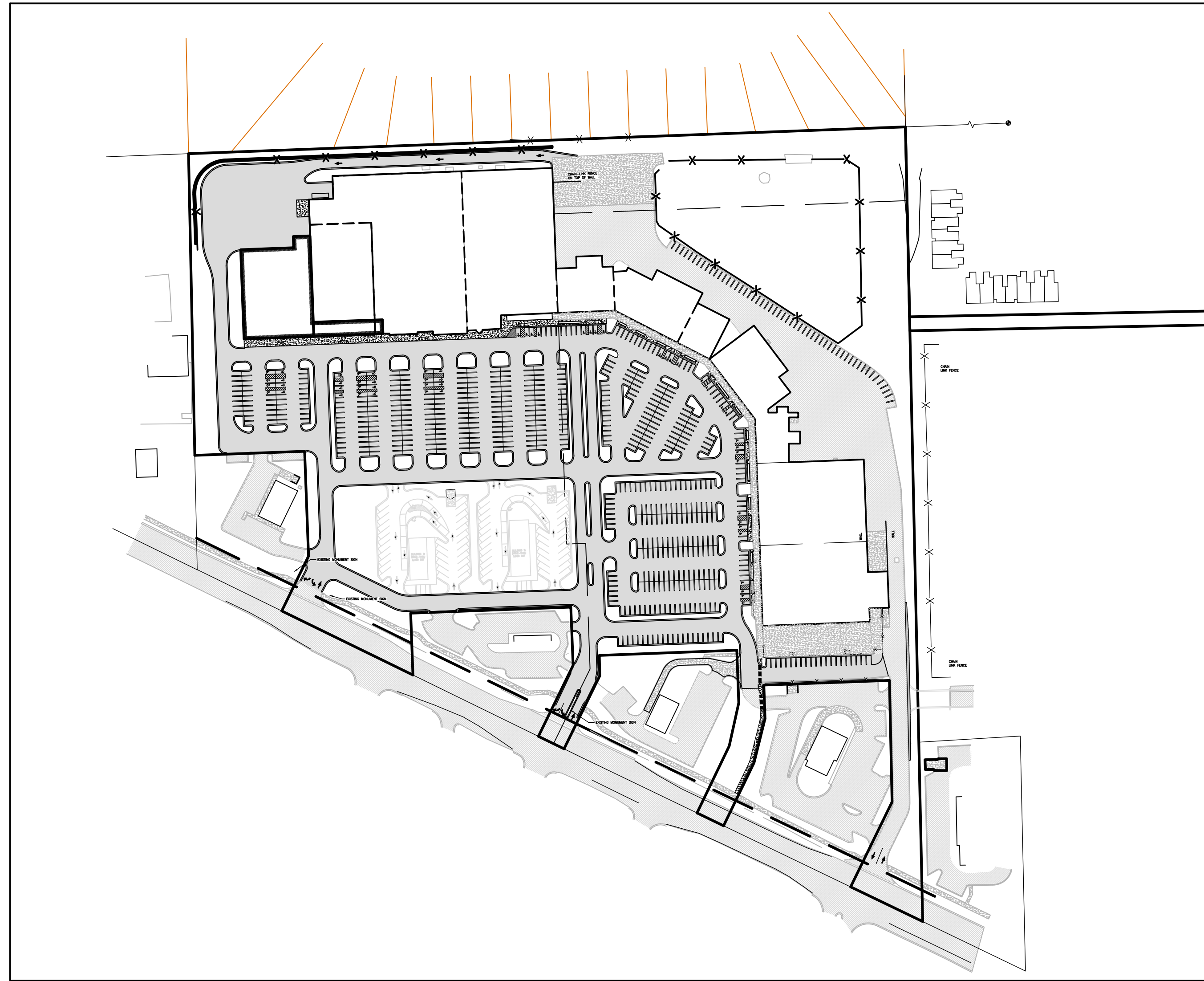
26.62 ACRE PARCEL (REVISED 6/20/91): A part of the West 1/2 of the Southeast 1/4 of Section 5, T2N-R5E, Genoa Township, Livingston County Michigan, more particularly described as follows: Commencing at the South 1/4 Corner of said Section; thence along the North-South 1/4 line of said Section 5, N 02°00'53" W, 1927.04 feet; thence along the centerline of Grand River Ave, S 64°46'02" E (previously recorded as S 60°26'30" E), 168.42 feet to the Point of Beginning of the Parcel to be described; thence N 25°13'58" E, 109.22 feet; thence N 02°56'41" W, 187.64 feet; thence S 87°03'19" W, 196.72 feet; thence along the North-South 1/4 line of said Section 5, N 02°00'53" W, 540.07 feet to the Center of Section 5; thence along the East-West 1/4 line of said Section 5 (as previously surveyed) N 87°03'19" E, 1284.64 feet (previously recorded as East 1320± feet); thence along the East line of the West 1/2 of the Southeast 1/4 of said Section 5, S 02°02'30" E, 1422.56 feet (previously recorded as South, 1405.00 feet); thence along the centerline of Grand River Avenue N 65°06'26" W, 143.10 feet; thence N 25°14'17" E, 169.26 feet; thence N 02°02'30" W, 217.61 feet; thence S 87°03'19" W, 225.17 feet; thence S 02°56'41" E, 60.00 feet; thence S 13°16'24" W, 81.74 feet; thence S 24°53'34" W, 125.00 feet; thence along said centerline of Grand River Avenue, N 65°06'26" W, 53.00 feet; thence N 24°53'34" E, 132.65 feet; thence N 11°43'57" E, 79.42 feet; thence N 02°56'41" W, 94.14 feet; thence S 87°03'19" W, 246.93 feet; thence S 02°56'41" E, 36.62 feet; thence S 25°13'58" W, 145.40 feet; thence along said centerline of Grand River Avenue N 64°46'02" W (previously recorded as N 60°26'30" W), 51.00 feet; thence N 25°13'58" E, 141.07 feet; thence N 02°56'41" W, 104.48 feet; thence S 87°03'19" W, 287.12 feet; thence S 02°56'41" E, 110.70 feet; thence along said centerline of Grand River Avenue N 64°46'02" W (previously recorded as N 60°26'30" W), 261.42 feet to the Point of Beginning, containing 26.62 acres, more or less, and subject to the rights of the public over the existing Grand River Avenue (100 Feet Wide Right-of-Way). Also subject to other easements or restrictions of record, if any.

SITE PLAN FOR GRAND RIVER PLAZA

PART OF T2N R5E S 1/4 CORNER, SECTION 5 GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



LOCATION MAP
NO SCALE



OVERALL SITE MAP
NO SCALE

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES & LEGEND
3	EXISTING CONDITIONS
4	NATURAL FEATURES PLAN
5	DEMOLITION PLAN
6	SITE PLAN
7	SIGNAGE PLAN
8	FIRE TRUCK CIRCULATION PLAN
9	TRUCK CIRCULATION PLAN
10	GRADING & DRAINAGE PLAN
11	SOIL EROSION & SEDIMENTATION CONTROL PLAN
12	UTILITY PLAN
13	LANDSCAPE PLAN
14	LANDSCAPE DETAILS
15	BASIN DETAILS
16	CONSTRUCTION DETAILS
17	CONSTRUCTION DETAILS
PLANS BY OTHERS	
1 OF 2	PHOTOMETRIC PLANS (GASSER BUSH)
2 OF 2	PHOTOMETRIC PLANS (GASSER BUSH)
A-200	COMPOSITE PLAN
A-210	FLOOR PLAN
A-301	EXISTING EXTERIOR ELEVATIONS
A-302	PROPOSED EXTERIOR ELEVATIONS
A-303	PROPOSED EXTERIOR ELEVATIONS
	HOBBY LOBBY EXTERIOR ELEVATION

PERMITS & APPROVALS		
AGENCY	DATE SUBMITTED	DATE APPROVED
• TOWNSHIP ENGINEERING APPROVAL	-	-
• LCDC	-	-
• MDOT	-	-
• SESC	-	-
• NPDES SESC NOC	-	-
• EGLLE - ACT 399	-	-

INDEMNIFICATION STATEMENT

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

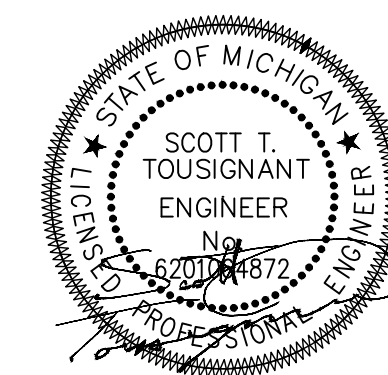
LIGHTING:
GASSER BUSH ASSOCIATES
30984 INDUSTRIAL RD
LIVONIA, MI 48150
PHONE: 734-266-6705
EMAIL: QUOTES@GASSERBUSH.COM

ARCHITECT:
SERENITY ARCHITECTURE COMPANY
5232 GREAT OAKS CT
WEST BLOOMFIELD, MI 48323
CONTACT: ROBERT JORDAN
PHONE: 248-830-3311
EMAIL: RJORDAN@SERENITYARCHITECTURE.COM

APPLICANT:
SYMMETRY MANAGEMENT
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ROYAL OAK, MI 48067
CONTACT: FRANK JARBOU
PHONE: 248-465-0200
EMAIL: FJARBOU@SYMMETRYMGMT.COM

OWNER:
HOWELL FAMILY VENTURES, LLC
29592 BECK ROAD
WIXOM, MI 48393

PREPARED BY:
BEBOSS
Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670
CONTACT: SCOTT TOUSIGNANT
EMAIL: SCOTT@BOSSENG.COM

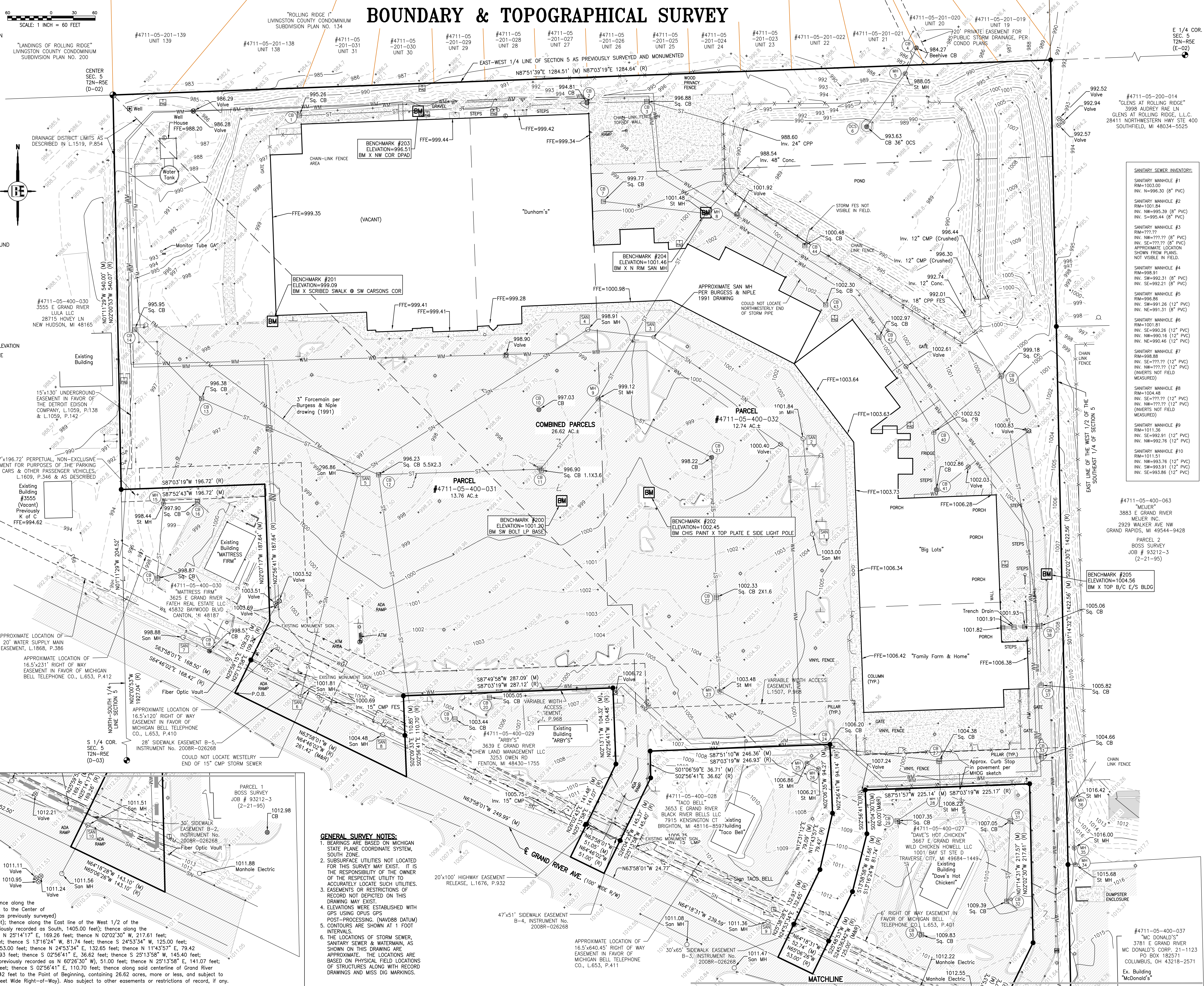


FOR SITE PLAN APPROVAL ONLY!
NOT FOR CONSTRUCTION

2	DH	ST	PER TWP REVIEW & PC MEETING	4-15-24	1
1	DH	ST	PER TOWNSHIP REVIEW	3-19-24	
NO	BY	CK	REVISION	DATE	
					JOB NO: 22-262-1

BOUNDARY & TOPOGRAPHICAL SURVEY

STORM SEWER INVENTORY, LEGEND, and SANITARY SEWER INVENTORY lists. Includes symbols for existing contours, spot elevations, benchmarks, power poles, guy wires, transformer pads, electrical risers, air conditioning units, light poles, hydrants, water valves, manholes, storm catch basins, inverters, telephone risers, gas meters, cable risers, cable TV risers, mailboxes, signs, steel rod sets, steel rods, pipe found, sanitary sewers, water mains, storm sewers, gas mains, cables, telephones, overhead wires, fences, measured and record points, and points of beginning. Also lists materials like asphalt, concrete, and gravel.



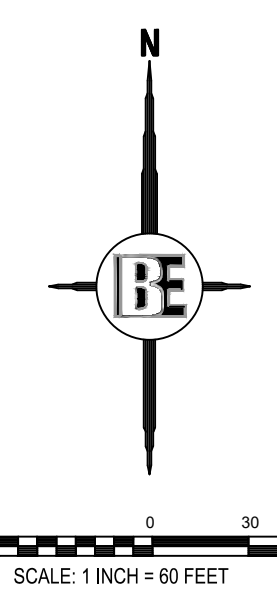
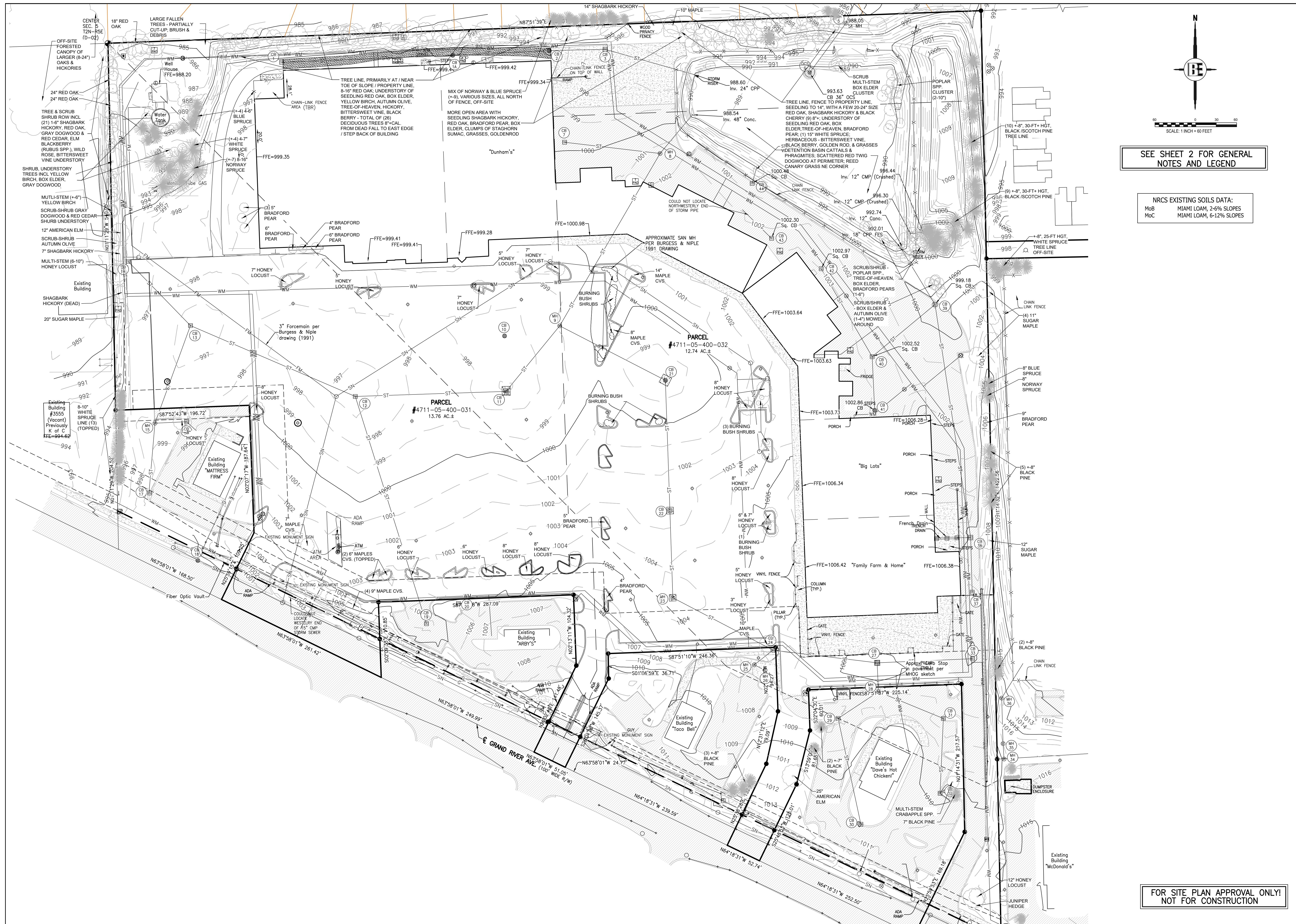
PROPERTY DESCRIPTION PER BOSS ENGINEERING MORTGAGE SURVEY, JOB NO. 90542-B, LAST REVISED 7-11-91: 26.62 ACRE PARCEL (REVISED 6/20/91): A part of the West 1/2 of the Southeast 1/4 of Section 5, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the South 1/4 Corner of said Section; thence along the North-South 1/4 line of said Section 5, N 02°00'53" W, 1927.04 feet; thence along the centerline of Grand River Ave, S 64°46'02" E (previously recorded as S 60°26'30" E), 168.42 feet to the Point of Beginning of the Parcel to be described; thence N 25°13'58" E, 109.22 feet; thence N 02°56'41" W, 187.64 feet; thence S 87°03'19" W, 196.72 feet; thence along the North-South 1/4 line of said Section 5, N 02°00'53" W, 540.07 feet to the Center of Section 5; thence along the East-West 1/4 line of said Section 5 (as previously surveyed) N 87°03'19" E, 1284.64 feet (previously recorded as East 1320.2 feet); thence along the East line of the West 1/2 of the Southeast 1/4 of said Section 5, S 02°02'30" E, 1422.56 feet (previously recorded as South, 1405.00 feet); thence along the centerline of Grand River Avenue N 65°06'26" W, 143.10 feet; thence N 25°14'17" E, 169.26 feet; thence N 02°02'30" W, 217.61 feet; thence S 87°03'19" W, 225.17 feet; thence S 02°56'41" E, 60.00 feet; thence S 13°16'24" W, 81.74 feet; thence S 24°53'34" W, 125.00 feet; thence along said centerline of Grand River Avenue, N 65°06'26" W, 53.00 feet; thence N 24°53'34" E, 132.65 feet; thence N 11°43'57" E, 79.42 feet; thence N 02°56'41" W, 94.14 feet; thence S 87°03'19" W, 246.93 feet; thence S 02°56'41" E, 36.62 feet; thence S 23°13'58" W, 145.40 feet; thence along said centerline of Grand River Avenue N 64°46'02" W (previously recorded as N 60°26'30" W), 51.00 feet; thence along said centerline of Grand River Avenue N 02°56'41" W, 104.48 feet; thence S 87°03'19" W, 281.12 feet; thence S 02°56'41" E, 110.70 feet; thence along said centerline of Grand River Avenue N 64°46'02" W (previously recorded as N 60°26'30" W), 261.42 feet to the Point of Beginning, containing 26.62 acres, more or less, and subject to the rights of the public over the existing Grand River Avenue (100 Feet Wide Right-of-Way). Also subject to other easements or restrictions of record, if any.

GENERAL SURVEY NOTES: 1. BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. 2. SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES. 3. EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST. 4. ELEVATIONS WERE ESTABLISHED WITH GPS USING OPUS GPS POST-PROCESSING. (NAD83 DATUM) 5. CONTOURS ARE SHOWN AT 1 FOOT INTERVALS. 6. THE LOCATIONS OF STORM SEWER, SANITARY SEWER & WATERMAIN, AS SHOWN ON THIS DRAWING ARE APPROXIMATE. THE LOCATIONS ARE BASED ON PHYSICAL FIELD LOCATIONS OF STRUCTURES ALONG WITH RECORD DRAWINGS AND MISS DIG MARKINGS.

Professional seal for Christopher S. Fergus, License No. 4001047055, State of Michigan. Includes the text 'BEBOSS Engineering' and 'Professional Surveying'.

Project information for GRAND RIVER PLAZA SYMMETRY MANAGEMENT, 812 SOUTH MAIN STREET, SUITE 200, ROUTH OAK, MI 48067, 248-465-0200. Includes title 'EXISTING CONDITIONS' and a table for project details.

Table with columns for PROJECT, PREPARED FOR, TITLE, DRAWN BY, FIELD CREW, SCALE, JOB NO., DATE, SHEET NO., and REVISION. Includes the BEBOSS Engineering logo and the number 3.



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

NRCS EXISTING SOILS DATA:
 MoB MIAMI LOAM, 2-6% SLOPES
 MoC MIAMI LOAM, 6-12% SLOPES

FOR SITE PLAN APPROVAL ONLY!
 NOT FOR CONSTRUCTION

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACTED LOCATION AND DEPTH OF UTILITIES CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE APPROPRIATE AGENCY OR THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

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 1-800-462-7171
 www.beboss.com

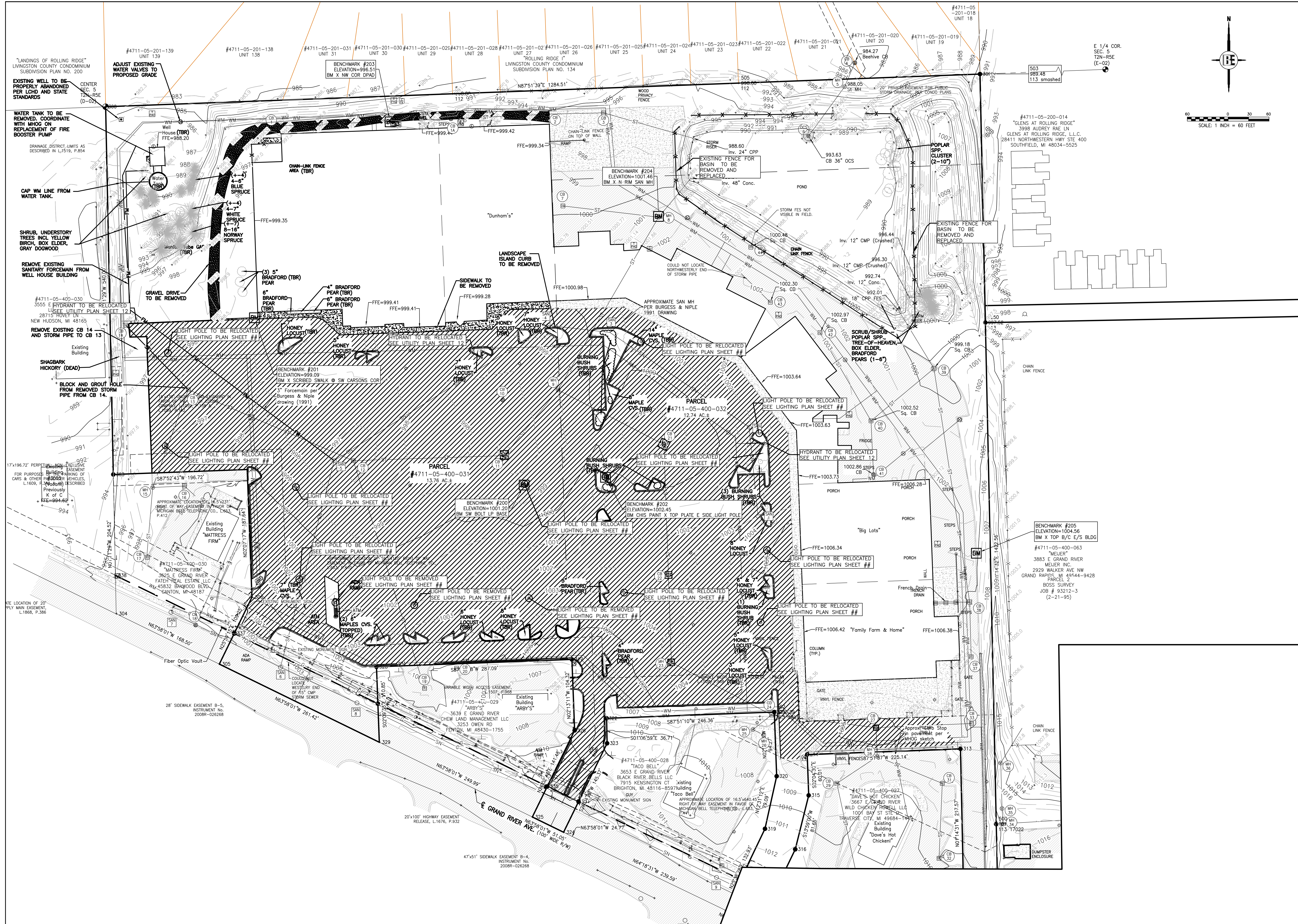
BEBOSS
 Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

PROJECT: GRAND RIVER PLAZA
 PREPARED FOR: SYMMETRY MANAGEMENT
 813 SOUTH MAIN STREET, SUITE 200
 ROYAL OAK, MI 48067
 248-655-0200

NO.	DATE	REVISION PER	COMMENTS
1	3-19-2024	PC	TOWNSHIP REVIEW
2	4-15-2024	PC	PER TWP REVIEW & PC MTC

TITLE: NATURAL FEATURES PLANS

DESIGNED BY: PC
 DRAWN BY: PC
 CHECKED BY:
 SCALE: 1" = 60'
 JOB NO: 22-262-1
 DATE: 2/20/24
 SHEET NO. 4

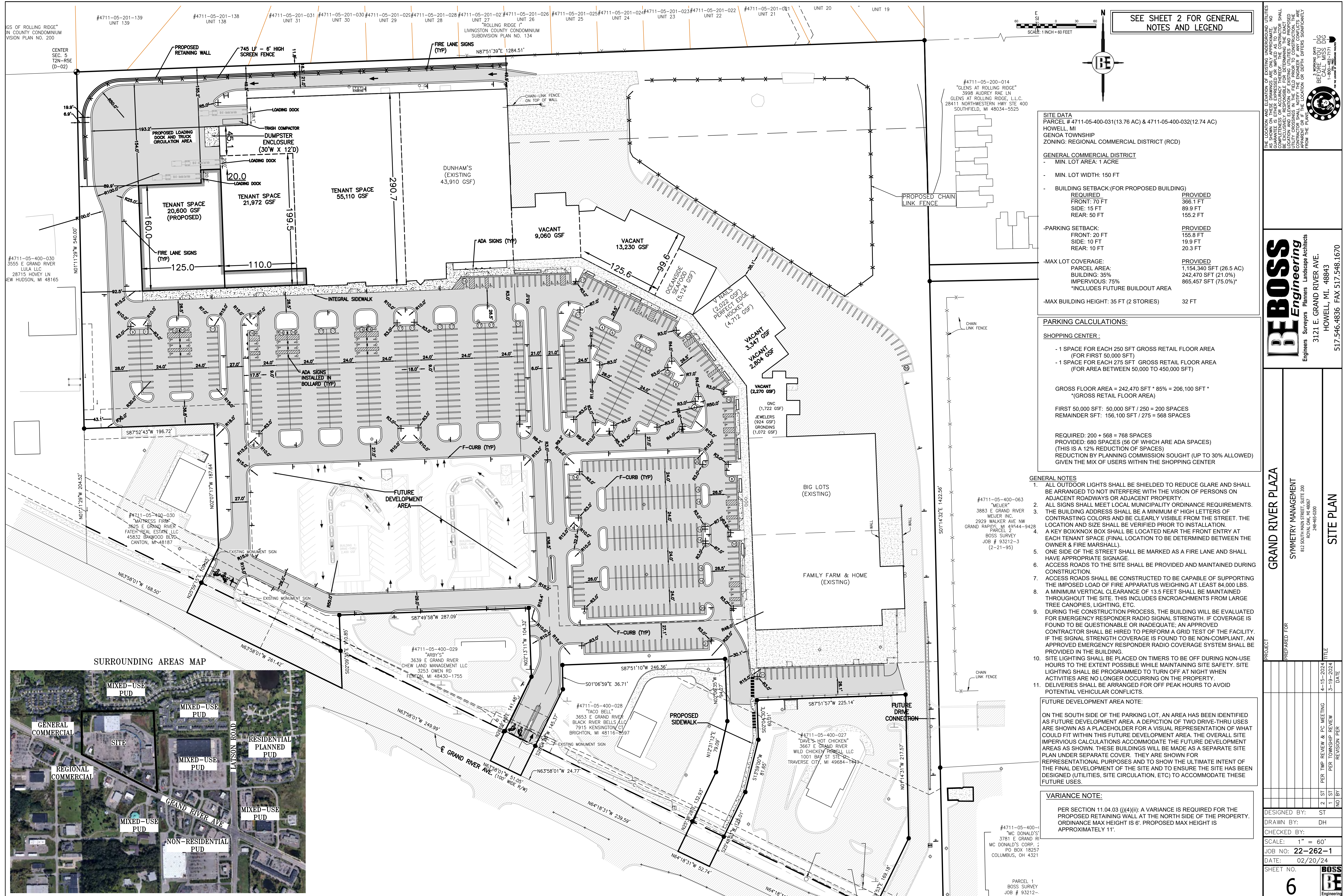


THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS BEFORE THE PLAN IS SUBMITTED FOR PERMITTING AGENCIES TO AVOID CONFLICTS FROM THE PLAN.

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3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

PROJECT	GRAND RIVER PLAZA
PREPARED FOR	SYMMETRY MANAGEMENT 813 SOUTH MAIN STREET, SUITE 200 ROYAL OAK, MI 48067 248-465-0200
TITLE	DEMOLITION PLAN
DATE	3-19-2024
PER TOWNSHIP REVIEW	1 BY
REVISION PER	NO BY
DESIGNED BY:	ST
DRAWN BY:	DH
CHECKED BY:	
SCALE:	
JOB NO:	22-262-1
DATE:	02/16/24
SHEET NO.	5



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

SITE DATA
 PARCEL #4711-05-400-031(13.76 AC) & 4711-05-400-032(12.74 AC)
 HOWELL, MI
 GENOA TOWNSHIP
 ZONING: REGIONAL COMMERCIAL DISTRICT (RCD)

GENERAL COMMERCIAL DISTRICT
 - MIN. LOT AREA: 1 ACRE
 - MIN. LOT WIDTH: 150 FT
 - BUILDING SETBACK (FOR PROPOSED BUILDING)

REQUIRED	PROVIDED
FRONT: 70 FT	366.1 FT
SIDE: 15 FT	89.9 FT
REAR: 50 FT	155.2 FT

-PARKING SETBACK:

REQUIRED	PROVIDED
FRONT: 20 FT	155.8 FT
SIDE: 10 FT	19.9 FT
REAR: 10 FT	20.3 FT

-MAX LOT COVERAGE:

REQUIRED	PROVIDED
PARCEL AREA:	1,154,340 SFT (26.5 AC)
BUILDING: 35%	242,470 SFT (21.0%)
IMPERVIOUS: 75%	865,457 SFT (75.0%)*
*INCLUDES FUTURE BUILDOUT AREA	

-MAX BUILDING HEIGHT: 35 FT (2 STORIES) 32 FT

PARKING CALCULATIONS:

SHOPPING CENTER:

- 1 SPACE FOR EACH 250 SFT GROSS RETAIL FLOOR AREA (FOR FIRST 50,000 SFT)
- 1 SPACE FOR EACH 275 SFT GROSS RETAIL FLOOR AREA (FOR AREA BETWEEN 50,000 TO 450,000 SFT)

GROSS FLOOR AREA = 242,470 SFT * 85% = 206,100 SFT *
 *(GROSS RETAIL FLOOR AREA)

FIRST 50,000 SFT: 50,000 SFT / 250 = 200 SPACES
 REMAINDER SFT: 156,100 SFT / 275 = 568 SPACES

REQUIRED: 200 + 568 = 768 SPACES
 PROVIDED: 680 SPACES (68 OF WHICH ARE ADA SPACES)
 (THIS IS A 12% REDUCTION OF SPACES)
 REDUCTION BY PLANNING COMMISSION SOUGHT (UP TO 30% ALLOWED)
 GIVEN THE MIX OF USERS WITHIN THE SHOPPING CENTER

- GENERAL NOTES**
- ALL OUTDOOR LIGHTS SHALL BE SHIELDED TO REDUCE GLARE AND SHALL BE ARRANGED TO NOT INTERFERE WITH THE VISION OF PERSONS ON ADJACENT ROADWAYS OR ADJACENT PROPERTY.
 - ALL SIGNS SHALL MEET LOCAL MUNICIPALITY ORDINANCE REQUIREMENTS.
 - THE BUILDING ADDRESS SHALL BE A MINIMUM 6" HIGH LETTERS OF CONTRASTING COLORS AND BE CLEARLY VISIBLE FROM THE STREET. THE LOCATION AND SIZE SHALL BE VERIFIED PRIOR TO INSTALLATION.
 - A KEY BOX/KIOSK SHALL BE LOCATED NEAR THE FRONT ENTRY AT EACH TENANT SPACE. FINAL LOCATION TO BE DETERMINED BETWEEN THE OWNER & FIRE MARSHALL.
 - ONE SIDE OF THE STREET SHALL BE MARKED AS A FIRE LANE AND SHALL HAVE APPROPRIATE SIGNAGE.
 - ACCESS ROADS TO THE SITE SHALL BE PROVIDED AND MAINTAINED DURING CONSTRUCTION.
 - ACCESS ROADS SHALL BE CONSTRUCTED TO BE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 84,000 LBS.
 - A MINIMUM VERTICAL CLEARANCE OF 13.5 FEET SHALL BE MAINTAINED THROUGHOUT THE SITE. THIS INCLUDES ENCROACHMENTS FROM LARGE TREE CANOPIES, LIGHTING, ETC.
 - DURING THE CONSTRUCTION PROCESS, THE BUILDING WILL BE EVALUATED FOR EMERGENCY RESPONDER RADIO SIGNAL STRENGTH. IF COVERAGE IS FOUND TO BE QUESTIONABLE OR INADEQUATE, AN APPROVED CONTRACTOR SHALL BE HIRED TO PERFORM A GRID TEST OF THE FACILITY. IF THE SIGNAL STRENGTH COVERAGE IS FOUND TO BE NON-COMPLIANT, AN APPROVED EMERGENCY RESPONDER RADIO COVERAGE SYSTEM SHALL BE PROVIDED IN THE BUILDING.
 - SITE LIGHTING SHALL BE PLACED ON TIMERS TO BE OFF DURING NON-USE HOURS TO THE EXTENT POSSIBLE WHILE MAINTAINING SITE SAFETY. SITE LIGHTING SHALL BE PROGRAMMED TO TURN OFF AT NIGHT WHEN ACTIVITIES ARE NO LONGER OCCURRING ON THE PROPERTY.
 - DELIVERIES SHALL BE ARRANGED FOR OFF PEAK HOURS TO AVOID POTENTIAL VEHICULAR CONFLICTS.

FUTURE DEVELOPMENT AREA NOTE:

ON THE SOUTH SIDE OF THE PARKING LOT, AN AREA HAS BEEN IDENTIFIED AS FUTURE DEVELOPMENT AREA. A DEPICTION OF TWO DRIVE-THRU WHAT ARE SHOWN AS A PLACEHOLDER FOR A VISUAL REPRESENTATION OF WHAT COULD FIT WITHIN THIS FUTURE DEVELOPMENT AREA. THE OVERALL SITE IMPERVIOUS CALCULATIONS ACCOMMODATE THE FUTURE DEVELOPMENT AREAS AS SHOWN. THESE BUILDINGS WILL BE MADE AS A SEPARATE SITE PLAN UNDER SEPARATE COVER. THEY ARE SHOWN FOR REPRESENTATIONAL PURPOSES AND TO SHOW THE ULTIMATE INTENT OF THE FINAL DEVELOPMENT OF THE SITE AND TO ENSURE THE SITE HAS BEEN DESIGNED (UTILITIES, SITE CIRCULATION, ETC) TO ACCOMMODATE THESE FUTURE USES.

VARIANCE NOTE:

PER SECTION 11.04.03 (j)(4)(ii): A VARIANCE IS REQUIRED FOR THE PROPOSED RETAINING WALL AT THE NORTH SIDE OF THE PROPERTY. ORDINANCE MAX HEIGHT IS 6'. PROPOSED MAX HEIGHT IS APPROXIMATELY 11'.

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BE
 BEBOSSE ENGINEERING
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 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

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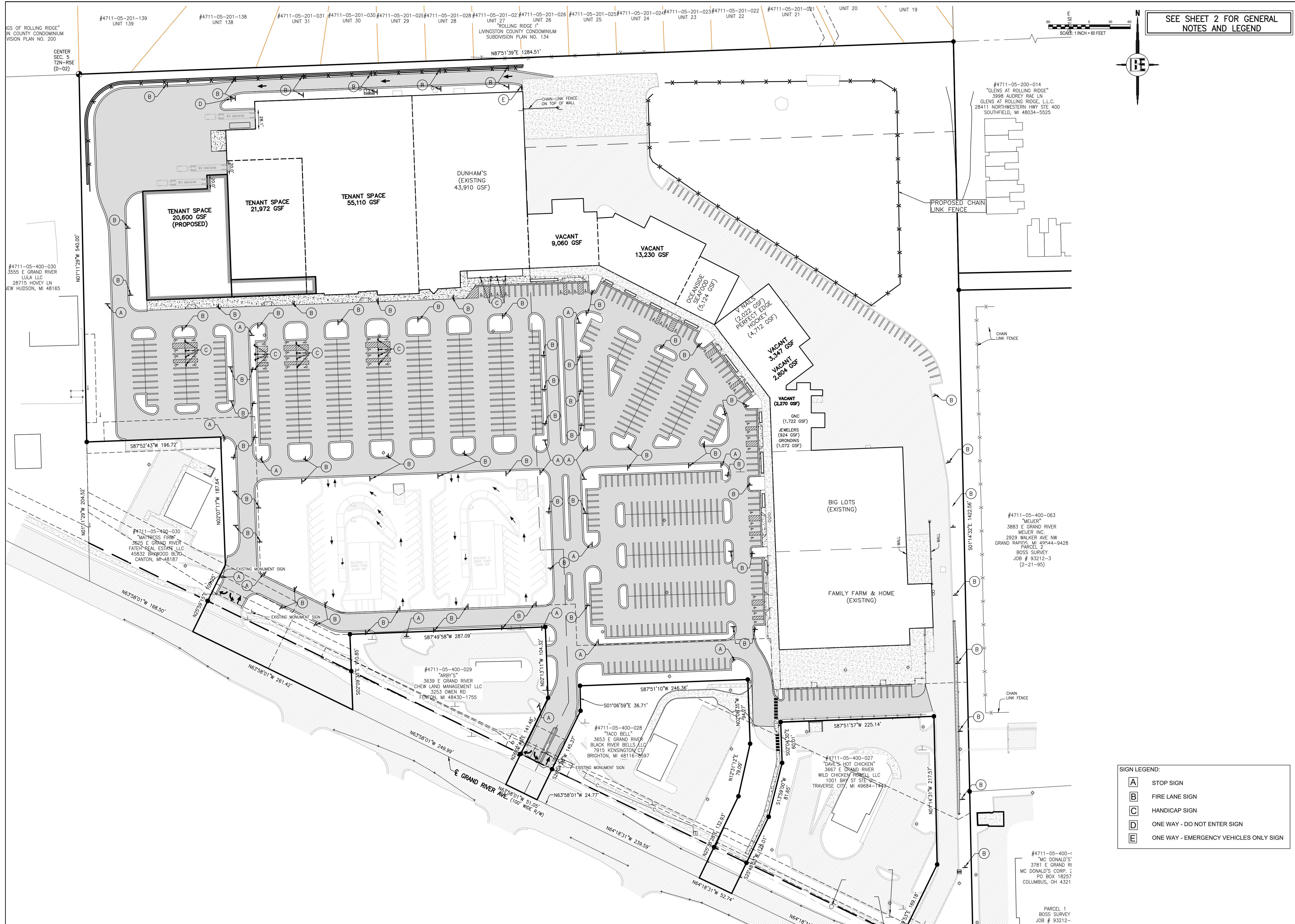
GRAND RIVER PLAZA

SYMMETRY MANAGEMENT
 813 SOUTH MAIN STREET, SUITE 200
 ROYAL OAK, MI 48067
 248-655-0200

SITE PLAN

PROJECT	PREPARED FOR	TITLE	DATE
GRAND RIVER PLAZA	SYMMETRY MANAGEMENT	SITE PLAN	4-15-2024
DESIGNED BY:	ST	DRAWN BY:	DH
CHECKED BY:		SCALE:	1" = 60'
PER. TWP. REVIEW & PC MEETING		JOB NO.:	22-262-1
PER. TOWNSHIP REVIEW		DATE:	02/20/24
NO BY		SHEET NO.:	6





SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

SIGN LEGEND:

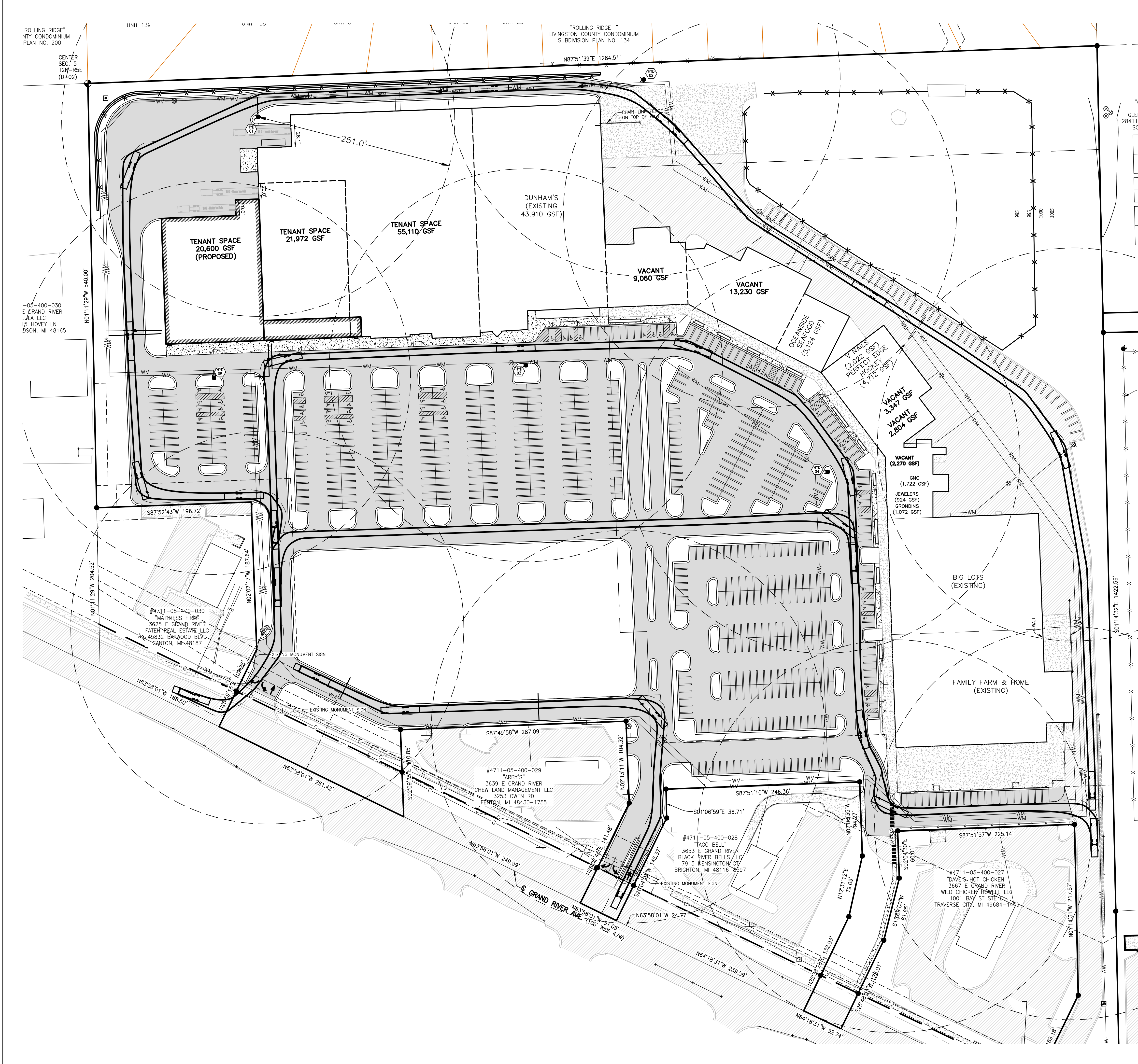
A	STOP SIGN
B	FIRE LANE SIGN
C	HANDICAP SIGN
D	ONE WAY - DO NOT ENTER SIGN
E	ONE WAY - EMERGENCY VEHICLES ONLY SIGN

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF ANY UTILITIES CROSSING IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ANY UTILITIES CROSSING IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ANY UTILITIES CROSSING IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ANY UTILITIES CROSSING IN THE FIELD PRIOR TO CONSTRUCTION.

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GRAND RIVER PLAZA
 SYMMETRY MANAGEMENT
 813 SOUTH MAIN STREET, SUITE 200
 ROYAL OAK, MI 48067
 248-655-0200

PROJECT	PREPARED FOR	TITLE
GRAND RIVER PLAZA	SYMMETRY MANAGEMENT	SIGNAGE PLAN
DESIGNED BY:	ST	DATE
DRAWN BY:	DH	DATE
CHECKED BY:		DATE
SCALE:	1" = 60'	DATE
JOB NO:	22-262-1	DATE
DATE:	02/20/24	DATE
SHEET NO.	7	DATE



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

Brighton Area Fire Authority
 Overall Length 49.083ft
 Overall Width 9.167ft
 Overall Body Height 7.500ft
 Min Body Ground Clearance 0.750ft
 Track Width 9.167ft
 Lock-to-lock time 5.00s
 Max Steering Angle (Virtual) 45.00°

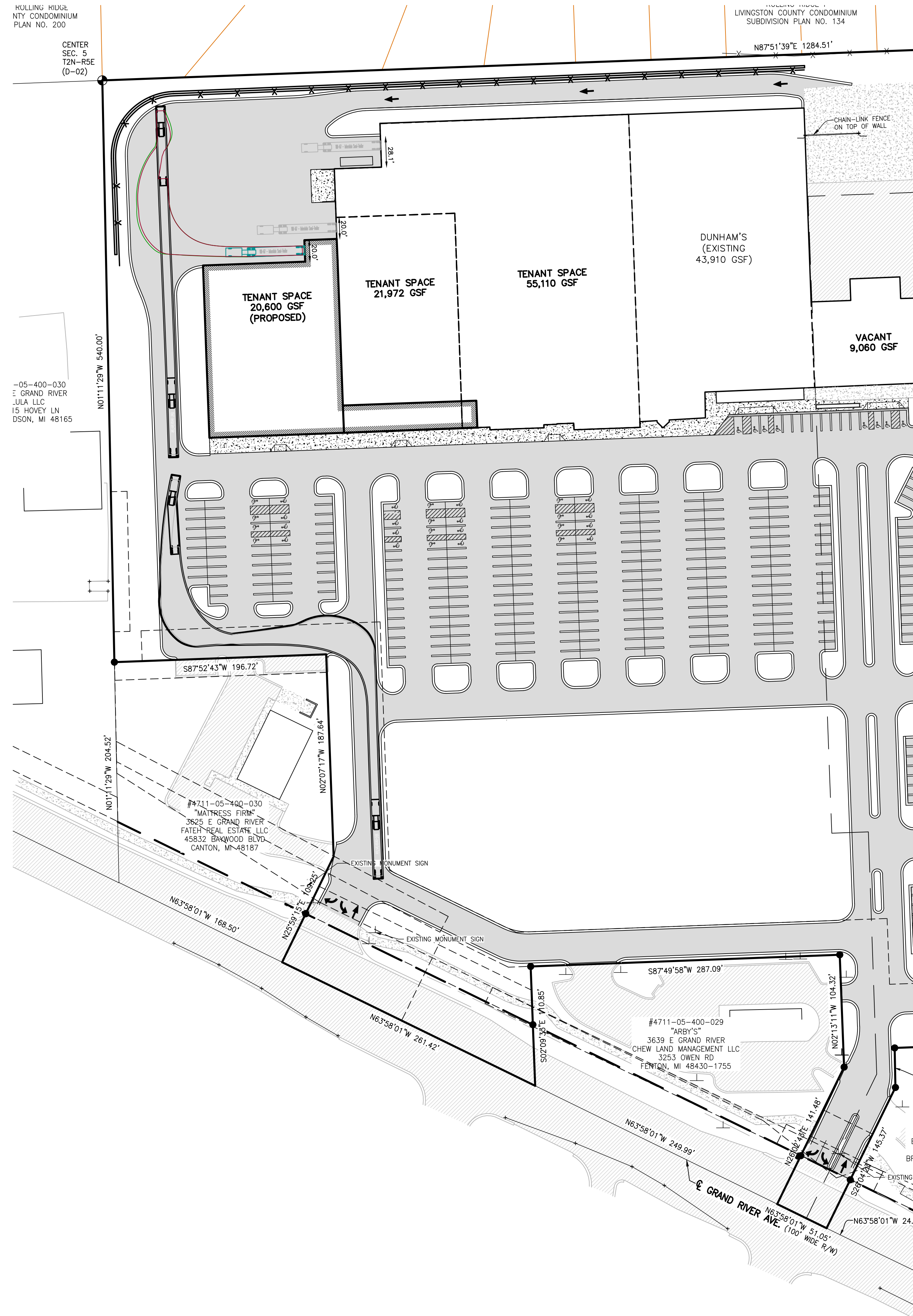
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 517.546.4836 FAX 517.548.1670

PROJECT	GRAND RIVER PLAZA
PREPARED FOR	SYMMETRY MANAGEMENT 813 SOUTH MAIN STREET, SUITE 200 ROYAL OAK, MI 48067 248-655-0200
TITLE	FIRE CIRCULATION PLAN
DESIGNED BY:	ST
DRAWN BY:	DH
CHECKED BY:	
SCALE:	1" = 60'
JOB NO:	22-262-1
DATE:	02/20/24
SHEET NO.	8

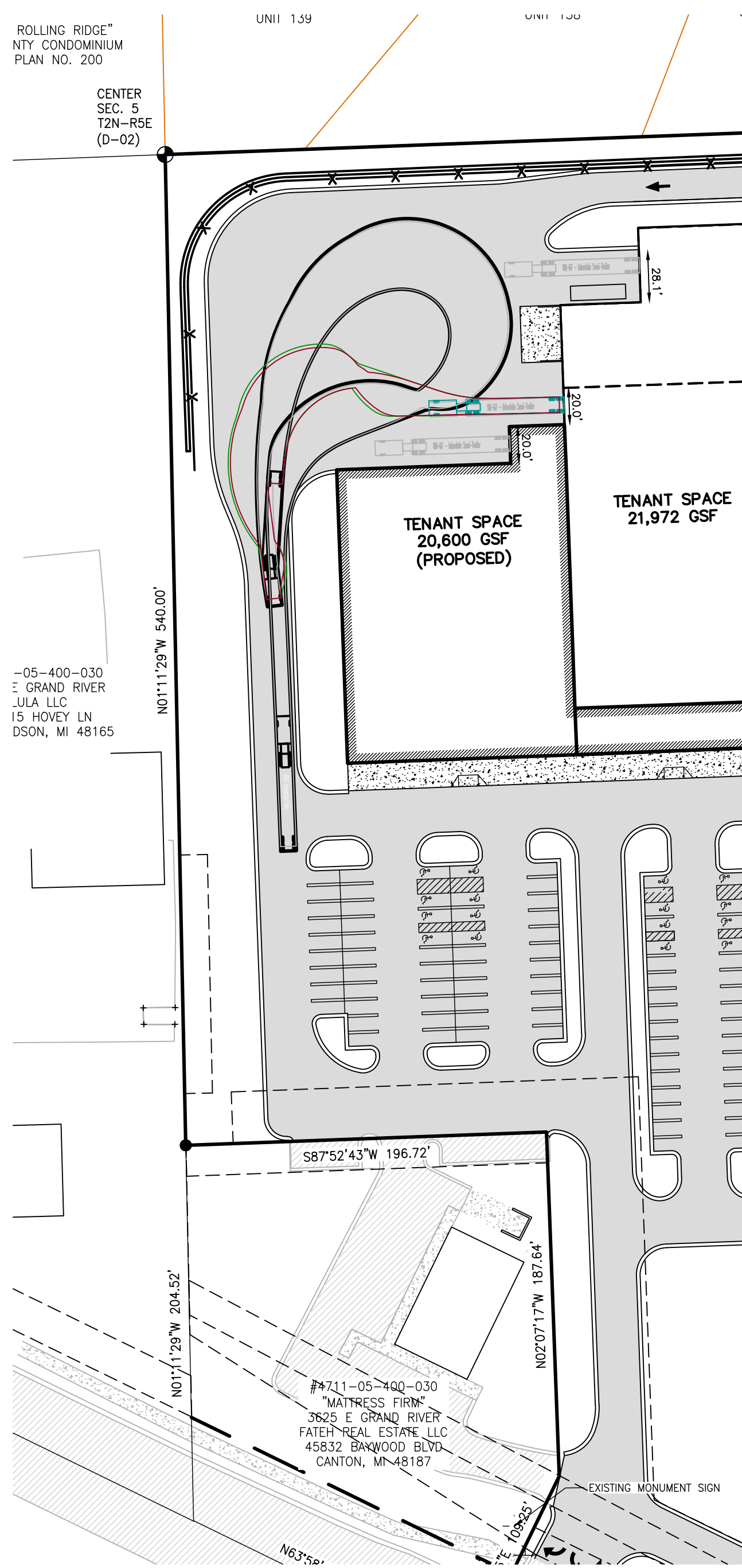
THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH, OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE PLANS. BE ENGINEERING, INC. CALL MSS DIG 1-800-462-7771

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 AutoCAD PDF (General Documentation).pc3

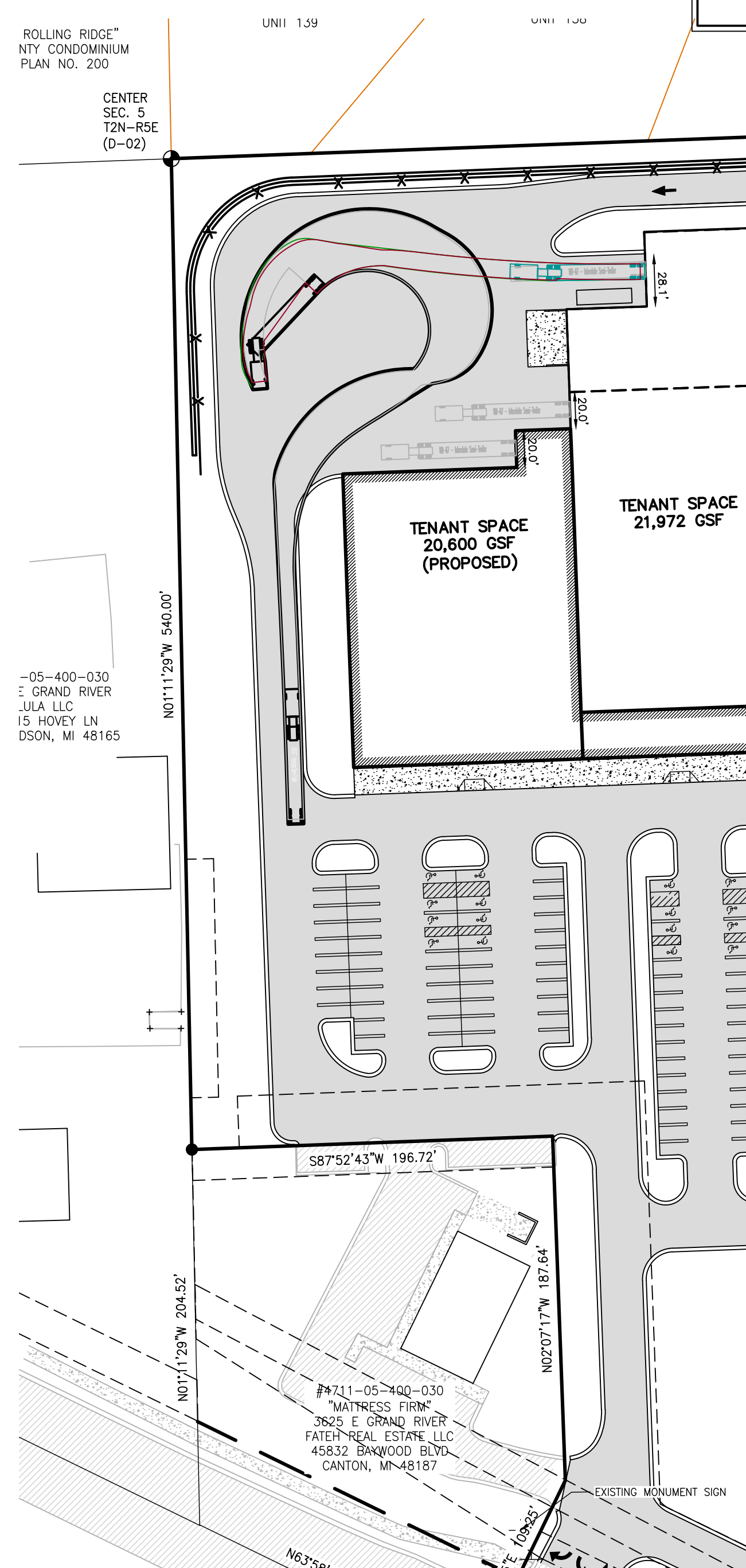
Packet Page 6



TRUCK DOCK #1 CIRCULATION
SCALE: 1" = 60'



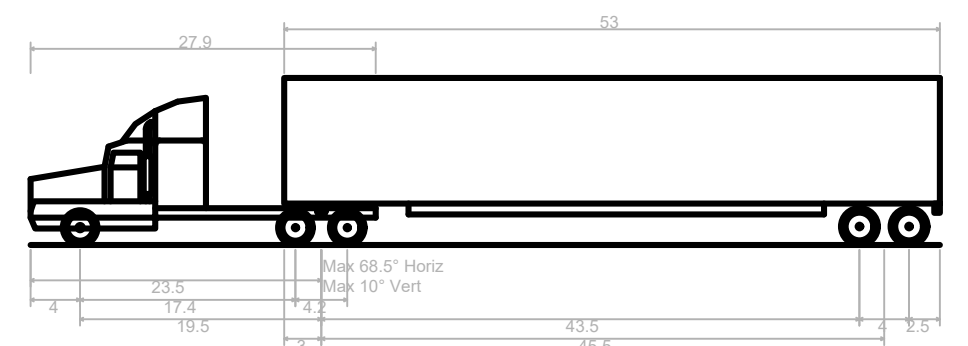
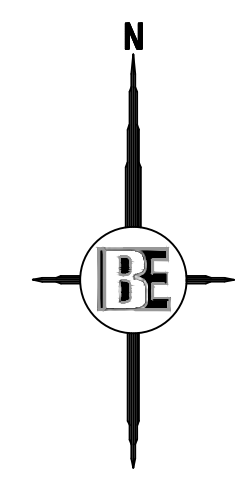
TRUCK DOCK #2 CIRCULATION
SCALE: 1" = 60'



TRUCK DOCK #3 CIRCULATION
SCALE: 1" = 60'

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

SCALE: 1 INCH = 60 FEET



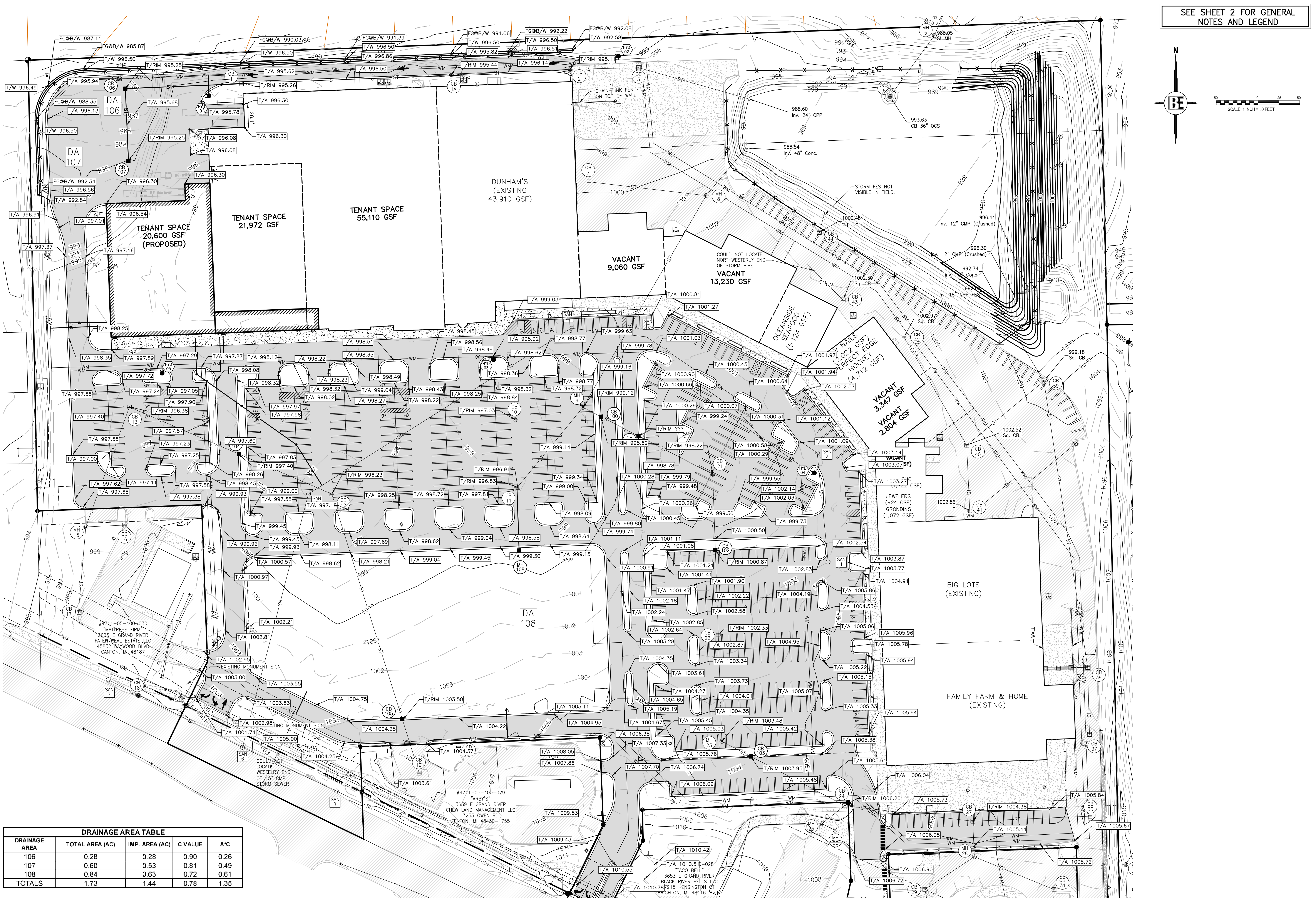
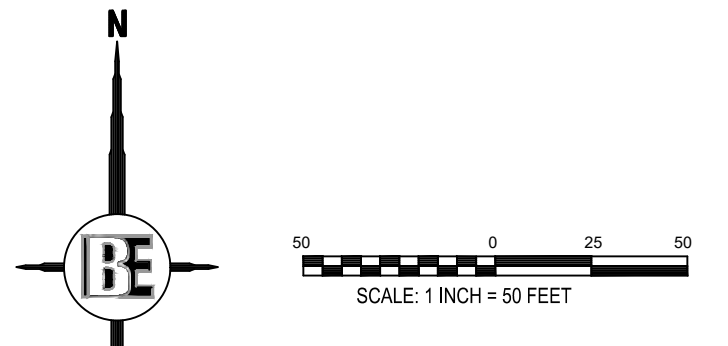
WB-67 - Interstate Semi-Trailer
Overall Length 73.501ft
Overall Width 8.500ft
Overall Body Height 13.500ft
Min Body Ground Clearance 1.334ft
Max Track Width 8.500ft
Lock-to-lock time 6.00s
Max Steering Angle (Virtual) 28.40°

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PROJECT	GRAND RIVER PLAZA
PREPARED FOR	SYMMETRY MANAGEMENT 813 SOUTH MAIN STREET, SUITE 200 ROYAL OAK, MI 48067 248-655-0200
TITLE	TRUCK CIRCULATION PLAN

DESIGNED BY:	ST
DRAWN BY:	DH
CHECKED BY:	
SCALE:	1" = 60'
JOB NO:	22-262-1
DATE:	02/20/24
SHEET NO.	9

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



DRAINAGE AREA	TOTAL AREA (AC)	IMP. AREA (AC)	C VALUE	A ^c
106	0.28	0.28	0.90	0.26
107	0.60	0.53	0.81	0.49
108	0.84	0.63	0.72	0.61
TOTALS	1.73	1.44	0.78	1.35

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO WARRANTY IS MADE BY THE ENGINEER AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES CROSSING IN THE FIELD PRIOR TO CONSTRUCTION. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR APPARATUS OR FOR THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

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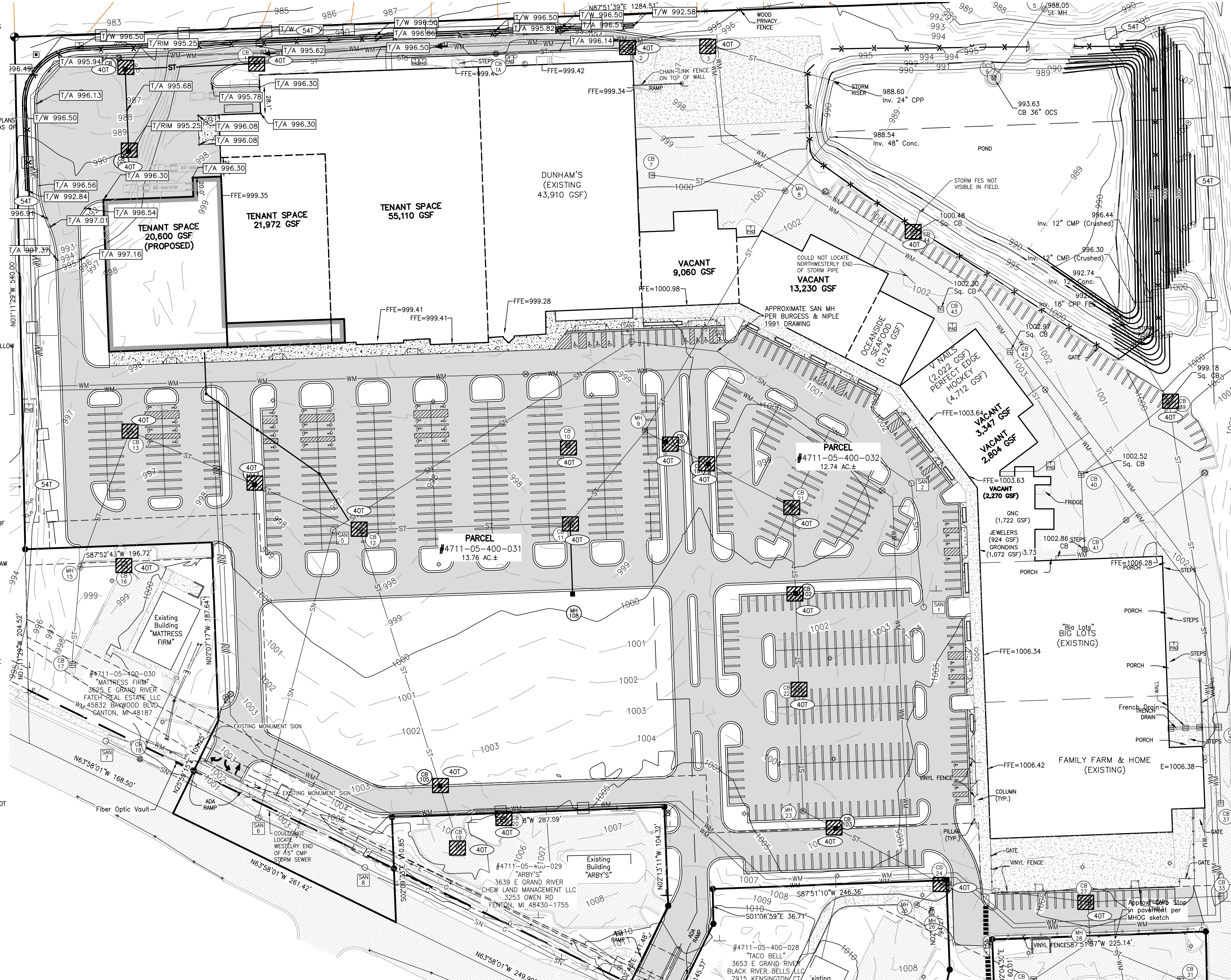
GRAND RIVER PLAZA
 SYMMETRY MANAGEMENT
 813 SOUTH MAIN STREET, SUITE 200
 ROYAL OAK, MI 48067
 248-665-0200

PROJECT	PREPARED FOR	TITLE	DATE
GRAND RIVER PLAZA	SYMMETRY MANAGEMENT	GRADING & DRAINAGE PLAN	02/20/24

NO	BY	DATE	REVISION
1	ST	4-15-2024	DESIGNED BY
2	DH	3-19-2024	DRAWN BY
1	ST	3-19-2024	CHECKED BY
1	ST	3-19-2024	SCALE: 1" = 50'
1	ST	3-19-2024	JOB NO: 22-262-1
1	ST	3-19-2024	DATE: 02/20/24
1	ST	3-19-2024	SHEET NO.

LIVINGSTON COUNTY SOIL EROSION PERMIT TEMPLATE
TEMPORARY CONTROLS AND SEQUENCE

1. NOTIFY LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE 24 HOURS PRIOR TO START OF GRADE WORK.
2. IN ACCORDANCE WITH PUBLIC ACT NO. 53, OF 1974 THE PERMIT HOLDER SHALL CALL MISS DIG FOR STAKING AND LOCATING OF UTILITIES, AT LEAST 72 HOURS IN ADVANCE OF THE START OF ANY WORK.
PERMITTING STANDARDS
3. (IMPORTANT NOTICE) RETENTION/DETENTION PONDS SHALL BE EXCAVATED, TOPSOILED, SEEDED, MULCHED AND TACKED PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. INGRESS/EGRESS MUST HAVE LARGE CRUSHED ROCK TO REDUCE THE TRACKING OF SOIL ONTO THE PUBLIC TRAFFIC AREAS. SEE DETAIL ITEMS BELOW.
4. A 36" M.D.O.T SPECIFICATION TYPE SILT FABRIC FENCE AS SHOWN ON PLANS SHALL BE PLACED AND MAINTAINED ALONG PERIMETER ON ALL LOW LYING AREAS OF THE CONSTRUCTION SITE TO FILTER RUNOFF BEFORE LEAVING PROJECT SITE.
5. ALL TEMPORARY EROSION CONTROL DEVICES AS NOTED ON PLANS SHALL BE INSTALLED PRIOR TO THE START OF MASSIVE EARTH DISTRIBUTION.
6. PLAN DOES DENOTE A DETAILED EROSION CONTROL DEVICE TO RESTRICT TRACKING OF MATERIAL ONTO THE HIGHWAY. STONE DIAPHRAGMS SHALL BE INSTALLED AT ALL INGRESS/EGRESS AREAS OF THE SITE PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. DIAPHRAGMS SHALL BE OF CRUSHED STONE AND SHALL HAVE A MINIMUM LENGTH OF 100' LINEAL FEET.
RETENTION PONDS
7. RETENTION/DETENTION/SEDIMENTATION PONDS SHALL BE EXCAVATED, TOPSOILED, SEEDED, MULCHED AND TACKED PRIOR TO THE START OF MASSIVE EARTH DISRUPTION.
8. DETENTION POND OUTLETS SHALL BE OF THE STANDPIPE AND STONE FILTER SYSTEM WITH TRASH SCREEN. OUTLET FLOW SHALL NOT EXCEED 0.20 CUBIC FEET OF WATER PER SECOND/PER ACRE. POND DIKES SHALL HAVE A MINIMUM OF ONE (1) FOOT OF FREEBOARD. AN EMERGENCY SPILLWAY SHALL BE CONSTRUCTED WITHIN THE FREEBOARD LEVEL.
9. THE EMERGENCY SPILLWAY FROM THE DETENTION POND SHALL BE SOODED AND PEGGED, OR RIP RAPPED, 15 FEET PAST THE TOE OF THE SLOPE OF THE BERM.
10. DIKES AND BERMS SHALL BE FREE OF ALL ORGANIC MATTER.
11. RETENTION/DETENTION PONDS SHALL BE FENCED WITH A 4" CHAIN LINK FENCE, INCLUDING A 12" ACCESS GATE FOR MAINTENANCE UNLESS MINIMUM 5 FT. VERTICAL SIDE TOE FLOPS ARE PROVIDED. THE FENCE SHALL BE INSTALLED AT THE OUTER PORTION OF THE BERM, TO ALLOW FOR MAINTENANCE WORK TO BE DONE INSIDE THE FENCE.
12. ALL UNIMPROVED DISTURBED AREAS SHALL BE STRIPPED OF TOPSOIL WHICH WILL BE STORED ON-SITE DURING THE EXCAVATION STAGE. TOPSOIL PILES SHALL BE SEEDED AND MULCHED, OR MATTED WITH STRAW IN THE NON-GROWING SEASON, IMMEDIATELY AFTER THE STRIPPING PROCESS IS COMPLETED, TO PREVENT WIND AND WATER EROSION.
13. SOIL EROSION CONTROLS SHALL BE MONITORED DAILY BY THE ON-SITE ENGINEER, OR CONTRACTOR, WHICHEVER CASE APPLIES.
SLOPES AND DITCHES
14. ON SITE DITCHES SHALL BE OF THE FLAT BOTTOM TYPE MINIMUM WIDTH OF 2' WITH A MINIMUM OF 3 HORIZONTAL TO 1 VERTICAL SIDE SLOPES. 3:1.
15. DITCHES WITH STEEP SLOPES WILL NEED FLOW CHECKS TO PREVENT SCOURING OF THE DITCH BOTTOM. THESE SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR INSPECTOR PRIOR TO THE START OF THE PROJECT.
16. SLOPES IN EXCESS OF 3 HORIZONTAL TO 1 VERTICAL SHALL NOT BE USED EXCEPT WITH A MECHANICAL DEVICE SUCH AS A RETAINING WALL, TERRACING, OR OTHER PRIOR APPROVED DEVICE.
STORM DRAINS
17. ALL STORM WATER STRUCTURES, CATCH BASINS AND/OR MANHOLES, IF BLOCK, SHALL BE PLASTERED ON BOTH THE INSIDE AND OUTSIDE OF THE STRUCTURES. GROUTING AND POINTING WILL BE NECESSARY AT THE CASTING AND STRUCTURE JOINT TO PREVENT LEAKAGE AND THE RESULTING SOIL MOVEMENT, AROUND THE STRUCTURE.
18. STORM WATER INLETS SHALL HAVE AS A TEMPORARY CONTROL A STRAW BALE BARRIER AND STONE FILTER INSTALLED AROUND THE INLET DURING CONSTRUCTION. AS AN ALTERNATIVE TO THE STRAW BALE BARRIER, A BURLAP AND PEA STONE FILTER MAY BE USED. THREE LAYERS OF BURLAP FIBER AND A FILTER OF PEA STONE MINIMUM 1 FT. IN DEPTH CAN BE USED. DUE TO THE POROSITY OF THE BURLAP FILTER THE MINIMUM OF 1 FT. OF STONE IS VERY IMPORTANT. THE CONTROL SHALL BE INSTALLED AS SOON AS THE STRUCTURE IS BUILT AND INSPECTED DAILY.
19. BURLAP AND PEA STONE FILTERS WILL NEED TO BE CHANGED AFTER EACH RAINFALL.
20. COUNTY CODE REQUIRES A MINIMUM PIPE SIZE OF 12" IN DIAMETER. IF SMALLER PIPE IS NEEDED FOR OUTLET PURPOSES THE 12" CAN BE ADAPTED TO THE CORRECT SIZE. ALL PIPE SHALL MEET THE SAME DIAMETER CODE SIZE.
21. ALL STORM DRAIN OUTLETS 15" IN DIAMETER OR LARGER SHALL HAVE ANIMAL GUARDS INSTALLED TO PREVENT ENTRANCE TO SYSTEM.
22. ALL STORM DRAINAGE PIPE 30" IN DIAMETER OR LARGER SHALL BE POINTED, AT THE JOINTS ON THE INSIDE WITH MORTAR, AFTER BACKFILLING.
23. ALL STORM DRAIN OUTLETS THAT DO NOT EMPTY INTO THE RETENTION/DETENTION POND SHALL HAVE A TEMPORARY 5'X10'X3' SUMP INSTALLED AT THE TERMINATION OF THE STORM SEWER. UPON COMPLETION OF THE STABILIZATION WORK THE SUMP AREA SHALL BE FILLED AND RIP RAPPED WITH COBBLE STONE. SILT TRAPS SHALL BE INSPECTED AFTER EACH STORM.
24. STORM WATER OUTLETS DO DENOTE RIP RAP. ALL OUTLETS SHALL BE RIP RAPPED OVER KEVED FILTER FABRIC WITH A MINIMUM OF 1500 YARDS OF 6" OR LARGER COBBLE STONE.
25. RIP RAP AS NOTED ON THE PLAN SHALL BE OF A FUNNEL SHAPE CONSTRUCTION, WIDTH SHALL INCREASE AS DISTANCE FROM THE OUTLET POINT INCREASES AT A 3:1 RATIO.
26. RIP RAP SHALL BE OF COBBLE STONE, 6" IN DIAMETER OR LARGER. GROUTING MAY BE NECESSARY, AND SHALL BE A MINIMUM OF 6" IN DEPTH WITH THE COBBLE SET IN THE CEMENT SLURRY.
27. STORM WATER OUTLET IS IN NEED OF A SPLASH BLOCK WHICH IS NOT NOTED ON THE PLAN. INSTALL SPLASH BLOCK IF SLOPE OF THE PIPE IS 4% OR GREATER.
28. IT WILL BE NECESSARY FOR THE DEVELOPER TO HAVE THE STORM DRAINAGE LINES CLEANED PRIOR TO FINAL INSPECTION BY THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE. IF REQUIRED, THIS WORK SHALL BE DONE BY A PROFESSIONAL SEWER CLEANING FIRM AND CERTIFIED IN WRITING BY THE PROJECT ENGINEER. ALL SUMPS AND TEMPORARY SILT TRAPS SHALL ALSO BE CLEANED AT THIS TIME.
STABILIZATION
29. ALL UNIMPROVED DISTURBED AREAS SHALL BE RE-TOP SOILED, WITH A MINIMUM OF 3" OF MATERIAL, SEEDED, MULCHED AND TACKED WITHIN 15 DAYS OF THE COMPLETION OF THE MASSIVE EARTH DISRUPTION. IN THE NON-GROWING SEASON STRAW MATTING WILL SUFFICE. HYDROSEEDING WILL BE AN ACCEPTABLE ALTERNATE FOR MULCHING. EXTREME CARE SHOULD BE EXERCISED IN SPRING AND FALL PERIODS AS A FROST WILL BREAK THE BOND OF THE HYDROSEEDING, WHICH WILL AFFECT THE EFFECTIVENESS OF THIS PROCEDURE.
30. IN THE NON-GROWING SEASON, TEMPORARY STABILIZATION OF MASSIVELY EXPOSED AREAS FOR WINTER STABILIZATION SHALL BE DONE WITH STRAW MATTING.
31. PERIODIC INSPECTIONS WILL BE MADE THROUGHOUT THE COURSE OF THE PROJECT. IT WILL BE THE RESPONSIBILITY OF THE MANAGERS OF THE PROJECT TO CONTACT THIS OFFICE FOR THE FINAL INSPECTION AT THE END OF THE PROJECT.
32. THIS COMMONWEALTH PERMIT IS VALID FOR THE MASS EARTH MOVEMENT, THE INSTALLATION OF ROADS, DRAINS, AND UTILITIES AND IS NOT FOR ANY SINGLE FAMILY RESIDENCE. ALL RESIDENTIAL BUILDERS WILL NEED TO SECURE MARKERS AND OR PERMITS AS NECESSARY FOR EACH LOT IN THIS DEVELOPMENT AT THE TIME APPLICATION FOR SINGLE FAMILY RESIDENCE IS MADE.
33. THE ISSUING BUILDING DEPARTMENT SHALL NOT ISSUE THE CERTIFICATE OF OCCUPANCY UNTIL THE FINAL INSPECTION LETTER FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE HAS BEEN OBTAINED.
34. PER THE LIVINGSTON COUNTY DRAIN COMMISSIONER THE SEEDING, FERTILIZER AND MULCH MINIMUM QUANTITIES SHALL BE AS FOLLOWS:
TOP-SOIL 3" IN DEPTH
GRASS SEED 218 LBS. PER ACRE
FERTILIZER 150 LBS. PER ACRE
STRAW MULCH 3" IN DEPTH 1.5 TO 2 TONS PER ACRE (ALL MULCHING MUST HAVE A TIE DOWN, SUCH AS TACKIFIER, NET BANDING, ETC.)
HYDRO-SEEDING HYDRO-SEEDING IS NOT ACCEPTABLE FOR SLOPES EXCEEDING 1% IN SUCH CASES STABILIZATION SHALL BE DONE WITH SEED AND STRAW MULCH WITH A TACKIFIER.
MAINTENANCE SCHEDULE FOR SOIL EROSION CONTROLS
1. SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH MAJOR STORM EVENT. MAINTENANCE SHALL INCLUDE REMOVAL OF ACCUMULATED SILT AND REPLACEMENT OF TORN SECTIONS. SILT FENCE SHALL BE REMOVED WHEN ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
2. TRACKING PAD SHALL BE INSPECTED MONTHLY FOR ACCUMULATED DIRT. TRACKING PAD SHALL BE REPLACED WHEN THE STONES ARE CHOKED WITH DIRT. TRACKING PAD SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FIRST COURSE OF ASPHALT BEING LAID.
3. DETENTION/RETENTION POND SHALL BE INSPECTED QUARTERLY ON A PERMANENT BASIS. MAINTENANCE SHALL INCLUDE SEDIMENT REMOVAL, EMBANKMENT STABILIZATION AND MAINTAINING THE OUTLET STRUCTURE IN GOOD CONDITION. NO TREES SHALL BE ALLOWED TO GROW ON THE EMBANKMENT.
4. CATCH BASINS SHALL BE INSPECTED ANNUALLY FOR ACCUMULATION OF SEDIMENT. ALL SEDIMENT MUST BE REMOVED AND DISPOSED OF PROPERLY WHEN THE SUMP IS FULL.
5. COMMON AREAS SHALL BE STABILIZED NO LATER THAN 15 DAYS AFTER GRADE WORK, PURSUANT TO RULE 1709 (5). SILT FENCE SHALL BE A MINIMUM 36"



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

SOIL EROSION CONTROL MEASURES

Table with 2 columns: Device Number and Description. Devices include: 6. Silt Fence, 14. Aggregate Cover, 15. Paving, 16. Curb & Gutter, 35. Catch Basin, 36. Catch Basin, 40. Inlet Sediment Filter, 54. Silt Fence.

T = TEMPORARY, P = PERMANENT
TOTAL DISTURBED AREA = 15.34 AC.

CONSTRUCTION SEQUENCE

Table with 2 columns: Activity and Duration. Activities include: 1. DAILY DEMO & CLEAR, 2. MASS GRADING, 3. UNDERGROUND UTILITY, 4. SEED & MULCH, 5. FINAL GRADING, 6. UNDERGROUND UTILITY, 7. SEED & MULCH, 8. DEMO & CLEAR.

CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE

Table with 4 columns: Activity, Weekly, Monthly, As Required. Activities include: MAINTAIN LANDSCAPING, CLEAN INLETS, COLLECT LITTER, SWEEP PARKING LOT.

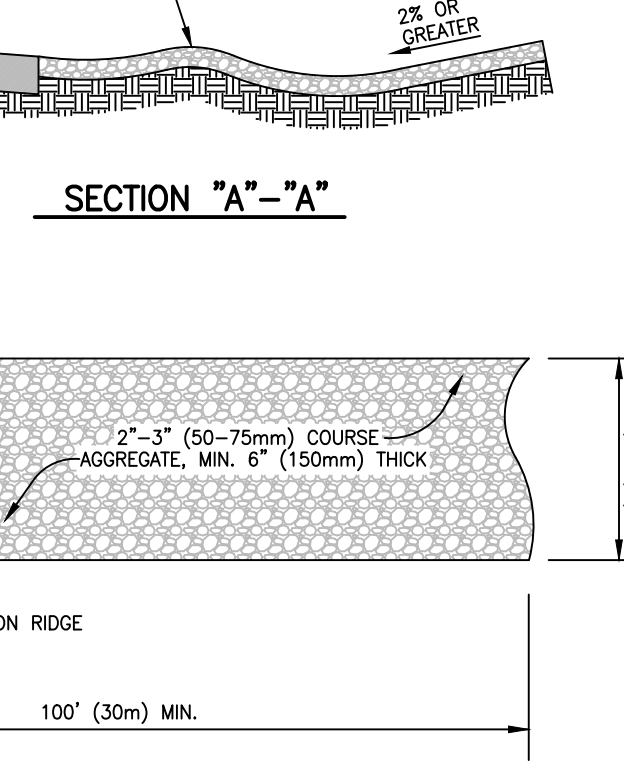
CONTROLS & MEASURES NARRATIVE

Table with 2 columns: Activity and Description. Activities include: MAINTAIN LANDSCAPING, CLEAN INLETS, COLLECT LITTER, SWEEP PARKING LOT, DUST CONTROL.

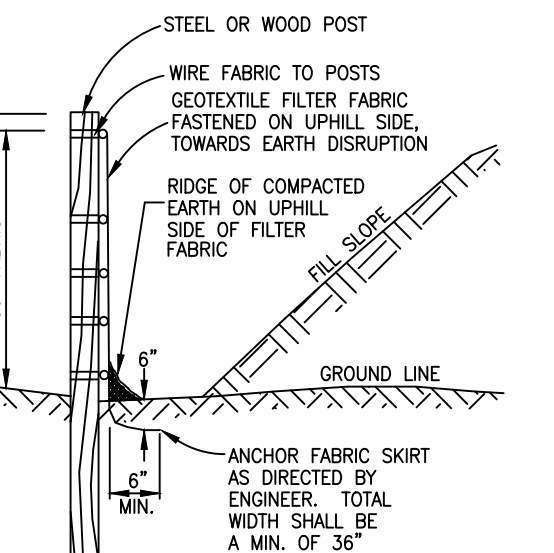
PROPOSED CONST. SCHEDULE FOR THE YEAR 2024-2025

Table with 7 columns: Activity, Aug, Sept, Oct, Nov, Dec, April. Activities include: DEMO & CLEAR, MASS GRADING, UNDERGROUND UTILITY, FINAL GRADING, SEED & MULCH.

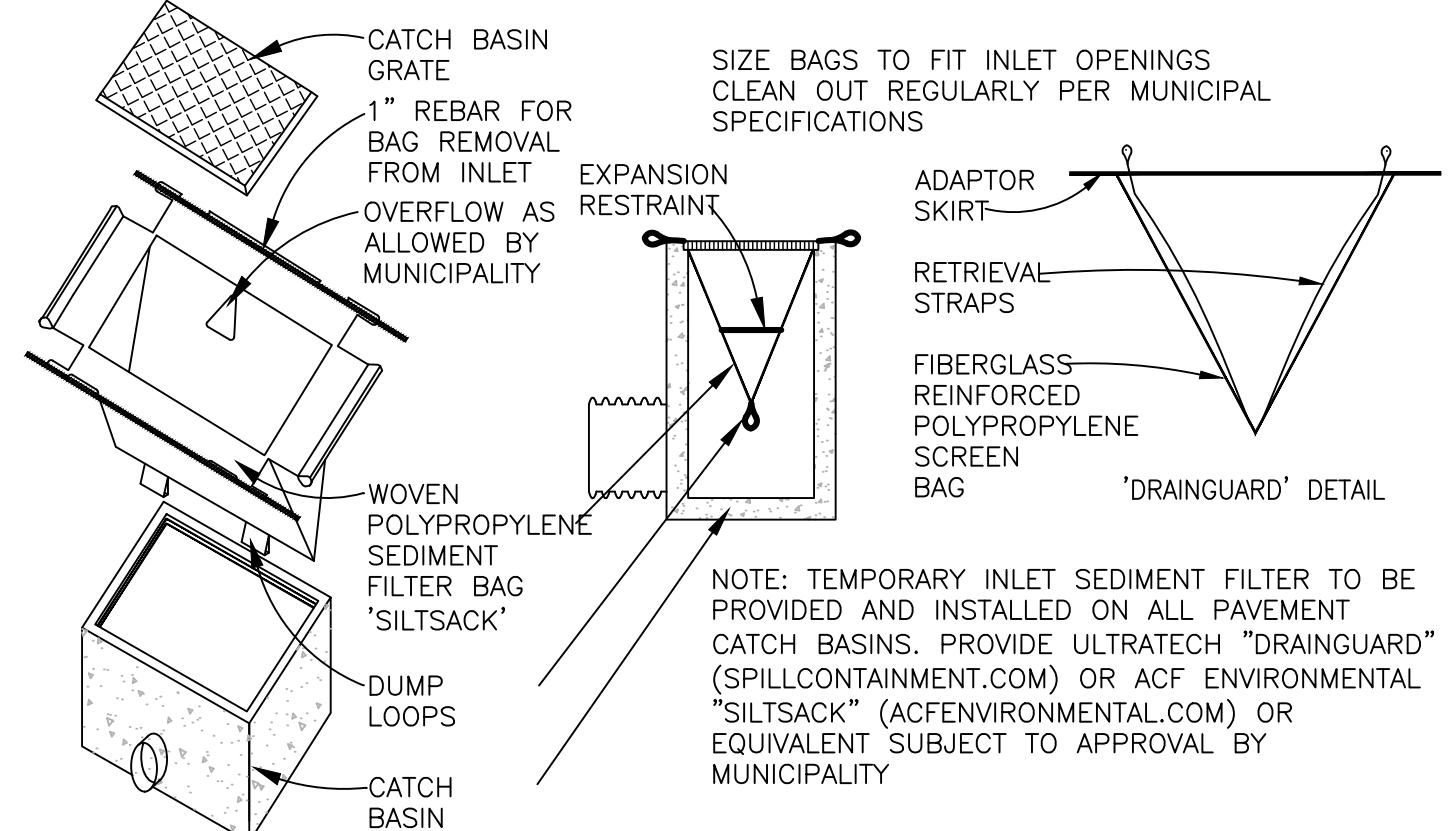
SECTION "A"- "A"



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT



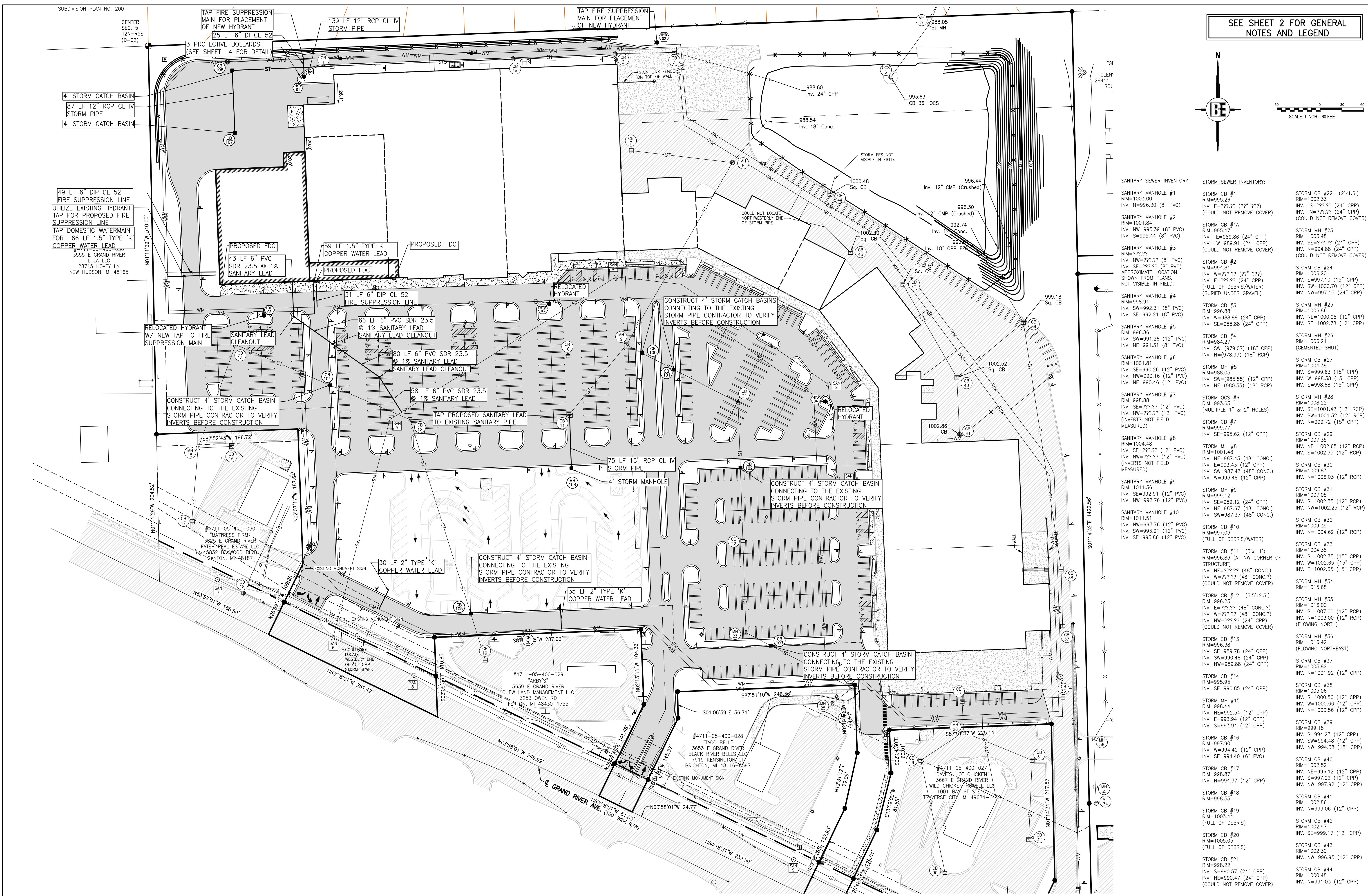
SILT FENCE DETAIL



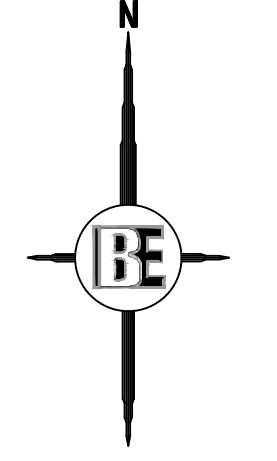
TEMPORARY INLET SEDIMENT FILTER DETAIL

SURFACE WATER & COUNTY DRAINS
WETLAND - ON SITE
LAKES - APPROXIMATELY 3450 FT NORTHWEST TO EARL LAKE
DRAINS - APPROXIMATELY 1400 FT NORTHEAST TO LATSON ROAD DRAIN

Project information including: BOSS Engineering logo, Grand River Plaza, Symmetry Management, project title 'SOIL EROSION AND SEDIMENTATION PLAN', project location '3121 E. GRAND RIVER AVE. HOWELL, MI. 48843', and project schedule 'DESIGNED BY: ST, DRAWN BY: DH, CHECKED BY: ST, SCALE: 1" = 60', JOB NO: 22-262-1, DATE: 02/20/24, SHEET NO: 11.



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



STORM SEWER INVENTORY:	SANITARY SEWER INVENTORY:
STORM CB #1 RIM=995.26 INV. E=???? (??' ???) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #1 RIM=1003.00 INV. N=996.30 (8" PVC)
STORM CB #2 RIM=995.47 INV. E=989.86 (24" CPP) INV. W=989.91 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #2 RIM=1001.84 INV. N=995.39 (8" PVC) INV. S=995.44 (8" PVC)
STORM CB #3 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #3 RIM=999.77 INV. NW=999.77 (8" PVC) INV. SE=999.77 (8" PVC) APPROXIMATE LOCATION SHOWN FROM PLANS, NOT VISIBLE IN FIELD.
STORM CB #4 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #4 RIM=998.91 INV. SW=992.31 (8" PVC) INV. SE=992.21 (8" PVC)
STORM CB #5 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #5 RIM=996.86 INV. SW=991.26 (12" PVC) INV. NE=991.31 (8" PVC)
STORM CB #6 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #6 RIM=1001.81 INV. SE=990.26 (12" PVC) INV. NW=990.16 (12" PVC) INV. NE=990.46 (12" PVC)
STORM CB #7 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #7 RIM=998.88 INV. SE=999.77 (12" PVC) INV. NW=999.77 (12" PVC) (INVERTS NOT FIELD MEASURED)
STORM CB #8 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #8 RIM=1004.49 INV. SE=999.77 (12" PVC) INV. NW=999.77 (12" PVC) (INVERTS NOT FIELD MEASURED)
STORM CB #9 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #9 RIM=1011.36 INV. SE=992.91 (12" PVC) INV. NW=992.76 (12" PVC)
STORM CB #10 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	SANITARY MANHOLE #10 RIM=1011.51 INV. NW=993.76 (12" PVC) INV. SW=993.91 (12" PVC) INV. SE=993.86 (12" PVC)
STORM CB #11 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #11 RIM=999.12 INV. SE=989.12 (24" CPP) INV. NE=987.67 (48" CONC.) INV. SW=987.37 (48" CONC.)
STORM CB #12 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #12 RIM=1004.38 INV. S=1002.75 (15" CPP) INV. W=1002.65 (15" CPP) INV. E=1002.65 (15" CPP) (COULD NOT REMOVE COVER)
STORM CB #13 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #13 RIM=1009.39 INV. N=1004.69 (12" RCP) (FULL OF DEBRIS/WATER)
STORM CB #14 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #14 RIM=1004.38 INV. S=1002.75 (15" CPP) INV. W=1002.65 (15" CPP) INV. E=1002.65 (15" CPP) (COULD NOT REMOVE COVER)
STORM CB #15 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #15 RIM=1005.82 INV. N=1001.92 (12" CPP)
STORM CB #16 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #16 RIM=1005.82 INV. N=1001.92 (12" CPP)
STORM CB #17 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #17 RIM=1005.82 INV. N=1001.92 (12" CPP)
STORM CB #18 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #18 RIM=1005.82 INV. N=1001.92 (12" CPP)
STORM CB #19 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #19 RIM=1005.82 INV. N=1001.92 (12" CPP)
STORM CB #20 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #20 RIM=1005.82 INV. N=1001.92 (12" CPP)
STORM CB #21 RIM=994.81 INV. W=994.81 (24" CPP) (COULD NOT REMOVE COVER)	STORM MH #21 RIM=1005.82 INV. N=1001.92 (12" CPP)
STORM CB #22 (2'x1.6')	STORM MH #22 RIM=1002.33 INV. S=999.77 (24" CPP) INV. N=999.77 (24" CPP) (COULD NOT REMOVE COVER)
STORM CB #23	STORM MH #23 RIM=1003.48 INV. SE=999.77 (24" CPP) INV. W=994.88 (24" CPP) (COULD NOT REMOVE COVER)
STORM CB #24	STORM MH #24 RIM=1006.20 INV. W=999.77 (??' ???) INV. E=997.10 (24" CPP) (FULL OF DEBRIS/WATER) (BURIED UNDER GRAVEL)
STORM CB #25	STORM MH #25 RIM=1006.86 INV. NE=1000.98 (12" CPP) INV. SE=1002.78 (12" CPP)
STORM CB #26	STORM MH #26 RIM=1006.21 INV. SW=999.07 (18" RCP) INV. N=998.97 (18" RCP)
STORM CB #27	STORM MH #27 RIM=1004.38 INV. S=999.63 (15" CPP) INV. W=998.38 (15" CPP) INV. E=998.68 (15" CPP)
STORM CB #28	STORM MH #28 RIM=1006.21 INV. SE=1001.42 (12" RCP) INV. SW=1001.32 (12" RCP) INV. N=999.72 (15" CPP)
STORM CB #29	STORM MH #29 RIM=1007.35 INV. NE=1002.65 (12" RCP) INV. S=1002.75 (12" RCP)
STORM CB #30	STORM MH #30 RIM=1009.83 INV. N=1006.03 (12" RCP)
STORM CB #31	STORM MH #31 RIM=1007.05 INV. S=1002.35 (12" RCP) INV. NW=1002.25 (12" RCP)
STORM CB #32	STORM MH #32 RIM=1009.39 INV. N=1004.69 (12" RCP)
STORM CB #33	STORM MH #33 RIM=1004.38 INV. S=1002.75 (15" CPP) INV. W=1002.65 (15" CPP) INV. E=1002.65 (15" CPP) (COULD NOT REMOVE COVER)
STORM CB #34	STORM MH #34 RIM=1015.68
STORM CB #35	STORM MH #35 RIM=1007.00 INV. S=1007.00 (12" RCP) INV. N=1003.00 (12" RCP) (FLOWING NORTH)
STORM CB #36	STORM MH #36 RIM=1016.42 INV. (FLOWING NORTHEAST)
STORM CB #37	STORM MH #37 RIM=1005.82 INV. N=1001.92 (12" CPP)
STORM CB #38	STORM MH #38 RIM=1005.06 INV. S=1000.56 (12" CPP) INV. W=1000.66 (12" CPP) INV. N=1000.56 (12" CPP)
STORM CB #39	STORM MH #39 RIM=999.18 INV. S=994.23 (12" CPP) INV. SW=994.48 (12" CPP) INV. NW=994.38 (18" CPP)
STORM CB #40	STORM MH #40 RIM=1002.52 INV. NE=996.12 (12" CPP) INV. S=997.02 (12" CPP) INV. NW=999.92 (12" CPP)
STORM CB #41	STORM MH #41 RIM=1002.86 INV. N=999.06 (12" CPP)
STORM CB #42	STORM MH #42 RIM=1002.97 INV. SE=999.17 (12" CPP)
STORM CB #43	STORM MH #43 RIM=1002.30 INV. NW=996.95 (12" CPP)
STORM CB #44	STORM MH #44 RIM=1000.48 INV. N=991.03 (12" CPP)

FROM	TO	DRAIN AREA	ACRES	RUNOFF COEFF	EQUIV. AREA A * C	INTEN-SITY I	TIME OF CONC. Tc	ADD'L RUNOFF Q	RUNOFF (CFS)	PIPE LENGTH (LF)	PIPE DIA. (IN)	VELOCITY FLOWING FULL (FPS)	HYDRAULIC GRADIENT %	ACTUAL SLOPE USED	MANNING COEFFICIENT	MANNING FLOW CAPACITY	MANNING'S VELOCITY (FT/SEC)	TIME (MIN)	HG ELEV UPPER END	HG ELEV LOWER END	RIM ELEV UPPER END	RIM ELEV LOWER END	INVERT UPPER END	INVERT LOWER END
107	106	107	0.60	0.81	0.49	4.38	15.00	2.14	87	12	3.34	0.54%	0.32%	0.013	2.02	2.57	0.56	991.88	991.41	995.25	995.25	990.58	990.30	
106	1	106	0.28	0.90	0.26	4.31	15.56	3.24	139	12	3.34	0.54%	0.32%	0.013	2.02	2.57	0.90	991.41	990.66	995.25	-	990.30	989.86	
108	11	108	0.84	0.72	0.61	4.38	15.00	0.00	2.65	75	15	2.84	0.29%	0.24%	0.013	3.17	2.59	0.48	991.22	991.00	999.20	-	990.18	990.00

UTILITY NOTES

- THE EXISTING SHARED FIRE RISER BETWEEN TENANT #3 AND DUNHAM'S SHALL BE SEPARATED. FIRE SUPPRESSION CONTRACTOR TO COORDINATE SEPARATION OF FIRE RISER FOR THESE TENANTS WITH THE BRIGHTON AREA FIRE AUTHORITY.
- ALL STORM STRUCTURES THAT ARE FULL OF DEBRIS ARE TO BE CLEANED OUT AS PART OF THE CONSTRUCTION PROJECT.

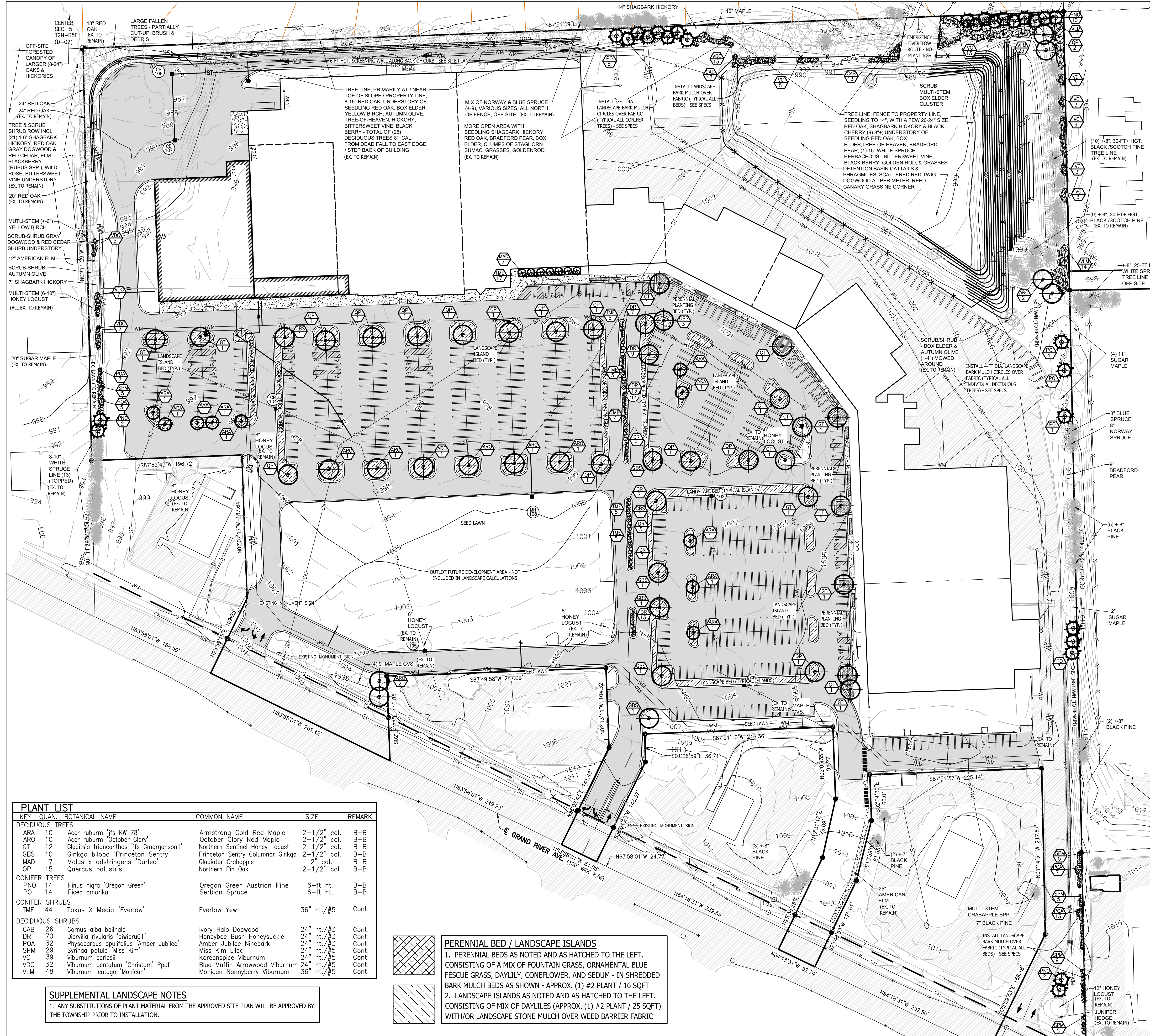
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HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

GRAND RIVER PLAZA
SYMMETRY MANAGEMENT
813 SOUTH MAIN STREET, SUITE 200
ROYAL OAK, MI 48067
248-465-0200

UTILITY PLAN

NO	BY	DATE	REVISION PER
1	ST	4-15-2024	PER TWP REVIEW & PC MEETING
2	ST	3-19-2024	PER TOWNSHIP REVIEW

DESIGNED BY: ST
DRAWN BY: DH
CHECKED BY:
SCALE: 1" = 60'
JOB NO: 22-262-1
DATE: 02/20/24
SHEET NO. 12



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

LANDSCAPE CALCULATIONS / NARRATIVE:

PROJECT INFORMATION:
 SITE SIZE: 26.50 ACRES TOTAL
 ZONED: 'RCD' REGIONAL COMMERCIAL DISTRICT
 ADJACENT ZONING / USES: NORTHEAST: 'MUPUD' (APARTMENTS) EAST: 'MUPUD' (MEIJER GROCERY) SOUTHWEST: 'RCD' (FAST FOOD - MCDONALD'S) SOUTH: GRAND RIVER AVE. / 'RCD' OUTLOTS (FAST FOOD) WEST: 'RCD' (COMMERCIAL) NORTH: 'MUPUD' (SINGLE-FAMILY RESIDENTIAL) SHOPPING CENTER GENERAL: 748 PROVIDED SPACES (2 INTERNAL AREAS DESIGNATED FOR FUTURE DEVELOPMENT NOT INCLUDED IN THE CALCULATIONS)

PARKING:
 REQUIRED: GREENBELT - PUBLIC R.O.W. (GRAND RIVER AVE.): 1 CANOPY TREE / 40 LFT FRONTAGE, MIN 20-FT WIDTH 455.88 / 40 = 11.40 = 12 CANOPY TREES

BUFFER - EAST ADJ. TO APARTMENTS - TYPE 'B': 1 CANOPY TREE + 1 CONIFER TREE + 4 SHRUBS / 30-LFT + 6-FT WALL OR 3-FT BERM, MIN. 20-FT WIDTH 339.84 / 30 = 11.33 = 12 CANOPY TREES + 12 CONIFERS + 46 SHRUBS

EAST / SOUTHWEST ADJ. TO COMMERCIAL - TYPE 'C': 1 CANOPY OR CONIFER TREE OR 4 SHRUBS / 20 LFT MIN. 10 FT WIDTH 1,026.46 / 20 = 51.32 = 52 CANOPY TREES + 210 SHRUBS

BUFFER - WEST ADJ. TO COMMERCIAL - TYPE 'C': 1 CANOPY OR CONIFER TREE OR 4 SHRUBS / 20 LFT MIN. 10 FT WIDTH 540.00 / 20 = 27 TREES OR 108 SHRUBS OR COMBINATION

BUFFER - NORTH ADJ. TO SF RESIDENTIAL - TYPE 'B': 1 CANOPY TREE + 1 CONIFER TREE + 4 SHRUBS / 30 LFT + 6-FT WALL OR 3-FT BERM, MIN. 20 FT WIDTH 1,284.51 / 30 = 42.82 = 43 CANOPY TREES + 43 CONIFER TREES + 172 SHRUBS

PARKING AREA (201 SPACES+): 1 CANOPY TREE & 100 SF OF LANDSCAPE AREA / 15 SPACES. 1/3 OF TREES MUST BE ON THE INTERIOR OF THE PARKING 748 SPACES / 15 = 50 CANOPY TREES + 5,000 SQFT OF LANDSCAPE AREA

DETENTION BASIN: 1 DECIDUOUS TREE + 10 SHRUBS / 50 LFT OF BASIN PERIMETER AT TOP EX. BASIN 1,052 LFT / 50 = 21 DECIDUOUS TREES + 210 SHRUBS

ACCESSORY STRUCTURES: WASTE RECEPTACLES, A/C CONDENSERS, ELEC. TRANSFORMERS, ETC. IN VISIBLE LOCATIONS LANDSCAPED WITH SHRUBS

PROVIDED: GREENBELT - PUBLIC R.O.W. (GRAND RIVER AVE.): WITHIN 20-FT OF R.O.W. EXISTING (4) 9-IN DBH MAPLES + (3) 8-IN DBH BLACK PINE + (1) 12" DBH HONEY LOCUST = TOTAL OF (8) MATURE TREES TO REMAIN TO MEET INTENT OF REQUIREMENTS

BUFFER - NORTHEAST ADJ. TO APARTMENTS - TYPE 'B': WITHIN 20-FT OF PROP. LINE, EXISTING 15-17-FT HGT BERM (6x MIN HGT.) + (10) 8-IN DBH, +30-FT HGT PINE + DEVELOPMENT FURTHER SUPPORTED BY EX. BASIN + ADDT. MATURE PERIMETER TREES, PROPOSED EX. TO REMAIN (EQUIV. TO 20 REQ'D TREES) + 4 CANOPY TREES + 46 INFILL SHRUBS

BUFFER - EAST / SOUTHWEST ADJ. TO COMMERCIAL - TYPE 'C': WITHIN 10-FT OF PROP. LINE, EX. (11) MIN 8-IN DBH DECIDUOUS & CONIFEROUS TREES + EX. BERM / DEPRESSED BUILDING & DRIVE AREA / RETAINING WALL - 4-FT TO 10-FT IN HGT. ADJ. AREA ALSO INCLUDES + 114-FT WIDE UNUSED ACCESS EASEMENT / DEAD-END ROAD & 655-LFT ADJ. TO STORM DETENTION BASIN (MEIJER). PROPOSED EX. TREES TO REMAIN (EQUIV. TO 22 REQ'D TREES) + 6 CONIFER TREES SUPPLEMENTED BUFFER TO ADJ. MCDONALD'S OUTLOT ONLY (257.88 / 20 = 12.89 = 13 CONIFER TREES + 44 SHRUBS - NOTE SPACE LIMITED BY EX. WATERMAIN & EASEMENT.

BUFFER - WEST ADJ. TO COMMERCIAL - TYPE 'C': WITHIN 10-FT OF PROP. LINE, EX. (8) MIN 8-IN DBH DECIDUOUS & CONIFEROUS TREES INCL. APPROX. 325-LFT OF TREE LINE CONSISTING OF 14-5-IN DBH TREES, PROPOSED EX. TREES TO REMAIN (EQUIV. TO 16 REQ'D TREES) + SUPPLEMENTED BUFFER (2 CONIFER TREES + 36 LARGE SHRUBS) - NOTE SPACE LIMITED BY STEEP SLOPES (3:1) AT SOUTHERN END & UTILITIES AT NORTHERN END

BUFFER - NORTH ADJ. TO SF RESIDENTIAL - TYPE 'B': WITHIN 20-FT OF PROP. LINE, EX. (34) MIN 8-IN DBH DECIDUOUS & CONIFEROUS TREES (AN ADJT. 4-5 WITHIN 49-FT) AND APPROX. 250-LFT OF 49-FT WIDE TREE LINE CONSISTING OF 1-7-IN DBH TREES, PROPOSED EX. TO REMAIN (EQUIV. TO MIN. 68 REQ'D TREES) + 6-FT HGT. (560-LFT) WALL BEHIND BLDG. PORTION PARALLEL TO PROPERTY LINE + SUPPLEMENTED BUFFER IN OPEN AREAS (LOADING DOCKS & EAST END) (18 CONIFER SCREENING TREES + 80 LARGE SHRUBS)

ADJACENT OUTLOTS: 4 EXISTING OUTLOTS INTERNAL TO OVERALL DEVELOPMENT - NO ADDITIONAL BUFFERING PROPOSED. PROPOSED 2 INTERNAL OUTLOTS TO BE DEVELOPED IN A LATER PHASE. LANDSCAPE REQUIREMENTS WILL BE CALCULATED & LANDSCAPING PROVIDED UNDER SEPARATE SITE PLAN APPROVAL PROCESS(ES).

PARKING AREA (201 SPACES+): WITHIN EX. PARKING LOT ISLANDS (4) MIN 8-IN DBH DECIDUOUS TREES, PROPOSED EX. TO REMAIN (EQUIV. TO 8 REQ'D TREES) + 50 NEW CANOPY TREES + 30,325 SQFT OF INTERNAL LANDSCAPE ISLANDS + ADDT. LANDSCAPE AREAS BETWEEN PERIMETER PARKING & BUILDING (2,280 SQFT).

DETENTION BASIN: PROPOSED EXISTING TO REMAIN. BASIN IS LOCATED IN SERVICE AREA AT THE NORTHEAST CORNER OF THE DEVELOPMENT OUTSIDE OF PUBLIC VIEW. IT IS ALREADY SUBSTANTIALLY VEGETATED. IT IS AND WILL BE SCREENED FROM ADJACENT PROPERTIES THROUGH EXISTING & PROPOSED LANDSCAPE BUFFER SCREENING.

ACCESSORY STRUCTURES: WASTE RECEPTACLES, A/C CONDENSERS, & ELEC. TRANSFORMERS ARE / TO BE LOCATED IN SERVICES AREAS OUTSIDE OF PUBLIC VIEW AND/OR SCREENED FROM ADJACENT PROPERTIES THROUGH EXISTING & PROPOSED LANDSCAPE BUFFER SCREENING.

PLANT LIST

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
DECIDUOUS TREES					
ARA	10	Acer rubrum 'J's KW 78'	Armstrong Gold Red Maple	2-1/2" cal.	B-B
ARO	10	Acer rubrum 'October Glory'	October Glory Red Maple	2-1/2" cal.	B-B
GT	12	Gleditsia triacanthos 'J's Gmorgenson'	Northern Sentinel Honey Locust	2-1/2" cal.	B-B
GBS	10	Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Columnar Ginkgo	2-1/2" cal.	B-B
MAD	7	Malus x adstringens 'Durelo'	Gladiator Crabapple	2" cal.	B-B
QP	15	Quercus palustris	Northern Pin Oak	2-1/2" cal.	B-B
CONIFER TREES					
PNO	14	Picea nigra 'Oregon Green'	Oregon Green Austrian Pine	6-ft ht.	B-B
PO	14	Pinus omorika	Serbian Spruce	6-ft ht.	B-B
CONIFER SHRUBS					
TME	44	Taxus X Media 'Everlow'	Everlow Yew	36" ht./#5	Cont.
DECIDUOUS SHRUBS					
CAB	26	Cornus alba bailhola	Ivory Halo Dogwood	24" ht./#3	Cont.
DR	70	Diervilla rivularis 'diwibr01'	Honeybee Bush Honeysuckle	24" ht./#3	Cont.
POA	32	Physocarpus opulifolius 'Amber Jubilee'	Amber Jubilee Ninebark	24" ht./#3	Cont.
SPM	29	Syringa patula 'Miss Kim'	Miss Kim Lilac	24" ht./#5	Cont.
VC	39	Viburnum carlesii	Koreanspice Viburnum	24" ht./#5	Cont.
VDC	32	Viburnum dentatum 'Christom' Ppaf	Blue Muffin Arrowwood Viburnum	24" ht./#5	Cont.
VLM	48	Viburnum lentago 'Mohican'	Mohican Nannyberry Viburnum	36" ht./#5	Cont.

PERENNIAL BED / LANDSCAPE ISLANDS

1. PERENNIAL BEDS AS NOTED AND AS HATCHED TO THE LEFT. CONSISTING OF A MIX OF FOUNTAIN GRASS, ORNAMENTAL BLUE FESCUE GRASS, DAYLILY, CONEFLOWER, AND SEDUM - IN SHREDDED BARK MULCH BEDS AS SHOWN - APPROX. (1) #2 PLANT / 16 SQFT

2. LANDSCAPE ISLANDS AS NOTED AND AS HATCHED TO THE LEFT. CONSISTING OF MIX OF DAYLILIES (APPROX. (1) #2 PLANT / 25 SQFT) WITH/OR LANDSCAPE STONE MULCH OVER WEED BARRIER FABRIC

SUPPLEMENTAL LANDSCAPE NOTES

1. ANY SUBSTITUTIONS OF PLANT MATERIAL FROM THE APPROVED SITE PLAN WILL BE APPROVED BY THE TOWNSHIP PRIOR TO INSTALLATION.

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACTED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE APPROPRIATE UTILITY CROSSINGS SHALL BE IDENTIFIED AND MARKED BY THE CONTRACTOR OR THE UTILITY COMPANY AT THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

BEBOSS Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

GRAND RIVER PLAZA

SYMMETRY MANAGEMENT
 812 SOUTH MAIN STREET, SUITE 200
 ROYAL OAK, MI 48067
 248-665-0200

PROJECT: GRAND RIVER PLAZA
 PREPARED FOR: SYMMETRY MANAGEMENT
 TITLE: LANDSCAPE PLAN
 DATE: 4-15-2024
 PER TWP REVIEW & PC MTC: 4-15-2024
 TOWNSHIP REVIEW COMMENTS: 3-19-2024
 REVISION PER: NO BY

DESIGNED BY: PC
 DRAWN BY: PC
 CHECKED BY:
 SCALE: 1" = 60'
 JOB NO: 22-262-1
 DATE: 2/20/24
 SHEET NO. 13

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

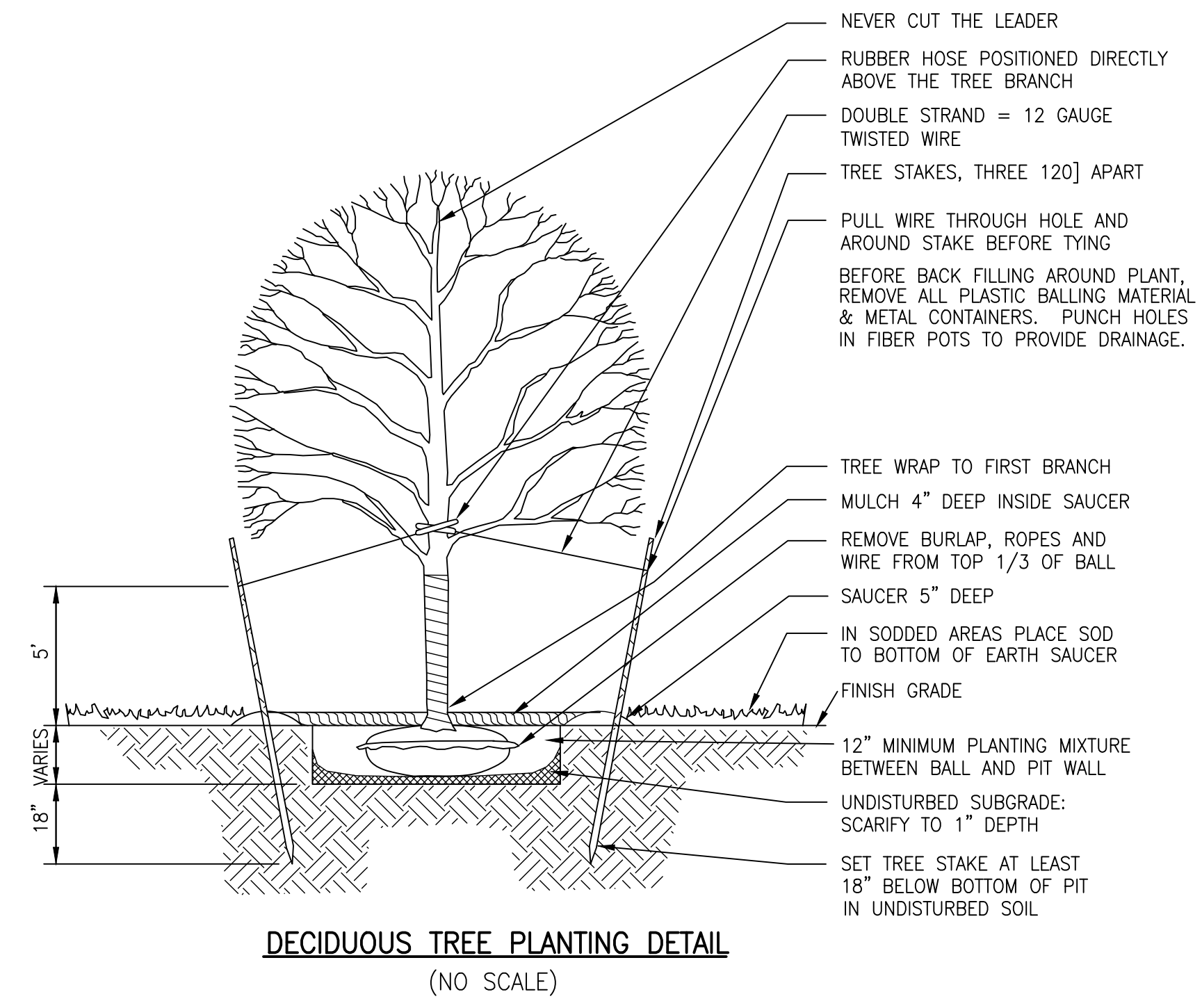
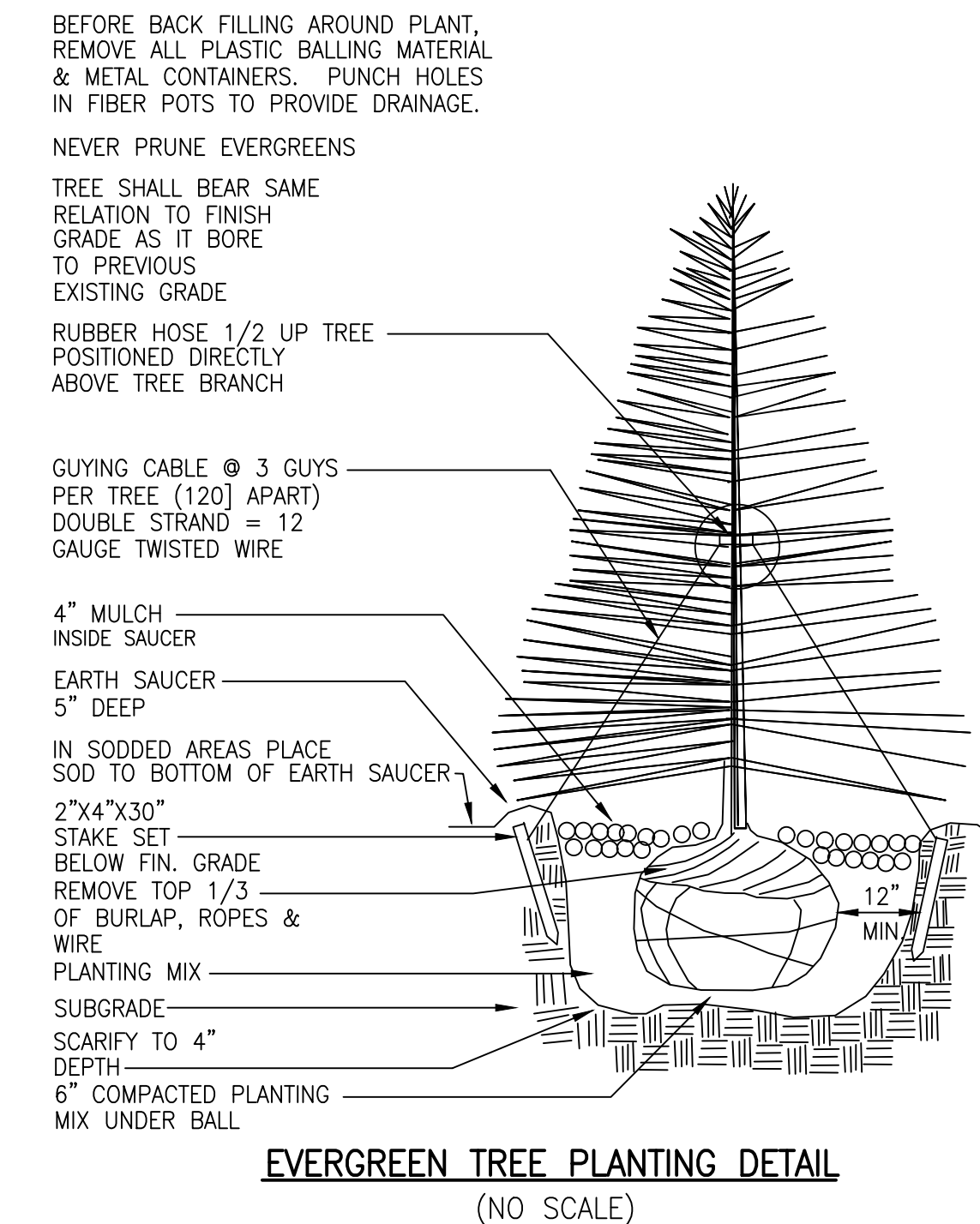
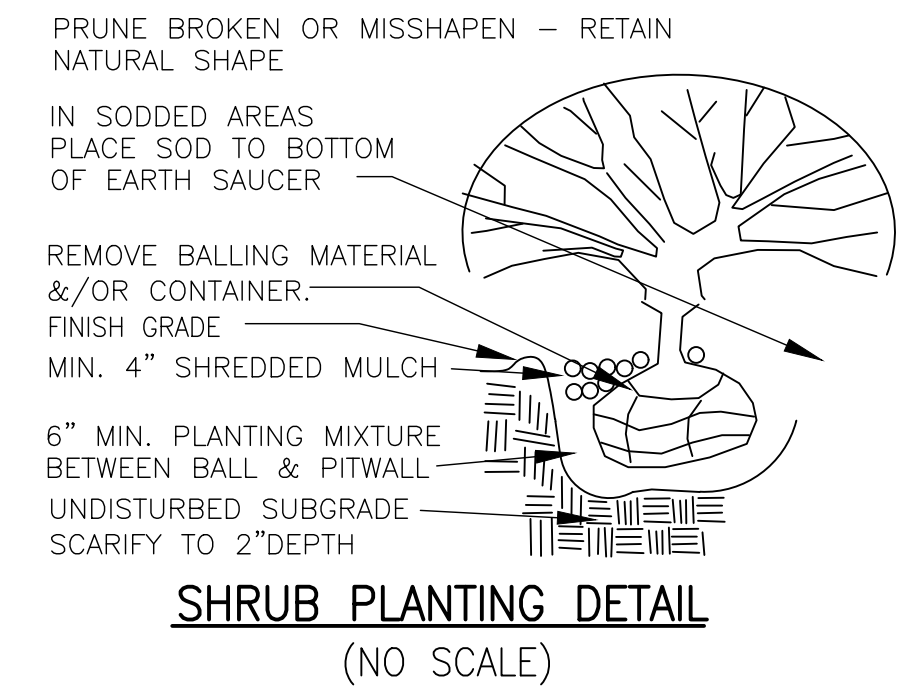
THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DEPTH, OR COMPLETENESS OF ANY UTILITIES. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL GOVERNMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL GOVERNMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL GOVERNMENTS.

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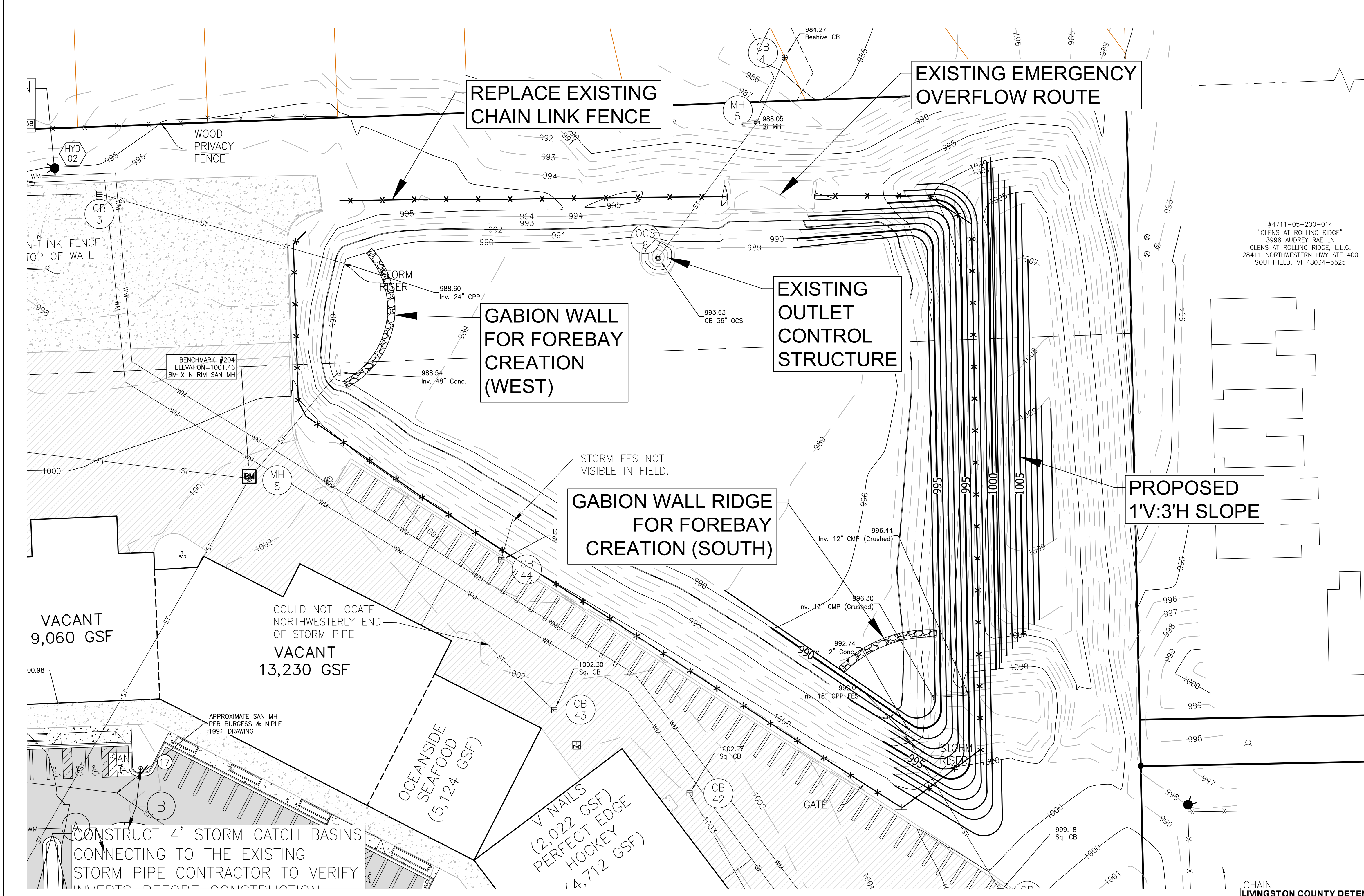
PROJECT: GRAND RIVER PLAZA
 PREPARED FOR: SYMMETRY MANAGEMENT
 813 SOUTH MAIN STREET, SUITE 200
 ROYAL OAK, MI 48067
 248-655-0200

NO	BY	REVISION PER	DATE
2	ST	PER TWP REVIEW & PC MITG	4-15-2024
1	PC	TOWNSHIP REVIEW COMMENTS	3-19-2024
NO	BY		

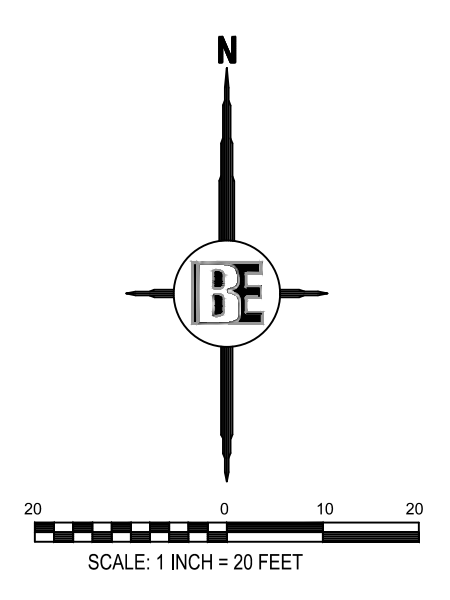
DESIGNED BY: PC
 DRAWN BY: PC
 CHECKED BY:
 SCALE: AS NOTED
 JOB NO: 22-262-1
 DATE: 2/20/24
 SHEET NO. 14



FOR SITE PLAN APPROVAL ONLY!
 NOT FOR CONSTRUCTION



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



STORM WATER NARRATIVE

THE EXISTING SHOPPING PLAZA CONTAINS AN EXISTING DETENTION BASIN IN THE NORTHEAST CORNER OF THE SITE. THERE IS AN EXISTING STORM SYSTEM NETWORK DIRECTING THE SITE'S STORM WATER TO THE EXISTING DETENTION BASIN. THE PROPOSED PROJECT DOES NOT HAVE ANY INCREASE IN IMPERVIOUS SURFACES AND THUS THERE IS NO NEGATIVE IMPACT THE DEVELOPMENT HAS ON THE EXISTING BASIN. THE BASIN SIDE SLOPE GOES TO THE EDGE OF PAVEMENT ON THE SOUTH SIDE, AND APPROACHES THE PROPERTY LINE ON THE NORTH SIDE. THERE IS ADDITIONAL SPACE ON THE EAST SIDE OF THE BASIN TO GRADE AND OBTAIN ADDITIONAL BASIN VOLUME. THE PROPOSED GRADING OBTAINS AN ADDITIONAL 40,000 CFT OF BASIN STORAGE WHICH IS AN IMPROVEMENT ON THE EXISTING BASIN.

THE BASIN CURRENTLY OUTLETS THROUGH AN OUTLET CONTROL STRUCTURE TO THE NORTH THROUGH AN EASEMENT IN THE ROLLING RIDGE SUBDIVISION. THERE ARE NO PROPOSED CHANGES TO THE OUTLET OR DRAINAGE PATH.

OVERALL THERE IS A POSITIVE STORM WATER IMPACT ON THE SITE DUE TO THIS PROPOSED DEVELOPMENT...PRIMARILY IN THE FORM OF ADDITIONAL BASIN VOLUME AND THE CREATION OF STORM WATER PRETREATMENT FOREBAYS.

#4711-05-200-014
 "GLENS AT ROLLING RIDGE"
 3998 AUDREY RAE LN
 GLENS AT ROLLING RIDGE, L.L.C.
 28411 NORTHWESTERN HWY STE 400
 SOUTHFIELD, MI 48034-5525

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF UTILITIES PRIOR TO CONSTRUCTION.

VACANT 9,060 GSF
 VACANT 13,230 GSF
 COULD NOT LOCATE NORTHWESTERLY END OF STORM PIPE

OCEANSIDE SEAFOOD (5,124 GSF)
 V NAILS (2,022 GSF) PERFECT EDGE HOCKEY (4,712 GSF)

CONSTRUCT 4' STORM CATCH BASINS CONNECTING TO THE EXISTING STORM PIPE CONTRACTOR TO VERIFY INVERTS BEFORE CONSTRUCTION

LIVINGSTON COUNTY DETENTION BASIN CALCULATIONS

EXISTING			PROPOSED		
AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS	AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
21.79	0.9	19.61	21.79	0.9	19.62
0.00	0.7	0.00	0.00	0.7	0.00
6.63	0.2	1.33	6.63	0.2	1.33

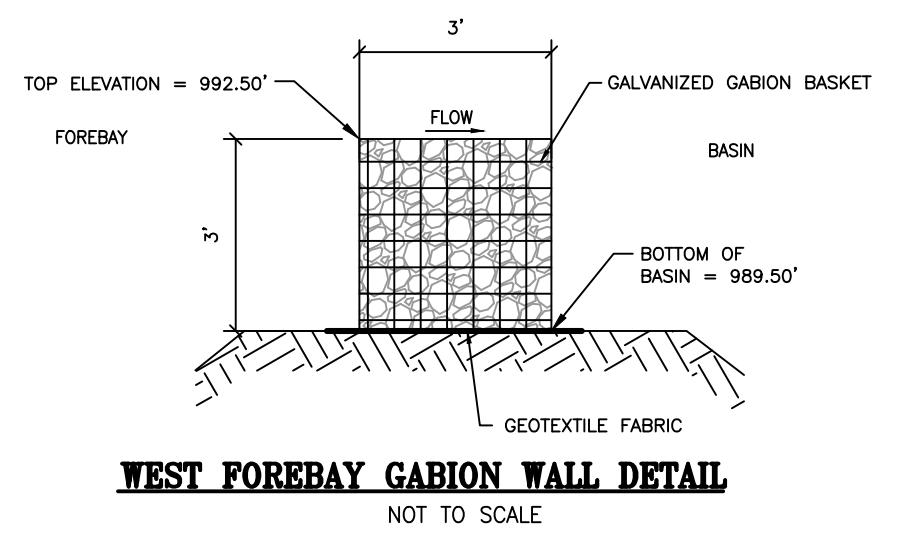
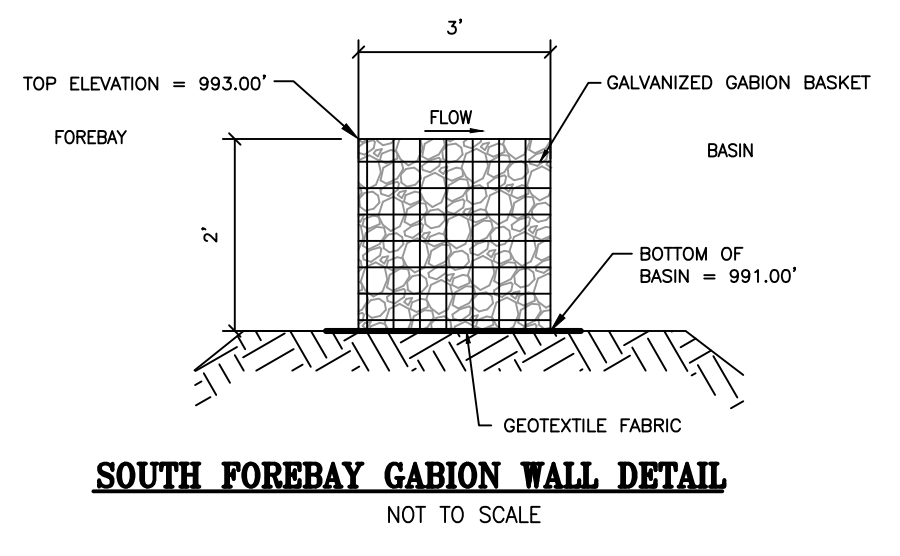
COMPOUND C: 0.74
 TOTAL DRAINAGE AREA: 28.42 ACRES

EXISTING BASIN STORAGE PROVIDED

ELEVATION	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)
994	61662	0.37	22,545	252,532
993.63	60203	0.63	37,251	229,987
993	58054	1	56,293	192,736
992	54532	1	52,139	136,443
991	49746	1	46,880	84,303
990	44014	1	37,423	37,423
989	30832			

STORAGE VOLUME PROVIDED:

ELEVATION	AREA	VOLUME	TOTAL VOLUME
994	68524	0.37	25,137
993.63	67354	0.63	41,806
993	65362	1	63,387
992	61411	1	59,589
991	57767	1	55,923
990	54079	1	49,712
989	45346		



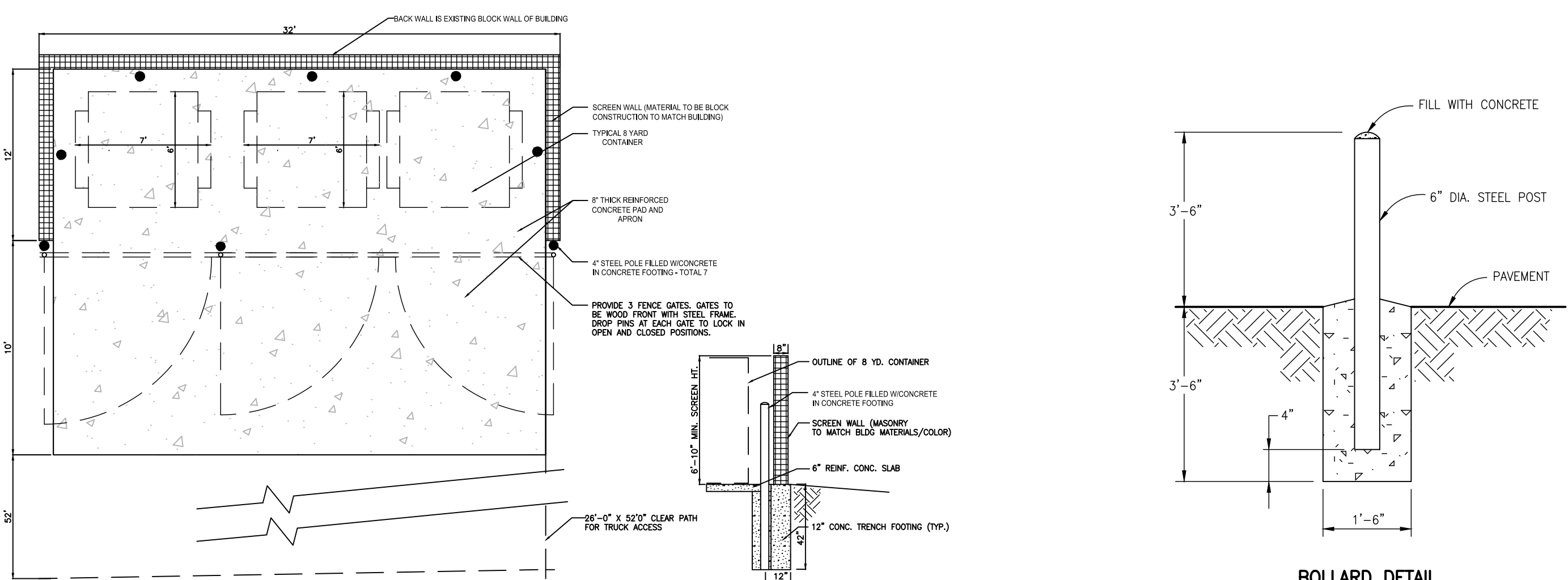
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GRAND RIVER PLAZA
 SYMMETRY MANAGEMENT
 813 SOUTH MAIN STREET, SUITE 200
 ROYAL OAK, MI 48067
 248-465-0200

BASIN DETAILS

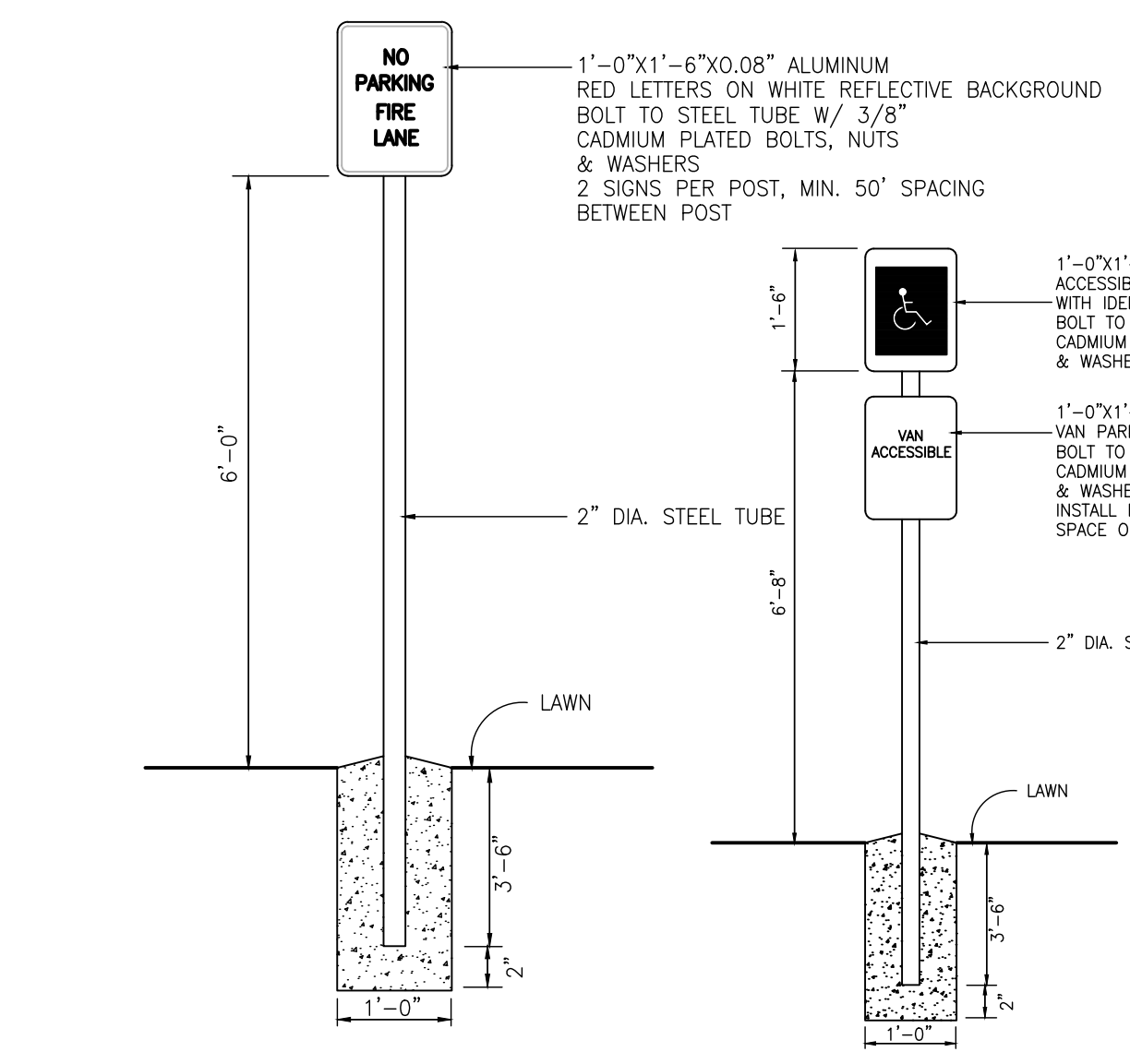
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1	ST	PER TOWNSHIP REVIEW	3-19-2024
2	ST	PER TWP REVIEW & PC MEETING	4-15-2024

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 CHECKED BY:
 SCALE: 1" = 30'
 JOB NO: 22-262-1
 DATE: 02/20/24
 SHEET NO. 15



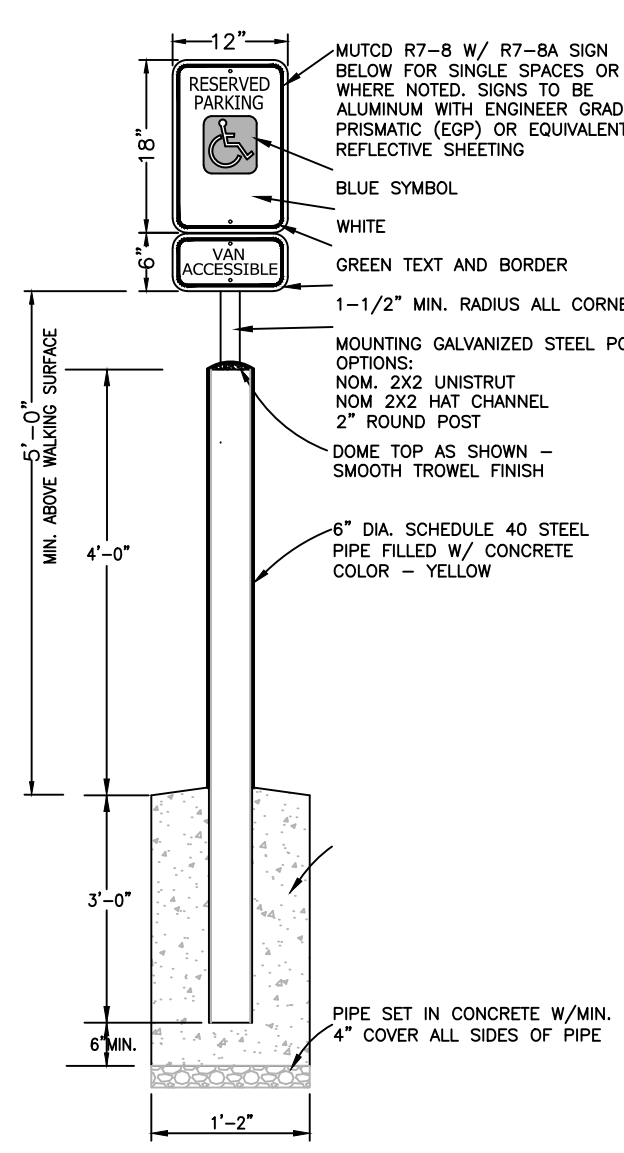
DUMPSTER ENCLOSURE DETAIL
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BOLLARD DETAIL
(NO SCALE)

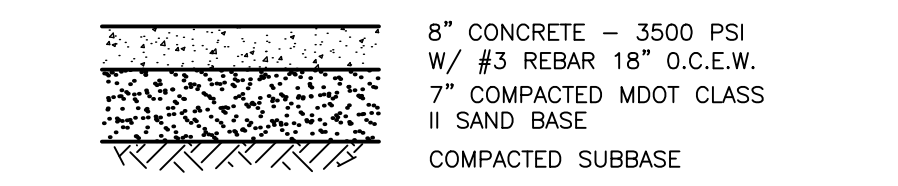


NO PARKING SIGN DETAIL
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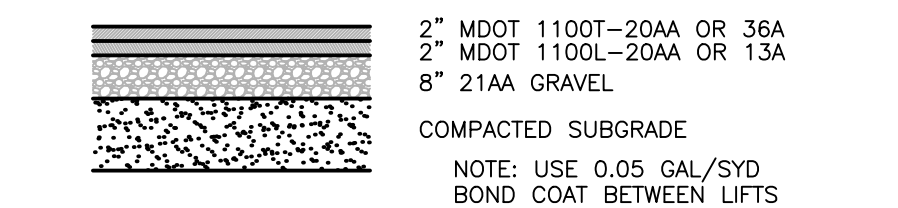
HANDICAP PARKING SIGN DETAIL
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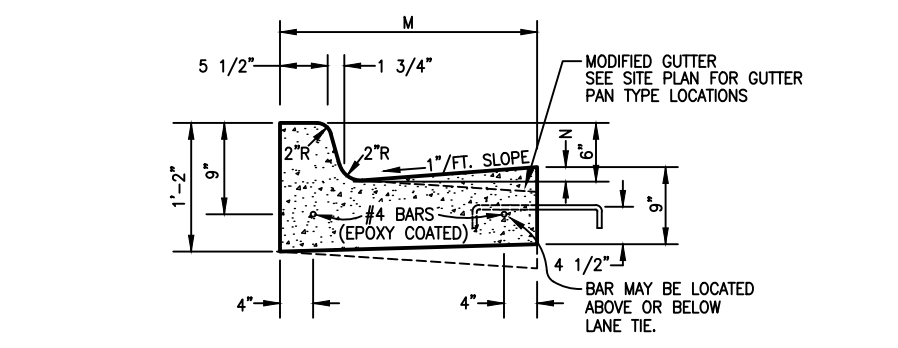
ADA ACCESSIBLE SPACE SIGN DETAIL
(NOT TO SCALE)



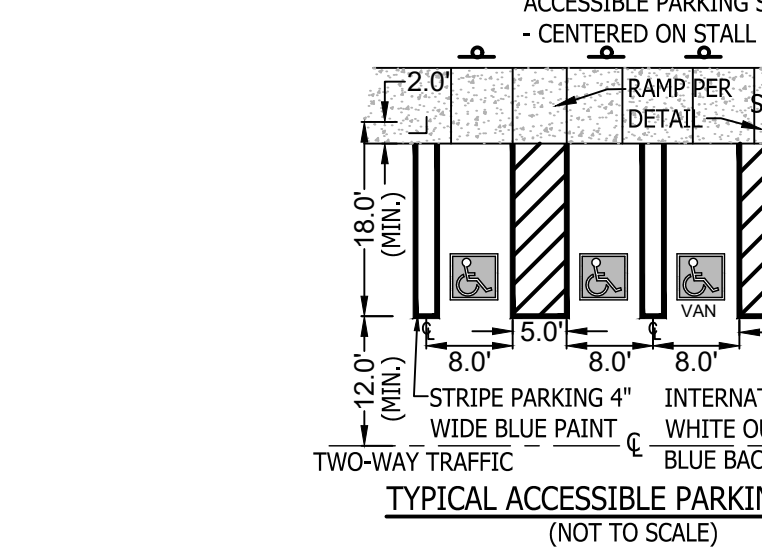
DUMPSTER PAD CONCRETE PAVEMENT CROSS SECTION
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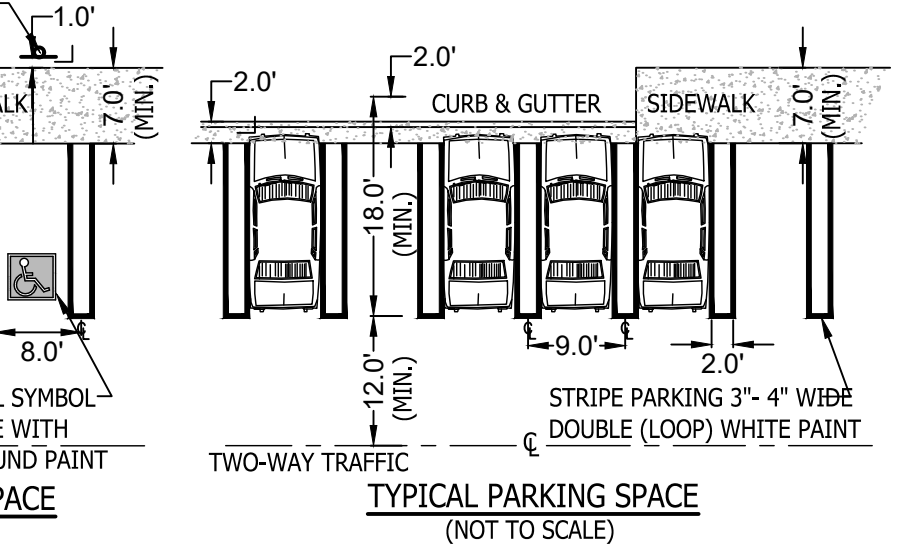
ASPHALT SECTION
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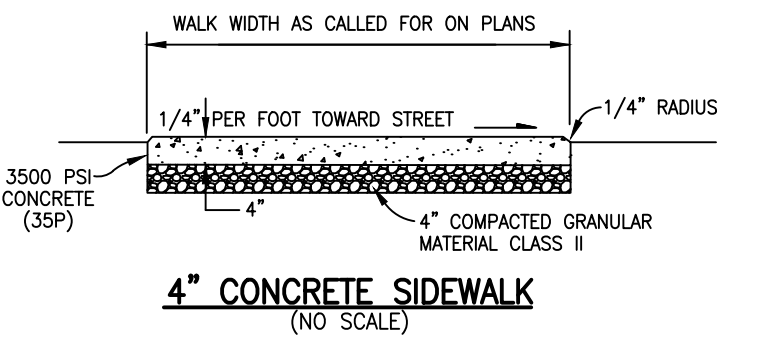
CONCRETE CURB & GUTTER TYPE F
(NO SCALE)



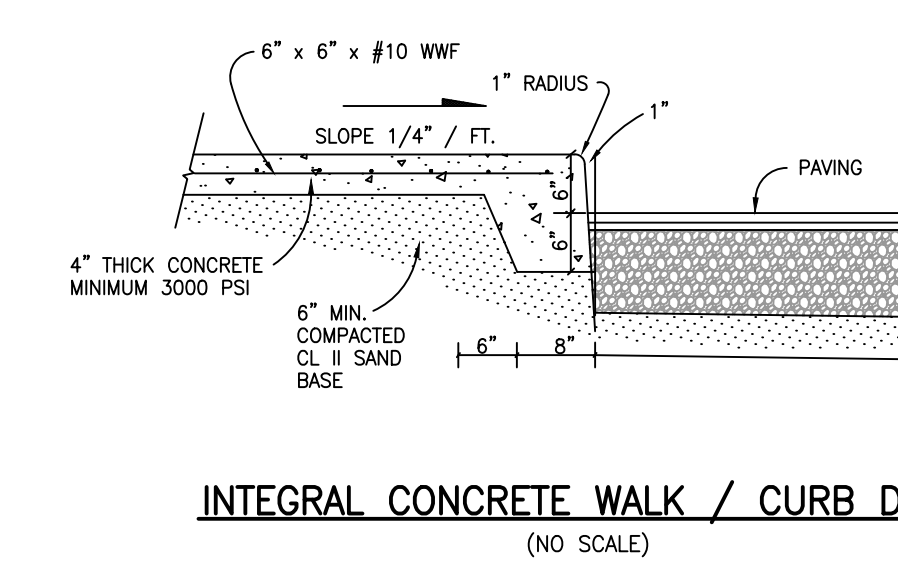
TYPICAL ACCESSIBLE PARKING SPACE
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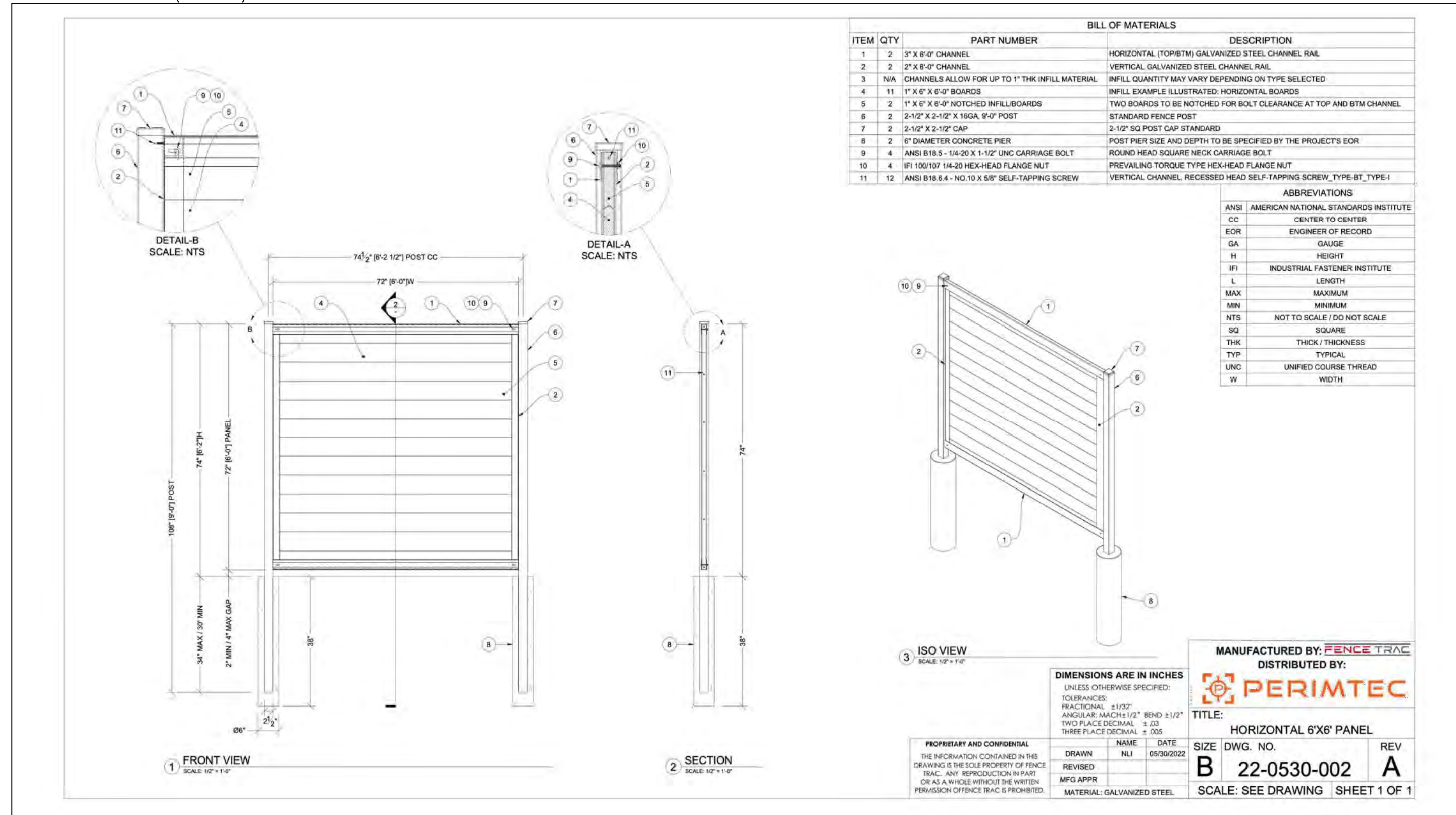
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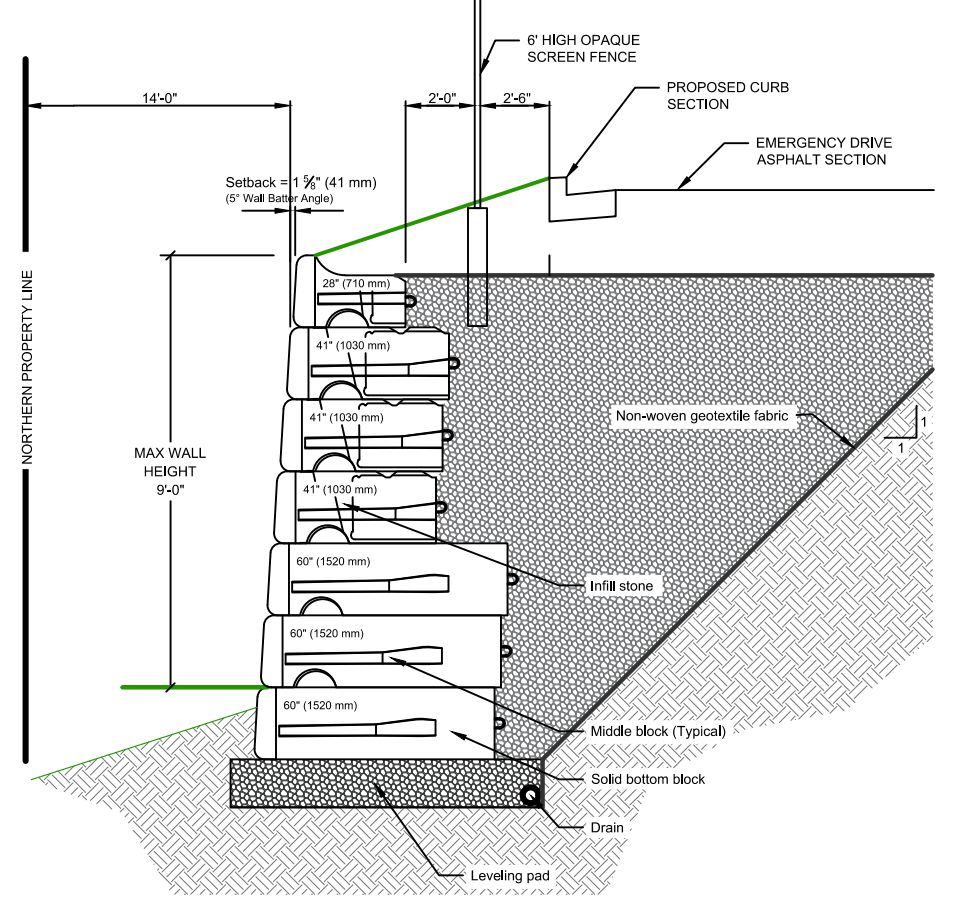
4" CONCRETE SIDEWALK
(NO SCALE)



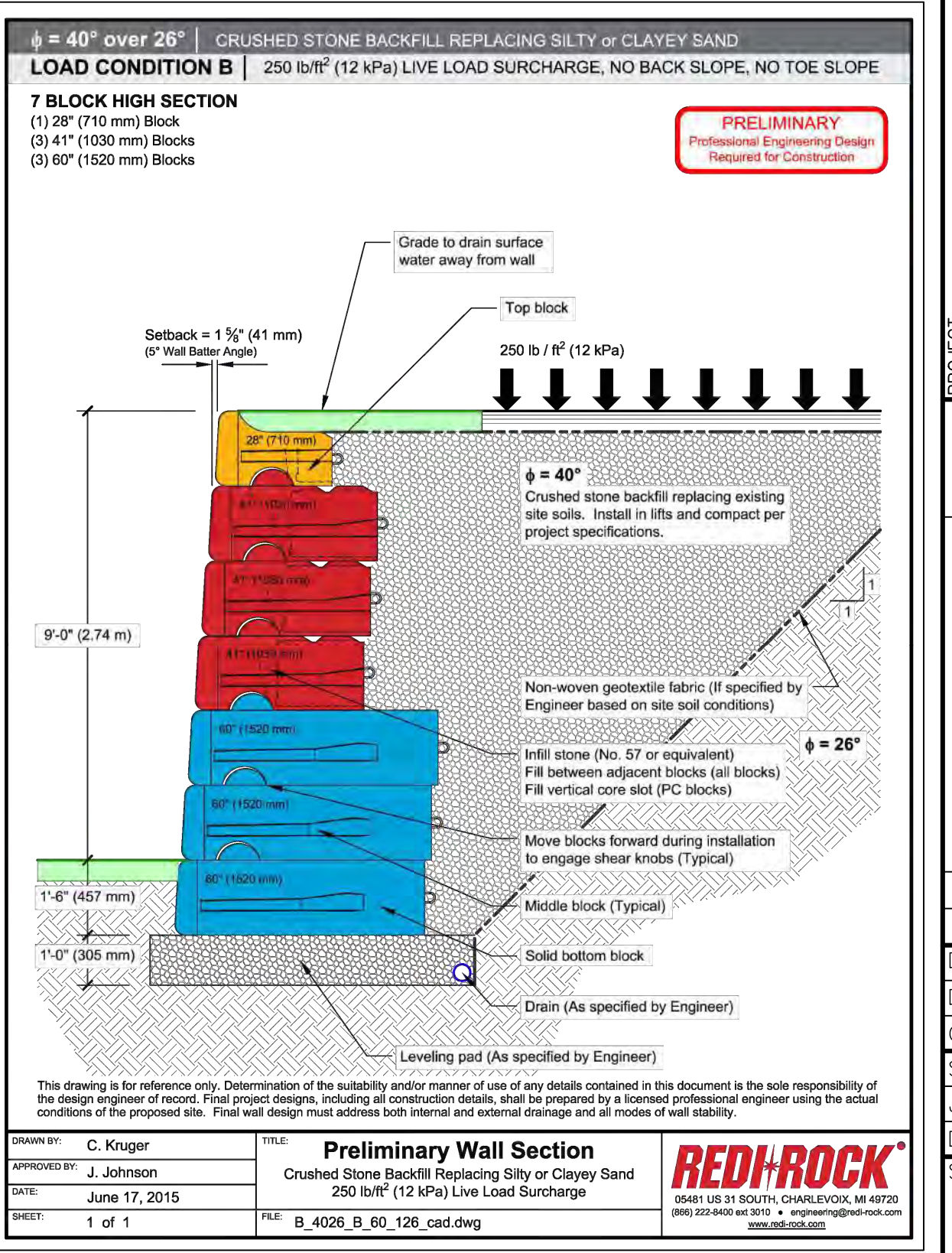
INTEGRAL CONCRETE WALK / CURB DETAIL
(NO SCALE)



SCREEN FENCE DETAIL
(COMES IN 6' HIGH AND 8' HIGH OPTIONS)
(NO SCALE)



RETAINING WALL CROSS SECTION SCHEMATIC
(NO SCALE)



Preliminary Wall Section
Crushed Stone Backfill Replacing Silty or Clayey Sand
250 lb/ft² (12 kPa) Live Load Surcharge

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GRAND RIVER PLAZA
SYMMETRY MANAGEMENT
813 SOUTH MAIN STREET, SUITE 200
ROYAL OAK, MI 48067
248-465-0200

CONSTRUCTION DETAILS

PROJECT	PREPARED FOR	TITLE	DATE
GRAND RIVER PLAZA <td>SYMMETRY MANAGEMENT</td> <td>CONSTRUCTION DETAILS</td> <td>4-15-2024</td>	SYMMETRY MANAGEMENT	CONSTRUCTION DETAILS	4-15-2024

NO	BY	DATE	REVISION PER
1	ST	3-19-2024	
2	ST	4-15-2024	

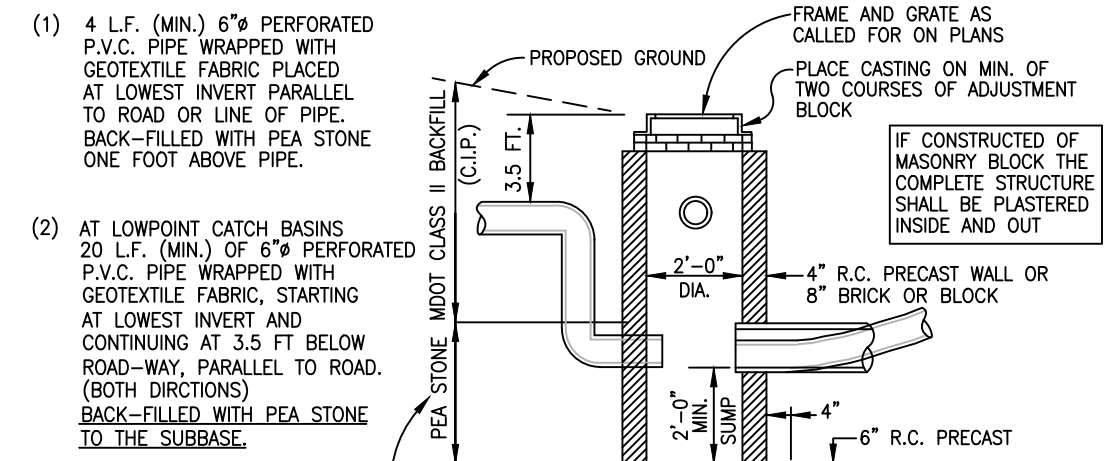
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DRAWN BY: ST
CHECKED BY:
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JOB NO: 22-262-1
DATE: 02/20/24
SHEET NO. 16

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

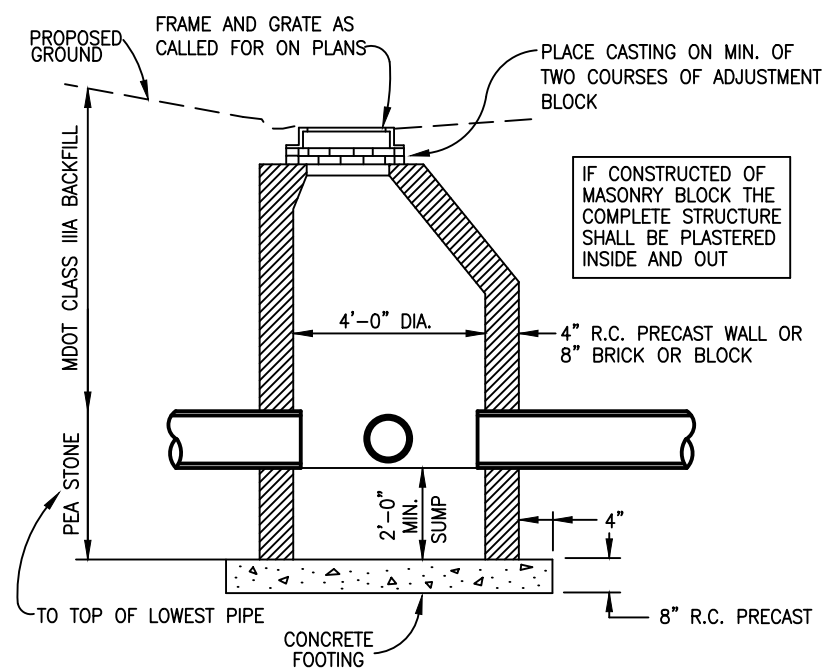
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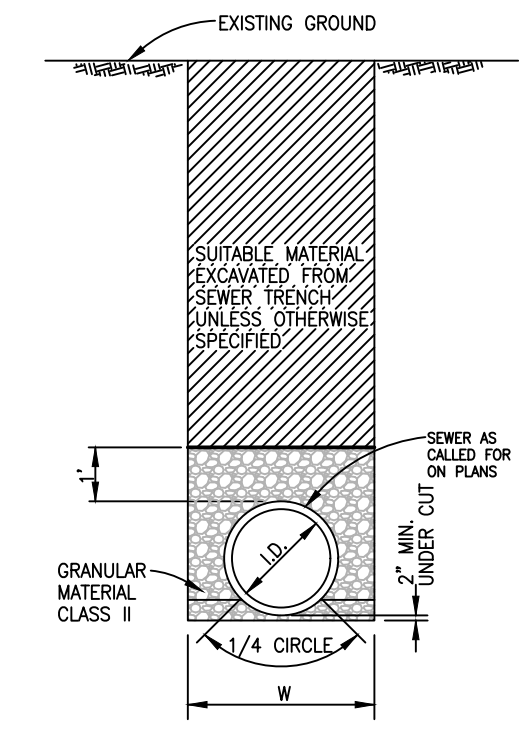
INSTALL SUBDRAINS AT ALL CATCH BASINS LOCATED WITHIN ROADWAY



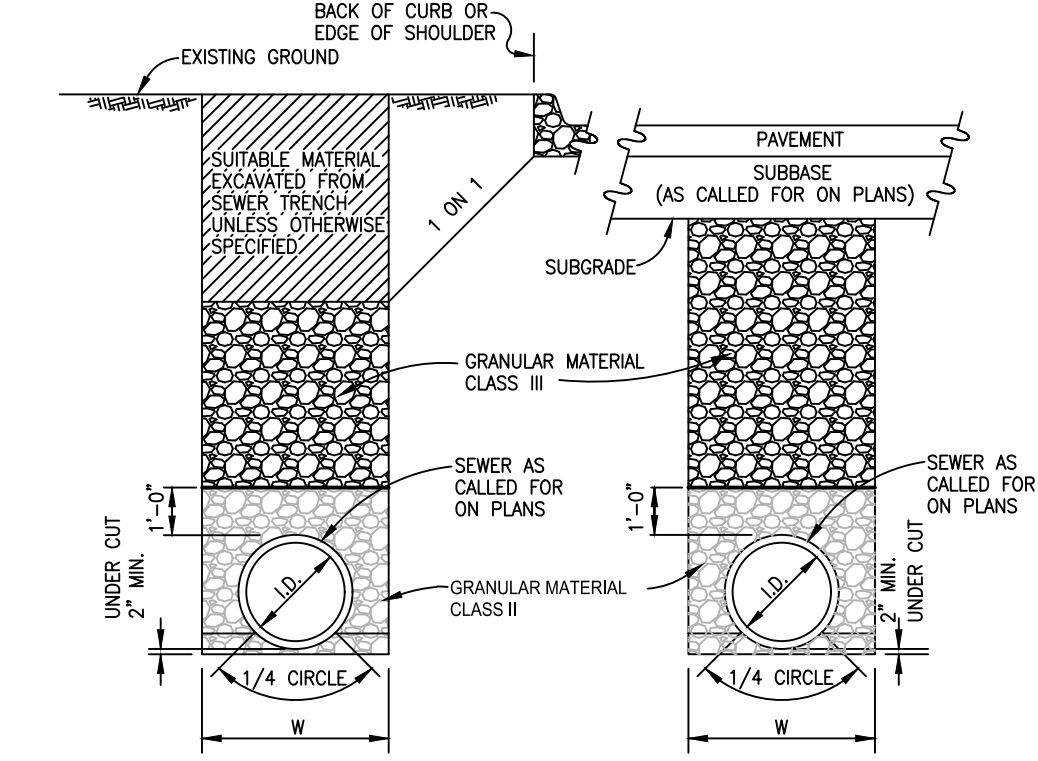
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NO SCALE



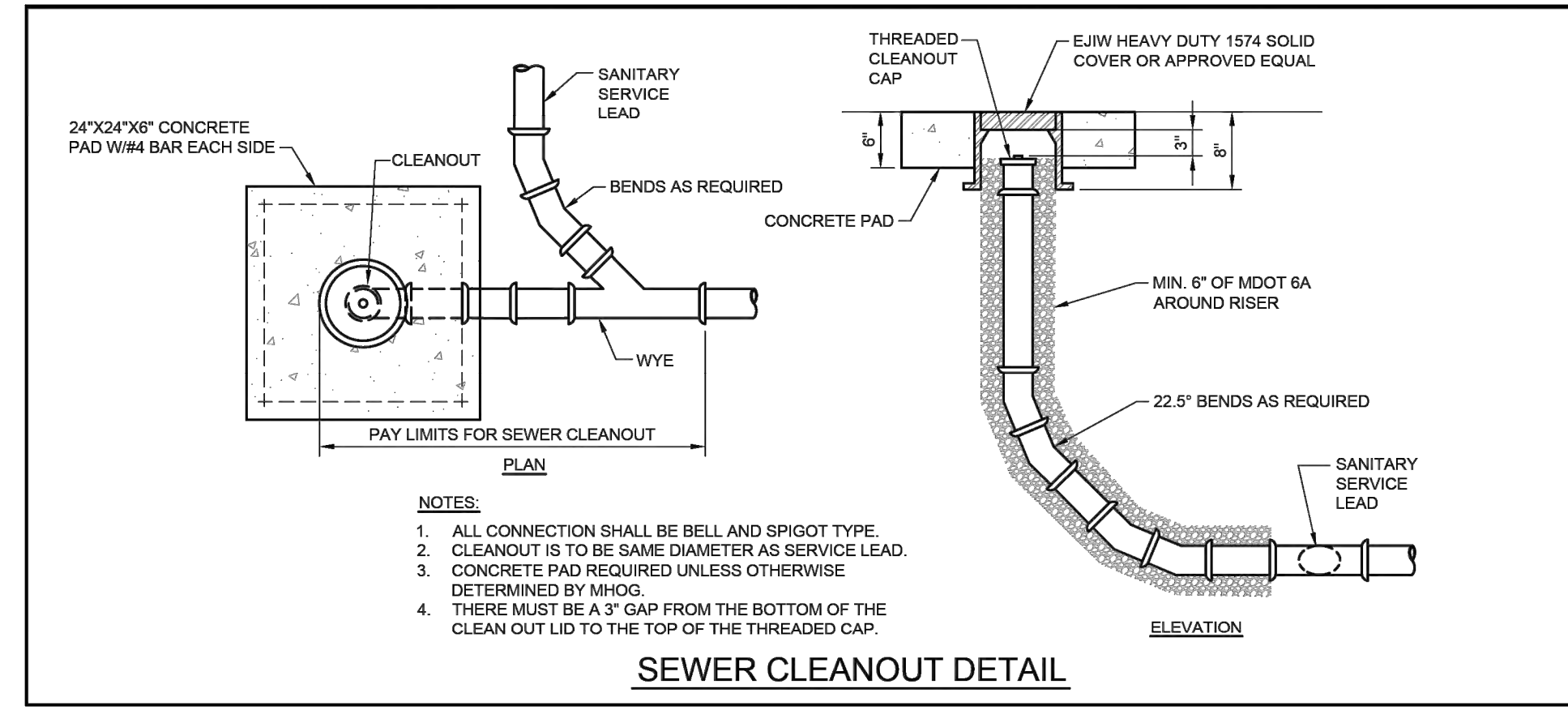
4 FT. DIA. CATCH BASIN W/SUMP
NO SCALE



SEWER NOT UNDER ROADBED
(REF. MDO DETAIL IV-830)
NO SCALE

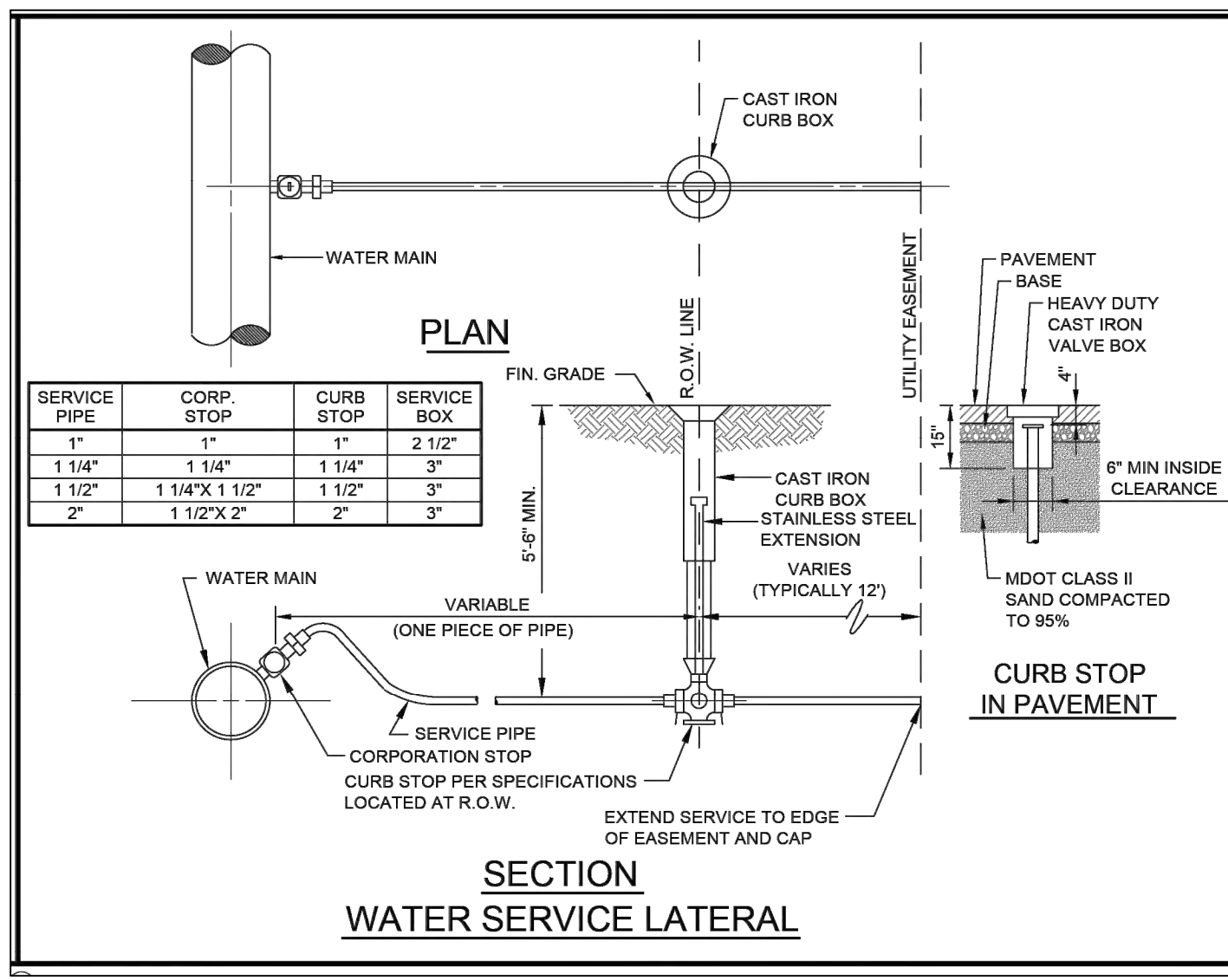


SEWER UNDER ROADBED OR WITHIN INFLUENCE OF ROADBED
(REF. MDO DETAIL IV-830)
NO SCALE

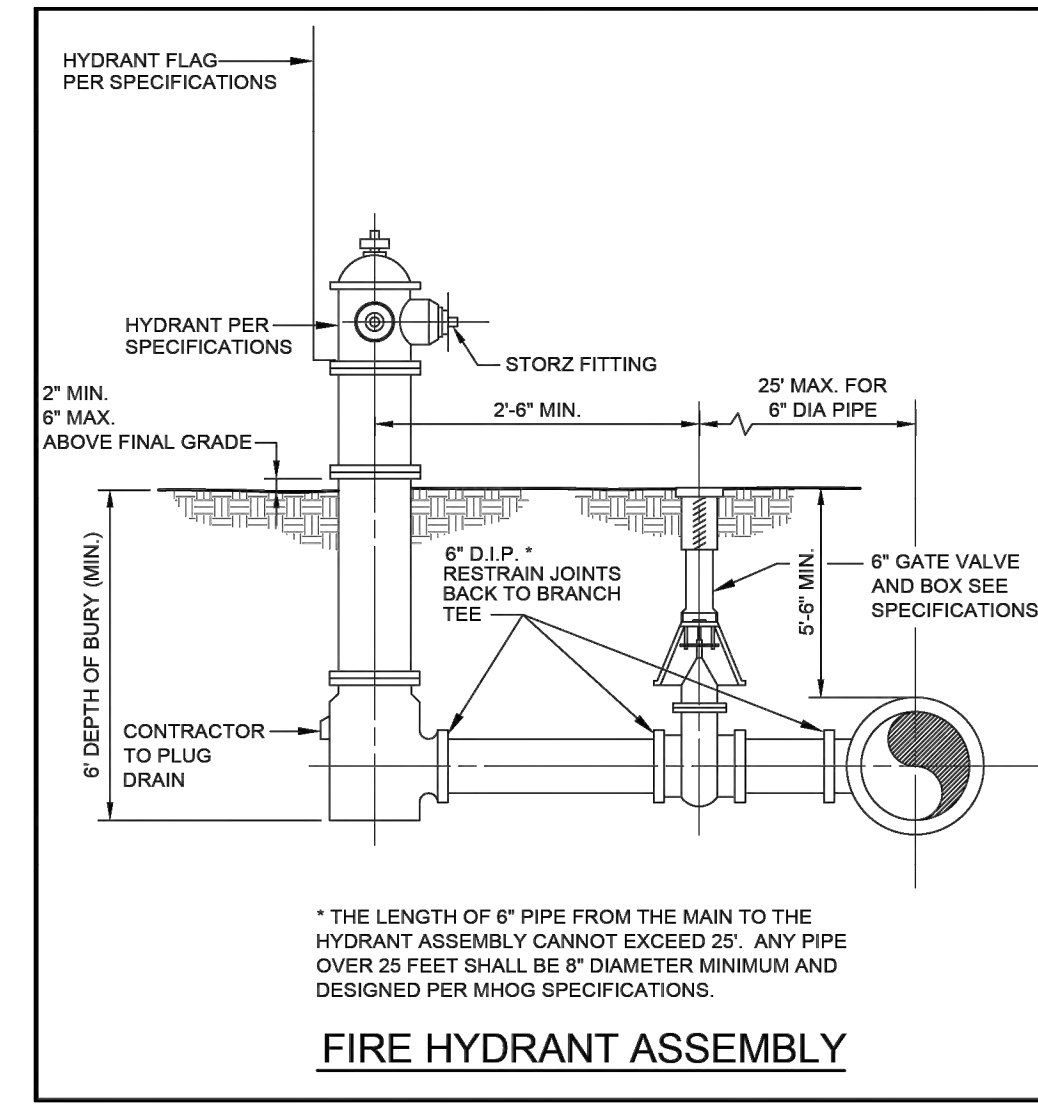


- NOTES:**
1. ALL CONNECTION SHALL BE BELL AND SPIGOT TYPE.
 2. CLEANOUT IS TO BE SAME DIAMETER AS SERVICE LEAD.
 3. CONCRETE PAD REQUIRED UNLESS OTHERWISE DETERMINED BY MHOG.
 4. THERE MUST BE A 3" GAP FROM THE BOTTOM OF THE CLEAN OUT LID TO THE TOP OF THE THREADED CAP.

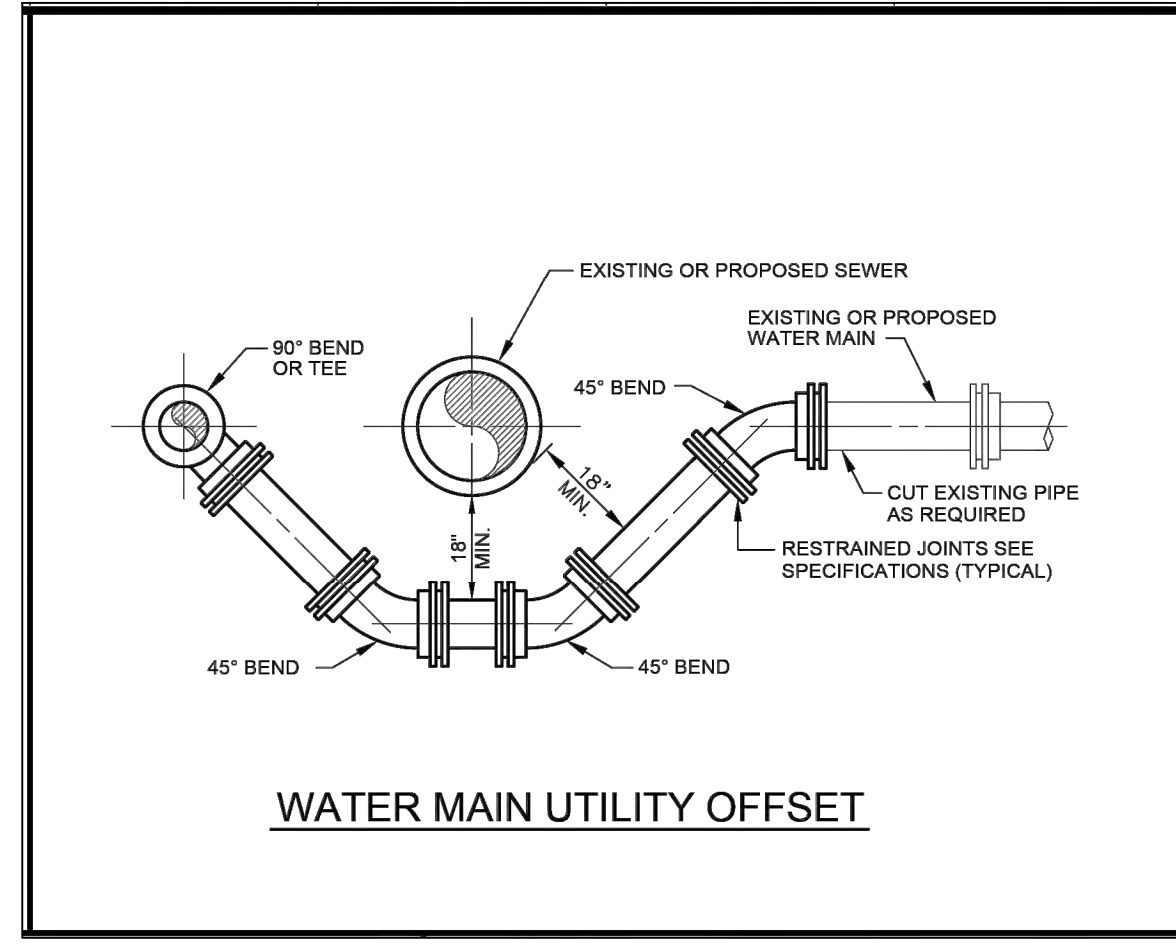
SEWER CLEANOUT DETAIL



SECTION WATER SERVICE LATERAL



FIRE HYDRANT ASSEMBLY



WATER MAIN UTILITY OFFSET

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PROJECT	PREPARED FOR	TITLE
CONSTRUCTION DETAILS		
DESIGNED BY:	ST	DATE
DRAWN BY:	ST	DATE
CHECKED BY:		DATE
SCALE:	NO SCALE	
JOB NO:	22-262-1	
DATE:	02/20/24	
SHEET NO.	17	



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



GP3D Granite Premier LED3

SPECIFICATIONS

General Description The Granite Premier LED3 is designed for ease of maintenance with the plug-in electrical module common to each of the luminaires in HoloPhane's Utility Luminaire Series...

Mechanical Specifications The luminaire housing shall: Be heavy grade A360 cast aluminum with 1% copper; IP55 rated housing provides tool-free access with a spring-loaded latch...

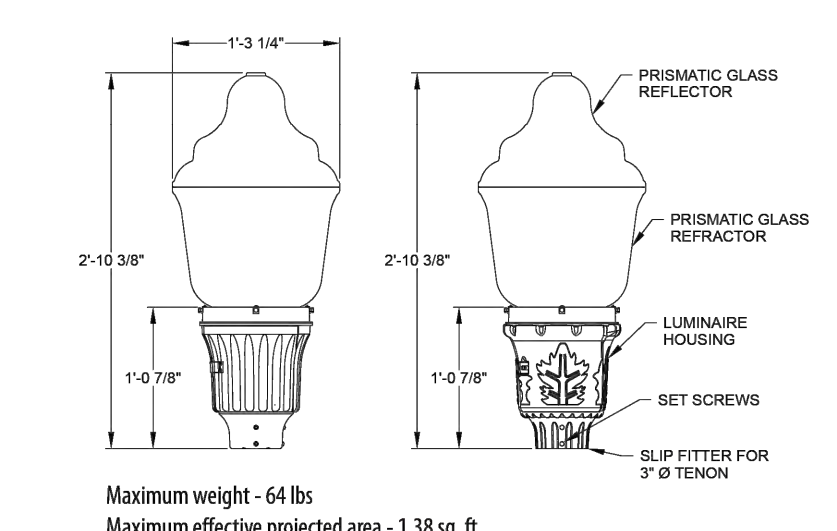
Electrical Specifications The driver shall meet the following requirements: Certified by UL or CSA for wet locations; A factory programmable electronic driver with 0-10V dimming control load...

Warranty 5-year limited warranty. This is the only warranty provided and no other statements in this specification shall create any warranty of any kind. All other express and implied warranties are disclaimed...

Optical Specifications The optical system is IP66 rated and consists of a precisely molded thermal resistant borosilicate glass refractor and top reflector mounted within the decorative glass optic...

BUY AMERICAN ACT This product is assembled in the USA and meets the Buy American(s) government procurement requirements under FAS, DFARS and DOT regulations.

Table with 2 columns: Notes, Type



GP3D Granite Premier LED3

SPECIFICATIONS

General Description The Granite Premier LED3 is designed for ease of maintenance with the plug-in electrical module common to each of the luminaires in HoloPhane's Utility Luminaire Series...

Mechanical Specifications The luminaire housing shall: Be heavy grade A360 cast aluminum with 1% copper; IP55 rated housing provides tool-free access with a spring-loaded latch...

Electrical Specifications The driver shall meet the following requirements: Certified by UL or CSA for wet locations; A factory programmable electronic driver with 0-10V dimming control load...

Warranty 5-year limited warranty. This is the only warranty provided and no other statements in this specification shall create any warranty of any kind. All other express and implied warranties are disclaimed...



D-Series Size 2 LED Wall Luminaire

d'series

Specifications Luminaire Width: 18-1/2" (47.0 cm) Depth: 1.0" (2.5 cm) Height: 7-5/8" (19.4 cm)

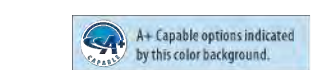
Back Box (BBW, E20WC) Width: 5-1/2" (14.0 cm) Depth: 1-1/2" (3.8 cm) Height: 4" (10.2 cm)

Table with 2 columns: Notes, Type

d'series

Capable Luminaire This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

To learn more about A+, visit www.aacbrands.com/aplus. 1. See ordering tree for details. 2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire...



Ordering Information

Table with columns: Series, LED, Drive Current, Color Temperature, Distribution, Voltage, Mounting, Control Options

Table with columns: Shipper, Shipper, Shipper, Shipper

One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com



D-Series Size 1 LED Wall Luminaire

d'series

Specifications Luminaire Width: 13-3/4" (34.3 cm) Depth: 1.0" (2.5 cm) Height: 6-3/8" (16.2 cm)

Back Box (BBW, E20WC) Width: 13-3/4" (34.3 cm) Depth: 4" (10.2 cm) Height: 6-3/8" (16.2 cm)

Table with 2 columns: Notes, Type

d'series

Introduction The D-Series Wall Luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting...

Ordering Information

Table with columns: Series, LED, Drive Current, Color Temperature, Distribution, Voltage, Mounting, Control Options

Table with columns: Shipper, Shipper, Shipper, Shipper

Table with columns: Accessories, Accessories, Accessories, Accessories

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (378) • www.lithonia.com



D-Series Size 1 LED Area Luminaire

d'series

Specifications EPA: 0.69 ft² (0.06 m²) Length: 32.71" (83.1 cm) Width: 14.26" (36.2 cm)

Back Box (BBW, E20WC) Width: 13-3/4" (34.3 cm) Depth: 4" (10.2 cm) Height: 6-3/8" (16.2 cm)

Table with 2 columns: Notes, Type

d'series

Introduction The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

Ordering Information

Table with columns: Series, LED, Drive Current, Color Temperature, Distribution, Voltage, Mounting, Control Options

Table with columns: Shipper, Shipper, Shipper, Shipper

Table with columns: Accessories, Accessories, Accessories, Accessories

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (378) • www.lithonia.com

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THESE DRAWINGS AS ONLY APPROXIMATE. NO ASSURANCE IS MADE AS TO THE ACCURACY OF THE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPLICABLE AGENCIES PRIOR TO CONSTRUCTION.

BEBOSS Engineering logo and contact information: Engineers, Surveyors, Planners, Landscape Architects. 3121 E. GRAND RIVER AVE. HOWELL, MI, 48843. 517.546.4836 FAX 517.548.1670

FIXTURE 'A' SPEC SHEET (NO SCALE)

FIXTURE 'B' SPEC SHEET (NO SCALE)

FIXTURE 'C' SPEC SHEET (NO SCALE)

FIXTURE 'D'/'E'/'F'/'G' SPEC SHEET (NO SCALE)

PROJECT: GRAND RIVER PLAZA. PREPARED FOR: SYMMETRY MANAGEMENT. TITLE: LIGHTING DETAILS. SHEET NO. 18. DESIGNED BY: ST. DRAWN BY: ST. CHECKED BY: ST. SCALE: NO SCALE. JOB NO: 22-262-1. DATE: 02/20/24. SHEET NO. 18. BEBOSS Engineering logo.

Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
DRIVE-THRU BUILDING #1	+	1.4 Fc	2.1 Fc	0.9 Fc	2.3:1	1.6:1	0.7:1
DRIVE-THRU BUILDING #2	+	1.7 Fc	3.5 Fc	0.3 Fc	11.7:1	5.7:1	0.5:1
LOADING DOCK AND TRUCK CIRCULATION	+	1.7 Fc	4.3 Fc	0.3 Fc	14.3:1	5.7:1	0.4:1
NEW BOULEVARD	+	3.2 Fc	4.8 Fc	1.5 Fc	3.2:1	2.1:1	0.7:1
PARKING LOT	+	2.5 Fc	5.7 Fc	0.4 Fc	14.3:1	6.3:1	0.4:1
RESIDENTIAL PROPERTY LINE	+	0.0 Fc	0.0 Fc	0.0 Fc	N/A	N/A	N/A

Schedule				
Symbol	Label	QTY	Manufacturer	Description
A	A	7	Hoopshane	GP03 P30 40K XXXX G15 Granville Premier Gen3, P30 Performance Package, 4000K CCT, Type 5 distribution
B	B	6	Lithonia Lighting	DSXW2 LED 30C 1000 40K T1M HVOLT
C	C	3	Lithonia Lighting	DSXW1 LED 30C 700 40K T1M HVOLT
D	D	3	Lithonia Lighting	DSX1 LED P5 40K 70CRI BLC4
E	E	6	Lithonia Lighting	DSX1 LED P5 40K 70CRI TSW
F	F	4	Lithonia Lighting	DSX1 LED P5 40K 70CRI TSW
G	G	14	Lithonia Lighting	DSX1 LED P5 40K 70CRI TSW

Ordering Note
 FOR INQUIRIES CONTACT GASSER BUSH AT
 QUOTES@GASSERBUSH.COM OR 734-266-6705.

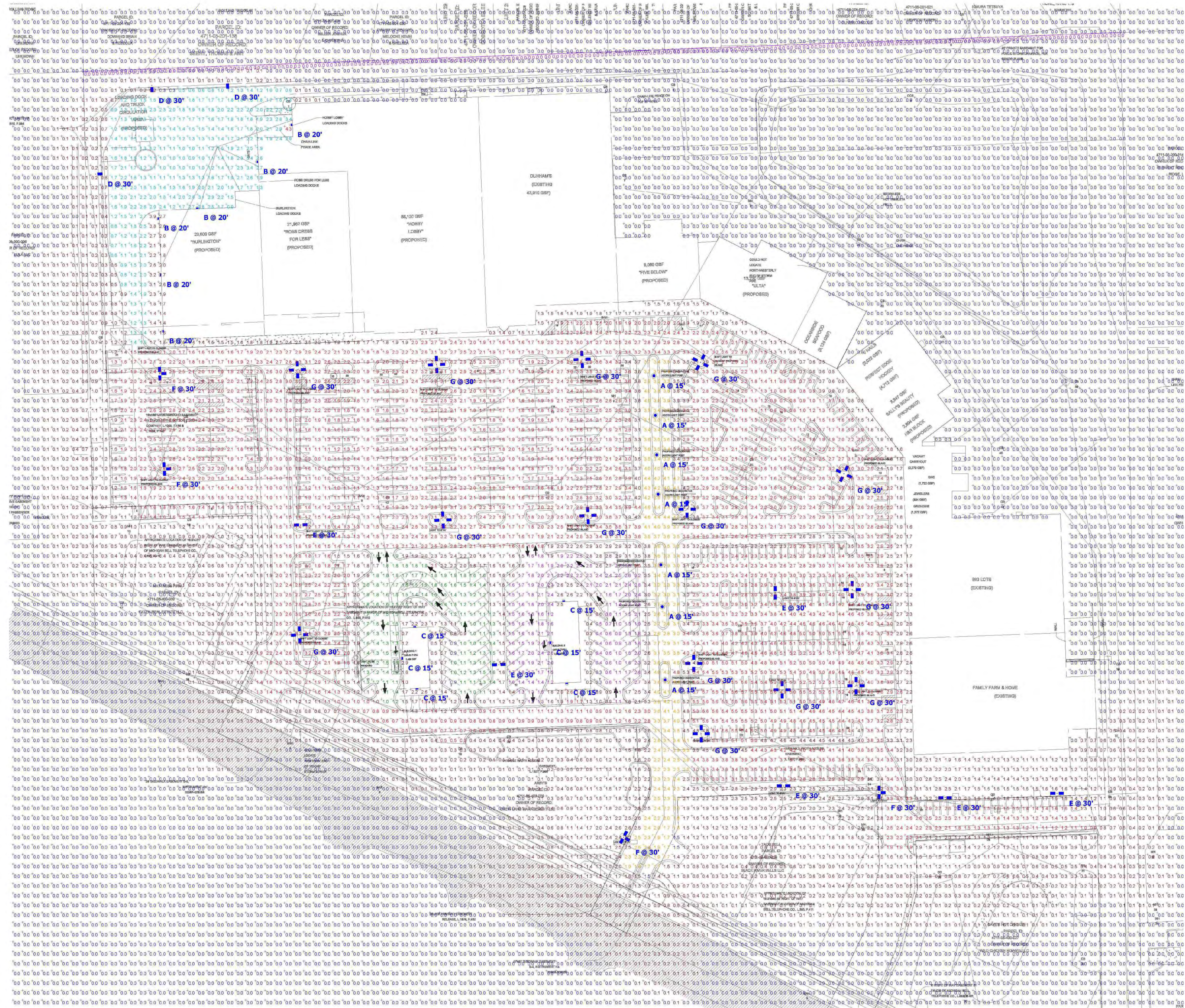
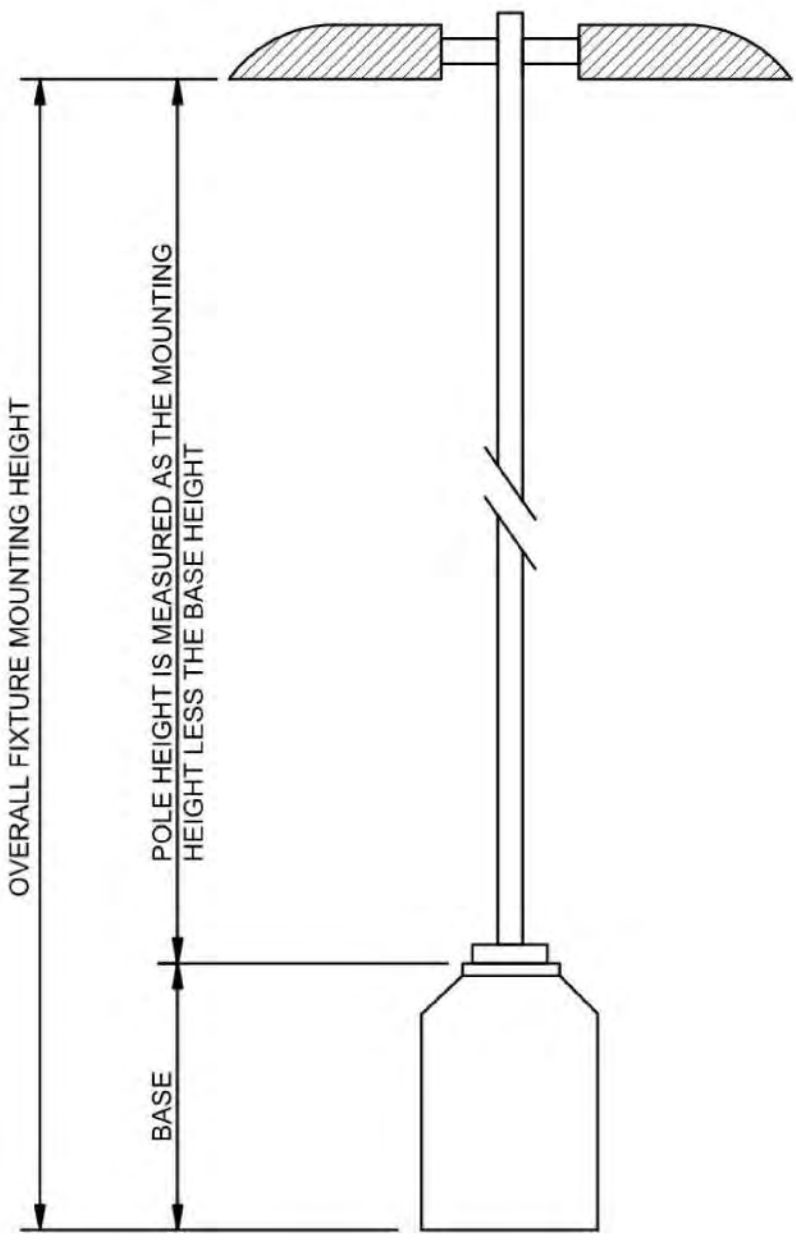
Drawing Note
 THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE
 FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN
 FIELD BY OTHERS.

General Note
 1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
 2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
 3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0".

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT
 TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS
 CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH
 ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY
 MANUFACTURER'S
 LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER
 VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING
 ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT
 IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1
 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705



Plan View
 Scale - 1" = 60ft

Consultant:

Key Plan: NO SCALE

Client:

Project:

Seal:



Date Issued For

01/24/24 OWNER REVIEW

02/08/24 OWNER REVIEW

02/15/24 SPA

03/19/24 SPA

Drawn: RLJ

Checked: RLJ

Approved: RLJ

Sheet Title:

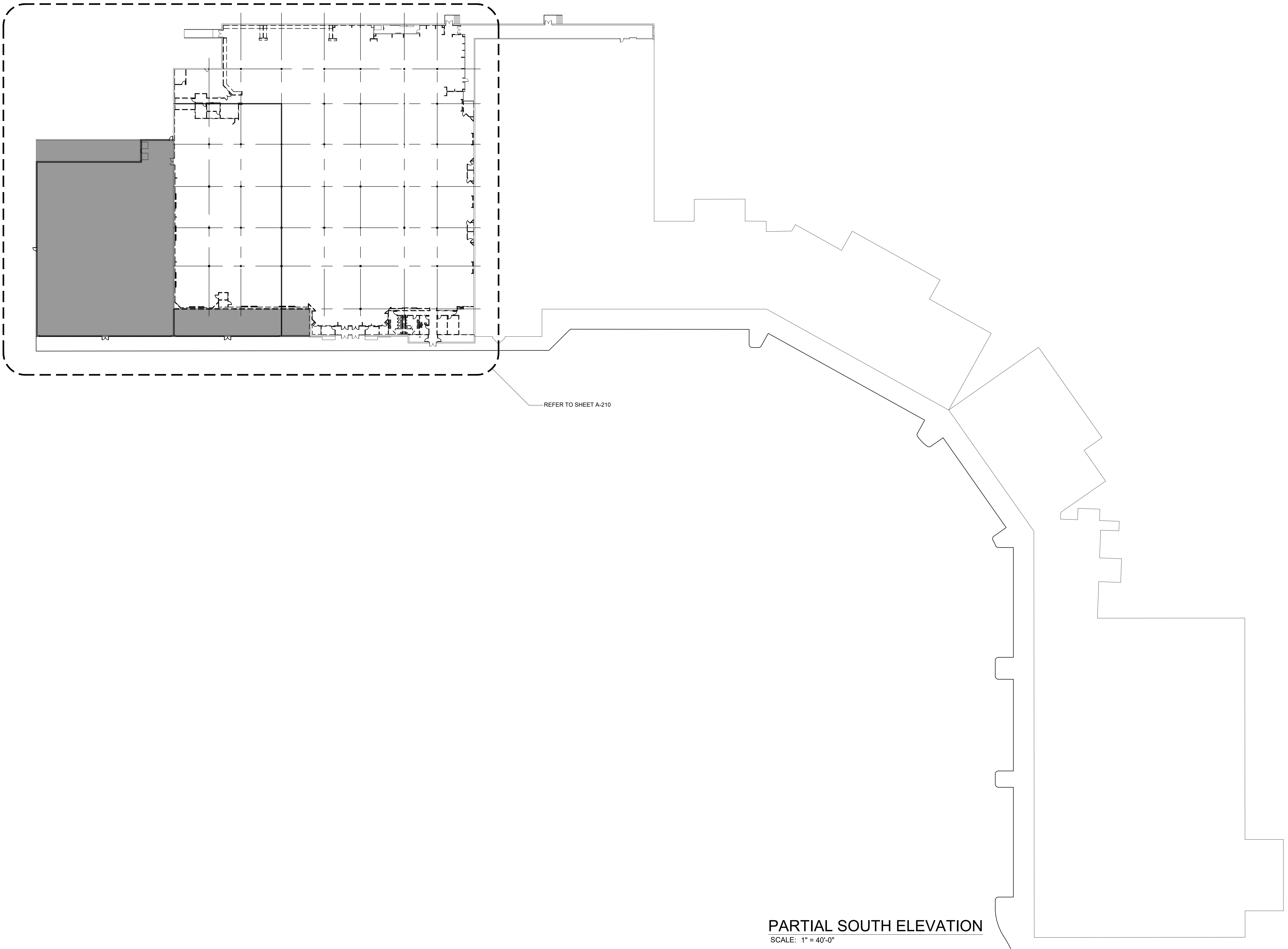
COMPOSITE

PLAN

Project No.:

Sheet Number: A-200

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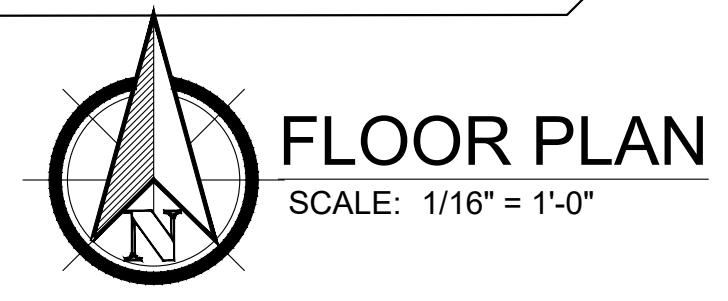
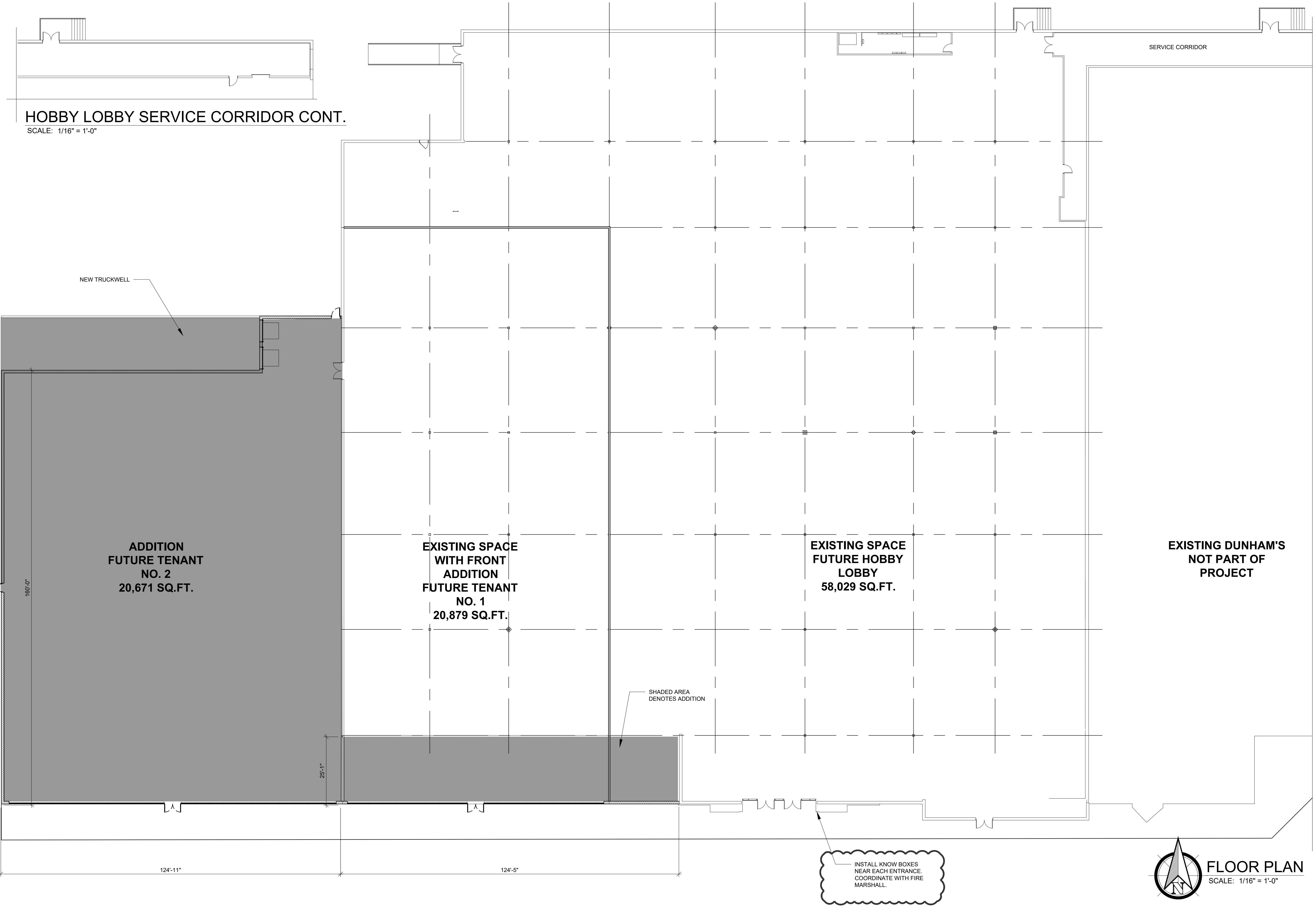
REFER TO SHEET A-210

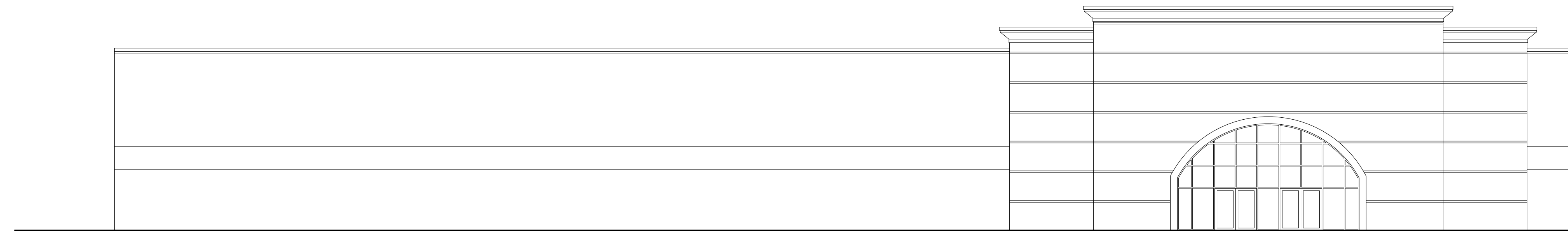
PARTIAL SOUTH ELEVATION
SCALE: 1" = 40'-0"



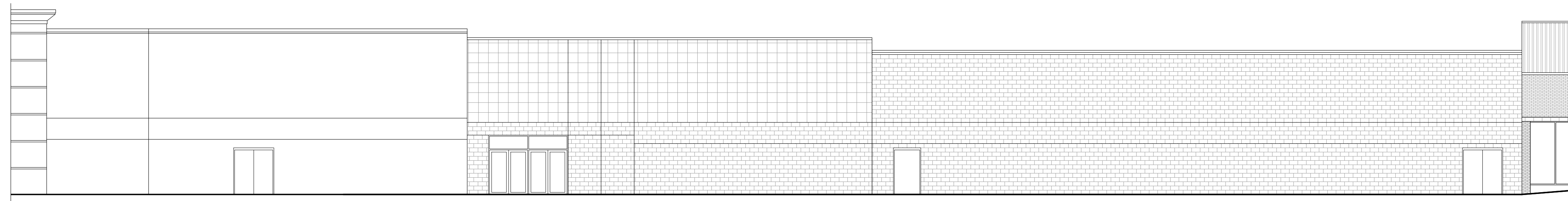
01/24/24	OWNER REVIEW
02/08/24	OWNER REVIEW
02/15/24	SPA
03/19/24	SPA

Drawn:	RLJ
Checked:	RLJ
Approved:	RLJ

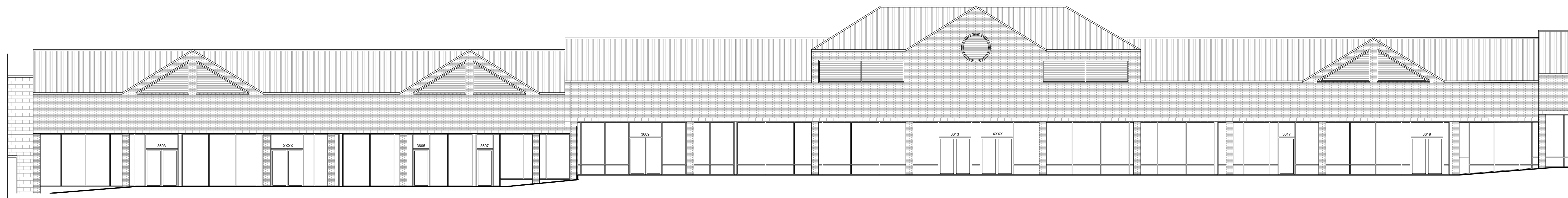




PARTIAL SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



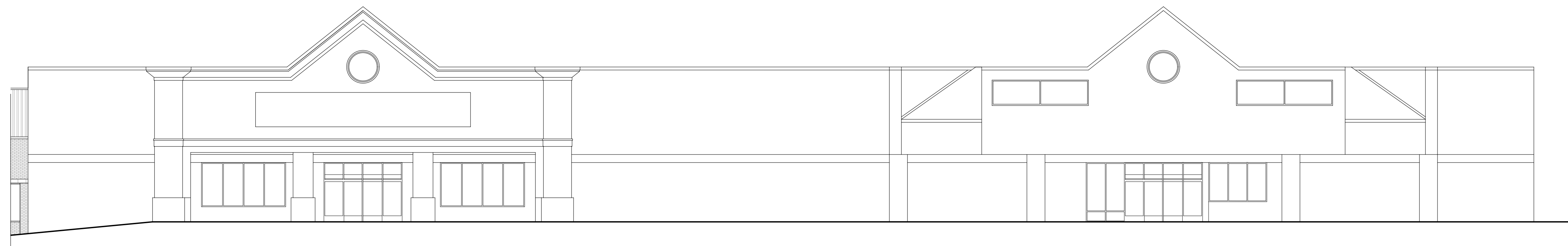
PARTIAL SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



PARTIAL SOUTH/ SOUTHWEST ELEVATION
SCALE: 3/32" = 1'-0"



PARTIAL WEST/SOUTHWEST ELEVATION
SCALE: 3/32" = 1'-0"



PARTIAL WEST ELEVATION
SCALE: 3/32" = 1'-0"

Key Plan: NO SCALE

Client:

Project:

Seal:



Date Issued For

01/24/24	OWNER REVIEW
02/08/24	OWNER REVIEW
02/15/24	SPA
03/19/24	SPA

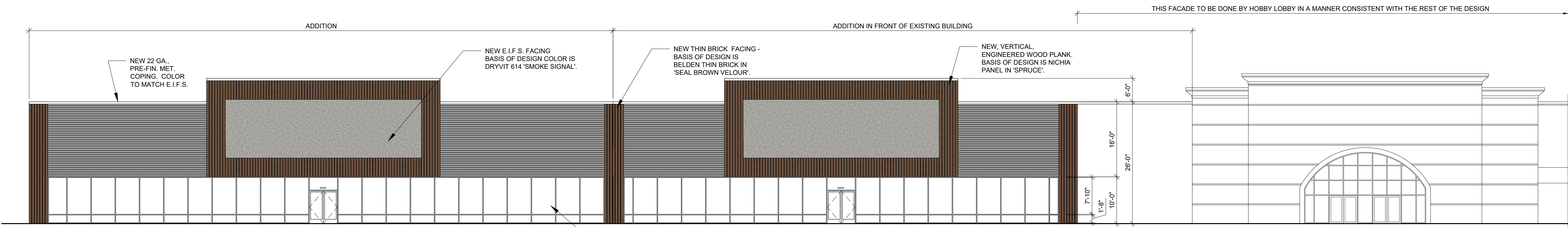
Drawn: RLJ
Checked: RLJ
Approved: RLJ

Sheet Title:
**EXISTING
EXTERIOR
ELEVATIONS**

Project No.:

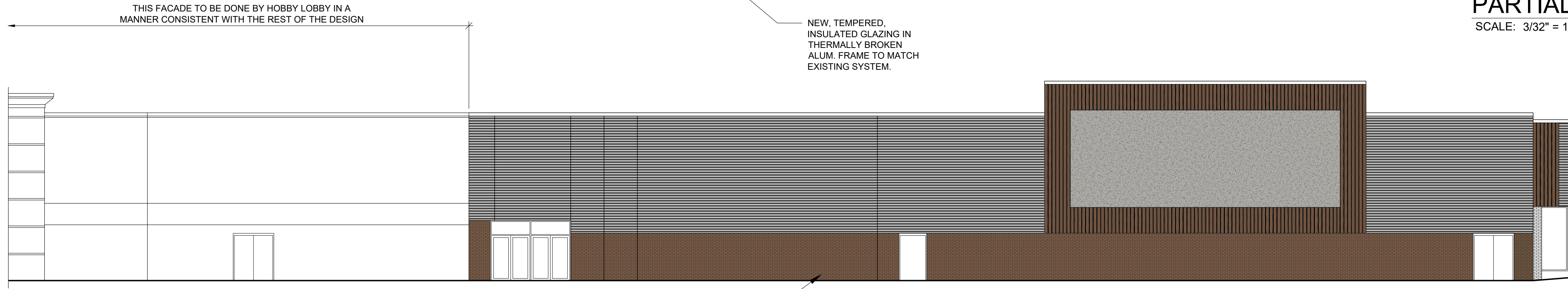
Sheet Number: **A-301**

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PARTIAL SOUTH ELEVATION

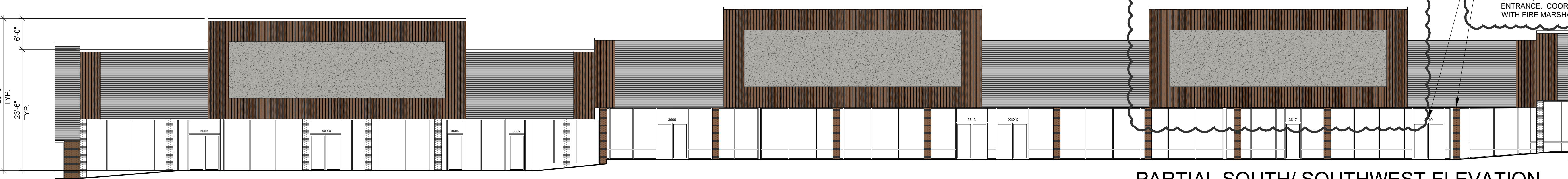
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PARTIAL SOUTH ELEVATION

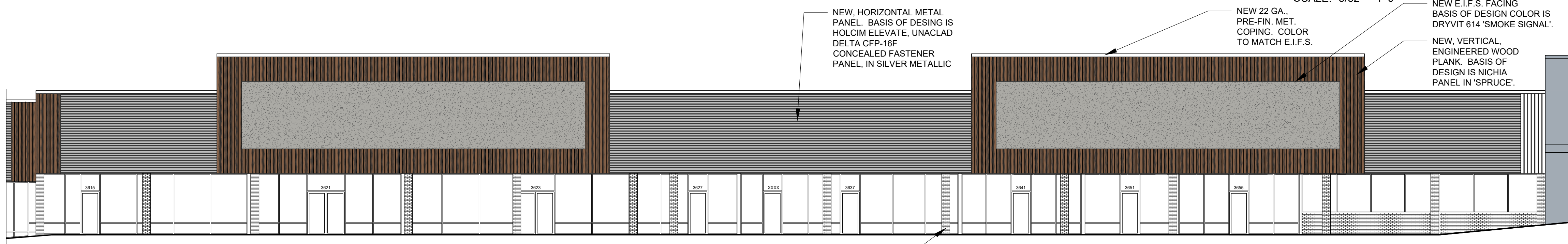
SCALE: 3/32" = 1'-0"

REVISED FAÇADE DESIGN, TYP.
ADDRESS ARE OVER EACH SUITE ENTRANCE.
INSTALL KNOW BOXES, ON BACKSIDE OF COLUMN, NEAR EACH ENTRANCE. COORDINATE WITH FIRE MARSHALL.



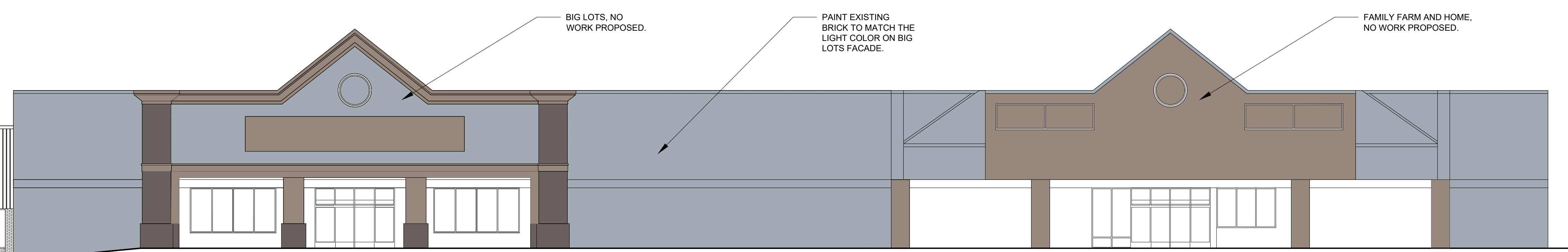
PARTIAL SOUTH/ SOUTHWEST ELEVATION

SCALE: 3/32" = 1'-0"



PARTIAL WEST/SOUTHWEST ELEVATION

SCALE: 3/32" = 1'-0"



PARTIAL WEST ELEVATION

SCALE: 3/32" = 1'-0"

GRAND RIVER PLAZA FAÇADE MATERIAL PERCENTAGES			
MATERIAL	FAÇADE AREA (SQ. FT.)	ALLOWED PERCENTAGE	ACTUAL PERCENTAGE
TOTAL	36,922	-	-
BRICK	5,808	100 ¹	16
SPLIT FACED CMU	2,361	25	6
EIFS	8,638	25	23
METAL PANEL	6,821	25	18
ENGINEERED WOOD PLANK	4,431	25	12
NONREFLECTIVE STOREFRONT/DOORS	8,862	-	24

1 - in the RCD district all façade facing a road must be 75% brick.

Consultant:

Key Plan: NO SCALE

Client:

Project:

Seal:



Date Issued For

01/24/24	OWNER REVIEW
02/08/24	OWNER REVIEW
02/15/24	SPA
03/19/24	SPA

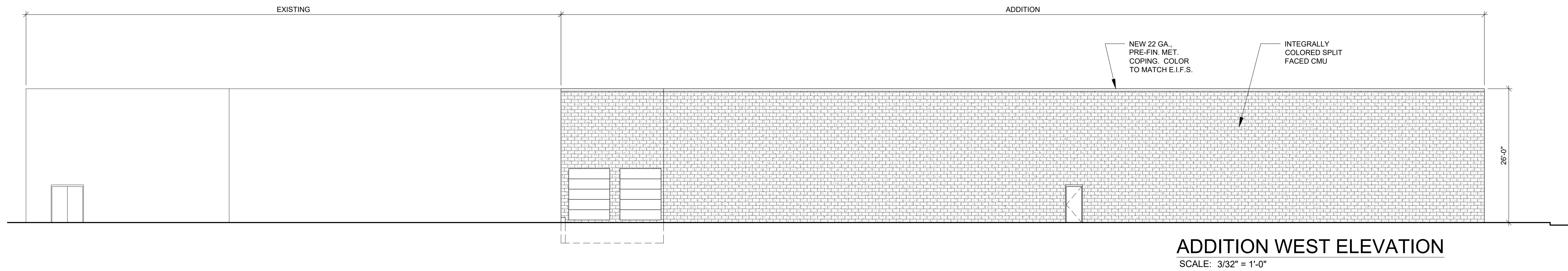
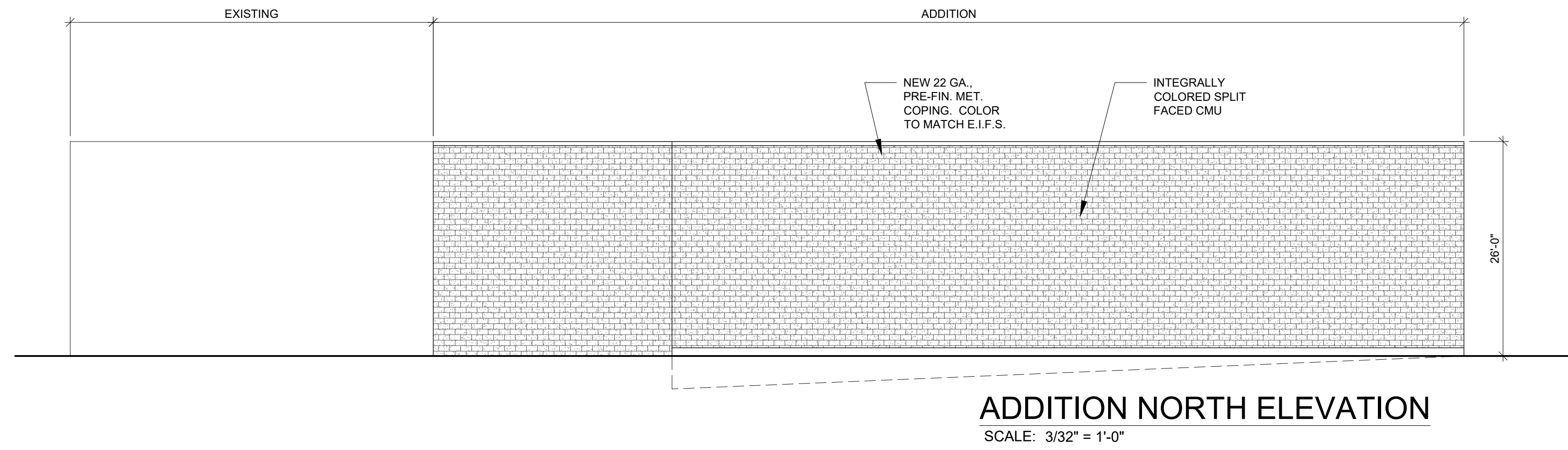
Drawn: RLJ
Checked: RLJ
Approved: RLJ

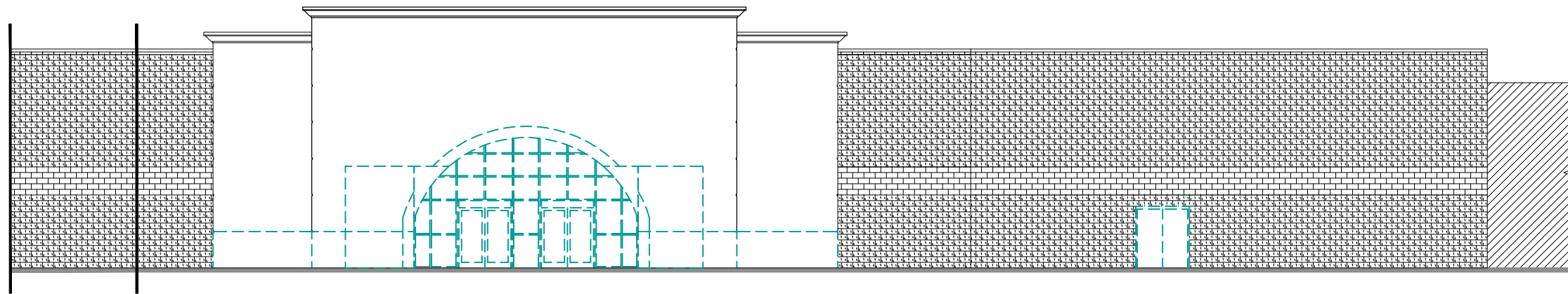
Sheet Title:
**PROPOSED
EXTERIOR
ELEVATIONS**

Project No.:

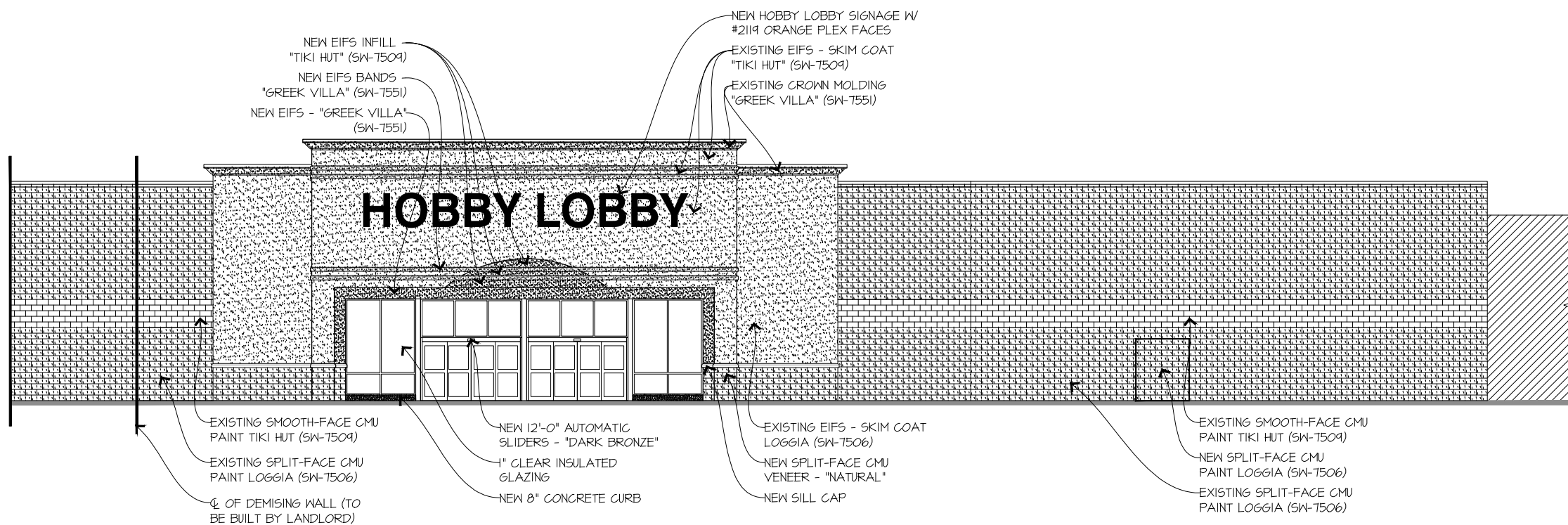
Sheet Number: **A-303**

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EXISTING FRONT ELEVATION
(SOUTH ELEVATION)





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

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Amy Ruthig, Planning Director
DATE: May 1, 2024
RE: Chestnut Development Site Grading Amendment
Environment Impact Assessment

Please find attached the project case file for revisions to previously approved site grading on a vacant 4.32- acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. In 2023, a site plan and environmental impact assessment was approved for site grading and tree removal. A condition of that approval was that 19 existing trees on the north side of the property were not to be removed. Staff discovered that the 19 trees were removed. In order to rectify the issue, the applicant has submitted for revised site plan approval to remove 58 trees to allow for a landscaped berm with 45 new evergreen trees at the rear of the property. The property is zoned Office Service District.



Procedurally, the Planning Commission has review and approval authority over the amended site plan, and the Township Board has the final approval authority over the amended Environmental Impact Assessment. The Environmental Impact Assessment was recommended for approval to the Township and Board and the site plan was approved by the Planning Commission on April 8, 2024. Based on the review of the revised submittal, I offer the following for your consideration:

ENVIRONMENTAL IMPACT ASSESSMENT

Moved by _____, Supported by _____ to **APPROVE** the Environmental Impact Assessment dated April 9, 2024 for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) with the following conditions:

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter

1. The Impact Assessment shall be reviewed for the revision and approved by Township staff.
2. The project shall be completed north to south.
3. Required berm and landscaping must be completed within 14 days of any tree removal.
4. Trees that are to remain shall be marked.
5. A performance guarantee shall be submitted prior to land use permit issuance.
6. Site plan overages shall be paid prior to land use permit issuance.
7. Staff recommends that the silt fence line shall be adjusted to ensure protection of trees that are to be preserved.
8. The trees shall be maintained healthy and replaced if dead or diseased.

If you should have any questions, please feel free to contact me.

Best Regards,

A handwritten signature in blue ink that reads "Amy Ruthig".

Amy Ruthig, Planning Director



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: CHESTNUT DEVELOPMENT LLC. 6253 GRAND RIVER AVE STE 700 BRIGHTON, MI 48116

If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: CHESTNUT DEVELOPMENT LLC. 6253 GRAND RIVER AVE STE 700 BRIGHTON, MI 48116

SITE ADDRESS: Grand River Ave PARCEL #(s): 11-06-200-101

APPLICANT PHONE: (734)679-4356 OWNER PHONE: (888)825-1420

OWNER EMAIL: permits@chestnutdev.com

LOCATION AND BRIEF DESCRIPTION OF SITE: North side of Grand River Ave.
Just west of Char-Ann Drive.

BRIEF STATEMENT OF PROPOSED USE: Grading preparation for future development. Replacement of trees that were inadvertently removed by contractor.

Please see letter from MEGA Engineering dated 9-20-23 and revised site plans showing proposed mitigation.

THE FOLLOWING BUILDINGS ARE PROPOSED: None

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: Steve Gronow, Owner

ADDRESS: 6253 GRAND RIVER AVE STE 700 BRIGHTON, MI 48116

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

1.) Kelly Ralko _____ of Chestnut Development, LLC. _____ at permits@chestnutdev.com
Name Business Affiliation E-mail Address

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.

SIGNATURE: Steve Gronow, Owner of Chestnut DATE: 9/20/23

PRINT NAME: Steve Gronow, Owner PHONE: 888-825-1420

ADDRESS: 6253 GRAND RIVER AVE STE 700 BRIGHTON, MI 48116

Commissioner McCreary stated that when a Special Land Use is granted, it has to meet certain requirements. The compatibility of the use, the impacts on the surrounding area, etc. She is in favor of this type of use, but not in this location.

Commissioner Dhaenens understands the changes that are being made with regard to the sound from the last two owners, but based on the public's comments, they are not convinced that it will be different than in the past.

Commissioner McBain wants to ensure the protection of the residents' use of their properties.

Mr. Perri does not want the township or the residents to be biased based on the previous owners. They are the owners and operators of the building and business, he lives within 500 yards of the site, and outdoor events will only occur from May 1 through September 15. There will be no outdoor events outside of those times. They will not be having concerts or parties. He would be willing to meet with the neighbors as well as receive feedback from them during the event season.

Commissioner McBain suggested the township visit the site and have a demo of the decibel levels. Mr. Holowicki stated they have met the ordinance limitations and can lock it so that it cannot be exceeded. He can guarantee that they would never exceed the limitations.

Moved by Commissioner Dhaenens, supported by Commissioner McBain to table to a future Planning Commission meeting, the Environmental Impact Assessment and site plan to convert the use and expand an existing building for an office use and event facility with outdoor entertainment at 5311 Brighton Road, north side of Brighton Road, between Clifford Road and Road and Oak Pointe Drive, noting that the petition shall provide firm use dates and times. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2... Consideration of a site plan amendment for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. The request is petitioned by Chestnut Development.

A. Recommendation of Environmental Impact Assessment (9-20-23)

B. Disposition of Amended Site Plan (10-17-23)

Mr. Alan Pruss with Monument Engineering and Brad of Chestnut Development were present. Mr. Pruss stated they would like to prepare the site for sale; however, there is no use for the site at this time. They would like to remove the existing trees at the back of the site along Char Ann, put up a berm, and then plant trees on the berm. They have received the planner's and engineer's letters and they have made their requested changes and submitted new plans.

Ms. Ruthig stated the new plan was not put in the packet because when it was published, the plan had not been reviewed. Mr. Borden stated he was able to review the revised plans today.

The applicant has addressed all but one of his concerns from his previous review letter. He suggested that if this item is recommended for approval this evening, it should be conditioned upon engineering review and approval and that an updated Environmental Impact Assessment be submitted that shows the changes that were made on the site plan. His outstanding concern is:

1. 45 new evergreen trees are proposed along the northerly property line atop a landscaped berm. The proposal includes four types of evergreen trees (Norway Spruce, Black Hill Spruce, Colorado Blue Spruce, and Eastern White Pine).

Commissioner Rassel wants to ensure that all of the trees that are to remain are marked. Brad stated they are; however, he can confirm that tomorrow.

Mr. Barber reviewed his email dated Monday, April 1, 2024. Storm water runoff from the site into the Turning Leaf Drive right-of-way will be increased. No calculations are provided. The petitioner should verify that runoff will not be increased. Mr. Pruss stated their post development runoff is 10 percent less than prior to the development. Mr. Barber disagreed. He asked Mr. Pruss to review it again.

The Brighton Area Fire Marshal's email from Friday, November 3, states that he has no new comments regarding this item.

The call to the public was made at 8:47 pm.

Mr. Dan Hassett of 2955 Turning Leaf asked for confirmation of what was going to be put in place.

Mr. Jeff Hudson of 2897 Turning Leaf confirmed that all of the existing trees are going to be removed, then a berm would be installed, and six foot trees will be planted on top of that. He noted that the trees that are going to be removed were forty feet high. He asked if the existing trees could remain. Mr. Pruss stated this was requested by the Planning Commission at their last meeting. Mr. Hudson stated that their property values have been affected by the trees being removed.

Mr. Scott Runyon of 3141 Char Ann Drive asked for clarification on which trees were going to be removed and what ones were going to stay.

The call to the public was closed at 8:54 pm.

There was a discussion regarding when the berm and plantings would occur. It was decided to have the berm and plantings done before the site grading.

Moved by Commissioner Rassel, supported by Commissioner McCreary, to recommend to the Township Board approval of the Environmental Impact Assessment to be submitted for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive, with the following conditions:

- The township engineer shall review and approve the plans.
- The Impact Assessment shall be reviewed for the corrections and approved by township staff.
- The project shall be completed from north to south
- A performance guarantee shall be submitted prior to land use permit issuance.

The motion carried unanimously.

Moved by Commissioner Rassel, supported by Commissioner McCreary, to approve the Amended Site Plan dated April 3, 2024 for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive, with the following conditions:

- Review by staff prior to submission to the Township Board.

The motion carried unanimously.

NEW BUSINESS:

OPEN PUBLIC HEARING #3...Consideration of a site plan application and environmental impact assessment for a proposed façade improvement and addition to an existing multi-tenant shopping center. The property is located at 3599 and 3669 Grand River Avenue, north side of Grand River Avenue, west of Latson Road. The request is petitioned by Symmetry Management.

- A. Recommendation of Environmental Impact Assessment (3-19-24)
- B. Recommendation of Site Plan (3-19-24)

Mr. Brent Lavanway of Boss Engineering; Mr. Frank Jarbou of Symmetry Management, the property owner; and Mr. Robert Jordan from Serenity Architecture were present.

Mr. LaVanway provided a review of the proposal. They will be adding landscape islands and landscaping, adding a boulevard entrance where the current traffic signal is located, adding a 20,000 building addition on the far west portion of the site, expanding the detention basin, planting an addition 90 trees and 200 shrubs, adding a paved driveway to connect the two parcels, and adding two out lots. They are reducing the number of parking spaces from 900 to 680, which must be approved by the Planning Commission; however, the ordinance does allow for shared parking.

Mr. Jarbou provided a history of his company. They are a redevelopment company that transforms and adds value to existing properties. They have secured a large tenant and have serious interests in the other locations. He reviewed the updates that will be made to the building and the site.

Black and white elevations and colored material example photos were presented. Commissioner McCreary would like to see sample materials and not a photograph.

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
March 11, 2024**

MINUTES

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Eric Rauch, Tim Chouinard, Marianne McCreary, Greg Rassel and Jeff Dhaenens. Absent was Glynis McBain. Also present were Planning Director Amy Ruthig, Brian Borden of Safebuilt, and John Barber of Tetra Tech.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

Moved by Commissioner McCreary, seconded by Commissioner Rassel, to approve the agenda as presented. **The motion carried unanimously.**

DECLARATION OF CONFLICT OF INTEREST:

None

CALL TO THE PUBLIC:

The call to the public was made at 6:31 pm with no response.

OLD BUSINESS:

OPEN PUBLIC HEARING #1...Consideration of a site plan amendment for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. The request is petitioned by Chestnut Development.

- A. Recommendation of Environmental Impact Assessment (9-20-23)
- B. Disposition of Amended Site Plan (10-17-23)

Mr. Steve Gronow has a non-profit organization that is interested in building on the entire property; however, they are also looking at other sites. He wanted to make the property more attractive to developers by clearing the brush and removing debris on the site. He acknowledges that the contractor removed the trees that were not to be removed, even though it was clearly marked. Since he is not sure how the property will be developed, he would like to build an eight-foot-high berm on the rear of the site between the trees and plant the appropriate number of evergreens to screen the homes on Turning Leaf from Grand River and complete the grading that was originally proposed and approved.

Mr. Borden suggested the applicant submit a drawing of what is being proposed, including the number of trees that will be planted. Commissioner McCreary agrees. She would like to see a visual of where on the site the berm and trees will be placed. Mr. Gronow stated this will be temporary.

Commissioner Rauch asked Mr. Gronow if there is a long-term screening plan for this area. He stated that the entire rear of the site contains scrub trees, so when the property is developed, he would like to remove those and have a landscape architect develop a permanent plan.

Commissioner Dhaenens suggested leaving the existing plantings as the permanent buffer and these new trees could remain. Mr. Gronow does not want to do that. He stated that the original requirement to have those trees remain should not have been made. They were within the building envelope and there is nothing in the ordinance that requires that. This property was commercial when the homes on Turning Leaf were built, so there was never a guarantee those trees would remain.

Ms. Ruthig stated that if trees are removed that were supposed to remain, they must be replaced by two, so since 19 trees were removed, 38 trees must be replaced.

The call to the public was made at 6:54 pm.

Ms. Melanie Johnson of 3990 Chilson Road lives next to one of Mr. Gronow's other properties. She believes that a temporary solution would work. If the new trees are not maintained, they could die.

Mr. Dan Hassett of 2955 Turning Leaf stated a berm all the way across with 19 trees planted would be acceptable. He knows it was an accident. He wants to ensure that a plan is submitted and approved.

Mr. Chris Mammoser of 2757 Turning Leaf is the secretary for the homeowners association impacted by this area. He is speaking as an individual, not representing the association. He would like to see a thoughtful and agreed to temporary solution while the property is waiting to be developed. He suggested leaving the tall scrub trees.

Mr. Phil Brown of 2933 Turning Leaf stated that his home and the one next to his are exposed. He is concerned with his property values and security.

The call to the public was closed at 7:08 pm.

Mr. Gronow believes he can create a permanent landscape berm across the entire property and plant the required number of trees. He would submit a plan for review and approval. The future engineering of the property would be done around that.

Commissioner Dhaenens suggested that Mr. Gronow consider the ordinance requirements for buffers and landscaping when determining how many trees should be planted. He agrees and will have the engineer use this information.

Moved by Commissioner Rassel, supported by Commissioner Rauch, to table Open Public Hearing #1 until on or before the May 13, 2024 Planning Commission meeting. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2...Consideration of a special land use application, environmental impact assessment and site plan to allow for a proposed automatic car wash located on vacant parcels #4711-04-300-017 ~~and 4711-09-100-017~~ Latson Road, east side of Latson Road, south side of Grand River Avenue. The request is petitioned by CWP West, LLC.

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (1-16-24)
- C. Recommendation of Site Plan (1-16-24)

Mr. Scott Tousignant of Boss Engineering and Nicole Castern of Mister Car Wash were present. Ms. Tousignant stated they have received MDOT approval for the stormwater discharge. He provided a review of the changes, specifically the color scheme, additional landscaping has been added to the front, the number of signs have been reduced, the building lighting has been changed, the cross access easement has been obtained, and they have added the screening fence. Also, they have changed the entrance drive to show the right in/right out.

Mr. Borden reviewed his letter dated February 6, 2024.

- 1. Special Land Use (Section 19.03)
 - a. The special land use standards of Section 19.03 are generally met.
 - b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(l) need to be met to the Commission's satisfaction.
 - c. The submittal shows that they would not be in compliance with the noise ordinance after 10 pm. He suggests the applicant restrict the hours of operation to ensure compliance with the Township's Noise Ordinance.
 - d. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.
- 2. Use Conditions (Section 7.02.02(1))
 - a. The use conditions are met.
- 3. Site Plan Review
 - a. The revised building elevations comply with the material standards of Section 12.01.
 - b. Building materials, design and color scheme are subject to review and approval by the Planning Commission.
 - c. The landscape plan is deficient in width for the Latson Road greenbelt.
 - d. The waste receptacle details must identify the required concrete base pad.

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
December 11, 2023**

MINUTES

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Chris Grajek, Eric Rauch, Tim Chouinard, Glynis McBain, Marianne McCreary, and Greg Rassel. Absent was Jeff Dhaenens. Also present were Planning Director Amy Ruthig, Brian Borden of Safebuilt, and Shelby Byrne of Tetra Tech.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

Moved by Commissioner Rauch, seconded by Commissioner Chouinard, to approve the agenda as presented. **The motion carried unanimously.**

DECLARATION OF CONFLICT OF INTEREST:

None

CALL TO THE PUBLIC:

The call to the public was made at 6:31 pm with no response.

OLD BUSINESS:

OPEN PUBLIC HEARING #1... Consideration of a site plan amendment for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. The request is petitioned by Chestnut Development.

- A. Recommendation of Environmental Impact Assessment (9-20-23)
- B. Disposition of Amended Site Plan (10-17-23)

Mr. Steve Gronow, the applicant, and Mr. Allan Pruss with Monument Engineering Group were present. Mr. Pruss requested to have their item tabled this evening as they will have a complete site plan forthcoming.

Commissioner McCreary questioned what is to prohibit the applicant from removing additional trees at this time. Ms. Ruthig stated that the applicant is not in site plan compliance so they are not allowed to do any work. She asked the applicant when they anticipate having the site plan ready for review. Mr. Gronow stated he has someone who is interested in the property. He anticipates being before the Planning Commission in June or July.

The call to the public was made at 6:33 pm.

Mr. Dan Hassett of 2955 Turning Leaf stated 40-50 trees were removed. He showed and submitted pictures of the tree density before and after the trees were removed. He is hoping that a berm and pine trees can be planted.

The call to the public was closed at 6:35 pm

Moved by Commissioner Rauch, supported by Commissioner Rassel, to postpone Agenda Item #1 for Parcel #4711-06-200-101 until the March 11, 2024 Planning Commission Meeting per the applicant's request. **The motion carried unanimously.**

NEW BUSINESS:

OPEN PUBLIC HEARING # 2... Consideration of a special use application, environmental Impact assessment and site plan for a commercial stable located at 7318 Herbst Road, south Side of Herbst Road, east of Hubert Road. The request is petitioned by the Nancy Merlo, Brighton Equestrian Club.

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (4-22-22)
- C. Recommendation of Site Plan (4-21-22)

Ms. Kathy Riesterer, who represents the applicant, and Mr. Ray Merlo were present. Ms. ~~Riesterer Rister~~ stated this was approved in 2022 with certain conditions but those conditions were not met, so the prior approval lapsed. They are requesting the same approval, and they have now completed the conditions of the previous approval.

She noted allowing the gravel was approved previously, instead of asphalt, as gravel is more advantageous for horses. The applicant agrees to limit the equipment to equestrian use. Mr. Merlo runs a construction company and he stores his equipment and trucks at a property near this site, but it is not stored there. Neighbors have noted that these trucks are on the site. She stated this is true; however, they are there to make deliveries or for construction purposes for the equestrian center or if Mr. Merlo visits the site in one of his work vehicles. They would like to reinstitute the fundraisers.

Mr. Borden reviewed his letter dated November 13, 2023:

- 1. Special Land Uses (Section 19.03):
 - a. The special land use standards of Section 19.03 are generally met.
 - b. Though the Zoning Map (AG) and Future Land Use Map (Low Density Residential) do not align, the proposal is compatible with the goals of the Master Plan.
 - c. In order to make favorable findings related to compatibility and impacts, the use conditions of Section 3.03.02(h) must be met to the Commission's satisfaction.
- 2. Commercial Stable Use Conditions (Section 3.03.02(h)):
 - a. The submittal demonstrates compliance with the applicable use conditions.

Moved by Commissioner Rauch, seconded by Commissioner Chouinard, to recommend to the Township Board approval of the Environmental Impact Assessment dated September 20, 2023 for two contiguous parcels (4711-09-200-006 and 008) at 4675 Grand River Avenue to allow for trailer sales and storage. **The motion carried unanimously.**

OPEN PUBLIC HEARING #3...Consideration of a site plan amendment for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. The request is petitioned by Chestnut Development.

- A. Disposition of amended Site Plan (9-1-23)
- B. Recommendation of Environmental Impact Assessment (9-20-23)

Ms. Brittney Shay of Monument Engineering was present. She advised that grading plans were previously approved by the township in preparation for future development. There were 19 trees that were required to be saved; however, when the project started, those trees were removed. They are proposing a new plan to establish screening due to the removal of these trees.

Mr. Borden reviewed his letter dated October 3, 2023.

1. In accordance with Section 13.01, the Planning Commission has review and approval authority over the site plan for grading and tree removal.
2. The approved site plan included a condition for additional tree preservation in the northerly portion of the site; however, those trees were removed, and the applicant now seeks approval of an amended site plan.

The applicant has addressed some of their concerns; however, his additional comments are:

3. There is a discrepancy between the notes and plan with respect to the number of new trees proposed. The plan depicts 20 trees, while the notes say 19. This must be corrected.
4. The size of the new trees proposed is not identified.
5. In his opinion, if the new trees are to be treated as replacement for what was removed, the new trees need to be much larger than Ordinance minimums of six feet in height at the time of planting. The trees removed were well above 20 feet in height. Alternatively, the Commission could require an increase in the number of trees to be planted to help offset what was removed.
6. The silt fence line should be adjusted to ensure protection of the tree along the west side of the limits of disturbance.
7. The applicant must address any comments provided by the Township Engineer.

Ms. Byrne has no engineering issues. She stated that the berm or plantings will not affect the drainage or underground utilities.

The Fire Marshal had no issues.

Commissioner Rauch is disappointed that the petitioner is not present this evening. He would like to know what happened. This is a significant oversight. He is not in favor of replacing what was removed with 19 six-foot trees. He would request that they be replaced with something much more robust. Also, to ensure that the new plantings grow, it would require irrigation.

Commissioner McBain is not in favor of a berm because that suggests manicured landscaping. She would like to have more natural plantings, such as trees, bushes, brush, etc.

Ms. Ruthig stated that when staff was made aware of the trees being removed, they were concerned with the location the applicant proposed to place the berm because it is in the 50-foot wide buffer that was supposed to remain natural. This could compromise some of the existing trees inside that 50-foot buffer.

Commissioner Rauch reiterated Commissioner McBain's comments that it should look natural and not manicured.

After discussion, it was determined that a landscape architect needs to provide a plan for approval by the township.

The call to the public was made at 7:16 pm.

Mr. Dan Hassett of 2955 Turning Leaf stated there was an approximate 300-foot-wide area of trees removed. His house can now be seen from Grand River. He would suggest the applicant bring in a lot of dirt to make a 10-12-foot-high berm, and then plant 30-40 white pines.

Mr. Chris Mammoser of 2757 Turning Leaf is the secretary of the homeowner's association. He thanked Ms. Ruthig for all of her help with this issue. They have purchased much larger trees than what is being proposed so the developer can also.

The call to the public was closed at 7:22 pm.

Commissioner Lowe would like to request that the developer or his representative be present at all future meetings.

Moved by Rauch, supported by Lowe, to table Open Public Hearing #3 for a site plan amendment for revisions to the previously approved site grading on a 4.32-acre parcel, #4711-06-200-101. **The motion carried unanimously.**

ADMINISTRATIVE BUSINESS:

Staff Report

Ms. Ruthig stated there will be a Planning Commission meeting next month.

Moved by Skolarus, supported by Ledford, to approve Resolution #4 Acknowledging the filing of the Special Assessment Roll, Scheduling the Second Hearing for May 15, 2023, and Directing the Issuance of Statutory Notices for the Stillriver Drive Road Rehabilitation Special Assessment Project (Summer Tax 2023). **The motion carried unanimously with a roll call vote (Ledford - yes, Croft - yes, Hunt - yes, Lowe - yes, Mortensen- absent, Skolarus - yes, and Rogers - yes).**

Ms. Skolarus stated that an appeal of the Pine Creek Road Improvement Special Assessment District has been filed so township counsel has asked for a temporary postponement of agenda items #6, 7 and 8 to allow the attorneys to review the appeals and advise staff on the next steps.

Moved by Skolarus, supported by Lowe, to postpone Agenda Items #6, 7, and 8 as requested by the Township Attorney. **The motion carried unanimously,**

6. Request for approval of Resolution #6 Bond Authorizing Resolution for the Pine Creek Ridge Road Improvement Special Assessment District. (Roll Call)
7. Request to approve the Memorandum of Understanding with the Lake Villas of Pine Creek for their contribution to the 2023 Pine Creek Ridge Road Improvement Project.
8. Request to approve a project agreement with the Livingston County Road Commission to reconstruct the roads within the Pine Creek Ridge Subdivision consisting of approximately 5.45 miles with the Township's cost not to exceed \$4,210,000.
9. Consideration of a recommendation for approval of an environmental impact assessment corresponding to the site plan for proposed site grading on a 4.32-acre vacant parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. The request is petitioned by Chestnut Development.

Mr. Allan Pruss of Monument Engineering, representing Chestnut Development, provided a review of the project. They will be grading the property and removing the guard rail to prepare it for future development. They will be preserving the trees as requested by the Planning Commission.

Mr. Mortensen arrived at 6:51 pm.

Moved by Hunt, supported by Lowe, to approve the Environmental Impact Assessment dated April 24, 2023 for Chestnut Development site grading project located on a 4.32-acre vacant parcel (4711-06-200-101) with the following conditions:

1. The silt fence line shall be adjusted to ensure protection of trees that are to be preserved per Planner's review letter dated April 4, 2023
2. MDOT approval for the removal of the guard rail shall be submitted to Township staff prior to issuance of land use permit.

The motion carried unanimously.

4. The proposal will result in the removal of several trees, though the submittal does not identify the exact (or estimated) quantity.
5. The submittal notes a potential location for structures that are not described/depicted in the PUD Agreement or the approved PUD plans. As suggested by Mr. Lekas , he recommends removing it from the plans.
6. The proposed construction road likely requires approval from the Road Commission.
7. Given the nature of the project, the plans need to be signed/sealed by a professional engineer.

Ms. Byrne has no engineering-related concerns with the project.

The Brighton Area Fire Authority Fire Marshal has no concerns regarding this project.

Ms. Spano stated Trinity has community farms at their other facilities. They use it as a community garden, patients use it for rehabilitation, the vegetables are served to the patients in the hospital, and it helps with their carbon footprint.

Commissioner Chouinard complimented the applicant for keeping the material on site.

The call to the public was made at 8:15 pm with no response.

Commissioner McCreary would like the applicant to add a tree buffer between this area and the adjacent residential property. Ms. Spano agrees. She recommended determining what should be planted after the grading has been completed. Commissioners agreed and recommended it be approved by Township Staff.

Moved by Commissioner Lowe, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Environmental Impact Assessment dated February 24, 2023 for site grading for Trinity Health. **The motion carried unanimously.**

Moved by Commissioner McCreary, seconded by Commissioner McBain, to approve the Amendment to the approved Final PUD Site Plan dated February 24, 2023 for site grading for Trinity Health conditioned upon staff approval of additional tree plantings on the eastern side to buffer the neighboring property. **The motion carried unanimously.**

OPEN PUBLIC HEARING #5...Consideration of an environmental impact assessment and site plan for proposed site grading on a 4.32-acre vacant parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. The request is petitioned by Chestnut Development.

- A. Recommendation of Environmental Impact Assessment (3-2-23)
- B. Disposition of Site Plan (2-10-23)

Mr. Allan Pruss of Monument Engineering Group and Brad Opfer of Chestnut Development were present. Mr. Pruss provided a review of the project, which will be to regrade the site and remove the guardrail along Grand River. The comments noted by the Township Planner will be addressed on the grading plan. They do not anticipate the need for stockpiling and staging; however, if it is, they have shown it on the plans.

The call to the public was made at 8:31 pm with no response.

Mr. Borden reviewed his letter dated April 4, 2023.

1. In accordance with Section 13.01, the Planning Commission has review and approval authority over the site plan for grading and tree removal.
2. Since the project only entails site engineering at this time, the applicant must address any comments provided by the Township Engineer.
3. He noted that the applicant has provided details of the stockpile and staging areas.
4. The silt fence line may need to be slightly adjusted to ensure protection of three trees that are to be preserved along the west and north sides of the limits of disturbance. Mr. Pruss advised that he will address these concerns.

Ms. Byrne reviewed her letter dated March 30, 2023.

1. The grading plan appears to be filling in an existing detention pond area and adjusting the outlet rim elevation. As the site is currently undeveloped, this change won't have a major impact on the downstream storm system. When the site is developed in the future it will need to have a new storm management system designed and would need MDOT approval to outlet to the Grand River storm sewer.
2. She noted the applicant has addressed the existing storm pipes shown on the survey plan but missing on the proposed grading plan.
3. The existing water main is shown on the survey plan but should also be clearly shown on the grading plan.

The Brighton Area Fire Authority Fire Marshal has no concerns regarding this project.

Commissioner McCreary questioned the trees along Char-Ann and Turning Leaf that have blue tags. Mr. Pruss stated there is 20 feet of greenspace from the end of pavement on Char-Ann to their property line and they will not be grading within the first 50 feet of their property, so this is almost 80 feet of trees and brush that will remain. She does not want to see those trees removed now since there is no plan to develop the site at this time. Mr. Pruss and Mr. Opfer agreed not to remove the trees.

Moved by Commissioner Lowe, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Environmental Impact Assessment submitted by Chestnut Development dated March 2, 2023 for proposed site grading on a 4.32-acre vacant parcel

(4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. **The motion carried unanimously.**

Moved by Commissioner Lowe, seconded by Commissioner Dhaenens, to approved the Site Plan submitted by Chestnut Development dated February 10, 2023 for site grading on a 4.32-acre vacant parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive, conditioned upon the trees to the north side of the property as discussed this evening shall not be removed per the revised diagram submitted this evening and final approval to be done by Township Staff. **The motion carried unanimously.**

ADMINISTRATIVE BUSINESS:

Staff Report

Ms. Ruthig stated there will be May and June Planning Commission meetings.

She advised that Staff may begin requesting demarcation signs be installed for wetlands in new developments. The developer does not encroach into the wetlands per the plans, but homeowners are not aware where the wetlands are adjacent to their property and sometimes mow their lawn into them, etc.

Approval of the February 13, 2022 Planning Commission meeting minutes

Needed changes were noted.

Moved by Commissioner McCreary, seconded by Commissioner Lowe, to approve the minutes of the February 13, 2022 Planning Commission Meeting as corrected. **The motion carried unanimously.**

Member Discussion

There were no items to discuss this evening.

Adjournment

Moved by Commissioner McCreary, seconded by Commissioner Lowe, to adjourn the meeting at 9:02 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary



April 2, 2024

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Chestnut Development site grading and tree removal – Amendment to Approved Site Plan (3 rd Review)
Location:	Vacant parcel – north side of Grand River, west of Char-Ann Drive
Zoning:	OSD Office Service District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal proposing an amendment to a previously approved site plan.

At their April 10, 2023 meeting, the Planning Commission granted conditional approval to allow site grading and tree removal, per Section 13.01 of the Township Zoning Ordinance.

The condition was that the (19) existing trees on the north side of the property were to be preserved.

Subsequent to that approval, grading activities commenced, and the trees subject to the Commission’s condition were removed.

The applicant has appeared before the Commission on multiple occasions to resolve this matter, and has provided a revised plan in response to the most recent discussion (cover sheet most recently dated 3/19/24).

A. Summary

1. In accordance with Section 13.01, the Planning Commission has review and approval authority over the amended site plan.
2. We are unable to identify 4 of the 16 trees that are to be preserved.
3. The northerly buffer zone provides 45 new evergreen trees atop a landscaped berm and protection of 3 large canopy trees (which count as 6 trees, by Ordinance).
4. The proposal is essentially consistent with buffer zone “B” planting requirements of the Ordinance.
5. The silt fence line should be adjusted to ensure protection of the 14-inch tree along the west side of the limits of disturbance.
6. The applicant must address any comments provided by the Township Engineer.

B. Background/Proposal/Process

The applicant proposed site grading and tree removal in anticipation of future development of the property.

Per Section 13.01, grading that changes the topography of the site by more than 3 feet on average or removal of more than 25% of existing trees with a diameter of 8 inches or more is subject to review by the Zoning Administrator, though it may be forwarded to the Planning Commission for their consideration (as is the case in this instance).

The project entailed filling to level the parcel, which has/had approximately 20’ of elevation change from the northwest (high ground) to the southeast.



Aerial view of site and surroundings (looking north)

The current plan includes the removal of 58 trees with a diameter of 8 inches or more (78% of such trees on site). It is important to note that we are only able to identify 12 trees to be preserved (as opposed to the 16 noted in the calculations).

Procedurally, the Planning Commission has review and approval authority over the amended site plan.

C. Review

We provide the following comments for the Commission's consideration:

- The amended plan maintains 20' side yard buffer zones, and a 50' rear buffer zone from the LDR property to the north.
- 45 new evergreen trees are proposed along the northerly property line atop a landscaped berm.
- The proposal includes 4 types of evergreen trees (Norway Spruce, Black Hill Spruce, Colorado Blue Spruce, and Eastern White Pine).
- A buffer zone "B" would entail 16 canopy trees, 16 evergreen trees, and 64 shrubs atop a berm. The proposed buffer zone includes 45 evergreen trees atop a berm and preservation of 3 existing canopy trees (which count as 6 trees, per Ordinance standards).
- The silt fence line should be adjusted to ensure protection of the 14-inch tree along the west side of the limits of disturbance.
- The Commission should consider any comments provided by the Township engineering consultant.

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

Respectfully,

SAFE BUILT

A handwritten signature in black ink, appearing to read "Brian V. Borden".

Brian V. Borden, AICP
Michigan Planning Manager

From: Barber, John <John.Barber@tetrattech.com>

Sent: Friday, April 12, 2024 2:21 PM

To: Amy Ruthig <amy@genoa.org>

Subject: RE: Chestnut Site Grading Amendment

Hi Amy,

I took another look at the berm grading and looking at the existing grades it looks like the runoff from the berm will not impact the right-of-way of Turning Leaf Drive. It should pretty much go flow right along the property line and then to the south. As long as vegetation is established on the slope it should be fine.

I called Allan at MEGA to let him know.

Please let me know if you need a formal review letter.

Thank you,

John

John Y. Barber, PE | Project Manager | Tetra Tech

From: Barber, John
Sent: Monday, April 1, 2024 3:42 PM
To: Amy Ruthig <amy@genoa.org>
Subject: Chestnut Site Grading Amendment

Hi Amy,

I looked at the revised plan dated 3/19/2024 showing the berm along the north side of the side.

While the berm and plantings should not impact the existing sanitary or water main easements, storm water runoff from the site into the Turning Leaf Drive right-of-way will be increased. No calculations are provided. The petitioner should verify that runoff will not be increased.

Thank you,

John

John Y. Barber, PE | Project Manager
Direct +1 (810) 956-9324 | Business +1 (734) 665-6000 | Cell +1 (810) 986-4570 | john.barber@tetrattech.com

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From: [Rick Boisvert](#)
To: [Amy Ruthig](#)
Cc: [Kelly VanMarter](#)
Subject: Plans
Date: Friday, November 3, 2023 4:48:03 PM
Attachments: [7075 McClements Rd. Fillmore Park Mountain Bike GT \(Site\) 11032023.pdf](#)
[1015 S. Latson Rd - Mister Car Wash GT \(Site\) 11032023.pdf](#)
[1111 S Latson Rd South Latson Commercial Development GT \(Site\) 11032023.pdf](#)
[3639 E Grand River Ave - Arby's \(Site\) \(GT\) 11032023.pdf](#)

Amy,
Attached are review letters for those who need them from us.

We have no new comments on the Chestnut Site Grading and No issues with the Woodland Village Parking plans. I don't see a need for a letter unless you would like one for these two.

Cordially,

Rick Boisvert, FM, CFPS
Fire Marshal
Brighton Area Fire Authority
615 W. Grand River
Brighton, MI 48116
O: (810)229-6640 D: (810)299-0033
F: (810)229-1619 C: (248)762-7929
rboisvert@brightonareafire.com





Monument Engineering Group Associates, Inc.

Developing Lifelong Relationships

monumentengineering.com

298 Veterans Drive, Fowlerville, MI 48836 (HQ)
(517) 223-3512



IMPACT ASSESSMENT

VACANT LAND GRAND RIVER AVE.
SECTION 6, GENOA TOWNSHIP

PREPARED BY:

Monument Engineering Group Associates, Inc.
298 Veterans Drive
Fowlerville, MI 48836

PREPARED FOR:

Chestnut Development
6253 Grand River Avenue
Suite 750
Brighton, MI 48114

March 2, 2023

Revised April 24, 2023

Updated September 20, 2023

Updated April 9, 2024

- *Fowlerville*
- *Northern Michigan*
- *Portage*

IMPACT ASSESSMENT

Revised Plans:

Should include the berm with the proposed height

Plans were revised on April 3, 2024, to show new trees (45) replacing trees originally identified to be saved. These revisions have no impact on the Impact Assessment previously submitted.

18.07.01 Preparer:

Prepared by: Monument Engineering Group Associates, Inc.

298 Veterans Drive, Michigan 48836

Allan W Pruss, PE, PS

Mr. Pruss has over 30 years of land development experience as an engineer and project manager.

Project Description:

This project entails filling the site in preparation for future development. Currently the site has approximately 20' of fall from the northwest corner to the southeast corner of the site. Some clearing of the site (tree removal) will take place as part of the earthmoving operations.

Landscape setbacks will be adhered to around the perimeter of the site to not affect the adjoining parcels.

18.07.02 Location:

The site is in Section 6 T02N, R05E on the north side of Grand River Avenue. Just west of Char Ann Drive and east of Tahoe Blvd. Parcel ID 4711-06-200-101. See location map.

The site is a 4.34 acres parcel of vacant land with some trees mainly on the north side of the property. There is approximately 20' of vertical relief from the northwest corner of the property to the southeast corner. There are no structures on the site.

The property to the north is a residential neighborhood with Turning Leaf Drive adjacent to the property. To the east is an office building with access off Char Ann Drive. To the south is Grand River Avenue with vacant land (wetlands) to the south of Grand River Ave. To the west is a single-family structure located +/-350' from Grand River Ave.

See Location Map and aerial photo for specific location and description of the property.

IMPACT ASSESSMENT



18.07.03 Impact on natural features:

The site is a 4.34 acres parcel of vacant land with some trees mainly on the north side of the property. There is approximately 20' of vertical relief from the northwest corner of the property to the southeast corner. There are no structures on the site. There are approximately 74 trees on site with a diameter breast height (DBH) of 8" or greater. Per the soil survey mapper, soil characteristics are mainly loam with some Carlisle muck. No soils investigation has been conducted as part of this project. There are no known wetlands (regulated or non-regulated) on the site. See site plan for existing conditions survey of the site.

18.07.04 Impact on stormwater management:

The site drains from northwest to southeast with approximately 20' of fall. The plan for this project is to prepare the site for future development by bringing fill to the site and creating a more level site. There will be no increase in impervious area. Soil erosion control measures will be implemented, and a soil erosion sediment control (SESC) permit will be applied for with the Livingston County Drain Commission (LCDC). There will be no impact on stormwater management nor the surrounding stormwater facilities.

18.07.05 Impact on surrounding land uses:

The proposed use will remain unchanged from current use (Vacant Land) as this is a site preparation project only. There will be no increase in noise, light or pollutants when this project is finished. Construction activities will take place during normal business hours, Monday through Saturday, 8 am until 6 pm. Dust control during construction will be handled by utilizing water buffalos during dry periods to keep moisture in the soils and minimize dust to adjoining parcels.

IMPACT ASSESSMENT

Included as part of the soil erosion permit will be a tracking mat designed to knock mud off equipment and vehicles leaving the site. Any mud tracked onto any adjoining roads will be cleaned up daily or as needed during the day.

18.07.06 Impact on public facilities and services:

The proposed use will remain unchanged from current use (Vacant Land) as this is a site preparation project only. There will be no increase in activity on this site after the project is completed. There will be no impact on public facilities or services after the project is completed.

18.07.07 Impact on public utilities:

The proposed use will remain unchanged from current use (Vacant Land) as this is a site preparation project only. Although all public and private utilities are available to service this site, no new utility connections are proposed, therefore there will be no impact on public utilities. There is an existing connection to the public storm sewer system connecting into the Grand River right of way (ROW). This connection will remain in place and the current drainage patterns on the site will be maintained.

A SESC permit will be applied for from LCDC which will have erosion control measures implemented on the site throughout construction. These measures require them to be inspected on a weekly basis, or within 24 hours of a rain event, to ensure their integrity and that they are working properly.

18.07.08 Storage and handling of any hazardous materials:

There will be no storage or handling of any hazardous materials on this site during or after construction.

18.07.09 Traffic Impact Study:

As the property will remain vacant after construction activities, there will be no increase in directional trips to or from the site. Therefore, no traffic impact study will be required.

18.07.10 Historic and Cultural Resources:

The site is currently vacant land with no structures.

18.07.11 Special Provisions:

No special provisions are being requested.

18.07.12 A list of all sources shall be provided:

No sources cited herein.

18.07.13 Any impact assessment previously submitted:

There are no previous impact assessments previously submitted that we are aware of.

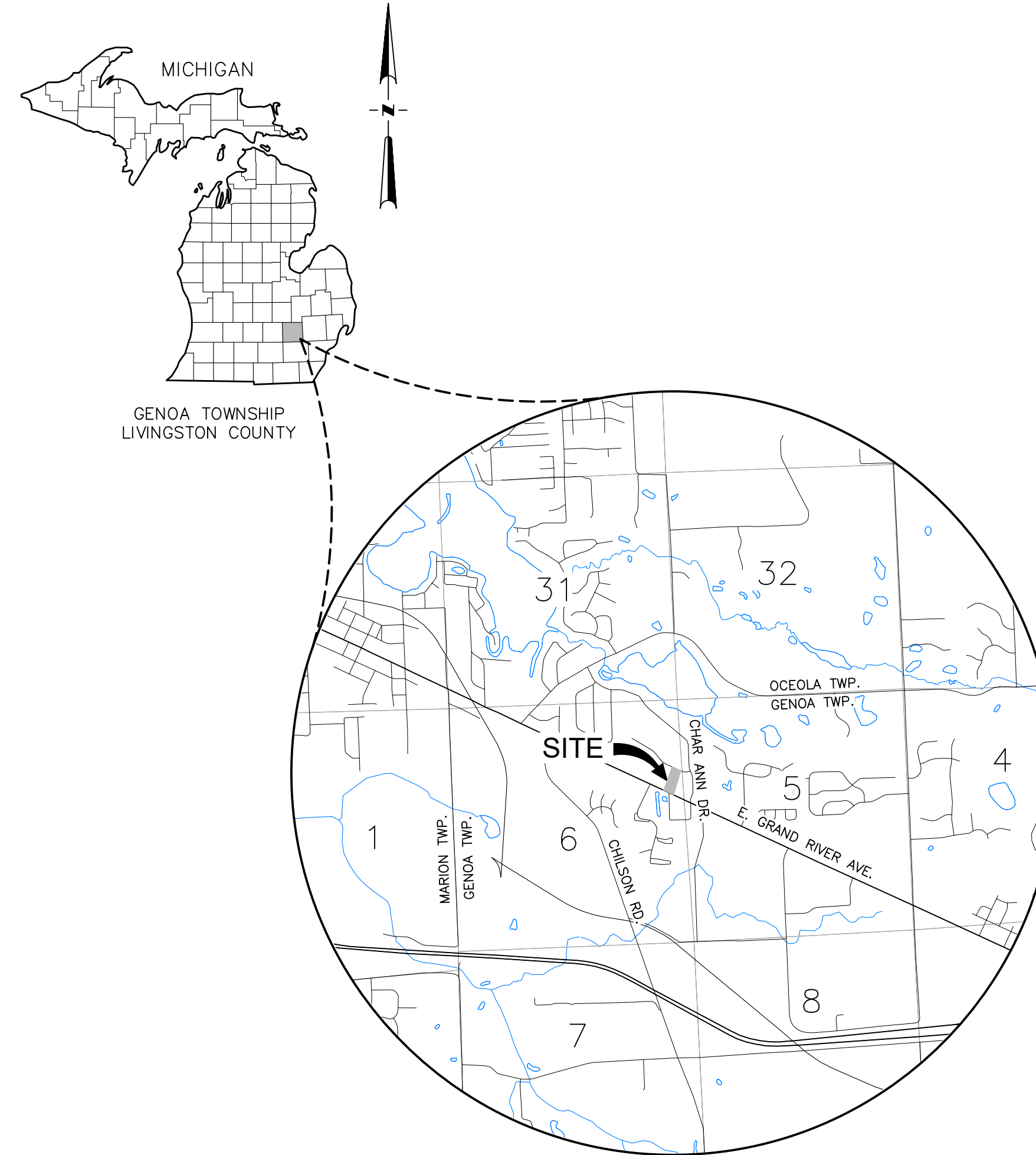
LEGAL DESCRIPTION (AS PROVIDED)

(PER TAX DESCRIPTION PROVIDED BY LIVINGSTON COUNTY GEOSPATIAL INFORMATION SYSTEM (GIS) MAPPING)

TAX NUMBER: 4711-06-200-101

SEC 6 T2N 55E COMM E 1/4 COR SEC TH N01°17'20"E 674.10 FT TH N61°41'16"W 330 FT FOR POB TH CONT N61°40'16"W 398.16 FT TH N21°00'11"E 424.64 FT TH N62°52'38"W 100.58 FT TH N20°45'29"E 50.12 FT TH S62°41'43"E 483.35 FT TH S19°15'30"W 483.42 FT TO POB CORR LEGAL 10/01 CONT. 4.37 AC.

PRELIMINARY SITE PLAN DRAWING FOR
CHESTNUT
E. GRAND AVE



LOCATION MAP

BEARING REFERENCE

BEARINGS ARE BASED ON PROJECT COORDINATE SYSTEM: MICHIGAN STATE PLANE COORDINATE SYSTEM, NAD83 (CONUS) (MOL) (GRS80), SOUTH ZONE 2113, INTERNATIONAL FEET, GROUND (LAT: 42°35'46.85" N, LON: 83°53'42.74" W, ELEV: 800.00', SCALE FACTOR: 1.00003817).

DESIGN ENGINEER/SURVEYOR



MONUMENT ENGINEERING GROUP ASSOCIATES, INC

INNOVATIVE GEOSPATIAL & ENGINEERING SOLUTIONS

298 VETERANS DRIVE,
FOWLerville, MI 48836
ALLAN W PRUSS, PE, PS
PHONE: 517-223-3512

CLIENT

CHESTNUT DEVELOPMENT
6253 GRAND RIVER AVENUE
SUITE 750
BRIGHTON, MICHIGAN 48114
POC: STEVE GRONOW
PHONE: 517-552-2489

		PLAN SUBMITTALS										
		SESC SUBMITTAL	REVISED SESC SUBMITTAL	REVISED GRADING PLAN	REVISED TREE REMOVAL CALC	SITE PLAN SUBMITTAL	SITE PLAN REVIEW COMMENTS	REVISED MDOT SUBMITTAL	REVISED MDOT SUBMITTAL	REVISED SITE PLAN SUBMITTAL	REVISED SITE PLAN SUBMITTAL	
		2/10/2023	2/13/2023	2/21/2023	2/22/2023	3/1/2023	4/24/2023	6/30/2023	7/7/2023	9/1/2023	10/17/2023	4/3/2024
GENERAL		INCLUDED SHEETS										
SHEET	G-1.0 COVER	●	●	●	●	●	●	●	●	●	●	●
SURVEY												
SHEET	V-1.0 TOPOGRAPHIC SURVEY & DEMO PLAN	●	●	●	●	●	●	●	●	●	●	●
SHEET	V-2.0 AERIAL VIEW					●	●	●	●	●	●	●
GRADING AND SOIL EROSION & SEDIMENTATION CONTROL (SESC)												
SHEET	C-7.0 GRADING AND SESC PLAN	●	●	●	●	●	●	●	●	●	●	●
SHEET	C-7.1 LCDC SESC NOTES AND DETAILS	●	●	●	●	●	●	●	●	●	●	●
SHEET	C-7.2 LCDC SESC DETAILS	●	●	●	●	●	●	●	●	●	●	●
ROAD PLANS												
SHEET	C-10.0 MOT PLAN								●	●	●	●
SHEET	C-10.1 MOT PLAN - LANE CLOSURE FORM								●	●	●	●
DETAILS												
SHEET	C-11.0 DETAILS								●	●	●	●
SHEET	C-11.1 DETAILS								●	●	●	●
SHEET	C-11.2 DETAILS								●	●	●	●
SPECIFICATIONS												
SHEET	C-12.0 SPECIFICATIONS	●	●	●	●	●	●	●	●	●	●	●
GENOA TOWNSHIP, LIVINGSTON COUNTY STANDARD DETAILS												

SHEET INDEX



Call MISS DIG
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www.missdig.org

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT :
CHESTNUT DEVELOPMENT
6253 GRAND RIVER AVE.
SUITE 750
BRIGHTON, MI 48114
POC: STEVE GRONOW
517-552-2489

COVER
PARCEL 4711-06-200-101
PART OF NE 1/4, SEC. 6, T2N-R5E,
GENOA CHARTER TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN

PLAN SUBMITTALS/REVISIONS	DATE
REVISED TREE REMOVAL CALC	02/22/2023
SITE PLAN SUBMITTAL	03/01/2023
SITE PLAN REVIEW COMMENTS	04/24/2023
REVISED MDOT SUBMITTAL	06/30/2023
REVISED MDOT SUBMITTAL	07/07/2023
REVISED SITE PLAN SUBMITTAL	09/01/2023
REVISED SITE PLAN SUBMITTAL	10/17/2023
REVISED SITE PLAN SUBMITTAL	4/3/2024

CURRENT ISSUE DATE:
4/24/2023

PROJECT NO: 22-168

SCALE: N/A
0 1/2" 1"

FIELD: RZ
DRAWN BY: M/MN
DESIGN BY: BS
CHECK BY: MAJAP

G-10

NOT FOR CONSTRUCTION

STRUCTURE SCHEDULE

EX. STORM SEWER		
STRUCTURE	RIM ELEV.	PIPES
(50412) CBB	953.05	24" NW IE= 943.90 24" SE IE= 944.03
(60196) CBS	961.31	UNABLE TO ACCESS
(60290) CBR	949.74	12" SE IE= 944.52
(60291) STMH	952.44	UNABLE TO ACCESS
(60295) CBB	951.48	24" NW IE= 944.03 24" SE IE= 945.23
(60342) CBS	952.91	12" N IE= 950.69
(60375) CBS	955.08	10" NE IE= 952.87

EXISTING PARKING

THERE ARE NO STRIPED PARKING SPACES ON THE SUBJECT PROPERTY.

SOILS INFO

SOIL TYPES ARE ACCORDING TO THE USDA SOIL SURVEY WEB SITE
(<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>)

- Caraba: CARLISLE MUCK, 0-2% SLOPES
- MoA: WAWASEE LOAM, 0-2% SLOPES
- MoB: WAWASEE LOAM, 2-6% SLOPES
- MoD: MIAMI LOAM, 12-18% SLOPES

DEMOLITION LEGEND

- • • • • ABANDON IN PLACE
- /// /// /// ABANDON LINEAR FEATURE
- SAWCUT
- X X X X X X X X REMOVE LINEAR FEATURE
- LIMITS OF DISTURBANCE
- X REMOVE OBJECT
- REMOVE PAVEMENT

DEMOLITION NOTES

- UTILITY OBJECTS SUCH AS GAS METER, TRANSFORMER, TELEPHONE PEDESTAL, UTILITY POLE & WIRES ARE TO BE REMOVED BY OTHERS IF APPLICABLE.
- ANY TREES NOT MARKED PER PLAN ARE TO BE PROTECTED & PRESERVED DURING CONSTRUCTION.
- ALL EXISTING MDT SIGNS DAMAGED OR LOST BY THE CONTRACTOR MUST BE REPLACED IN KIND ON NEW SUPPORTS AT THE CONTRACTOR'S EXPENSE.
- ALL EXISTING PAVEMENT MARKINGS THAT ARE REMOVED FOR TRAFFIC CONTROL OR OBLITERATED DURING CONSTRUCTION OPERATIONS MUST BE REPLACED WITH WATERBORNE FOR THE LONGITUDINAL, LANE LINES.

TREE REMOVAL CALCS

74 TREES ON-SITE WITH A DIAMETER 8" OR LARGER
NUMBER OF TREES PROPOSED TO BE REMOVED: 58
62/74 x 100 = 84% OF TREES 8" OR LARGER BEING REMOVED

EXISTING LEGEND

- DECIDUOUS TREE, CONIFEROUS TREE, SHRUB
- TREE LINE/ CANOPY
- DITCH/ DRAINING COURSE
- UG TELE, MH, TELE PED, CABLE PED
- UG FIBER, PED, LINE MARKER, VAULT
- UG ELEC, MH, TRANSFORMER, AC UNIT, METER, BOX
- OH ELEC, UTIL POLE, GUY WIRE
- GROUND LIGHT, POLE, POLE W/ ARM LT
- LIGHT MH, LT CTRL BOX, PARK METER, CAR CHARGER
- ELEC HAND HOLE, OUTLET, SIGNAL MH, SIGNAL BOX
- UG GAS, MH, VALVE, LINE MARKER
- GAS WELL, METER, VENT
- WATER MAIN, MH, VALVE IN BOX, HYDRANT, FDC
- WATER WELL, METER, STOP BOX, POST INDICATOR VALVE
- IRRIGATION CONTROL VALVE, SPRINKLER HEAD
- STORM SEWER, MH, CB, INLET, YARD DRAIN, DOWN SPOUT
- CULVERT/ END SECTION
- SANITARY SEWER, MH, CLEAN OUT
- COMBINED SEWER, MH
- STEAM LINE, MH
- MISC. MANHOLE, HAND HOLE, HAND BOX
- PARKING BLOCK, SIGN, FLAG POLE, POST, ROCK, MAIL BOX
- SECTION LINE, SECTION CORNER
- FOUND IRON ROD (FIR), FD MON, FD PK
- SET IRON ROD (SIR), SET PK, MAG NAIL
- FINISH FLOOR ELEVATION, SPOT ELEVATION
- CONTOUR
- FENCE
- RAILROAD SIGNAL, SIGNAL BOX
- SOIL BORING
- EX. ASPHALT
- EX. CONCRETE
- EX. GRAVEL

WETLAND NOTE

ACCORDING TO THE NATIONAL WETLAND INVENTORY WEBSITE (HTTP:WWW.FWS.GOV/WETLANDSDATAMAPPER.HTML), THERE ARE NO NOTED WETLANDS ON THE SUBJECT PARCEL. WETLAND FLAGGING WAS NOT OBSERVED DURING THE FIELD SURVEY. AN OFFICIAL STUDY FOR THE PRESENCE OF WETLANDS WAS NOT CONDUCTED BY MONUMENT ENGINEERING GROUP ASSOCIATES.

FLOOD ZONE

FEMA MAP SCALES DO NOT SUPPLY SUFFICIENT LEVEL OF DETAIL TO PLOT ACCURATELY. ZONES IF PLOTTED HEREIN ARE APPROXIMATE.

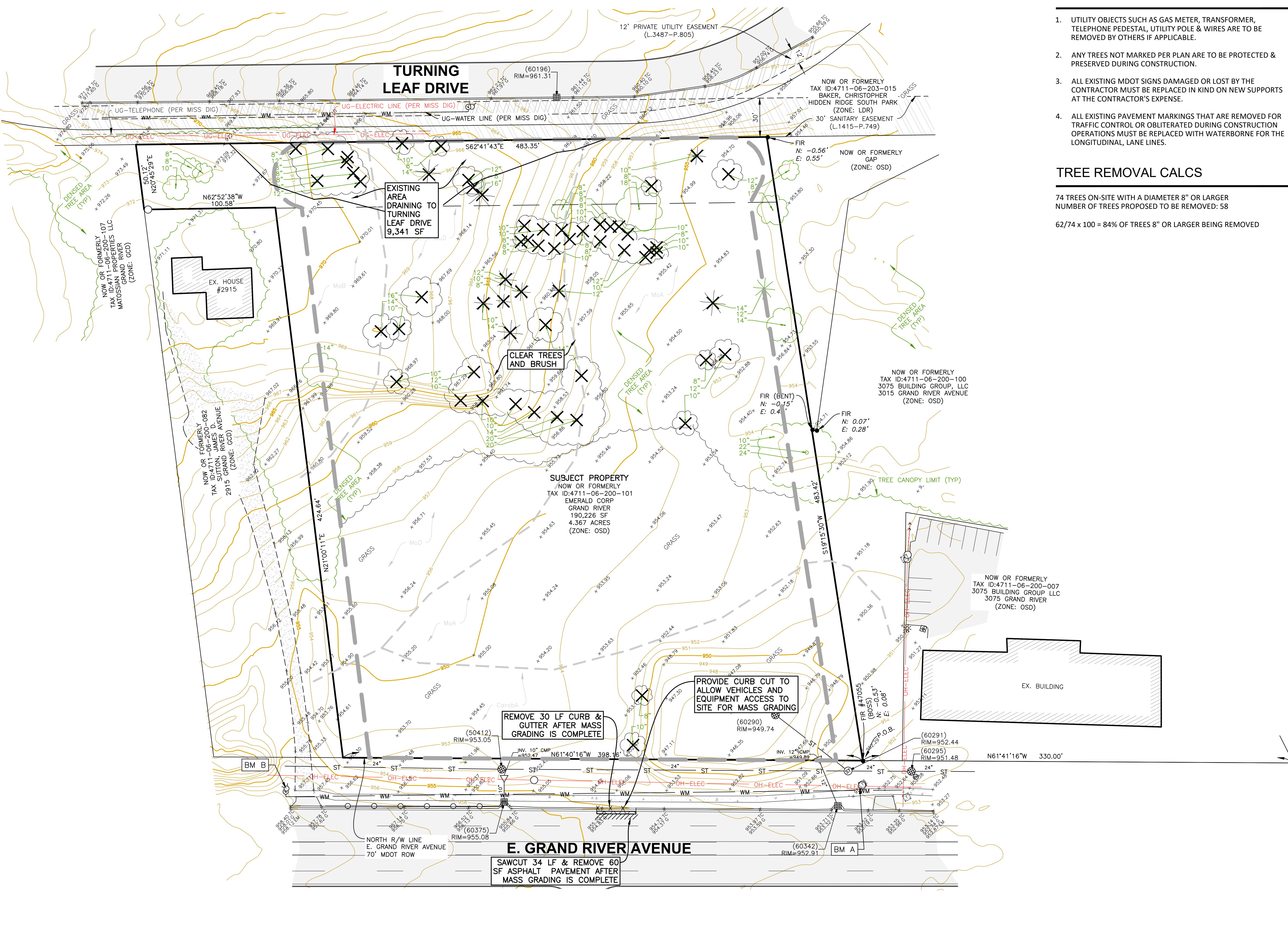
BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY APPEARS TO LIE ENTIRELY IN ZONE (X) AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO THE FLOOD INSURANCE RATE MAP FOR THE COUNTY OF LIVINGSTON, COMMUNITY PANEL NO. (26093C0307D), EFFECTIVE DATE 9/17/2008.

UTILITY NOTES

- ALL FRANCHISE UTILITIES (GAS, FIBER, CABLE, UG ELEC., TELE.) SHOWN ARE BASED ON MISS DIG MARKINGS LOCATED AT TIME OF SURVEY UNLESS NOTED OTHERWISE.
- THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

BENCHMARKS

DATUM: NAVD88
 BM A:
 DESC. BENCH TIE ON SOUTH SIDE OF UTILITY POLE
 ELEV = 952.87'
 BM B:
 DESC. TOP ARROW OF HYDRANT
 ELEV = 960.72'



INNOVATIVE GEOSPATIAL & ENGINEERING SOLUTIONS

MEGA
MONUMENT ENGINEERING GROUP ASSOCIATES, INC.

298 VETERANS DRIVE
 FOWLERVILLE, MICHIGAN 48836
 (OFFICE) 517-223-3512
 MONUMENTENGINEERING.COM

SERVICE DISABLED VETERAN OWNED
 SMALL BUSINESS (SDVOSB)

ALLAN W. PRUSS
 ENGINEER
 NO. 6201043168

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 3 full working days before you dig:
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 1-800-482-7171
 www.missdig.org

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CLIENT :

CHESTNUT DEVELOPMENT
 6253 GRAND RIVER AVE.
 SUITE 750
 BRIGHTON, MI 48114
 POC: STEVE GRONOW
 517-552-2489

TOPOGRAPHIC SURVEY & DEMO PLAN
 PARCEL 4711-06-200-101
 PART OF NE 1/4, SEC. 6, T2N-R5E,
 GENOA CHARTER TOWNSHIP,
 LIVINGSTON COUNTY, MICHIGAN

DATE	DESCRIPTION
02/22/2023	PLAN SUBMITTALS/REVISIONS
03/01/2023	REVISED TREE REMOVAL CALC
04/24/2023	SITE PLAN SUBMITTAL
06/30/2023	SITE PLAN REVIEW COMMENTS
07/07/2023	REVISED MDT SUBMITTAL
09/01/2023	REVISED SITE PLAN SUBMITTAL
10/17/2023	REVISED SITE PLAN SUBMITTAL
4/3/2024	REVISED SITE PLAN SUBMITTAL

CURRENT ISSUE DATE: 4/24/2023

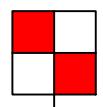
PROJECT NO: 22-168

SCALE: 1" = 40'

FIELD:
 DRAWN BY: MV, MN
 DESIGN BY: BS
 CHECK BY: MA, AP

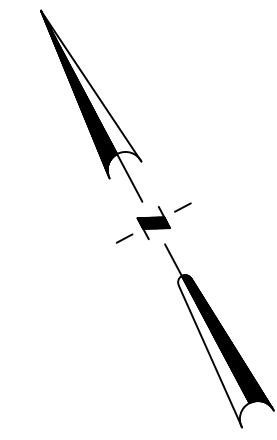
V-10

NOT FOR CONSTRUCTION



AERIAL SOURCE

AERIAL IMAGE PER ESRI/DIGITAL GLOBE
DATE: UNKNOWN



TURNING LEAF DRIVE

E. GRAND RIVER AVENUE

INNOVATIVE GEOSPATIAL & ENGINEERING SOLUTIONS



298 VETERANS DRIVE
FOWLERVILLE, MICHIGAN 48836
(OFFICE) 517-223-3512
MONUMENTENGINEERING.COM

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Allan W. Pruss

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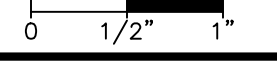
AERIAL VIEW
PARCEL 4711-06-200-101
PART OF NE 1/4, SEC. 6, T2N-R5E,
GENOA CHARTER TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN

PLAN SUBMITTALS/REVISIONS	DATE
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SITE PLAN REVIEW COMMENTS	04/24/2023
REVISED MOOT SUBMITTAL	06/30/2023
REVISED SITE PLAN SUBMITTAL	07/07/2023
REVISED SITE PLAN SUBMITTAL	09/01/2023
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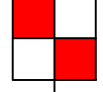
SCALE: 1" = 40'



FIELD: RZ
DRAWN BY: MVMN
DESIGN BY: BS
CHECK BY: MAJAP

V-2.0

NOT FOR CONSTRUCTION



BENCHMARKS

DATUM: NAVD88

BM A:
DESC. BENCH TIE ON SOUTH SIDE OF UTILITY POLE
ELEV = 952.871'

BM B:
DESC. TOP ARROW OF HYDRANT
ELEV = 960.727'

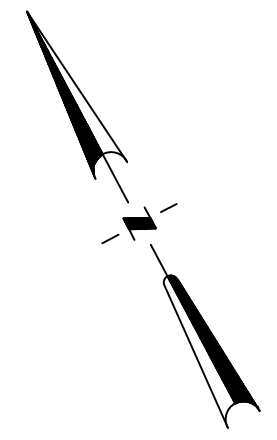
SOILS INFO

SOIL TYPES ARE ACCORDING TO THE USDA SOIL SURVEY WEB SITE
(<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>)

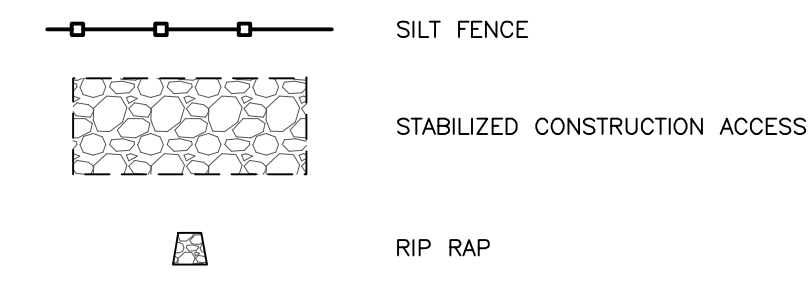
SOIL TYPE LIMIT AND LABEL

- CarabA: CARLISLE MUCK, 0-2% SLOPES
- MoA: WAWASEE LOAM, 0-2% SLOPES
- MoB: WAWASEE LOAM, 2-6% SLOPES
- Mod: MIAMI LOAM, 12-18% SLOPES

CONSTRUCTION SEQUENCE	OPERATION TIME SCHEDULE - BEGINNING APRIL 2024		
	APR	MAY	JUN
1 CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON APPROVED PLANS.			
2 REMOVE ALL TOPSOIL AND ORGANIC MATTER. TOPSOIL MAY BE STORED ON SITE IN DESIGNATED AREA TO BE USED FOR FUTURE PLANTING AND FILL AREAS. TRUCK REMAINING TOP SOIL OFFSITE AND PROPERLY DISPOSE.			
3 PLACE INLET FILTERS AT CATCH BASINS THROUGHOUT SITE.			
4 FINISH GRADE AND STABILIZE AS SOON AS POSSIBLE. STABILIZE ALL DISTURBED AREAS WITH CLASS A SEED AND MULCH. IN AREAS OF SLOPES OF 1:4 OR STEEPER, CONTRACTOR TO SEED AND INSTALL PEGGED IN PLACE EROSION CONTROL BLANKETS.			
5 REPAIR/CLEAN INLET FILTERS AS REQUIRED.			
6 REMOVE TEMPORARY SOIL EROSION MEASURES ONCE SEEDING VEGETATION HAS BEEN ESTABLISHED. CLEAN ALL AFFECTED STORM STRUCTURES AS NECESSARY.			



SESC LEGEND



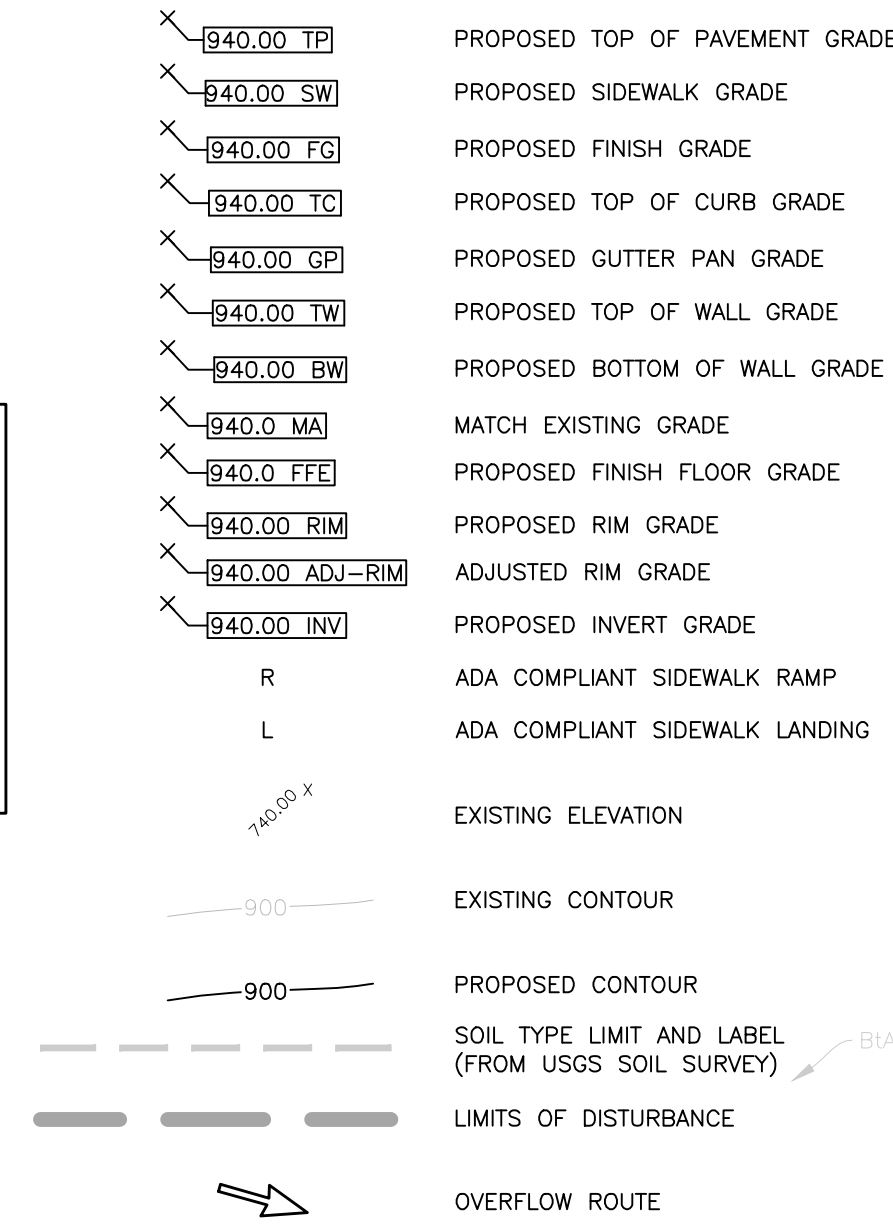
EROSION CONTROL QUANTITIES

Disturbed Area: 3.84 Acres

QTY	UNIT	ITEM
1742	LF	SILT FENCE
4	EA	INLET PROTECTION
1	EA	STABILIZED CONSTRUCTION ACCESS

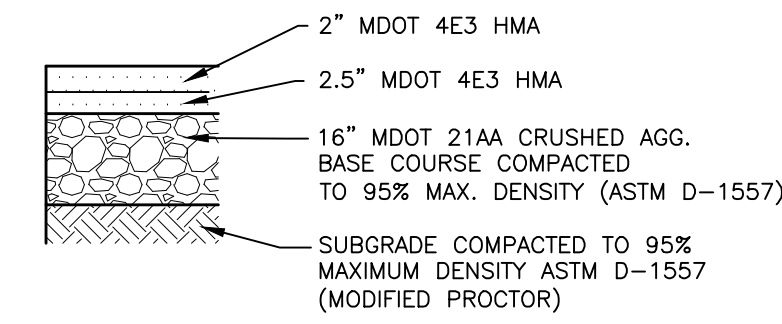
NOTE: QUANTITIES ARE FOR ENTIRE SITE

GRADING LEGEND

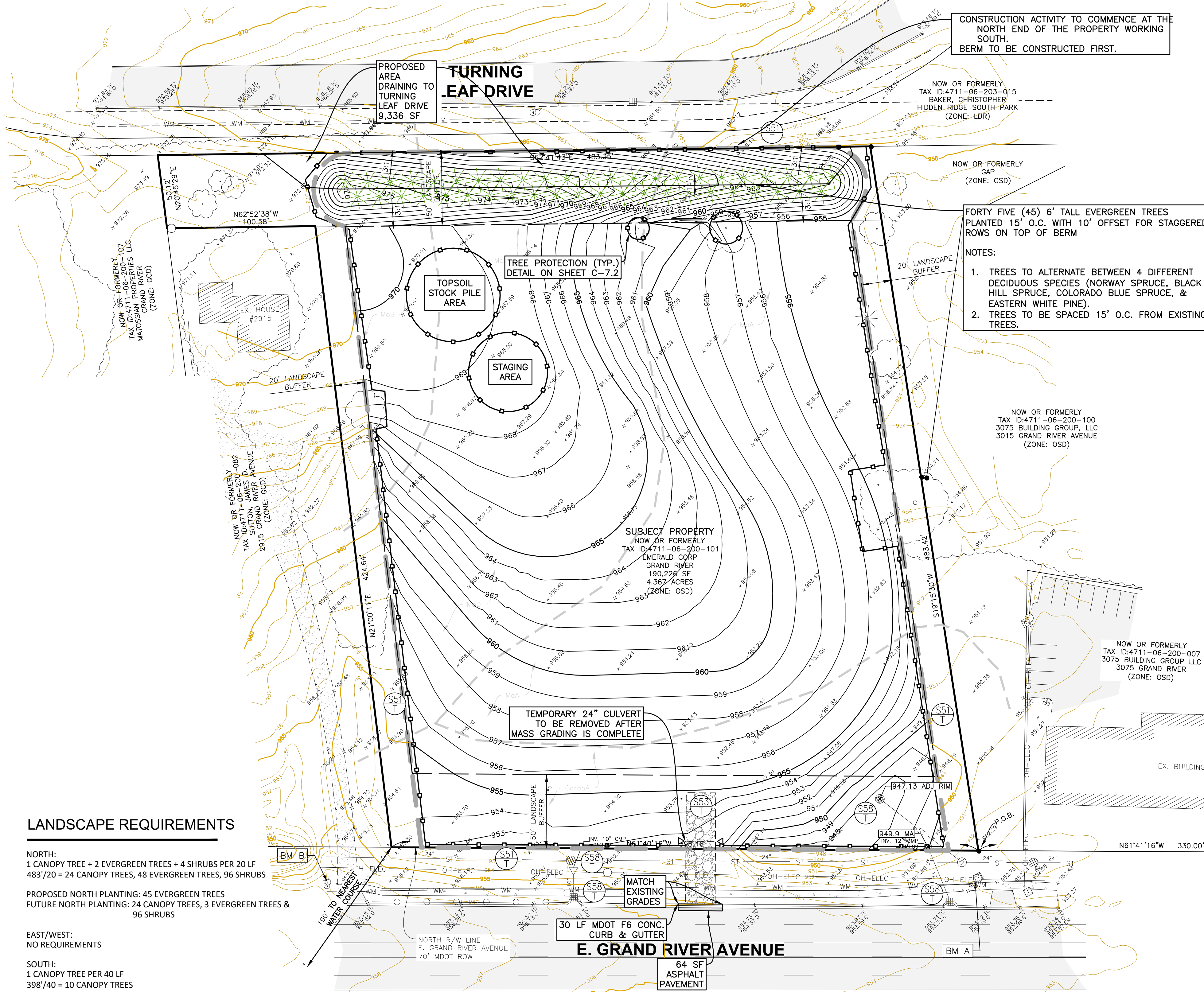


STANDARD DUTY HMA PAVEMENT SECTION

Applies to:



The two trees were incorrectly marked as preserved and had been previously removed.



LANDSCAPE REQUIREMENTS

NORTH:
1 CANOPY TREE + 2 EVERGREEN TREES + 4 SHRUBS PER 20 LF
483'/20 = 24 CANOPY TREES, 48 EVERGREEN TREES, 96 SHRUBS

PROPOSED NORTH PLANTING: 45 EVERGREEN TREES
FUTURE NORTH PLANTING: 24 CANOPY TREES, 3 EVERGREEN TREES & 96 SHRUBS

EAST/WEST:
NO REQUIREMENTS

SOUTH:
1 CANOPY TREE PER 40 LF
398'/40 = 10 CANOPY TREES

PROPOSED SOUTH PLANTING: 0 CANOPY TREES
FUTURE SOUTH PLANTING: 10 CANOPY TREES

DTMB SOIL EROSION & SEDIMENTATION CONTROL MEASURES

MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT, AND BUDGET (DTMB)

EROSION CONTROLS			
KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
E6	MULCH		FOR USE IN AREAS SUBJECT TO EROSION SURFACE FLOWS OR SEVERE WIND OR ON NEWLY SEEDING AREAS.
E8	PERMANENT SEEDING		STABILIZATION METHOD UTILIZED ON SITES WHERE EARTH CHANGE HAS BEEN COMPLETED (FINAL GRADING ATTAINED).

SEDIMENT CONTROLS			
KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
S51	SILT FENCE		USE ADJACENT TO CRITICAL AREAS, TO PREVENT SEDIMENT LAIDEN SHEET FLOW FROM ENTERING THESE AREAS.
S53	STABILIZED CONSTRUCTION ACCESS		USED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE.
S55	SEDIMENT BASIN		AT THE OUTLET OF DISTURBED AREAS AND AT THE LOCATION OF A PERMANENT DETENTION BASIN.
S58	INLET PROTECTION FABRIC DROP		USE AT STORMWATER INLETS, ESPECIALLY AT CONSTRUCTION SITES.

EROSION & SEDIMENT CONTROLS			
KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
ES31	CHECK DAM		USED TO REDUCE SURFACE FLOW VELOCITIES WITHIN CONSTRUCTED AND EXISTING FLOW CORRIDORS.

EROSION CONTROL STANDARDS

- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE.
- DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
- EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
- CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THESE PLANS. CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES AND OTHER CHANGES HAS BEEN ACCOMPLISHED.
- STAGING OF THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLACES AND AS REQUIRED TO INSURE PROGRESSIVE STABILIZATION OF DISTURBED AREAS.
- SOIL EROSION CONTROL PRACTICES WILL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
- A CERTIFIED STORM WATER OPERATOR WILL BE NAMED ON THE MDEQ NOTICE OF COVERAGE FOR NPDES AS REQUIRED.
- ALL DISTURBED AREAS ARE TO BE TOP SOILED AND SEEDED WITH THE FOLLOWING MIN RATIO:
TOP-SOIL 3" IN DEPTH, GRASS SEED 218 LBS PER ACRE, FERTILIZER 150 LBS PER ACRE, STRAW MULCH 3" DEPTH 1.5 TO 2 TONS PER ACRE.
- HYDRO-SEEDING IS NOT ACCEPTABLE FOR SLOPES EXCEEDING 1%. ON SLOPES OVER 1%, STABILIZATION SHALL BE DONE WITH SEED AND STRAW MULCH WITH A TACKIFIER, OR STRAW BLANKETS PEGGED IN PLACE.

SOIL EROSION CONTROL MAINTENANCE SCHEDULE AND NOTES.

- CONTRACTOR MUST OBTAIN A SOIL EROSION AND SEDIMENTATION CONTROL PERMIT FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE PRIOR TO COMMENCING WORK.
- EARTHWORK SHALL BE LIMITED TO THE PROPOSED SITE AS SHOWN ON THE PLAN.
- CONTRACTOR SHALL INSPECT THE SOIL EROSION/SEDIMENTATION CONTROL DEVICES ONCE A WEEK AND/OR WITHIN 24 HOURS OF A RAINFALL EVENT WHICH RESULTS IN A STORM WATER DISCHARGE FROM THE SITE. ANY DAMAGE TO EROSION CONTROL MEASURES MUST BE REPAIRED IMMEDIATELY.
- ALL MUD OR DEBRIS TRACKED ONTO EXISTING PUBLIC ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
- SILT FENCE MAINTENANCE SHALL INCLUDE THE REMOVAL OF ANY BUILT-UP SEDIMENT WHEN THE SEDIMENT HEIGHT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE. THE CONTRACTOR IS RESPONSIBLE TO REMOVE, REPLACE, RETRENCH OR RE-BACKFILL THE SILTATION FENCE SHOULD IT FAIL OR BE DAMAGED DURING CONSTRUCTION.
- PERMANENT STABILIZATION MUST BE COMPLETED WITHIN 30 DAYS OF FINAL GRADING.
- ACCESS ROADS MUST BE MAINTAINED AS NECESSARY, TO KEEP THEM EFFECTIVE, NEW LAYERS OF STONE MAY BE ADDED AS OLD LAYERS BECOME COMPACTED. STEPS SHOULD ALSO BE TAKEN TO REPAIR THE ACCESS ROADS IF RUTS OR PONDING WATER APPEARS.
- INLET FILTERS SHOULD BE INSPECTED FOR BUILDUP OF SILT AND OTHER DEBRIS. THIS IS EVIDENT IF GEOTEXTILE/SOD STRUCTURE IS CAUSING FLOODING. MAINTENANCE WOULD CONSIST OF REMOVING OF SEDIMENTS WITH A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL. IF INLET FILTER IS BEYOND THIS LEVEL OF REPAIR, IT MAY BE NECESSARY TO REPLACE BOTH THE SOD AND GEOTEXTILE FILTER.
- IF SOIL EROSION/SEDIMENT CONTROL MEASURES ARE INADEQUATE FOR THE SITE, THE PROPER EROSION CONTROL AUTHORITY MUST BE NOTIFIED.



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SUITE 750
BRIGHTON, MI 48114
POC: STEVE GRONOW
517-552-2489

GRADING AND SESC PLAN
PARCEL 4711-06-200-101
PART OF NE 1/4, SEC. 6, T2N-R5E,
GENOA CHARTER TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN

DATE	DESCRIPTION
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4/3/2024	REVISED SITE PLAN SUBMITTAL

CURRENT ISSUE DATE:
4/24/2023

PROJECT NO: 22-168

SCALE: 1" = 40'
0 1/2" 1"

FIELD:
DRAWN BY: RZ
DESIGN BY: MV/MN
CHECK BY: MA/MP

C-7.0

NOT FOR CONSTRUCTION

LCDC NOTES

Top Soil & Soil Storage Areas:

- Top soil or soil storage areas shall be seeded and mulched, or matted with straw, immediately after the stripping process is completed, to prevent wind and water erosion.

Slopes and Ditches:

- On-site ditches shall be of the flat bottom type, minimum width of 2' with a minimum of 3' horizontal to 1' vertical side slopes, 3:1.
- Side slopes in excess of 3' horizontal to 1' vertical shall not be used except with a mechanical device such as a retaining wall, or terracing.
- Ditches with steep grades will need "stone flow checks" to prevent scouring of the ditch bottoms. They may be used as a temporary measure and removed once sufficient stabilization has been established. These shall be depicted on plans by the engineer. Indicate flow checks on all slopes 3.00% and greater.

Detention/Retention, Sedimentation Ponds:

- New land developments within Livingston County shall be equipped with detention/retention facilities for storm water in accordance with the Drainage Policies of the Livingston County Drain Commissioner.
- Inlets into detention ponds must not discharge at the same location as the outlet structure.
- Detention Pond Stand Pipe Outlet Detail must be the Livingston County Drain Commissioner's standard Detention Pond outlet, e.g. orifice outlets without sedimentation control devices are prohibited.
- Stand pipe structure must have a 2 ft. sump.
- Detention Pond stand pipe structure shall show staggering of outlet holes at different elevations. This will minimize plugging and provide for more effective filtering.
- The stone around the stand pipe structure shall be refreshed with clean stone prior to completion of the project.
- Detention/Retention, Sedimentation Ponds shall be excavated, top soiled, seeded, mulched and tacked prior to the start of massive earth disruption.
- Inlets into Detention/Retention Ponds must be located within two feet of the bottom floor of the pond.

Detention Pond Spillway:

- Rip-rap proposed in the construction of the emergency spillway must be placed over keyed-in geo-fabric blanket.

Silt Fence:

- All commercial projects constructed in Livingston County shall install 36" high silt fence.

Inlet Protection:

- Sedimentation protection for catch-basin inlets. Silt sacks are the preferred choice in the winter months, because they are less likely to be disturbed by the process of snow plowing.
- Open-Pipe, inlet protection must be provided with straw bales, stone or geo-fabric.

Outlet Protection:

- All storm drains 15" in diameter or larger shall have animal guards installed to prevent entrance to the system.
- All rip-rap must be placed over keyed-in geo-fabric.
- Storm drain outlets that do not empty into the retention/detention pond shall have a temporary 5'x10'x3' sump installed at the termination of the storm sewer. Upon completion of the stabilization work the sump area shall be filled and rip-rapped with cobble stone over keyed in filter fabric. Silt traps shall be inspected after each storm.
- Splash blocks may be required depending on the outley flow rate or velocity.

Tracking onto public roadway:

- It is required that each development have an ingress/egress of crushed stone to restrict tracking of material onto the Public Roadway. All commercial construction sites require a minimum 75-foot tracking mat shown at ingress/egress.

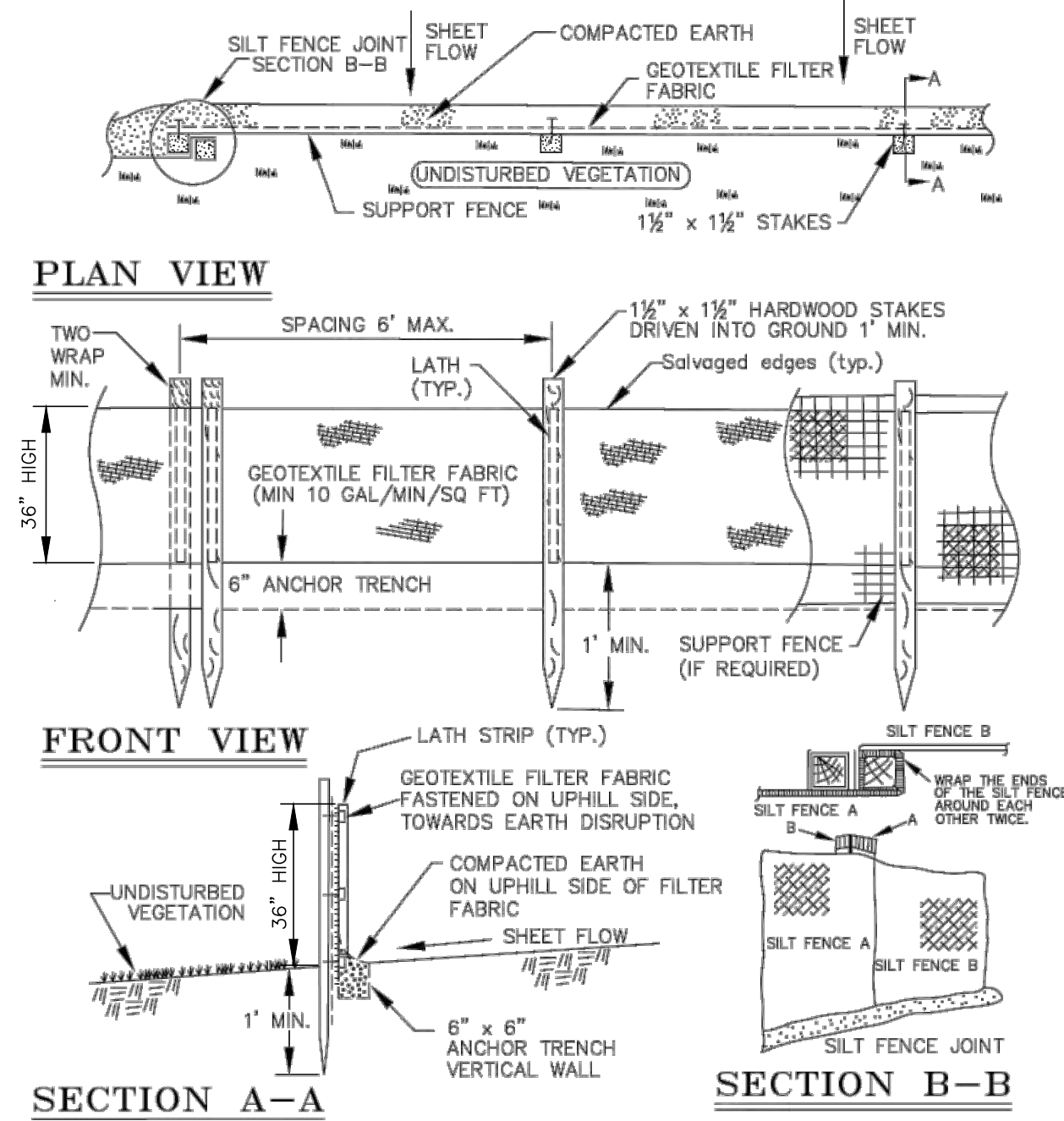
Stabilization Standards:

- For subdivision and site condominium developments: As of May 01, 2000, it is required that temporary stabilization of the entire site be completed and approval from the Livingston County Drain Commissioner's Office obtained prior to the issuance of single family dwelling permits.
- For commercial or industrial sites, common areas shall be called out on plans, in accordance with Part 17, prescribed by R 323.1709 and R 323.1710, pursuant to PART 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act (Previously known as P.A. 347 of 1972) of Act 347, Public Acts OF 1972, as amended) indicating areas to be stabilized after 15 days of grade work. Areas to be outlined are as follows: detention/retention, drainage easements, utility easements, boulevards, etc.

Seeding, Fertilizer and Mulch Bare Ground Ratio:

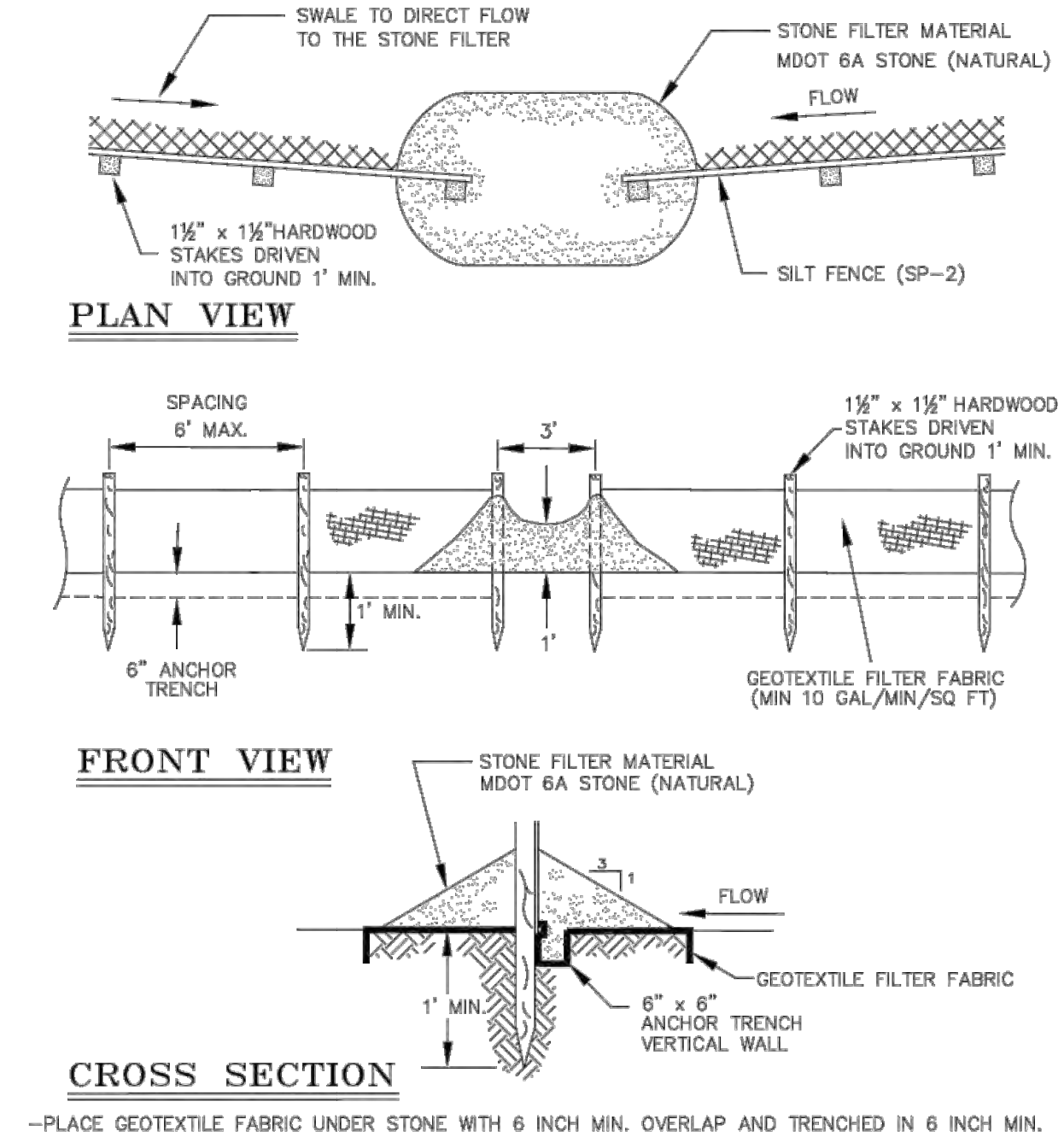
- This information shall be detailed on the construction plans.
- Top Soil 3" in depth
- Grass Seed 217.84 lbs per acre
- Fertilizer 150 lbs per acre
- Straw Mulch 3" in depth (All mulching must have a tie down)
- Hydroseeding is not acceptable for slopes exceeding 1%, in such cases stabilization shall be done with seed and and straw mulch with a tackifier.

36" SILT FENCE STANDARD CONTROL

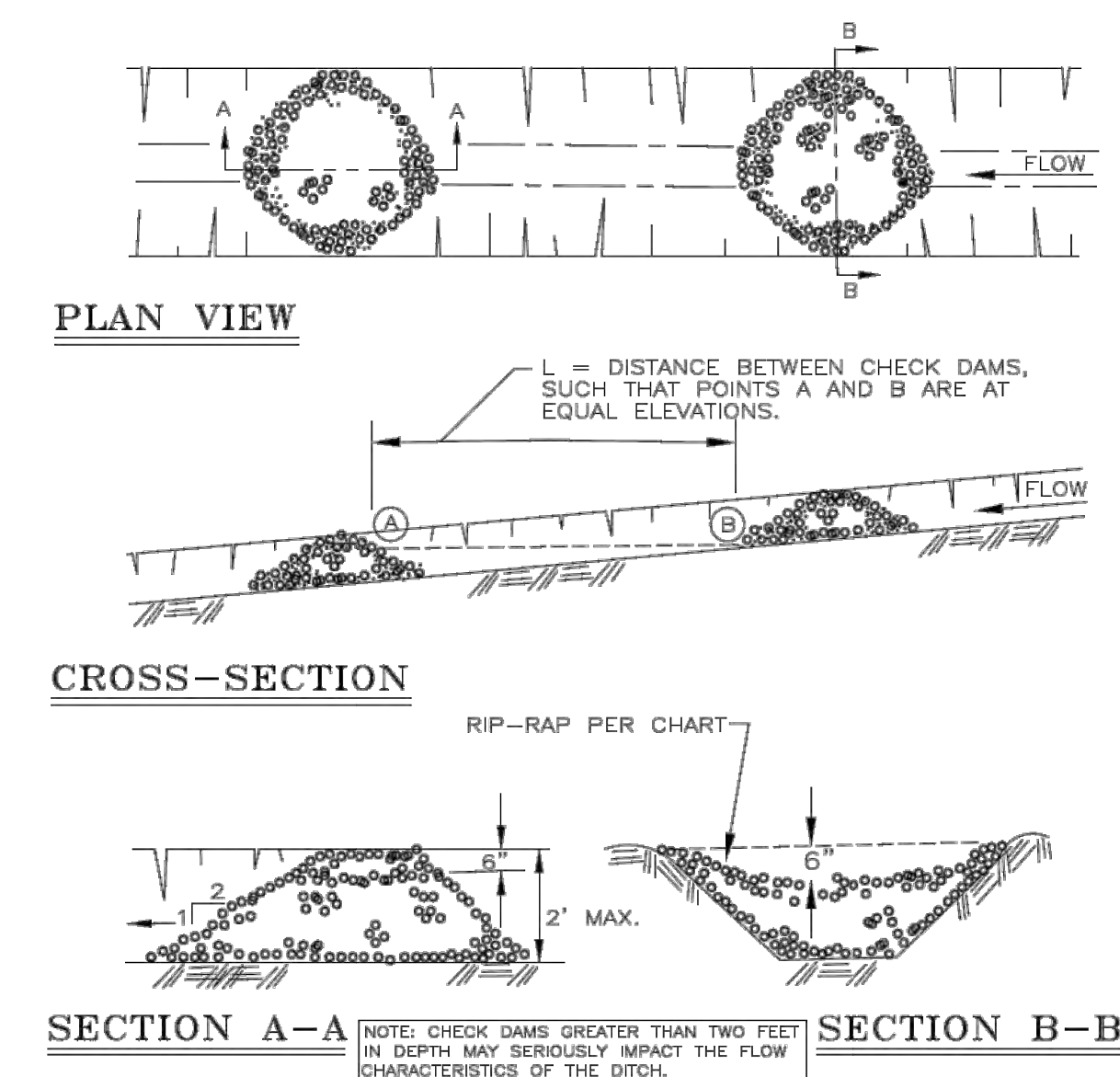


36" SILT FENCE GRAVEL FILTER STANDARD CONTROL

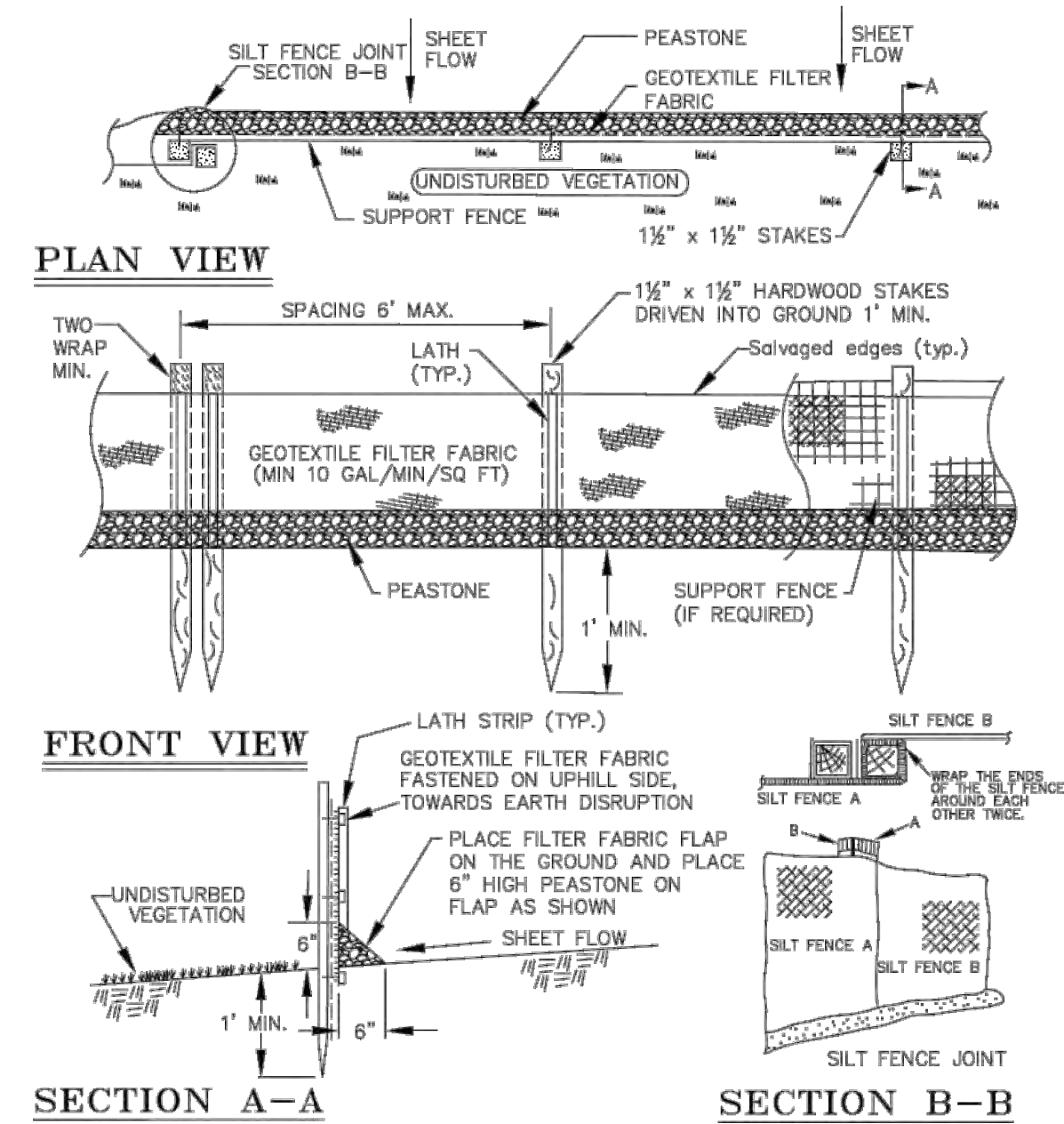
(ALL ALTERNATIVES MUST BE PRE-APPROVED BY THE INSPECTOR ON A CASE BY CASE BASIS)



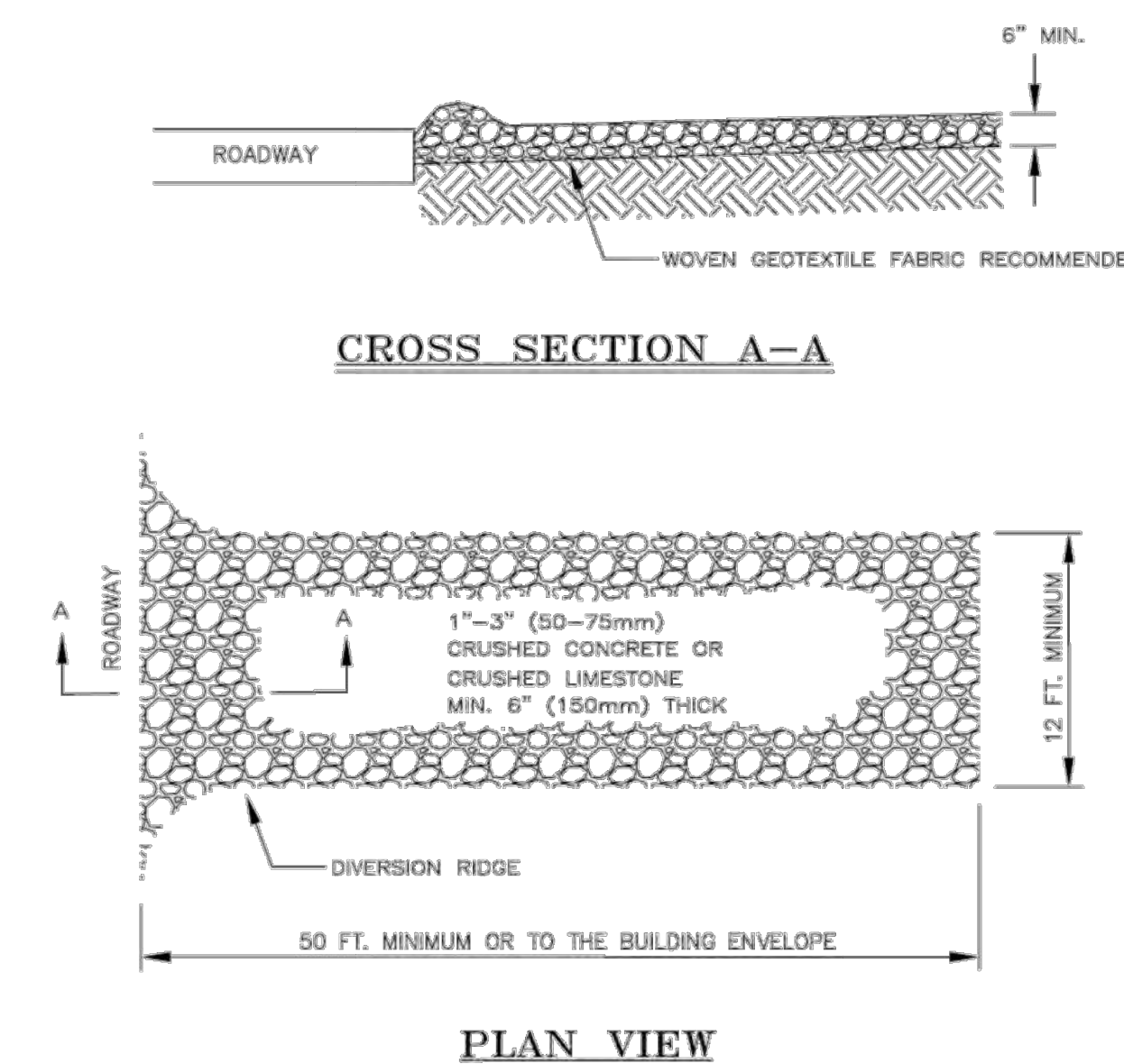
ANGULAR RIP RAP CHECK DAM STANDARD CONTROL



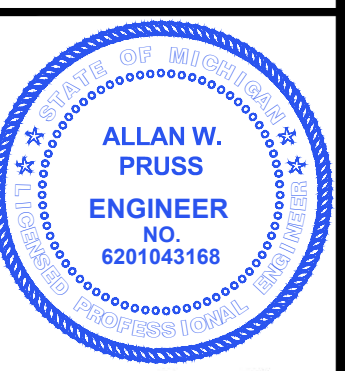
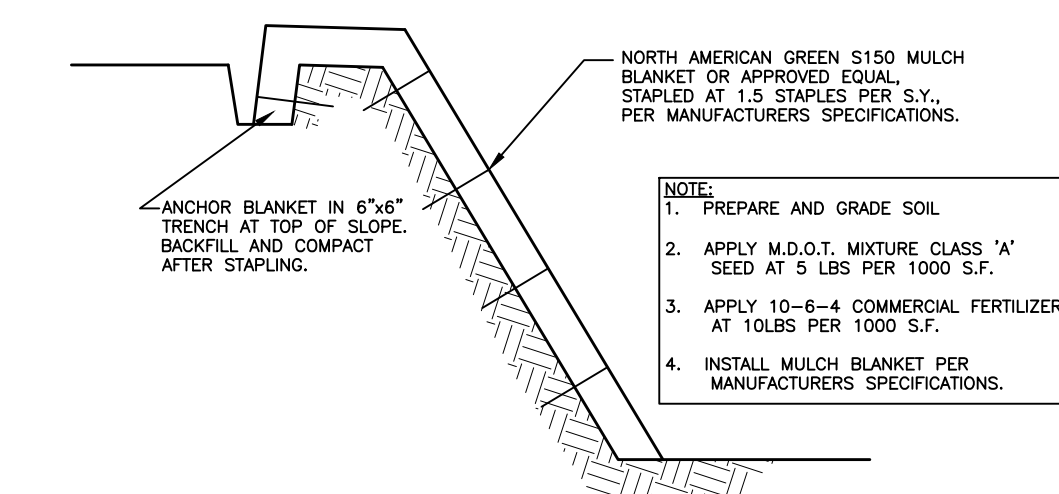
36" SILT FENCE WINTER FROZEN GROUND INSTALLATION STANDARD CONTROL



TRACKING MAT STANDARD CONTROL



EROSION CONTROL BLANKET DETAIL



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CLIENT :
CHESTNUT DEVELOPMENT
6253 GRAND RIVER AVE.
SUITE 750
BRIGHTON, MI 48114
POC: STEVE GRONOW
517-552-2489

LCDC SECC NOTES AND DETAILS
PARCEL 4711-06-200-101
PART OF NE 1/4, SEC. 6, T2N-R5E,
GENOA CHARTER TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN

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CURRENT ISSUE DATE: 4/24/2023

PROJECT NO: 22-168

SCALE: N/A
0 1/2" 1"

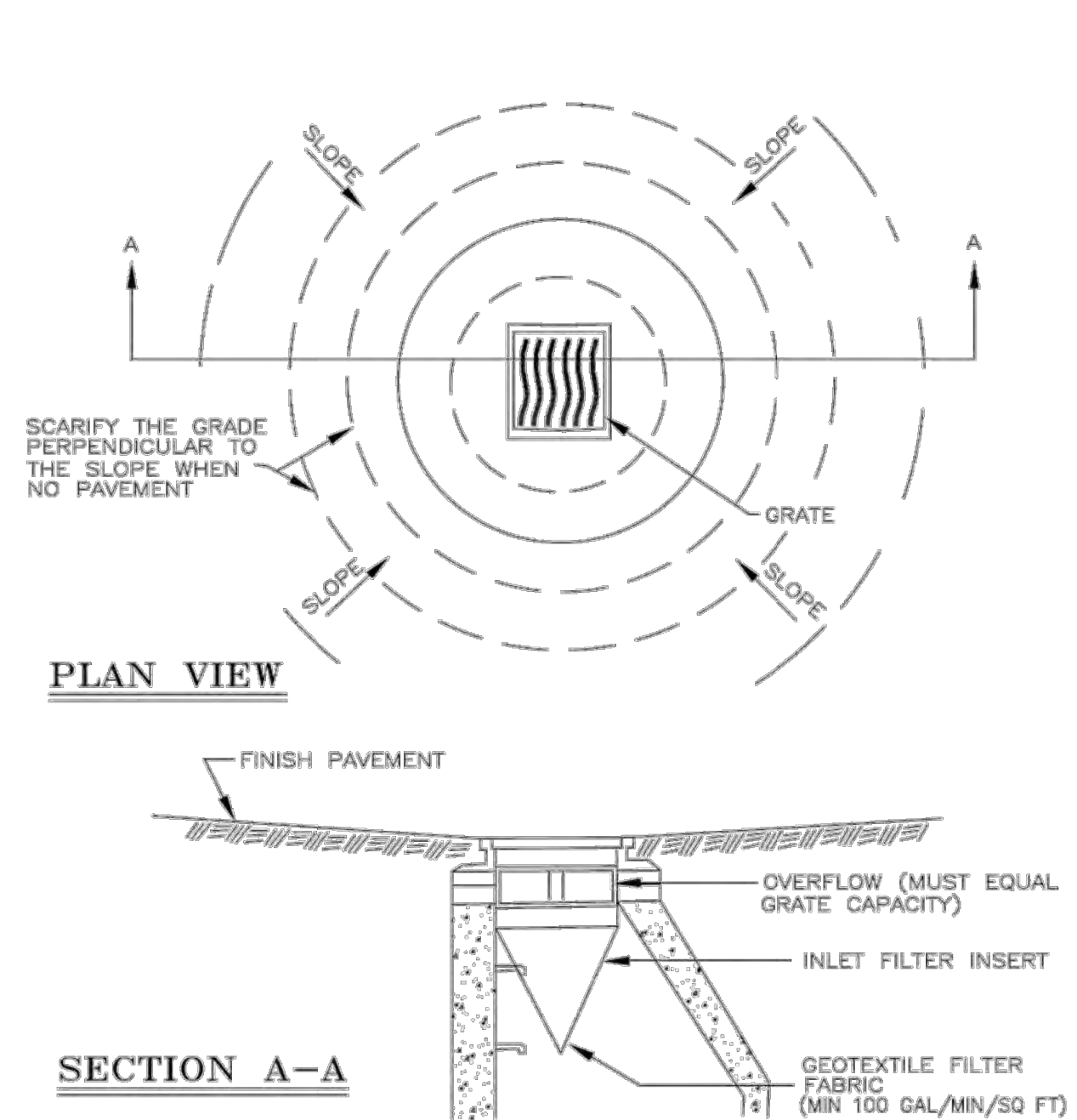
FIELD: RZ
DRAWN BY: M/MN
DESIGN BY: BS
CHECK BY: MAAP

C-7.1

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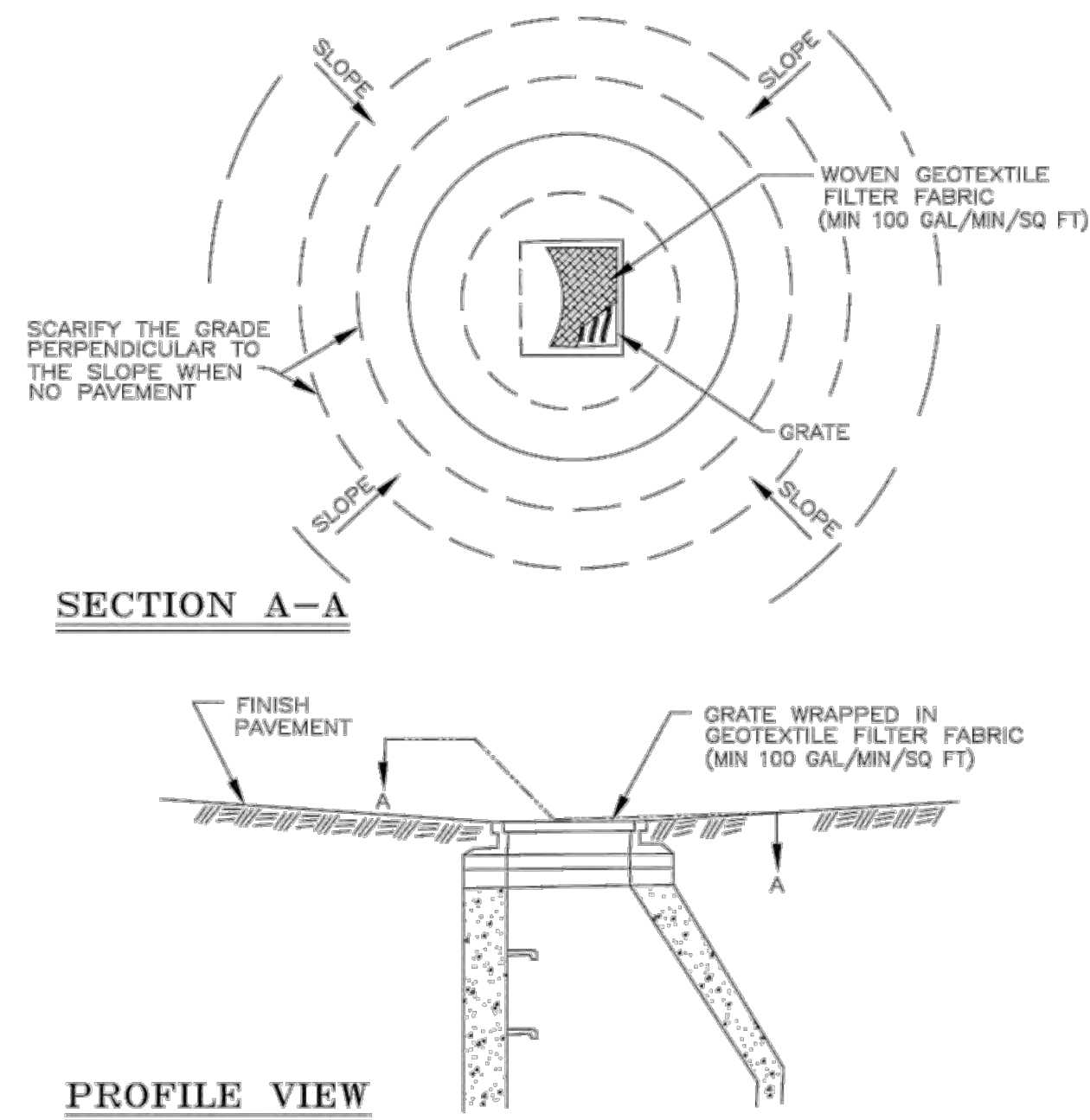
SILT SACK OR APPROVED EQUAL LOW POINT/YARD INLET FILTER
STANDARD CONTROL YEAR ROUND OR WINTER USE

APPROVED FOR USE DURING WINTER MONTHS OR IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING



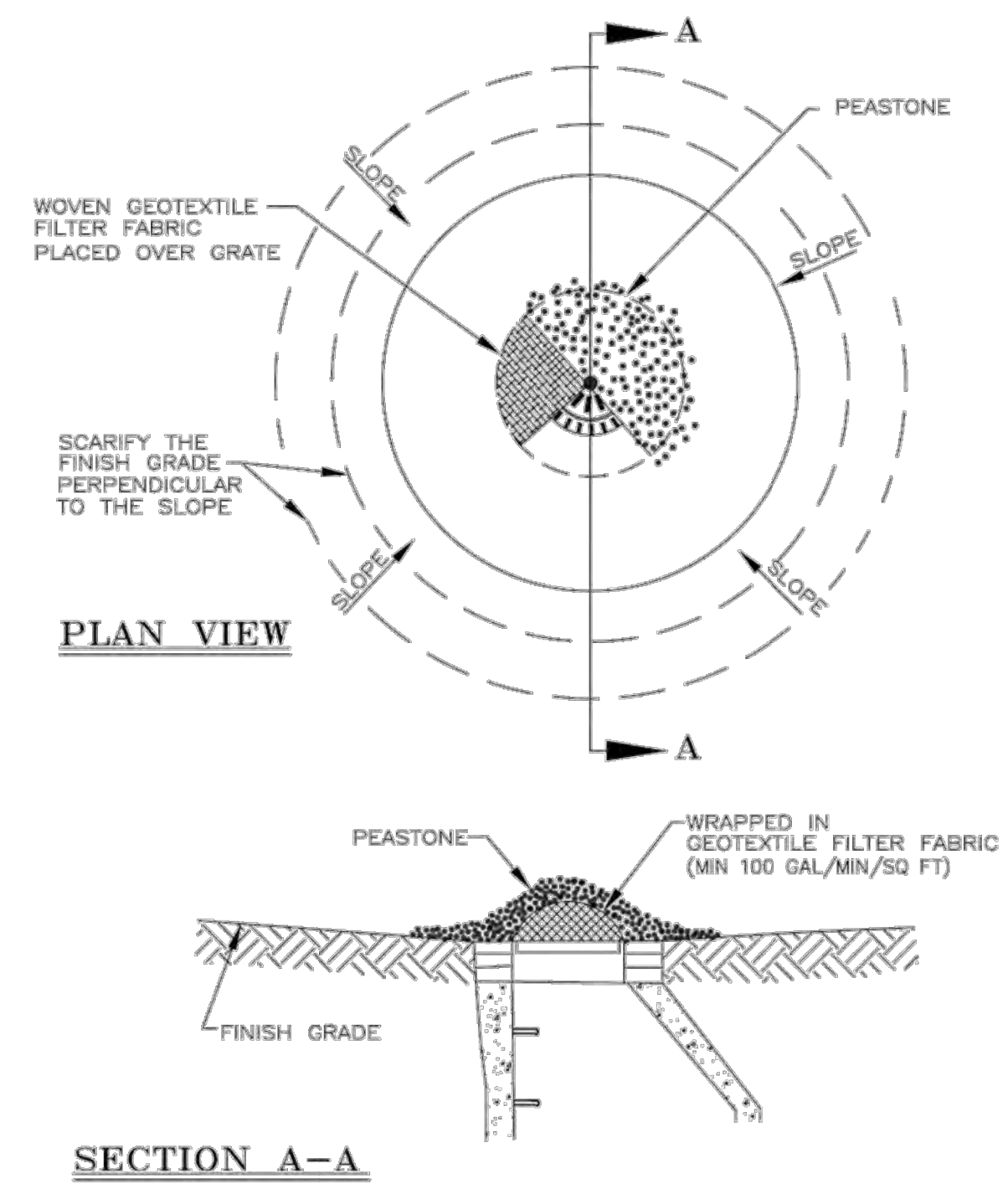
GEOTEXTILE FABRIC LOW POINT/YARD INLET FILTER
STANDARD CONTROL NON-WINTER USE

NOT FOR USE IN WINTER MONTHS OR IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING



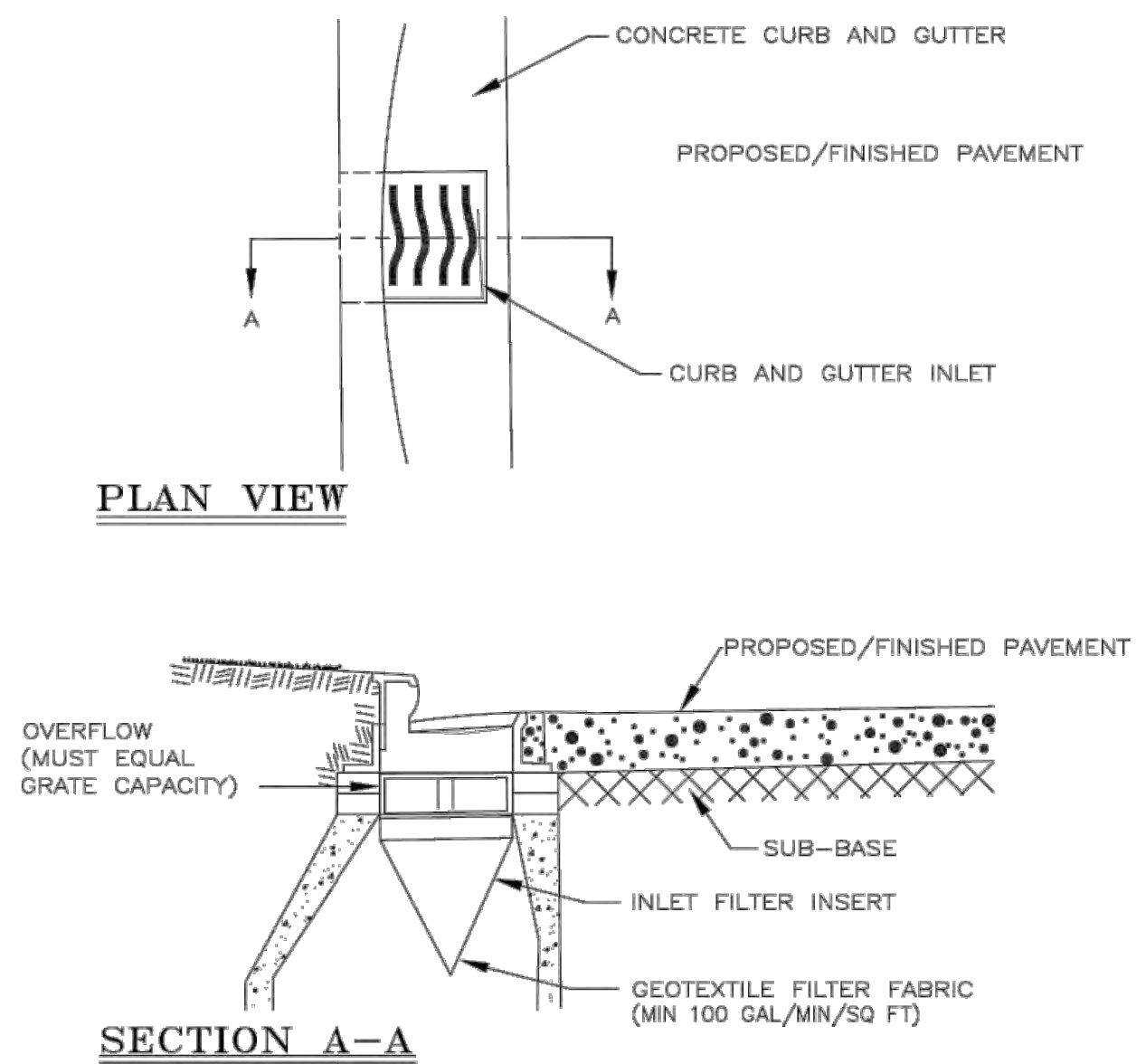
GEOTEXTILE & PEASTONE LOW POINT/YARD INLET FILTER
STANDARD CONTROL NON-WINTER USE

NOT FOR USE IN WINTER MONTHS OR IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING



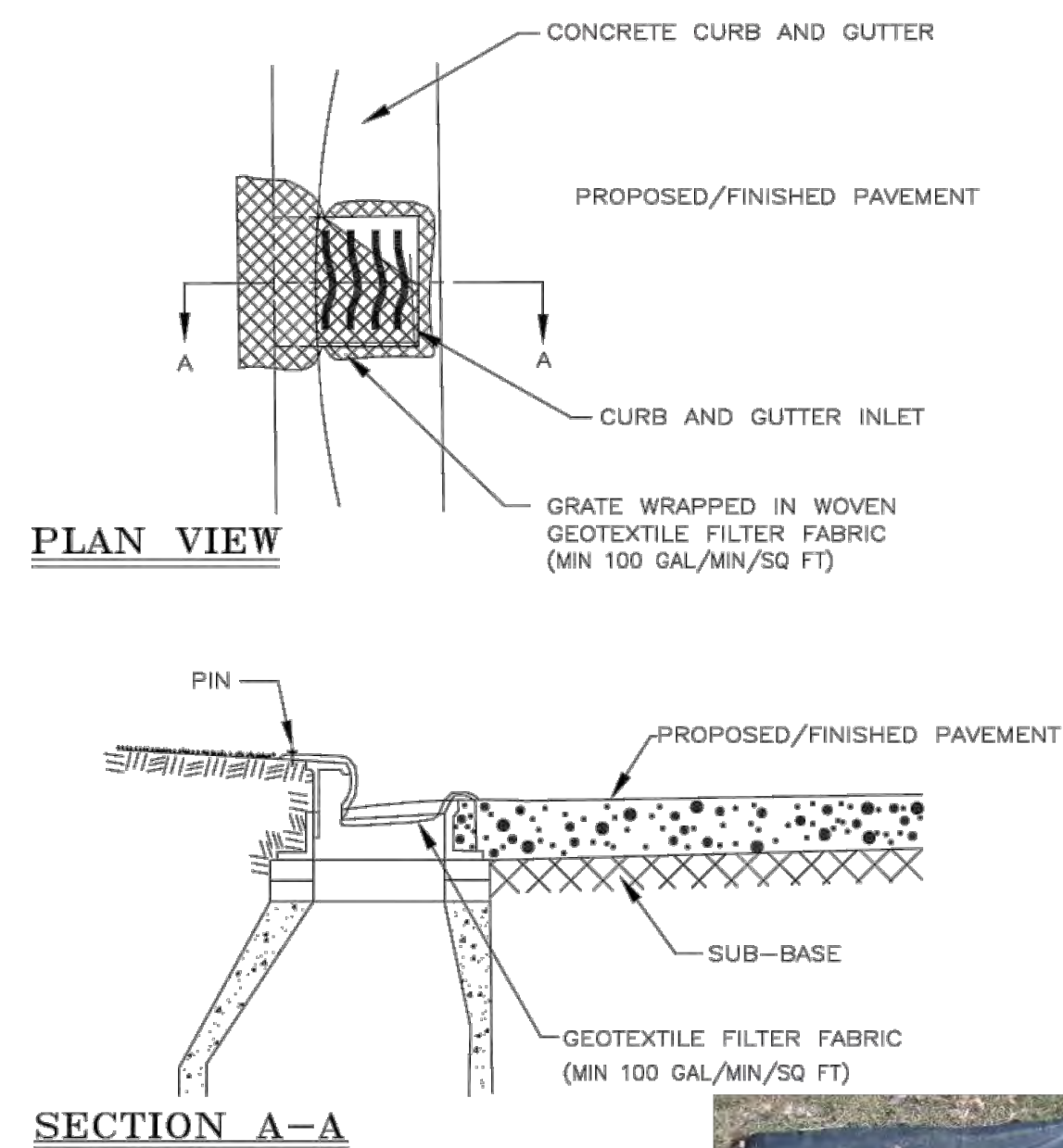
SILT SACK OR APPROVED EQUAL CURB AND GUTTER INLET FILTER
STANDARD CONTROL YEAR ROUND OR WINTER USE

APPROVED FOR USE DURING WINTER MONTHS OR IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING

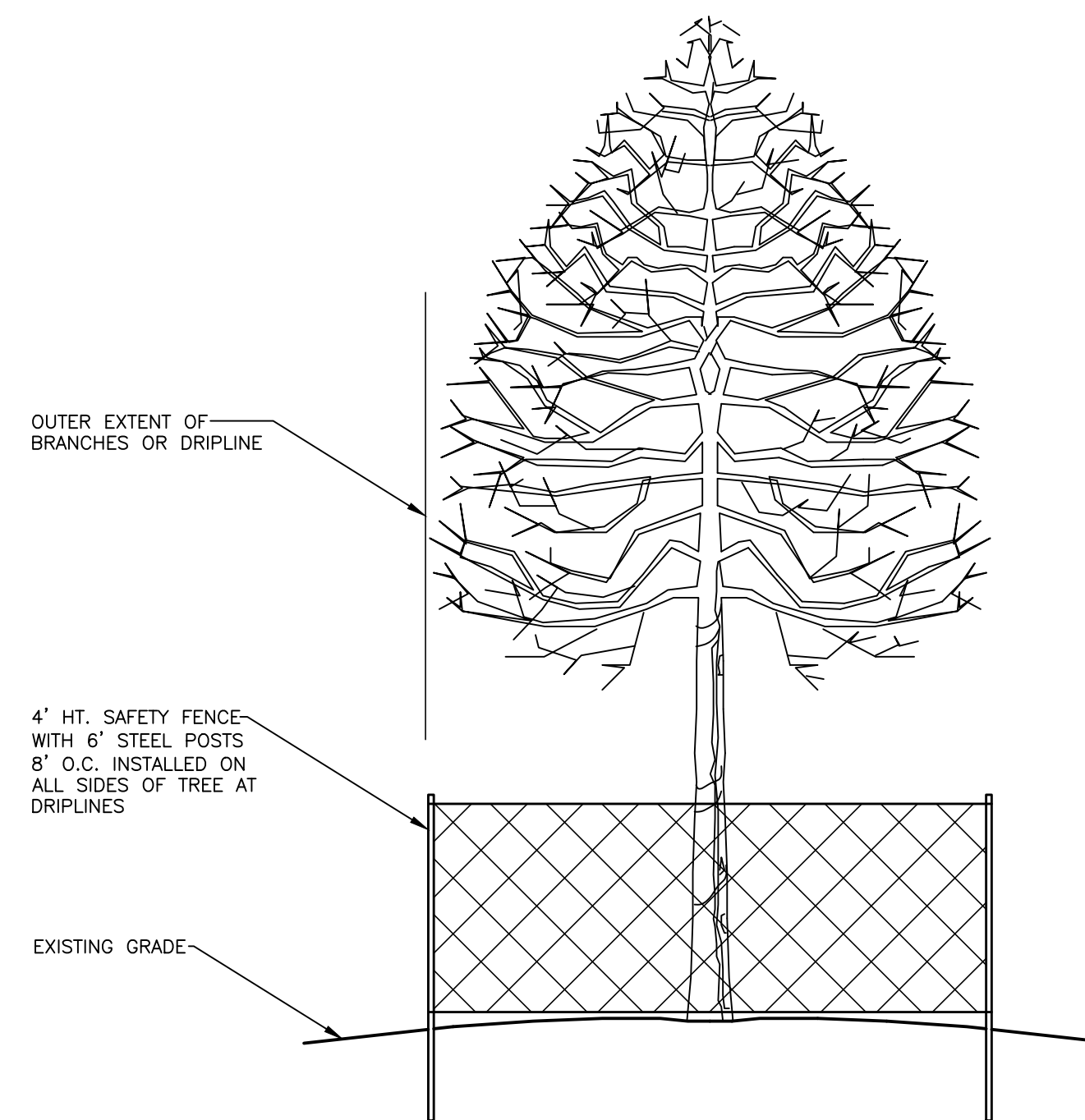


GEOTEXTILE FABRIC CURB AND GUTTER INLET FILTER
STANDARD NON-WINTER USE

NOT FOR USE IN WINTER MONTHS OR IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING



FENCE DETAIL - TREE PROTECTION

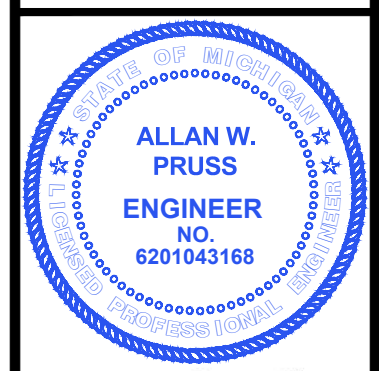


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CLIENT :

CHESTNUT DEVELOPMENT

6253 GRAND RIVER AVE.
SUITE 750
BRIGHTON, MI 48114
POC: STEVE GRONOW
517-552-2489

LCDC SESC DETAILS

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CURRENT ISSUE DATE: 4/24/2023

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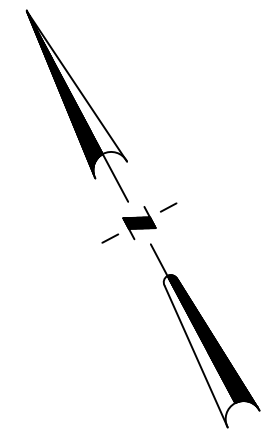
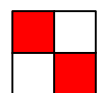
SCALE: N/A

0 1/2" 1"

FIELD: RZ
DRAWN BY: MV, MN
DESIGN BY: BS
CHECK BY: MA, AP

C-7.2

NOT FOR CONSTRUCTION



LEGEND

- CHANNELIZING DEVICES
- TYPE III LIGHTED BARRICADE
- ⊥ SIGN, TYPE (A OR B), TEMPORARY
- ☀ LIGHTED ARROW, TYPE C
- TRAFFIC FLOW
- ▨ WORK AREA
- ▩ BUFFER ZONE

NOTES

- ALL SIGN MATERIALS AND SUPPORTS MUST MEET NCHRP-350 CRASH WORTHY OR MASH REQUIREMENTS
- TEMPORARY WARNING, REGULATORY, AND GUIDE SIGNS NOT REQUIRED FOR A PARTICULAR LANE OR SHOULDER CLOSURE MUST BE REMOVED, COVERED OR LAID DOWN WITH THE LEGS REMOVED
- ANY MDOT SIGNS IMPACTED DURING CONSTRUCTION MUST BE REPLACED IN KIND ON NEW SUPPORTS PER MDOT STANDARDS.
- DURING THE LANE CLOSURES ACCESS FOR EMERGENCY VEHICLES (FIRE, AMBULANCE, POLICE) MUST BE MAINTAINED TO ADJACENT HOMES, BUSINESSES AND SUBDIVISIONS AT ALL TIMES.
- ANY LANE CLOSURES ON GRAND RIVER AVE. WILL ONLY BE ALLOWED WHEN THERE IS ACTIVE WORK. PRIOR TO APPROVAL AS STATED BELOW, A LANE CLOSURE REQUEST FORM NEEDS TO BE SUBMITTED FOR REVIEW AND APPROVAL.
- NO LANE CLOSURES OR WORK DURING ANY DESIGNATED STATE HOLIDAY OR SPECIAL EVENT AS DEFINED BY THE ENGINEER. LANE CLOSURES ON GRAND RIVER AVE. WILL ONLY BE PERMITTED FROM 9:00 AM TO 3:00 PM, WEEKDAY OR 7:00 AM TO 7:00 PM ON SATURDAY AND SUNDAY UNLESS DETOURED AND OTHERWISE APPROVED BY THE ENGINEER. NEED TO SUBMIT A LANE CLOSURE REQUEST FORM A MINIMUM OF 5 BUSINESS DAYS IN ADVANCE OF THE PROPOSED CLOSURE TO THE MDOT BRIGHTON TSC OPERATIONS/TRAFFIC AND SAFETY UNIT BY E-MAIL FOR REVIEW AND APPROVAL. SUBMIT TO GEORGE SEIF AT SEIFG@MICHIGAN.GOV. SEE ATTACHED FORM ON SHEET C-10.1
- ALL EXISTING PAVEMENT MARKINGS THAT ARE REMOVED FOR TRAFFIC CONTROL OR OBLITERATED DURING CONSTRUCTION OPERATIONS MUST BE REPLACED WITH WATERBORNE FOR THE LONGITUDINAL, LANE LINES.
- ALL EXISTING PERMANENT MDOT SIGNS DAMAGED OR LOST BY THE CONTRACTOR MUST BE REPLACED IN KIND ON NEW SUPPORTS AT THE CONTRACTOR'S EXPENSE.

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517-552-2489

MOT PLAN

PARCEL 4711-06-200-101
PART OF NE 1/4, SEC. 6, T2N-R5E,
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CURRENT ISSUE DATE:
4/24/2023

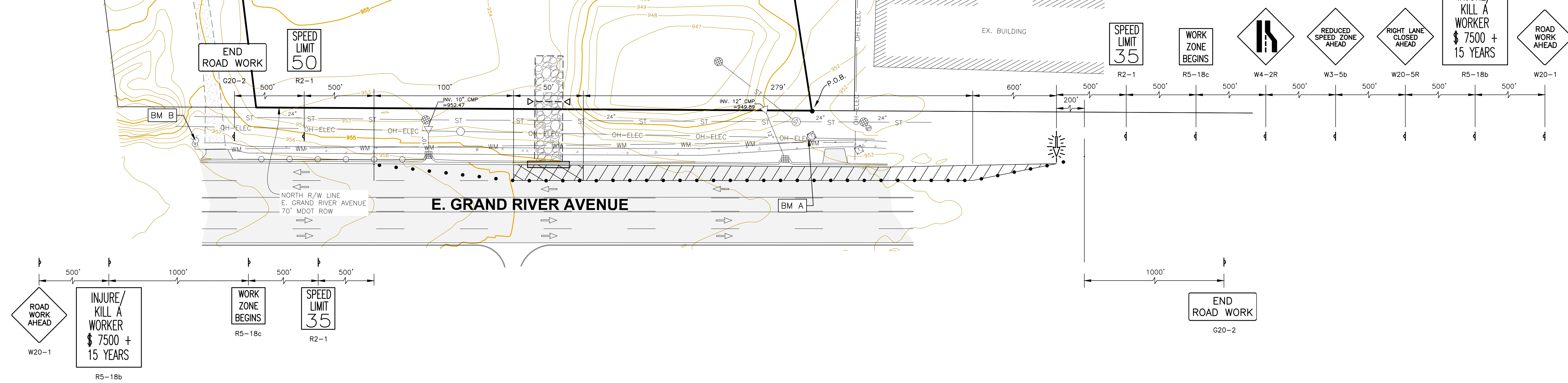
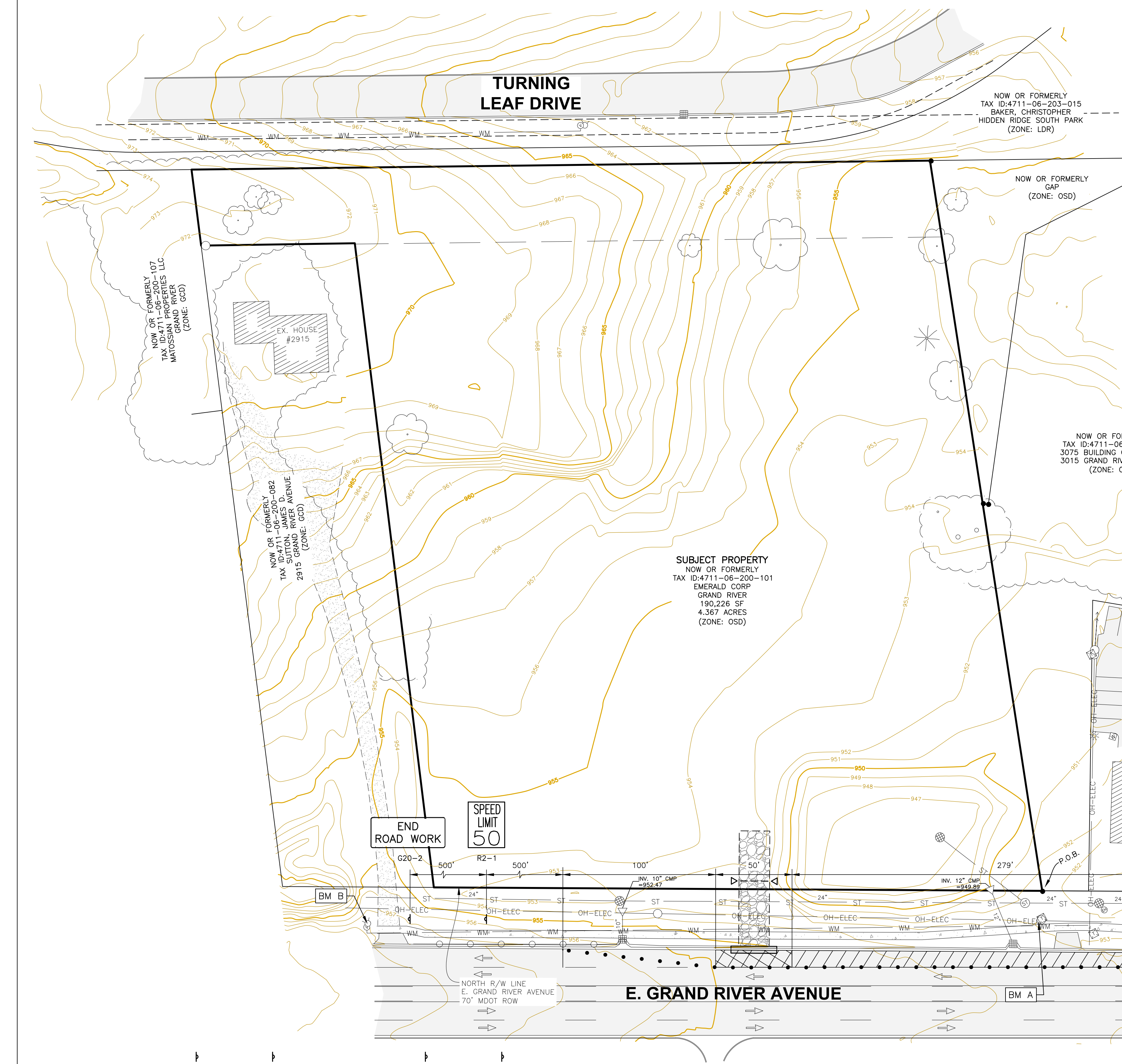
PROJECT NO: 22-168

SCALE: 1" = 40'

FIELD:
DRAWN BY: MVMN
DESIGN BY: BS
CHECK BY: MAJAP

C-10.0

NOT FOR CONSTRUCTION



Local Agency Programs
Hot Mix Asphalt (HMA) Selection Guidelines
Revised: 11/01/2017
FHWA Approved: 12/26/2017

The following guidelines have been developed at the request of Local Agency Engineers for use on Local Agency projects. These guidelines have been reviewed and approved by the County Road Association of Michigan Engineering Committee. Previous experience and performance shall permit variations from these guidelines as per Sect D: Alternative Mixes.

A. HMA Mixture Type and Binder Selection

Selection is based on present day two-way commercial ADT. The commercial ADT ranges for each of the mixture types have taken into account an assumed future traffic growth rate.

Table with columns: Com. ADT, Com. ADT 0-300, Com. ADT 301-700, Com. ADT 701-1000, Com. ADT 1001-3400, Com. ADT 3401-9999. Rows include Mixture Type (Top, Leveling, Base) and Binder Grades by Region (Superior, Metro, All Other).

Note 1: If the designer wishes to reduce the target air voids on projects to 3.5%, a note needs to be added to the plans on the HMA Application Table stating that the air voids have been changed to 3.5% for that particular project for top and leveling courses.

Note 2: The mixture type in each traffic category listed in the above table is specifically designed to perform under their respective Commercial ADT. Selecting a mixture type that is specifically designed for a higher Comm. ADT than the project being designed may adversely affect performance.

Note 3: One course overlays on composite pavements where the prevention of cold temperature related thermal cracking is not as much of a concern, the cold temperature number of the PG binder may be decreased by one grade to help reduce costs.

Example: For a one course overlay in the Superior Region on a composite project, the recommended PG binder would be a PG58-28 instead of a PG58-34.

Note 4: To address traffic areas that are more susceptible to rutting early in pavements life such as signalized intersections and other areas of stop/start traffic use the pay item entitled High Stress Hot Mix Asphalt Mixture. The difference between the High Stress HMA Mixture and the typical HMA pay item is the Performance Graded binder. For High Stress Mixtures, increase the high temperature binder by one grade and add the polymer. The increase in the high temperature number results in an asphalt binder with improved high temperature stiffness or rutting resistance for both the leveling and top course.

Example: For a high stress application for a mixture type 5E3 placed in an intersection the recommended binder grade would be a PG70-28P instead of a PG64-28. Following are the recommend guides for the proper application of the Special Provision for High Stress Hot Mix Asphalt Mixture:

- a. Use this pay item 1000 feet on either side of the center of signalized intersections and other areas where stop/start traffic occurs on the mainline (for quantity calculations use 1100 feet).
b. There are cases where the signalized intersections are spaced 1 mile or less over the entire length of the project. When this occurs, specify the High Stress HMA Mixture pay item for the entire length.
c. All HMA approaches that are adjacent to the High Stress HMA Mixture areas should be specified using this pay item.
d. Use of the Pay Item High Stress HMA (mix), should not be used unless it is to be distinguished from the same mix with a different PG grade.

B. Application Rates

HMA application rates shown in the table below are the required minimum and maximum rates for each of the specific mixtures. Pavement designs requiring a HMA greater than the recommended maximum will require multiple lifts of the leveling and/or base mixes.

Table with columns: Mixture Type, Marshall Mixture (36A, 13A, 2C, 3C, 4C), Superpave Mixture (LVSP, 3E, 4E1, 4E3+, 5E). Rows include Min. #/syd and Max. #/syd.

Note 1: Application rate of 110 #/syd. per 1-inch thickness.

Note 2: When shoulders of 8 ft. or greater are being paved as a separate operation on a project, the following note should be added to the plans near the HMA Application Table; "For shoulders only, the mix design and/or JMF target value for Air Voids are to be adjusted to 2.5 percent." If it is not known whether the shoulders will be placed as a separate paving operation, the note should be added.

C. Aggregate Wear Index (All Projects)

Aggregate Wear Index (AWI) is required for all aggregates used in HMA top course mixtures. The following table identifies the required minimum AWI, based on the present average daily traffic (vehicular and commercial) per lane (ADT/Lane):

Table with columns: ADT/Lane, Minimum AWI. Rows: <100 (None), 100 - 2000 (220), >2000 (260).

D. Alternative Mixes

These guidelines provide for the selection of Hot Mixed Asphalt (HMA) and application rates utilizing the Superpave mix design system along with the Marshall Mix design system. The substitution of another HMA mixture type other than the recommended mixture is acceptable if it has demonstrated to perform under similar traffic conditions. If a local agency desires to use an HMA mixture or grade of binder other than what is contained within this guide, they must submit the change in writing. The letter or email must include the alternate mix design, the justification/reason for the change, and a statement that they accept responsibility for the outcome of the performance of the mix design that is used in lieu of the recommended mixture.

E. Non-Motorized Path Mixes

When designing a Non-Motorized Path, recommended HMA Mixes that have historically worked well include:

Superpave mixes:

HMA, LVSP

HMA, 5E_

Shared Use Path, HMA Snowmobile Wearing Cse - Special (See: 12DS806(F355))

Marshall mixes:

HMA, 13A

HMA, 36A

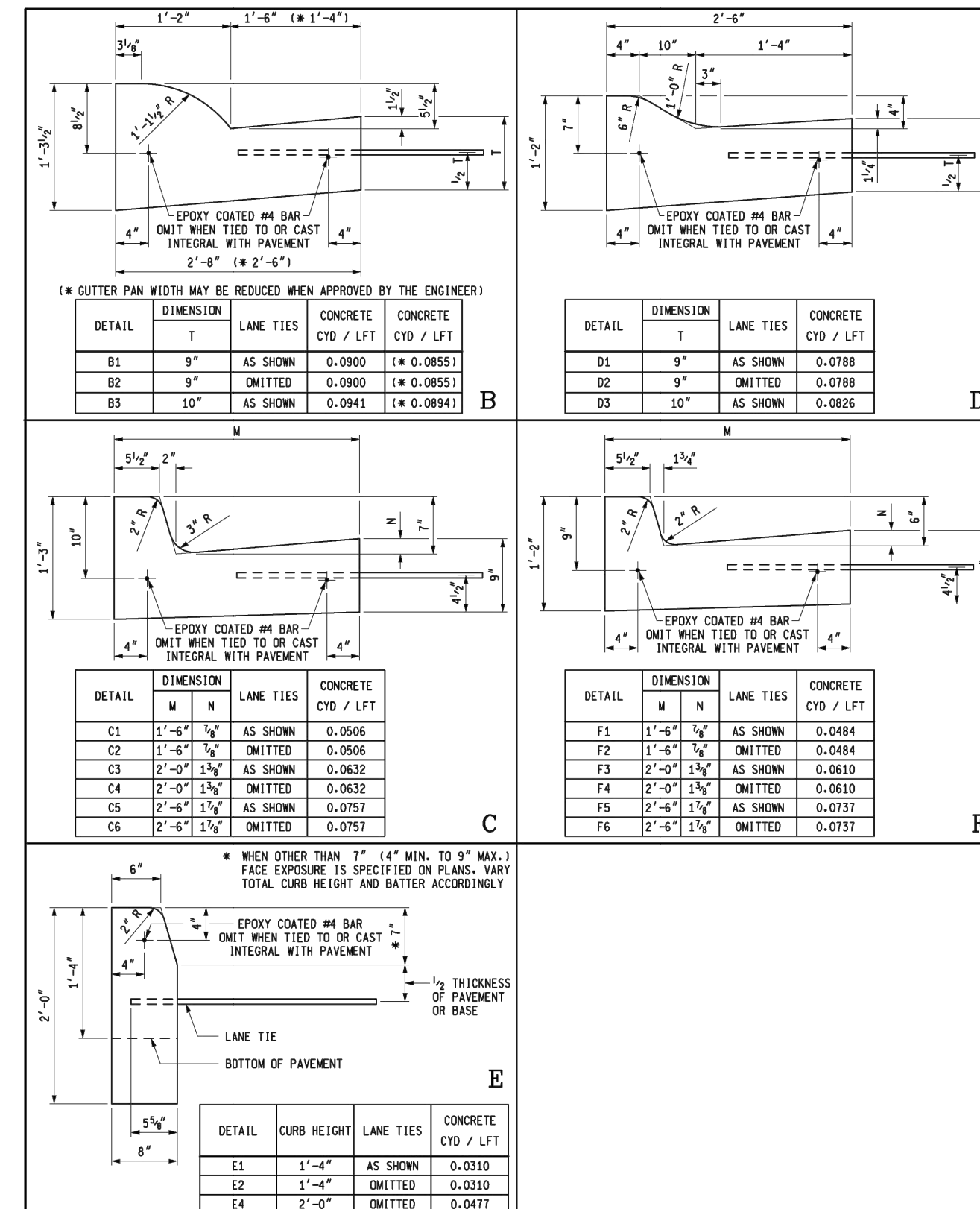
No AWI is required on the top course, however, if the designer wishes, he or she can use the Aggregate Wear Index (AWI) of 220 minimum.

Use PG 58-28 for all mixes, except for HMA, 5E_, which should be PG 64/28.

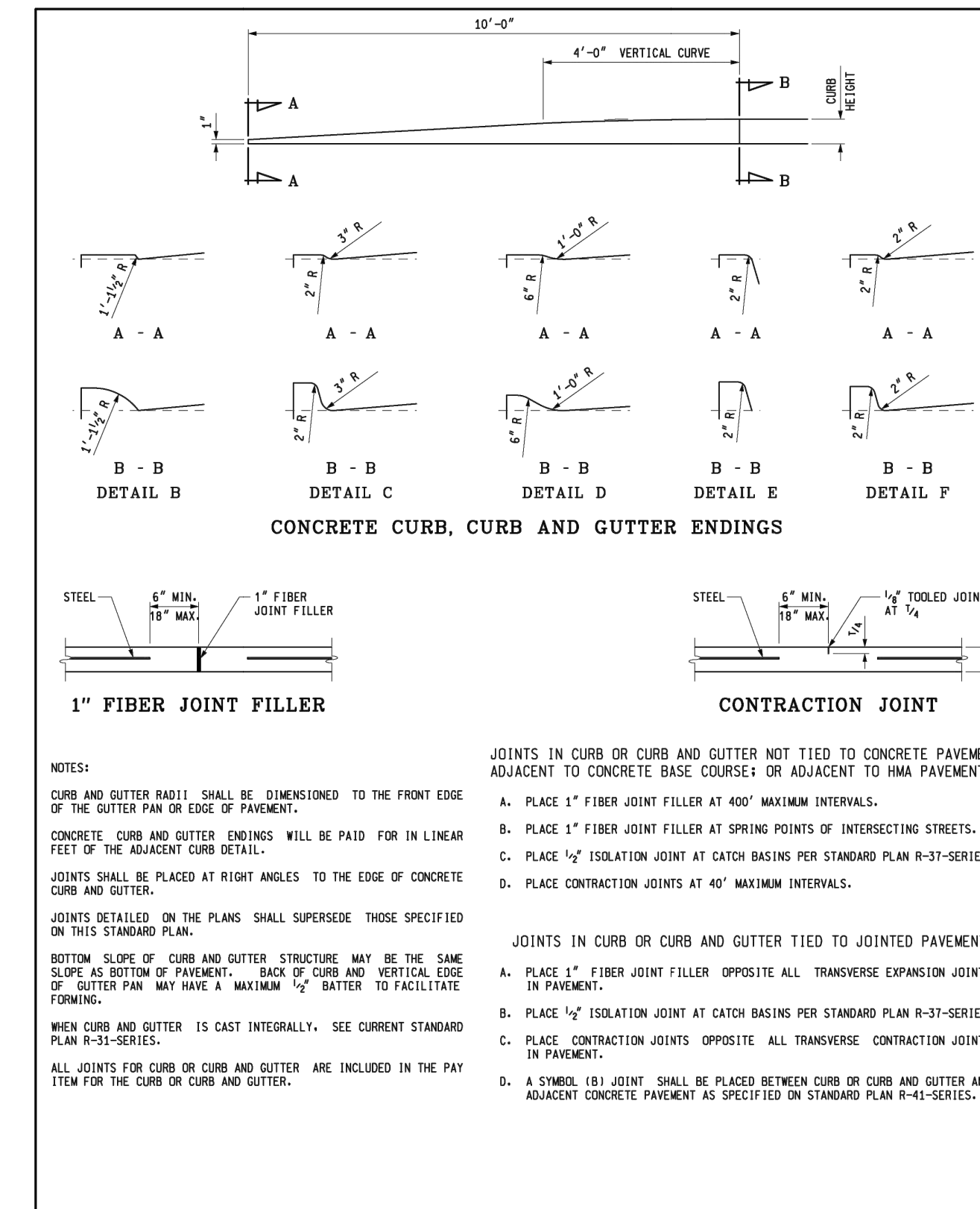
Application rates should match the chart on the previous page (page 3 of 4).

F. Non-Motorized Path Alternative Mixes

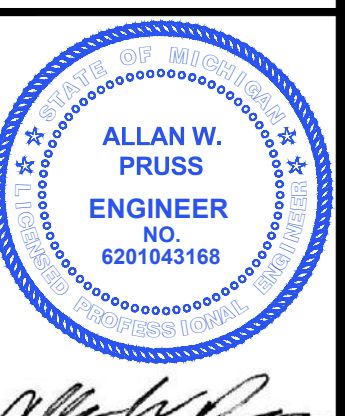
If a local agency desires to use an HMA mixture or grade of binder other than what is contained within this guide, or if they propose another pavement treatment or type, they must submit the change request to the LAP Staff Engineer in writing. The letter or email must include the alternate mix design, or pavement treatment, the justification and/or reason for the change, and a statement that they accept responsibility for the outcome of the performance of the mix design that is used in lieu of the recommended mixture.



AMDOT logo, Michigan Department of Transportation Bureau of Highway Development, Standard Plan for Concrete Curb and Concrete Curb & Gutter, R-30-G, SHEET 1 OF 2.



Michigan Department of Transportation Bureau of Highway Development, Standard Plan for Concrete Curb and Concrete Curb & Gutter, R-30-G, SHEET 2 OF 2.



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DETAILS: PARCEL 4711-06-200-101, PART OF NE 1/4, SEC. 6, T2N-R5E, GENOA CHARTER TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

Table with columns: DATE, PLAN SUBMITTALS/REVISIONS, REVISED TREE REMOVAL CALC, SITE PLAN SUBMITTAL, REVISED MOOT SUBMITTAL, REVISED MOOT SUBMITTAL, REVISED SITE PLAN SUBMITTAL, REVISED SITE PLAN SUBMITTAL.

CURRENT ISSUE DATE: 4/24/2023

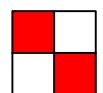
PROJECT NO: 22-168

SCALE: N/A

FIELD: RZ, DRAWN BY: MV/MN, DESIGN BY: BS, CHECK BY: MA/JP

C-11.1

NOT FOR CONSTRUCTION



SIGN NUMBER KEY												
EXIT 15-11 48" x 48" 60" x 48"	EXIT OPEN 15-12 48" x 36"	EXIT CLOSED 15-13 48" x 36"	EXIT ONLY 15-14 48" x 36"	30 MPH 15-15 VAR. x 24"	20 15-16 60" x 24"	ROAD WORK 15-17 60" x 24"	END WORK 15-18 48" x 24"	TO TRAFFIC 15-19 24" x 18"	TO TRAFFIC 15-20 24" x 18"	TO TRAFFIC 15-21 24" x 18"	TO TRAFFIC 15-22 24" x 18"	TO TRAFFIC 15-23 24" x 18"
<p>SEE WDOT SHS 13-WORK ZONE FOR SIGN DETAILS</p> <p>MDOT Michigan Department of Transportation</p> <p>NOT TO SCALE</p> <p>NO: 103-GEN-SIGN</p> <p>TRAFFIC TYPICALS SIGN SHEET</p> <p>DATE: JUNE 2021</p> <p>SHEET: 1 OF 5</p>												

SIGN NUMBER KEY												
NORTH 10-10 36" x 60"	SOUTH 10-11 36" x 60"	NORTH SOUTH 10-12 60" x 48"	ONE WAY 10-13 36" x 60"	ONE WAY 10-14 36" x 60"	ONE WAY 10-15 36" x 60"	ONE WAY 10-16 36" x 60"	ONE WAY 10-17 36" x 60"	STOP 10-18 36" x 36"	STOP 10-19 36" x 36"	STOP 10-20 36" x 36"	STOP 10-21 36" x 36"	STOP 10-22 36" x 36"
<p>SEE WDOT SHS 13-WORK ZONE FOR SIGN DETAILS</p> <p>MDOT Michigan Department of Transportation</p> <p>NOT TO SCALE</p> <p>NO: 103-GEN-SIGN</p> <p>TRAFFIC TYPICALS SIGN SHEET</p> <p>DATE: JUNE 2021</p> <p>SHEET: 2 OF 5</p>												

SIGN NUMBER KEY												
W1-1 18" x 18"	W1-2 18" x 18"	W1-3 18" x 18"	W1-4 18" x 18"	W1-5 18" x 18"	W1-6 18" x 18"	W1-7 18" x 18"	W1-8 18" x 18"	W1-9 18" x 18"	W1-10 18" x 18"	W1-11 18" x 18"	W1-12 18" x 18"	W1-13 18" x 18"
<p>SEE WDOT SHS 13-WORK ZONE FOR SIGN DETAILS</p> <p>MDOT Michigan Department of Transportation</p> <p>NOT TO SCALE</p> <p>NO: 103-GEN-SIGN</p> <p>TRAFFIC TYPICALS SIGN SHEET</p> <p>DATE: JUNE 2021</p> <p>SHEET: 3 OF 5</p>												

SIGN NUMBER KEY												
DIP W2-1 24" x 24"	EVENT W2-2 24" x 24"	SOFT W2-3 24" x 24"	ROAD W2-4 24" x 24"	WET W2-5 24" x 24"	LOOSE W2-6 24" x 24"	ROUGH W2-7 24" x 24"	LOW W2-8 24" x 24"	SHOULDER W2-9 24" x 24"	ROAD W2-10 24" x 24"	ROAD W2-11 24" x 24"	ROAD W2-12 24" x 24"	ROAD W2-13 24" x 24"
<p>SEE WDOT SHS 13-WORK ZONE FOR SIGN DETAILS</p> <p>MDOT Michigan Department of Transportation</p> <p>NOT TO SCALE</p> <p>NO: 103-GEN-SIGN</p> <p>TRAFFIC TYPICALS SIGN SHEET</p> <p>DATE: JUNE 2021</p> <p>SHEET: 4 OF 5</p>												

SIGN NUMBER KEY												
RAMP W2-14 24" x 24"	ONE WAY W2-15 24" x 24"	ONE WAY W2-16 24" x 24"	ONE WAY W2-17 24" x 24"	ONE WAY W2-18 24" x 24"	ONE WAY W2-19 24" x 24"	ONE WAY W2-20 24" x 24"	ONE WAY W2-21 24" x 24"	ONE WAY W2-22 24" x 24"	ONE WAY W2-23 24" x 24"	ONE WAY W2-24 24" x 24"	ONE WAY W2-25 24" x 24"	ONE WAY W2-26 24" x 24"
<p>SEE WDOT SHS 13-WORK ZONE FOR SIGN DETAILS</p> <p>MDOT Michigan Department of Transportation</p> <p>NOT TO SCALE</p> <p>NO: 103-GEN-SIGN</p> <p>TRAFFIC TYPICALS SIGN SHEET</p> <p>DATE: JUNE 2021</p> <p>SHEET: 5 OF 5</p>												

SIGN NUMBER KEY												
CONCRETE W2-27 24" x 24"	CONCRETE W2-28 24" x 24"	CONCRETE W2-29 24" x 24"	CONCRETE W2-30 24" x 24"	CONCRETE W2-31 24" x 24"	CONCRETE W2-32 24" x 24"	CONCRETE W2-33 24" x 24"	CONCRETE W2-34 24" x 24"	CONCRETE W2-35 24" x 24"	CONCRETE W2-36 24" x 24"	CONCRETE W2-37 24" x 24"	CONCRETE W2-38 24" x 24"	CONCRETE W2-39 24" x 24"
<p>SEE WDOT SHS 13-WORK ZONE FOR SIGN DETAILS</p> <p>MDOT Michigan Department of Transportation</p> <p>NOT TO SCALE</p> <p>NO: 103-GEN-SIGN</p> <p>TRAFFIC TYPICALS SIGN SHEET</p> <p>DATE: JUNE 2021</p> <p>SHEET: 5 OF 5</p>												

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CLIENT:

CHESTNUT DEVELOPMENT
6253 GRAND RIVER AVE.
BRIGHTON, MI 48114
POC: STEVE GROWOW
517-552-2489

DETAILS

PARCEL 4711-06-200-101
PART OF NE 1/4, SEC. 6, T2N-R5E,
GENOA CHARTER TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN

DATE	DESCRIPTION
02/22/2023	REMOVED TREE REMOVAL CALC
03/01/2023	SITE PLAN SUBMITTAL
04/24/2023	SITE PLAN REVIEW COMMENTS
06/30/2023	REVISED WDOT SUBMITTAL
07/07/2023	REVISED WDOT SUBMITTAL
09/01/2023	REVISED SITE PLAN SUBMITTAL
10/17/2023	REVISED SITE PLAN SUBMITTAL
4/3/2024	REVISED SITE PLAN SUBMITTAL

CURRENT ISSUE DATE: 4/24/2023

PROJECT NO: 22-168

SCALE: N/A

0 1/2" 1"

FIELD: RZ
DRAWN BY: MVMN
DESIGN BY: BS
CHECK BY: MAAP

C-11.2

NOT FOR CONSTRUCTION



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

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Kelly VanMarter, Township Manager
DATE: May 1, 2024
RE: Pine Creek Ridge Road Project – Resolution #5D Amendment

I am pleased to report that the Michigan Tax Tribunal has issued Proposed Opinion and Judgment in support of the Pine Creek Ridge Special Assessment District in each of the 6 appeals. Of those 6, we have received 5 Final Judgements and we expect the remaining Final Judgment any day. Each of the final Judgments we have received support the opinion and the district. Staff is preparing to move ahead with the project however, there are a few necessary adjustments to the district.

To ensure sufficient time to receive the Final Judgment and prepare for next steps, staff is requesting that the district be moved from the Summer 2024 to the Winter 2024 tax bill. In addition, the Township has incurred \$75,000 in legal costs both from bond and tribunal counsel as a result of the appeals. These costs must be added to the project costs which is a 1.92% increase to the district and a \$281.96 increase to each parcel.

For this reason, I am requesting a fourth amendment to Resolution #5 to move the project from the Summer to the Winter 2024 Tax and to increase the project cost to include the \$75,000 in legal fees. There will be NO change to the current no-interest pre-payment deadline of June 1, 2024. To reflect these changes, I have prepared Resolution #5D which is included in the following pages for your review. If approved, staff will mail notice to each owner in the district to inform them of the increased cost and to remind them that the no interest pre-payment period deadline is June 1. I look forward to discussing this with you on Monday. Please let me know if you have any questions.

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter

Resolution #5D

Fourth Amendment to Resolution No. 5 for the Pine Creek Ridge Road Improvement Project

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 May 6, 2024 at 6:30 p.m., there were:

PRESENT:

ABSENT:

The following preamble and resolutions were offered by _____ and seconded by _____.

Fourth Amendment to Resolution Confirming Special Assessment Roll

WHEREAS, the Board of Trustees of the Township (“Township Board”) has determined to proceed with the Pine Creek Ridge Road Improvement Project within the Township as described in the amended Exhibit A (the “Project”) and in accordance with Act No. 188, Michigan Public Acts of 1954, as amended;

WHEREAS, the Township Board adopted its Resolution confirming Special Assessment Roll on April 17, 2023, approving the Special Assessment Roll for the Pine Creek Ridge Road Improvement Project (Winter 2023) (the “Roll”); and

WHEREAS, a number of property owners in the district filed appeals with the Michigan Tax Tribunal which has delayed the Township’s ability to proceed with bonding for the project; and

WHEREAS, the Township Board first amended the Resolution confirming the Special Assessment Roll on May 15, 2023, to extend the deadline for payments without interest from May 17, 2023 to September 14, 2023; and

WHEREAS, the Township Board approved a second amendment to the Resolution confirming the Special Assessment Roll on August 21, 2023 to move the project from the Winter 2023 to the Summer 2024 tax and to extend the deadline for payments without interest from September 14, 2023 to March 1, 2024; and

WHEREAS, the Township Board approved a third amendment to the Resolution confirming the Special Assessment Roll on February 5, 2024 to again extend the deadline for payments without interest from March 1, 2024 to June 1, 2024; and

WHEREAS, the Township has received Proposed Opinions and Judgments in support of the project from the Michigan Tax Tribunal and the Township wishes to move the project from the Summer 2024 to the Winter 2024 tax to ensure that all final Tax Tribunal Judgements are received; and

WHEREAS, the Township has incurred additional costs associated with the Michigan Tax Tribunal Appeals which will increase project costs by \$75,000 or 1.92%; and

WHEREAS, that it is again necessary to further modify certain deadlines related to the Roll for the Project and to also modify the project costs to include the additional legal fees for the Tribunal appeals.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. 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 Pine Creek Ridge Road Improvement Project to be levied on the Winter 2024 tax (the "Roll") (Exhibit B).
2. Future Installments - Principal. The Township Board determines that each special assessment may be paid in fifteen equal installments. The first installment shall be due December 1, 2024. Each subsequent installment shall be due at intervals 12 months from the due date of the first installment.
3. Future Installments - Interest. Special assessments may be paid in full up to June 1, 2024 without interest. Thereafter, all unpaid installments shall bear interest, payable annually on each installment due date, at a rate of one percent (1%) above the highest rate of interest borne by the Bonds that are being issued to finance the Project.
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. 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 May 6, 2024 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; (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

EXHIBIT A – THE PROJECT
(amended)

PINE CREEK RIDGE ROAD IMPROVEMENT PROJECT (SUMMER WINTER TAX 2024)
DESCRIPTION OF PROJECT
A FIFTEEN-YEAR SPECIAL ASSESSMENT DISTRICT
WITH PROJECTED COSTS AS FOLLOWS:

- Total construction cost of the project: \$4,210,000.00
- Total number of parcels: 266*
- Homeowners representing over 50% of property and frontage have signed petitions.
- The Lake Villas of Pine Creek are contributing \$58,197.67 which includes a contribution from the Township of \$14,549.52 which is 25% of the project cost to the Lake Villas in accordance with Township policy.
- The Township is contributing \$399,000 to the project which is \$1,500 per parcel in Pine Creek Ridge since this project will improve a public roadway in accordance with established policy.
- The Township will need to sell bonds to finance the project. The estimated interest for the district is 5.5% and the administrative cost is \$144,000.
- The Township incurred \$75,000 in legal fees associated with resident appeals to the Michigan Tax Tribunal (MTT). These costs which consist of an increase of 1.92% have been added into the district.

• Project Cost:

<i>Construction Cost</i>	\$ 4,210,000.00
<i>Administration and Bonding Costs</i>	\$ 144,000.00
TOTAL PROJECT COST	\$ 4,354,000.00
<i>Township Contribution to Pine Creek Ridge (\$1,500 per parcel)</i>	\$ (399,000.00)
<i>Villas contribution including Township portion</i>	\$ (58,197.67)
Legal cost of Michigan Tax Tribunal appeals	\$ 75,000.00
NET PROJECT COST	\$ 3,896,802.33
	\$ 3,971,802.33

- Total Principle Cost per Parcel is ~~\$14,649.63~~ \$14,931.59.
- The annual principle payment is ~~\$976.64~~ \$995.44 with 5.5% interest applied to the outstanding balance.
- The project will consist of:
 - Minor curb repair in areas that impede drainage as needed;
 - Drainage system cleaning and repair as necessary;
 - Reseal drainage structures in curblines from the inside and replace any loose or missing brick;
 - Removal of existing asphalt;
 - Proof roll the base to identify any soft and yielding areas to be addressed prior to placement of the asphalt pavement; and
 - Paving of 4.5 inches of 13A hot mix asphalt installed in 2 lifts with one lift of 2.5” and one of 2”.

**After the district was approved, there was a combination of lots 242 & 243. These 2 lots are now one parcel (#4711-36-301-281) with 2 assessments. The amended roll will show a parcel count of 267 with the original 2 parcels listed with a zero assessment and the new parcel showing the double assessment.*

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-101-001	X3265, Pine Creek Rd	14,931.59	CHUNN ERIN R & BRADLEY M 5250 HIDDEN PINES DR
4711-36-101-002	X3265, Pine Creek Rd	14,931.59	PROVANCHER REBECCA & JASON 5258 HIDDEN PINES DR
4711-36-101-003	X3265, Pine Creek Rd	14,931.59	DAVIS LIVING TRUST 5266 HIDDEN PINES DR
4711-36-101-004	X3265, Pine Creek Rd	14,931.59	REICHARDT KATHLEEN TRUST 5274 HIDDEN PINES DR
4711-36-101-005	X3265, Pine Creek Rd	14,931.59	FLETCHER JEFFREY & KELLY 5288 HIDDEN PINES DR
4711-36-101-006	X3265, Pine Creek Rd	14,931.59	PURDEA CRISTINA LTS 9.3 5294 HIDDEN PINES CT
4711-36-101-007	X3265, Pine Creek Rd	14,931.59	BUNKELMAN BRANDON & ASHLEE 5300 HIDDEN PINES CT
4711-36-101-008	X3265, Pine Creek Rd	14,931.59	SMITH JAMES & WEST BEVERLY RFT 5306 HIDDEN PINES CT
4711-36-101-009	X3265, Pine Creek Rd	14,931.59	FORTSON CRAIG 5312 HIDDEN PINES CT
4711-36-101-010	X3265, Pine Creek Rd	14,931.59	FRAZEE THOMAS M & LINDA M 5318 HIDDEN PINES CT
4711-36-101-011	X3265, Pine Creek Rd	14,931.59	FAGARAS SABASTIAN & BIT CLAUDIA 5324 HIDDEN PINES CT
4711-36-101-012	X3265, Pine Creek Rd	14,931.59	ZACK ERNIE & JACQUELINE TRUST 5332 HIDDEN PINES CT
4711-36-101-013	X3265, Pine Creek Rd	14,931.59	BAUER VICTORIA TRUSTEE 5366 HIDDEN PINES CT
4711-36-101-014	X3265, Pine Creek Rd	14,931.59	ALEXANDER PAMELA & PETER 5350 HIDDEN PINES DR
4711-36-101-015	X3265, Pine Creek Rd	14,931.59	STRICKLAND JEANNE 5358 HIDDEN PINES DR
4711-36-101-016	X3265, Pine Creek Rd	14,931.59	KOKALIS, GEORGE P. & CAROLYN 5370 HIDDEN PINES DR
4711-36-101-017	X3265, Pine Creek Rd	14,931.59	GELLERMAN JAMES & MAUREEN LTS 9.3 5374 HIDDEN PINES DR
4711-36-101-018	X3265, Pine Creek Rd	14,931.59	ALLEN, JOHN H. & JOANN H. 5382 HIDDEN PINES DR
4711-36-101-019	X3265, Pine Creek Rd	14,931.59	LOVETT PAUL & ANN REV JOINT TRUST 5359 LAKE FOREST BLVD
4711-36-101-020	X3265, Pine Creek Rd	14,931.59	SILLES, VICTOR & JOYCE 5337 LAKE FOREST BLVD
4711-36-101-021	X3265, Pine Creek Rd	14,931.59	DAY SCOTT A & SALLY A 5315 LAKE FOREST BLVD
4711-36-101-022	X3265, Pine Creek Rd	14,931.59	SMITH RAYMOND & REBECCA 5293 LAKE FOREST BLVD
4711-36-101-023	X3265, Pine Creek Rd	14,931.59	HUTCHESON DANIEL & JODIE 5271 LAKE FOREST BLVD
4711-36-101-024	X3265, Pine Creek Rd	14,931.59	CUNNINGHAM JEFFERY & PAMELA 5261 HIDDEN PINES DR
4711-36-101-025	X3265, Pine Creek Rd	14,931.59	PUSKAR JONATHAN & MELISSA TRUST 5269 HIDDEN PINES DR
4711-36-101-026	X3265, Pine Creek Rd	14,931.59	LINGENFELTER, KENNETH 7819 LOCHLIN DR
4711-36-101-027	X3265, Pine Creek Rd	14,931.59	CRAIG SEAN & SARA 5285 HIDDEN PINES DR

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-101-028	X3265, Pine Creek Rd	14,931.59	MICHAELS REV FAMILY TRUST 5293 HIDDEN PINES DR
4711-36-101-029	X3265, Pine Creek Rd	14,931.59	ROTTINGHAUS, STEVEN & KAREN L. 5341 HIDDEN PINES DR
4711-36-101-030	X3265, Pine Creek Rd	14,931.59	FISHER, ALAN R. & JUDITH A. 5349 HIDDEN PINES DR
4711-36-101-031	X3265, Pine Creek Rd	14,931.59	KIMBALL, DAVID & MARGUERITE 5387 LAKE RIDGE DR
4711-36-101-032	X3265, Pine Creek Rd	14,931.59	COLEY RANDALL L 5419 LAKE RIDGE DR
4711-36-101-033	X3265, Pine Creek Rd	14,931.59	SIDOCK WILLIAM TRUST 5451 LAKE RIDGE DR
4711-36-101-034	X3265, Pine Creek Rd	14,931.59	SAWYER ROBERT & DEBORAH 5483 LAKE RIDGE DR
4711-36-101-035	X3265, Pine Creek Rd	14,931.59	MARTABANO JOHN A & EMILY 5515 LAKE RIDGE DR
4711-36-101-036	X3265, Pine Creek Rd	14,931.59	RIMBOLD ARTHUR & YOLANDA 5547 LAKE RIDGE DR
4711-36-101-037	X3265, Pine Creek Rd	14,931.59	O'CONNOR BRIAN & DONNA LIFE LEASE 5579 LAKE RIDGE DR
4711-36-101-038	X3265, Pine Creek Rd	14,931.59	BELLHORN BRIAN & KUBIAK-SQUASHIC HO 5611 LAKE RIDGE DR
4711-36-101-039	X3265, Pine Creek Rd	14,931.59	PORTA DAVID & AMANDA 5643 LAKE RIDGE DR
4711-36-101-040	X3265, Pine Creek Rd	14,931.59	MEZEL REVOCABLE LIVING TRUST 5675 LAKE RIDGE DR
4711-36-101-041	X3265, Pine Creek Rd	14,931.59	DICKOW ROBERT & FARIAL TRUST 5705 LAKE RIDGE DR
4711-36-101-042	X3265, Pine Creek Rd	14,931.59	POPOV IGOR & KARI 5739 LAKE RIDGE DR
4711-36-101-043	X3265, Pine Creek Rd	14,931.59	LAGERVELD SCOTT & COURTNEY 5771 LAKE RIDGE DR
4711-36-101-044	X3265, Pine Creek Rd	14,931.59	HOPMAN ROBERT S & KATHY L 5803 LAKE RIDGE DR
4711-36-101-045	X3265, Pine Creek Rd	14,931.59	BROWN, JEFFREY M. & MARCI 5810 LAKE RIDGE DR
4711-36-101-046	X3265, Pine Creek Rd	14,931.59	MILETO VINCENT LIVING TRUST 5778 LAKE RIDGE DR
4711-36-101-047	X3265, Pine Creek Rd	14,931.59	LABINE JEFFREY L & JEDYNAK JEAN M 5746 LAKE RIDGE DR
4711-36-101-048	X3265, Pine Creek Rd	14,931.59	LEE ROBERT & JANET LTS 9.3 5714 LAKE RIDGE DR
4711-36-101-049	X3265, Pine Creek Rd	14,931.59	BERG CHARLES&DERUITER LINDA LTS 9.3 5682 LAKE RIDGE DR
4711-36-101-050	X3265, Pine Creek Rd	14,931.59	BIERLEIN JASON W. & HEATHER L. C. 5650 LAKE RIDGE DR
4711-36-101-051	X3265, Pine Creek Rd	14,931.59	REICHARDT STEPHEN & CINNAMON 5622 LAKE RIDGE DR
4711-36-101-052	X3265, Pine Creek Rd	14,931.59	VREELAND-RAPAI KATHRYN RLT 5586 LAKE RIDGE DR
4711-36-101-053	X3265, Pine Creek Rd	14,931.59	RENYOLDS GREGORY & EYDIE LIV TRUST 5554 LAKE RIDGE DR
4711-36-101-054	X3265, Pine Creek Rd	14,931.59	MAHALAK CAROLYN J TRUST 5522 LAKE RIDGE DR

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-101-055	X3265, Pine Creek Rd	14,931.59	RAFFERTY DESMOND & LISA LTS 9.3 5490 LAKE RIDGE DR
4711-36-101-059	X3265, Pine Creek Rd	14,931.59	SPINALE CHARLES & CAROL RLT 5360 LAKE RIDGE DR
4711-36-101-060	X3265, Pine Creek Rd	14,931.59	TEKIELE III BERNARD C & JENNIFER S 5365 HIDDEN PINES DR
4711-36-101-061	X3265, Pine Creek Rd	14,931.59	MARSHALL KAY & BRYAN TRUST 5373 HIDDEN PINES DR
4711-36-101-062	X3265, Pine Creek Rd	14,931.59	NAJJAR SHIRLEY TRUST 5381 HIDDEN PINES DR
4711-36-101-063	X3265, Pine Creek Rd	14,931.59	SLOANE JOSEPH C & LISANNE M 5389 HIDDEN PINES DR
4711-36-101-068	X3265, Pine Creek Rd	14,931.59	TAYLOR TERRY & DARLENE LTS 9.3 5458 LAKE RIDGE DR
4711-36-101-069	X3265, Pine Creek Rd	14,931.59	BECKER RALPH & ELLEN TRUST 5394 LAKE RIDGE DR
4711-36-102-064	X3265, Pine Creek Rd	14,931.59	TEPPER CRAIG D & SHEILA 5417 RIVER RIDGE DR
4711-36-102-065	X3265, Pine Creek Rd	14,931.59	MILLHOUSE JOHN & ROSANNE 5433 RIVER RIDGE DR
4711-36-102-066	X3265, Pine Creek Rd	14,931.59	SAMMUT, VINCENT & JOYCE 5445 RIVER RIDGE DR
4711-36-102-067	X3265, Pine Creek Rd	14,931.59	KLEBBA ELLEN L REV. LIVING TRUST 5457 RIVER RIDGE DR
4711-36-102-068	X3265, Pine Creek Rd	14,931.59	RICE RALPH 5479 RIVER RIDGE DR
4711-36-102-069	X3265, Pine Creek Rd	14,931.59	STACEY ERNEST & VICKIE LTS 9.3 5495 RIVER RIDGE DR
4711-36-102-070	X3265, Pine Creek Rd	14,931.59	DAILY JEFFREY & ANNE 5515 RIVER RIDGE DR
4711-36-102-071	X3265, Pine Creek Rd	14,931.59	RUNYAN DAWN & ROGER 5533 RIVER RIDGE DR
4711-36-102-072	X3265, Pine Creek Rd	14,931.59	GAFOOR DANA 5555 RIVER RIDGE DR
4711-36-102-073	X3265, Pine Creek Rd	14,931.59	BERGMOOSER BRADLEY & KIMBERLY 5573 RIVER RIDGE DR
4711-36-102-074	X3265, Pine Creek Rd	14,931.59	REED FRANK & SUSAN LIFE ESTATE 5591 RIVER RIDGE DR
4711-36-102-075	X3265, Pine Creek Rd	14,931.59	POLLOCK , GREGORY & GINA 5609 RIVER RIDGE DR
4711-36-102-076	X3265, Pine Creek Rd	14,931.59	MARTEL RICHARD & KATHLEEN 7203 RIVER RIDGE CT
4711-36-102-077	X3265, Pine Creek Rd	14,931.59	PILCHAK GARY & THERESE LIFE ESTATE 7215 RIVER RIDGE CT
4711-36-102-078	X3265, Pine Creek Rd	14,931.59	CLIFTON RAPLH REVOCABLE TRUST 7220 RIVER RIDGE CT
4711-36-102-079	X3265, Pine Creek Rd	14,931.59	HAUTAMAKI, DAVID & ROBIN 7200 RIVER RIDGE CT
4711-36-102-080	X3265, Pine Creek Rd	14,931.59	LOVEJOY DANIEL W & KRISTIN 5631 RIVER RIDGE DR
4711-36-102-081	X3265, Pine Creek Rd	14,931.59	URBAN HEATHER LTS 9.3 5632 RIVER RIDGE DR
4711-36-102-082	X3265, Pine Creek Rd	14,931.59	KOSAIAN, PAUL P. & JOANN M. 5610 RIVER RIDGE DR

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-102-083	X3265, Pine Creek Rd	14,931.59	TOMBURRINI, MICHAEL & ROBIN 5588 RIVER RIDGE DR
4711-36-102-084	X3265, Pine Creek Rd	14,931.59	WHITE, RICHARD & LYNDA 5566 RIVER RIDGE DR
4711-36-102-085	X3265, Pine Creek Rd	14,931.59	LIPHARDT MICHAEL & CONSTANCE 5544 RIVER RIDGE DR
4711-36-102-086	X3265, Pine Creek Rd	14,931.59	WAGNER TERRANCE & POPPY KATHRYN 5522 RIVER RIDGE DR
4711-36-102-087	X3265, Pine Creek Rd	14,931.59	KANNISTO RODNEY & CARA REV TRUST 5500 RIVER RIDGE DR
4711-36-102-088	X3265, Pine Creek Rd	14,931.59	WYLIE FAMILY TRUST 5468 RIVER RIDGE DR
4711-36-102-089	X3265, Pine Creek Rd	14,931.59	RUSSELL BRYAN & KRISTIN 5453 HIDDEN PINES DR
4711-36-102-090	X3265, Pine Creek Rd	14,931.59	MAHON TIMOTHY & BRENNER CAROLYN 5467 HIDDEN PINES DR
4711-36-102-091	X3265, Pine Creek Rd	14,931.59	NAAB THOMAS & MARY ANITA LTS 9.3 5485 HIDDEN PINES DR
4711-36-102-092	X3265, Pine Creek Rd	14,931.59	SHOCK, LARRY & JANICE 5507 HIDDEN PINES DR
4711-36-102-093	X3265, Pine Creek Rd	14,931.59	FITCHETT DANIEL & ANGELA 5523 HIDDEN PINES DR
4711-36-102-094	X3265, Pine Creek Rd	14,931.59	KWAN VINCENT & JANICE 5531 HIDDEN PINES DR
4711-36-102-095	X3265, Pine Creek Rd	14,931.59	PEREIRA FAMILY LIVING TRUST 5553 HIDDEN PINES DR
4711-36-102-096	X3265, Pine Creek Rd	14,931.59	GUBOW MARTIN & COLLEEN 7232 FOREST WAY
4711-36-102-097	X3265, Pine Creek Rd	14,931.59	HAYES, STEVEN M. & CINDY 7204 FOREST WAY
4711-36-102-098	X3265, Pine Creek Rd	14,931.59	SCHOENHERR TOBIAS 7176 FOREST WAY
4711-36-102-099	X3265, Pine Creek Rd	14,931.59	SCHURIG REVOCABLE LIVING TRUST 7148 FOREST WAY
4711-36-102-100	X3265, Pine Creek Rd	14,931.59	KEHOE, STEVEN & BARBARA 7120 FOREST WAY
4711-36-102-101	X3265, Pine Creek Rd	14,931.59	CROUSE BRIAN C & ULLA 7119 FOREST WAY
4711-36-102-102	X3265, Pine Creek Rd	14,931.59	CROUSE BRIAN C & ULLA K 7119 FOREST WAY DR
4711-36-102-103	X3265, Pine Creek Rd	14,931.59	QUINN RYAN & JILL LTS 9.3 5498 HIDDEN PINES DR
4711-36-102-104	X3265, Pine Creek Rd	14,931.59	WOLFE THOMAS & JOANN 5474 HIDDEN PINES DR
4711-36-102-105	X3265, Pine Creek Rd	14,931.59	KAVANAGH JOHN & CINDY 6170 ANNAPOLIS DR
4711-36-102-106	X3265, Pine Creek Rd	14,931.59	STAFFORD JOHN & KRISTA 5450 HIDDEN PINES DR
4711-36-102-107	X3265, Pine Creek Rd	14,931.59	BROWN ELIZABETH TRUST 5383 RIVER RIDGE DR
4711-36-102-108	X3265, Pine Creek Rd	14,931.59	ARIA MARY ELLEN 5388 HIDDEN PINES DR
4711-36-102-109	X3265, Pine Creek Rd	14,931.59	WENDERSKI LEONARD & ANDREA LTS 9.3 5326 LAKE FOREST BLVD

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-203-110	X3265, Pine Creek Rd	14,931.59	POYNTER, RICK E. & MARCIA A. 5242 ARBOR BAY DR
4711-36-203-111	X3265, Pine Creek Rd	14,931.59	MANGINO, DENNIS 5260 ARBOR BAY DR
4711-36-203-112	X3265, Pine Creek Rd	14,931.59	BYERS BRUCE & DEBRA LTS 9.3 5278 ARBOR BAY DR
4711-36-203-113	X3265, Pine Creek Rd	14,931.59	ORLICK FAMILY TRUST 5296 ARBOR BAY DR
4711-36-203-114	X3265, Pine Creek Rd	14,931.59	BIBER MICHAEL 225 E GRAND RIVER AVE STE 203
4711-36-203-115	X3265, Pine Creek Rd	14,931.59	BEAVER, THOMAS A. 5368 ARBOR BAY DR
4711-36-203-116	X3265, Pine Creek Rd	14,931.59	BUSCH, JOHN & JOSEPHINE 5404 ARBOR BAY DR
4711-36-203-117	X3265, Pine Creek Rd	14,931.59	SEGLER, RAPHAEL M. & BETH A. 5428 ARBOR BAY DR
4711-36-203-118	X3265, Pine Creek Rd	14,931.59	GADDAM RAMESH & SHAILAJA 5458 ARBOR BAY DR
4711-36-203-119	X3265, Pine Creek Rd	14,931.59	GASIOR TRUST 5484 ARBOR BAY DR
4711-36-203-120	X3265, Pine Creek Rd	14,931.59	CUCUZ VELINKA LTS 9.3 5502 ARBOR BAY DR
4711-36-203-121	X3265, Pine Creek Rd	14,931.59	BOSKOVICH JACQUELINE ROSE TRUST 5520 ARBOR BAY DR
4711-36-203-122	X3265, Pine Creek Rd	14,931.59	SNODGRASS DAVID A & DEBORAH L R 5538 ARBOR BAY DR
4711-36-203-123	X3265, Pine Creek Rd	14,931.59	DAGG JAMES & ELENA 1227 ANDOVER CT
4711-36-203-124	X3265, Pine Creek Rd	14,931.59	CAMPBELL DOUGLAS & ANDREA TRUST 5572 ARBOR BAY CT
4711-36-203-125	X3265, Pine Creek Rd	14,931.59	KOZA EDWARD M TRUST 5608 ARBOR BAY CT
4711-36-203-126	X3265, Pine Creek Rd	14,931.59	CAPATINA LEE 5621 ARBOR BAY CT
4711-36-203-127	X3265, Pine Creek Rd	14,931.59	HARKER TROY & ANNE 5603 ARBOR BAY CT
4711-36-203-128	X3265, Pine Creek Rd	14,931.59	SPEER, LOUIS & JEANETTE 5585 ARBOR BAY CT
4711-36-203-129	X3265, Pine Creek Rd	14,931.59	JOSEPH LAWRENCE LIVING TRUST 5567 ARBOR BAY CT
4711-36-203-130	X3265, Pine Creek Rd	14,931.59	BORSOS CARLA RLT 5549 ARBOR BAY CT
4711-36-203-131	X3265, Pine Creek Rd	14,931.59	EDWARDS PAUL & CATHERINE LTS 9.3 5531 ARBOR BAY CT
4711-36-203-132	X3265, Pine Creek Rd	14,931.59	SNYDER DALE & SANDRA 5513 ARBOR BAY CT
4711-36-203-133	X3265, Pine Creek Rd	14,931.59	GAZAREK CRAIG & KARA 5495 ARBOR BAY CT
4711-36-203-134	X3265, Pine Creek Rd	14,931.59	JUSTICE GARY & DONNA TRUST 5477 ARBOR BAY CT
4711-36-203-135	X3265, Pine Creek Rd	14,931.59	HAYOSH BRADLEY J & MICHELLE 5459 ARBOR BAY CT
4711-36-203-136	X3265, Pine Creek Rd	14,931.59	ZIMMERMAN, LOREN & BETH 5441 ARBOR BAY CT

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-203-137	X3265, Pine Creek Rd	14,931.59	MCGARRY TRUST 5423 ARBOR BAY CT
4711-36-203-138	X3265, Pine Creek Rd	14,931.59	STEWART BRIAN G & JANET L 5405 ARBOR BAY CT
4711-36-203-139	X3265, Pine Creek Rd	14,931.59	HAIGHT MARIA & JOHN 5430 ARBOR BAY CT
4711-36-203-140	X3265, Pine Creek Rd	14,931.59	HOLTON WADE & JILL 5464 ARBOR BAY CT
4711-36-203-141	X3265, Pine Creek Rd	14,931.59	VULGAMOTT SCHEMM TRUST 5482 ARBOR BAY CT
4711-36-203-142	X3265, Pine Creek Rd	14,931.59	GORMAN NATHANIEL & WICHER JOANNA 5500 ARBOR BAY CT
4711-36-203-143	X3265, Pine Creek Rd	14,931.59	ALAMAT JARED C 5518 ARBOR BAY CT
4711-36-203-144	X3265, Pine Creek Rd	14,931.59	JOLLAY JEFFREY & RENEE 5536 ARBOR BAY CT
4711-36-203-145	X3265, Pine Creek Rd	14,931.59	BEATON, JAMES & MARY 5571 ARBOR BAY DR
4711-36-203-146	X3265, Pine Creek Rd	14,931.59	DAVIES ERIC & COURTNEY 5535 ARBOR BAY DR
4711-36-203-147	X3265, Pine Creek Rd	14,931.59	VANBROUCK, JOHN M. & DONNA M. 5517 ARBOR BAY DR
4711-36-203-148	X3265, Pine Creek Rd	14,931.59	BUCK ERIC & ALEXANDER 5499 ARBOR BAY DR
4711-36-203-149	X3265, Pine Creek Rd	14,931.59	SCRUGGS RAYMOND A & MOLLY K 5467 ARBOR BAY DR
4711-36-203-150	X3265, Pine Creek Rd	14,931.59	KRAUSE ANDREW & DIANE 5449 ARBOR BAY DR
4711-36-203-151	X3265, Pine Creek Rd	14,931.59	ODOM, SONNY L. & CASSIE L. 5431 ARBOR BAY DR
4711-36-301-152	X3265, Pine Creek Rd	14,931.59	HOUGHTON WILLIAM & ELIZABETH LTS 5392 HIDDEN PINES DR
4711-36-301-153	X3265, Pine Creek Rd	14,931.59	LOURIA, MATTHEW A. & LAURIE R. 5347 RIVER RIDGE DR
4711-36-301-154	X3265, Pine Creek Rd	14,931.59	SCHEBEL, JAY & JODI 5325 RIVER RIDGE DR
4711-36-301-155	X3265, Pine Creek Rd	14,931.59	STROHMAIER, ALAN H. & LINDA J. 5303 RIVER RIDGE DR
4711-36-301-156	X3265, Pine Creek Rd	14,931.59	BYRNE BRENDAN & MELISSA 5281 RIVER RIDGE DR
4711-36-301-157	X3265, Pine Creek Rd	14,931.59	HECKMAN PAUL & KAREN REV TRUST 5259 RIVER RIDGE DR
4711-36-301-158	X3265, Pine Creek Rd	14,931.59	SPAHR ADAM & STEPHANIE 5237 RIVER RIDGE DR
4711-36-301-159	X3265, Pine Creek Rd	14,931.59	TEPER, RONALD D. & TINA L. 5215 RIVER RIDGE DR
4711-36-301-160	X3265, Pine Creek Rd	14,931.59	KIM JONG YOON & EOM JUNG YOON 5193 RIVER RIDGE DR
4711-36-301-161	X3265, Pine Creek Rd	14,931.59	MILLER, ANGUS & MANDANA 5171 RIVER RIDGE DR
4711-36-301-162	X3265, Pine Creek Rd	14,931.59	MIKA, DAVID & SANDRA 5149 RIVER RIDGE DR
4711-36-301-163	X3265, Pine Creek Rd	14,931.59	EISENHART CHRISTOPHER 5127 RIVER RIDGE DR

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-301-164	X3265, Pine Creek Rd	14,931.59	RENAS LOGAN & SALMON CHRISTINA 5150 RIVER RIDGE DR
4711-36-301-165	X3265, Pine Creek Rd	14,931.59	HEWITT ROBERT J 5190 RIVER RIDGE DR
4711-36-301-168	X3265, Pine Creek Rd	14,931.59	SANOW DANIEL & KATRINA 5318 WYNDAM LN
4711-36-301-169	X3265, Pine Creek Rd	14,931.59	CRAFT BRYANT & LEAH 5336 WYNDAM LN
4711-36-301-170	X3265, Pine Creek Rd	14,931.59	FINAZZO NICOLO & HOLLY 5354 WYNDAM LN
4711-36-301-171	X3265, Pine Creek Rd	14,931.59	HETHERTON SEAN & JENNIFER 5372 WYNDAM LN
4711-36-301-172	X3265, Pine Creek Rd	14,931.59	TRAPP HEATHER REVOCABLE TRUST 5390 WYNDAM LN
4711-36-301-173	X3265, Pine Creek Rd	14,931.59	OLSEN DANIELLE TRUST 5408 WYNDAM LN
4711-36-301-174	X3265, Pine Creek Rd	14,931.59	GIULIANI MATTHEW & GINA 5426 WYNDAM LN
4711-36-301-175	X3265, Pine Creek Rd	14,931.59	HENGER DOUGLAS J & NANCY S 5444 WYNDAM LN
4711-36-301-176	X3265, Pine Creek Rd	14,931.59	LEBRON ALEJANDRO & JENNIFER LTS 9.3 5479 WYNDAM LN
4711-36-301-177	X3265, Pine Creek Rd	14,931.59	SCHWAB MICHAEL & KELLI RLT 7036 FOREST WAY
4711-36-301-178	X3265, Pine Creek Rd	14,931.59	SPINALE & HORKEY REV LIV TRUST 7064 FOREST WAY
4711-36-301-179	X3265, Pine Creek Rd	14,931.59	TRACY MICHAEL & KAREN LTS 9.3 7092 FOREST WAY
4711-36-301-180	X3265, Pine Creek Rd	14,931.59	COUSINS, CHRISTOPHER & SUSAN 7089 FOREST WAY
4711-36-301-181	X3265, Pine Creek Rd	14,931.59	MEANEY JOSEPH & KAREN REV TRUST 7061 FOREST WAY
4711-36-301-182	X3265, Pine Creek Rd	14,931.59	GREGORY RANDALL & YOUNG CHERI 7033 FOREST WAY
4711-36-301-183	X3265, Pine Creek Rd	14,931.59	DOUGLAS, MICHAEL J. & SHERRY P. 5415 WYNDAM LN
4711-36-301-184	X3265, Pine Creek Rd	14,931.59	FINNEGAN DENNIS & MICHELLE 5397 WYNDAM LN
4711-36-301-185	X3265, Pine Creek Rd	14,931.59	HODGES GLENN 5379 WYNDAM LN
4711-36-301-186	X3265, Pine Creek Rd	14,931.59	DOUGHTERY MAURINE & JAMES 5361 WYNDAM LN
4711-36-301-187	X3265, Pine Creek Rd	14,931.59	HENDERSHOT REVOCABLE TRUST 5327 WYNDAM LN
4711-36-301-188	X3265, Pine Creek Rd	14,931.59	MACFARLANE SCOTT & DELYNNE 5268 RIVER RIDGE DR
4711-36-301-189	X3265, Pine Creek Rd	14,931.59	THOMPSON LESLIE 5290 RIVER RIDGE DR
4711-36-301-190	X3265, Pine Creek Rd	14,931.59	MARLATT MARC R & LESLIE 5308 RIVER RIDGE DR
4711-36-301-191	X3265, Pine Creek Rd	14,931.59	CHAUDRY IRSHAD & MICHELINE 17922 ARBOR HAVEN DR
4711-36-301-192	X3265, Pine Creek Rd	14,931.59	CHAUDRY IRSHAD & MICHELINE 17922 ARBOR HAVEN DR

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-301-193	X3265, Pine Creek Rd	14,931.59	KLEIN CHARLES & SPITZLEY LISA RT 5499 WYNDAM LN
4711-36-301-194	X3265, Pine Creek Rd	14,931.59	DELLICOLLI ANTHONY & ANITA LTS 9.3 5517 WYNDAM LN
4711-36-301-195	X3265, Pine Creek Rd	14,931.59	GORDON IAIN & ELIZABETH 5535 WYNDAM LN
4711-36-301-196	X3265, Pine Creek Rd	14,931.59	BIHLMeyer DANIEL J & JULIE K 5553 WYNDAM LN
4711-36-301-197	X3265, Pine Creek Rd	14,931.59	ROBINSON ANTHONY D & AMY M RLT 5571 WYNDAM LN
4711-36-301-198	X3265, Pine Creek Rd	14,931.59	CHERESKO DANIEL & DONNA 5589 WYNDAM LN
4711-36-301-199	X3265, Pine Creek Rd	14,931.59	CUBR, JAMES & MARY JO 5607 WYNDAM LN
4711-36-301-200	X3265, Pine Creek Rd	14,931.59	DEMERY CHAD E. LAURIE A. 5625 WYNDAM LN
4711-36-301-201	X3265, Pine Creek Rd	14,931.59	BONGERO DAVID & WENDY 33346 GLENDALE ST
4711-36-301-202	X3265, Pine Creek Rd	14,931.59	PETERSON WILLIAM R & SHANNON M 7348 FOREST WAY
4711-36-301-203	X3265, Pine Creek Rd	14,931.59	MURRAY DAVID & BRIDGETT 7326 FOREST WAY
4711-36-301-204	X3265, Pine Creek Rd	14,931.59	SOVRAN DANIEL LTS 9.3 7304 FOREST WAY
4711-36-301-205	X3265, Pine Creek Rd	14,931.59	PARRELL ERIC & HEATHER 7280 FOREST WAY
4711-36-301-206	X3265, Pine Creek Rd	14,931.59	SMITH STEPHEN & REBECCA 7256 FOREST WAY
4711-36-301-207	X3265, Pine Creek Rd	14,931.59	LONGSWORTH BLAINE T & SUSAN A 7253 FOREST WAY CT
4711-36-301-208	X3265, Pine Creek Rd	14,931.59	MERCATANTE STEVEN D & DENISE N 7125 FOREST WAY CT
4711-36-301-209	X3265, Pine Creek Rd	14,931.59	MCDONALD CHRISTOPHER & COMBE-DUQUET 7143 FOREST WAY CT
4711-36-301-210	X3265, Pine Creek Rd	14,931.59	SCHOCK HAROLD & MA JIA 7136 FOREST WAY CT
4711-36-301-211	X3265, Pine Creek Rd	14,931.59	VANDERHOVEL JASON 1396 BAYWOOD CIR
4711-36-301-212	X3265, Pine Creek Rd	14,931.59	MASSEY BARBARA 7100 FOREST WAY CT
4711-36-301-215	X3265, Pine Creek Rd	14,931.59	HOUSE KEVIN & SARA 5732 WYNDAM LN
4711-36-301-216	X3265, Pine Creek Rd	14,931.59	HENWOOD, GREGORY J. & CYNTHIA R. 5714 WYNDAM LN
4711-36-301-217	X3265, Pine Creek Rd	14,931.59	OMALLEY BRENDAN & EILEEN 5696 WYNDAM LN
4711-36-301-218	X3265, Pine Creek Rd	14,931.59	ERRER RAYMOND & LORI 5678 WYNDAM LN
4711-36-301-219	X3265, Pine Creek Rd	14,931.59	KIME ELIZABETH & BRIAN 5660 WYNDAM LN
4711-36-301-222	X3265, Pine Creek Rd	14,931.59	WYBO CHRISTOPHER & CHRISTINE LTS9.3 5744 WYNDAM LN
4711-36-301-223	X3265, Pine Creek Rd	14,931.59	KOTRBA CHAD M & LINDSEY M 5749 WYNDAM LN

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-301-224	X3265, Pine Creek Rd	14,931.59	SHACKA RANDY S & REBECCA E 5783 WYNDAM LN
4711-36-301-225	X3265, Pine Creek Rd	14,931.59	LAUNGER PAUL & MARGARET 6000 BARCLAY DR
4711-36-301-226	X3265, Pine Creek Rd	14,931.59	GILLEYLEN TIMOTHY & JERILYN 5988 BARCLAY DR
4711-36-301-227	X3265, Pine Creek Rd	14,931.59	SCHNEIDER KATIE & JASON 5976 BARCLAY DR
4711-36-301-228	X3265, Pine Creek Rd	14,931.59	JAWORSKI, THOMAS S. & MELISSA D. 5964 BARCLAY DR
4711-36-301-229	X3265, Pine Creek Rd	14,931.59	LONGSWORTH, EVELYN A. TRUST 7341 PINE VISTA DR
4711-36-301-230	X3265, Pine Creek Rd	14,931.59	GROVE KENNETH & EVA 5858 HARTFORD WAY
4711-36-301-231	X3265, Pine Creek Rd	14,931.59	CROSKEY LIVING TRUST 5850 HARTFORD WAY
4711-36-301-232	X3265, Pine Creek Rd	14,931.59	DEMATOS MATTHEW & NANCY 5842 HARTFORD WAY
4711-36-301-233	X3265, Pine Creek Rd	14,931.59	SHAMOON KOSAI & SHELLY 5830 HARTFORD WAY
4711-36-301-236	X3265, Pine Creek Rd	14,931.59	OGINSKY DANIEL & ANNA 5853 HARTFORD WAY
4711-36-301-237	X3265, Pine Creek Rd	14,931.59	MARSEE JEFFERY & KOCH-MARSEE DIANA 5861 HARTFORD WAY
4711-36-301-238	X3265, Pine Creek Rd	14,931.59	MCCONEGHY NICHOLAS & ALLISON 5869 HARTFORD WAY
4711-36-301-239	X3265, Pine Creek Rd	14,931.59	PAGE THOMAS & BEVERLY LTS 9.3 5877 HARTFORD WAY
4711-36-301-240	X3265, Pine Creek Rd	14,931.59	HICKEY THOMAS J & MARGARET L 5885 HARTFORD WAY
4711-36-301-241	X3265, Pine Creek Rd	14,931.59	SPEZIA JOSEPH, MONICA, ROBERT PO BOX 884
4711-36-301-242	X3265, Pine Creek Rd	0.00	JONES KELLY TRUST 7987 STATE ST
4711-36-301-243	X3265, Pine Creek Rd	0.00	JONES KELLY TRUST 7987 STATE ST
4711-36-301-244	X3265, Pine Creek Rd	14,931.59	MIZE JOHN & SEAGRAM LAURA TRUSTS 5917 HARTFORD WAY
4711-36-301-245	X3265, Pine Creek Rd	14,931.59	CONDON MICHAEL & TAYLOR 5929 HARTFORD WAY
4711-36-301-246	X3265, Pine Creek Rd	14,931.59	KENNEDY DAVID L 76 HALSEY BLVD UNIT D
4711-36-301-247	X3265, Pine Creek Rd	14,931.59	KENNEDY DAVID L 76 HALSEY BLVD UNIT D
4711-36-301-248	X3265, Pine Creek Rd	14,931.59	ZACCAGNI PAUL & MICHELE 5953 HARTFORD WAY
4711-36-301-249	X3265, Pine Creek Rd	14,931.59	HARVILL MARK & ELLIE 5961 HARTFORD WAY
4711-36-301-250	X3265, Pine Creek Rd	14,931.59	FRITSCH LIVING TRUST 5969 HARTFORD WAY
4711-36-301-251	X3265, Pine Creek Rd	14,931.59	HANDELSMAN DENISE 5977 HARTFORD WAY
4711-36-301-252	X3265, Pine Creek Rd	14,931.59	SORNSON ROBERT & NANCY 5985 HARTFORD WAY

PARCEL	ASSESSMENT NAME	ASSESSMENT	OWNER ADDRESS
4711-36-301-253	X3265, Pine Creek Rd	14,931.59	GARAGIOLA, STEPHEN E. & CAROL H. 6025 WYNDAM LN
4711-36-301-254	X3265, Pine Creek Rd	14,931.59	BULGER, HAROLD W. & SANDRA A. 6037 WYNDAM LN
4711-36-301-255	X3265, Pine Creek Rd	14,931.59	DIAMANTONI ZACHARY 5980 HARTFORD WAY
4711-36-301-256	X3265, Pine Creek Rd	14,931.59	AMINE, MICHAEL & MARCY ANN 5987 WYNDAM LN
4711-36-301-257	X3265, Pine Creek Rd	14,931.59	YANALUNAS KYLE & HELEN & MARK 5975 WYNDAM LN
4711-36-301-258	X3265, Pine Creek Rd	14,931.59	CORIC MATTHEW & LISA R 1936 MAGNOLIA DR
4711-36-301-259	X3265, Pine Creek Rd	14,931.59	SCIORE ANTONIO & ROSE 5951 WYNDAM LN
4711-36-301-260	X3265, Pine Creek Rd	14,931.59	KING JOHN 5995 BARCLAY DR
4711-36-301-261	X3265, Pine Creek Rd	14,931.59	GARBACIK, MARK E. & MARY A. 5983 BARCLAY DR
4711-36-301-262	X3265, Pine Creek Rd	14,931.59	DAVIS SPENCER & KRISTIN 5971 BARCLAY DR
4711-36-301-263	X3265, Pine Creek Rd	14,931.59	PARKS BRADLEY & PATRICIA REV TRUST 5959 BARCLAY DR
4711-36-301-264	X3265, Pine Creek Rd	14,931.59	COJOCNEANU, SORIN & CLAUDIA 5906 HARTFORD WAY
4711-36-301-265	X3265, Pine Creek Rd	14,931.59	MESSMANN RICHARD & ROBIN LTS 9.3 5912 HARTFORD WAY
4711-36-301-266	X3265, Pine Creek Rd	14,931.59	SALINE NATALIE 5920 HARTFORD WAY
4711-36-301-267	X3265, Pine Creek Rd	14,931.59	MCGAFFNEY BENJAMIN & LAURA 5934 HARTFORD WAY
4711-36-301-268	X3265, Pine Creek Rd	14,931.59	SHIPMAN DIAR & BETH TRUST 5950 HARTFORD WAY
4711-36-301-269	X3265, Pine Creek Rd	14,931.59	PENNINGTON PHILLIP & CAROLYN 5966 HARTFORD WAY
4711-36-301-271	X3265, Pine Creek Rd	14,931.59	LORENCE JENNIFER REV. TRUST 5300 WYNDAM LN
4711-36-301-274	X3265, Pine Creek Rd	14,931.59	NINER CRAIG 7335 FOREST WAY
4711-36-301-275	X3265, Pine Creek Rd	14,931.59	ROSSER DAVID & JEAN TRUST 7359 FOREST WAY
4711-36-301-276	X3265, Pine Creek Rd	14,931.59	ZDZIEBKO MICHAEL 47064 NORTHUMERLAND ST
4711-36-301-277	X3265, Pine Creek Rd	14,931.59	WILLIAMS DAN & KEENER AMANDA 5756 WYNDAM LN
4711-36-301-280	X3265, Pine Creek Rd	14,931.59	BEAVER FAMILY TRUST 5845 HARTFORD WAY
4711-36-301-281	X3265, Pine Creek Rd	29,863.18	JONES KELLY TRUST 7987 STATE ST
# OF PARCELS: 267	TOTALS:	3,971,802.94	

EXHIBIT C

WARRANT

TO: Esteemed 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 Pine Creek Ridge Road Improvement Project (Winter Tax 2024) (the "Roll") confirmed by the Township Board on August 21, 2023 and amended by the Township Board on May 6, 2024 (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



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

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Kelly VanMarter, Township Manager
DATE: May 1, 2024
RE: Cropland Agreement

Please find attached a proposed Cropland Agreement with Cathy and Tim Esper for the continued agricultural use of the Lyle Herbst Farm and adjacent park parcel. This agreement was prepared by the Township Attorney.



SUPERVISOR
Bill Rogers
CLERK
Paulette A. Skolarus
TREASURER
Robin L. Hunt
TRUSTEES
Jean W. Ledford
Terry Croft
Diana Lowe
Jeff Dhaenens
MANAGER
Kelly VanMarter

For the portions of the land purchased with Natural Resources Trust Fund grant money, the MDNR has approved the temporary use of the park for concurrent agricultural use to ensure that the fallow fields are not overrun by invasive species such as the highly

aggressive autumn olive while the Township prepares to convert the use from passive to active recreation. In addition, we believe that maintaining crops for a few years alongside the recreational use of the land will increase plant, animal, and insect biodiversity and will improve pollinator habitats that support fruit and vegetable production and soil health. The MDNR requires that any proceeds associated with this activity be invested back into the park. Current fiscal year budget provides a line item within the Parks and Recreation Fund to ensure that the funds are used appropriately.

In this regard, please consider the following motions

Moved by _____ and **supported** by _____ to approve the Cropland Agreement for 2024 with Cathy and Tim Esper to maintain the historical agricultural use of 51 acres of fields located on parcel 4711-23-100-005 with revenue to be placed in Parks and Recreation Fund line item #208-000-434-001.

Sincerely,



Kelly VanMarter

Cropland Agreement
Genoa Charter Township
Parcel 4711-23-100-005

Cathy and Tim Esper and Genoa Charter Township's agree to utilize 51 acres of parkland at 6132 Crooked Lake Road, Howell, MI for the purpose of farming for crop year 2024. They understand that the land must always be available for public outdoor recreation in addition to be used for crop. Payment to the Township shall be \$55.00 per harvested acre to be paid by December 31, 2024.

They can trim fields as needed for equipment and they assume all liability while on property for themselves and anyone they permit to be on the property. If a claim or lawsuit is made arising out of this cropland agreement, Cathy and Tim Esper agree to defend and indemnify the Township and its employees and officials. Agreement renewal will be decided by 12-31-2024. They can sign for farm programs and for crop insurance.

All land planted can be harvested.

Bill Rogers
Supervisor, Genoa Charter Township
2911 Dorr Road, Brighton, MI 48116
Township: (810) 227-5225

Cathy or Tim Esper
2961 Jewell Road, Howell, MI 48843
(517) 546-8147 (no voicemail) get texts



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

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Kelly VanMarter, Township Manager
DATE: May 1, 2024
RE: Great Start Livingston - Story Walk

The Township Supervisor has been approached by Great Start Livingston regarding installation of a StoryWalk along the pathway at the Township Park property. Please see link below to more information about the program. The purpose of this agenda item is for discussion only.

<https://greatstartlivingston.org/storywalk/>

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter