

**Genoa Charter Township Election Commission
Special Meeting
Sept. 3, 2013
6:25 p.m.**

AGENDA

Call to Order:

1. Discussion of a request by the clerk to combine precincts for the Nov. 5, 2013 Special Election requesting millage approval for roads.
2. Request for approval of a recommendation to the Township Board to approve the combination of precincts as follows: 4 & 8, 5 & 12, 1 & 9, 3 & 11, 6 & 7, and 2 & 10.

Adjournment

**GENOA CHARTER TOWNSHIP BOARD
Regular Meeting
September 3, 2013
6:30 p.m.**

AGENDA

Call to Order:

Pledge of Allegiance:

Call to the Public*:

Approval of Consent Agenda:

1. Payment of Bills.
2. Request to approve minutes: August 19, 2013
3. Request for approval of an amendment to Fund No. 264 adding White Pines street lighting.
4. Request for approval of an amendment to the General Fund Budget increasing Parks and Recreation from \$100,000 to \$130,000 to allow for the expenditure to SELCRA and reducing the ending fund balance for the fiscal year ending March 31, 2014.
5. Request for approval of a recommendation to the Township Board to approve the combination of precincts as follows: 4 & 8, 5 & 12, 1 & 9, 3 & 11, 6 & 7, and 2 & 10 as recommended by the Election Commission.
6. Consider approval for a proposal from Scodeller Construction for crack sealing roads in the Forest Ponds and Woodland Springs at Lake Chemung subdivisions a total cost of \$19,900.

7. Consider approval for a request from Livingston Sunrise Rotary Foundation for approval of a charitable gaming license.

Approval of Regular Agenda:

8. Review of a special use application, impact assessment and site plan for proposed outdoor storage and a 22,000 square foot addition of a manufacturing facility located at 1326 Grand Oaks Drive, Howell MI 48843, petitioned by Michigan Rod Products, Inc.

Disposition of Petition

- A. Disposition of Special Use for outdoor storage.
- B. Disposition of Environmental Impact Assessment. (Aug. 26, 2013)
- C. Disposition of Site Plan. (Aug. 26, 2013)

9. Review of a special use application, impact assessment and site plan for proposed service center expansion, new collision center, and parking lot located at Maxey Ford, 2798 E. Grand River Avenue, Howell MI 48843, petitioned by SRM Associations, LLC.

Disposition of Petition

- A. Disposition of Special Use for major expansion of existing special use.
- B. Disposition of Environmental Impact Assessment. (Aug. 26, 2013)
- C. Disposition of Site Plan. (Aug. 26, 1013)

10. Review of a special use application, impact assessment and site plan for proposed grading within the natural features setback and construction of a new 2,368 square foot office building located on the north side of Grand River Avenue, east of Kellogg Road, Sec. 14, petitioned by Dr. Brad Rondeau.

Disposition of Petition

- A. Disposition of Special Use for grading within natural features setback.
- B. Disposition of Environmental Impact Assessment. (July 30, 2013)
- C. Disposition of Site Plan. (July 30, 2013)

11. Review of newsletter articles for September publication.

Correspondence
Member Discussion
Adjournment

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

CHECK REGISTERS FOR TOWNSHIP BOARD MEETING

DATE: September 3, 2013

TOWNSHIP GENERAL EXPENSES: Thru September 3, 2013	\$121,641.44
August 30, 2013 Bi Weekly Payroll	\$82,622.36
September 3, 2013 Monthly Payroll	\$12,502.76
OPERATING EXPENSES: Thru September 3, 2013	<u>\$30,430.13</u>
TOTAL:	\$247,196.69

<u>Check Number</u>	<u>Vendor No</u>	<u>Vendor Name</u>	<u>Check Date</u>	<u>Check Amount</u>
29952	ATT& IL	AT&T	08/15/2013	118.14
29953	BGDOOR	Brighton Garage Door	08/15/2013	90.00
29954	BLUE CRO	Blue Cross & Blue Shield Of Mi	08/15/2013	23,788.75
29955	BullsEye	BullsEye Telecom	08/15/2013	152.50
29956	COOPERST	Cooper's Turf Management LLC	08/15/2013	1,160.00
29957	DYKEMA	Dykema Gossett PLLC	08/15/2013	1,947.00
29958	EHIM	EHIM, INC	08/15/2013	9,755.84
29959	GANNETT	Livingston Press & Argus	08/15/2013	650.00
29960	GENOA RO	Genoa Twp Road Projects #264	08/15/2013	18.34
29961	GENOA TW	Genoa Township	08/15/2013	503.04
29962	Mancuso	Mancuso & Cameron, P.C.	08/15/2013	10,932.66
29963	SELCRA	Selcra	08/15/2013	27,899.00
29964	SKOLAR P	Paulette Skolarus	08/15/2013	35.60
29965	USTREA	United States Treasury	08/15/2013	86.00
29966	BullsEye	BullsEye Telecom	08/19/2013	928.16
29967	ETNA SUP	Etna Supply Company	08/19/2013	243.19
29968	Evolving	Evolving Technologies	08/19/2013	1,584.00
29969	GENOADPW	Genoa Township DPW Fund	08/19/2013	79.98
29970	HUBBELL	Hubbell, Roth, Clark, Inc.	08/19/2013	5,624.57
29971	JOHNSONR	Johnson, Rosati, Schultz & Jop	08/19/2013	7,500.30
29972	MASTER M	Master Media Supply	08/19/2013	160.69
29973	SPIRIT L	Spirit Of Livingston	08/19/2013	210.00
29974	Clearwat	Clearwater Systems	08/20/2013	58.50
29975	GreenOak	Green Oak Twp Treasurer's Ofc	08/20/2013	12.00
29976	LACROIX	Joan Lacroix	08/20/2013	400.00
29977	PFEFFER	Pfeffer, Hanniford, Palka	08/20/2013	6,000.00
29978	FED EXPR	Federal Express Corp	08/21/2013	143.22
29979	VERIZONW	Verizon Wireless	08/21/2013	251.67
29980	INSPEC	INSPEC, Inc.	08/21/2013	240.00
29981	SHELL	Shell	08/22/2013	164.45
29983	Equitabl	Equivest Unit Annuity Lock Box	08/30/2013	685.00
29985	StateOfM	State of Michigan	08/30/2013	8,876.95
29986	WALMART	Walmart Community	08/26/2013	118.03
29987	Sitnar	Susan Sitnar	08/26/2013	7,500.00
29988	AMERAWA	American Awards & Engraving	08/26/2013	9.00
29989	ARCHINAL	Michael Archinal	08/26/2013	500.00
29990	AT&T Fax	AT&T	08/26/2013	92.79
29991	CARDM	Chase Card Services	08/26/2013	1,565.06
29992	COMCAST	Comcast	08/26/2013	130.19
29993	DTE EN	DTE Energy	08/26/2013	142.91
29994	MASTER M	Master Media Supply	08/26/2013	59.94
29995	Postmast	Postmaster	08/26/2013	200.00
29996	VERIZONW	Verizon Wireless	08/26/2013	510.90
29997	VERIZONW	Verizon Wireless	08/26/2013	513.07

Report Total: 121,641.44

Accounts Payable
Computer Check Register

Genoa Township

2911 Dorr Road
Brighton, MI 48116

(810) 227-5225

User: angie

Printed: 08/22/2013 - 13:16

Bank Account: 101CH

Check	Vendor No	Vendor Name	Date	Invoice No	Amount
11156	AETNA LI	Aetna Life Insurance & Annuity	08/30/2013		25.00
Check 11156 Total:					25.00
11157	EFT-FED	EFT- Federal Payroll Tax	08/30/2013		7,741.33 4,268.04 4,268.04 998.16 998.16
Check 11157 Total:					18,273.73
11158	EFT-PENS	EFT- Payroll Pens Ln Pyts	08/30/2013	LOAN	1958.20 1,824.20
Check 11158 Total:					1958.20 1,824.20
11159	EFT-TASC	EFT-Flex Spending	08/30/2013		871.10
Check 11159 Total:					871.10
29983	Equitabl	Equivest Unit Annuity Lock Box	08/30/2013		685.00
Check 29983 Total:					685.00
11160	FIRST NA	First National Bank	08/30/2013		2,480.00 48,686.06 75.00

Check 11160 Total: 51,241.06

29985

StateOfM

State of Michigan

08/30/2013

08/30/2013

8,876.95

Check 29985 Total: 8,876.95

Report Total:

81,797.04

LOAN + 134.00

\$ 81,931.04

CK#
12062

+ 691.32

\$ 82,622.36

Genoa Charter Township
User: angie

Payroll
Computer Check Register

Printed: 08/22/13 12:38
Batch: 630-08-2013

<u>Check No</u>	<u>Check Date</u>	<u>Employee Information</u>	<u>Amount</u>
12062	08/30/2013	Galinac Kristina Galinac	691.32
Total Number of Employees: 1			Total for Payroll Check Run: 691.32

Accounts Payable
Computer Check Register

Genoa Township

2911 Dorr Road
Brighton, MI 48116

(810) 227-5225

User: cathy

Printed: 08/20/2013 - 10:42

Bank Account: 101CH

Check	Vendor No	Vendor Name	Date	Invoice No	Amount
11152	EFT-FED	EFT- Federal Payroll Tax	09/03/2013		1,831.67 753.47 753.47 176.21 176.21
			Check 11152 Total:		3,691.03
11153	EFT-PENS	EFT- Payroll Pens Ln Pyts	09/03/2013		294.21
			Check 11153 Total:		294.21
11154	EFT-TASC	EFT-Flex Spending	09/03/2013		88.43
			Check 11154 Total:		88.43
11155	FIRST NA	First National Bank	09/03/2013		8,429.09
			Check 11155 Total:		8,429.09
			Report Total:		12,502.76

#595 PINE CREEK W/S FUND
Payment of Bills
August 13 - 26, 2013

Type	Date	Num	Name	Memo	Amount
Check	08/20/2013	2115	Pfeffer, Hanniford & Palka	PC - Audit for the Period Ended March 2013	-1,200.00
Total					-1,200.00

#592 OAK POINTE WATER/SEWER FUND
Payment of Bills
August 13 - 26, 2013

Type	Date	Num	Name	Memo	Amount
Check	08/14/2013	2762	Bullseye Telecom	Inv. #16991238 8/9/13 Acct #-003CA32	-273.93
Check	08/19/2013	2763	Asphalt Specialists, Inc.	Inv. #JC5294 7/15/13	-500.00
Check	08/19/2013	2764	AT&T	Acct #810 227-4883 026 3 dated 8/7/13	-56.99
Check	08/19/2013	2765	BRIGHTON ANALYTICAL, LLC	Customer ID GENOATWP	-268.00
Check	08/19/2013	2766	CLEARWATER SYSTEMS	Account #MI-5660	-995.00
Check	08/19/2013	2767	COOPERS TURF MANAGEMENT, LLC	Invoices - OP Rec'd on 7/31/13	-830.00
Check	08/19/2013	2768	DeBottis Development&Asphalt Seal Coatir	Invoice 8/5/13	-2,329.00
Check	08/19/2013	2769	DUBOIS COOPER ASSOCIATES INCORP	Inv. #158638 8/7/13	-1,315.60
Check	08/19/2013	2770	Dykema Gossett PLLC	Inv. #1527864 8/8/13	-99.00
Check	08/19/2013	2771	GENOA TWP DPW FUND	Common Costs per KP letter dated 8/15/13	-2,533.85
Check	08/19/2013	2772	HACH Company	Inv. #8418869 & #8392779	-1,878.54
Check	08/19/2013	2773	M & K Jetting and Televising	Inv.#13429 7/24/13	-1,315.00
Check	08/19/2013	2774	PVS Nolwood Chemicals, Inc	Inv. #412676 8/13/13 & CR #112896 7/16/13	-927.00
Check	08/19/2013	2775	SCHUTZ & CO., INC	Inv. #3553 8/9/13	-207.90
Check	08/19/2013	2776	STANDARD ELECTRIC	Inv. #1740425-00 7/29/13 - Customer #210405	-45.87
Check	08/19/2013	2777	Tetra Tech GEO	Inv. #50702522 8/5/13	-245.94
Check	08/20/2013	2778	Pfeffer, Hanniford & Palka	OP - Audit for the Period Ended March 2013	-500.00
Total					-14,321.62

#593 LAKE EDGEWOOD W/S FUND**Payment of Bills**

August 13 - 26, 2013

Type	Date	Num	Name	Memo	Amount
Check	08/19/2013	2400	BullsEye Telecom	Inv. #16959108 8/9/13	-350.61
Check	08/19/2013	2401	Brighton Analytical L.L.C.	Inv. #0813-81931 & #0813-82020	-154.00
Check	08/19/2013	2402	Cooper's Turf Management	Inv. #10935 7/31/13	-325.00
Check	08/19/2013	2403	GENOA TWP DPW FUND	Common costs per KP letter dated 8/15/13	-1,082.64
Check	08/19/2013	2404	Tetra Tech GEO	Inv. #50702523 8/5/13	-677.16
Check	08/20/2013	2405	Pfeffer, Hanniford & Palka	LE - Audit for the Period Ended March 2013	-400.00
Total					-2,989.41

#503 DPW UTILITY FUND**Payment of Bills**

August 13 - 26, 2013

Type	Date	Num	Name	Memo	Amount
Check	08/14/2013	2558	Chase Card Services	Acct #5582 5086 3893 2167	-1,036.13
Check	08/14/2013	2559	LOWE'S	Acct #9900 641641 9	-1,537.94
Check	08/14/2013	2560	Staples Credit Plan	Acct #6035 5178 6145 0400	-1,288.19
Check	08/14/2013	2561	Spirit of Livingston	Inv. #00008599 8/5/13	-70.00
Check	08/14/2013	2562	U.S. POSTMASTER		-308.54
Check	08/19/2013	2563	Auto Zone	Inv. #2170319302 8/8/13	-5.49
Check	08/19/2013	2564	Belle Tire	Inv/Order #22918655 8/2/13	-72.00
Check	08/19/2013	2565	Business Imaging Group	Inv. #227593 7/29/13 & Inv. #227822 8/13/13	-138.35
Check	08/19/2013	2566	Clearwater Systems	Statement #580973 8/1/13	-104.00
Check	08/19/2013	2567	D&G Equipment, Inc.	Inv. #81635 7/24/13	-320.58
Check	08/19/2013	2568	HOWELL TRUE VALUE HARDW	Inv. #065474 8/6/13	-18.55
Check	08/19/2013	2569	Port City Communications, Inc.	Inv. #444408012013	-194.58
Check	08/19/2013	2570	Tractor Supply Co.	Acct #6035301203240252 7/30/13	-39.96
Check	08/19/2013	2571	USABlueBook	Inv. #116191 8/5/13	-225.05
Check	08/20/2013	2572	Pfeffer-Hanniford-Palka	DPW - Audit for the Period Ended March 2013	-450.00
		2573	Void		
Check	08/21/2013	2574	Shell Fleet Plus	Acct. #065-332-306 8/13/13	-4,512.08
Check	08/26/2013	2575	Greg Tarara	September 2013 Car Allowance	-500.00
Check	08/26/2013	2576	HUMPHRISS	September 2013 Car Allowance	-500.00
Check	08/26/2013	2577	Verizon Wireless	Acct #41002220-00002	-597.66
Total					-11,919.10

GENOA CHARTER TOWNSHIP BOARD

Regular Meeting
August 19, 2013

MINUTES

Supervisor McCrie called the regular meeting of the Genoa Charter Township Board to order at 6:30 p.m. The Pledge of Allegiance was then said. The following persons were present constituting a quorum for the transaction of business: Gary McCrie, Paulette Skolarus, Robin Hunt, Linda Rowell, Jim Mortensen, Todd Smith and Jean Ledford. Also present were Township Manager Michael Archinal and eight persons in the audience.

A Call to the Public was made with no response.

Approval of Consent Agenda:

Moved by Ledford and supported by Mortensen to approve all items listed under the Consent Agenda as requested. The motion carried unanimously.

1. Payment of Bills.

2. Request to approve minutes: Aug. 5, 2013.

3. Request for approval the appointment of Jean Ledford and Michael Archinal to the SELCRA Board.

Approval of Regular Agenda:

Moved by Hunt and supported by Smith to approve for action all items listed under the regular agenda with the addition of item 8 regarding LSL Planning. The motion carried unanimously.

4. Request for approval of resolution to attempt to control and prevent oak wilt by banning pruning or trimming of oak trees between April 1 and October 15.

Moved by Smith and supported by Ledford to approve resolution No. 130819 with minor changes. The motion carried by roll call vote as follows: Ayes – Ledford, Smith, Hunt, Rowell, Mortensen, Skolarus and McCrie. Nays – None.

5. Request for approval of agreement for street lighting with the North Shore Community Association.

Moved by Smith and supported by Skolarus to approve the agreement for street lighting with North Shore Community Association as requested. The motion carried unanimously.

6. Presentation by Hubbell, Roth and Clark of a Road Improvement Master Plan.

Jon Booth of Hubbell, Roth & Clark, Inc. presented the road improvement master plan to the board. The projects outlined for construction include: Crooked Lake Road, Latson Road, Beck Road, Conrad/Challis Roads, Challis/Bauer Intersection, Herbst Road, Cunningham Lake & Bauer Roads, Bauer Road and Hughes Road. No formal action was taken by the board

7. Request for approval of a resolution to approve ballot language for a New Road Improvement Millage.

Jim Kiefer of Dykma Gossett presented the program for bonding and ballot language to the board. A call to the public was made with the following response: James Nowak – These are county roads and the county should be paying for them. Dorothy Coppola provided the board with a letter dated 08/19/2013 objecting to the proposal. I have lived here 35 years and paved roads will increase traffic. Robert Egan – Are the bonds adjustable? Kiefer – No they are fixed. I am opposed to this project. Trees will be destroyed on Cunningham Lake and Conrad. I am also concerned with truck traffic on Bauer that will need to use the round-about. A three way stop for Bauer and Challis would be a better solution.

Mortensen – Road construction is the responsibility of the county. I will vote no on this proposal. Ledford I would rather see the state move forward on this matter. Smith – This millage request should be determined by the residents of this township and the way to do that is to put it on the ballot.

Moved by Skolarus and supported by Smith to approve a resolution with ballot language for a new road improvement millage. The motion carried by roll call vote as follows: Ayes – Smith, Hunt, Rowell, Skolarus and McCririe. Nays – Mortensen and Ledford.

8. Request for approval of a proposal from LSL Planning to create new Interchange Campus and Interchange Commercial PUD Zoning Districts for an amount not to exceed \$5,000.

Moved by Smith and supported by Hunt to approve the proposal dated 08/15/2013 with LSL Planning services. The motion carried as follows: Ayes – Smith, Hunt, Rowell, Skolarus and McCririe. Nays – Mortensen and Ledford.

Rowell asked for detail with regard to expenditures for Chestnut Development (Steve Gronow) but did not disagree with the request for a public hearing.

Ledford provided an overview of the 2040 regional transportation plan being overseen by SEMCOG.

The regular meeting of the Genoa Charter Township Board was adjourned at 8:05 p.m.



Paulette A. Skolarus
Genoa Charter Township Clerk

(Press/argus 08/23/2013)

GENOA TOWNSHIP - ROAD/LAKE/LIGHTING REIMBURSEMENT FUND #264
 BUDGET TO ACTUAL REPORT
 BUDGETS FOR THE YEARS ENDING 3/31/2013, 2014, 2015

ACCOUNT DESCRIPTION		ACTUAL THRU 3/31/2012	ACTUAL THRU 2/8/2013	BUDGET FOR THE YEAR ENDING 3/31/2013	BUDGET FOR THE YEAR ENDING 3/31/2014	1st AMEND 9/3/2013	PROJECTED BUDGET FOR THE YEAR ENDING 3/31/2015
REVENUE							
264-000-664	INTEREST INCOME	913	426	1,000	1,000	1,000	1,000
264-453-672	ASSESSMENTS - CHEMUNG WEED	Jul-17 32,614	29,539	32,180	51,000	51,000	51,000
460-670-100	ASSESSMENTS - PARDEE LAKE 2	Dec-15 25,200	3,436	25,200	25,200	25,200	25,200
465-672-000	ASSESSMENTS - CROOKED LAKE WEED	Jul-17		0	21,000	21,000	21,000
264-464-672	ASSESSMENTS - FENDT DRIVE	Dec-12 37,962		35,462			
264-4688-676	GLENWAY	Dec-16	558	16,186	16,186	16,186	16,186
264-467-675	TIMBERVIEW	Dec-18			42,400	42,400	42,400
264-465-673	RED OAKS	Dec-23	2,470		61,250	61,250	61,250
	WHITE PINES	N/A				800	800
000-699-000	OPERATING TRANS IN FROM GF	Dec-16	350,000	350,000	500,000	500,000	300,000
000-695-000	Other		3,500	3,500			
	TOTAL REVENUES	96,689	389,929	463,528	718,036	718,836	518,836
EXPENDITURES							
453-801-000	LAKE CHEMUNG WEEDS	52,818	44,324	46,000	60,000	60,000	55,000
460-801-000	PARDEE LAKE WEEDS	19,260	26,360	26,000	26,000	26,000	26,000
460-801-000	EAST AND WEST CROOKED LAKE WEEDS		4,673	5,000	50,000	50,000	20,000
364-465-802	RED OAKS		22,793	20,000	780,000	780,000	
263-468-801	GLENWAY		107,904	108,000			
264-466-801	MOUNTAIN/MYSTIC/MILROY		3,362	25,000	120,000	120,000	
264-467-801	TIMBERVIEW				300,000	300,000	
	WHITE PINES					800	800
451-695-000	MISC./AUDIT	1,700	2,052	2,500	2,500	2,500	2,500
	TOTAL EXPENDITURES	73,778	211,468	232,500	1,338,500	1,339,300	104,300
	NET REVENUES/EXPENDITURES	22,911		231,028	(620,464)		414,536
	BEGINNING FUND BALANCE	541,780		564,691	795,719		175,255
	ENDING FUND BALANCE	564,691		795,719	175,255		589,791

MEMORANDUM

TO: Township Board

FROM: Michael Archinal 

DATE: 8/29/2013

RE: Crack Sealing Woodland Springs and Forest Ponds

On April 1, 2013 the Township Board approved a proposal from the Livingston County Road Commission for crushed limestone improvements on Brighton Road and Beck Road. The approved amount was for \$215,000. The actual invoice amounts came in at \$106,136.66 and \$68,535.71 respectively for a total of \$174,672.37.

Woodland Springs and Forest Ponds are two subdivisions on the north side of Hughes Road. They are both prime candidates for crack sealing. Scodeller Construction has provided crack sealing services to the Township for several years. They have provided a proposal for hot poured rubber sealing and overbanding in the amount of \$19,900. I am requesting that a portion of the remaining general fund road budget be dedicated to this project.

Please consider the following action:

Moved by _____, supported by _____, to approve a proposal from Scodeller Construction for crack sealing services in the Chemung Forest and Forest Ponds subdivisions for the amount of \$19,900.

B. Call to the public

Jeff Dhaenens addressed the Board in support of the weed control program. He also supports the people who are seeking clarifications of lake access points. Smith agreed to provide clarification to the audience members who need lake access clarifications.

C. Request for approval of Resolution #5 confirming the Special Assessment Roll

Moved by Skolarus and supported by Ledford to approve resolution number five, subject to a change to exhibit B, adding \$267,000.00 as item #2. The motion carried by roll call vote as follows: Ayes - Ledford, Smith, Rowell, Skolarus and McCririe. Nay – Mortensen. Absent – Hunt.

7. Request to approve a proposal from LSL Planning to authorize \$4,000 in additional expenses for the Master Plan Update.

Moved by Smith and supported by Skolarus to authorize the expenditure as requested by VanMarter. The motion carried unanimously.

8. Consider approval of a proposal from the Livingston County Road Commission for the crushed limestone improvements to Brighton Road between King and Treasure Lake and Beck Road between Fisk and the railroad tracks at a total cost of \$215,000.00.

Moved Skolarus and supported by Ledford to approve the expenditure as requested by Archinal. The motion carried unanimously.

Member Discussion: Skolarus indicated there is a sufficient amount of petitions from Timberview and that soil borings would be done. Mortensen introduced his grandson, Tripp, who is visiting from Ann Arbor for his Boy Scout group. Smith indicated the marshmallow drop was successful. The 242 Church had a successful Easter. Mortensen will be unable to attend the next meeting.

The meeting was adjourned at 7:20 p.m.

Paulette A. Skolarus
Genoa Charter Township Clerk

(press/argus 04/05/2013)

Bills dated
6-30-13
total
\$ 174,672.37

Livingston County Road Commission

3535 Grand Oaks Drive • Howell, Michigan 48843-8575
Telephone: (517) 546-4250 • Facsimile: (517) 546-9628
Internet Address: www.livingstonroads.org

March 15, 2013

Mr. Michael Archinal, Manager
Genoa Township
2911 Dorr Road
Brighton, MI 48116

Re: Potential 2013 Gravel Road Projects

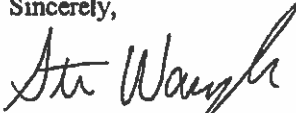
Dear Mr. Archinal:

Per your request, we are providing you with a list of potential gravel road improvement projects for your review. The location and estimate of each project is shown in the following table.

ROAD	LOCATION	TYPE OF WORK	AMOUNT
Beck Road	East of Fisk Road (1,950 feet)	8" Surface Limestone, Tree Work, and Limited Drainage Work	\$95,000.00
Brighton Road	West from the End of Pavement (6,850 feet)	4" Surface Limestone, Tree Work, and Limited Drainage Work	\$120,000.00
Hubert Road	North of Herbst Road (2,635 feet)	8" Surface Limestone, Tree Work, and Limited Drainage Work	\$150,000.00
King Road	South of Brighton Road (1,600 feet)	4" Surface Limestone, Tree Work, and Limited Drainage Work	\$40,000.00

If you have any questions, please do not hesitate to contact Dub Toddy or me.

Sincerely,



Steve Wasylik, P.E.
Director of Operations

Cc: Dub Toddy, LCRC District 3 Foreman
File

06/30/2013

INVOICE # 1 - 2013

TOWNSHIP CONTRACT BILLING

GENOA TOWNSHIP
ATTN: PAULETTE SKOLARUS - CLERK
2911 DORR RD
BRIGHTON, MI 48116

LIVINGSTON COUNTY ROAD COMM
ATTN: ACCOUNTING DEPT
3535 GRAND OAKS DR
HOWELL, MI 48843

CONTRACT	DATE	CONTRACT AMOUNT
489.5502 BRIGHTON RD	04/25/2013	\$120,000
(W from end of pvemnt 6,850')		

	<u>CURRENT MONTH</u>	<u>YEAR TO DATE</u>
LABOR	16,879.80	16,879.80
EQUIPMENT	19,102.23	19,102.23
MATERIALS	2,507.51	2,507.51
PAYABLES	60,242.27	60,242.27
PAYMENT TO CONTRACTOR	0.00	0.00
OVERHEAD ALLOCATION	<u>7,404.85</u>	<u>7,404.85</u>
CURRENT YEARS EXPENSE	106,136.66	106,136.66
PREVIOUS YEARS EXPENSE		
TOTAL WORK ORDER EXPENSE		106,136.66
CURRENT YEARS RECEIPTS		
PREVIOUS YEARS RECEIPTS		
LCRC CREDIT		
OTHER CREDITS		<u> </u>

TOTAL AMOUNT DUE TO LCRC:	\$106,136.66
----------------------------------	---------------------

06/30/2013

INVOICE # 1 - 2013

TOWNSHIP CONTRACT BILLING

GENOA TOWNSHIP
ATTN: PAULETTE SKOLARUS - CLERK
2911 DORR RD
BRIGHTON, MI 48116

LIVINGSTON COUNTY ROAD COMM
ATTN: ACCOUNTING DEPT
3535 GRAND OAKS DR
HOWELL, MI 48843

CONTRACT	DATE	CONTRACT AMOUNT
489.5501 BECK ROAD	04/25/2013	\$95,000
(East of Fisk Rd)		

	<u>CURRENT MONTH</u>	<u>YEAR TO DATE</u>
LABOR	12,383.10	12,383.10
EQUIPMENT	13,928.72	13,928.72
MATERIALS	951.13	951.13
PAYABLES	36,491.22	36,491.22
PAYMENT TO CONTRACTOR	0.00	0.00
OVERHEAD ALLOCATION	<u>4,781.54</u>	<u>4,781.54</u>
CURRENT YEARS EXPENSE	68,535.71	68,535.71
PREVIOUS YEARS EXPENSE		
TOTAL WORK ORDER EXPENSE		68,535.71
CURRENT YEARS RECEIPTS		
PREVIOUS YEARS RECEIPTS		
LCRC CREDIT		
OTHER CREDITS		<u> </u>

TOTAL AMOUNT DUE TO LCRC:	\$68,535.71
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SCODELLER CONSTRUCTION

51722 Grand River • Wixom, MI 48393 • 248.374.1102 • Fax 248.374.1109

August 26, 2013

Mr. Michael C. Archinal
Genoa Township Manager
Township Hall
2911 Dorr Rd.
Brighton, MI 48116

Dear Mr. Archinal,

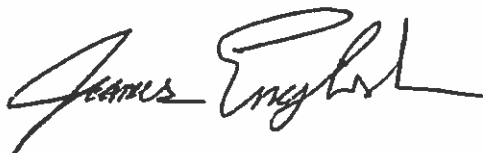
Re: Crack Sealing of Residential Roads

Attached is a schedule of costs to seal asphalt residential roads per your request. Sealant material is most effective when injected into the crack, rather than covering the road surface above the crack. Wherever possible, it is our intent to rout all major working cracks greater than 1/8" wide to form a reservoir to hold hot poured rubber within the crack. Secondary cracks less than 1/8" wide will be sealed by the "overband" method, which entails a 2" wide band of rubber on the road surface.

Some sections of road have deteriorated to the point that crack sealing will be of little use. Such excluded areas are indicated on the schedule. Other areas of pavement are a mixture of individual working cracks and localized areas of "map/alligator" cracking, characterized by many cracks very close together do to a base failure. Our prices exclude such areas, which will not benefit from surface treatment.

After this year's crack sealing there are a few roads /sections of road that will not benefit from surface treatments again. I will make myself available at your convenience to discuss these areas and the scope of work, so that there is mutual understanding of your needs, priorities and our repair intent.

Sincerely



James English

248-374-1102 ext 111



Contracting For Pavement Preservation
Equal Opportunity Employer



Genoa Township 2013 Crack Sealing Program

<u>Street</u>	<u>Cost</u>
Eagle at Forest Ponds	
Blue Heron	\$ 1,700.00
Forest Ponds	\$ 1,700.00
Shadetree	\$ 2,500.00
Woodland Springs at Lake Chemung	
Woodland Springs	\$ 1,500.00
Catherines	\$ 1,500.00
Pine Trace	\$ 2,000.00
Chemung Forest	\$ 3,500.00
Pond Hill	\$ 2,500.00
Shadow Pines	\$ 750.00
Weeping Willow	\$ 1,500.00
Oak Bend	\$ 750.00
TOTAL COST	\$ 19,900.00



*Contracting For Pavement Preservation
Equal Opportunity Employer*





QUALIFICATION INFORMATION

The organization must complete this form and submit with the qualification documents. **If this form does not accompany the qualification documents, documents will be returned to contact person.** This will delay processing. Any misrepresentation is grounds for denial.

Please check the appropriate box(es) for the license you wish to obtain.				Application(s) and fee(s) enclosed?	
<input type="checkbox"/> Millionaire Party	<input type="checkbox"/> Bingo	<input type="checkbox"/> Raffle	<input type="checkbox"/> Charity Game Ticket	<input type="checkbox"/> Yes	<input type="checkbox"/> No
1. Name of Organization Livingston Sunrise Rotary Foundation					
2. Doing Business As (DBA) (if applicable)				3. US Federal Employer Identification Number	
4. Organization Physical Address					
City		State	Zip	County	
5. Organization Mailing Address <input type="checkbox"/> Same as Physical Address					
City		State	Zip	County	
6. Telephone Number		7. Fax Number		8. Date Organization Established	
9. Briefly describe the purpose of the organization					
10. Name of Authorized Contact Person			11. Authorized contact person's position or role with organization		
12. Mailing Address					
City		State	Zip	County	
13. Email Address		14. Telephone Number		15. Fax Number	
The undersigned hereby certifies that the representations, information and data, presented are true, accurate and complete to the best of the undersigned's knowledge. <i>The undersigned understands that failure to answer truthfully, completely and accurately could preclude the organization from receiving an approval to obtain a gaming license.</i>					
Authorized Contact Signature				Date	
Print Name and Title					

PLEASE READ CAREFULLY

If you are qualifying for a millionaire party license, mail this completed form and the required qualification documentation to Michigan Gaming Control Board, PO Box 30786, Lansing, MI 48909.

If you are qualifying for a raffle, bingo, or charity game ticket license, mail this completed form and the required qualification documentation to Charitable Gaming Division, PO Box 30023, Lansing, MI 48909.

If you are qualifying for a millionaire party **AND** raffle, bingo, or charity game license, you must submit copies of this form and all qualification documents to **BOTH** agencies.





LOCAL CIVIC ORGANIZATION QUALIFICATION REQUIREMENTS

Please allow at least 8 weeks for the qualification process.

If the organization has never submitted qualifying information as a local civic organization, the following information shall be submitted in the name of the organization prior to being approved to conduct a bingo, millionaire party, raffle, or charity game. A previously qualified organization may be required to submit updated qualification information to assure its continued eligibility under the act.

1. A signed and dated copy of the organization's current bylaws or constitution, including membership criteria.
2. A complete copy of the organization's Articles of Incorporation that have been filed with the Corporations and Securities Bureau, if the organization is incorporated.
3. A copy of the letter from the IRS stating the organization is exempt from federal tax under IRS code 501(c)

OR

copies of one bank statement per year for the previous five years, excluding the current year.

4. A provision in the bylaws, constitution, or Articles of Incorporation that states should the organization dissolve, all assets, and real and personal property will revert:
 - A. If exempt under 501(c)3, to another 501(c)3 organization.
 - B. If not exempt under 501(c)3, to the local government.
5. A revenue and expense statement for the previous 12 month period to prove all assets are used for charitable purposes, i.e. 990's, Treasurer's report, audit. Do not send check registers or cancelled checks. Explain the purpose of each expenditure made to an individual. Once the organization has conducted licensed gaming events, the Bureau may require the organization to provide additional proof that all assets are being used for charitable purposes.
6. A copy of a resolution passed by the local body of government stating the organization is a recognized nonprofit organization in the community (form attached).
7. A provision in the bylaws, constitution, or Articles of Incorporation indicating the organization will remain nonprofit forever.

Additional information may be requested after the initial documents submitted have been reviewed. If you have any questions or need further assistance, please call our office at (517) 335-5780.

Act 382 of the Public Acts of 1972, as amended, defines a local civic organization as an organization "that is organized not for pecuniary profit; that is not affiliated with a state or national organization; that is recognized by resolution adopted by the local governmental subdivision in which the organization conducts its principal activities; whose constitution, charter, articles of incorporation, or bylaws contain a provision for the perpetuation of the organization as a nonprofit organization; whose entire assets are used for charitable purposes; and whose constitution, charter, articles of incorporation, or bylaws contain a provision that all assets, real property, and personal property shall revert to the benefit of the local governmental subdivision that granted the resolution upon dissolution of the organization."

LOCAL GOVERNING BODY RESOLUTION FOR CHARITABLE GAMING LICENSES
 (Required by MCL 432.103(K)(ii))

At a regular meeting of the Genoa Township Board of Trustees
REGULAR OR SPECIAL TOWNSHIP, CITY, OR VILLAGE COUNCIL/BOARD

called to order by _____ on _____
DATE

at _____ a.m./p.m. the following resolution was offered:
TIME

Moved by _____ and supported by _____

that the request from Livingston Sunrise Rotary Foundation of Genoa Township,
NAME OF ORGANIZATION CITY

county of Livingston, asking that they be recognized as a
COUNTY NAME

nonprofit organization operating in the community for the purpose of obtaining charitable

gaming licenses, be considered for approval.
APPROVAL/DISAPPROVAL

APPROVAL		DISAPPROVAL	
Yeas:	_____	Yeas:	_____
Nays:	_____	Nays:	_____
Absent:	_____	Absent:	_____

I hereby certify that the foregoing is a true and complete copy of a resolution offered and
 adopted by the Genoa Township Board of Trustees at a regular
TOWNSHIP, CITY, OR VILLAGE COUNCIL/BOARD REGULAR OR SPECIAL

meeting held on _____
DATE

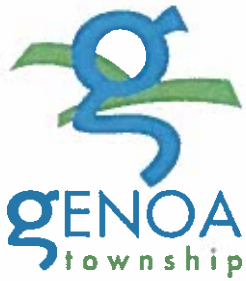
SIGNED: _____
TOWNSHIP, CITY, OR VILLAGE CLERK

PRINTED NAME AND TITLE

ADDRESS

Signature:

Email: mike@genoa.org



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

MEMORANDUM

TO: Honorable Board of Trustees

FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director

DATE: August 28, 2013

RE: Michigan Rod Products- Special Land Use & Site Plan Approval

MANAGER'S REVIEW: 

I have reviewed the special land use request, revised site plan and environmental impact assessment for the proposed outdoor storage and 22,000 sq. ft. addition to the Michigan Rod Products manufacturing facility located at 1326 Grand Oaks Drive. This project was recommended for approval by the Planning Commission on August 12th, 2013. My review of the revised submittal was focused on compliance with the outstanding items discussed at the Planning Commission and my recommendation is as follows:

Special Land Use Permit: I recommend **approval** of the Special Land Use for outdoor storage with the condition that the height of materials stored outside shall not exceed 10 feet. This Special Land Use is recommended for approval because it complies with the standards provided in Sections 19.03.

Environmental Impact Assessment: I recommend **approval** of the impact assessment dated August 26th, 2013 subject to dust control management procedures being added to the document.

Site Plan: I recommend **approval** of the site plan dated August 26, 2013 with the following condition:

- Prior to issuance of a land use permit, Township Staff shall verify compliance with the requirements of the Fire Department and Township Engineer.

Sincerely,



SUPERVISOR

Gary T. McCririe

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

MANAGER

Michael C. Archinal

TRUSTEES

H. James Mortensen

Jean W. Ledford

Todd W. Smith

Linda Rowell

**GENOA TOWNSHIP
APPLICATION FOR SITE PLAN REVIEW**

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS*: Asselin Associates Architects
4488 W Bristol Rd, Flint, MI 48507

OWNER'S NAME & ADDRESS: Michigan Rod Products, Inc
1326 Grand Oaks Dr, Howell, MI 48843

SITE ADDRESS: 1326 Grand Oaks Dr, Howell, MI 48843 PARCEL #(s): 4711-08-100-011

APPLICANT PHONE: (810) 230-9311 OWNER PHONE: (517) 552-9812

LOCATION AND BRIEF DESCRIPTION OF SITE: west side of grand oaks drive,
wooded 20 acre parcel with existing building, between
grand oaks avenue + I-96

BRIEF STATEMENT OF PROPOSED USE:
fabrication of steel components for automotive
industry (manufacturing)

THE FOLLOWING BUILDINGS ARE PROPOSED:
+/- 22,000 sqft addition

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: Raymond L. Embach Jr.

ADDRESS: 4488 WEST BRISTOL ROAD, FLINT, MI 48507

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

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

J. John Asselin Jr of Asselin Associates Architects at (810) 230-2831
Name Business Affiliation Fax No.

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: Raymond L. Embach Jr. DATE: 7-10-13

PRINT NAME: RAYMOND L. EMBACH JR PHONE: 810-230-9311

ADDRESS: 4488 WEST BRISTOL ROAD, FLINT, MI 48507

**APPLICATION FOR SPECIAL LAND USE
GENOA TOWNSHIP**

APPLICANT NAME* & ADDRESS: Asselin Associates Architects
4488 W Reistered, Flint, MI 48507

OWNER NAME* & ADDRESS: Michigan rod products, Inc
1226 grand oaks dr, Howell, MI 48843

SITE ADDRESS: 1226 grand oaks dr, Howell, MI 48843 PARCEL #(s): 4711-08-100-011

APPLICANT PHONE: (810) 230-9311 OWNER PHONE: (517) 552-9812

Location and brief description of site and surroundings:
West side of grand oaks driver, wooded 10 acre parcel
with existing building, between grand river avenue + I-96

Proposed Use:
fabrication of steel components for automotive industry
(manufacturing)

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

THE EXISTING USE MEETS THE ZONING ORDINANCES REQUIREMENTS AND
WILL NOT CAUSE NEGITIVE IMPACT TO SURROUNDING AREAS

b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

THE OUTDOOR COIL STORAGE IS DESIGNED TO BE A CONCRETE SLAB OFF OF THE
EXISTING INTERIOR DRIVE, WHICH IS SCREENED BY EXISTING WOODED AREA. THE
STORAGE WILL NOT IMPACT ANY OF THE SURROUNDING AREAS

c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

THE USE IS EXISTING AND IS TO REMAIN. THE OUTDOOR STORAGE WILL
NOT IMPACT EXISTING PUBLIC FACILITIES IN ANY WAY

d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

No IT WILL NOT. IT IS A EXISTING USE THAT IS TO REMAIN

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)?
If so, describe how the criteria are met.

THE ONLY SPECIFIC CRITERIA IS THE OUTDOOR STORAGE, WHICH IS SCREENED BY THE EXISTING DENSE WOODS AREAS

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Ray L. Embach III STATES THAT THEY ARE THE FREE OWNER* OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: RAYMOND L. EMBACH III (AUTHORIZED AGENT)

ADDRESS: 4488 WEST BRESTOL ROAD, FLINT, MI 48507

*Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

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

J. John L. Asselin Jr of Asselin Associates Architects at (810) 230-2831
Name Business Affiliation Fax No

Note: This application must be accompanied by a site plan review application and the associated site plan review submittal requirements. (The Zoning Administrator may allow a less detailed sketch plan for a change in use.)

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: Ray L. Embach III DATE: 7-10-13
PRINT NAME: RAYMOND L. EMBACH III PHONE: (810) 230-9311
ADDRESS: 4488 WEST BRESTOL ROAD, FLINT, MI 48507

There was discussion whether the building could be moved to the west and parking placed to the east. The petitioner was not interested in this alternative. The petitioner is willing to center the driveway between the driveways to the east and west. Dean Tengel is concerned about approving a plan where the driveway does not fit within the ordinance.

Chairman Brown asked why the petitioner dropped from 21 to 17 parking spaces between the two submittals. There are a total of four employees currently. It is hoped that a partner and second hygienist would be added within five years.

REU's were discussed. The petitioner has referred to himself as a medical office and a business office. The petitioner will meet with Township staff to work on this designation and the REU's for the same.

Barbara Figurski asked about the projecting wall sign. Brian Borden indicated it is marquis style and not permitted. The petitioner will be seeking a variance for this. The sign may be considered two sign spaces. Calculations will have to be made. The angle only allows the sign to extend 2' from the building at the farthest point.

Brian Borden discussed the fact that there is no dedicated load space. One isn't needed given the nature of the business.

Kelly VanMarter reminds the petitioner that although he has low windows in the back of the building, he may not manicure that area because of the natural features setback that must be maintained.

Chairman Brown asked if anyone from the public wishes to address the Planning Commission regarding this project. No one responded.

Motion by Jim Mortensen to table this item and reschedule it to a date of August 26. Support by Barbara Figurski. **Motion carried unanimously.**

Planning Commission disposition of petition

- A. Recommendation of Special Use.
- B. Recommendation of Environmental Impact Assessment.
- C. Recommendation of Site Plan.

OPEN PUBLIC HEARING #2... Review of a special use application, impact assessment and site plan for proposed outdoor storage and a 22,000 square foot addition of a manufacturing facility located at 1326 Grand Oaks Drive, Howell MI 48843, petitioned by Michigan Rod Products, Inc.

John Asselin from Flint, Michigan is the associate architect on this petition. He gave a brief overview of the proposed plan to the Planning Commission. The proposed addition is 22,000 square feet. It would also be necessary to increase parking. They want to bank a parking area at this time that would be paved in the future if needed to avoid water runoff issues at this point.

Brian Borden reviewed the plan. He feels that the general and specific use standards of the ordinance have been met. The expansion is intended to match the existing building.

Gary Markstrom addressed the Planning Commission. The re-grading of the detention basin and cleaning up of the detention basin area should be addressed by the petitioner. Fire hydrant placements, etc. has been addressed by the Fire Department per Gary Markstrom.

Mike Evans of the Fire Department addressed this petition. There is a pre-existing non-conformance situation with this petitioner. He is trying to work with the petitioner without creating a huge financial burden. The first issue is access. They need access on the west side of the building. Ideally, they'd like the south side as well but it's not feasible. He is hoping the petitioner will extend the drive behind the building for access by the Fire Department. This is a "sprinkle" building, so there is some leniency that can be given. The second issue is the water. They are requesting some more fire hydrants be placed along the property to increase the Fire Department's ability to fight any fire that may occur. The petitioner is open minded to working with the Fire Department.

The petitioner indicated the environmental impact assessment should read .38 to .39 rather than .39 to .39.

Eric Rauch addressed the petitioner as to how the dump truck would access the dumpster with coils in front of it. The petitioner will leave sufficient room for the dump truck.

A new employee entrance is being developed in the building.

The storm pipe on the north side of the building is approximately 5' from the building. This pipe is a 2' diameter pipe. The footing system is spread and it will be 6" outside the building. Manhole 1 should be moved north a few feet.

Chairman Brown made a call to the public with no response.

Planning Commission disposition of petition

- A. Recommendation of Special Use.
- B. Recommendation of Environmental Impact Assessment.
- C. Recommendation of Site Plan.

Motion by Jim Mortensen to recommend that the Township Board approve the special use permit to store coils outside in three areas, the height of which will not exceed 10' and will not be visible from the main road because of the placement existing screening. This recommendation is consistent with the ordinance regarding special use permits and is further subject to the approval of the site plan and environmental impact assessment. Support by Barbara Figurski. **Motion carried unanimously.**

Motion by Barbara Figurski to recommend that the Township Board approve the environmental impact assessment dated with the addition of dust control management and subject to approval of the special use permit and site plan. Support by James Mortensen. **Motion carried unanimously.**

Motion by Jim Mortensen to recommend to the Township Board approval of the site plan dated 7/30/13 subject to the following:

1. Compliance with the Township engineer's letter dated 8/5/13, as revised;
2. Compliance with Brighton Fire Department letter dated 8/16/13 subject to changes that will occur over further discussions and agreements with Brighton Fire Department;
3. The installation of a gravel road for fire suppression purposes on the west side of the building as approved by the BFD
4. The approval by the Township Board of the environmental impact assessment and special use permit.

Support by Diana Lowe. **Motion carried unanimously.**

OPEN PUBLIC HEARING #3... Review of a special use application, impact assessment and site plan for proposed service center expansion, new collision center, and parking lot located at Maxey Ford, 2798 E. Grand River Avenue, Howell MI 48843, petitioned by SRM Associations, LLC.

Thom Dumond and Mike Maxey addressed the Planning Commission. Mr. Maxey gave a brief history of his experience in auto sales. He then gave a brief overview of the reasoning for the project. A photographic rendering was shown to the Planning Commission. Mr. Maxey has contacted the neighbors and has had good relations with them concerning this project.

The proposed plan will increase the service bays by six. Directly behind that area would be the new collision center. No parking spots will be lost. The parking that is reflected on the plan represents the amount of vehicles that Maxey can project to sell.

The screening wall will be 6' tall from the southwest corner of lot along the length of the parking area. There will be evergreens there. This design will bring the retention basin into compliance with the Drain Commission requirements. The front approaches from Grand River will remain "as is."

John from CityScape addressed the Planning Commission. Ford's current prototype image program will be utilized with this building to keep a clean image with the building. The petitioner provided material samples to the Township.

Brian Borden reviewed his concerns with the plan. This would be deemed a major amendment to an existing land use. The applicant is proposing a



ASSELIN
ASSOCIATES
ARCHITECTS

August 26, 2013

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Michigan Rod Addition
1326 Grand Oaks Drive
Site Plan Review – final submission

Ms. VanMarter,

We have reviewed the comments as presented by the Township's consultants and have modified our documents accordingly. Please see the following narrative describing how they have been modified. Please do not hesitate to contact me with questions or concerns. I look forward to seeing you at the Site Plan Review meeting.

Sincerely,

John L. Asselin Jr. AIA

Tetra Tech Comments

1. With the existing detention basin now shown on the plans, the proposed system has been reviewed and it does not appear to meet current Township standards. The impact statement notes there is a 74,326 cubic foot detention basin on site. Using the site information provided in your calculations, the basin is already under capacity and doesn't appear to have a sediment forebay to capture suspended particles from the first-flush. The table below shows the results of the site runoff for the pre- and post- construction modified C factor.

0.38 (pre-)	3838 (Fore Bay)	76,769 (Detention Volume)
0.39 (post-)	3968 (Fore Bay)	79,359 (Detention Volume)

It is recommended to utilize the depressed area near the existing stormwater outfall as the location of the forebay and to construct a more defined swale to the detention basin around the existing gas well. Additional excavation in the channel and edge of basin can be performed to meet the new detention requirements. The petitioner has corrected all of the existing site information but must still provide solutions to the comments above and resubmit the site plan for review.

The detention basin will be modified to hold 80,487 cu ft with a Fore Bay with a capacity of 4,134 cu ft. See new engineering sheets included in revised drawing set.

Fire Department Comments

1. The new gravel access drive shall be signed as No Parking – Fire Lane along with roadway markers to indicate the location of the drive since it is not planned to be paved. **New gravel fire lane to be identified as requested. See new sheet C1.5 – Fire Site Plan.**
2. The FDC needs to be shown on the plans. **Relocated Fire Department Connection shown on new sheet C1.5.**
3. The size of the new water main needs to be indicated. **New water line size shown 6" new sheet C1.5.**

Planning Commission Comments

1. Compliance with the Township engineer's letter dated 8/5/13, as revised; **See above.**
2. Compliance with Brighton Fire Department letter dated 8/16/13 subject to changes that will occur over further discussions and agreements with Brighton Fire Department; **See above**
3. The installation of a gravel road for fire suppression purposes on the west side of the building as approved by the BFD **See above.**
4. The approval by the Township Board of the environmental impact assessment and special use permit. **The Environmental Impact Assessment has been modified to show the correct Cw change as well as describe the new detention basin modification.**



LSL Planning, Inc.

Community Planning Consultants

August 5, 2013

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
Subject:	Michigan Rod Products – Special Land Use and Site Plan Review #2
Location:	1326 Grand Oaks Drive – west side of Grand Oaks, south of Cleary Drive
Zoning:	IND Industrial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised site plan (dated 7/30/13) and application for special land use proposing a 22,963 square foot addition to the existing Michigan Rod Products building located at 1326 Grand Oaks Drive. The request also entails three small outdoor storage areas near the building and parking lot.

The subject site and adjacent properties are within the IND Industrial zoning district. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance and Master Plan.

A. Summary

1. In our opinion, the general special land use standards of Article 19 and specific use standards of Article 8 are met.
2. Any issues raised by the Township Engineer must be addressed.
3. The Planning Commission has approval authority over the building elevations.
4. The site plan is deficient by 113 parking spaces. The applicant proposes use of land banked parking to offset the difference.

B. Proposal/Process

The applicant requests special land use and site plan review/approval for: 1) a 22,963 square foot addition to the existing Michigan Rod Products building; and 2) development of an outdoor storage area.

Table 8.02 of the Township Zoning Ordinance lists manufacturing and fabrication operations as permitted uses, although the outdoor storage area is listed as a special land use. The latter is also subject to the use conditions of Section 8.02.02(b).

Following a public hearing, the Planning Commission may forward its recommendation on both the special land use and site plan to the Township Board for their consideration.



Aerial view of site and surroundings (looking north)

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

1. **Master Plan.** The Master Plan and Future Land Use Map identify the site and adjacent properties as Industrial. This classification is generally intended for “industrial uses such as research, wholesale and warehouse activities and light industrial operations which manufacture, compound, process, package, assemble and/or treat finished or semi-finished products from previously prepared material.”

Additionally, the Plan includes a goal to “encourage quality industrial development to diversify the tax base with room for future expansion, where not in conflict with surrounding land uses.”

Given the statements above, we are of the opinion that the proposed project is consistent with the Township Master Plan. This statement is made provided the project complies with the specific use conditions of Section 8.02.02(b).

2. **Compatibility.** The site is already developed with an industrial use in an area planned, zoned and generally used for industrial purposes. Given the established land use pattern in this area, the proposed project is generally expected to be compatible with surrounding land uses. Again, this statement is made provided the specific use conditions of Section 8.02.02(b) are met.
3. **Public Facilities and Services.** The Impact Assessment notes that the site is currently served by public water and sanitary and contains an existing on-site detention system. The site has access to a paved public roadway and the proposed project is not expected to result in a substantial increase in traffic. With that being said, the applicant must address any comments provided by the Township Engineer with respect to this criterion.
4. **Impacts.** The proposed addition is located where a parking lot currently exists and is not expected to impact any existing environmental features.

- 5. Mitigation.** If any additional concerns arise as part of this review process, the Township may require mitigation necessary to limit or alleviate any potential adverse impacts as a result of the proposed project.

D. Use Conditions

Section 8.02.02(b) provides the following use conditions related to outdoor storage in the IND District:

- 1. Minimum lot area shall be one (1) acre.**

The site contains a gross area of 20 acres.

- 2. Any stockpiles of soils, fertilizer or similar loosely packaged materials shall be sufficiently covered or contained to prevent dust or blowing of materials.**

The submittal notes that the outdoor storage area is intended for metal coils and that no loosely packaged materials will be stored.

- 3. All outdoor storage areas shall be paved with a permanent, durable and dustless surface and shall be graded and drained to dispose stormwater without negatively impact adjacent property. The Township Board, following a recommendation of the Planning Commission and the Township Engineer, may approve a gravel surface for all or part of the display or storage area for low intensity activities, upon a finding that neighboring properties and the environment will not be negatively impacted.**

The submittal notes that the outdoor storage will be on a concrete slab.

- 4. No outdoor storage shall be permitted in any required yard (setback) of buildings for the district in which the outdoor display, sales or storage use is located. Any approved outdoor sales or display with a parking lot shall meet the required parking lot setback; provided the Planning Commission may require additional landscaping screening or ornamental fencing.**

The outdoor storage area is well outside of required setbacks.

- 5. The site shall include a building of at least five hundred (500) feet of gross floor area for office use in conjunction with the use.**

As a result of the proposed project, the building will provide 150,000 square feet of floor area; 8,000 of which is used for office space.

- 6. All loading and truck maneuvering shall be accommodated on-site.**

Given the location and design of drives and the outdoor storage area, this standard is met.

- 7. All outdoor storage area property lines adjacent to a residential district shall provide a buffer zone A as described in Section 12.02. A buffer zone B shall be provided on all other sides. The Planning Commission may approve a six (6) foot high screen wall or fence, or a four (4) foot high landscaped berm as an alternative.**

The outdoor storage area is in a location that will be screened by existing wooded areas. Additionally, it is located over 500 feet from the front lot line and is not expected to be visible from off-site.

- 8. The height of all material and equipment stored in an outdoor storage area shall not exceed the height of any landscape screening, wall or fence. Boats and recreational vehicles may exceed the height of the fence provided that they are setback from the fence a distance equal to their height. Storage of materials up to the height of the adjacent building wall may be permitted in the rear yard if it is illustrated on the site plan, the rear yard does not abut a residential district or face an expressway, and such storage is confined to within twenty (20) feet of the building.**

The applicant has indicated that the coil storage will be limited to a height of 10 feet. Given the outdoor storage is intended to be screened by existing wooded areas, this requirement will be met.

E. Site Plan Review

- 1. Dimensional Requirements.** As described in the table below, the project complies with the dimensional standards of the IND District:

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
IND	1	150	85	25	40	20 front 10 side/rear	30'	40% building 85% impervious
Proposal	20	650	190	50 (S) 320 (N)	160	105 front 40 side	22'	17% building 29% impervious

- 2. Building Materials and Design.** Proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission. The submittal includes elevation views of the proposed addition, noting the use of decorative scored block wainscot for the building base, as well as metal siding and roofing, all of which are intended to match the existing industrial building.
- 3. Parking.** In accordance with Section 14.04, light industrial uses require 1.5 spaces for each 1,000 square feet of gross floor area, while offices require 1 space for each 300 square feet of gross floor area. Given the proposed size of the building, 242 spaces are required, while only 131 are provided.

The applicant proposes the use of 113 land banked spaces to offset the difference, noting that the additional spaces are not needed given actual usage. Per Section 14.02.05, the Township may require that such parking (or more parking) be constructed if determined to be necessary.

The existing parking spaces and drive aisles meet the standards of Article 14, while the revised plan also includes the required number of barrier free spaces.

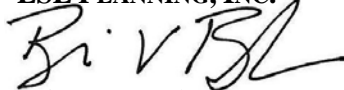
- 4. Vehicular Circulation.** The proposed site plan will not substantially alter existing circulation patterns. As requested in our initial review letter, the applicant has provided a truck turning template to Sheet C1.3 and has added a small paved area as a potential truck “run-off” space.
- 5. Loading.** Given the size of the building, Section 14.08.08 requires 5 loading spaces, which are to be located in a rear or side yard not directly visible to a public street. The revised plan identifies 8 loading spaces (5 exterior spaces and 3 interior spaces). Given the number and placement of the loading spaces, this requirement is met.
- 6. Landscaping.** The site plan identifies 5 new trees to be planted as part of the project. Review of aerial photos indicates the presence of greenbelt trees along Grand Oaks Drive and other heavily wooded areas on each side of the northerly parking lot and at the rear of the site that will not be disturbed as part of this project.

7. **Waste Receptacle and Enclosure.** Sheet C1.3 identifies an existing waste receptacle. The note describing the receptacle states that it is within a masonry enclosure and placed on a concrete base pad, per Ordinance requirements.
8. **Exterior Lighting.** The revised site plan includes a lighting plan. Sheet E1.1 includes a photometric plan and fixture details, both of which comply with current Ordinance standards.
9. **Signs.** A note on Sheet C1.3 states that no new advertising signage is proposed as part of this project.
10. **Impact Assessment.** The submittal includes a revised Impact Assessment (dated 7/30/13). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at borden@lslplanning.com.

Sincerely,

LSL PLANNING, INC.



Brian V. Borden, AICP
Senior Planner



August 5, 2013

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

**Re: Michigan Rod Products Building Addition
Site Plan Review #2**

Dear Ms. Van Marter:

We have reviewed the resubmitted site plan documents from Asselin Associates Architects dated July 30, 2013. The approximately 20 acre site is located on Grand Oaks Drive and is proposed for a 22,000 square foot addition to the existing structure. The addition is proposed on the south side of the building and requires the parking lot to be relocated and expanded for the additional use. Tetra Tech has reviewed the documents and site plan and offers the following comments.

SITE PLAN

1. With the existing detention basin now shown on the plans, the proposed system has been reviewed and it does not appear to meet current Township standards. The impact statement notes there is a 74,326 cubic foot detention basin on site. Using the site information provided in your calculations, the basin is already under capacity and doesn't appear to have a sediment forebay to capture suspended particles from the first-flush. The table below shows the results of the site runoff for the pre- and post- construction modified C factor.

C-factor	Required Forebay Volume (cft)	Required Detention Volume (cft)
0.38 (pre-)	3838	76,769
0.39 (post-)	3968	79,359

It is recommended to utilize the depressed area near the existing stormwater outfall as the location of the forebay and to construct a more defined swale to the detention basin around the existing gas well. Additional excavation in the channel and edge of basin can be performed to meet the new detention requirements.

The petitioner has corrected all of the existing site information but must still provide solutions to the comments above and resubmit the site plan for review.

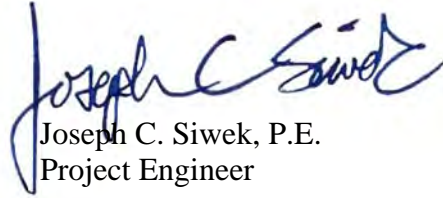
Ms. Kelly Van Marter
Michigan Rod Products Building Addition – Site Plan Review #2
August 5, 2013
Page 2

Please call if you have any questions.

Sincerely,



Gary J. Markstrom, P.E.
Unit Vice President



Joseph C. Siwek, P.E.
Project Engineer

Copy: John Asselin Jr., Asselin Associates Architects



Brighton Area Fire Department

615 W. Grand River

Brighton, Michigan 48116

810-229-6640 Fax: 810-229-1619

August 6, 2013

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Michigan Rod Addition
1326 Grand Oaks Drive
Site Plan Review

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on July 30, 2013 and the drawings are dated July 30, 2013. The project is based on a 22,000 square foot addition to an existing 128,000 mixed use (F-2/S-2/B) building. The plan review is based on the requirements of the International Fire Code (IFC) 2012 edition and Genoa Township Ordinance. The following deficiencies shall be addressed prior to Fire Department approval.

1. Fire Department access shall be improved based upon Chapter 503 and Appendix D of the IFC. Access road shall be extended along the entire west end of the structure to the southwest corner, and shall be provided with an approved means of turnaround. Road shall be at least 20 feet wide and comply with Appendix D. Based upon square footage of the current structure, a secondary access road shall be provided to the site. With the planned increase in area, non-conformance would be exacerbated. Accommodations may be possible if additional access and water supply improvements are provided.
2. Fire Department water supply shall be provided based upon Chapter 507 and Appendix C of the IFC. Fire hydrants shall be located along the main access road and fire department access road in accordance with Genoa/MHOG water requirements.
3. A hydrant shall be provided within 100' of the fire department connection.
4. The access road into the site shall be a minimum of 26' wide. With a width of 26' wide, one side of the street shall be marked as a fire lane. Include the location of the proposed fire lane signage and include a detail of the fire lane sign in the submittal. Access roads to site

IFC 912.2

August 6, 2013
Michigan Rod Products-addition
1326 Grand Oaks Drive
Site Plan Review
Page 2 of 2

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 75,000 pounds.

IFC D 103.6
IFC D103.1
IFC D 102.1
IFC D 103.3

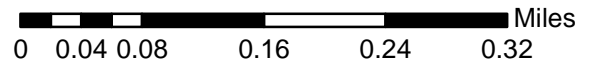
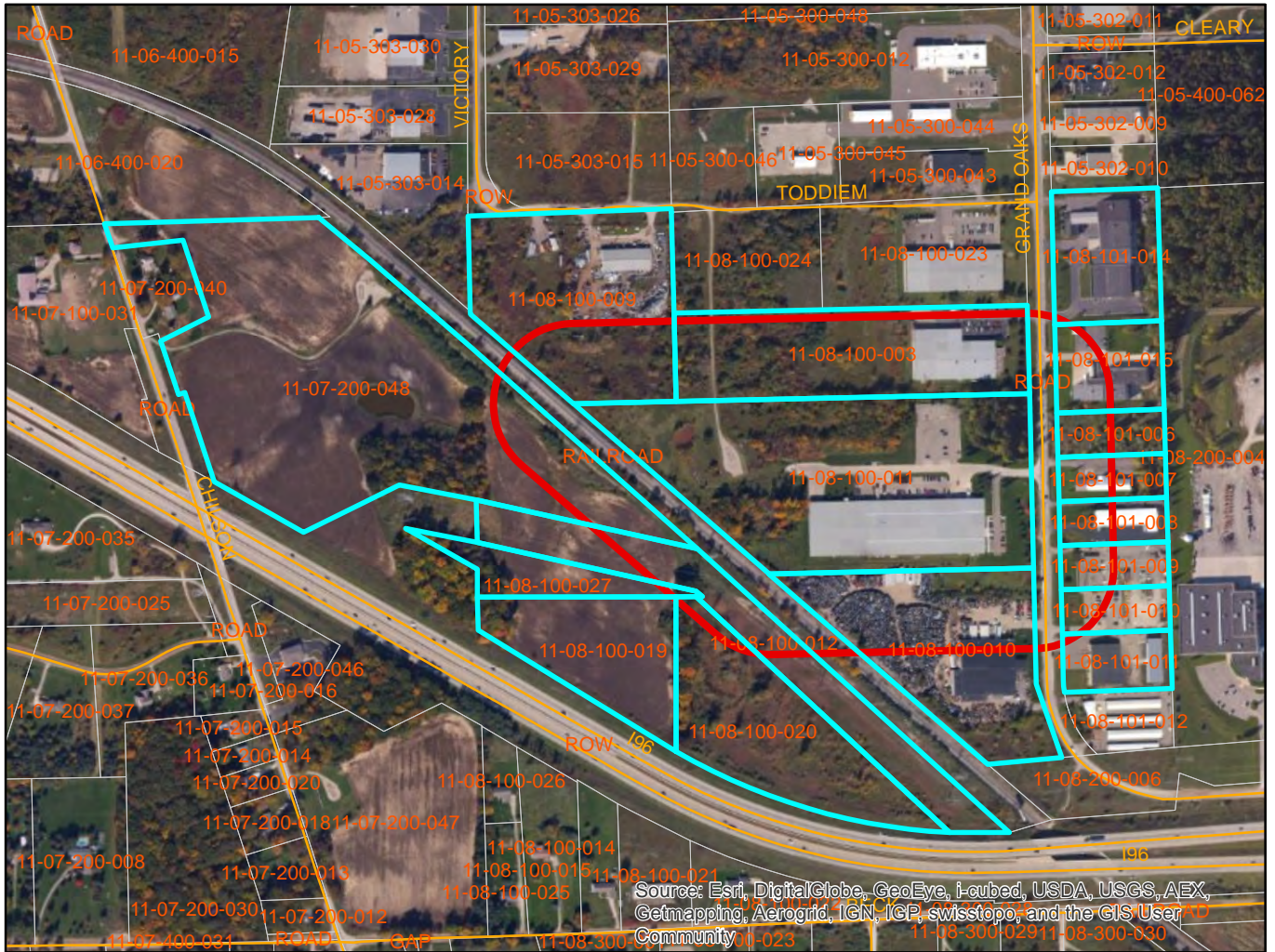
Additional comments will be given during the building plan review process (specific to the building plans and occupancy). If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

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

Rick Boisvert
Captain – Fire Inspector

300 Ft Buffer for Noticing



July 22, 2013

Michigan Rod Addition

Applicant: John Asselin

Parcel: 11-08-100-011

Meeting Date: August 12, 2013



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

July 26, 2013

To Whom It May Concern:

There will be a hearing for a Special Land Use Permit in your general vicinity on Monday, August 12 at 6:30 p.m. at Genoa Township Hall, located at 2911 Dorr Road, Brighton, Michigan.

The property in question is located at 1326 Grand Oaks Drive, Howell MI 48843. The Special Land Use has been requested for outdoor storage and a 22,000 square foot building addition. The request is petitioned by Michigan Rod Products, Inc.

Materials relating to this request are available for public inspection at the Genoa Township Hall during regular business hours. If you have any questions or objections in this regard, please be present at the public hearing noted above. Written comments may be addressed to the Planning Commission.

Sincerely,

Kelly VanMarter
Assistant Township Manager / Community Development Director
KKV/kp

SUPERVISOR
Gary T. McCririe

CLERK
Paulette A. Skolarus

TREASURER
Robin L. Hunt

MANAGER
Michael C. Archinal

TRUSTEES
H. James Mortensen
Jean W. Ledford
Todd W. Smith
Linda Rowell

**IMPACT ASSESSMENT
MICHIGAN ROD PRODCUTS
August 26, 2013**

INTRODUCTION

The proposed development is a 81'-6" x 275' addition to the North side of the existing 200' x 642' manufacturing facility of Michigan Rod Products at 1326 Grand Oaks Drive. Potential areas of concern are noted along with the proposed methods of addressing each item. The format conforms to the impact assessment requirements as outlined in Section 18.07 of the published Zoning Ordinance for Genoa Township.

DISCUSSION ITEMS

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

Prepared by:
Asselin Associates Architects
Commercial/Industrial Architecture
4488 West Bristol Road
Flint, Michigan 48507
(810) 230-9311
(810) 230-2831 Fax

Prepared for:
Michigan Rod Products
1326 Grand Oaks Drive
Howell, Michigan 48843

B. Location: Description/analysis of the project site including all existing structures, manmade facilities, natural features, and areas within 100 feet of the property.

The site is located on the west side of Grand Oaks Drive (100 feet R.O.W.) approximately 2,000 feet south of Grand River Avenue, in the Southwest ¼ of Section 5, T2N-R5E, Genoa Township, Livingston County, Michigan. The approximate gross area of the parcel is 20 acres. The site slopes generally from the Southeast toward the Northwest. The site ultimately drains toward the Northwest, and thence West into an unnamed drain that flows to the West for approximately 1.5 miles into the Marion and Genoa drain. A 74,326 cubic foot detention basin was designed in a previous project in the northwest corner of the site, however investigation indicates that the basin is undersized and needs to be increased in storage volume. A site plan has been prepared which provides a more detailed description of the site. There is significant existing vegetation on the site and is shown on the Site Plan. All significant vegetation lies outside the

construction boundary. It is intended to have little grading done on the site except in the building footprint, revised detention basin and a drive extension to serve the addition. All of the surrounding property is part of the Grand Oaks Industrial Park and is zoned Industrial (IND).

C. Impact on Natural Features: Description of the environmental characteristics of the site prior to development and following development, i.e., topography, soils, geology, wildlife, woodlands, mature trees (eight inch caliper or greater), ground water (depth to aquifer(s), impermeable soil layers and identification of nearby wells), wetlands, drainage, lakes, streams, creeks, ponds, and surface and ground water quality.

As shown on the Site Plan, there will be little or no impact on the vegetation. The topography will be raised at the footprint of the building. After a short, smooth transition from the building, the existing topography will remain as presently existing.

D. Impact on Stormwater Management: Description of natural drainage patterns, soil infiltration, water capacity, changes to site drainage, stormwater management facilities to be installed, measures to control soil erosion and sedimentation during grading, construction operations, and until a permanent ground cover is established.

There will be a minimal increase of impervious surface of 6,059 square feet for this addition which will result in a marginal increase of the weighted runoff coefficient (Cw) from 0.38 to 0.39. The existing detention basin was surveyed and found to be smaller than originally designed. It will be expanded to meet the current LCDC requirements.

Surface runoff during periods of construction will be controlled by proper methods set by the Livingston County Soil Erosion Control and Drain Commissioner, including silt fence, pea stone filters, seed, and mulch.

E. Impact on Surrounding Land Uses: Description of the types of proposed uses and other manmade facilities, including any project phasing and hours of operation. Description and control of light, noise or air pollution.

The applicant is proposing to construct a 22,413 square foot building addition. The site is located in the Industrial District (IND). The proposed use is compatible with surrounding zonings, as the site is located in an industrial park and is surrounded by Industrial zoning and uses. The expected impact due to construction of the building and circulation drives will be minimized because of the following:

1. There are no woodlands or other significant features on the site to be disturbed to facilitate construction of the site improvements. The existing

detention basin is to be expanded to meet the requirements of the Livingston County Drain Commission and detain the amount of water generated by a 100 year storm (80,487 cu ft).

2. The site plan was prepared taking into account existing topography to minimize the amount of earthwork required for the building and parking areas. Filling is required to establish appropriate foundation elevations in the existing building. Current, well-developed landscaping to remain and is in accordance with Genoa Township standards.
3. Soil erosion control measures such as silt fence, straw bale filters, and pea stone filters at catch basins will be utilized during construction to control siltation and sedimentation from entering the detention areas.
4. A dumpster has been provided on site that will be screened using an eight (8) foot masonry enclosure.
5. Outdoor storage of steel coils screened by existing, well-developed vegetation.

There is no significant noise or air pollutant increases anticipated for the proposed use on this site. The only pollution and noise will come from car and truck traffic into and out of the site, which will be minimal for an industrial storage use such as this. No additional site lighting is proposed except for two new wall mounted egress light fixtures that will be directed downward.

F. Impact on Public Facilities and Services: Describe the number of expected residents, employees, visitors or patrons, and the anticipated impact on public schools, recreation facilities, police protection, fire protection and emergency services.

The facility is anticipated to employ the same number of people as existing.

G. Impact on Public Utilities: Describe the method to be used to serve the development with water and sanitary sewer facilities, control drainage on the site - including runoff control during periods of construction, and solid waste disposal. Expected sewage rates shall be provided in equivalents to a single family home. Other utilities serving the site shall be identified.

No additional service requirements are proposed for this parcel. Water service is provided via connection to a 12" DI extension of the watermain currently within the Grand Oaks Drive right-of-way. Sanitary sewer will not be used in the proposed addition. Storm water runoff from the proposed onsite detention basin will be restricted to an agricultural runoff rate from all developed areas. Underground gas, electric, and telephone are also available.

H. Storage and Handling of Any Hazardous Materials: Description of any hazardous substances expected to be used, stored or disposed of on the site including type of materials, location within the site and method of containment.

No hazardous materials will be used, stored, or disposed of on-site.

I. Impact on Traffic and Pedestrians: Description of the traffic volumes to be generated and impact on area.

The impact on traffic and pedestrians from this use will be minimal due to the location and nature of the use. The site is located within an industrial park, which will not be a primary location for pedestrian traffic. The use of automobile storage will constitute a minimal amount of additional vehicular traffic for the area on a daily basis.

No new access to Grand Oaks Drive is needed.

J. Historic and Cultural Resources

Not applicable.

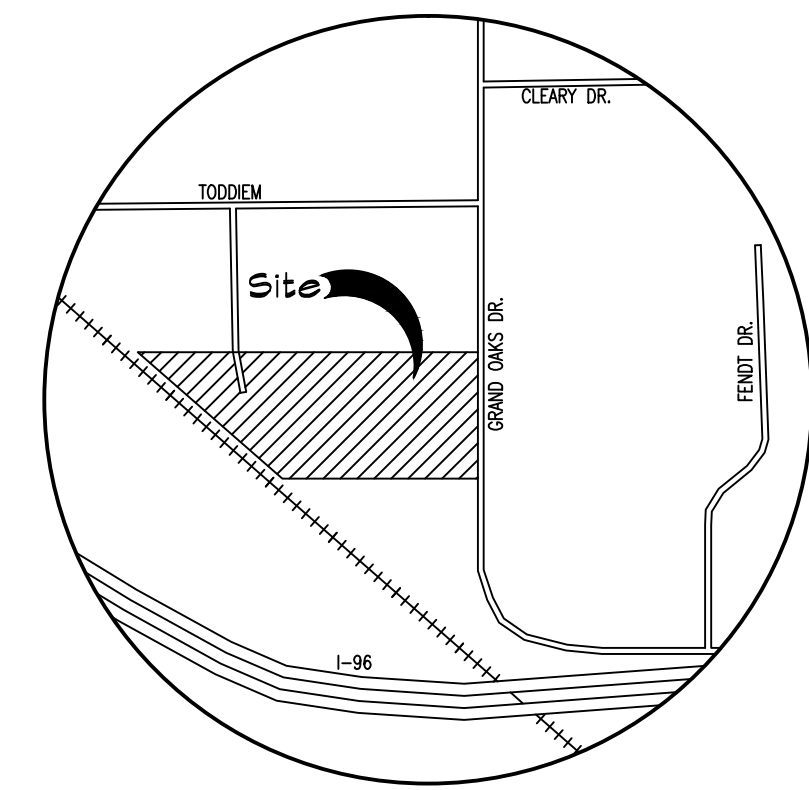
K. Special provisions: Description of any deed restrictions, protective covenants, master deed, or association bylaws.

None. Current easements for a gas well on the Northwest side of the property will remain.

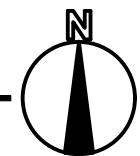
Proposed Addition for:

Michigan Rod Products

1326 Grand Oaks drive, Genoa Township, Livingston Co. MI



LOCATION MAP
SCALE: N.T.S.



LEGAL DESCRIPTION

SEC 8 T2N R5E, COMM N 1/4 COR, TH S 87°12'58"W 496.99 FT, TH S 02° 06'23"E 739.81 FT TO POB, TH S 02°06'23"E 650.12 FT, TH S 88°02' 55"W 989 FT, TH N 49°45'12"W 967.88 FT, TH N 89°08'E 1702.61 FT TO POB 20 AC M/L 1984 SPLIT FR 001

CONTRACTOR

**Rhoads &
Johnson**
CONSTRUCTION COMPANY

ARCHITECT
John L. Asselin, Jr.



**ASSELIN
ASSOCIATES
ARCHITECTS**

4488 West Bristol Road
Flint, Michigan 48507
Phone: (810) 230-9311
Fax: (810) 230-2831

Revised For Site Plan Review 08-26-13

Schedule of Drawings

	Sheet Name	Revision Date
	COVER SHEET	08-26-13
C1.1	OVERALL EXISTING SITE PLAN	08-26-13
C1.2	ENLARGED SITE DEMOLITION PLAN	08-26-13
C1.3	ENLARGED SITE PLAN	08-26-13
C1.4	ENLARGED GRADING PLAN	08-26-13
C1.5	FORE SAFETY SITE PLAN	08-26-13
1 of 2	DETENTION BASIN DESIGN	08-23-13
2 of 2	DETENTION BASIN CALCULATIONS	08-20-13
E1.1	PHOTOMETRIC LAYOUT	08-26-13
A1.1	FLOOR PLAN & ELEVATIONS	08-26-13



ASSELIN ASSOCIATES ARCHITECTS

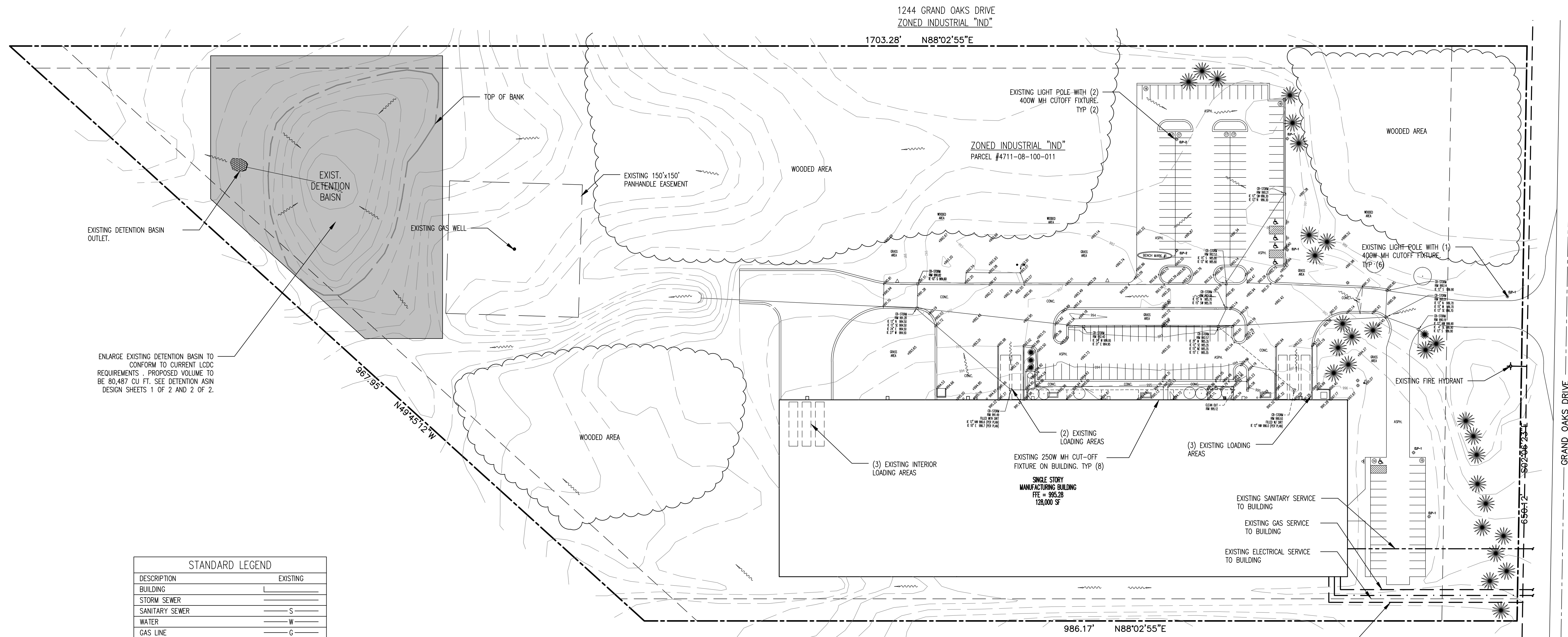
4488 W. BRISTOL ROAD
FLINT, MICHIGAN 48507
PHONE: (810) 230-4311
FAX: (810) 230-2831

Rhoads & Johnson
CONSTRUCTION COMPANY

Existing Site Plan

Proposed Addition for:
Michigan Rod products
1526 Grand Oaks Drive, Genoa Township, Livingston Co. MI

drawn by: JJA
date: 06-18-13
job number: 1303
approved by: JJA
revisions:
07-10-13
07-30-13
08-26-13
sheet: C.1
of: 51

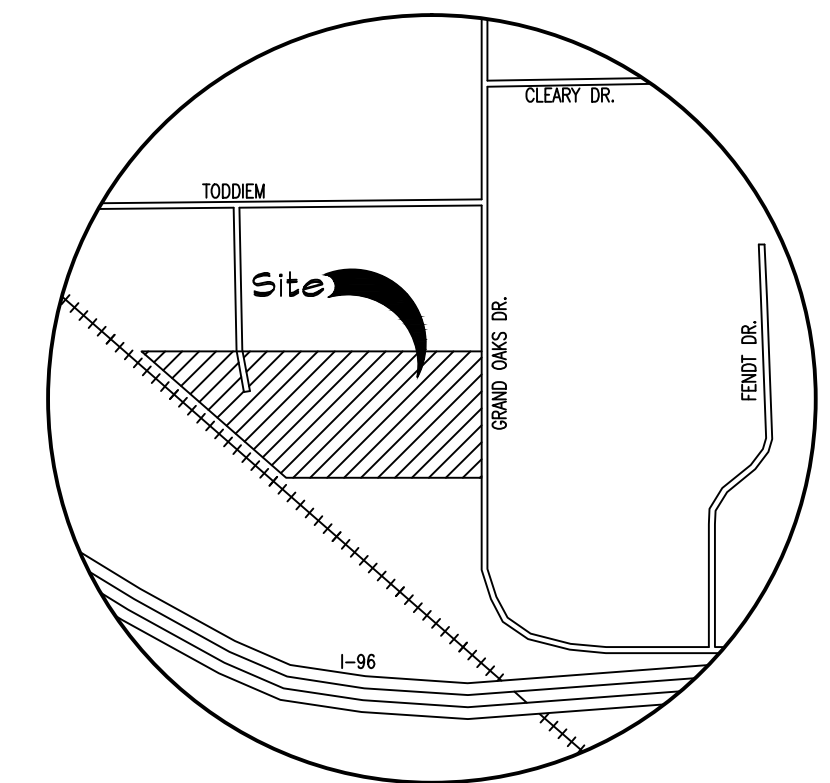


ENLARGE EXISTING DETENTION BASIN TO CONFORM TO CURRENT LDC REQUIREMENTS. PROPOSED VOLUME TO BE 80,487 CU. FT. SEE DETENTION BASIN DESIGN SHEETS 1 OF 2 AND 2 OF 2.

STANDARD LEGEND	
DESCRIPTION	EXISTING
BUILDING	—
STORM SEWER	—
SANITARY SEWER	S
WATER	W
GAS LINE	G
ELECTRIC LINE	E
TELEPHONE LINE	T
MANHOLE	○
CATCH BASIN	□
FIRE HYDRANT	△
VALVE	•
UTILITY POLE W/GUY WIRE	⊕
UTILITY RISER	⊞
LIGHT POLE	✱
SIGN	△
CURB & GUTTER	—
FENCE	—x—x—
GUARD RAIL	—+—+—
INVERT ELEVATION	IE 6" 750.00
CONTOUR	—750—
SPOT ELEVATION	+750.00
ASPHALT SURFACE	▬
CONCRETE SURFACE	▬
GRAVEL SURFACE	▬ GRAY
TREE LINE	—
TREE	+

LEGAL DESCRIPTION
SEC 8 T2N R5E, COMM N 1/4 COR, TH S 87°12'58"W 496.99 FT, TH S 02° 06'23"E 739.81 FT TO POB, TH S 02°06'23"E 650.12 FT, TH S 88°02' 55"W 989 FT, TH N 49°45'12"W 967.88 FT, TH N 89°08'E 1702.61 FT TO POB 20 AC M/L 1984 SPLIT FR 001

EXISTING SITE PLAN
SCALE: 1" = 60'-0"



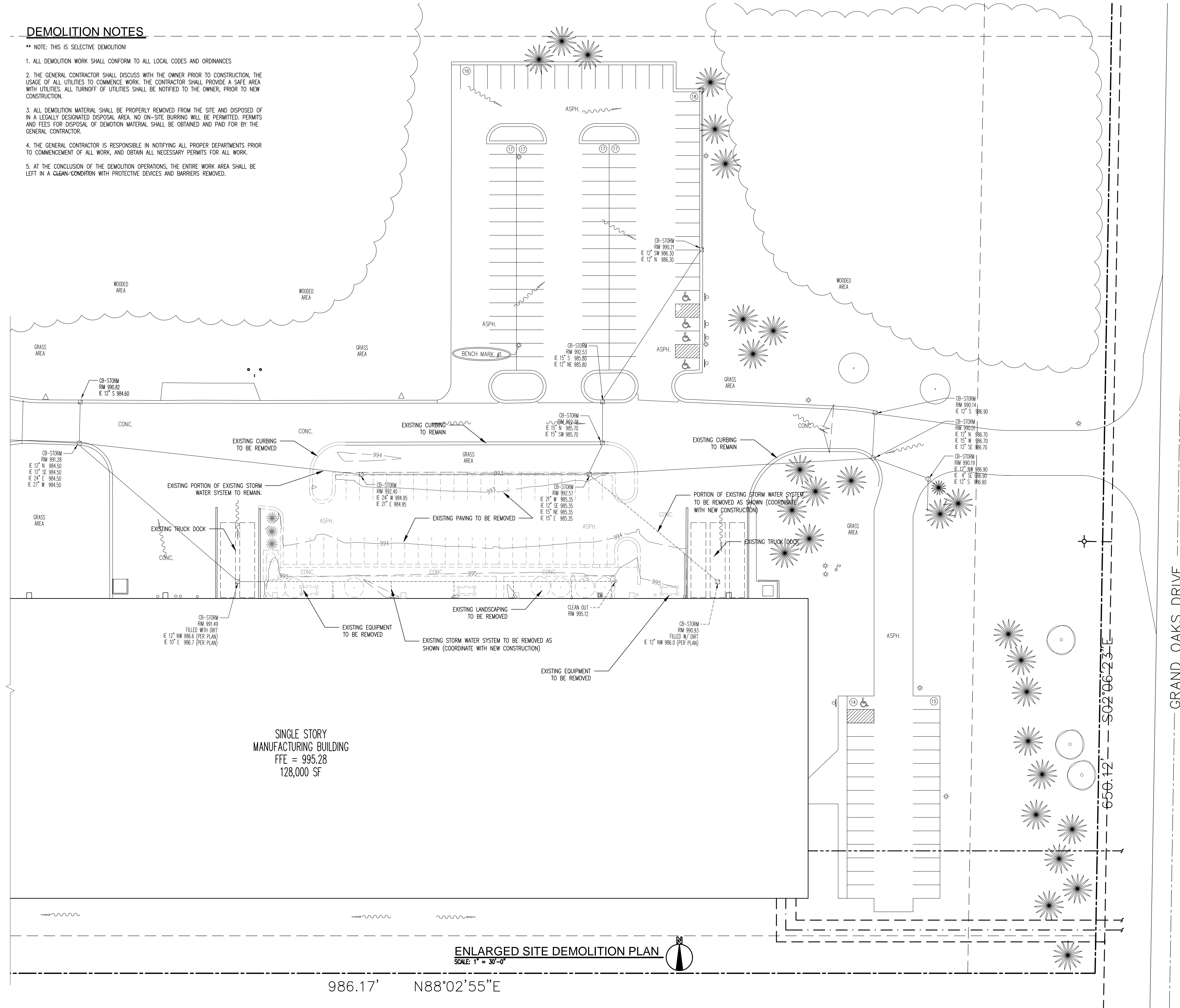
LOCATION MAP
SCALE: N.T.S.



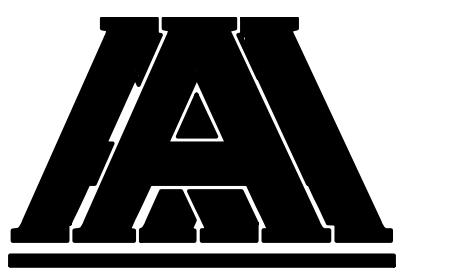
DEMOLITION NOTES

** NOTE: THIS IS SELECTIVE DEMOLITION!

1. ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES
2. THE GENERAL CONTRACTOR SHALL DISCUSS WITH THE OWNER PRIOR TO CONSTRUCTION, THE USAGE OF ALL UTILITIES TO COMMENCE WORK. THE CONTRACTOR SHALL PROVIDE A SAFE AREA WITH UTILITIES. ALL TUNNOFF OF UTILITIES SHALL BE NOTIFIED TO THE OWNER, PRIOR TO NEW CONSTRUCTION.
3. ALL DEMOLITION MATERIAL SHALL BE PROPERLY REMOVED FROM THE SITE AND DISPOSED OF IN A LEGALLY DESIGNATED DISPOSAL AREA. NO ON-SITE BURRING WILL BE PERMITTED. PERMITS AND FEES FOR DISPOSAL OF DEMOTION MATERIAL SHALL BE OBTAINED AND PAID FOR BY THE GENERAL CONTRACTOR.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE IN NOTIFYING ALL PROPER DEPARTMENTS PRIOR TO COMMENCEMENT OF ALL WORK, AND OBTAIN ALL NECESSARY PERMITS FOR ALL WORK.
5. AT THE CONCLUSION OF THE DEMOLITION OPERATIONS, THE ENTIRE WORK AREA SHALL BE LEFT IN A CLEAN CONDITION WITH PROTECTIVE DEVICES AND BARRIERS REMOVED.



ENLARGED SITE DEMOLITION PLAN
SCALE: 1" = 30'-0"

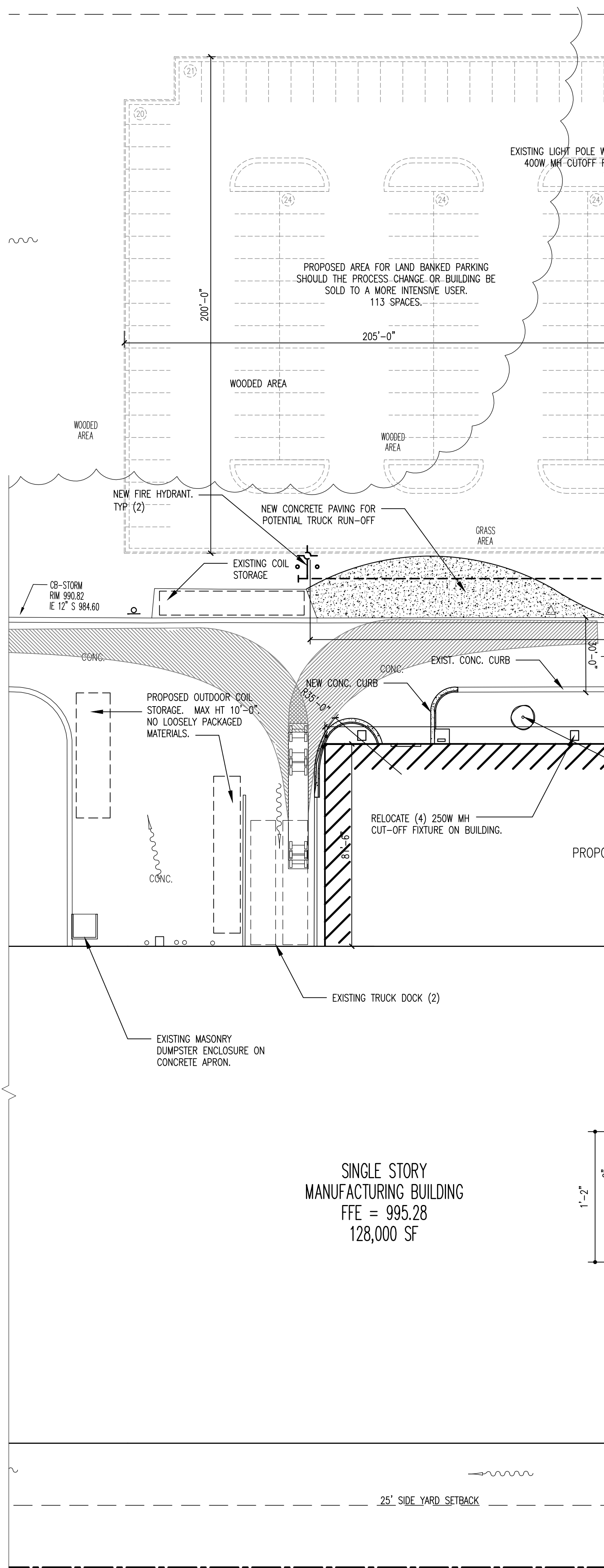
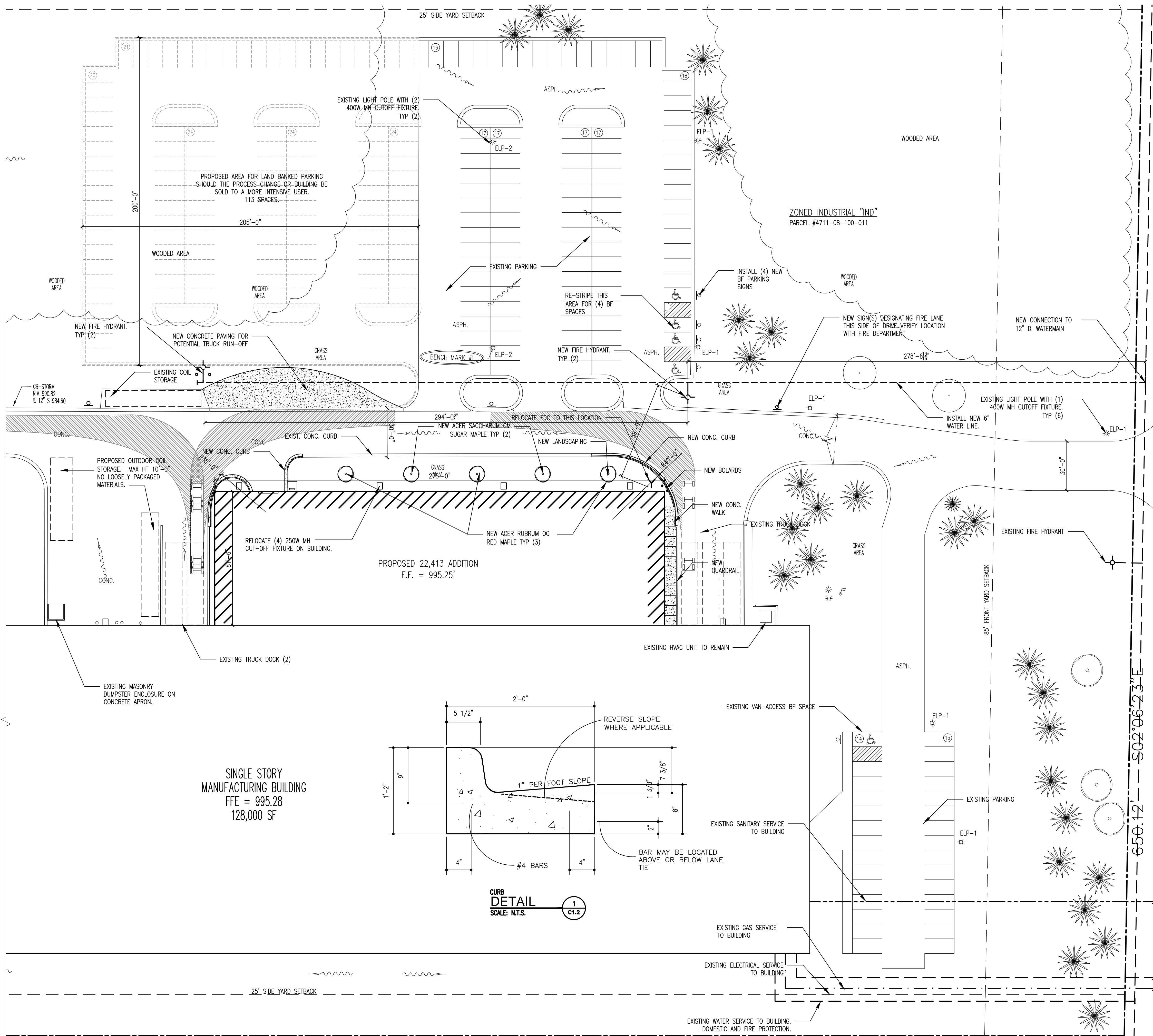


ASSELEIN ASSOCIATES ARCHITECTS
4488 W. BRISTOL ROAD
FLINT, MICHIGAN 48507
PHONE: (810) 230-4311
FAX: (810) 230-2831

Rhoads & Johnson CONSTRUCTION COMPANY
Overall Site Plan

Proposed Addition for:
Michigan Rod products
1526 Grand Oaks drive, Genoa Township, Livingston Co. MI

drawn by: JJA
date: 06-18-13
job number: 1303
approved by: JJA
revisions:
07-10-13
07-30-13
08-26-13
sheet: C1.2
of: 5

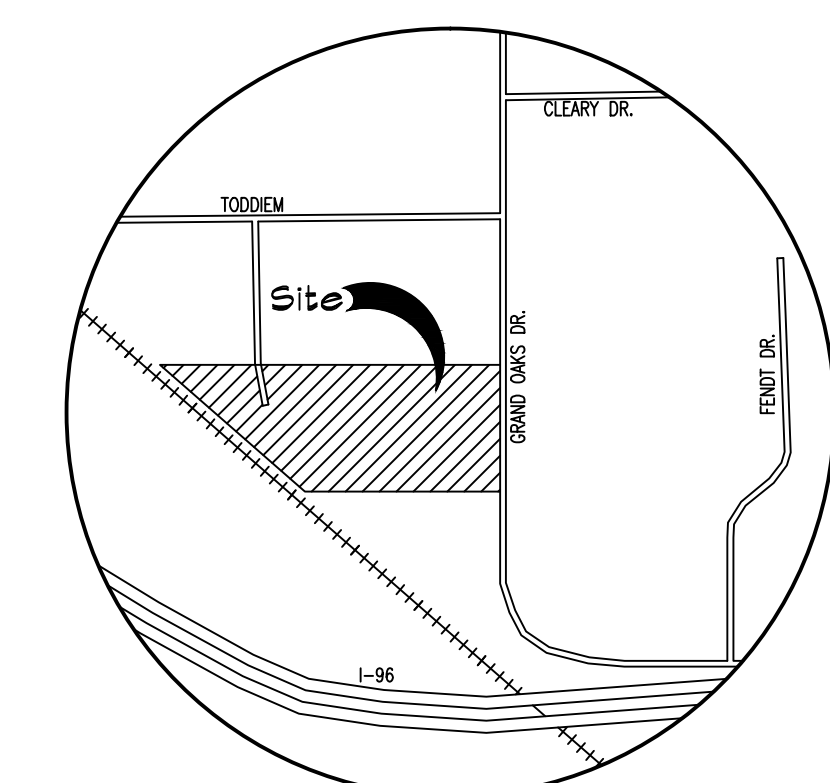


SINGLE STORY
MANUFACTURING BUILDING
FFE = 995.28
128,000 SF

PROPOSED 22,413 ADDITION
F.F. = 995.25'

986.17' N88°02'55"E 1480 GRAND OAKS DRIVE ZONED INDUSTRIAL "IND"

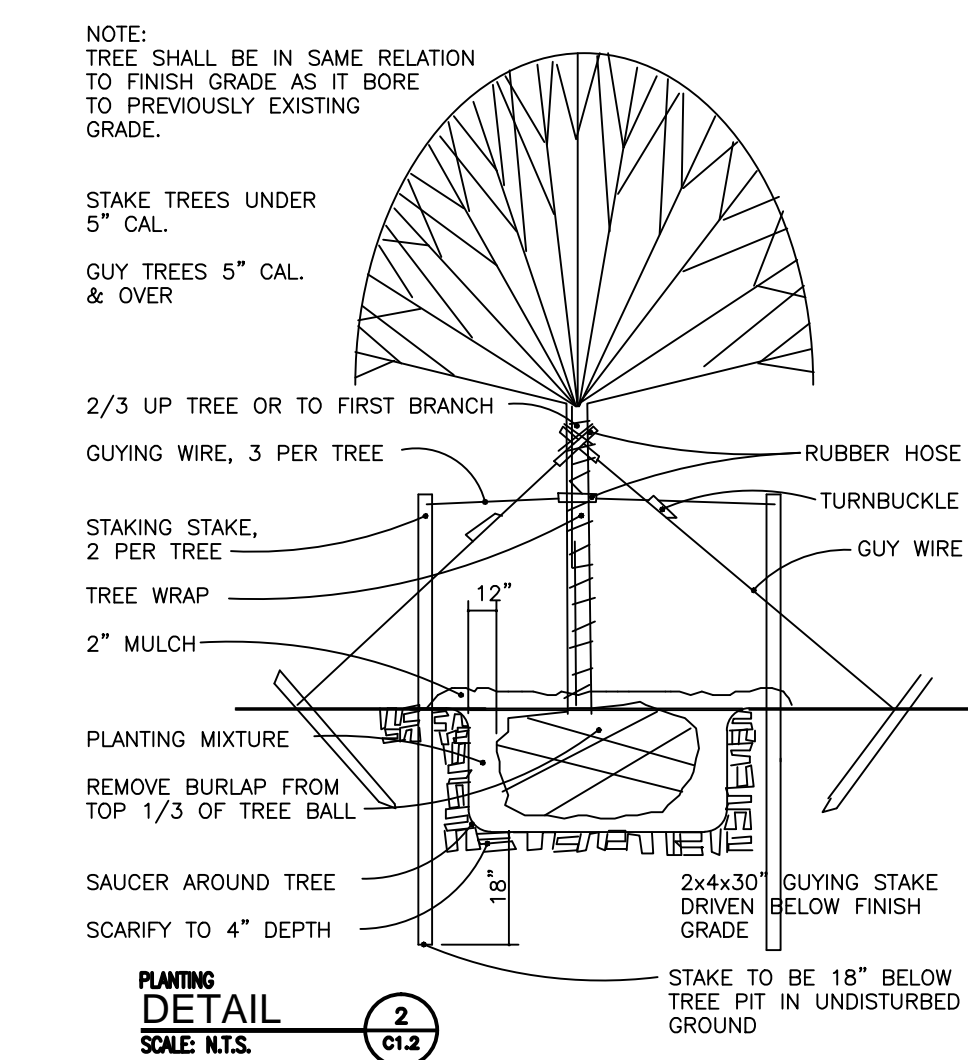
ENLARGED SITE PLAN
SCALE: 1" = 30'-0"



LOCATION MAP
SCALE: N.T.S.

LEGAL DESCRIPTION

SEC 8 T2N R5E, COMM N 1/4 COR, TH S 87°12'58"W 496.99 FT, TH S 02° 06'23"E 739.81 FT TO POB, TH S 02°06'23"E 650.12 FT, TH S 88°02' 55"W 989 FT, TH N 49°45'12"W 967.86 FT, TH N 89°08'E 1702.61 FT TO POB 20 AC M/L 1984 SPLIT FR 001



PLANTING DETAIL
SCALE: N.T.S.

GENERAL NOTES

- DO NOT SCALE DRAWINGS!!! ALL NECESSITY DIMENSIONS ARE GIVEN. SHOULD ANY QUESTIONS ARISE REGARDING DIMENSIONS THEY SHOULD BE DIRECTED TO THE ATTENTION OF THE ARCHITECT
- ALL SITE INFORMATION WAS TAKEN FROM AN ARCHITECTURAL SURVEY
- ALL WORK TO BE DONE ACCORDING TO ALL APPLICABLE CODES AND ORDINANCES AS WELL AS THE BEST PRACTICE AND STANDARDS OF THE TRADE. ALL SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING PROPER PERMITS AND PAYING ALL APPLICABLE FEES.
- WATER SERVICE IS EXISTING TO REMAIN
- SANITARY SERVICE IS EXISTING TO REMAIN
- AREA OF PARCEL: 20.06 ACRES
- BUILDING AREA:
EXISTING OFFICE = 8,000 S.F.
EXISTING MANUFACTURING = 120,000 S.F.
PROPOSED MANUFACTURING = 22,413 S.F.
TOTAL BUILDING AREA = 150,413 S.F.
- EXISTING LAND USE: LIGHT MANUFACTURING
PROPOSED LAND USE: LIGHT MANUFACTURING
- PARKING:
1.5 SPACE PER 1000 G.S.F. (IND)(215) + 1/300 OFFICE (27)
PARKING REQUIRED = 242 SPACES (PER ORDINANCE)
EXISTING PARKING PROVIDED = 131 SPACES
TOTAL EMPLOYEE COUNT = 75 ((46) 1ST SHFT, (27) 2ND SHFT AND (2) 3RD SHFT). TO MINIMIZE WATER RUNOFF LAND BANKING OF UNNECESSARY PAVING IS PROPOSED.
LAND BANKED SPACES PROVIDED = 113
TOTAL PARKING SPACES SHOWN = 244
- LOT COVERAGE
BUILDING COVERAGE ALLOWED = 40%
BUILDING COVERAGE PROVIDED = 17%
IMPERVIOUS COVERAGE ALLOWED = 85%
BUILDING COVERAGE PROVIDED = 29%
- BUILDING HEIGHT
HEIGHT ALLOWED = 30',
HEIGHT PROVIDED = 22'
- ADDITIONAL PAVEMENT/IMPERVIOUS = 6,059± S.F. (2.6% INCREASE)
- SITE ARE ZONED: INDUSTRIAL "IND"
- ALL LANDSCAPE AND GREEN BELTS ARE EXISTING TO REMAIN
- NO NEW SIGNAGE OTHER THAN THE REQUIRED BUILDING ADDRESS AND FIRE LANE SIGNS ARE PROPOSED AS PART OF THIS PROJECT

ASSELIN ASSOCIATES ARCHITECTS
4488 W. BRISTOL ROAD
FLINT, MICHIGAN 48507
PHONE: (810) 230-4311
FAX: (810) 230-2831

Rhoads & Johnson CONSTRUCTION COMPANY
Enlarged Site Plan

Proposed Addition for:
Michigan Rod products
1526 Grand Oaks drive, Genoa Township, Livingston Co. MI

drawn by: JJA
date: 06-18-13
job number: 1303
approved by: JJA
revisions:
07-10-13
07-30-13
08-13-13
08-26-13
sheet: C1.3
of: 5



ASSELIN ASSOCIATES ARCHITECTS

4488 W. BRISTOL ROAD
FLINT, MICHIGAN 48507
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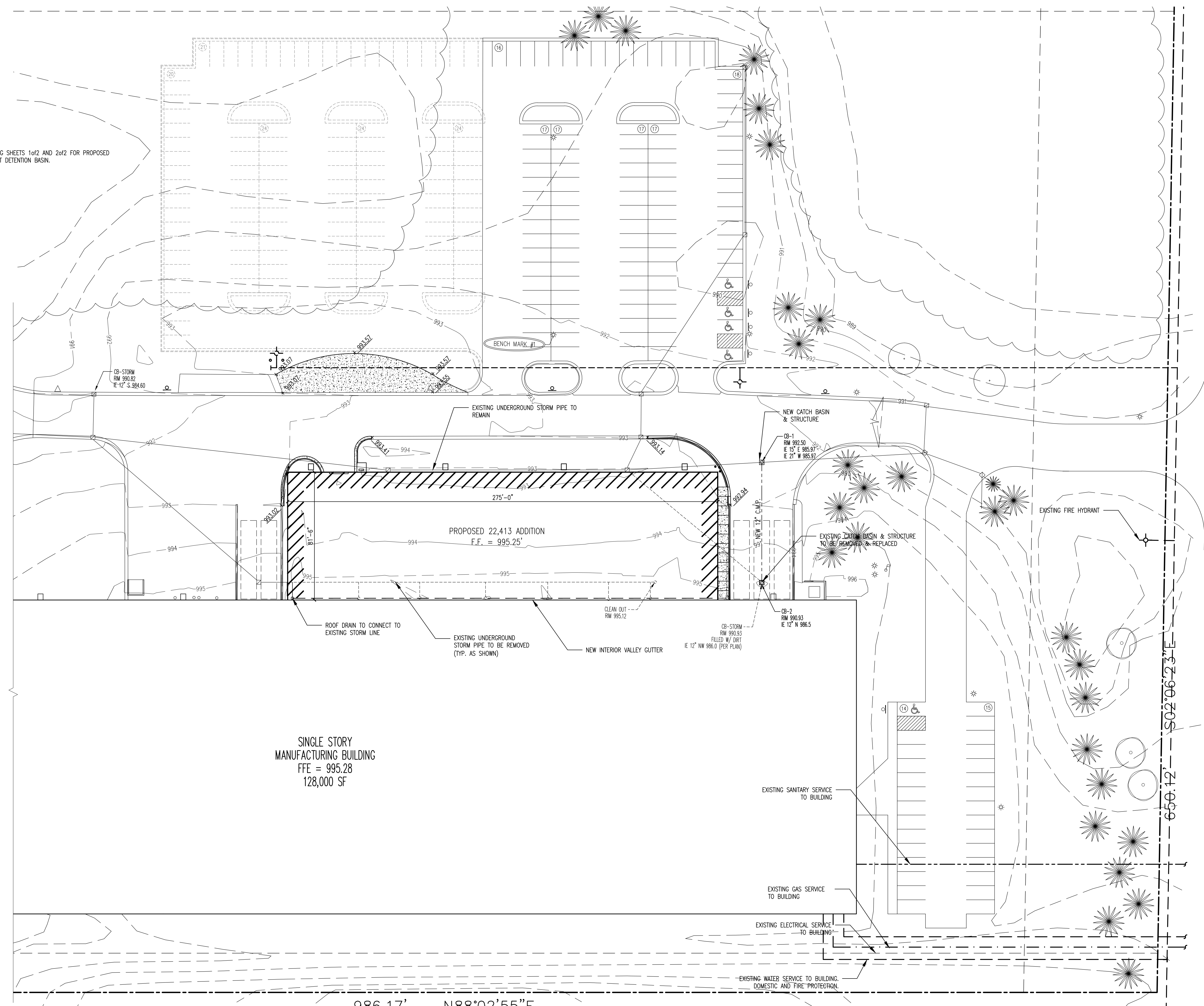
Rhoads & Johnson
Johnson
CONSTRUCTION COMPANY

Enlarged Grading Plan

Proposed Addition for:
Michigan Rod products
1526 Grand Oaks drive, Genoa Township, Livingston Co. MI

drawn by: RLE
date: 06-18-13
job number: 1303
approved by: JLA
revisions:
07-10-13
07-30-13
08-26-13
sheet: C.4
of: 5

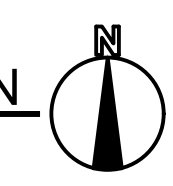
SEE ENGINEERING SHEETS 1of2 AND 2of2 FOR PROPOSED NEW GRADING AT DETENTION BASIN.



SINGLE STORY
MANUFACTURING BUILDING
FFE = 995.28
128,000 SF

986.17' N88°02'55"E

ENLARGED GRADING PLAN
SCALE: 1" = 30'-0"



GRAND OAKS DRIVE

650.12' S02°06'23"E



ASSELIN ASSOCIATES ARCHITECTS

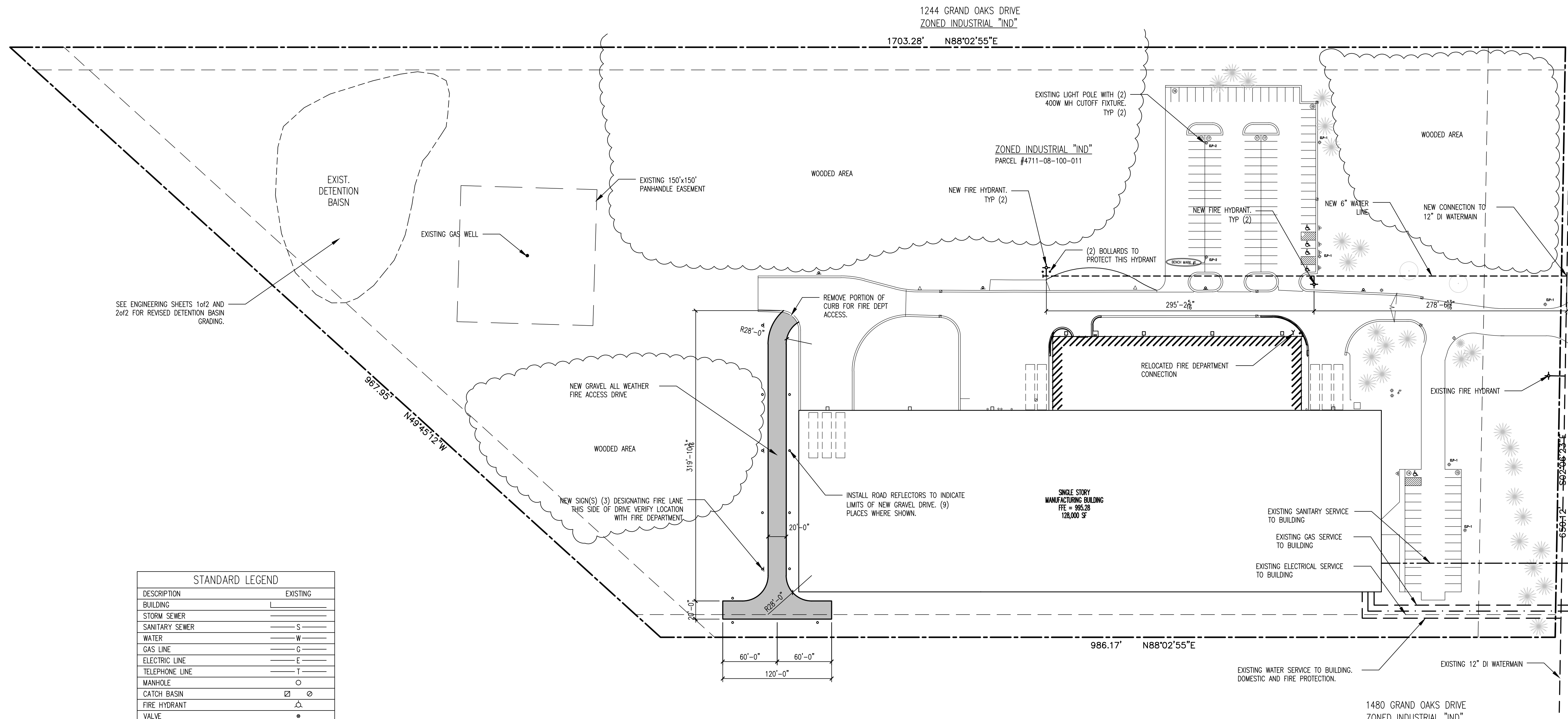
4488 W. BRISTOL ROAD
FLINT, MICHIGAN 48507
PHONE: (810) 230-4311
FAX: (810) 230-2831

Rhoads & Johnson
CONSTRUCTION COMPANY

Fire Site Plan

Proposed Addition for:
Michigan Rod products
1526 Grand Oaks drive, Genoa Township, Livingston Co. MI

drawn by: JJA
date: 08-19-13
job number: 1303
approved by: JJA
revisions: 08-26-13
sheet: C/5
of: 5

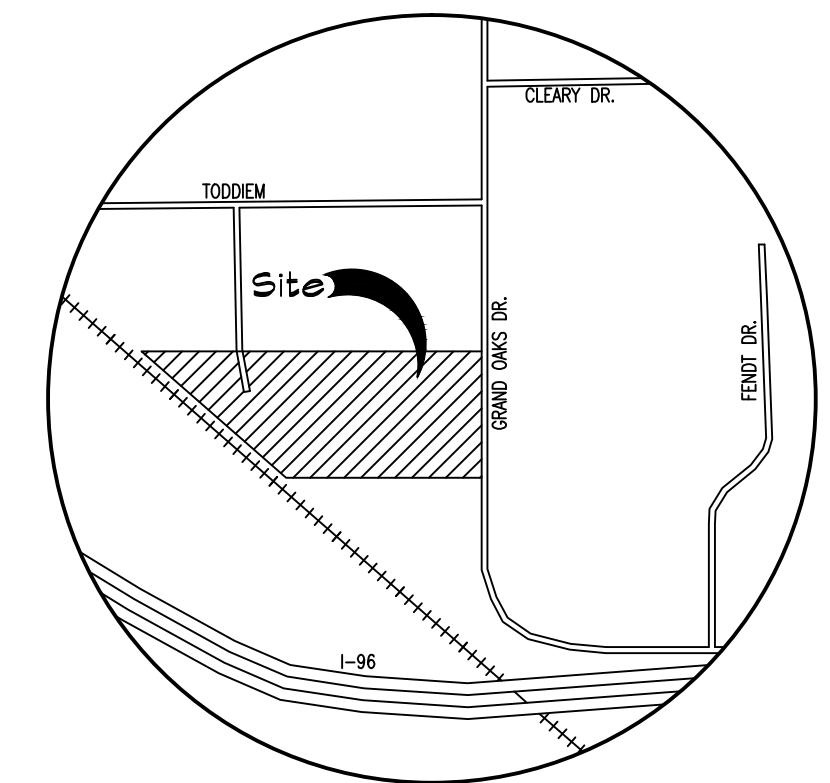


SEE ENGINEERING SHEETS 1a/2 AND 2a/2 FOR REVISED DETENTION BASIN GRADING.

STANDARD LEGEND	
DESCRIPTION	EXISTING
BUILDING	—
STORM SEWER	—
SANITARY SEWER	S
WATER	W
GAS LINE	G
ELECTRIC LINE	E
TELEPHONE LINE	T
MANHOLE	○
CATCH BASIN	⊠
FIRE HYDRANT	⊠
VALVE	•
UTILITY POLE W/GUY WIRE	⊠
UTILITY RISER	⊠
LIGHT POLE	⊠
SIGN	⊠
CURB & GUTTER	—
FENCE	—
GUARD RAIL	—
INVERT ELEVATION	IE 6" 750.00
CONTOUR	— 750
SPOT ELEVATION	+ 750.00
ASPHALT SURFACE	—
CONCRETE SURFACE	—
GRAVEL SURFACE	— GRAY
TREE LINE	—
TREE	+

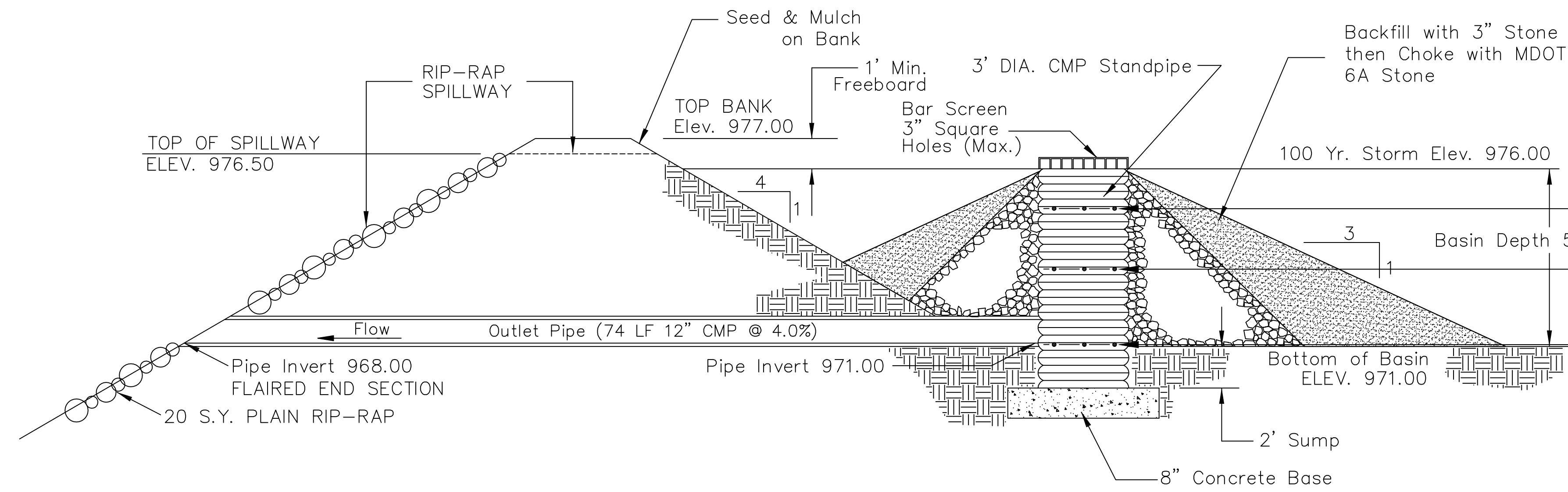
FIRE SITE PLAN
SCALE: 1" = 60'-0"

LEGAL DESCRIPTION
SEC 8 T2N R5E, COMM N 1/4 COR, TH S 87°12'58"W 496.99 FT, TH S 02° 06'23"E 739.81 FT TO POB, TH S 02°06'23"E 650.12 FT, TH S 88°02' 55"W 989 FT, TH N 49°45'12"W 967.88 FT, TH N 89°08'E 1702.61 FT TO POB 20 AC M/L 1984 SPLIT FR 001



LOCATION MAP
SCALE: N.T.S.





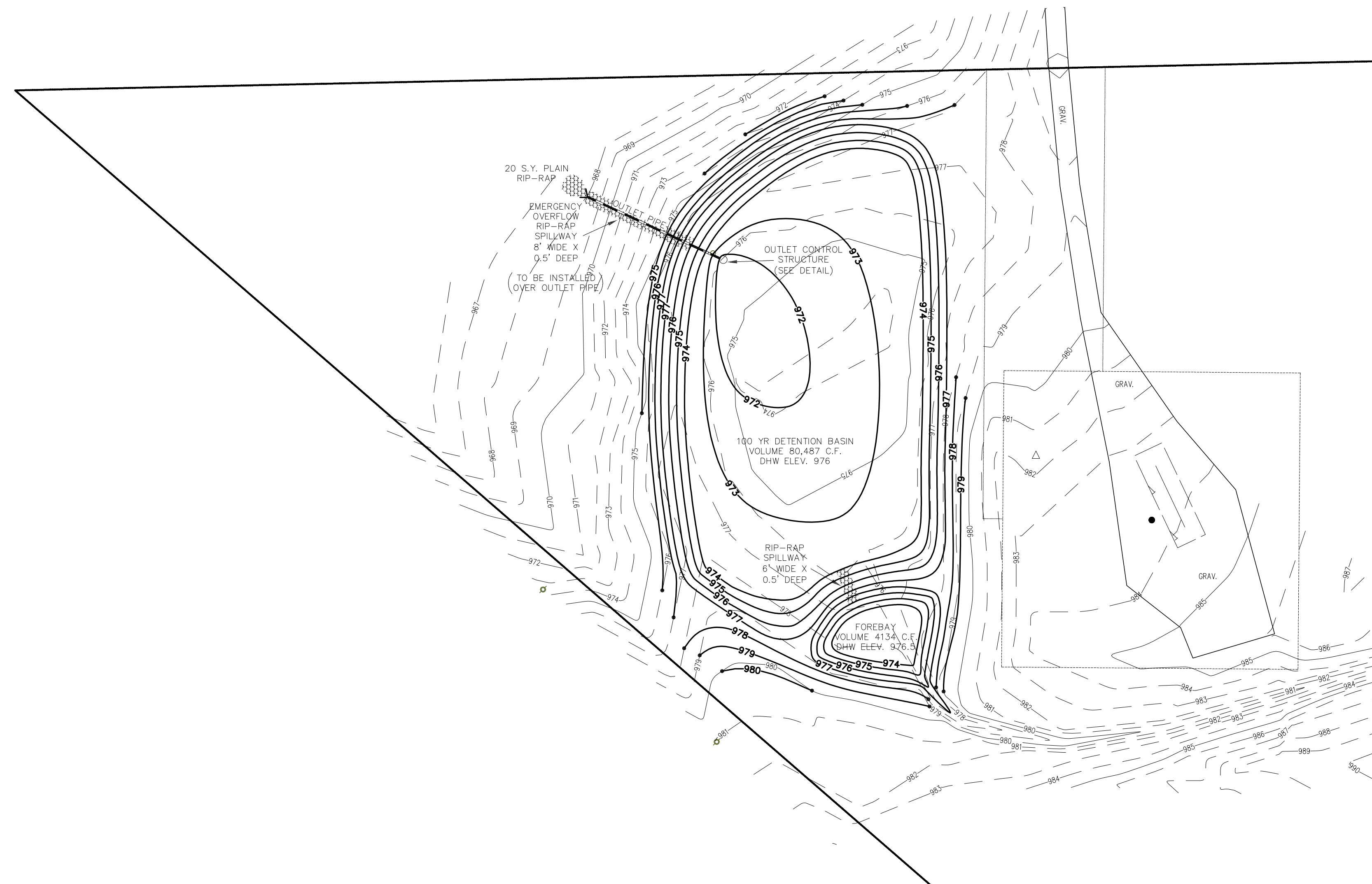
Place TWENTYSIX 2" Dia. Holes around Periphery of Standpipe at Elev. 974.55

Place SEVEN 1" Dia. Holes around Periphery of Standpipe at Elev. 973.02

Place FOUR 1" Dia. Holes around Periphery of Standpipe at Elev. 971.00

NOTE:
Extreme Care must be exercised to insure that the holes in the Standpipe do not become clogged with Sediment.

OUTLET CONTROL STRUCTURE DETAIL
NTS



DETENTION BASIN PLAN VIEW
1" = 40'

[Signature]

STATE OF MICHIGAN
JOSEPH A. WIZYNAJTY
ENGINEER
No. 21585
LICENSED PROFESSIONAL SURVEYOR

REC ENGINEERS
REAL ESTATE CONSULTING ENGINEERS, INC.
16509 BELFAST FENTON, MICHIGAN 48430
(810) 869-0194 OR (810) 845-5364

CLIENT
ASSELIN ASSOCIATES
4488 W. BRISTOL ROAD
FLINT, MI 48507
(810) 230-9311

DATE:	8/20/13
DESIGNED BY:	MJW
CHECKED BY:	JAW
DRAWN BY:	MJW
CREW CHIEF:	N/A

72 HOURS BEFORE YOU DIG CALL MISS DIG 800-487-7171 (TOLL FREE)

NO.	REVISIONS	DATE	BY
1	MISC. REY'S PER TWP. ENGINEER REVIEW	8/23/13	MJW

DETENTION BASIN DESIGN
OF
MICHIGAN ROD ADDITION
LIVINGSTON COUNTY MICHIGAN
GENOA TOWNSHIP

**LIVINGSTON COUNTY DETENTION CALCULATIONS
FOR 100 YEAR STORM**

FOR MICHIGAN ROD 8/18/2013

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
5.39	0.9	4.85
0.00	0.7	0.00
14.67	0.2	2.93

WEIGHTED C: 0.39
DRAINAGE AREA: 20.06 ACRES

K1 = Ax C (Design Constant) 7.8234
Qa = MAX ALLOW OUTFLOW (0.20 CFS / ACRE) 4.012 CFS

DURATION (MIN)	DURATION (SEC)	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF x Ax C	OUTFLOW DURATION x Qo	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2750	21514	1204	20311
10	600	7.86	4714	36882	2407	34475
15	900	6.88	6188	48407	3611	44796
20	1200	6.11	7333	57372	4814	52557
30	1800	5.00	9000	70411	7222	63189
60	3600	3.24	11647	91120	14443	76676
90	5400	2.39	12913	101024	21665	79359
120	7200	1.90	13655	106830	28886	77943
180	10800	1.34	14488	113344	43330	70014

REQUIRED 100 YEAR DETENTION VOLUME = 79359 CF

FOREBAY VOLUME

V(F) = 5% OF THE 100-YEAR STORM VOLUME BASED ON THE AREA TRIBUTARY TO THE INLET

V(F) = (.05)(V100)
V(F) = 3968 CF

FOREBAY STORAGE VOLUME REQUIRED: 3968 CF

FOREBAY STORAGE VOLUME PROVIDED:

ELEV	AREA	VOLUME	CUMMULATIVE VOLUME
977	2591	2304	5368
976.5	2304	1080	4134
976	2016	1765	3055
975	1514	1290	1290
974	1065	0	

DESIGN HIGHWATER ELEVATION

BANKFULL FLOOD VOLUME

V_{BF} = 5160 x A x C = 40369 CF

FIRST FLUSH VOLUME

V_{FF} = 1815 x A x C = 14199 CF

BASIN STORAGE PROVIDED

ELEV.	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)
977	33510	1	31,816	112,303
976	30122	1	28,558	80,487
975	26993	1	25,487	51,930
974	23980	1	17,801	26,443
973	11622	1	7,227	8,642
972	2831	1	1,416	1,416
971	0		0	0

FREEBOARD ELEVATION
DESIGN HIGHWATER ELEVATION

BOTTOM OF BASIN = 971.00

FIRST FLUSH X_{FF} = 973.02

BANKFULL X_{BF} = 974.55

100 YEAR X₁₀₀ = 975.96

OUTLET CONTROL STRUCTURE

FIRST FLUSH OF RUNOFF

THE AVERAGE ALLOWABLE RELEASE RATE FOR RUNOFF IS 0.5" OVER AREA OF SITE IN 24 HRS.

Q_{FF} = V_{FF} x (1/24HRS) x (1HR/3600SEC) = 0.164 CFS

PLACE OPENINGS IN STANDPIPE AT BOTTOM OF BASIN = 971.00

HEAD = h_{FF} = X_{FF} - BOTTOM BASIN ELEV = 2.02 FT

A = Q_{FF} / (0.62 x (2 x 32.2 x h_{FF}^{0.5})) = 0.023 FT²

A / 0.0055 = 4.26 INCH DIAMETER ORIFICE HAS AN AREA OF 0.0055 SF

THEREFORE, USE THE FOLLOWING NUMBER OF 1 INCH DIAMETER HOLES

4.00 HOLES, AT ELEV. 971.00

Q_{FF}MAX = 0.242 CFS

BANKFULL FLOOD

FOR THE ALLOWABLE RELEASE RATE OF 24-40 HOURS, CHECK THE DISCHARGE THROUGH THE FIRST FLUSH ORIFICE TO SEE IF ADDITIONAL HOLES ARE NECESSARY.

HEAD = h = X_{BF} - BOTTOM OF BASIN = 3.55 FT

Q_{90.0} = 0.62x #HOLES x (AREA EACH HOLE_{FF}) x (2 x 32.2 x h)^{0.5} = 0.204 CFS

T_{90.0} = (1SEC / Q_{90.0}) x V_{BF} x (1HR / 3600SEC) = 54.86 HRS

BECAUSE THE HOLDING TIME EXCEEDS 40 HRS, ADDITIONAL ORIFICES IN THE STANDPIPE ARE REQUIRED.

VOLUME THROUGH 4 1 INCH DIAMETER HOLES IN 24 HOURS:

V = Q_{90.0} x 24HRS x 3600SEC/HR = 17662 CF

REMAINING VOL. = 22707 CF

Q_{BF} = REMAINING VOLUME x (1 / 24HRS) x (1 / 3600SEC) = 0.263 CFS

PLACE OPENINGS AT FIRST FLUSH ELEVATION = 973.02

HEAD = h_{BF} = X_{BF} - X_{FF} = 1.52 FT

A = Q_{BF} / (0.62 * (2*32.2*h_{BF})^{0.5}) = 0.043 SF

A / 0.0055 = 7.84 INCH DIAMETER ORIFICE HAS AN AREA OF 0.0055 SF

THEREFORE, USE 7 1 INCH DIAMETER HOLES AT ELEV. = 973.02

Q_{BF}MAX = 0.326 CFS

100 YEAR FLOOD

Q_a = ALLOWABLE RELEASE RATE x AREA SITE IN ACRES = 4.012 CFS

Q_a IS A PEAK OR MAXIMUM FLOW. CALCULATE THE MAXIMUM FLOW PASSING THROUGH FIRST FLUSH AND BANKFULL ORIFICES. USING THE TOTAL HEAD, AND SUBTRACT FROM Q_a TO DETERMINE THE ORIFICE SIZE TO RELEASE THE 100 YEAR STORM VOLUME:

Q_{FF}MAX + Q_{BF}MAX = 0.57 CFS

Q_a - (Q_{FF}MAX + Q_{BF}MAX) = 3.44 CFS

A = Q_a / (0.62 * (2 * 32.2 * (X₁₀₀ - X_{BF}))^{0.5}) = 0.582 SF

A / 0.022 = 26.69 INCH DIAMETER ORIFICE HAS AN AREA OF 0.022 SF

THEREFORE, USE THE FOLLOWING NUMBER OF 2 INCH DIAMETER HOLES:

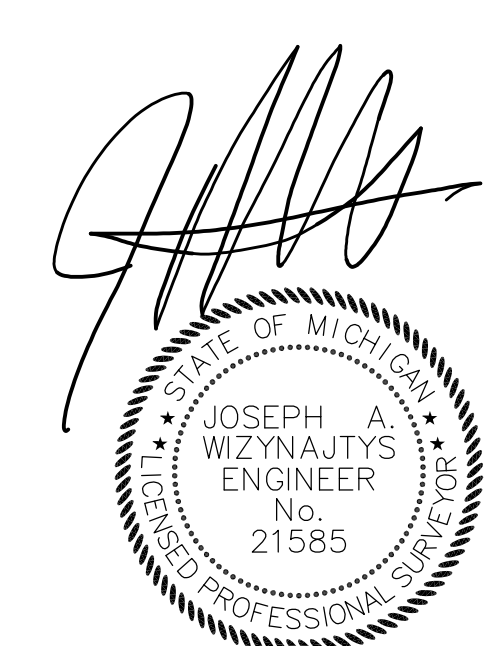
26 HOLES AT ELEV. = 974.55

Q₁₀₀ = 3.356 CFS

Q₀ = Q₁₀₀ + Q_{BF}MAX + Q_{FF}MAX = 3.924 CFS

SUMMARY OF REQUIRED STANDPIPE HOLES:

ELEVATION	# OF HOLES	DIAMETER OF HOLES
974.55	26	2 INCHES
973.02	7	1 INCHES
971.00	4	1 INCHES



REC ENGINEERS
REAL ESTATE CONSULTING ENGINEERS, INC.
16509 BELFAST, FENTON, MICHIGAN 48430
(810) 869-0194 OR (810) 845-5364

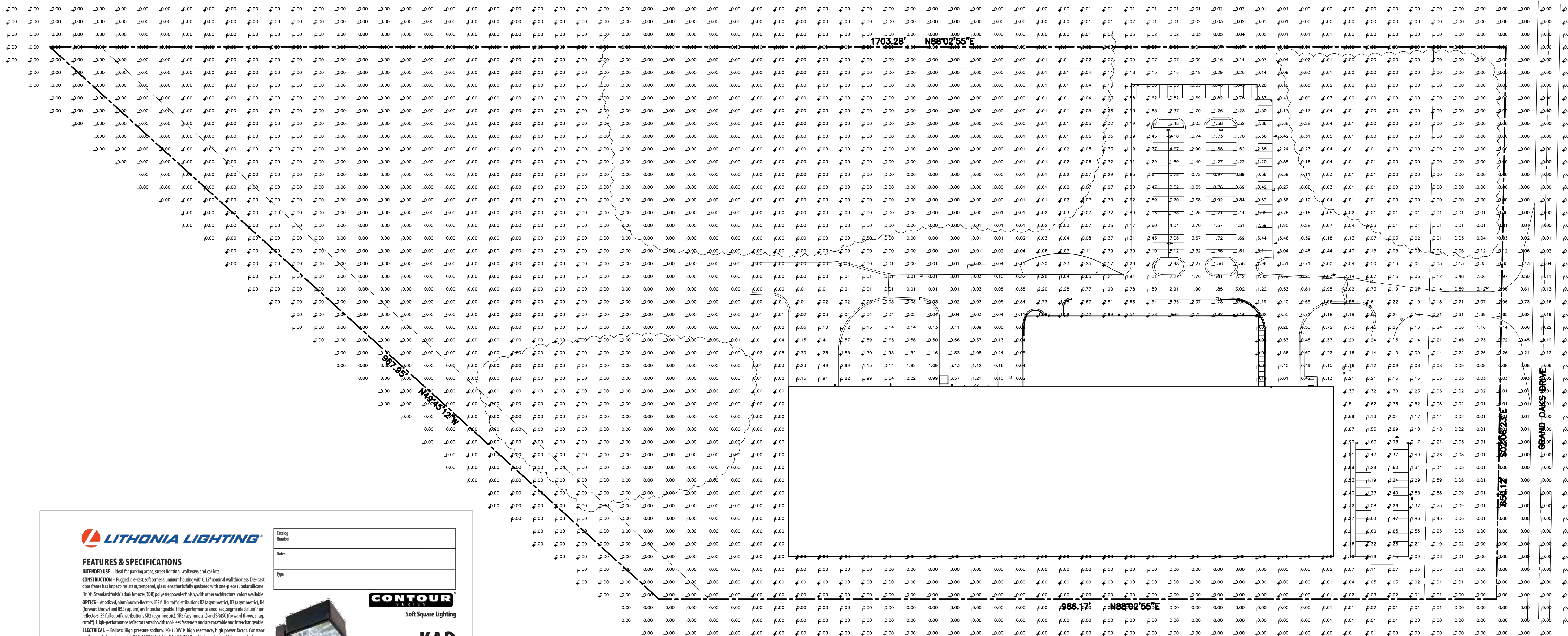
CLIENT
ASSELIN ASSOCIATES
4488 W. BRISTOL ROAD
FLINT, MI 48507
(810) 230-9311

DATE: 8/20/13
DRAWN BY: MJW
CHECKED BY: MJW
SCALE: 1" = 40'



NO.	REVISIONS	DATE	BY

DETENTION BASIN DESIGN
OF
MICHIGAN ROD ADDITION
LIVINGSTON COUNTY MICHIGAN
GENOA TOWNSHIP



FEATURES & SPECIFICATIONS

INTENDED USE - Ideal for parking areas, street lighting, walkways and car lots.
CONSTRUCTION - Rugged, die-cast, soft corner aluminum housing with 0.12" nominal wall thickness. Die-cast door frame has impact-resistant, tempered, glass lens that is fully gasketed with one-piece tubular silicone. Finish: Standard finish is dark bronze (DBR) polyester powder finish, with other architectural colors available.
OPTICS - Anodized, aluminum reflectors: IE5 full cutoff (distributions SR2 (symmetrical), SR3 (asymmetrical), R4 (forward throw) and R55 (square)) are interchangeable. High performance anodized, segmented aluminum reflectors IE5 full cutoff (distributions SR2 (symmetrical), SR3 (asymmetrical) and SR4S (forward throw, sharp cutoff)), high performance reflectors attach with tool-less fasteners and are reusable and interchangeable.
ELECTRICAL - Ballast: High pressure sodium: 70-150W to high reactance, high power factor. Constant wattage autotransformer for 200-400W. Metal halide: 70-150W to high reactance, high power factor and is standard with pulse-start ignitor technology. "SCWK" not required. Constant wattage autotransformer for 175-400W. Super CWK (pulse start ballast), 80% efficient and EISA legislation compliant. S required for metal halide. 151-400W (SCWK option) for US shipments only. CSA, NRTL or IUL required for probe start shipments outside of the US. Pulse-start ballast (SCWA) required for 200W, 320W, or 350W. Ballast is 100% factory tested.
 Socket: Provides, horizontally oriented medium base socket for 70-150W. Megal base socket for 175W and above, and 70-400W, with copper alloy, nickel-plated screw shell and center contact. UL listed 1500W, 600V.
LISTINGS - UL Listed (standard), CSA Certified (see options), UL listed for 25°C ambient and wet locations. IP65 rated in accordance with standard IEC 529.
WARRANTY - 1-year limited warranty. Complete warranty terms located at www.lithonia.com/CustomerResources/terms_and_conditions.aspx.
 Note: Specifications subject to change without notice.

<p>Contour Number</p> <p>Notes</p> <p>Type</p>	<p>CONTOUR</p> <p>Soft Square Lighting</p> <p>KAD</p> <p>METAL HALIDE: 70-400W HIGH PRESSURE SODIUM: 70-400W 20" TO 35" MOUNTING</p>
--	--

ORDERING INFORMATION For shortest lead times, configure product using **bolded** options. Example: KAD 400M R3 TB SCWA SPD04 LP

KAD	Series	Wattage	Distribution	Voltage	Ballast	Mounting ¹¹	Arm length
KAD	Metal halide	70W ¹ 250M ²	Ceramic metal halide 70MHC ³	Standard reflectors R2 IE5 type II asymmetric ⁴	120 208 ⁵	(Blank) Magnepic ballast	Ships in fixture carton
		100W ¹ 320M ²	70S 70MHC ³	R3 IE5 type III asymmetric ⁴	240 ⁶	CWI Constant wattage isolated ⁷	SPB ⁸ Square pole
		150W ¹ 350M ²	100S 100MHC ³	SR3 IE5 type III asymmetric ⁴	277 ⁹	SCWA Super CWK pulse-start ballast	RPD ¹⁰ Round pole
		175W ¹ 400M ²	150S 150MHC ³	B4 IE5 type IV forward throw ⁴	347 ⁹	SCWA Super CWK pulse-start ballast	WBD ¹¹ Wall bracket
		200W ¹	250S 400S	R55 IE5 type V square	480 ¹²	SCWA Super CWK pulse-start ballast	WPD ¹² Wood or pole wall

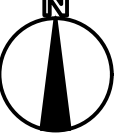
Options		Finish ¹⁴		Lamp ¹⁵
Shipped installed in fixture	CSA CSA Certified	PE3 NEMA twist-lock PE (270V)	(Blank) Dark bronze	LPI Lamp Included
SF Single fuse (120, 277, 347V) ¹⁶	NRTL Available with probe start shipping outside the U.S.	PE4 NEMA twist-lock PE (600V)	DBW White	LALP Less Lamp
DF Double fuse (208, 240, 480V) ¹⁷	REG1 California Title 20, effective 1/1/2010	PE7 NEMA twist-lock PE (270V)	DBL Black	
PD Power tray ¹⁸	SC Shorting cap for PER option	DMB Medium bronze	DNA Natural aluminum	
PER NEMA twist-lock receptacle only (no photocell)	Shipped separately ¹⁹	DNA Natural aluminum	Super Durable Enthalas 100SD0 Dark bronze	
QRS Quartz restrike system ²⁰	HS House side shield	WG Wire guard ²¹	DBLX Black	
QRSTD QRS time delay ²²	FE1 NEMA twist-lock PE (120, 208, 240V)			
WTB Terminal wiring block ²³				

Accessories: Temon Mounting Slipfitter (RPX required.)
 Order as separate catalog number. Must be used with pole mounting.

Temon O.D.	One	Two	Three	Four
2-3/8"	T20-190	T20-280	T20-290 ²⁴	T20-300 ²⁵
2-7/8"	T25-190	T25-280	T25-290 ²⁴	T25-300 ²⁵
4"	T35-190	T35-280	T35-290 ²⁴	T35-300 ²⁵

OUTDOOR KAD-B-S

PHOTOMETRIC PLAN
 SCALE: 1" = 60'-0"





ASELIN ASSOCIATES ARCHITECTS

4488 W. BRISTOL ROAD
FLINT, MICHIGAN 48507
PHONE: (810) 230-4311
FAX: (810) 230-2831

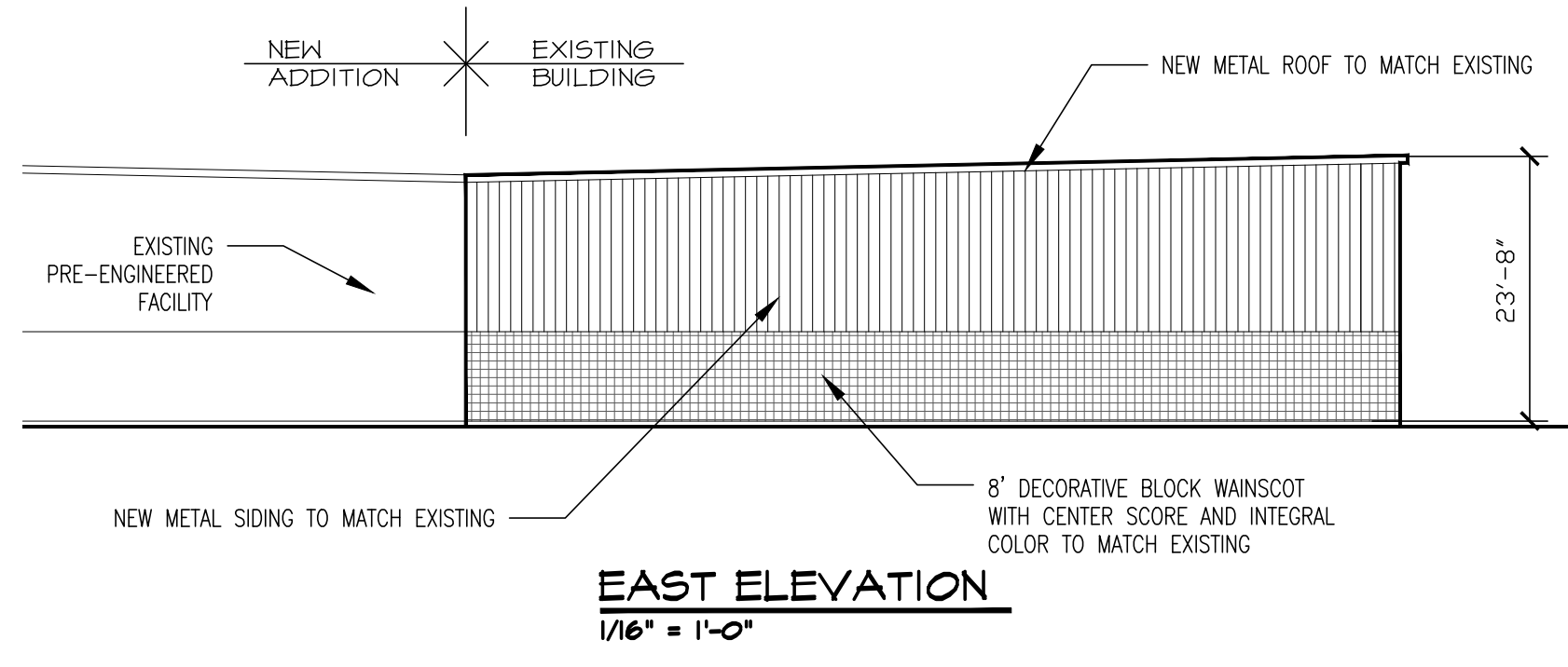
Rhoads & Johnson
CONSTRUCTION COMPANY

Overall Floor Plan

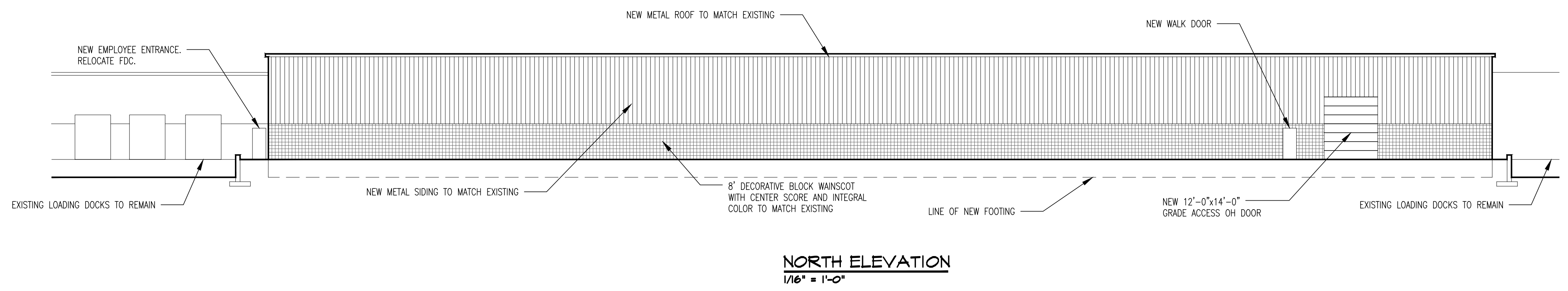
Proposed Addition for:
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08-26-13

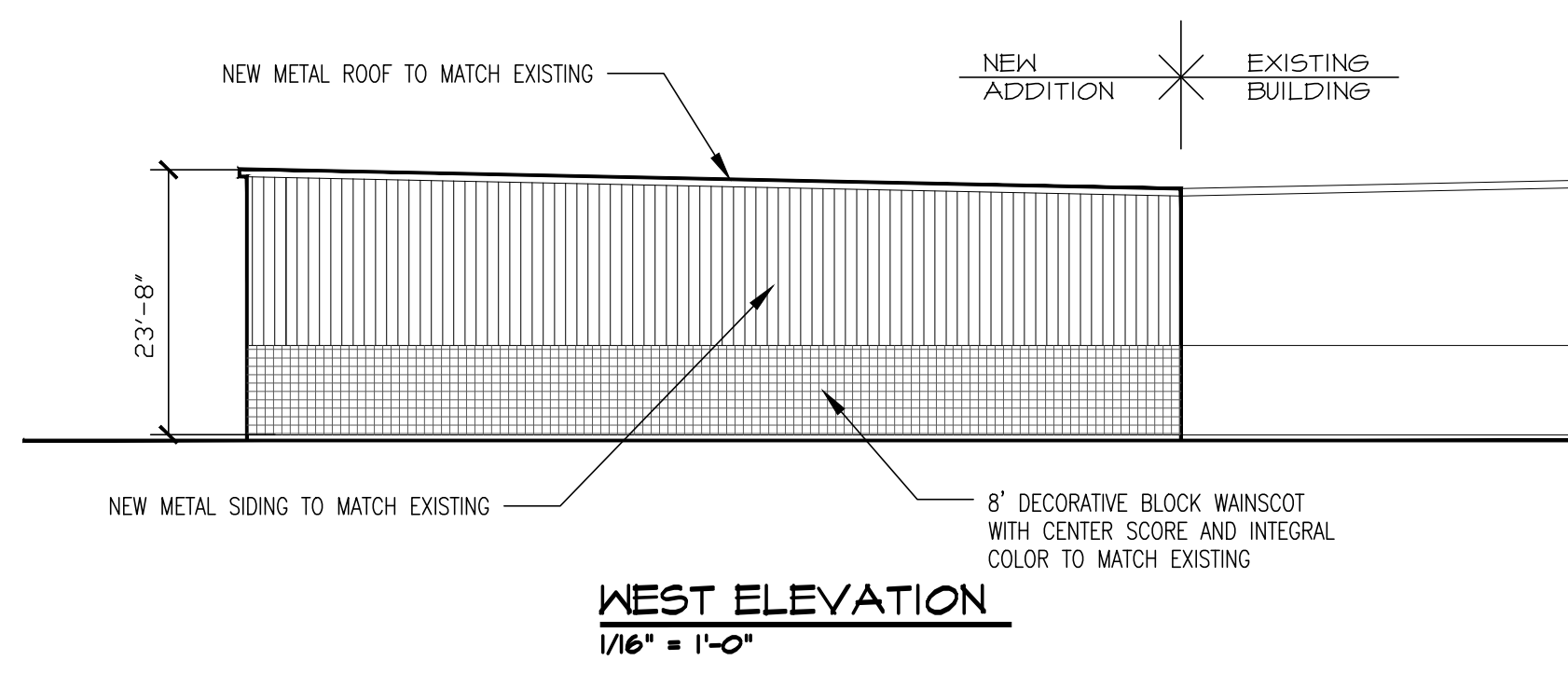
sheet: A1.1
of: 1



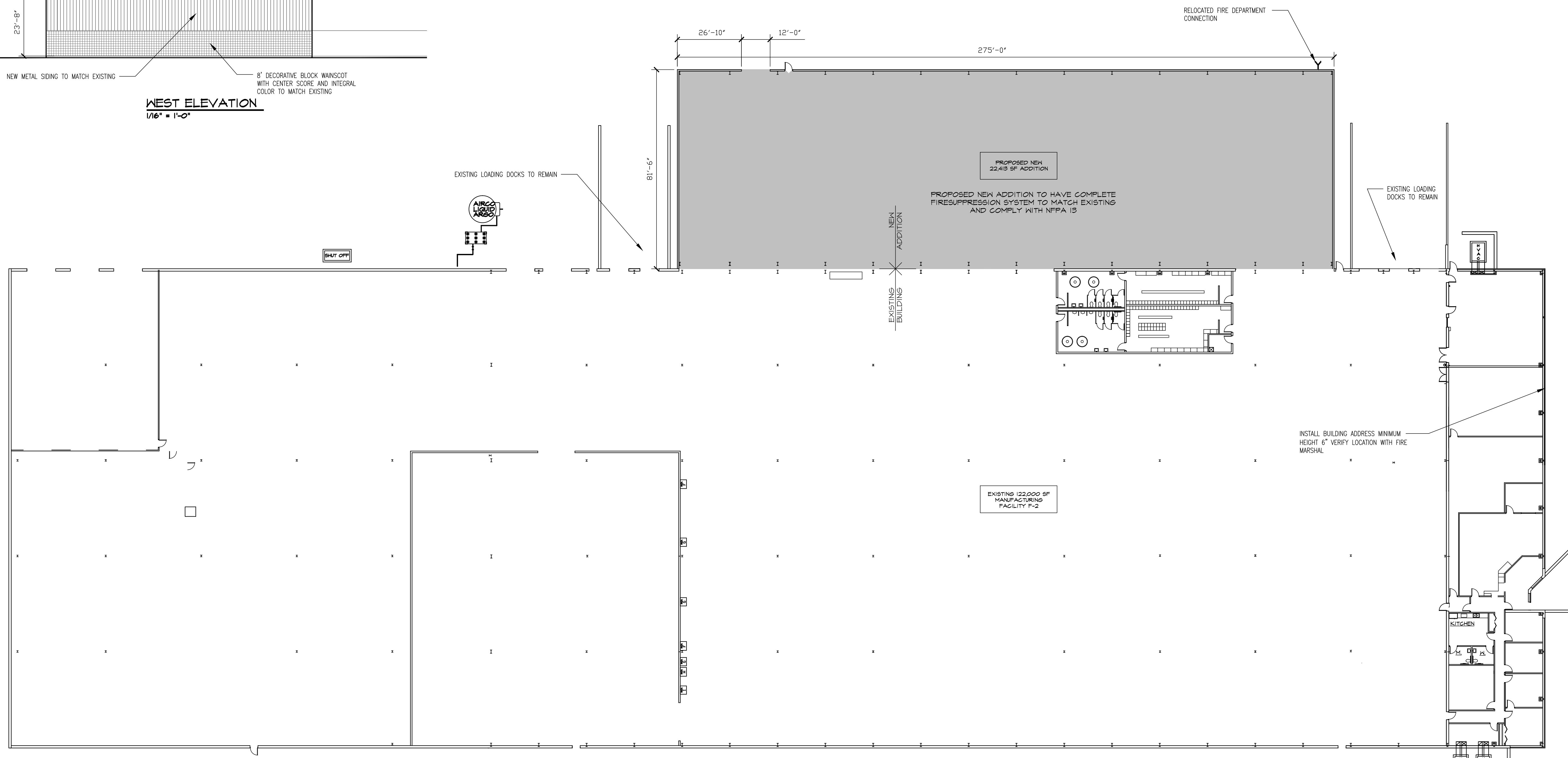
EAST ELEVATION
1/16" = 1'-0"



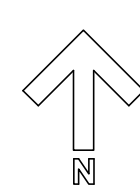
NORTH ELEVATION
1/16" = 1'-0"

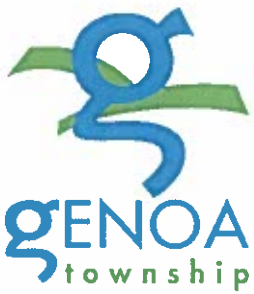


WEST ELEVATION
1/16" = 1'-0"



FLOOR PLAN
3/164" = 1'-0"





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

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director
DATE: August 28, 2013
RE: Maxey Ford - Special Land Use & Site Plan Approval

MANAGER'S REVIEW: _____

I have reviewed the special land use request, revised site plan and environmental impact assessment for the proposed service center expansion, new collision center, and parking lot addition for the Maxey Ford dealership located at 2798 E. Grand River Avenue. This project was recommended for approval by the Planning Commission on August 12th, 2013 and obtained Zoning Board of Appeals approval on August 20th, 2013. My review of the revised submittal was focused on compliance with the outstanding items discussed at the Planning Commission and my recommendation is as follows:

Special Land Use Permit: I recommend approval for the expansion of the existing special land use which includes an addition onto the existing building and the construction of a new collision center. This Special Land Use is recommended for approval with the following conditions:

1. Vehicles horns/alarms shall not be used to locate vehicles on the site.
2. All lighting shall be downward directed and comply with the Township ordinance.
3. No outdoor speaker system will be allowed.

This Special Use is recommended for approval because it complies with the standards provided in Section 19.03.

Environmental Impact Assessment: I recommend approval of the impact assessment dated August 26, 2013 with the following condition:

- Page 12 of the PIP Plan should be corrected to show the Brighton Area Fire Department, the Livingston County Sheriff, and Donald Arbic of the Emergency Management Department.

SUPERVISOR

Gary T. McCririe

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

MANAGER

Michael C. Archinal

TRUSTEES

H. James Mortensen

Jean W. Ledford

Todd W. Smith

Linda Rowell

Site Plan: I recommend approval of the site plan dated August 26, 213 with the following conditions:

1. The concrete pad for the dumpster enclosure shall be extended by 3 feet.
2. The Zoning Board of Appeals will need to approve any new deviations from the Sign Ordinance.
3. The Township Engineer shall review and approve the revised plans prior to issuance of a land use permit. This includes a review of the additional curb and gutter along the east property line.
4. A note will be added to the plan indicating that Saturday construction will be coordinated with the Elks Club to the east.
5. A note will be added to the plan that reasonable effort will be made to preserve the trees in the area of installation for the masonry wall.
6. All requirements of the Brighton Area Fire Department shall be met.
7. The 2 parcels shall be combined into 1 parcel prior to issuance of a Land Use Permit.
8. Recorded copies of the Utility Easements for both the water and sewer main shall be provided to the Township prior to issuance of the Land Use Permit.

Sincerely,



Kelly VanMarter
Assistant Township Manager/Community Development Director

GENOA TOWNSHIP
APPLICATION FOR SITE PLAN REVIEW

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS*: Mike Maxey, 2798 E. Grand River, Howell, MI 48843

OWNER'S NAME & ADDRESS: SRM Associates LLC, 2798 E. Grand River, Howell, MI 48843

SITE ADDRESS: 2798 E. Grand River, Howell, MI 48843 PARCEL #(s): 4711-06-200-058 & 103

APPLICANT PHONE: (517) 545-5700 OWNER PHONE: (517) 545-5700

LOCATION AND BRIEF DESCRIPTION OF SITE: Existing Ford dealership and service center.

BRIEF STATEMENT OF PROPOSED USE: Expand the existing service center, relocate collision center to this site and expand parking lot.

THE FOLLOWING BUILDINGS ARE PROPOSED: Service Center expansion and new collision center.

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

BY: 

ADDRESS: Mike Maxey, 2798 E. Grand River, Howell, MI 48843

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

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

1) Thom Dumond of Boss Engineering at (517) 548-1670
Name Business Affiliation Fax No

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: 7-8-13

PRINT NAME: Michael Maxey PHONE: 517-545-5700

ADDRESS: 2798 E. Grand River, Howell, MI 48843

**APPLICATION FOR SPECIAL LAND USE
GENOA TOWNSHIP**

APPLICANT NAME* & ADDRESS: Mike Maxey, 2798 E. Grand River, Howell, MI 48843

OWNER NAME* & ADDRESS: SRM Associates LLC, 2798 E. Grand River, Howell, MI 48843

SITE ADDRESS: Same PARCEL #(s): 4711-06-200-103 & 058

APPLICANT PHONE: (517) 545-5700 OWNER PHONE: (517) 545-5700

Location and brief description of site and surroundings:

The area of the proposed development is a automobile dealership. To the east of the existing dealership is the Elks Lodge, to the west is a commercial strip center, to the south is a residential development and to the north is Grand River Ave.

Proposed Use:

Automobile dealership, service area and collision center.

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

- a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The proposed improvements are an expansion of what is currently taking place on the property. The facility will be providing needed services to the greater Howell area including new and used automobile sales and service, general maintenance and collision repairs.

- b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

The architectural and site design have been created to tie into the existing facility.

- c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

The facility has direct access onto Grand River. The retention basin will be expanded to service the storm water runoff from the drainage area lessening the potential for flooding. Public utilities are currently location on the property will be minimally impacted from this expansion.

- d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?


The storage and disposal of vehicle fluids will be in compliance with local, state and federal requirements.

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)?
If so, describe how the criteria are met.

Sec. 3.03.02 - Nothing. Sec. 7.02.02 - All work will take place within the building in accordance with local, state and federal requirements. Sec. 8.02.02 - Nothing.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Michael Maxey STATES THAT THEY ARE THE FREE OWNER* OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: 

ADDRESS: 2798 E. Grand River Ave., Howell

*Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

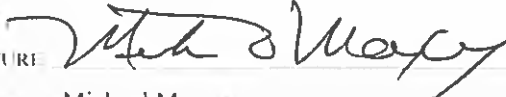
Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1) Thom Dumond of Boss Engineering at (517) 548-1670
Name Business Affiliation Fax No

Note: This application must be accompanied by a site plan review application and the associated site plan review submittal requirements. (The Zoning Administrator may allow a less detailed sketch plan for a change in use.)

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 7-8-13

PRINT NAME Michael Maxey

PHONE 517-545-5700

ADDRESS 2798 E. Grand River Ave., Howell

Motion by Barbara Figurski to recommend that the Township Board approve the environmental impact assessment dated with the addition of dust control management and subject to approval of the special use permit and site plan. Support by James Mortensen. **Motion carried unanimously.**

Motion by Jim Mortensen to recommend to the Township Board approval of the site plan dated 7/30/13 subject to the following:

1. Compliance with the Township engineer's letter dated 8/5/13, as revised;
2. Compliance with Brighton Fire Department letter dated 8/16/13 subject to changes that will occur over further discussions and agreements with Brighton Fire Department;
3. The installation of a gravel road for fire suppression purposes on the west side of the building as approved by the BFD
4. The approval by the Township Board of the environmental impact assessment and special use permit.

Support by Diana Lowe. **Motion carried unanimously.**

OPEN PUBLIC HEARING #3... Review of a special use application, impact assessment and site plan for proposed service center expansion, new collision center, and parking lot located at Maxey Ford, 2798 E. Grand River Avenue, Howell MI 48843, petitioned by SRM Associations, LLC.

Thom Dumond and Mike Maxey addressed the Planning Commission. Mr. Maxey gave a brief history of his experience in auto sales. He then gave a brief overview of the reasoning for the project. A photographic rendering was shown to the Planning Commission. Mr. Maxey has contacted the neighbors and has had good relations with them concerning this project.

The proposed plan will increase the service bays by six. Directly behind that area would be the new collision center. No parking spots will be lost. The parking that is reflected on the plan represents the amount of vehicles that Maxey can project to sell.

The screening wall will be 6' tall from the southwest corner of lot along the length of the parking area. There will be evergreens there. This design will bring the retention basin into compliance with the Drain Commission requirements. The front approaches from Grand River will remain "as is."

John from CityScape addressed the Planning Commission. Ford's current prototype image program will be utilized with this building to keep a clean image with the building. The petitioner provided material samples to the Township.

Brian Borden reviewed his concerns with the plan. This would be deemed a major amendment to an existing land use. The applicant is proposing a

6' masonry screen wall to provide a visual and noise barrier. This would be the only issue with the specific and general use standards.

The proposed addition to the service center will require a variance from the ZBA. The petitioner is in the process of obtaining that. They are seeking a variance for the setback, as well. The expansion will meet the current building materials. The new part of the building, the collision center, does not.

Brian Borden discussed parking versus vehicle storage and how each is treated. If one delineates how they are treated, they meet the Township standards.

Brian Borden indicated that essentially the entire site as it exists does not comply with landscape requirements. The applicant has included new plantings around the detention pond.

The proposed waste receptacle is in an allowable area that does require Planning Commission approval. The dumpster will be screened to bring it into compliance with the ordinance.

Signage was discussed. The second wall sign will require approval of the Planning Commission. A traffic impact statement was not provided. The Planning Commission has discretion whether to require this. The petitioner addresses the Planning Commission regarding traffic studies. The petitioner feels there will only be 105 additional "trips" per day with the increase of repair stalls.

The petitioner is encouraged to combine the two lots. This should be discussed at the Township Board meeting.

Gary Markstrom addressed the Commission. The petitioner has complied with most of their comments. It is hopeful that the factory sewer will become public. An 8" water main is being installed for fire suppression. The demands for water should be reviewed since it is a fairly large main. The drainage areas were discussed. The area on the south side should have provisions to capture the water on the site. There should be provisions for the water to go through the wall. The petitioner said this shouldn't be an issue.

Mike Evans addressed the Planning Commission. Item number two has been worked through with the architect. This will be a sprinkler building. The turning radiuses around the buildings caused the Fire Department some concern. To the west of the collision center are some parking spaces that can be moved/deleted to permit proper trip radius. There are approximately eight. The petitioner will meet with Mike Evans regarding that.

Chairman Brown made a call to the public.

Dean Cocolies addressed the Commission. They will be facing the detention area. Their main concerns are lighting and noise. The woods are going to stay. He is asking what will be torn down exactly. The area that abuts his property will

not be changed. The lighting will not be aimed to the neighborhood and will be away from the residential areas. There will be no noises added. The outdoor PA systems have been disconnected in the rear areas.

Allan Almgrin – Chairman of the Trustees of the Howell Elks Lodge addressed the Planning Commission. He asked about storm water runoff. He is hoping there will be some controlling of the runoff. Mr. Almgrin suggested he would speak to the petitioners at some point about working something out. He asked if there would be set construction hours and if they would impede on the Lodge's ability to earn rental income from receptions, etc. Any paint fumes, etc will be a non-issue.

Chairman Brown read various letters into the record: two by Jenny Carrender and one by John & Connie Knauss. All efforts will be made to save the existing trees by the petitioner.

Planning Commission disposition of petition

- A. Recommendation of Special Use.
- B. Recommendation of Environmental Impact Assessment.
- C. Recommendation of Site Plan.

Motion by James Mortensen to recommend to the Township Board approval of the special use permit for the expansion of Bob Maxey Ford to add a body shop and an expansion of the existing service department. This recommendation is made because it is a major amendment to an existing use and consistent with the zoning requirements of the ordinances. This recommendation is conditional upon approval of the site plan and environmental impact assessment by the Township Board. Further, requirements of this special use permit will be that no horns will be blown by dealership personnel attempting to locate vehicles, lighting will be down directed and no outdoor speaker system will be installed. Support by Dean Tengel. **Motion carried unanimously.**

Motion by Barbara Figurski to recommend to the Township Board approval of the environmental impact assessment dated 7/29/13, subject to:

- 1. PIP plan must be submitted prior to the land use permit authorization;
- 2. Expand retention basin statements;
- 3. Requirements of the Township Engineer must be met;
- 4. Approval of the special use permit and site plan.

Support by John McManus. **Motion carried unanimously.**

Motion by James Mortensen to recommend to the Township Board approval of the site plan dated 7/29/13 subject to:

- 1. The six foot masonry wall as depicted is acceptable and will substitute for the normal screening required for the site;
- 2. The proposed building addition will require a variance. The petitioner will seek variances from the Zoning Board of Appeals for the front

- setback requirements and grading the gravel storage area within the rear setback;
3. The Planning Commission recommends approval of the setback for the collision center given the masonry screening wall;
 4. The building elevations and materials reviewed this evening are acceptable and the building material samples will become the property of the Township;
 5. It should be noted that the proposed building addition shall match the existing building in terms of materials;
 6. The Planning Commission accepts the parking requirements as a combination of new vehicle storage and normal vehicle parking;
 7. The waste receptacle location is acceptable and will be screened;
 8. The concrete base shall be extended by three feet;
 9. The signage appears to be beyond the ordinance and will need to be reviewed by the Zoning Board of Appeals;
 10. A note will be added to the site plan that the applicant will work on drainage to the east with the Elks property and Township engineer;
 11. A note will be added to the site plan indicating that any Saturday construction will be coordinated with the Elks Club to the east;
 12. A note will be added to the site plan that every reasonable effort will be made to preserve trees in the installation of the masonry fence;
 13. The requirements of the Township engineer spelled out in his letter of 8/5/13 will be complied with. In addition, water usage with the installation of a water main will be coordinated with the Township engineer and additional drainage information will be provided to the Township engineer;
 14. The requirements of the Brighton Fire Department outlined in their letter of 8/8/13 will be complied with. Some modification may be possible in discussions with the Fire Department regarding turning radiuses;
 15. A note will be added to the site plan that the applicant will work with the Township regarding the possibility of combining the two parcels into one;
 16. Utilities easements will be provided prior to the issuance of the land use permit.

Support by Barbara Figurski. **Motion carried unanimously.**

Administrative Business:

- *Staff report. Kelly VanMarter provided an update.*
- *Approval of July 22, 2013 Planning Commission meeting minutes. **Motion** by Barbara Figurski and support by John McManus to adopt the minutes of the Planning Commission meeting of July 22, 2013. **Motion carried unanimously.***
- *Member Discussion*
- *Adjournment. **Motion** by Diana Lowe and support by Barbara Figurski to adjourn the meeting at 9:35 p.m. **Motion carried unanimously.***

DRAFT

**GENOA CHARTER TOWNSHIP
ZONING BOARD OF APPEALS
AUGUST 20, 2013
MINUTES**

Chairman Dhaenens called the regular meeting of the Zoning Board of Appeals to order at 6:30p.m. at the Genoa Charter Township Hall. The Pledge of Allegiance was then said. The members and staff of the Zoning Board of Appeals were as follows: Chris Grajek, Marianne McCreary, Jean Ledford, Barbara Figurski and Jeff Dhaenens. Also present were Township staff member Ron Akers. There were 11 persons in the audience.

Moved by Ledford, supported by Figurski to approve the agenda as presented. **Motion carried unanimously.**

13-19...A request by Bob Maxey Ford, Sec. 6, 2798 E. Grand River, for continuation building or structure to continue the existing front building face to the east.

Mike Maxey of Maxey Ford, Tony Dellicolli of CityScape Architects and Thom Dumond of Boss Engineering were present for the petitioner. Mr. Dumond gave a brief presentation of the purposed improvements and variances requested. Mr. Dellicolli provided renderings to the Board members to show the proposed improvements. The Board members were concerned about the flow of traffic coming out of the service center.

A call to the public was made with no response.

Moved by Figurski, supported by McCreary to approve case #13-19, for SRM Associates LLC, 2798 E. Grand River, for a front yard setback variance of 5' and parking lot variance of 7' on the rear property line based on the following finding of facts:

1. Strict compliance with the front yard setback requirement would limit the ability of the property owner to construct an addition which maintains a consistent front building line with the existing main building;
2. The area within the rear lot line parking lot setback is already developed as a parking area and the proposed 6' masonry screening wall will adequately mitigate the impact the proposed changes to the site plan will have on the adjacent residential properties;
3. The need for the variance is not self-created;
4. According to the Planner's Report, the proposed variance will not impair public safety or welfare;
5. There will be little if any impact on the surrounding neighborhood. The front yard variance will provide for a consistent appearance on the Grand River corridor and the proposed 6'

masonry screening wall will mitigate the impacts of the extended parking lot. **Motion carried unanimously.**

13-20...A request by Zion Restoration US, Sec. 23, 6518 Catalpa, for a 14 foot side yard variance to construct an addition.

Glen Vilcil of Zion Restoration and Mr. Swint was present for the petitioner. Mr. Vilcil gave a brief overview in regards of the neighborhood lots and of the addition which is 10 x 18 in size that the homeowner would like to construct.

A call to the public was made with Chairman Dhaenens stating that an email was received in support of the variance.

Moved by Ledford, supported by Figurski, to approve case # 13-30 for Zion Restoration, 6518 Catalpa, for a 14 foot side yard variance due to the addition having little impact on the adjacent properties. The addition will be the same distance from the side property line as the attached garage.

The hardship is the property is zoned LDR (Low Density Residential) and was created under less strict zoning requirements. The lot size and building were made non-conforming by the current zoning requirements. The pie shaped lot has limitations. The variance is not self-created. Conditioned upon the home and garage being guttered. **Motion carried unanimously.**

13-21...A request by Thomas A. and Donna Jean Phelps, 4470 Clifford Road, for a 2 foot sideyard setback variance to construct a deck and variance to extend that deck 3 feet further from the rear building line than the 15 foot maximum allows.

Thomas and Donna Phelps were present for the petitioner. Mr. Phelps gave a history and overview of the property and the variances requested.

A call to the public was made with Chairman Dhaenens stated that an email from Terry Campo and Cynthia Giddings were received in support of the variance.

Moved by McCreary, supported by Figurski, to approve case# 13-21, Thomas and Donna Phelps, 4470 Clifford, for a 2 foot side yard variance and a 3 foot variance from the rear distance line.



LSL Planning, Inc.

Community Planning Consultants

August 6, 2013

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
Subject:	Bob Maxey Ford Expansion – Special Land Use and Site Plan Review #2
Location:	2798 E. Grand River Avenue – south side of Grand River, east of Chilson Road
Zoning:	GCD General Commercial District

Dear Commissioners:

At the Township's request, we have reviewed the revised site plan (dated 7/29/13), as well as the application for special land use (dated 7/8/13) proposing an expansion of the existing auto dealership and service center on the 10-acre property. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance.

A. Summary

1. Provided the Commission feels the 6-foot masonry screen wall is sufficient to protect the adjacent residential properties, the case can be made that the general special land use standards of Article 19 and specific use standards of Article 7 are met.
2. Any issues raised by the Township Engineer must be addressed and/or mitigated.
3. A 6-foot masonry screen wall is proposed along the rear lot line in lieu of the required buffer zone.
4. The proposed building addition requires a variance from the front yard setback requirements. In our opinion, paving the gravel storage area within the required rear yard setback also requires a variance.
5. The Planning Commission may reduce the rear yard setback requirement for the collision center given the proposal to install a 6-foot tall screen wall.
6. The Planning Commission has approval authority over the building elevations, including materials and colors. The proposed building addition will match the existing building; however, the proposed collision center does not meet the wall material requirements of Section 12.01.03.
7. If the amount of parking is deemed excessive, Planning Commission approval will be required.
8. The existing site is deficient in terms of all landscaping requirements. The proposed project includes new detention pond landscaping.
9. The waste receptacle location requires Planning Commission approval for an encroachment into the side yard setback. The concrete base pad must also be extended by 3 feet.
10. The Planning Commission may allow a second wall sign.
11. The revised Impact Assessment does not provide all of the information required by Section 18.07.09 for a Traffic Impact Statement.



Aerial view of site and surroundings (looking north)

B. Proposal/Process

The applicant requests special land use and site plan review/approval for a new 17,083 square foot collision center building, as well as a 10,139 square foot service center expansion. Table 7.02 of the Zoning Ordinance lists automobile dealerships as special land uses in the GCD.

In accordance with Section 19.06, the proposed expansion is considered a major amendment to an existing special land use. Therefore, a new application for special land use approval is required in addition to the need for site plan review and approval. Automobile dealerships are also subject to the specific use conditions of Section 7.02.02(c).

Lastly, the collision shop is an accessory component of the auto dealership, which is allowable per Table 7.02, although it would not otherwise be permitted in the GCD. That is, the accessory collision shop cannot operate in the absence of the auto dealership as the principal use of the property.

Following a public hearing on the request, the Planning Commission may forward its recommendation on the project to the Township Board for a final decision.

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

- 1. Master Plan.** The Township Master Plan and Future Land Use map designate the site as General Commercial. This Plan states that this classification is intended for “businesses which serve the requirements of the community at large including Genoa Township, Howell, Brighton and pass-by traffic along Grand River Avenue.” The Plan also notes that uses in this category are likely to generate significant traffic and that outdoor sales and display areas may be included. Lastly, the Plan states that such areas are to be buffered from nearby residential areas.

It is the latter statement that is the potential concern under this criterion. Specifically, the proposed development encroaches into required setbacks and buffer zones between the residential uses to the south (see Sections D and E of this letter below). Provided the adjacent residences can be adequately protected, the proposed project may be viewed as consistent with the Master Plan.

2. **Compatibility.** Similar to the statement above, the primary concern over compatibility amongst land uses is related to the encroachments towards the residential properties immediately south of the site. In an effort to mitigate this concern, the applicant proposes a 6-foot masonry screen wall along the rear lot line. Provided the Township finds the screen wall sufficient to protect the adjacent residences from impact, the project may be viewed as compatible with surrounding land uses.
3. **Public Facilities and Services.** As a developed site fronting Grand River, we are under the impression that necessary facilities and services are already in place. However, we defer to the Township Engineer and Fire Department for any concerns they may have under this criterion.
4. **Impacts.** Part of the proposed project includes an expansion of the retention basin. Provided engineering requirements are met, the project is not expected to impact environmental features.
5. **Mitigation.** If any additional concerns arise as part of this review process, the Township may require mitigation necessary to limit or alleviate any potential adverse impacts as a result of the proposed project.

D. Use Conditions

Section 7.02.02(c) provides the following use conditions related to the sale of automobiles in the GCD:

1. **Sale space for used mobile homes, recreational vehicles and boats may only be carried on in conjunction with a regularly authorized new mobile home, recreational vehicle or boat sales dealership on the same parcel of land.**

Given this is an existing dealership, this standard is likely met.

2. **All outdoor storage areas shall be paved with a permanent, durable and dustless surface and shall be graded and drained to dispose storm water without negatively impact adjacent property. The Township Board, following a recommendation of the Planning Commission and the Township Engineer, may approve a gravel surface for all or part of the display or storage area for low intensity activities, upon a finding that neighboring properties and the environment will not be negatively impacted.**

All such areas are either paved already or are proposed to be paved as part of this project.

3. **No storage or display of vehicles shall be permitted in any landscape greenbelt area, provided the Township may permit a display pod for an automobile within the greenbelt area where it is integrated into the landscape design.**

The site plan identifies 4 existing display pods within the required greenbelt and notes that they were approved as part of a 2008 site plan.

4. **The site shall include a building of at least five hundred (500) feet of gross floor area for office use in conjunction with the use.**

The main sales and service building contains 30,950 square feet of gross floor area.

5. All loading and truck maneuvering shall be accommodated on-site.

The revised plans include a truck turning template and a note indicating that all maneuvering will occur on-site.

6. All outdoor storage area property lines adjacent to a residential district shall provide a buffer zone A as described in Section 12.02. A buffer zone B shall be provided on all other sides. The Planning Commission may approve a six (6) foot high screen wall or fence, or a four (4) foot high landscaped berm as an alternative.

The properties to the south are zoned and used for residential purposes; however, the developed area encroaches into the required buffer. In the absence of sufficient area to accommodate the required buffer zone, the Township may require a 6-foot high screen wall or fence as an alternative. Accordingly, the site plan proposes a new 6-foot tall masonry screen wall 2.8 feet from the rear property line.

E. Site Plan Review

1. Dimensional Requirements. The project has been reviewed for compliance with the dimensional requirements of Section 7.03, as shown in the table below.

The existing sales building is nonconforming due to its reduced front yard setback, while existing parking/storage areas do not meet front, side or rear setback requirements. Additionally, the proposed building addition does not meet the front yard setback requirement and will require a variance from the ZBA. Furthermore, we are of the opinion that paving the current gravel storage area at the rear of the site is an improvement to a nonconforming situation that should also require a variance from ZBA.

Lastly, the proposed collision center does not meet the rear yard setback requirement; however, Section 7.03.03(m) allows the Planning Commission to grant a setback reduction when a 6-foot screen wall is proposed, as is the case.

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
GCD	1	150	70	15	50	20 front 10 side/rear	35	35% building 75% impervious
Proposal	10.2	672	25 existing 65 proposed	36.9 (E)	41.7 proposed	0 front 0 side (E) 2.8 rear	19.8	13.2% building 67.4% impervious

2. Building Materials and Design. The proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission. The proposed building addition is constructed of an aluminum panel system. The amount of aluminum paneling generally exceeds the percentage limitation of Section 12.01.03; however, it appears as though the intent is to match the rest of the building. The Commission also has some discretion for alterations to existing buildings.

Meanwhile, the proposed collision center is to be constructed of CMU and metal siding. Both materials exceed the percentage limitations of Section 12.01.03. As a new building, the Township may wish to require compliance with current Ordinance standards.

3. Parking and Vehicular Circulation. Section 14.04 requires 1 parking space for each 200 square feet of gross leasable area, plus 3 spaces per auto service bay for auto sales uses. Based upon the applicant’s calculations, 195 parking spaces are required. In total, there are 600 spaces for both parking and new/used vehicle storage.

A note on Sheet C2 indicates that 195 of the spaces will be reserved for customer and employee parking, while the remainder (405) will be used to store new and used vehicles. This is a rather unique situation as it relates to the maximum parking requirement of Section 14.02.06.

Specifically, if the Township treats the storage spaces similar to parking spaces, then Planning Commission approval is needed given the excessive amount of parking. Conversely, if the Township wishes to make the distinction between parking and storage, as depicted on the site plan, then the amount of parking is appropriate.

The parking spaces and drive aisles meet or exceed the dimensional standards of Section 14.06, while the details on Sheet C2 also provide for looped (or double) striped spaces, as required. The revised plans also provide the 6 required barrier free parking spaces (based on 195 parking spaces).

4. **Pedestrian Circulation.** Section 12.05 requires sidewalks and pathways along certain road frontages, including an 8-foot pathway along Grand River Avenue west of the 141 interchange. The site plan shows an existing 8-foot wide concrete pathway, as is required.
5. **Vehicular Circulation.** The site currently provides 3 driveways accessing Grand River. No changes are proposed to the existing driveways or circulation pattern as part of the proposed project.
6. **Loading.** Given the size of the buildings, Section 14.08.08 requires 3 loading spaces, which are to be located in a rear or side yard not directly visible to a public street. The revised site plan includes the required spaces immediately west of the existing service building.
7. **Landscaping.** The following table is a summary of the landscaping required by Section 12.02:

Location	Requirements	Proposed	Comments
Front yard greenbelt	17 canopy trees 20-foot width	10 existing trees 0 to 20-foot width (existing)	The project does not propose any changes to the existing greenbelt. Unless the Township requires removal of the existing front parking spaces on the westerly portion of the site, there is limited room for additional landscaping. One exception is there appears to be room for additional trees in the middle landscape island.
Buffer zone "A" (S) for outdoor storage	27 canopy trees 54 evergreens 107 shrubs 6' wall or 3' berm 50-foot width	6' wall 2.8-foot width	7.02.02(c) allows the Commission to approve a 6' screen wall in lieu of the required buffer zone.
Buffer zone "B" (S) for remainder of site	27 canopy trees 27 evergreens 105 shrubs 6' wall or 3' berm 20-foot width	Retain existing vegetation and provide detention pond landscaping 3 new evergreen trees 60-plus foot width	Section 12.02.13 allows the PC to modify landscaping requirements.
Detention pond	22 canopy OR evergreen trees 122 shrubs	7 evergreen trees 70 shrubs Retain existing vegetation	Section 12.02.13 allows the PC to modify landscaping requirements.
Parking lot (based on total number of parking and storage spaces)	40 canopy trees 4,000 s.f. of landscaped area	No landscaping provided (existing condition)	Section 12.02.13 allows the PC to modify landscaping requirements.

- 8. Waste Receptacle and Enclosure.** The site plan identifies a new waste receptacle in the southeast corner of the site. The proposed placement meets the spacing requirement from the residential district to the south, but encroaches into the side yard setback, which is only allowed with Planning Commission approval.

Details on Sheet A-202 show a concrete base pad and masonry enclosure; however, the base pad must be extended by 3 feet in length per Section 12.04.

- 9. Exterior Lighting.** The lighting plan on Sheet C6 proposes 26 new light fixtures, which includes 15 light poles and 11 wall mounted fixtures. The photometric plan provided demonstrates compliance with the light intensity standards of Section 12.03. Meanwhile, Sheet C9 includes detail sheets for the proposed fixtures showing the use of downward directed cutoff fixtures. Our only additional comment is that one of the light poles appears to be covered up by the water main easement note.

- 10. Signs.** The building elevation drawings identify 2 wall signs, although there are notes that seem to indicate 2 additional signs may be proposed. Table 16.1 limits the business to 1 wall sign; however, the Planning Commission may permit a second wall sign under “certain circumstances.”

Specifically, Footnote 2(b) allows the Commission to grant two wall signs for businesses on interior lots, which require additional visibility due to obstructed views or building orientation. If two signs are allowed, their area cannot exceed a total of 100 square feet. If approved, the applicant must obtain a sign permit prior to installation of any signage.

- 11. Impact Assessment.** As required by Ordinance, the submittal includes a revised Impact Assessment (dated 7/29/13). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

In response to our initial review letter, the Assessment has been updated to include a narrative on traffic; however, it does not provide all of the information required by Section 18.07.09.

Lastly, the Assessment notes that the applicant is currently preparing a Pollution Incident Prevention Plan (PIPP), in accordance with Section 13.07.04, given the inclusion of a collision shop and the potential for the need to deal with some potentially hazardous materials.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at borden@lslplanning.com.

Sincerely,

LSL PLANNING, INC.



Brian V. Borden, AICP

Senior Planner



August 5, 2013

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

Re: Bob Maxey Ford Dealership Expansion - Site Plan Review #2

Dear Ms. Van Marter:

We have reviewed the resubmitted site plan documents from Boss Engineering dated July 29, 2013. The site is located on an 11.27 acre parcel on the south side of Grand River Avenue and is proposing to build an approximate 10,139 expansion to the existing service center and a new 17,083 square foot collision center on the southeast corner of the lot. Tetra Tech reviewed the updated documents and offers the following additional comments.

SITE PLAN

Sheet C4

1. All proposed public sewer and water main shall have the recommended size permanent easement shown clearly on the drawings. This was not shown on any of the submitted sheets.
2. The comment regarding the 2-inch force main connection was intended to indicate a detail for the proposed connection should be clarified through the connection note or through inclusion of a detail. Connection to the manhole will require a detail showing that the discharge is directed down and into the flow channel to avoid accelerated corrosion of the manhole. This must be included on the construction drawings.

The petitioner has successfully addressed all previous comments. After addressing the comment to show all required permanent easements on the drawings, we have no objections to approval of the site plan.

Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Markstrom'.

Gary J. Markstrom, P.E.
Unit Vice President

A handwritten signature in blue ink, appearing to read 'Joseph C. Siwek'.

Joseph C. Siwek, P.E.
Project Engineer

Copy: Thom Dumond, R.L.A, LEED AP., Boss Engineering



Brighton Area Fire Department

615 W. Grand River

Brighton, Michigan 48116

810-229-6640 Fax: 810-229-1619

August 8, 2013

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Bob Maxey Ford Expansion
2798 E. Grand River
Revised Site Plan Review

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned revised site plan. The plans were received for review on August 1, 2013 and the drawings are dated July 9, 2013. The project is based on a 9,700 square foot expansion to an existing service building and a 17,100 square foot new body shop building. The plan review is based on the requirements of the International Fire Code (IFC) 2012 edition.

It is recommended that the Township consider the following comments prior to approving this project.

1. **Second Request:** An approved fire apparatus access road shall be provided to extend within 150 feet of all portions of the exterior walls. Access around the proposed buildings shall provide emergency vehicles with an outside turning radius of 50' and a minimum vertical clearance of 13 ½ feet. The applicant needs to show an adequate fire apparatus access route that meets this criteria. ***Several proposed parking spaces on both the east and west side of the collision center are impeding this performance requirement.***
IFC 503.1 & 503.2
2. The body shop building is shown to be protected with an automatic fire sprinkler system. However, the addition to the main building does not appear to have the same protection. Both additions shall be provided with an automatic sprinkler system in accordance with NFPA 13, *Standard for the Installation of Automatic Sprinkler Systems*. ***Note: the Architect has provided a code analysis document showing how the front building would not be required to be protected by a sprinkler system. However, this document does not meet the requirements of the Fire Code for S-1 use groups and repair garages.***
IFC 903
- A. **Corrected:** The FDC shall be located on the front of the buildings within 100' of a hydrant (Location to be approved by fire official). ***FDC is shown on sheet A-103 for the collision center in an acceptable location.***

IFC 912.2

B. **Corrected for the Collision Center:** The location, size, gate valve, and connection of the fire protection lead shall be indicated on the utility site plan.

3. **Corrected:** The applicant is showing the addition of one hydrant to the west of the body shop building. However, due to the proposed spacing and access routes, at least one additional hydrant will be required on the east side of the buildings.

IFC C103.1

4. **Corrected:** Where fire hydrants are subject to impact and damage by motor vehicles, guard posts or other approved means of protection shall be provided in accordance with Section 312 of the IFC.

IFC507.5.6

5. **Second Request:** The location of a key box (Knox Box) shall be indicated on future submittals. The Knox box will be located adjacent to the front door of the structure.

IFC 506.1

This proposed plan represents challenges regarding providing adequate access to and from the proposed buildings. It is suggested the designer and applicant meet with a fire department representative to discuss concerns and alternative solutions.

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). If you have any questions about the comments on this plan review please contact me at 810-229-6640.

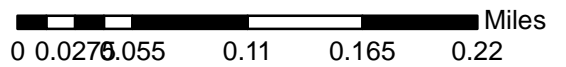
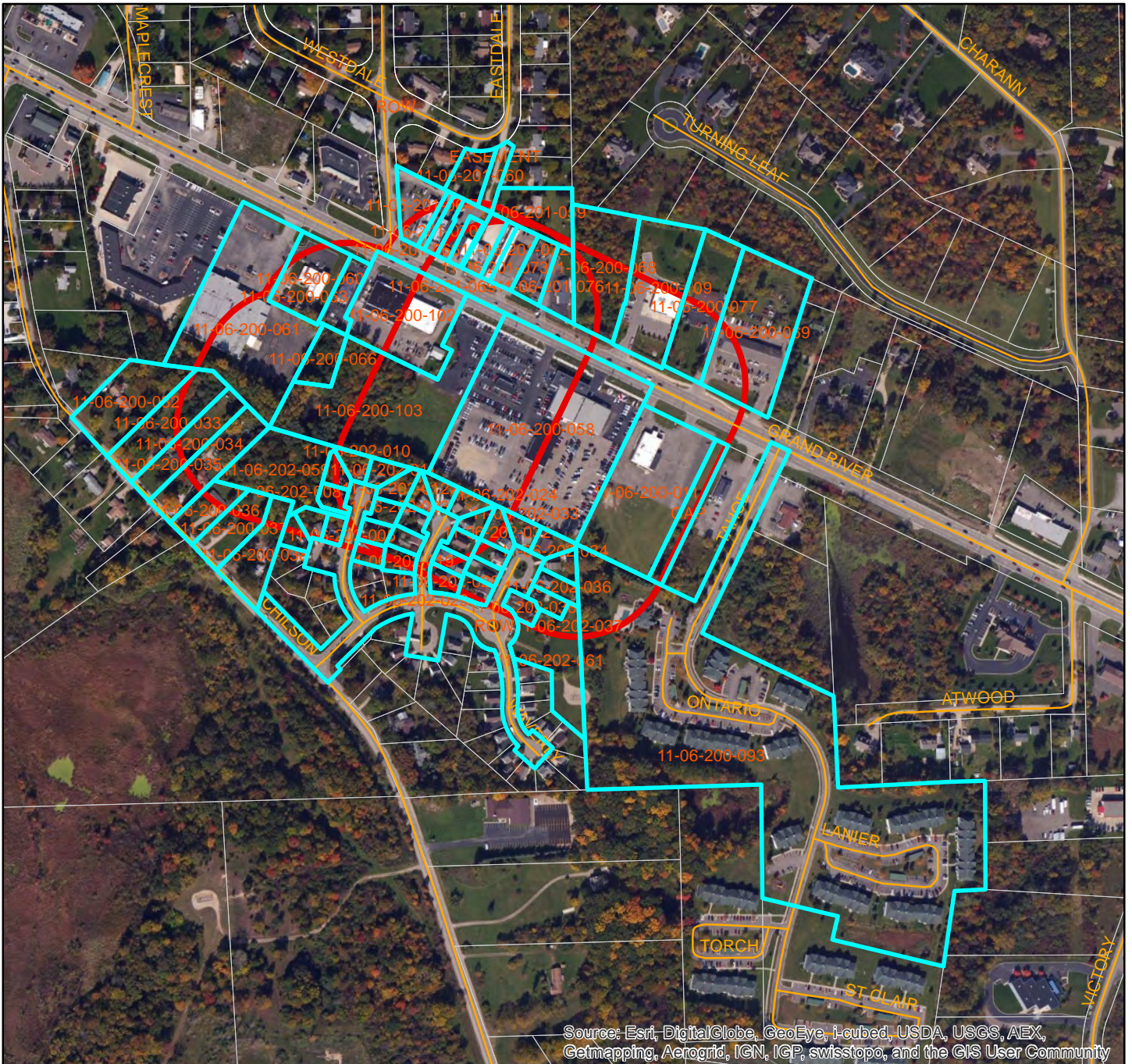
Cordially,



Michael Evans
Deputy Fire Chief

cc: Kathryn Poppy - Kathryn@Genoa.org

300 Ft Buffer for Noticing



July 12, 2013

Maxey Ford Expansion

Applicant: Mike Maxey

Parcel: 11-06-200-058 & 103

Meeting Date: August 12, 2013





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

July 26, 2013

To Whom It May Concern:

There will be a hearing for a Special Land Use Permit in your general vicinity on Monday, August 12 at 6:30 p.m. at Genoa Township Hall, located at 2911 Dorr Road, Brighton, Michigan.

The property in question is located at Maxey Ford, 2798 E. Grand River Avenue, Howell MI 48843. The Special Land Use has been requested for a proposed service center expansion, new collision center, and parking lot addition. The request is petitioned by SRM Associations, LLC.

Materials relating to this request are available for public inspection at the Genoa Township Hall during regular business hours. If you have any questions or objections in this regard, please be present at the public hearing noted above. Written comments may be addressed to the Planning Commission.

Sincerely,

Kelly VanMarter
Assistant Township Manager / Community Development Director
KKV/kp

SUPERVISOR
Gary T. McCririe

CLERK
Paulette A. Skolarus

TREASURER
Robin L. Hunt

MANAGER
Michael C. Archinal

TRUSTEES
H. James Mortensen
Jean W. Ledford
Todd W. Smith
Linda Rowell

**IMPACT ASSESSMENT
FOR
“BOB MAXEY FORD DEALERSHIP EXPANSION”
GENOA TOWNSHIP, LIVINGSTON COUNTY
MICHIGAN**

Prepared for:

**Bob Maxey Ford
2798 E. Grand River
Howell, Michigan 48843
517.545.5700**

Prepared by:

**BOSS ENGINEERING COMPANY
3121 E. GRAND RIVER
HOWELL, MICHIGAN 48843
517-546-4836**

August 26, 2013

INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development has on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Written Impact Assessment Requirements* guidelines in accordance with Section 18.07 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

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 :
BOSS ENGINEERING COMPANY
3121 E. Grand River
Howell, Michigan 48843

Prepared For:
Bob Maxey Ford
2798 E. Grand River
Howell, Michigan 48843

B. Description of the site, including existing structures, man made facilities, and natural features, all-inclusive to within 100' of the property boundary.

Bob Maxey Ford is located on 11.27 acres on the south side of Grand River Avenue between Tenpenny Furniture to the west and Howell Elks Lodge to the east. Approximately 6.75 acres of the property is currently being used by the automobile dealership. The remainder of the site (4.52 acres) has been left in its natural state and undeveloped except for a retention basin in the southwest corner of the property.

The property is at a high point along Grand River Avenue with a majority of it sloping south and west to the existing retention basin area. A portion of the property sheet flows to the east. The total elevation change across the property is approximately 32 feet. The undeveloped portion of the property is covered with scattered trees, brush and native grasses.

Existing utilities on-site and abutting the site include a 12" watermain along the south side of Grand River Ave., and a 8" watermain running through the center of the property. The sanitary sewer service is provided to the dealership through a sanitary lead which connects to the public sewer located near the southeast corner of the property. The storm sewer system is self contained on site.

Grand River Avenue is a five (5) lane roadway under the jurisdiction of the Michigan Department of Transportation (M.D.O.T.) with curb and gutter, and a center left turn lane.

Also, a small portion of the existing parking lot currently extends into the Grand River Avenue right-of-way by 4 feet. Section 24.10 of the Genoa Township Ordinance states "Where a non-conforming front setback, parking lot setback or green belt is created as a result of additional road right-of-way width being acquired by a road agency, the building or parking lot may be improved or expanded without the need to obtain a variance from the ZBA, providing the following conditions are met:"

1. Conformed Prior to Right-of Way Widening – Even though Boss Engineering has been working on the site since 1998, we do not have any record of the original site plan and how it related to

the Grand River right-of-way. The asphalt was installed prior to the previous owner purchasing the dealership which was in 1996.

2. Will Not Decrease Conformity – Our plan is to leave the front area untouched. Therefore, not decreasing the conformity.

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.

As previously mentioned, the subject site slopes gradually from Grand River towards the southwest. The U.S.D.A. Soil Conservation Service "Soil Survey of Livingston County" indicates the soils to be as follows:

Percent of Site	Name	Percent Slopes
100%	Miami Loam	2-6%

The site contains no streams, creeks, lakes or regulated wetlands per the National Wetland Inventory Plan prepared by the United States Department of the Interior, and site visit.

The undeveloped portion of the site contains a mix of trees, brush and grasses.

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

Most of the existing storm drainage runoff is captured in a retention basin located at the southwest corner of the property. The area where the service center expansion is proposed and the new body shop location, is currently paved and part of the automobile dealership. The only increase in impervious surface will be for the parking lot expansion located in the center portion of the property. This area will drain into the proposed expanded retention basin. A storm water forebay will be added to the storm treatment system per the requirements of the Livingston County Drain Commission to pre-treat the storm water runoff.

The Livingston County Drain Commissioner must issue a Soil Erosion Control permit to ensure proper soil erosion control measures are used during construction. All requirements will be met including temporary drainage control, temporary dust control and runoff control. The following methods will be used as required, diversion berms, geotextile sediment control fences, diversion ditching, and slope stabilization. Stone filters will be installed on catch basins, inlets and pipe inlets. Finish grades, redistribution of top soil and lawn will be installed upon building and paving construction completion. Pavements, swales, basins, etc will be cleaned after construction and properly maintained by Maxey Ford.

At the time of construction, there may be some temporary dust, noise, vibration and smoke, but these conditions will be of relatively short duration and shall be controlled by applying appropriate procedures to minimize the effects, such as watering if necessary for dust control and working near adjacent buildings only during daytime hours.

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.

The owner is proposing to construct a 10,139 square foot expansion to the existing service center located on the east side of the dealership. The expansion will allow for the servicing of up to 15

vehicles at one time. The project also includes the reconfiguration and expansion of the existing parts and service area. The hours for the dealership vary depending on the services needed and the day of the week.

In addition to the service center addition, Maxey Ford will be relocating the collision center from Victory Drive to behind the dealership. The new collision center is be 17,083 square feet in size and it will contain the body shop, paint shop and alignment center. The staff and most of the equipment from the existing center will be relocated to the new facility.

With the service center expansion and addition of the collision center, a portion the of the existing site lighting will be removed and replaced with new light fixtures designed to meet the current Genoa Township lighting ordinance.

Included with this submittal are new identification elements required by Ford. Plans have been prepared by Ford and the Cityscape to shown the proposed additions.

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

The development will be served by public water and sewer systems adjacent to the site. In addition to connecting the new collision to the public sanitary sewer system, the existing used vehicle building will be connection to the sewer and water system. Currently the used vehicle building is on a pump and haul arrangement.

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.

The site is located within the Genoa-Oceola Sanitary Sewer District. The applicant will work with Township staff to determine the number of Residential Equivalent Units (R.E.U.) for the proposed use.

Because the storm sewer system is located entirely on the site, limited impact is anticipated from storm events. The retention basin will be expanded to mean current Livingston County Drain Commission requirements and include a forebay for pretreatment. Much of the existing and proposed site sheet flows towards the existing retention basin.

All other utilities, including gas, electric, and telephone are available at the site and are not expected to increase in size or capacity. All proposed dry utilities will be underground.

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

The automobile fluids (new and used) kept on site will be stored or disposed of in accordance with current local, state and federal requirements.

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

Based on the Institute of Transportation Engineers Publication TRIP GENERATION manual for automobile care centers, the number of trips in an average weekday is 1500, with the peak being between 4:00 PM and 6:00 PM.

Traffic Impact Statement

Bob Maxey Ford is located on Grand River Avenue which is under the jurisdiction of the Michigan Department of Transportation. The five lane road has two west and two east bound lanes with a center turn. Michigan Department of Transportation has no plans to make any modifications to the current configuration of the road.

There are three drive approaches onto the site from Grand River. The first two are on either side of the new vehicle showroom, and the final drive approach is a shared approach with the development to the west. No improvements are proposed for the three approaches.

With the expansion of the service, the dealership is anticipating a small increase in traffic due to the additional services. The reason for the building addition is to allow the dealership to keep vehicles being serviced inside the building, instead of moving vehicles in and out as parts become available.

Maxey Ford currently has a collision just to the east of their property on Victory Drive. The intent is move their entire collision center operation to their main facility. The new building will be able to handle a similar number of vehicles being serviced. There should be little or no increase in traffic on Grand River with the move of their collision from their existing site to this property. The customers currently using the existing facility are already using Grand River Avenue to access the facility. The traffic will be shifted down the street to the relocated collision center. Therefore, the existing road network can accommodate the minimal increase in the additional new vehicle trips the development is anticipated to generate.

The estimate number of new trips that are anticipated with the increase in service stalls and the addition of the collision center is 105 per day. The brake down of those trips are as follows.

When a person drops a vehicle off for service, typically there is someone else driving a separate vehicle to pick them up or drop them off to get their vehicle after it is completed. This generates 3 trips per visit to the dealership.

For the service center expansion, the average number of vehicles worked on per day per stall is 2. There is an increase of 6 stalls with the expansion of the service center. There is up to 6 trips per vehicle being serviced (3 vehicles when dropping off and 3 vehicles when picking up). The increase in trips is 6 trips per vehicle times 2 vehicles per stall times 6 stalls which equals 72 new trips with the service center.

The collision center sees an average of 5.5 new vehicles each day being dropped off for service and 5.5 being picked up times 3 trips each which equals 33 trips. This brings the total daily increase to 105 vehicles.

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

None

K. Description of all sources:

- Genoa Township's Submittal Requirements For Impact Assessment/Impact Statement
- Genoa Township Zoning Ordinances
- Soil Survey of Livingston County, Michigan, U.S.D.A. Soil Conservation Service
- Trip Generation 6th Edition, Institute of Transportation Engineers

Spill Prevention, Control and Countermeasure Plan
and
Pollution Incident Prevention Plan

Bob Maxey Ford of Howell
2798 East Grand River Avenue
Howell, Michigan 48843

August, 2013

ASTI ENVIRONMENTAL



GENOA TOWNSHIP

AUG 26

RECEIVED

ASTI
ENVIRONMENTAL

Spill Prevention, Control and Countermeasure
Plan and
Pollution Incident Prevention Plan

Bob Maxey Ford of Howell
2798 East Grand River Avenue
Howell, Michigan 48843

August, 2013

**BOB MAXEY FORD OF HOWELL
 SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
 POLLUTION INCIDENT PREVENTION PLAN**

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**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

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**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

SUMMARY INFORMATION PAGE

FACILITY OWNER:
Bob Maxey Ford of Howell

FACILITY OPERATOR:
Bob Maxey Ford of Howell
2798 East Grand River Avenue
Howell, Michigan 48843

TECHNICAL CONTACT PERSONS:

PRIMARY CONTACT

Dan Retherford
Service Manager
Work Phone: (517)338-0249

SECONDARY CONTACT

Ardi Kastriati
Parts Manager
Work Phone: (517) 338-0257

TYPE OF INDUSTRIAL FACILITY:

Primary SIC Code
5511 – Motor Vehicle Dealers (New and Used)

NAICS Codes
441110- Automobile dealers, new only or new and used

EPA HAZARDOUS WASTE GENERATOR ID:
MID044965762

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

CERTIFICATION AND MANAGEMENT APPROVAL

As stated in 40 CFR Part 112.7 – “If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan.”

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document that I have the level of authority to commit the necessary resources to fully implement this SPCC Plan.

Signature	_____	Date:	_____
Name	Michael Maxey		
Title	President Bob Maxey Ford of Howell 2798 East Grand River Avenue Howell, MI 48843		

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

1.0 CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER

By means of this certification, I attest that I am familiar with the requirements of provisions of 40 CFR Part 112, that I or my designated agent have visited and examined the facility, that this SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the requirements of this Part, that procedures for required inspection and testing have been established and that the Plan is adequate for the facility.



Engineer Signature
Bruce Bawkon, P. E.

8/19/2013

Date of Plan Certification

32011 Michigan

Registration No. and State

ASTI Environmental
10448 Citation Drive
Brighton, MI 48116

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

PLAN RECORD OF REVIEWS

In accordance with 40 CFR Part 112.5(b), a review and evaluation of the Spill Prevention Control and Countermeasure (SPCC) Plan is conducted at least once every five years. However, a Pollution Incident Prevention Plan requires a review and evaluation every three years. Therefore, Bob Maxey Ford of Howell (Maxey Ford) is required to review this Plan every three years and, furthermore, within six months if any of the following guidelines are applicable:

1. When required by the EPA or MDEQ after review of the Plan;
2. Whenever there is a change in facility design, construction, operations, or maintenance that materially affects the potential for an oil spill; and
3. At the time of the required three-year review of the plan (i.e., by August 2016), if the review indicates more effective control and prevention technology will significantly reduce the likelihood of a spill event (if such technology has been field proven).

Any technical amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. Non-technical amendments, such as telephone numbers and names, need not be certified by a Professional Engineer.

I, the undersigned, have completed a review and evaluation of the Plan for Bob Maxey Ford of Howell on _____ [date], and _____ [will or will not] amend the Plan as a result.

Authorized Signature: _____
Name (Print): _____
Title: _____

If in need of modification, describe amendments to be completed:

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

2.0 INTRODUCTION

This combined Spill Prevention Control and Countermeasure Plan and Pollution Incident Prevention Plan (Plan) has been prepared for the Maxey Ford of Howell (Maxey Ford) facility at 2798 East Grand River Avenue, Howell, MI 48843. ASTI Environmental (ASTI) provided technical assistance in the development of this document.

2.1 FEDERAL REGULATIONS

In accordance with 40 CFR Part 112, entitled "Oil Pollution Prevention," and the State of Michigan Department of Environmental Quality (MDEQ) Code of Administrative Rules (MI Rules), as amended (Act 451) MCL 324.3101 *et seq.*, "Pollution Incident Prevention Plans (PIPP)," this Plan has been developed to provide procedures and measures for minimizing the potential discharge of oil¹ from storage and transfer activities at Maxey Ford into navigable waters of the United States.

This Plan has been developed for Maxey Ford, consistent with the requirements of 40 CFR Part 112. The SPCC regulations establish requirements designed to prevent the discharge of oil from non-transportation related facilities to navigable waters of the United States. These regulations require subject facilities that could reasonably be expected to discharge oil to prepare SPCC plans that describe the equipment and methods used to prevent spills and to respond to a spill.

40 CFR Part 112 contains two applicability criteria that must be evaluated when determining if the regulation applies to a facility. The first criterion is as follows:

- *"Underground storage tank capacity in excess of 42,000 gallons or a combined aboveground storage capacity in excess of 1,320 gallons"*

Only oil containers with a capacity of 55 gallons or greater, which are not permanently closed, count towards the 1,320-gallon threshold. Completely buried tanks subject to all of the technical requirements of 40 CFR Part 280 or a State program approved under 40 CFR Part 281 and underground tanks that are permanently closed do not count towards the 42,000-gallon threshold.

The second criterion that must be assessed when determining the applicability of 40 CFR 112 is as follows:

- *"...could reasonably be expected to discharge oil in harmful quantities...into or upon the navigable waters of the United States or adjoining shorelines, or waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Act or Deepwater Port Act, or affecting certain natural resources."*

¹ Section 311 of the Clean Water Act defines oil as "oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes other than dredged spoil." EPA interprets this definition to include crude oil and refined petroleum products, as well as such non-petroleum products as vegetable and animal oils.

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Based on communications with EPA regulators, it is ASTI's understanding that EPA interprets the potential of discharge to surface water very broadly, and that most facilities exceeding the volumetric thresholds must develop and implement SPCC Plans.

A regulatory cross-reference matrix that identifies where the SPCC requirements are addressed by this Plan is included in **Appendix A**.

2.2 APPLICABLE STATE OR LOCAL REQUIREMENTS

40 CFR 112.7 (1) An oil spill contingency plan following the provisions of part 109 of this chapter.

40 CFR 109.3 Purpose and Scope The guidelines in this part establish minimum criteria for the development and implementation of State, local, and regional contingency plans by State and local governments in consultation with private interests to insure timely, efficient, coordinated and effective action to minimize damage resulting from oil discharges

As stated in Section 2.2, this plan complies with the requirements of Michigan Act 451- Part 324 – Pollution Incident Prevention Plan.

40 CFR 112.3 (b) If your oil production facility as described in paragraph (a)(1) of this section becomes operational after November 10, 2011, or as described in paragraph (a)(2) of this section becomes operational after November 10, 2010, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare and implement a Plan within six months after you begin operations.

This plan was prepared to comply with the requirements of 40 CFR 112.3(b).

40 CFR 112.7 (2) Comply with all applicable requirements listed in this part.

There are no deviations from the applicable requirements for 40 CFR 112.7.

40 CFR 112.7 (3)(iii) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located.....Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;

The physical layout of the facility is described in Section 6. There are no discharge or drainage controls from secondary containment or other structures.

40 CFR 112.7 (j): In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations and guidelines.

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In order to fulfill the requirements of 40 CFR 112.7 (j), which require Plans to discuss conformance with applicable State rules, regulations and guidelines, Maxey Ford's compliance with several State regulations was evaluated. The MDEQ has several regulatory programs that address oil storage facilities. Specifically these are:

- Act 451- Part 211 – *Underground Storage Tanks, UST Registration;*
- Act 451- Part 213 – *Leaking Underground Storage Tanks (LUST); and*
- Act 451- Part 324 – *Pollution Incident Prevention Plan;*

Act 451- Part 213 establishes requirements applicable to the reporting and cleanup of releases of oil from USTs in the State of Michigan. Reporting requirements identified in these rules, as they pertain to this Plan, are identified in Section 7.0. Oils at the Maxey Ford facility that are subject to the SPCC regulations are also regulated under this State program. Maxey Ford exceeds the thresholds that trigger applicability of Act 451- Part 324, and is therefore subject to the requirements of this regulatory program. Please note that preparation and maintenance of this document meets the requirements of Part 324 provided the MDEQ Water Division, local health department and local emergency planning committee (LEPC) are provided with a certification that this Plan has been completed. Since Maxey Ford has an active UST system at their facility, Part 211 would also apply. When applicable, these MDEQ regulatory programs are further discussed in the text of this Plan that follows.

No other applicable local, State or Tribal regulations have been identified for the Maxey Ford facility.

2.3 REVIEW AND AMENDMENT BY MANAGEMENT

According to Act 451- Part 213 Maxey Ford is required to review or amend this Plan at least every three years or if any of the following situations occur:

1. There is a change in facility design; or
2. There is construction which modifies the facility; or
3. There is a change in operation or maintenance procedures which materially affects the facility's potential to discharge oil or other hazardous substances into or upon water or adjoining shorelines; or
4. A tank is commissioned or decommissioned, replaced, reconstructed or moved; or
5. A piping system is replaced, reconstructed or installed.

Whenever one of the above conditions occurs, Maxey Ford management will review and amend this Plan as soon as possible. In no event will this review and/or amendment occur later than six months after such a condition occurs. Plan reviews will be documented within this Plan, as shown in the preceding Management Record of Reviews.

The Plan will be amended within six months of any review to include more effective prevention and control technology if:

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1. Such technology will significantly reduce the likelihood of a spill event from the facility;
and
2. Such technology has been field-proven at the time of the review.

The EPA Regional Administrator may also require amendment of this Plan if he determines that the Plan does not satisfy the SPCC requirements or amendment is necessary to prevent and contain discharges from the facility.

Management Approval of the Plan is provided on page iv, and will be updated each time the Plan is modified, or every three years, whichever is less.

2.4 REVIEW BY REGISTERED PROFESSIONAL ENGINEER

The original Plan must be reviewed and certified by a licensed Professional Engineer to ensure that this Plan meets the guidelines set forth in 40 CFR Part 112 and applicable State of Michigan requirements. All technical amendments to this Plan must be certified by a Professional Engineer. Certification consists, at a minimum, of a stamped, signed statement by a Professional Engineer that this Plan meets federal and State requirements. This certification is located on page v of this Plan. Non-technical² amendments need not be certified by a Professional Engineer.

² The regulatory preamble states that non-technical amendments include items such as changes to the contact list or telephone numbers, product changes if the new product is compatible with existing conditions, and other changes that do not materially affect the facility's potential to discharge oil. If the owner or operator is unsure of the status of a change, he should have the Plan certified.

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3.0 ROLES AND RESPONSIBILITIES

3.1 EMERGENCY RESPONSE COORDINATORS

40 CFR 112.7 (f)(2): Designated person accountable for spill prevention - Designate a person at each applicable facility who is accountable for oil spill prevention and who reports to facility management.

The following are the designated Spill Response Coordinators for Maxey Ford:

Primary SPCC/PIPP Coordinator:

Dan Retherford
Service Manager
Work Phone: (248) 910-9405

Secondary SPCC/PIPP Coordinator:

Ardi Kastriati
Parts Manager
Work Phone: (517) 338-0257

There is a SPCC/PIPP Coordinator, either on the premises or on call, at all times. These individuals are thoroughly familiar with this Plan, all operations and activities at the facility, and the location and character of oil products handled. They have the authority to commit the resources needed to carry out this Plan. They have successfully completed the necessary training to coordinate an appropriate response to spill incidents. They are also responsible for interfacing with external contacts such as police, fire, or hospital. In the event of a spill, the SPCC/PIPP Coordinator will perform the response procedures as described in Section 6.0 of this Plan.

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4.0 SITE DESCRIPTION

Maxey Ford is an automobile and truck sales and service facility located at 2798 East Grand River Avenue, Howell, MI 48843. The site has two major structures that incorporates office space and shop areas for vehicle maintenance.

The Standard Industrial Classification code for Maxey Ford operations is 5511 – Motor Vehicle Dealers (New and Used). The North American Industry Classification System (NAICS) codes for Maxey Ford operations are 441110- Automobile dealers, new only or new and used.

Maxey Ford currently employs approximately 65 employees at the 2798 East Grand River Avenue, Howell, MI 48843 site and operates Monday through Friday from 7:30 am to 7:00 pm and Saturday 8:30 am to 4:00 pm.

4.1 LOCATION MAP

The site is located in the NE ¼ of the NE ¼ of Section 006, T2N, R5E, City of Howell, Livingston County, Michigan (as shown on **Figure 1**). Surface drainage from the site is to the public drain at north edge of the site with surface run off to the south of the site.

Figure 1 – Site Location Map serves as the general location map and identifies the location of the facility and the receiving waters within one mile of the facility.

4.2 SITE PLAN

40 CFR 112.7 (a)(3): Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes.

The Site Plan includes the following features: direction of surface water (or accidental release) flows; locations of oil product storage areas (i.e., above ground storage tanks, underground storage tanks, and drum storage areas including identification of contents); and locations where major spills or leaks have occurred (if applicable). **Figure 2 – Site Layout** identifies the above-referenced features present at the Maxey Ford facility.

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5.0 RECEIVING WATERS AND WETLANDS

The property is located at an elevation that is locally higher than surrounding area. Potential surface water flow would be away from the site in all directions. The nearest receiving water or potentially impacted navigable body of water for discharges is a wetland located approximately 1,500 feet southwest of the property. Earl Lake is located approximately 2,500 feet to the northeast.

Any onsite spillage or release of fuel/oil would likely reach adjacent water bodies via the municipal storm water drain system along East Grand River Avenue and to the south of the property.

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**6.0 POTENTIAL OIL DISCHARGE SOURCES / RISK
 ASSESSMENT**

6.1 IDENTIFICATION OF OIL PRODUCT STORAGE, TRANSFER, AND USE AREAS

Site reconnaissance was conducted by ASTI to review the physical features of the facility; and identify areas of oil product storage, transfer, and use at the facility that are subject to the SPCC and PIPP regulations.

40 CFR 112.7 (b)(1) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

40 CFR 112.8 If you are the owner or operator of an onshore facility (excluding a production facility), you must: (a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed in this section.

Based on information provided by Maxey Ford and observations made during reconnaissance, an inventory was completed of all types of oil product storage at the facility and associated activities. Table 1 provides a description of the types and amounts of materials stored on-site, the associated pollutants, and an evaluation of the degree of risk posed to water quality or potentially impacted navigable bodies of water. The table descriptions include product stored in aboveground storage containers, underground storage tanks, oil-filled equipment and transfer lines, spill containment tanks, portable tanks, and drum storage at the facility. These source areas are also identified on Figure 2.

The main north building has trench drains that drain to an underground storage tank (UST) located outside the north wall. The UST does not have a discharge. Spill associated with tanks in the storage shed south of the building do not have secondary containment. Spills would be contained in the shed and surrounding paved areas.

TABLE 1 OIL INVENTORY AND TANK CAPACITY			
TANK ID	MAIN BUILDING (NORTH BUILDING)		Potential Spill Direction
A1	400 gallon	5w20 Motor Oil	Shed and paved areas
A2	400 gallon	5w20 Motor Oil	Shed and paved areas
B	275 gallon	10w30 Diesel Motor Oil	Inside building
C	400 gallon	Mercon 5 Trans Fluid	Shed and paved

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TABLE 1 OIL INVENTORY AND TANK CAPACITY			
TANK ID	MAIN BUILDING (NORTH BUILDING)		Potential Spill Direction
			areas
D	400 gallon	15w40 Diesel Motor Oil	Shed and paved areas
E	275 gallon	5w30 Motor Oil	Shed and paved areas
F	300 gallon	Windshield Washer Solvent	Shed and paved areas
G	275 gallon	Mercon LV Trans Fluid	
H	275 gallon	5w30 Motor Oil	Inside building
I	275 gallon	5w20 Motor Oil	Inside building
HR	55 gallon	Hydraulic Lift Oil Reservoir	Inside building
N	55 gallon	Brake Solvent Fluid	Shed and paved areas
P	150 gallon	Used Antifreeze	Outside to paved areas
Q	500 gallon	Used Oil	Outside to paved areas
TANK ID	SERVICE GARAGE (SOUTH BUILDING)		Potential Spill Direction
J	275 gallon	5w20 Motor Oil	Inside building
K	275 gallon	5w30 Motor Oil	Inside building
L	275 gallon	15w40 Diesel Motor Oil	Inside building
M	200 gallon	Windshield Washer Solvent	Inside building
O	950 gallon	Wastewater UST	No discharge
R	500 gallon	Diesel Off Road	Inside building

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6.2 POTENTIAL SPILL PREDICTIONS

40 CFR 112.7 (b): Where experience indicates a reasonable potential for equipment failure (such as tank overflow, rupture, or leakage), the plan should include a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each major type of failure.

Figure 2 depicts the locations of oil storage and processing areas (i.e. Functional Areas) at the Maxey Ford facility. Table 1 forms part of Maxey Ford's management system which addresses the above requirements for all material usage at the site. Table 1 summarizes the following information:

- Functional Area (e.g. Building)
- Location/Products
- General and Specific Aspect(s)
- Regulatory Requirement (e.g. contents, quantity, containment, flow direction)

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**7.0 SPILL / EMERGENCY RESPONSE AND
COUNTERMEASURES**

40 CFR 112.7 (a)(3)(iv): Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor) must be addressed in the Plan.

40 CFR 112.7 (a)(3)(v): Methods of disposal of recovered materials in accordance with applicable legal requirements must be addressed in the Plan.

40 CFR 112.7 (a)(5): Organize portions of the Plan that describe the procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency.

40 CFR 112.7 (a)(3)(vi): A contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies must be addressed in the Plan.

40 CFR 112.7 (a)(4): Unless you have submitted a response plan under 112.20, provide information and procedures in your Plan to enable a person reporting a discharge to relate relevant information about the facility (i.e., location and phone number) and the discharge (e.g., date and time, type of material, quantity, source, etc.).

7.1 DISCOVERY / INTERNAL FACILITY REPORTING

All employees are trained to notify their respective supervisor or the spill coordinator upon discovery of a spill or leak. If an employee notifies their supervisor, then the supervisor (or employee if their respective supervisor was unavailable) must immediately contact the spill coordinator listed in Section 2.1.

7.2 NON-EMERGENCY SPILLS

In the event of an incidental spill or leak, when the substance and its hazards are known and they do not pose a threat to personal safety or the environment, then an appropriate absorbent material would be applied by the person who discovered the release to contain or control the spill.

7.3 SPILL PROCEDURES

If it is determined that there is an imminent or actual release situation, the Spill Coordinator will:

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Emergency Alerts

Immediately call 911 to notify the local and/or state police, Fire Department, clean-up contractor(s) and/or Ambulance Services with designated roles as appropriate in the event of a hazardous material spill.

CITY OF HOWELL FIRE DEPARTMENT *Brighton Area Fire* 911

CITY OF HOWELL POLICE *Liv. Cnty. Sheriff* 911

LIVINGSTON COUNTY LOCAL EMERGENCY PLANNING COMMITTEE *Donald Arabic*
Mr. Richard L. Winsett
300 S Highlander Way
Howell MI 48843
517-546-4620

MDEQ EMERGENCY 24 HOUR (PEAS) (800) 292-4706

NATIONAL RESPONSE CENTER (U.S. COAST GUARD) (800) 424-8802

U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 5 (800) 621-8431

Assessment

1. Identify the character, source, amount, and real extent of any released materials.
2. Assess possible hazards to human health or the environment that may result from the emergency situation. In making this assessment, the Spill Coordinator considers both direct and indirect effects, including hazardous gases or surface water runoff resulting from fires or explosions. If such hazard is determined to exist, the emergency coordinator:
 - Evaluates whether a local evacuation may be advisable, and immediately notifies the appropriate local authorities;
 - Helps local officials decide whether local areas should be evacuated; and
 - Follows the procedures of Section 7.0 of this Plan to determine whether immediate verbal notification to authorities is required.

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Maxey Ford documents spills using the *Spill Report Form* that is contained in Appendix E. The *Spill Report Form* contains information that is likely to be requested during verbal reporting of an emergency release.

Containment

1. Cease all activities and if possible secure all transfer operations being conducted in the area of the emergency.
2. Make all reasonable attempts to contain the spill to prevent any further danger to persons or the environment, such as stopping processes and operations, containing released waste, and removing or isolating containers.
3. If the extent or location of the emergency prevents safely containing the spill, isolate the problem to the extent possible until additional resources (e.g., Fire Department) arrive.
4. If facility operations are stopped, the Spill Coordinator monitors for leaks, pressure buildup, gas generation or equipment ruptures, when appropriate.
5. Upon the arrival of the Fire Department, advise the officer in command of the nature of the materials involved, unusual spill control techniques and safety procedures. Provide the officer in command with any information that is requested pertaining to the materials and assist him as requested.

Actions Following an Emergency

1. Immediately after a emergency release of hazardous material, the Spill Coordinator:
 - Provides for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. The waste material from the clean-up effort must be characterized. Representative sampling and analysis may be necessary to make this determination.
 - Ensures that incompatible waste does not come in contact with the released waste.
 - Coordinates the cleaning and decontamination of all emergency equipment used during the emergency and ensures readiness or replacement before transfer operations resume in the affected area of the facility.
 - For releases that are hazardous wastes or result in the generation of hazardous wastes, the Spill Coordinator notifies the MDEQ Waste Management Division prior to resuming operations in the affected area.

Written Reports

Follow the procedures outlined in Section 7.0 of this Plan to determine whether follow-up written notification is required.

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Other Follow-up Actions

Following any spill, the Spill Coordinator will evaluate the success of the spill response, and offer recommendations necessary to improve the effectiveness of Maxey Ford's spill response procedures, equipment, or construction. Emergency and spill response information that may be evaluated, if applicable, includes:

- Response time of facility personnel;
- Response time and effectiveness of emergency coordinator;
- Response and preparedness of the fire department, community hospital, etc.;
- Capabilities of emergency equipment;
- Identification of character of emergency and special precautions taken during response;
- Containment of spill, leak or fire;
- Cleanup and disposal of resultant cleanup material and waste;
- Internal communication systems; and
- Evacuation of emergency area.

If an oil release and corrective actions result in changes to the facility's operation or maintenance, then revision of this Plan is required within six months (40 CFR 112.5[a]). In the event of any significant spills or leaks that occur subsequent to the implementation of this plan,

Table 2 – *Spill History* should be modified, within 14 calendar days of knowledge of the release, to provide a description and date of the release, and the Plan should be reviewed and modified where appropriate.

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8.0 EXTERNAL SPILL REPORTING REQUIREMENTS

8.1 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (40 CFR 110.6 AND 40 CFR 112.4)

The National Response Center must be notified immediately at 1-800-424-8802 whenever a discharge of oil results in a visual sheen on surface water.

40 CFR Part 112.4(a) requires that Maxey Ford report to the Region 5 Administrator of the EPA within 60 days of the release, under the following conditions:

- If an oil discharge of more than 1,000 gallons occurs in a single spill event; AND
- If the release(s) enter a receiving water; OR
- If a discharge of more than 42 gallons of oil occurs in each of two discrete spill events within any 12-month period; AND
- If the release(s) enter a receiving water.

The spill report will contain the following information:

1. Name of the facility;
2. Name(s) of the owners or operator of the facility;
3. Location of the facility;
4. Maximum storage or handling capacity of the facility and normal daily throughput;
5. The corrective actions and/or countermeasures taken, including a description of equipment repairs or replacements;
6. An adequate description of the facility, including maps, flow diagrams and topographical maps;
7. The cause(s) of such release, including a failure analysis of the system or subsystem in which a failure occurred;
8. Additional preventive measures taken or contemplated to minimize the possibility of recurrence; and
9. Such other information as the EPA Region 5 Administrator may reasonably require pertinent to the Plan or spill event.

In accordance with 40 CFR Part 112.4(c), the MDEQ may conduct a review and provide recommendations to the EPA Region 5 Administrator as to further procedures, methods, equipment and other requirements necessary to prevent and contain discharges of oil from the facility.

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Written reports to the Region 5 Administrator of the EPA should be sent to the following address:

USEPA Great Lakes
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Written reports to the MDEQ should be sent to the following address:

MDEQ
Environmental Response Division
525 West Allegan Street
PO Box 30473
Lansing, Michigan 48909-7973

Verbal and written notification requirement guidelines and full contact details can be found in Appendix B and E of this Plan.

8.2 MDEQ REQUIREMENTS

Under the Michigan Rules, Part 211 and Part 324, verbal notification of a reportable discharge of oil must also be made immediately (*i.e.*, within twenty-four hours of the release) to the MDEQ Pollution Emergency Alerting System (PEAS) at (800) 292-4706 (24 hours), or if calling outside Michigan (517)-373-7660. Part 324 also requires a call to 911 in the case of a reportable release

Notification to the MDEQ (or Michigan State Police) is required immediately if any of the following conditions are met within the PIPP Part 5 of MCL324:

1. If a Polluting Material as defined in 324.2002 exceed the threshold reportable quantities (TRQs) as seen in R324.2009.
2. If a Oil and/or Salt as defined in R324.2001 and R324.2002 respectively are a Polluting Material are discharged

A written report may be required at the discretion of the MDEQ with consideration of the effectiveness of the cleanup and the potential for impacts to groundwater or surface water quality.

MDEQ verbal and written notification requirements can be found in Appendix E of this Plan along with a sample notification form. Appendix E also contains guidance documents pertaining to Part 324 and determination of a reportable release.

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9.0 HISTORY OF SIGNIFICANT SPILLS AND LEAKS

Based on historical information provided by Maxey Ford, the facility has experienced no reportable or significant releases at this site.

In the event of any significant spills or leaks that occur subsequent to the implementation of this Plan, Table 2 will be modified to provide a description of the release, the circumstances leading to the release, and date of the release.

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**10.0 CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA
– OIL POLLUTION ACT OF 1990**

The final rule of the Oil Pollution Act of 1990 as published on July 1, 1994 in the *Federal Register* mandates that if an owner/operator determines that the facility does *not* have the potential to cause "substantial harm," the owner/operator must complete the certification form contained in 40 CFR 112.20, Attachment C-II. This form must be maintained at the facility. It has been determined that the Maxey Ford facility does *not* meet the "substantial harm" criteria. The executed certification and listing of self-selection criteria are presented in **Appendix C**.

It is important to note that if the operations at the facility change so that the terms of this certification are no longer satisfied, a Facility Response Plan must be prepared and submitted to the Regional Administrator (See 40 CFR 112.20).

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11.0 CONTROLS

11.1 DEFINITIONS

Non-structural, structural, and other measures intended to protect surface water and groundwater quality are referred to as Best Management Practices (BMPs). In the SPCC program, BMPs measures are referenced as "preventive measures" or "preventive systems." All such measures are referenced as BMPs within this Plan. BMPs correlate to Maxey Ford's internal management system procedure document(s).

11.2 SPCC-REQUIRED BMPS

Maxey Ford currently implements several specific spill prevention control BMPs to prevent the discharge of oil identified at each of the potential pollutant sources from reaching navigable waters of the United States or adjoining shorelines.

These BMPs include all of the following:

- Storage of materials in appropriate containers and locations;
- Convenient placement of spill kits and cleanup equipment;
- Consistent monitoring of equipment in operation;
- Filling of large storage containers with small ones, thereby reducing the possibility of a significant spill;
- Facility inspections; and
- Annual training of employees on oil and polluting materials handling and spill procedures.

In some cases, certain SPCC requirements may be satisfied by implementing other equivalent environmental measures. If this approach has been used in lieu of satisfying specific SPCC requirements, the approach has been identified in the following text and an explanation has been provided for the use of the alternative methods.

11.2.1 Procedures for Routine Handling of Products

40 CFR 112.7 (a)(3)(ii): Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.) must be provided in your Plan.

Training programs, as described in Section 10.2.4 below, include instructions on the procedures used at the facility for routine handling of product to prevent the discharge of oil.

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11.2.2 Diversionsary Structures and Containment

40 CFR 112.7 (c): Appropriate containment and/or diversionsary structures or equipment to prevent discharged oil from reaching a navigable watercourse must be provided. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. One of the following preventive systems or its equivalent must be used as a minimum:

Onshore facilities:

- (i) Dikes, berms or retaining walls sufficiently impervious to contain oil;*
- (ii) Curbing;*
- (iii) Culverting, gutters or other drainage systems;*
- (iv) Weirs, booms or other barriers;*
- (v) Spill diversion ponds;*
- (vi) Retention ponds;*
- (vii) Sorbent materials.*

All drums, parts washers and liquid containers have been fitted with appropriate secondary containment or are stored within areas that provide secondary containment.

11.2.3 Inspections

40 CFR 112.7(e): Inspections, tests, and records - Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

To prevent the discharge of oil from storage tanks, reservoirs, or drums, the following inspections and tests are conducted by Maxey Ford:

1. A visual inspection of the facility and all related functional areas is conducted bi-monthly (6 times per year) using the **Inspection Checklist** (Appendix D).

The **Oil Storage Areas Inspection Checklist** included in Appendix D will be used by Maxey Ford to document inspections. Corrective actions for any deficiencies noted during the inspections.

The facility's Plan authorized signatory representative will review and approve all **Oil Storage Inspection Checklist** results. All records will be retained per Maxey Ford management system requirements.

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11.2.4 Training

40 CFR 112.7 (f)(1): Personnel instructions –At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules and regulations; general facility operations; and, the contents of the facility SPCC Plan.

Training is provided for all employees whose work is associated with oil product storage and for employees who are responsible for implementing activities identified in the Plan. The training informs them of the components and goals of the Plan.

Maxey Ford's SPCC/PIPP training is conducted at least annually. On the job training is conducted for new employees. The training identifies the components and goals of the Plan and includes a discussion of oil pollution control laws and regulations, and specific topics such as:

- Conducting inspections;
- Good housekeeping (e.g., equipment and container cleaning procedures, facility cleaning procedures);
- Material management practices (e.g., spent solvent management, used oil management);
- Procedures for routine handling of products (loading, unloading, and facility transfers, etc.);
- Spill prevention and response procedures; and
- Utilizing spill control kits located where spills might occur.

In addition, personnel who work in areas where oils are used or stored, or who are associated with bulk deliveries, are trained in, and informed of preventive measures at the facility designed to minimize the potential for oil product incidental or uncontrollable spills or leaks.

This training is recorded using the facility's SPCC/PIPP Training Form. Completed training records are maintained in with the SPCC/PIPP Plan.

40 CFR 112.7 (f)(2): Designated person accountable for spill prevention - Designate a person at each applicable facility who is accountable for oil spill prevention and who reports to facility management.

The primary and secondary spill coordinators are the designated individuals primarily responsible and accountable for spill prevention at the Maxey Ford facility.

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40 CFR 112.7 (f)(3): Spill prevention briefings - Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in 112.1 (b) or failures, malfunctioning components, and any recently developed precautionary measures.

Refer to the personnel instructions section above for an explanation of employee training programs.

11.2.5 Site Security

40 CFR 112.7 (g)(1): Fencing - Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.

The facility is fenced. This area is also well lit for additional security.

40 CFR 112.7 (g)(2): Flow valves locked - Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.

The facility's tank systems are not equipped drain valves.

40 CFR 112.7 (g)(3): Starter controls locked - Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is in a non-operating or non-standby status.

Specific BMPs related to locked starter controls include lock out of pump motors when the pump is in a non operating status.

40 CFR 112.7 (g)(4): Pipeline loading/unloading connections securely capped - Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.

There are no oil pipelines for loading or unloading at the facility.

40 CFR 112.7 (g)(5): Lighting adequate to detect spills - Provide facility lighting commensurate with the type and location of the facility that will assist in the: (i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and (ii) Prevention of discharges occurring through acts of vandalism.

Outside lighting is provided to assist in the early detection or prevention of an accidental or intentional release of pollutant or material as a result of vandalism, theft, sabotage or other improper uses of facility property.

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11.2.6 Tank Car and Truck Unloading/Unloading Racks

40 CFR 112.7 (h)(1): Secondary containment for vehicles - Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

This facility does not possess loading/unloading racks subject to the secondary containment requirement.

40 CFR 112.7 (h)(2): Warning notices for vehicles - Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

Racks are not present at the facility, consequently, specific BMPs related to warning notices for vehicles during loading/unloading procedures at the facility are not applicable.

40 CFR 112.7 (h)(3): Inspection of vehicle drain outlets before departure from facility - Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

Racks are not present at the facility, consequently, specific BMPs related to warning notices for vehicles during loading/unloading procedures are not applicable.

11.2.7 Field-Constructed Aboveground Container Evaluation

40 CFR 112.7 (i): Brittle fracture evaluation requirement – Field-constructed aboveground containers undergoing repair, alteration, reconstruction, or change in service that might affect the risk of discharge or failure due to brittle fracture or other catastrophe must be evaluated. This evaluation is also necessary when there has been a discharge or failure due to brittle fracture or other catastrophe.

Not applicable. No field-constructed aboveground containers exist at the Maxey Ford facility.

11.2.8 Drainage Control

40 CFR 112.8 (b)(1): Facility drainage areas - Restrain drainage from diked storage areas by valves to prevent a discharge of oil into the drainage system or facility effluent treatment system, except where facility systems are designed to handle such discharge. Diked areas may be emptied by pumps or ejectors; however, they must be manually activated and the condition of the accumulation must be examined before starting to ensure no oil will be discharged.

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Not Applicable. The facility does not have any diked storage areas onsite.

40 CFR 112.8 (b)(2): Valves used on diked area storage - Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained storm water, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section. These requirements are as follows. Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in 112.1 (b). Open the bypass valve and reseal it following drainage under responsible supervision. Keep adequate records of such events, for example, any records required under permits issued in accordance with 122.41(j)(2) and 122.41(m)(3) of this chapter.

Not applicable. Valves are not currently utilized to drain spill decks and storage areas at the facility.

40 CFR 112.8 (b)(3): Drainage systems from undiked areas - Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

The existing conditions and low risk levels at the site limit the practicality of site modifications that would be necessary to achieve this type of control.

The facility's other prevention systems are intended to limit the potential for a discharge from areas not directly protected by dikes.

40 CFR 112.8 (b)(4): Final discharge of drainage - If facility drainage is not engineered as in paragraph (b)(3) of this section equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

Not applicable. On site drainage ditches are not present.

40 CFR 112.8 (b)(5): Facility drainage systems and equipment - Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in 112.1(b) in case there is an equipment failure or human error at the facility

This section is not currently applicable to the facility. Treatment systems for drainage waters are not currently utilized at the facility.

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11.2.9 Bulk Storage Containers³/Secondary Containment

40 CFR 112.8 (c)(1): Container compatibility with contents - Do not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

All materials and bulk liquids are used and stored in their respective containers appropriate to the material in them.

40 CFR 112.8 (c)(2): Diked area construction and containment volume for storage containers – Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

All materials and bulk liquids at facility are stored in areas with adequate protection in the event of a spill.

40 CFR 112.8 (c)(3): Diked area inspection and drainage of rainwater - Do not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open water course, lake, or pond, and bypassing the facility treatment system unless you: (i) Normally keep the bypass valve sealed closed. (ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in 112.1(b). (iii) Open the bypass valve and reseal it following drainage under responsible supervision; and (iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with 122.41(j)(2) and 122.41(m)(3) of this chapter.

Not applicable. Secondary containment areas of the facility do not possess drainage systems that discharge to a storm drain or directly into surface water.

40 CFR 112.8 (c)(4): Corrosion protection of buried metallic storage tanks - Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

Not applicable. There are no completely buried tanks or UST's at the facility.

³ Note that the definition of bulk storage container excludes oil-filled electrical, operating, or manufacturing equipment

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40 CFR 112.8 (c)(5): Corrosion protection of partially buried metallic storage tanks - Do not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

Not applicable. Partially buried tanks are not present at the facility.

40 CFR 112.8 (c)(6): Aboveground container periodic integrity testing - Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

Records of tank testing are attached to this plan.

40 CFR 112.8 (c)(7): Control of leakage through internal heating coils - Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

Not applicable. No bulk storage tanks that contain internal heating coils exist at the facility.

40 CFR 112.8 (c)(8): Container installation fail-safe engineered - Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices: (i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station; in smaller facilities an audible air vent may suffice. (ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level. (iii) Direct audible or code signal communication between the container gauger and the pumping station. (iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers. (v) You must regularly test liquid level sensing devices to ensure proper operation.

A person must be present to monitor gauges and the overall filling of bulk storage containers.

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40 CFR 112.8 (c)(9): Observation of discharged effluents - Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in 112.1 (b).

Not applicable. No effluent treatment facilities exist at the facility.

40 CFR 112.8 (c)(10): Corrective actions for visible oil leaks from container seams and gaskets - Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets and bolts. You must promptly remove any accumulations of oil in diked areas.

Corrective action(s) for visible oil leaks from bulk storage tanks are addressed in Section 7.

40 CFR 112.8 (c)(11): Appropriate location of portable oil storage containers - Position or locate mobile or portable oil storage containers to prevent a discharge as described in 112.1(b). You must furnish a secondary means of containment, such as dikes or catchment basins, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

All portable storage containers are contained on or within purpose built secondary containment structures such as the fuel shed or spill pallets. Additionally, the north service building floor drains to an oil water separator that acts as secondary containment.

11.2.10 Facility Transfer Operations

40 CFR 112.8 (d)(1): Buried piping installation protection and examination - Provide buried piping that is installed or replaced after August 16, 2002 with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection provisions for piping in Part 280 of this chapter or a State program approved under Part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.

There are no buried pipe systems at the facility.

40 CFR 112.8 (d)(2) Management of "out-of-service" connections - Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

Not applicable. No "out-of-service" piping systems exist at the facility.

40 CFR 112.8 (d)(3): Pipe support design - Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

All pipe work is secured to the walls, and is therefore protected from the outdoors and associated corrosion and heating/cooling stresses.

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40 CFR 112.8 (d)(4): Aboveground valve and pipeline inspections - Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

The ***Oil Storage Areas and Inspection Checklist*** included in Appendix D of this Plan is used by the facility to document inspections.

40 CFR 112.8 (d)(5): Protection of aboveground piping from vehicular traffic - Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

Not applicable. All above ground piping in the facility is located out of the reach of any vehicle traffic wither outside or inside the facility.

11.3 OTHER BMPS

11.3.1 Good Housekeeping

Good housekeeping means maintaining a clean, orderly work environment. Oil storage areas and equipment are kept neat to prevent releases to the environment. "Good housekeeping" practices are an effective first step toward pollution prevention. Container areas, storage areas, oil-bearing equipment and loading docks are common areas that contribute residual oils to the environment and are areas where good housekeeping practices may be appropriate. Good housekeeping BMPs may include:

- Orderly storage of containers, including designated storage areas;
- Scheduling of disposal pick-ups to avoid excessive accumulations of waste oils;
- Routine inspections for leaks and condition of drums, tanks, and containers; and
- Prompt cleanup of spills or incidental releases, using dry chemicals when appropriate.

11.3.2 Preventive Maintenance

Preventive maintenance limits the potential for equipment malfunctions that would increase the opportunity for a discharge of oil-based pollutants to a receiving body of water. The primary element of preventive maintenance employed at the facility is the routine inspection and repair of facility piping, pumps, storage tanks and bins, process and material handling equipment, and bulk storage vessels. The inspections performed as part of Maxey Ford's Plan are described above in Section 10.2.3.

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12.0 PRODUCT INVENTORY

In accordance with Michigan Part 5 Rules, chemical products found on-site in quantities in excess of Threshold Management Quantities (TMQs), their associated hazardous ingredients, CAS numbers for each hazardous ingredient, and the amount of each product stored on-site. are also detailed in Table 3.

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POLLUTING MATERIALS INVENTORY TABLE 3

CAS	MATERIAL	On-Site Tank Gallons	Constituent		Specific Gravity	Constituent lbs / gallon	TMQ lbs	Part 5 Rule		CERCLA RQ Pounds
			Volume by percent	Concentration percent				Constituent TRQ (lbs)	Spill TRQ Total gallons	
	WINDSHIELD WASHER FLUID	200								
107-21-1	Ethylene glycol (1,2-Ethanediol)	200	2.00%	100.0%	1.156	0.193	39	500	2,593	5,000
67-56-1	Methyl alcohol (Methanol)	200	30.00%	100.0%	0.7915	1.980	396	500	252	5,000
	SPENT ANTIFREEZE	150								
107-21-1	Ethylene glycol (1,2-Ethanediol) (glycol)	150	50.00%	100.0%	1.156	4.821	723	500	104	5,000
	ANTIFREEZE	55								
107-21-1	Ethylene glycol (1,2-Ethanediol) (glycol)	55	84.00%	100.0%	1.156	8.098	445	500	62	5,000

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A1 5w20 Motor Oil	400
A2 5w20 Motor Oil	400
B 5w20 Diesel Motor Oil	275
C Mercon 5 Trans Fluid	400
D 15w 40 Diesel Motor Oil	400
E 5w30 Motor Oil	275
G Mercon LV Trans Fluid	275
H 5w30 Motor Oil	275
I 5w20 Motor Oil	275
HR Hydraulic Lift	275
Q Used Oil	500
J 5w20 Motor Oil	275
K 5w30 Motor Oil	275
L 15w40 Diesel Motor Oil	275
R Diesel Off Road	500

Total Oils = 5,075 gallons

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13.0 MAKING PLANS AVAILABLE

40 CFR 112.3(e)(1)&(2): (1) The Plan must be maintained at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and (2) The Plan must be made available to the Regional Administrator for on-site review during normal working hours.

A copy of the Plan and associated records are retained at the facility. Upon request, a copy of the Plan will be made available to:

- Federal, State or local officials with jurisdiction over SPCC and PIPP Plans.

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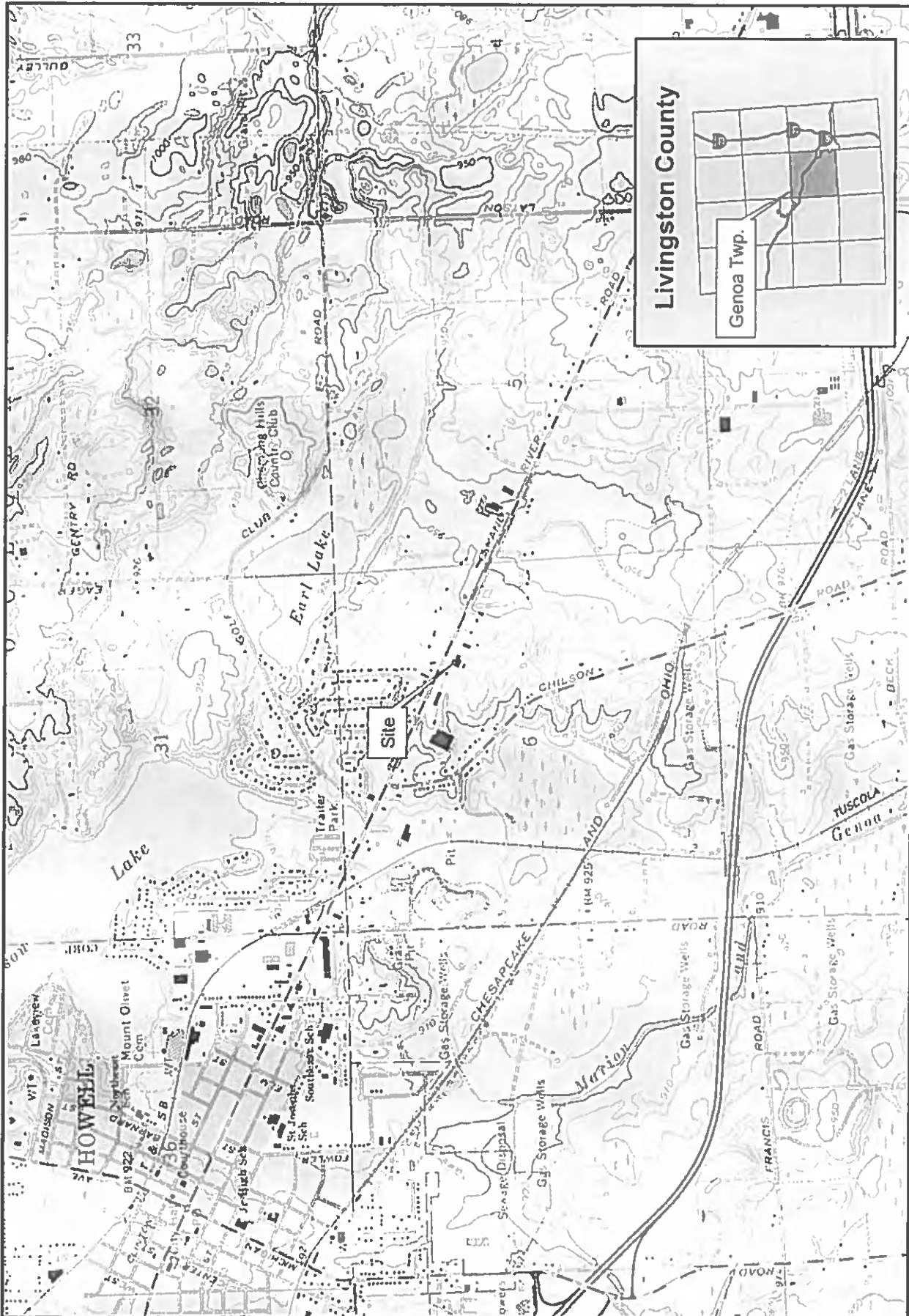
14.0 RETENTION OF RECORDS

40 CFR 112.7(e): You must keep a record of SPCC inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

SPCC/PIPP inspections are recorded using the *Inspection Checklist*, which is included in the Plan.

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FIGURES



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ENVIRONMENTAL

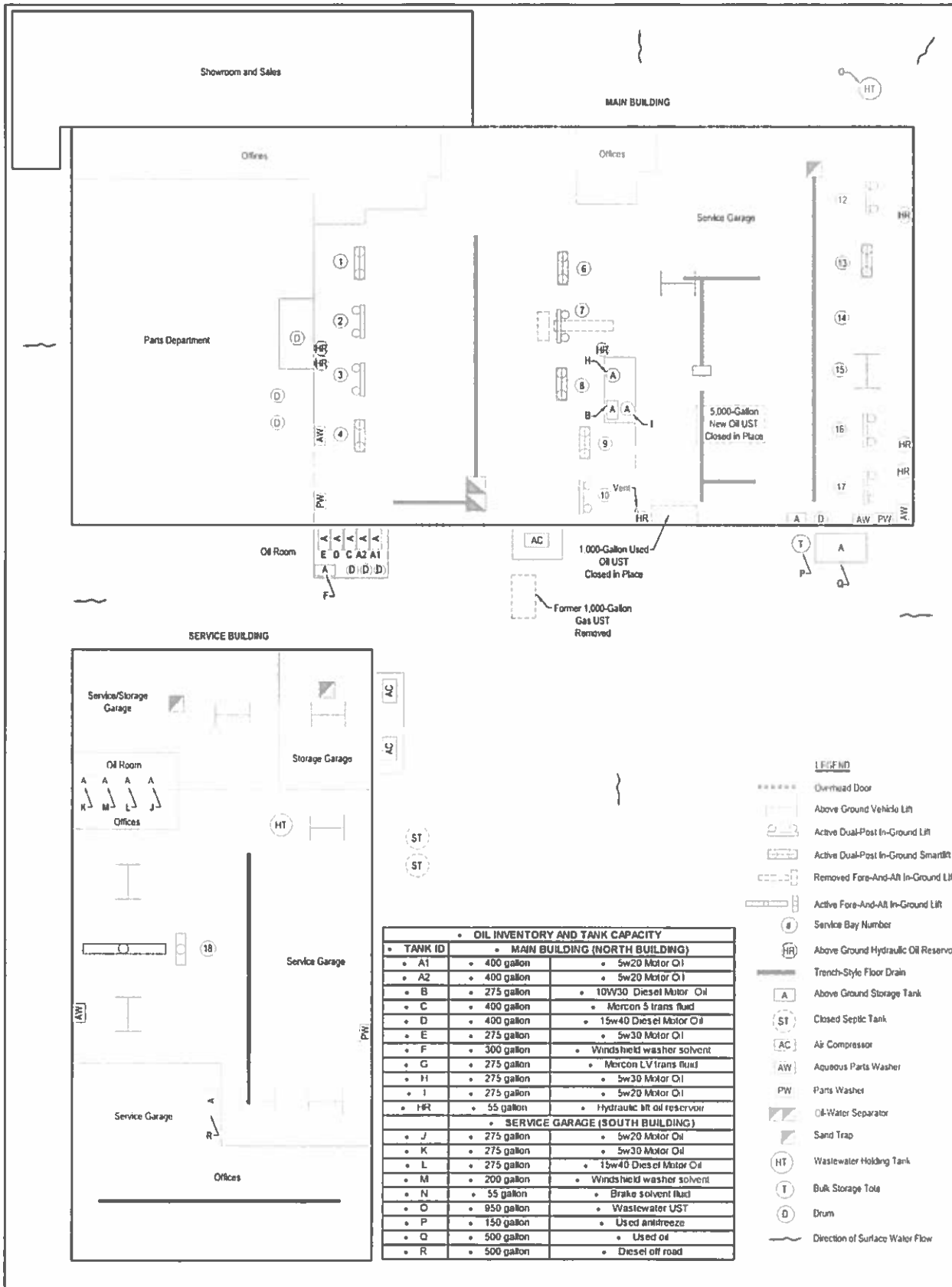


Genoa Township, MI

2798 East Grand River

Created for Bob Maxey Ford of Howell
 Created by KTH, June 25, 2012, ASTI Project 8010

Site Location Map



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**APPENDIX A
REGULATORY CROSS-REFERENCE MATRIX**

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SPCC 40 CFR 112 CROSS REFERENCE MATRIX

Regulation	Description	Page No.
§112.3(b)(1) or (c)	SPCC Plan prepared prior to facility becoming operational (effective 11/10/2010)	2
§112.3(d)	Professional Engineer (PE) certification with five elements	v
§112.5(a)	Amendment of SPCC Plan	2
§112.5(b)	Review of Plan at least every 5 years with documentation (i.e. a log)	vi
§112.6	Qualified Facilities: meets qualification criteria	N/A
§112.6(a) or (b)	Tier I or Tier II Self Certification with 8 elements	N/A
§112.6(a)(2)	Technical amendments self-certified	N/A
§112.6(a)(3)(i)	Template has failure analysis	N/A
§112.6(a)(3)(ii)	Template has adequate secondary containment	N/A
§112.6(a)(3)(iii)	Template has overfill protection	N/A
§112.6(b)(2) / (i)	Technical amendment Self-Certified or PE certification for deviations from Plan requirements	N/A
§112.6(c)(3)(i)	Environmental Equivalence certified by PE	N/A
§112.6(c)(3)(ii)	Impracticability determination certified by PE	N/A
§112.6(c)(4)	PE certification with three elements	N/A
§112.7	General requirements for SPCC Plans for all facilities & all oil types	
§112.7	Management approval of Plan	iv
§112.7	Discussion of facilities, procedures, methods or equipment not yet fully operational with details of installation and operational start-up	N/A
§112.7(a)(1)	General requirements; discussion of facility's conformance with rule requirements	1; 2
§112.7(a)(2)	Deviations from Plan requirements	2
§112.7(a)(3)	Facility description and diagram, type of oil and capacity of each container, transfer stations and piping, buried containers on diagram	Figure 2
§112.7(a)(3)(ii)	Discharge prevention measures	20
§112.7(a)(3)(iii)	Discharge drainage controls	2, 7
§112.7(a)(3)(iv)	Countermeasures for discharge discovery, response and cleanup	10
§112.7(a)(3)(v)	Methods of disposal of recovered materials in accordance with legal requirements	10
§112.7(a)(3)(vi)	Contact list and phone numbers for facility response coordinator, National Response Center, cleanup contractors, all Federal, State, and local agencies who must be contacted in case of a discharge	10
§112.7(a)(4)	Spill reporting information	10
§112.7(a)(5)	Discharge procedures	10
§112.7(b)	Failure prediction (sources, quantities, rates, and directions)	8 and Table 1
§112.7(c)	Secondary containment for all areas from which a discharge of oil could occur (i.e. mobile refuelers, loading/unloading areas, transformers, oil filled operational equipment, etc.) other than bulk containers	21
§112.7(d)	Explanation of impracticability of secondary containment	N/A
§112.7(d)(1)	Oil spill contingency plan per part 109	2
§112.7(d)(2)	Commitment of manpower, equipment & materials to remove a discharge	i
§112.7(e)	Written procedures for inspections and tests	App E
§112.7(e)	Records of inspections and tests signed and kept 3 years	App F
§112.7(f)(1)	Employee training	21

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SPCC 40 CFR 112 CROSS REFERENCE MATRIX**

Regulation	Description	Page No.
§112.7(f)(2)	Designated individual accountable for discharge prevention	5, 22
§112.7(f)(3)	Discharge prevention briefings scheduled and conducted annually	22
§112.7(g)	Security: How oil handling, processing and storage areas are secured and access is controlled	23
§112.7(g)	Security: How master flow and drain valves of containers are secured	23
§112.7(g)	Security: How unauthorized access to starter controls on oil pumps is prevented	23
§112.7(g)	Security: How out-of-service and loading/unloading connections of oil pipelines are secured	23
§112.7(g)(5)	Security: Appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges is addressed	23
§112.7(h)	Loading/unloading rack (excluding offshore facilities)	NA
§112.7(h)(1)	Containment for contents of largest compartment	24
§112.7(h)(2)	Warning light/sign, barrier system, wheel chocks, or break interlock system to prevent departure with connected lines	24
§112.7(h)(3)	Inspect drains and outlets of vehicles	24
§112.7(i)	Brittle fracture or catastrophic failure evaluation requirements	24
§112.7(j)	Conformance with State requirements	2
§112.3(k)(1)	Qualified Oil-Filled Operational Equipment: meets criteria	
§112.7(k)(2)(i)	Inspection procedures or monitoring program	App E
§112.7(k)(2)(ii)(A)	Oil spill contingency plan per part 109	2
§112.7(k)(2)(ii)(B)	Written commitment of resources	lv
§112.8, §112.12	Requirements for Onshore Facilities (excluding production)	
§112.8(a), §112.12(a)	Meet general and specific requirements	8
§112.8(b)(1), §112.12(b)(1)	Facility drainage: Restrain drainage from diked areas; inspect accumulation	24
§112.8(b)(2), §112.12(b)(2)	Facility drainage: Manual valves to drain diked areas, inspect before discharging into watercourse	25
§112.8(b)(3), §112.12(b)(3)	Facility drainage: Undiked drainage with a potential for a discharge designed to flow to ponds, lagoons, or catchment basins	25
§112.8(b)(4), §112.12(b)(4)	Facility drainage: Final discharge of ditch drainage controlled	25
§112.8(b)(5), §112.12(b)(5)	Facility drainage: Where pump transfer is needed, two lift pumps installed with one installed permanently	25
§112.8(c), §112.12(c)	Bulk storage containers:	26
§112.8(c)(1), §112.12(c)(1)	Containers compatible with material and conditions of storage	26
§112.8(c)(2), §112.12(c)(2)	Secondary containment for capacity of largest container & sufficient freeboard for precipitation	26
§112.8(c)(3), §112.12(c)(3)	Not allow drainage of rainwater from diked areas unless inspected, records kept of drainage events	26
§112.8(c)(4), §112.12(c)(4)	Completely buried metallic containers corrosion protected, leak testing conducted	26
§112.8(c)(5), §112.12(c)(5)	Partially buried containers corrosion protected	27

**BOB MAXEY FORD OF HOWELL
SPCC 40 CFR 112 CROSS REFERENCE MATRIX**

Regulation	Description	Page No.
§112.8(c)(6), §112.12(c)(6)	Integrity testing, visual plus non-destructive shell testing, comparison records kept	27
§112.8(c)(7), §112.12(c)(7)	Internal heating coils monitored	27
§112.8(c)(7), §112.12(c)(7)	Internal heating coils monitored	27
§112.8(c)(8), §112.12(c)(8)	Containers engineered to prevent discharges	28
§112.8(c)(8)(v), §112.12(c)(8)(v)	Liquid level sensing devices tested to ensure proper operation	28
§112.8(c)(9), §112.12(c)(9)	Observe effluent treatment facilities to detect system upsets	29
§112.8(c)(10), §112.12(c)(10)	Correct visible leaks and remove accumulations of oil	29
§112.8(c)(11), §112.12(c)(11)	Secondary containment for mobile/portable containers with capacity of largest container &	29
§112.8(d), §112.12(d)	Facility transfer operations, pumping and facility process:	NA
§112.8(d)(1), §112.12(d)(1)	Buried piping installed or replaced after 8/16/02 corrosion protected	29
§112.8(d)(2), §112.12(d)(2)	Terminal connections capped/blank flanged when not in service or in standby service for an extended time	29
§112.8(d)(3), §112.12(d)(3)	Pipe supports properly designed	29
§112.8(d)(4), §112.12(d)(4)	Inspect aboveground piping, integrity and leak test buried piping	30
§112.8(d)(5), §112.12(d)(5)	Warn vehicles of aboveground piping	30
§112.20(e)	Completed and signed certification of substantial harm form (Appendix C)	Appendix D

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

APPENDIX B

**MICHIGAN Act 451- Part 324 – POLLUTION INCIDENT PREVENTION PLAN CROSS
REFERENCE MATRIX**

Bob Maxey Ford of Howell PIPP Document Checklist

Rule	Description of Section	Page / Section
324.2006(1)(a)	All of the following general information:	
324.2006(1)(a)(i)	Facility name	Page iii
324.2006(1)(a)(ii)	Mailing address	Page iii
324.2006(1)(a)(iii)	Street address, if other than mailing address	Page iii
324.2006(1)(a)(iv)	Facility phone number	Page iii
324.2006(1)(a)(v)	24-hour emergency phone number or numbers	Page iii
324.2006(1)(a)(vi)	Internal emergency notification procedures	Section 2
324.2006(1)(a)(vii)	The name of the designated spill prevention and control coordinator	Section 2
324.2006(1)(a)(viii)	The name of the person or persons responsible for on-site spill prevention and control, if different than the designated spill prevention and control coordinator	Section 2
324.2006(1)(a)(ix)	The name of the facility owner	Page iii
324.2006(1)(a)(x)	A map showing the facility relative to the surrounding area, including thoroughfares	Figure 1
324.2006(1)(b)	Procedures for emergency notification of all the following entities:	
324.2006(1)(b)(i)	The department's pollution emergency alerting system (PAES)	Sections 6.0 - 7.0
324.2006(1)(b)(ii)	National response center	Section 7.0
324.2006(1)(b)(iii)	Local emergency planning committee (LEPC)	Section 7.0
324.2006(1)(b)(iv)	Local fire department	Section 7.0
324.2006(1)(b)(v)	Local law enforcement agency	Section 7.0
324.2006(1)(b)(vi)	Municipal wastewater treatment plant in the facility is served by a municipal wastewater treatment plant	Section 7.0
324.2006(1)(b)(vii)	Appropriate spill cleanup contractor, or consulting firm, or both	Section 7.0
324.2006(1)(c)	All of the following spill control and cleanup procedures:	
324.2006(1)(c)(i)	Inventory and location of spill control and cleanup equipment available on and off-site	Section 6.0
324.2006(1)(c)(ii)	Procedures for response and cleanup	Section 6.0
324.2006(1)(c)(iii)	Procedures for characterization and disposal of recovered materials.	Section 6.0
324.2006(1)(d)	A polluting material inventory, including all of the following:	
324.2006(1)(d)(i)	Identification of all polluting materials typically on-site in quantities exceeding the threshold management quantity during the preceding 12 months. The materials shall be identified by product name, chemical name, and chemical abstracts service number.	Table 1
324.2006(1)(d)(ii)	The location of material safety data sheets for all polluting materials on-site in quantities exceeding the threshold management quantity.	Section 5.1

PIPP Document Checklist

Rule	Description of Section	Page / Section
324.2006(1)(e)	A site plan depicting relevant site structures and all storage and use areas where polluting materials are managed on-site in quantities exceeding the threshold management quantity, including the following:	
324.2006(1)(e)(i)	Aboveground and underground tanks.	Figure 2
324.2006(1)(e)(ii)	Floor drains.	Figure 2
324.2006(1)(e)(iii)	Loading and unloading areas.	Figure 2
324.2006(1)(e)(iv)	Sumps.	n/a
324.2006(1)(e)(v)	On-site water supplies.	n/a
324.2006(1)(f)	Outdoor secondary containment structures, including all of the following information:	
324.2006(1)(f)(i)	Location or locations.	Figure 2
324.2006(1)(f)(ii)	Design and construction data, including dimensions, materials, capacity, and the amount of the polluting material stored in each area.	Table 1
324.2006(1)(f)(iii)	Provisions for the capture and removal of spilled polluting materials.	Section 10
324.2006(1)(f)(iv)	Provisions for secondary containment structure physical security, including signage, gates, fences, and barriers.	Section 10.2.5
324.2006(1)(f)(v)	Precipitation management procedures, including characterization and disposal procedures and copies of any permits authorizing discharge.	n/a
324.2006(1)(f)(vi)	Inspection and maintenance procedures.	Section 10.2.3
324.2006(1)(g)	Other controls.	Section 10
324.2006(1)(h)	Provisions for general facility physical security.	Section 10.2.5

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

APPENDIX C

**CERTIFICATION OF THE APPLICABILITY OF THE
SUBSTANTIAL HARM CRITERIA (40 CFR 112.20**

40 CFR 112.20
CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM
CRITERIA

Facility Name: Bob Maxey Ford of Howell
Facility Address: 2798 East Grand River, Howell, Michigan 48843

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes No

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes No

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula,¹) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" see Appendix E to this part, section 10, for availability) and the applicable Area Contingency Plan.

Yes No

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?²

Yes No

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes No

¹ If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

² For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(e)

Certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature: _____ Title President

Name: Michael Maxey Date: _____

SELF-SELECTION CRITERIA

Under the rule, a facility falls under the “substantial harm” category if it meets at least one of the following criteria:

- I. The facility has a total storage capacity greater than or equal to 42,000 gallons and performs over-water oil transfers to or from vessels; OR
- II. The facility has a total storage capacity greater than or equal to one million gallons, and meets any one of the following conditions:
 - A. Does not have adequate secondary containment for each aboveground storage area;
 - B. Is located such that a discharge could cause “injury” to an environmentally sensitive area;
 - C. Is located such that a discharge would shut down a public drinking-water intake; or
 - D. Has had, in the past 5 years, a reportable spill greater than or equal to 10,000 gallons.

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

**APPENDIX D
INSPECTION CHECK LIST (40 CFR 11.2(k)(2)(i))**

**BOB MAXEY FORD OF HOWELL
 SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
 POLLUTION INCIDENT PREVENTION PLAN**

Date: _____

MAINTAIN INSPECTION RECORDS FOR THREE YEARS

Purchase Order: _____

Weather Conditions: _____

Inspector's Name: _____

General Comments: _____

MAIN BUILDING (NORTH BUILDING AST OBSERVATIONS)	Yes / No					
	A1	A2	B	C	D	E
	400 gallon 5w20 Motor Oil	400 gallon 5w20 Motor Oil	275 gallon 10w30 Diesel Motor Oil	400 gallon Mercon 5 Trans Fluid	400 gallon 15w40 Diesel Motor Oil	275 gallon 5w30 Motor Oil
Is secondary containment area free of visible signs of staining or leakage?						
Is the tank free of visible signs of leakage?						
Are there signs of tank corrosion?						
Are the valves and piping connections dry and free of visible signs of leakage?						
Tank Supports – Signs of damage or corrosion?						
Tank Foundation – Signs of damage or cracks?						

COMMENTS

Tank A1:
Tank A2:
Tank B:
Tank C:
Tank D:
Tank E:

**BOB MAXEY FORD OF HOWELL
 SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
 POLLUTION INCIDENT PREVENTION PLAN**

Date: _____

MAIN BUILDING (NORTH BUILDING AST OBSERVATIONS)	Yes / No					
	F	G	H	I	HR	N
	300 gallon Windshield Washer Solvent	275 gallon Mercon LV Trans Fluid	275 gallon 5230 Motor Oil	275 gallon 5w20 Motor Oil	55 gallon Hydraulic Lift Oil Reservoir	55 gallon Brake Solvent Fluid
Is secondary containment area free of visible signs of staining or leakage?						
Is the tank free of visible signs of leakage?						
Are there signs of tank corrosion?						
Are the valves and piping connections dry and free of visible signs of leakage?						
Tank Supports – Signs of damage or corrosion?						
Tank Foundation – Signs of damage or cracks?						

COMMENTS

Tank F:
Tank G:
Tank H:
Tank I:
Tank HR:
Tank N:

**BOB MAXEY FORD OF HOWELL
 SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
 POLLUTION INCIDENT PREVENTION PLAN**

Date: _____

MAIN BUILDING (NORTH BUILDING AST OBSERVATIONS)	Yes / No					
	P	Q				
	150 gallon Used Antifreeze	500 gallon Used Oil				
Is secondary containment area free of visible signs of staining or leakage?						
Is the tank free of visible signs of leakage?						
Are there signs of tank corrosion?						
Are the valves and piping connections dry and free of visible signs of leakage?						
Tank Supports – Signs of damage or corrosion?						
Tank Foundation – Signs of damage or cracks?						

COMMENTS

Tank Q:
Tank P:

**BOB MAXEY FORD OF HOWELL
 SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
 POLLUTION INCIDENT PREVENTION PLAN**

Date: _____

SERVICE GARAGE (SOUTH BUILDING) AST OBSERVATIONS	Yes / No
---	-----------------

	J	K	L	M	O	R
	275 gallon 5w20 Motor Oil	275 gallon 5w30 Motor Oil	275 gallon 15w40 Diesel Motor Oil	200 gallon Windshield Washer Solvent	950 gallon Wastewater UST	500 gallon Diesel Off Road
Is secondary containment area free of visible signs of staining or leakage?						
Is the tank free of visible signs of leakage?						
Are there signs of tank corrosion?						
Are the valves and piping connections dry and free of visible signs of leakage?						
Tank Supports – Signs of damage or corrosion?						
Tank Foundation – Signs of damage or cracks?						

COMMENTS

Tank J:
Tank K:
Tank L:
Tank M:
Tank O:
Tank R:

**BOB MAXEY FORD OF HOWELL
 SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
 POLLUTION INCIDENT PREVENTION PLAN**

Date: _____

	Yes / No							
MAIN BUILDING (NORTH BUILDING) DRUM AREA 1 55 GALLON DRUMS OBSERVATIONS	Windshield Washer Fluid	Grease	Gear Oil	Antifreeze	Transmission Fluid	Hydraulic Fluid	Diesel Fuel Additive	Other
Number of Drums								
Is the floor around the secondary containment free of visible signs of staining or leakage?								
Is the drum free of visible signs of leakage?								
Is the secondary containment free of liquid?								
Are there signs of drum corrosion?								
Are the valves (if any) dry and free of visible signs of leakage?								
Comments:								

	Yes / No							
SERVICE GARAGE (SOUTH BUILDING) DRUM AREA 2 55 GALLON DRUMS OBSERVATIONS	Windshield Washer Fluid	Grease	Gear Oil	Antifreeze	Transmission Fluid	Hydraulic Fluid	Diesel Fuel Additive	Other
Number of Drums								
Is the floor around the secondary containment free of visible signs of staining or leakage?								
Is the drum free of visible signs of leakage?								
Is the secondary containment free of liquid?								
Are there signs of drum corrosion?								
Are the valves (if any) dry and free of visible signs of leakage?								
Comments:								

**BOB MAXEY FORD OF HOWELL
 SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
 POLLUTION INCIDENT PREVENTION PLAN
 Date: _____**

Inspection Checklist for Spill Clean-Up Supplies

Spill Kit Inspection Area	Absorbent pads Booms	Granular Absorbent	Other	
	adequate supply	adequate supply	adequate supply	Describe
MAIN BUILDING (NORTH BUILDING)				
SERVICE GARAGE (SOUTH BUILDING)				
Comments:				

OIL WATER SEPARATOR UST OBSERVATIONS	Yes	No
Are manifests available for clean out of OWS?		
Are there signs of spillage at the tanker truck loading location?		
Comments		

GENERAL SITE CONDITIONS	Yes	No
Housekeeping standards maintained in roadways, parking areas and material storage areas?		
Fencing/gates in good condition?		
Parking area free of leaks and spills?		
Containers emptied and cleaned prior to placing them on the lot?		
Comments		

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

Date: _____

If any spills or leaks, immediately notify the Primary Spill Coordinator, and begin spill countermeasures.

Corrective Actions Taken _____

NOTES: _____

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

APPENDIX E

MDEQ SPILL REPORTING GUIDELINES AND MDEQ SPILL OR RELEASE REPORT

REPORTING RELEASES PER PART 5 RULES

Facilities with reportable releases as defined in Rule 324.2002(b) and (g) and Section 3111b of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, must notify specific agencies. Oil storage facilities subject to federal SPCC regulations must notify if they have reportable releases of oil (See Water Bureau POG #2). Due to the reorganization of the DEQ, submittal of written reports about releases as required in R 324.2007 now go to the Water Bureau instead of the Waste Management Division as noted in the rules.

If a release occurs and is reportable, the facility needs to meet the following requirements:

1. Call to report releases exceeding threshold reporting quantities:
 - PEAS at 800-292-4706 or from out of state call 517-373-7660, and
 - 911 (or their primary public safety answering point) per Section 3111b of Part 31 of Act 451, effective June 15, 2004
2. Submit written report within 10 days after the release to:
 - DEQ Water Bureau District Supervisor (mailing addresses are the same as Part 5 staff contacts)
 - Local health department, environmental health section per Section 3111b of Part 31 of Act 451, effective June 15, 2004

You may use the form EQP 3465 "Spill or Release Report" available on the Internet in Word or PDF format, or submit a written report containing the information identified in Rule 7(2). Include

- a. Cause of release
- b. Discovery of release
- c. Response measures taken or schedule for completion of measures to be taken, or both
- d. Measures taken to prevent recurrence of similar releases

3. Report releases as required under other regulations

If you are required to submit a written release report to a DEQ Division (for example a permit may require reporting of releases) and are subject to the Part 5 rule reporting requirements, if the other required report contains the information listed, it is not necessary to also submit a separate report to the Water Bureau.

Releases that go into a public wastewater treatment plant (WWTP) and meet Part 5 rule conditions are also reportable to the Water Bureau.

Section 3115 of Part 31 was revised to include penalties for failing to report a release as required or having discharges in violation of Part 31. Effective June 15, 2004.



SPILL OR RELEASE REPORT

NOTE: Some regulations require a specific form to use and procedures to follow when reporting a release. Those forms and procedures MUST be used and followed if reporting under those regulations. This report form is to aid persons reporting releases under regulations that do not require a specific form. This report form is not required to be used. To report a release, some regulations require a facility to call the PEAS Hotline at 800-292-4706, or DEQ District Office that oversees the county where it occurred, and other regulating agencies and provide the following information. A follow-up written report may be required. Keep a copy of this report as documentation that the release was reported. If you prefer to submit this report electronically by FAX or e-mail, contact the regulating agency for the correct telephone number or e-mail address. See the DEQ website on Spill/Release Reporting for more reporting information.

Please print or type all information.

Form with sections: NAME AND TITLE OF PERSON SUBMITTING WRITTEN REPORT, TELEPHONE NUMBER, NAME OF BUSINESS, STREET ADDRESS, CITY, STATE, ZIP CODE, BUSINESS TELEPHONE NUMBER, RELEASE LOCATION, SITE IDENTIFICATION NUMBER, COUNTY, TOWNSHIP, TIER/RANGE/SECTION, RELEASE DATA, DATE & TIME OF RELEASE, DURATION OF RELEASE, TYPE OF INCIDENT, MATERIAL RELEASED, CAS NUMBER, ESTIMATED QUANTITY, PHYSICAL STATE, FACTORS CONTRIBUTING TO RELEASE, SOURCE OF LOSS, TYPE OF MATERIAL RELEASED, MATERIAL LISTED ON or DEFINED BY, IMMEDIATE ACTIONS TAKEN, RELEASE REACHED.

EXTENT OF INJURIES, IF ANY 	WAS ANYONE HOSPITALIZED? <input type="checkbox"/> Yes NUMBER _____ HOSPITALIZED: _____ <input type="checkbox"/> No	TOTAL NUMBER OF INJURIES TREATED ON-SITE: _____
--	---	---

DESCRIBE THE INCIDENT, THE TYPE OF EQUIPMENT INVOLVED IN THE RELEASE, HOW THE VOLUME OF LOSS WAS DETERMINED, ALONG WITH ANY RESULTING ENVIRONMENTAL DAMAGE CAUSED BY THE RELEASE. IDENTIFY WHO IMMEDIATELY RESPONDED TO THE INCIDENT (own employees or contractor — include cleanup company name, contact person, and telephone number). ALSO IDENTIFY WHO DID FURTHER CLEANUP ACTIVITIES, IF PERFORMED OR KNOWN WHEN REPORT SUBMITTED

CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE

ESTIMATED QUANTITY OF ANY RECOVERED MATERIALS AND A DESCRIPTION OF HOW THOSE MATERIALS WERE MANAGED (include disposal method if applicable)

CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE

ASSESSMENT OF ACTUAL OR POTENTIAL HAZARDS TO HUMAN HEALTH (include known acute or immediate and chronic or delayed effects, and where appropriate, advice regarding medical attention necessary for exposed individuals.)

CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY NOTIFIED:

INITIAL CONTACT BY: Telephone Fax Email Other

DATE/TIME INITIAL CONTACT: _____

PEAS: 800-292-4706 Log Number Assigned _____

DEQ District or Field Office Divisions or Offices Contacted:

<input type="checkbox"/> Baraga	<input type="checkbox"/> Gwinn	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Bay City	<input type="checkbox"/> Jackson	<input type="checkbox"/> Land & Water Management
<input type="checkbox"/> Cadillac	<input type="checkbox"/> Kalamazoo	<input type="checkbox"/> Office Geological Survey
<input type="checkbox"/> Crystal Falls	<input type="checkbox"/> Lansing	<input type="checkbox"/> Remediation and Redevelopment
<input type="checkbox"/> Detroit	<input type="checkbox"/> Newberry	<input type="checkbox"/> Waste and Hazardous Materials
<input type="checkbox"/> Gaylord	<input type="checkbox"/> Warren	<input type="checkbox"/> Water Bureau
<input type="checkbox"/> Grand Rapids	<input type="checkbox"/> Wyoming	

DEQ Office locations are subject to change

NAME AND TITLE OF PERSON MAKING INITIAL REPORT:

DEQ STAFF CONTACTED & PHONE NUMBER:

OTHER ENTITIES NOTIFIED:

	Date:	Time:
<input type="checkbox"/> National Response Center (NRC): 800-424-8802	_____	_____
<input type="checkbox"/> US Coast Guard Office:	_____	_____
<input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste Marie		
<input type="checkbox"/> US Department of Transportation	_____	_____
<input type="checkbox"/> US Environmental Protection Agency	_____	_____
<input type="checkbox"/> 911 (or primary public safety answering point)	_____	_____
<input type="checkbox"/> Local Fire Department	_____	_____
<input type="checkbox"/> Local Police and/or State Police	_____	_____
<input type="checkbox"/> Local Emergency Planning Committee	_____	_____
<input type="checkbox"/> State Emergency Response Commission via MI SARA Title III Program	_____	_____
<input type="checkbox"/> Wastewater Treatment Plant Authority	_____	_____
<input type="checkbox"/> Hazmat Team	_____	_____
<input type="checkbox"/> Local Health Department	_____	_____
<input type="checkbox"/> Department of Labor & Economic Growth MIOSHA	_____	_____
<input type="checkbox"/> Department of Labor & Economic Growth Fire Safety	_____	_____
<input type="checkbox"/> Michigan Department of Agriculture. 800-405-0101	_____	_____
<input type="checkbox"/> Other _____	_____	_____

PERSON CONTACTED & PHONE NUMBER:

DATE WRITTEN REPORT SUBMITTED	SIGNATURE OF PERSON SUBMITTING WRITTEN REPORT
-------------------------------	---

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

**APPENDIX F
RECORDS OF INSPECTIONS AND TESTS SIGNED AND KEPT 3 YEARS**

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

**APPENDIX G
TRAINING RECORDS**

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

**APPENDIX H
CORRESPONDENCE**

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

**APPENDIX I
SPCC REGULATIONS**

**BOB MAXEY FORD OF HOWELL
SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN
POLLUTION INCIDENT PREVENTION PLAN**

**APPENDIX J
PIPP REGULATIONS**

SITE / CONSTRUCTION PLANS FOR BOB MAXEY FORD OF HOWELL DEALERSHIP EXPANSION PART OF NE 1/4 SEC. 6, T.2N., R.6E. GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

PROPERTY DESCRIPTION:

(Per Metropolitan Title Company, Commitment No. NU-412578, effective date March 28, 2002 at 8:00 A.M.); Revision E, May 13, 2002

Land in the Township of Genoa, Livingston County, Michigan, described as follows:
Parcel 1: A part of the Northeast fractional 1/4 of Section 6, Town 2 North, Range 5 East, described as follows: Commencing at the East 1/4 corner of said Section 6; thence N 87°31'15" W 804.54 feet; thence N 1°34'30" E 1022.16 feet; thence N 60°06'45" W 616.07 feet along the centerline of Grand River Avenue to the point of beginning of the land to be described; running thence N 60°06'45" W 531.00 feet along the centerline of Grand River Avenue; thence S 29°53'15" W 570.00 feet; thence S 60°06'45" E 531.00 feet; thence N 29°53'15" E 570.00 feet to the point of beginning. Parcel 2: Part of the Northeast 1/4 of Section 6, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the East 1/4 corner of said Section 6; thence N 87°24'40" W 1616.81 feet along the East-West 1/4 line to a found iron rod; thence N 01°33'53" E 796.77 feet to a found concrete monument; thence N 60°06'45" W 531.00 feet to a found concrete monument and to the point of beginning of the land to be described; running thence N 70°11'20" W 525.21 feet (recorded as N 70°16'30" W 525.00 feet) to a found 1/2 inch iron rod; thence N 30°12'43" E 166.40 feet (recorded as N 29°41'36" E 166.45 feet) to a found 1/2 inch iron rod; thence S 78°31'03" E 114.50 feet (recorded as S 78°38'13" E 114.55 feet) to a found 1/2 inch iron rod; thence N 21°31'08" E 173.16 feet (recorded as N 21°26'18" E 173.06 feet) to a found 1/2 inch iron rod; thence S 60°01'58" E 326.49 feet (recorded as S 60°06'45" E) to a set 1/2 inch iron rod; thence N 29°52'49" E 105.14 feet to a set 1/2 inch iron rod; thence N 60°01'58" W 35.46 feet to a set 1/2 inch iron rod; thence N 29°52'49" E 183.46 feet and passing through the centerline of a curb cut to the centerline of Grand River Avenue; thence S 60°01'58" E 141.66 feet (recorded as S 60°06'45" E) along the centerline of Grand River Avenue; thence S 29°52'49" W 570.00 feet (recorded as S 29°53'15" W 570.00 feet) to the point of beginning.

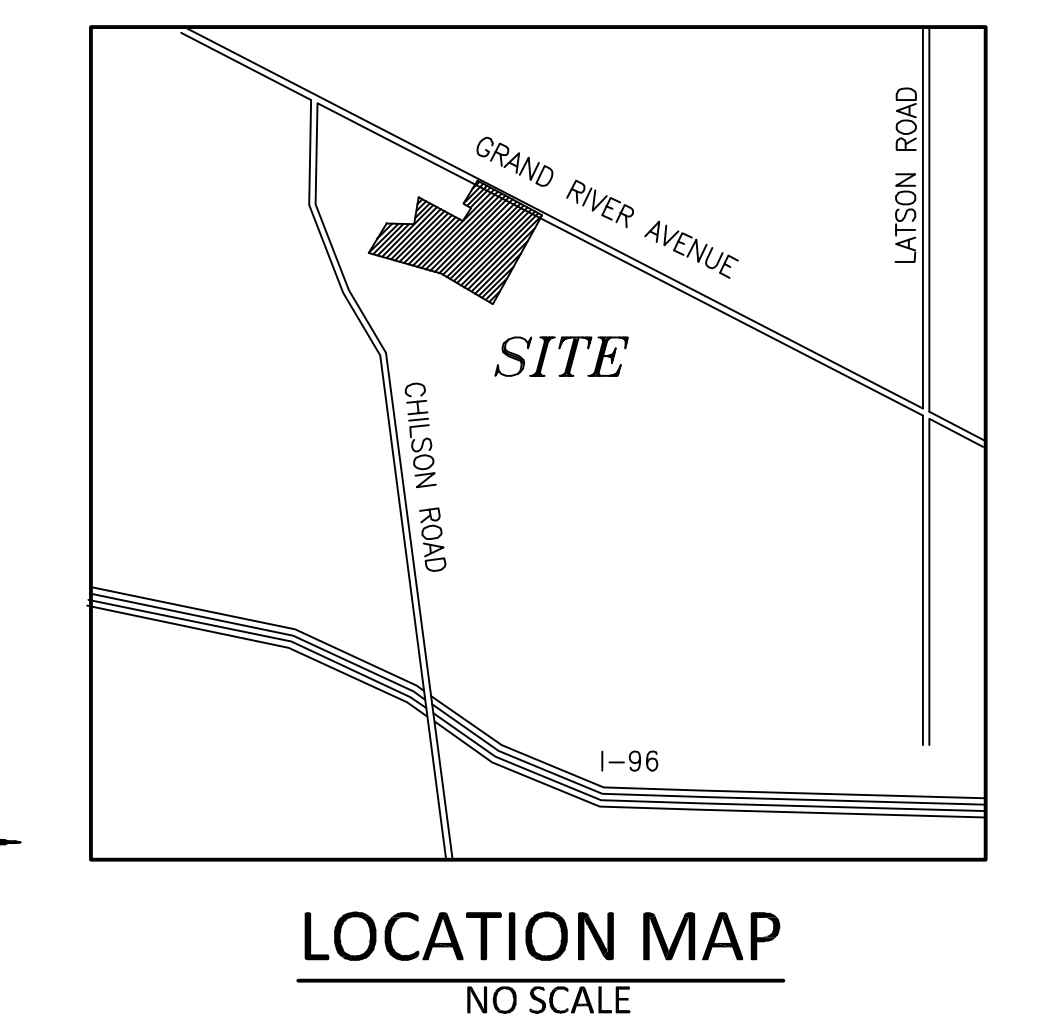
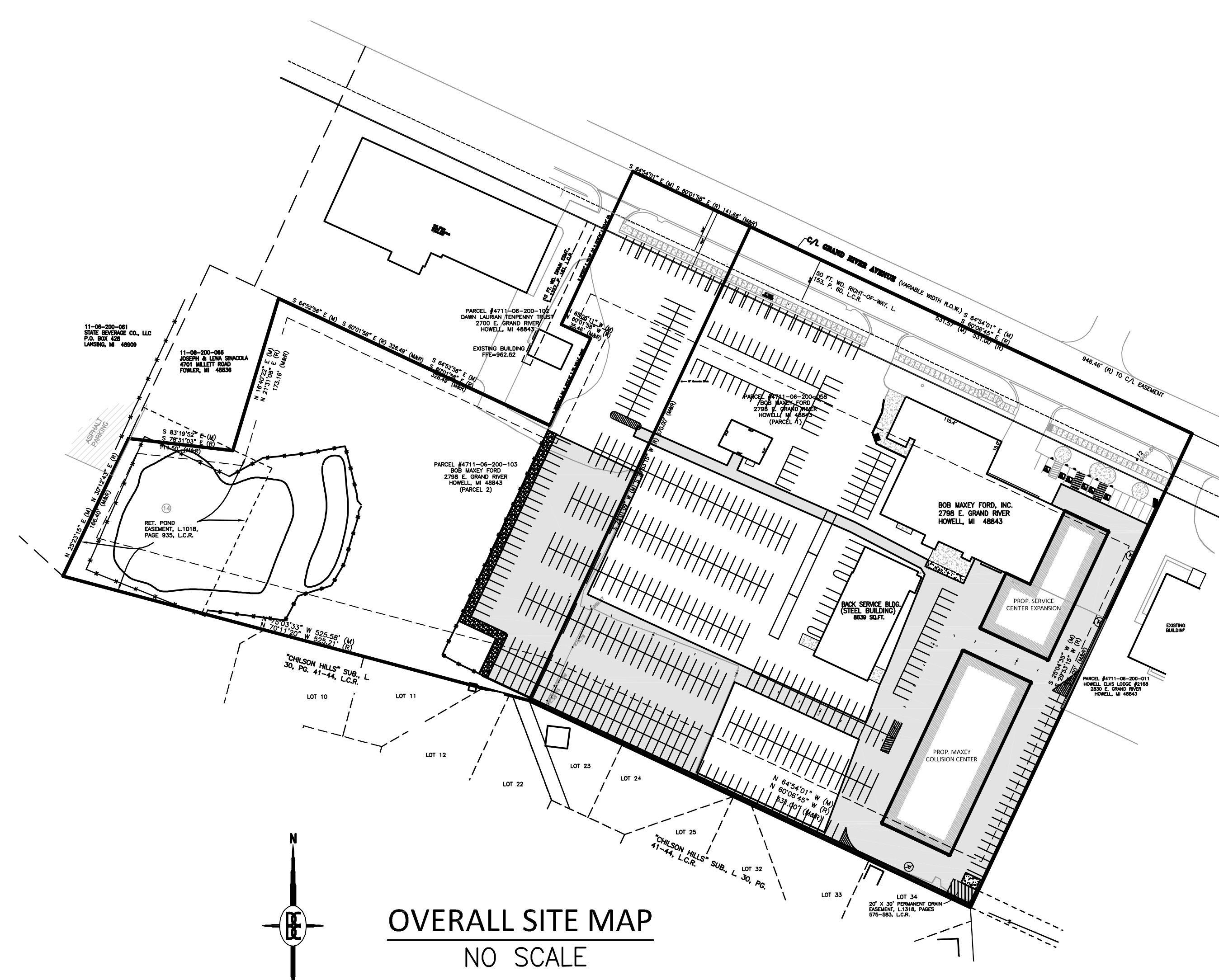
Easement Parcel:
Easement for Common Driveway as created, limited and defined in the document entitled Grant of Common Driveway Easement dated January, 15, 1997, recorded in Liber 2147, page 719, Livingston County Records.

Tax Item No. 11-06-200-058-201-47070, as to Parcel 1
Tax Item No. 11-06-200-103-201-47070, as to Parcel 2

(AFTER SITE PLAN APPROVAL AND PRIOR TO ISSUANCE OF THE LAND USE PERMIT, A PARCEL COMBINATION WILL BE COMPLETED)

CONSTRUCTION NOTES

- THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 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.
 - DO NOT SCALE THESE DRAWINGS AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
 - A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
 - IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
 - ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
 - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
 - PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
 - ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS.
 - ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
 - THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
 - THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
 - THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
 - THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
 - THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
 - ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOT CLASS II).
 - ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
 - NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
 - DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
 - IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
 - NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
 - ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
 - ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
 - TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
 - ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
 - AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
 - ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
 - NO SEEDING SHALL BE DONE AFTER OCTOBER 15 WITHOUT APPROVAL OF THE ENGINEER.
 - ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
 - SOIL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
 - ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.

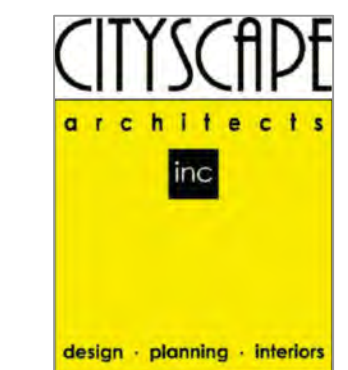


SHEET INDEX	
SHEET NO.	DESCRIPTION
C1	COVER SHEET
C2	SITE PLAN
C3	GRADING, DRAINAGE & SOIL EROSION CONTROL PLAN
C4	UTILITY PLAN
C5	LANDSCAPE PLAN
C6	LIGHTING PLAN
C7	EXISTING CONDITIONS & DEMOLITION PLAN
C8	CONSTRUCTION NOTES & DETAILS
C9	CONSTRUCTION NOTES & DETAILS
C10	MHOG SANITARY SEWER DETAILS
C11	MHOG WATER SERVICE DETAILS
DRAWINGS PREPARED BY ARCHITECT	
A-101	RENOVATED SALES BLDG. FLOOR PLAN
A-103	PROPOSED BODY SHOP PLAN
A-201	SALES: EXTERIOR ELEVATIONS
A-202	BODY SHOP: BUILDING ELEVATIONS
SK-01	PROPOSED KNOX BOX LOCATION PLAN & ELEVATION

BOB MAXEY FORD DEALERSHIP EXPANSION



OWNER
BOB MAXEY FORD
2798 E. GRAND RIVER
HOWELL, MICHIGAN 48843
CONTACT: MR. MICHAEL MAXEY
PHONE: 517-545-5700



ARCHITECT
CITYSCAPE ARCHITECTS INC.
40850 GRAND RIVER AVE, SUITE 200
NOVI, MI 48375
248.471.7877

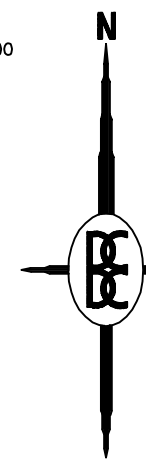
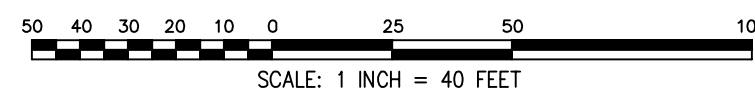
CIVIL ENGINEER/LANDSCAPE ARCHITECT



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.

		C1
2	TD	PLANNING COMMISSION COMMENTS
1	TD	TWP. REVIEW
NO	BY	CK
		REVISION PER
		DATE
		13-182



GENERAL SURVEY NOTES:

- CURRENT ZONING: GCD (GENERAL COMMERCIAL)
- GROSS AREA = 11.27 AC.
- NET AREA = 10.19 AC.
- LOT COVERAGE
BUILDINGS = 1.34 AC. (13.2%)
IMPERVIOUS (BUILDINGS & PAVEMENT) = 6.87 AC. (67.4%)
- MINIMUM SETBACK REQUIREMENTS:
FRONT = 70' (30' IF NO PARKING IN FRONT YARD)
PROPOSED = 65.19' (EXTENSION OF EX. BLDG.)
SIDES = 15'
REAR = 50' = 37.07'
PROPOSED = 41.72' (ALLOWED W/6 FT. HT. SCREEN WALL)
- EXISTING USE: NEW & PRE-OWNED AUTO SALES & SERVICE
- PROPOSED USE: NEW & PRE-OWNED AUTO SALES & SERVICE, AND BODY SHOP
- SEE ARCHITECTURAL PLANS FOR ALL NEW SIGNAGE - NO NEW FREE STANDING SIGNAGE PROPOSED.
- ALL VEHICLE MAINTENANCE WILL BE CONDUCTED INSIDE THE FACILITY.
- NO OUTDOOR STORAGE IS PROPOSED.
- NO WRECKED VEHICLES WILL BE STORED ON SITE.
- ALL WASTE FLUIDS ARE TO BE STORED INSIDE THE FACILITY. THE STORAGE AND DISPOSAL OF ALL WASTE FLUIDS TO MET ALL CURRENT LOCAL, STATE AND FEDERAL REQUIREMENTS.
- ACCORDING TO THE NATIONAL WETLAND INVENTORY MAP, NO WETLANDS EXISTING ON THIS PROPERTY.
- BUILDING AREAS
MAIN SALES & SERVICE BUILDING 30,950 S.F.
EXISTING PRE-OWNED CARS 1,550 S.F.
EXISTING SERVICE & PREP 8,475 S.F.
BODY SHOP 17,085 S.F.
TOTAL 58,060 S.F.
- TOTAL NUMBER PEOPLE EMPLOYED AT THIS FACILITY = 68
- PARKING REQUIREMENTS
REQUIRED: 1 PARKING SPACE PER 200 S.F. OF GROSS LEASABLE AREA, PLUS 3 SPACES PER AUTO SERVICE BAY FOR SALES USES.
GROSS AREA 6,517 S.F./200 = 33 SPACES
SERVICE BAYS = 54 SPACES X 3 = 162 SPACES
TOTAL SPACES REQUIRED = 195 SPACES
TOTAL SPACES PROVIDED = 599 SPACES (INCLUDES 6 BARRIER FREE SPACES BASED ON 195 REQUIRED PARKING SPACES) - REMAINDER OF SPACES TO BE USED FOR NEW AND USED VEHICLE SALES).
- ALL TRUCK MANEUVERING IS/WILL TAKE PLACE ON THE PROPERTY. NO MANEUVERING ALLOWED IN GRAND RIVER.

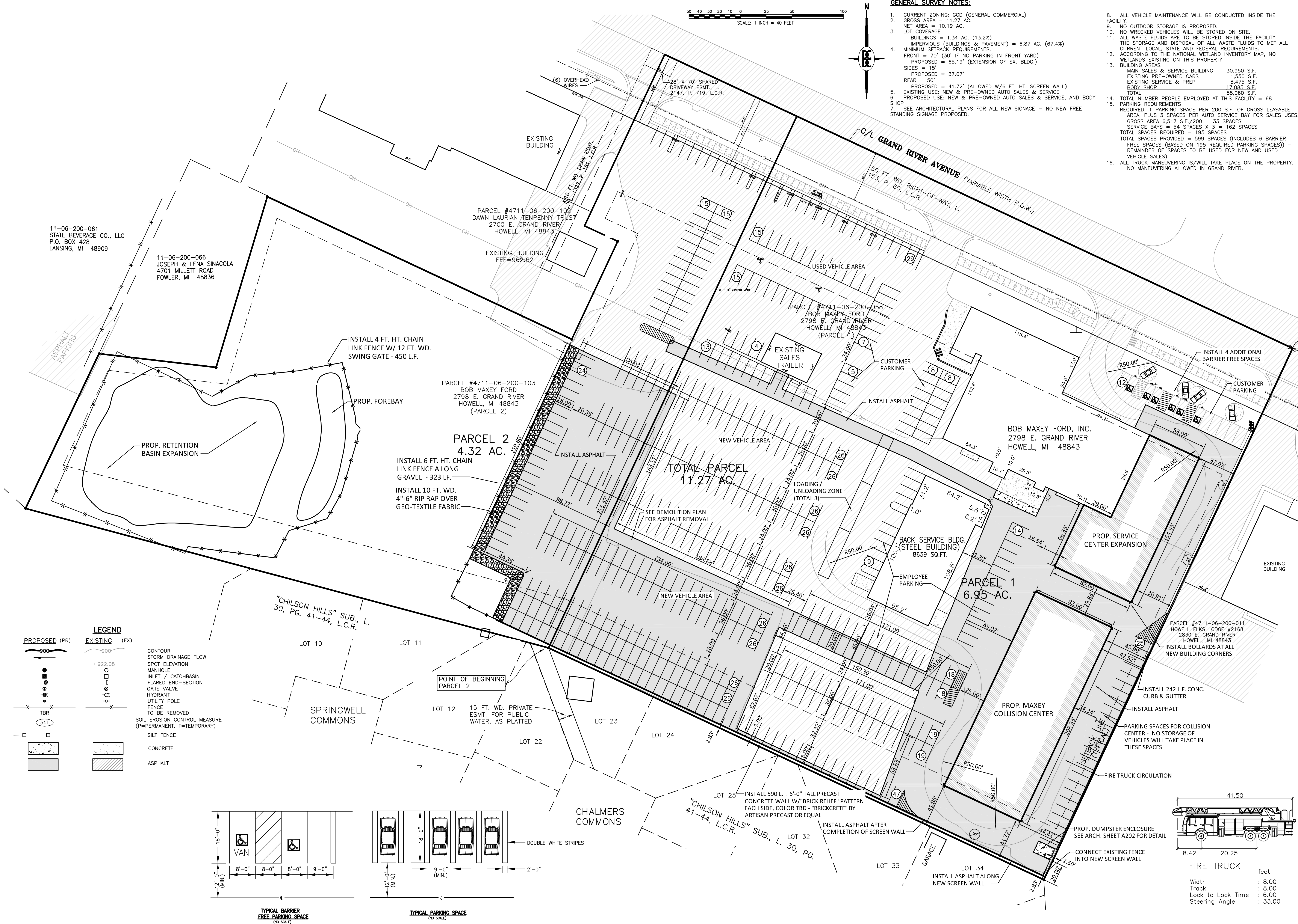
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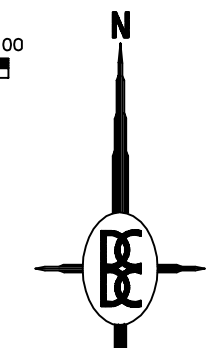
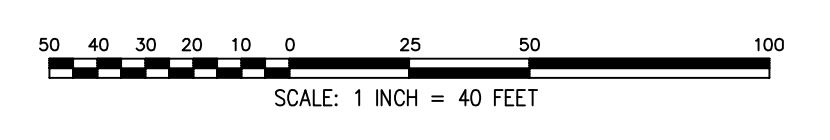
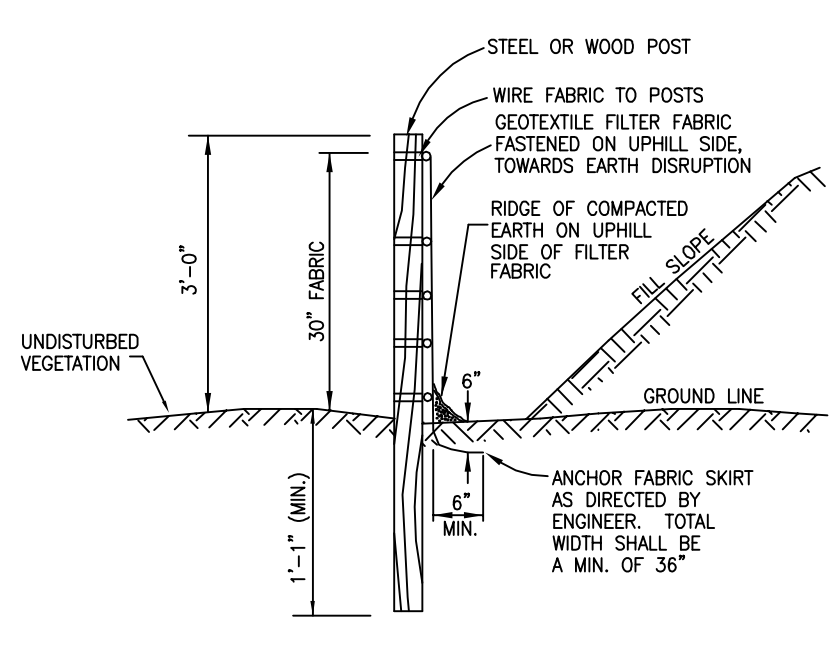
BOSS ENGINEERING
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS
(E-MAIL: bossengr.com)
3121 E. GRAND RIVER AVE.
HOWELL, MI 48843
(800) 246-6735 FAX (517) 546-1670

PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**
FOR: **BOB MAXEY FORD OF HOWELL**
2798 E. GRAND RIVER AVE.
HOWELL, MI 48843
517.545.5700

NO.	DATE	REVISION PER	BY
1	8-28-13	TWP. REVIEW	TD
2	7-29-13	P. C. COMMENTS	TD

DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY: TD
SCALE: 1" = 40'
JOB NO. 13-182
DATE 07-09-13
SHEET NO. C2





SOIL EROSION CONTROL MEASURES

1		TOPSOIL MAY BE STOCKPILED ABOVE BODIUM AREAS TO ACT AS A EROSION STOCKPILE SHOULD BE TEMPORARILY SEED
6		PROMOTES ESTABLISHMENT OF VEGETATIVE COVER. SPECIFIC INSTRUCTIONS FOR SEEDING ARE GIVEN APPROXIMATELY. SEEDING FOR DRINKING WATER AREAS SHALL BE APPROXIMATELY 10% OF THE TOTAL AREA TO BE SEEDING. SEEDING SHALL BE EXCLUDED FOR RETAINING WALLS. THE SEEDING SHALL BE PERFORMED IN THE FIELD PRIOR TO CONSTRUCTION. THE UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE APPROXIMATE LOCATION OF THE UTILITY CROSSINGS SHALL BE SHOWN ON THE PLAN OR IN THE FIELD PRIOR TO CONSTRUCTION.
13		USED WHERE VEGETATION IS NOT EASILY ESTABLISHED. SPECIFIC FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS. PERMITS RUNOFF TO INFILTRATE SOIL. DISPERSES ENERGY FROM FLOW AT POINTS OF CONCENTRATION.
14		STABILIZES SOIL SURFACE, TRAP INTRUSIVE ROOTS. PERMITS CONSTRUCTION TRAFFIC IN AREAS WHERE VEGETATION IS NOT EASILY ESTABLISHED. CONSTRUCTION OF PAVED AREAS MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS.
15		PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY. IRREGULAR SURFACE WILL HELP SLOW VELOCITY.
35		SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS. PERMITS CONSTRUCTION TRAFFIC IN AREAS WHERE VEGETATION IS NOT EASILY ESTABLISHED. CONSTRUCTION OF PAVED AREAS MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS.
36		COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.
54		USES GEOTEXTILE FABRIC AND POSTS OR PILES. EASY TO CONSTRUCT AND LOCATE, AS NECESSARY. (SEE DETAIL SHEET)

T = TEMPORARY P = PERMANENT
TOTAL AREA DISTURBED = 182,091 S.F. (4.18 AC)

THE DESIGN AND CONSTRUCTION OF EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MDNR) REGULATIONS. UTILITIES AS SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.

BOSS ENGINEERING
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LANDSCAPE ARCHITECTS
(E-MAIL: boss@bosseng.com)
3121 E. GRAND RIVER AVE.
HOWELL, MI 48843
(800) 246-6735 FAX (517) 546-1670

PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**
FOR: **BOB MAXEY FORD OF HOWELL**
2798 E. GRAND RIVER AVE.
HOWELL, MI 48843
517.545.5700

TITLE: **GRADING, DRAINAGE & SOIL EROSION CONTROL**

NO	BY	DATE	REVISION PER
1	P. C. COMMENTS	8-26-13	
2	TWP. REVIEW	7-29-13	
3	NO		

DESIGNED BY: **TD**
DRAWN BY: **TD**
CHECKED BY: **TD**

SCALE: **1" = 40'**
JOB NO.: **13-182**
DATE: **07-09-13**
SHEET NO.: **C3**

11-06-200-061
STATE BEVERAGE CO., LLC
P.O. BOX 428
LANSING, MI 48909

11-06-200-066
JOSEPH & LENA SINACOLA
4701 MILLETT ROAD
FOWLER, MI 48836

PARCEL #4711-06-200-102
DAWN LAURIAN TENPENNY TRUST
2700 E. GRAND RIVER
HOWELL, MI 48843

PARCEL #4711-06-200-058
BOB MAXEY FORD
2798 E. GRAND RIVER
HOWELL, MI 48843 (PARCEL 1)

PARCEL 2
4.32 AC.

TOTAL PARCEL
11.27 AC.

PARCEL 1
6.95 AC.

PROP. SERVICE CENTER EXPANSION
F.F.E. = 978.10

PROP. MAXEY COLLISION CENTER
F.F.E. = 978.10

LEGEND

PROPOSED (PR)	EXISTING (EX)	DESCRIPTION
900	902.08	CONTOUR
FF	FF	STORM DRAINAGE FLOW
FG	FG	SPOT ELEVATION
T/A	T/A	FINISHED FLOOR ELEVATION
T/C	T/C	FINISHED GRADE ELEVATION
T/W	T/W	TOP OF ASPHALT
T/CONC	T/CONC	TOP OF CURB
T/P	T/P	TOP OF WALK
RIM	RIM	TOP OF CONCRETE
INV	INV	TOP OF PIPE
MH	MH	RIM ELEVATION
IN	IN	INVERT ELEVATION
CB	CB	MANHOLE STRUCTURE
ES	ES	INLET STRUCTURE
SN	SN	CATCHBASIN STRUCTURE
SL	SL	END-SECTION
FM	FM	SANITARY SEWER
PS	PS	SANITARY LEAD
ST	ST	FORCE MAIN
WL	WL	PRESSURE SEWER
FO	FO	STORM SEWER
OH	OH	WATER MAIN
C	C	WATER LEAD
T	T	FIBER OPTIC
		OVERHEAD WIRE
		CABLE
		ELECTRIC
		GAS
		TELEPHONE
		MANHOLE
		INLET / CATCHBASIN
		FLARED END-SECTION
		GATE VALVE
		HYDRANT
		UTILITY POLE
		FENCE
		TO BE REMOVED
		SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
		SILT FENCE
		LIMITS OF GRADING/CLEARING
		CONCRETE
		ASPHALT
		HEAVY DUTY ASPHALT
		LIMITS OF DRAINAGE

"CHILSON HILLS" SUB., L. 30, PG. 41-44, L.C.R.

LOT 10

LOT 11

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SOIL TYPES
(PER U.S.D.A. SOIL CONSERVATION SERVICE "SOIL SURVEY OF LIVINGSTON COUNTY")

SOIL TYPE: MIAMI LOAM
PERCENT OF SITE: 100%
PERCENT SLOPES: 2-6%

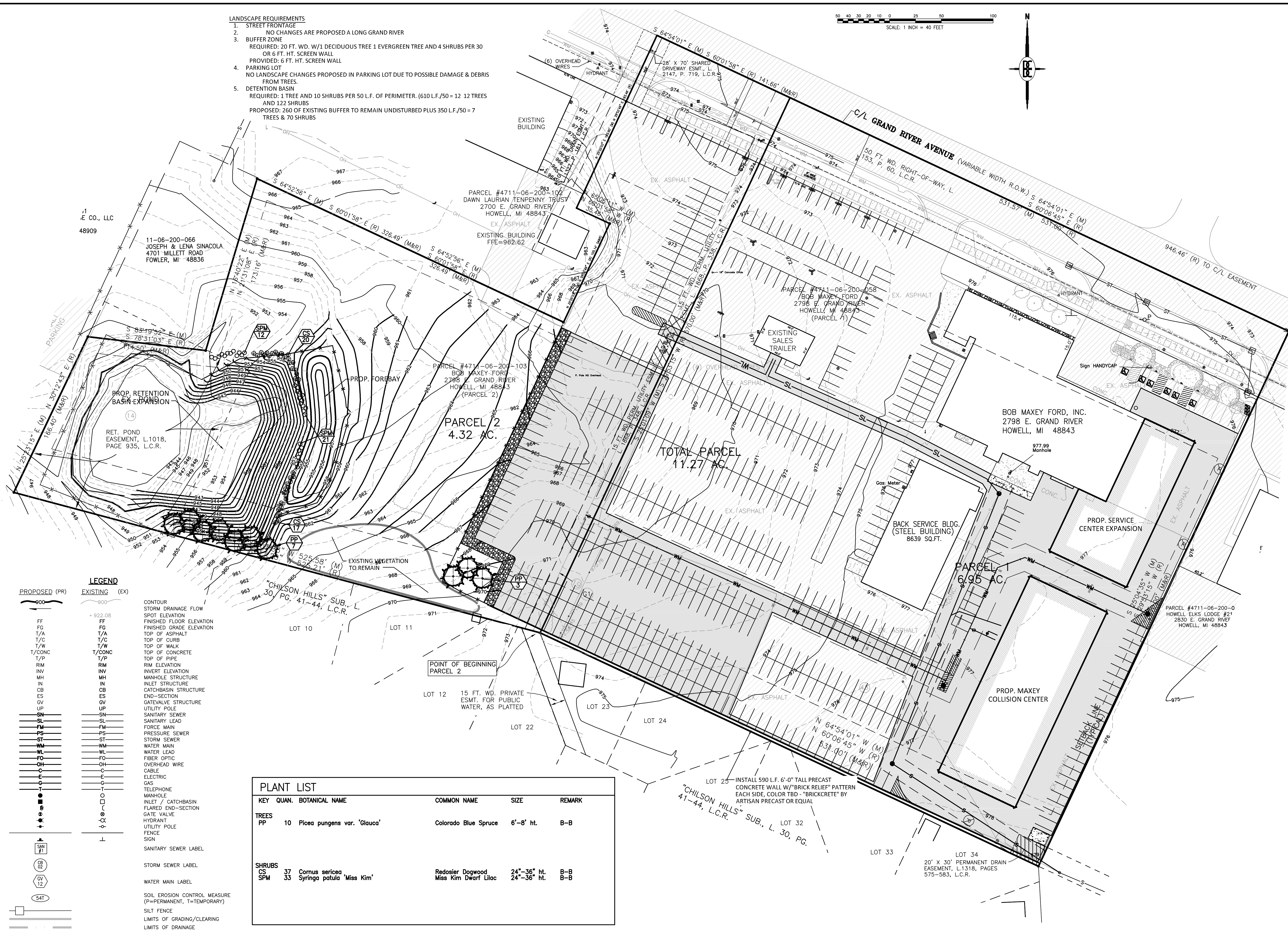
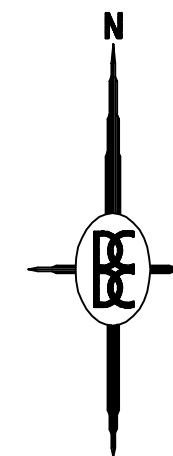
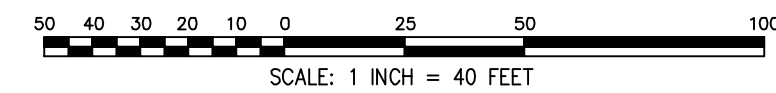
BENCHMARK CHART

BM #3
BOSS NAIL & TAG SET AT W/SIDE OF POWER POLE, 37' WEST OF SW CORNER OF KRUG FORD BUILDING. ELEV. = 976.38 (NGVD29 DATUM)

BM #6
NORTH SIDE OF TOP OF CONCRETE BASE TO L. POLE, 4TH POLE EAST OF THE WESTERLY ENTRANCE TO KRUG FORD. ELEV. = 974.82 (NGVD29 DATUM)

LANDSCAPE REQUIREMENTS

- STREET FRONTAGE
NO CHANGES ARE PROPOSED A LONG GRAND RIVER
- BUFFER ZONE
REQUIRED: 20 FT. WD. W/1 DECIDUOUS TREE 1 EVERGREEN TREE AND 4 SHRUBS PER 30 OR 6 FT. HT. SCREEN WALL
PROVIDED: 6 FT. HT. SCREEN WALL
- PARKING LOT
NO LANDSCAPE CHANGES PROPOSED IN PARKING LOT DUE TO POSSIBLE DAMAGE & DEBRIS FROM TREES
- DETENTION BASIN
REQUIRED: 1 TREE AND 10 SHRUBS PER 50 L.F. OF PERIMETER. (610 L.F./50 = 12 TREES AND 122 SHRUBS)
PROPOSED: 260 OF EXISTING BUFFER TO REMAIN UNDISTURBED PLUS 350 L.F./50 = 7 TREES & 70 SHRUBS



LEGEND

PROPOSED (PR)	EXISTING (EX)	
900	900	CONTOUR
FF	FF	FINISHED FLOOR ELEVATION
FG	FG	FINISHED GRADE ELEVATION
T/A	T/A	TOP OF ASPHALT
T/C	T/C	TOP OF CURB
T/W	T/W	TOP OF WALK
T/CONC	T/CONC	TOP OF CONCRETE
T/P	T/P	TOP OF PIPE
RIM	RIM	RIM ELEVATION
INV	INV	INVERT ELEVATION
MH	MH	MANHOLE STRUCTURE
IN	IN	INLET STRUCTURE
CB	CB	CATCHBASIN STRUCTURE
ES	ES	END-SECTION
GV	GV	GATEVALVE STRUCTURE
UP	UP	UTILITY POLE
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAIN
PS	PS	PRESSURE SEWER
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
FO	FO	FIBER OPTIC
OH	OH	OVERHEAD WIRE
C	C	CABLE
E	E	ELECTRIC
G	G	GAS
T	T	TELEPHONE
MANHOLE	MANHOLE	INLET / CATCHBASIN
FLARED END-SECTION	FLARED END-SECTION	FLARED END-SECTION
GATE VALVE	GATE VALVE	GATE VALVE
HYDRANT	HYDRANT	HYDRANT
UTILITY POLE	UTILITY POLE	UTILITY POLE
FENCE	FENCE	FENCE
SIGN	SIGN	SIGN
SANITARY SEWER LABEL	SANITARY SEWER LABEL	SANITARY SEWER LABEL
STORM SEWER LABEL	STORM SEWER LABEL	STORM SEWER LABEL
WATER MAIN LABEL	WATER MAIN LABEL	WATER MAIN LABEL
SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
SILT FENCE	SILT FENCE	SILT FENCE
LIMITS OF GRADING/CLEARING	LIMITS OF GRADING/CLEARING	LIMITS OF GRADING/CLEARING
LIMITS OF DRAINAGE	LIMITS OF DRAINAGE	LIMITS OF DRAINAGE

PLANT LIST

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
TREES					
PP	10	<i>Picea pungens</i> var. 'Glauca'	Colorado Blue Spruce	6'-8' ht.	B-B
SHRUBS					
CS	37	<i>Cornus sericea</i>	Redosier Dogwood	24"-36" ht.	B-B
SPM	33	<i>Syringa patula</i> 'Miss Kim'	Miss Kim Dwarf Lilac	24"-36" ht.	B-B

THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

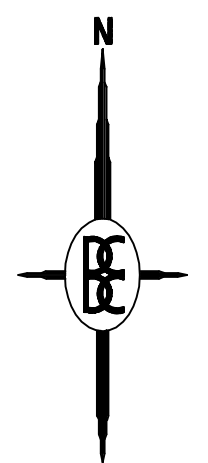
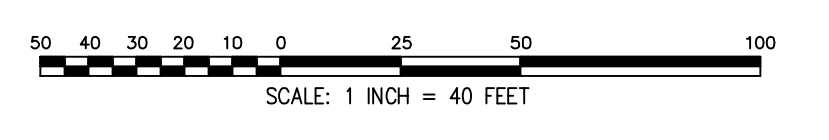
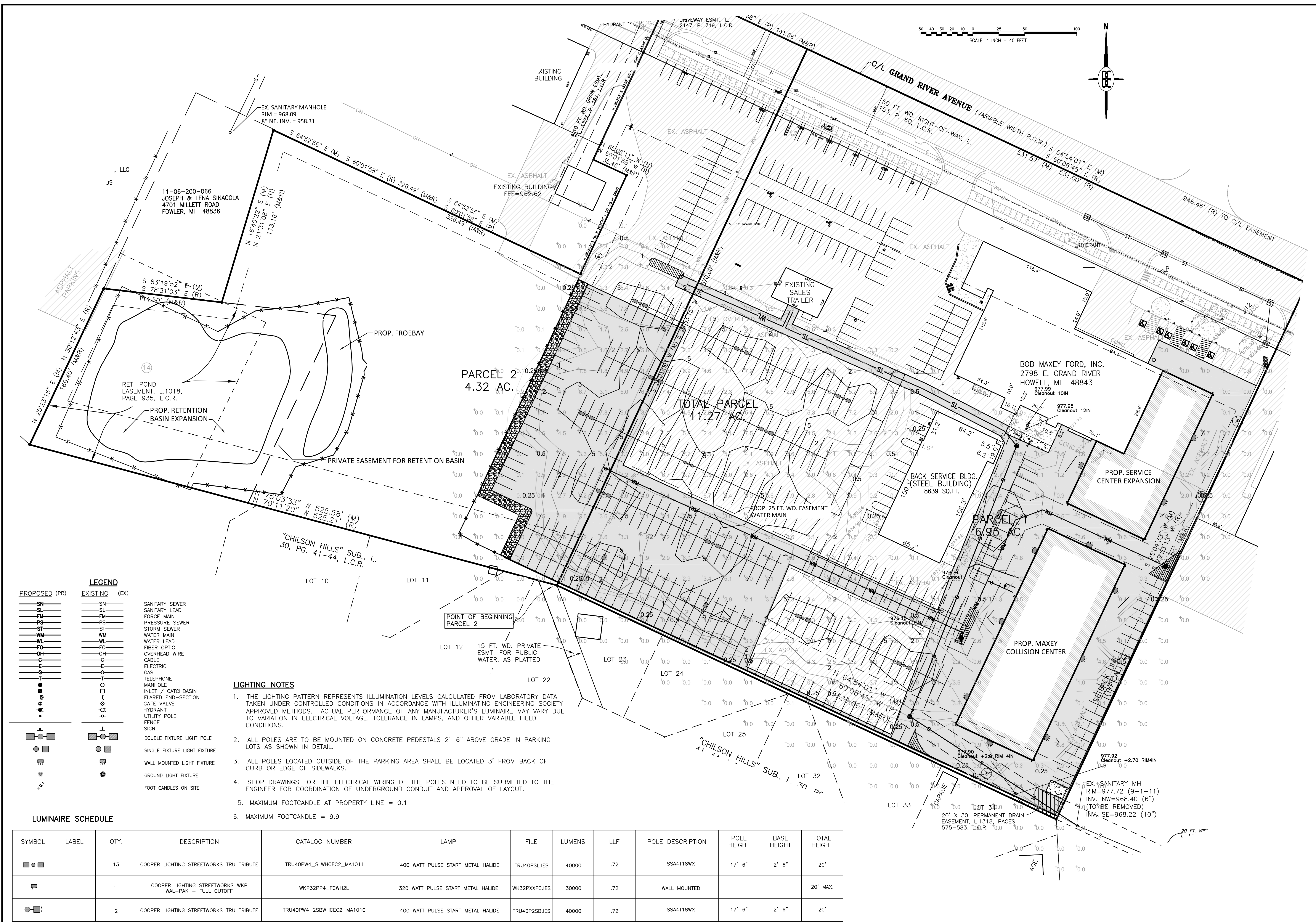
BOSS ENGINEERING
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(E-MAIL: boss@bosseng.com)
3121 E. GRAND RIVER AVE.
HOWELL, MI 48843
(800) 246-6735 FAX (517) 546-1670

PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**
2798 E. GRAND RIVER AVE.
HOWELL, MI 48843
517.545.5700

TITLE: **LANDSCAPE PLAN**

NO.	BY	DATE
1	TD	7-29-13
2	TD	8-26-13

DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY: TD
SCALE: 1" = 40'
JOB NO. 13-182
DATE 07-09-13
SHEET NO. C5



LEGEND

PROPOSED (PR)	EXISTING (EX)	
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAIN
PS	PS	PRESSURE SEWER
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
FO	FO	FIBER OPTIC
OH	OH	OVERHEAD WIRE
C	C	CABLE
E	E	ELECTRIC
G	G	GAS
T	T	TELEPHONE
MH	MH	MANHOLE
IC	IC	INLET / CATCHBASIN
FS	FS	FLARED END-SECTION
GV	GV	GATE VALVE
HY	HY	HYDRANT
UP	UP	UTILITY POLE
F	F	FENCE
S	S	SIGN
DF	DF	DOUBLE FIXTURE LIGHT POLE
SL	SL	SINGLE FIXTURE LIGHT FIXTURE
WM	WM	WALL MOUNTED LIGHT FIXTURE
GL	GL	GROUND LIGHT FIXTURE
FC	FC	FOOT CANDLES ON SITE

- LIGHTING NOTES**
1. THE LIGHTING PATTERN 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.
 2. ALL POLES ARE TO BE MOUNTED ON CONCRETE PEDESTALS 2'-6" ABOVE GRADE IN PARKING LOTS AS SHOWN IN DETAIL.
 3. ALL POLES LOCATED OUTSIDE OF THE PARKING AREA SHALL BE LOCATED 3' FROM BACK OF CURB OR EDGE OF SIDEWALKS.
 4. SHOP DRAWINGS FOR THE ELECTRICAL WIRING OF THE POLES NEED TO BE SUBMITTED TO THE ENGINEER FOR COORDINATION OF UNDERGROUND CONDUIT AND APPROVAL OF LAYOUT.
 5. MAXIMUM FOOTCANDLE AT PROPERTY LINE = 0.1
 6. MAXIMUM FOOTCANDLE = 9.9

LUMINAIRE SCHEDULE

SYMBOL	LABEL	QTY.	DESCRIPTION	CATALOG NUMBER	LAMP	FILE	LUMENS	LLF	POLE DESCRIPTION	POLE HEIGHT	BASE HEIGHT	TOTAL HEIGHT
☐	13		COOPER LIGHTING STREETWORKS TRU TRIBUTE	TRU40PW4_SLWHCEC2_MA1011	400 WATT PULSE START METAL HALIDE	TRU40PSLIES	40000	.72	SSA4T18WX	17'-6"	2'-6"	20'
☐	11		COOPER LIGHTING STREETWORKS WKP WAL-PAK - FULL CUTOFF	WKP32PP4_FCWH2L	320 WATT PULSE START METAL HALIDE	WK32PXXFC.IES	30000	.72	WALL MOUNTED			20' MAX.
☐	2		COOPER LIGHTING STREETWORKS TRU TRIBUTE	TRU40PW4_2SBWHCEC2_MA1010	400 WATT PULSE START METAL HALIDE	TRU40P2SB.IES	40000	.72	SSA4T18WX	17'-6"	2'-6"	20'

ALL IES FILES PROVIDED BY MANUFACTURER FOR CALCULATION OF LIGHTING LEVEL.

THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES.

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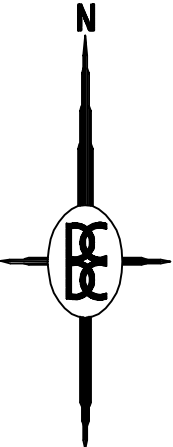
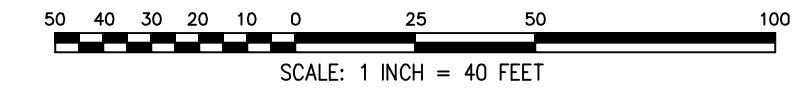
PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**
7798 E. GRAND RIVER AVE.
HOWELL, MI 48843
517.545.5700

TITLE: **LIGHTING PLAN**

NO.	DATE	REVISION PER
1	8-28-13	TWP.
2	7-29-13	REVISED

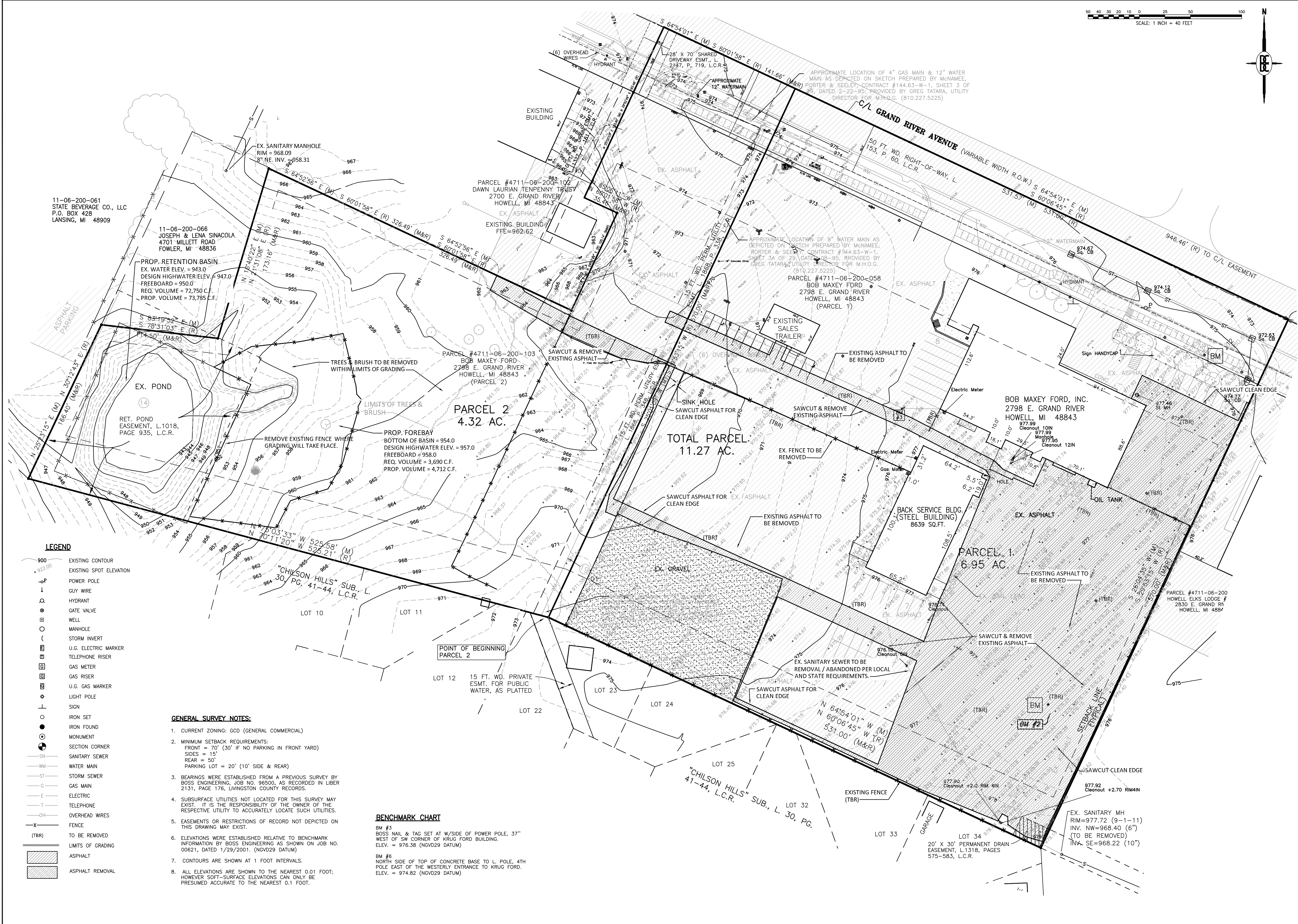
DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY: TD

SCALE: 1" = 40'
JOB NO. 13-182
DATE 07-09-13
SHEET NO. C6



THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION SHOWN ON THESE DRAWINGS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE APPROPRIATE OF THE LOCATION OR DEPTH OF UTILITIES FROM THE FIELD PRIOR TO CONSTRUCTION.

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STATE BEVERAGE CO., LLC
P.O. BOX 428
LANSING, MI 48909

11-06-200-066
JOSEPH & LENA SINACOLA
4701 MILLETT ROAD
FOWLER, MI 48836

PROP. RETENTION BASIN
EX. WATER ELEV. = 943.0
DESIGN HIGHWATER ELEV. = 947.0
FREEBOARD = 950.0
REQ. VOLUME = 72,750 C.F.
PROP. VOLUME = 73,785 C.F.

EX. POND
RET. POND
EASEMENT, L.1018,
PAGE 935, L.C.R.

PARCEL #4711-06-200-102
DAWN LAURIAN TENPENNY TRUST
2700 E. GRAND RIVER
HOWELL, MI 48843

PARCEL #4711-06-200-103
BOB MAXEY FORD
2798 E. GRAND RIVER
HOWELL, MI 48843
(PARCEL 2)

PARCEL 2
4.32 AC.

TOTAL PARCEL
11.27 AC.

PARCEL #4711-06-200-058
BOB MAXEY FORD
2798 E. GRAND RIVER
HOWELL, MI 48843
(PARCEL 1)

BOB MAXEY FORD, INC.
2798 E. GRAND RIVER
HOWELL, MI 48843

PARCEL 1
6.95 AC.

PARCEL #4711-06-200
HOWELL ELKS LODGE #
2830 E. GRAND RIVER
HOWELL, MI 48843

- LEGEND**
- 900 EXISTING CONTOUR
 - 922.00 EXISTING SPOT ELEVATION
 - ⊕ POWER POLE
 - ⊖ GUY WIRE
 - ⊙ HYDRANT
 - ⊕ GATE VALVE
 - ⊙ WELL
 - ⊙ MANHOLE
 - ⊙ STORM INVERT
 - ⊕ U.G. ELECTRIC MARKER
 - ⊕ TELEPHONE RISER
 - ⊕ GAS METER
 - ⊕ GAS RISER
 - ⊕ U.G. GAS MARKER
 - ⊕ LIGHT POLE
 - ⊕ SIGN
 - ⊕ IRON SET
 - ⊕ IRON FOUND
 - ⊕ MONUMENT
 - ⊕ SECTION CORNER
 - SN — SANITARY SEWER
 - WM — WATER MAIN
 - ST — STORM SEWER
 - G — GAS MAIN
 - E — ELECTRIC
 - T — TELEPHONE
 - OH — OVERHEAD WIRES
 - X — FENCE
 - (TBR) TO BE REMOVED
 - ▨ LIMITS OF GRADING
 - ▨ ASPHALT
 - ▨ ASPHALT REMOVAL

- GENERAL SURVEY NOTES:**
- CURRENT ZONING: GCD (GENERAL COMMERCIAL)
 - MINIMUM SETBACK REQUIREMENTS:
FRONT = 70' (30' IF NO PARKING IN FRONT YARD)
SIDES = 15'
REAR = 50'
PARKING LOT = 20' (10' SIDE & REAR)
 - BEARINGS WERE ESTABLISHED FROM A PREVIOUS SURVEY BY BOSS ENGINEERING, JOB NO. 96500, AS RECORDED IN LIBER 2131, PAGE 176, LIVINGSTON COUNTY RECORDS.
 - 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.
 - EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
 - ELEVATIONS WERE ESTABLISHED RELATIVE TO BENCHMARK INFORMATION BY BOSS ENGINEERING AS SHOWN ON JOB NO. 00621, DATED 1/29/2001. (NGVD29 DATUM)
 - CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
 - ALL ELEVATIONS ARE SHOWN TO THE NEAREST 0.01 FOOT; HOWEVER SOFT-SURFACE ELEVATIONS CAN ONLY BE PRESUMED ACCURATE TO THE NEAREST 0.1 FOOT.

BENCHMARK CHART

BM #3
BOSS NAIL & TAG SET AT W/SIDE OF POWER POLE, 37"
WEST OF SW CORNER OF KRUG FORD BUILDING.
ELEV. = 976.38 (NGVD29 DATUM)

BM #6
NORTH SIDE OF TOP OF CONCRETE BASE TO L. POLE, 4TH
POLE EAST OF THE WESTERLY ENTRANCE TO KRUG FORD.
ELEV. = 974.82 (NGVD29 DATUM)

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HOWELL, MI 48843
(800) 246-6735 FAX (517) 546-1670

PROJECT:	BOB MAXEY FORD DEALERSHIP EXPANSION		
PREPARED FOR:	BOB MAXEY FORD OF HOWELL 2798 E. GRAND RIVER AVE. HOWELL, MI 48843 517.545.5700		
TITLE:	EXISTING CONDITIONS & DEMOLITION PLAN		
DATE	8-28-13	DATE	7-29-13
P. C. COMMENTS		TWP. REVIEW PER	
NO. BY		REVISION PER	
DESIGNED BY:	TD		
DRAWN BY:	TD		
CHECKED BY:	TD		
SCALE	1" = 40'		
JOB NO.	13-182		
DATE	07-09-13		
SHEET NO.	C7		

**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. 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 DIAPERS SHALL BE INSTALLED AT ALL INGRESS/EGRESS AREAS OF THE SITE PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. DIAPERS 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 SLOTTED 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. HORIZONTAL TO 1 FT. VERTICAL SIDE SLOPES 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 ONSITE DURING THE EXCAVATING 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.
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 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 BARFLED TO THE CORRECT SIZE. ALL PIPE SHALL MEET THE 12" DIAMETER CODE SIZE.
21. ALL STORM DRAIN OUTLETS 15" IN DIAMETER OR LARGER SHALL HAVE ANIMAL GUARDS INSTALLED TO PREVENT ENTRANCE TO THE SYSTEM.

CONSTRUCTION SEQUENCE

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EROSION IS MINIMIZED AND THAT COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, AND ORDINANCES IS MAINTAINED THROUGHOUT EXECUTION OF THIS PROJECT.

1 DAYS	1. INSTALL SILT FENCE AS SHOWN ON PLANS.
5 DAYS	2. ROUGH GRADE AND INSTALL STORM DRAINAGE.
1 DAY	3. INSTALL INLET PROTECTION ON STORM INLETS.
80 DAY	4. START BLOCK CONSTRUCTION.
4 DAYS	5. INSTALL PAVEMENT.
4 DAYS	6. FINE GRADE AROUND BUILDING, SPREAD TOPSOIL, SEED OR SOD AS APPLICABLE.
1 DAY	7. REMOVE ALL EROSION CONTROL STRUCTURES.
1 DAY	8. REMOVE ACCUMULATED SILT FROM ALL EXISTING DRAINAGE.

**CONTROLS & MEASURES
POST CONSTRUCTION SEQUENCE**

ACTIVITY	WEEKLY	MONTHLY	AS REQUIRED
MAINTAIN LANDSCAPING, REPLACE MULCH	X	X	X
CLEAN INLETS		X	X
COLLECT LITTER	X		X
SWEEP PARKING LOT		X	X

CONTROLS & MEASURES NARRATIVE

ACTIVITY	DESCRIPTION
MAINTAIN LANDSCAPING, REPLACE MULCH	COLLECT GRASS, TREE, AND SHRUB CLIPPINGS. DISPOSE IN APPROVED CONTAINER. REPLACE DEAD SOD, TREES AND SHRUBS.
CLEAN INLETS	REMOVE LITTER, SEDIMENT, AND DEBRIS. DISPOSE OF IN APPROVED LANDFILL.
COLLECT LITTER	DISPOSE OF WITH INLET DEBRIS.
SWEEP PARKING LOT	REMOVE MUD, DIRT, GREASE AND OIL WITH PERIODIC SWEEPING.
DUST CONTROL	SPRINKLE WATER AS NEEDED

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 15 SQ. 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 BIND 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. PERMIT FEES DURING THE WINTER PERIOD OF NON-CONSTRUCTION, (DECEMBER 1 THROUGH MARCH 31), SHALL NOT BE IMPOSED IF THE PERMIT HOLDER TEMPORARILY STABILIZES THE EXPOSED AREAS WITH STRAW MATTING, AND OTHER APPROVED CONTROLS, AND OBTAINS A WINTER STABILIZATION CERTIFICATE FROM THIS OFFICE.
32. 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.
33. THIS COMMERCIAL 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 MAINTENANCE AND/OR PERMITS NECESSARY FOR EACH LOT IN THIS DEVELOPMENT AT THE TIME APPLICATION FOR SINGLE FAMILY RESIDENCE IS MADE.
34. 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.
35. PER THE LIVINGSTON COUNTY DRAIN COMMISSIONER THE SEEDING, FERTILIZER AND MULCH MINIMUM QUANTITIES SHALL BE AS FOLLOWS:

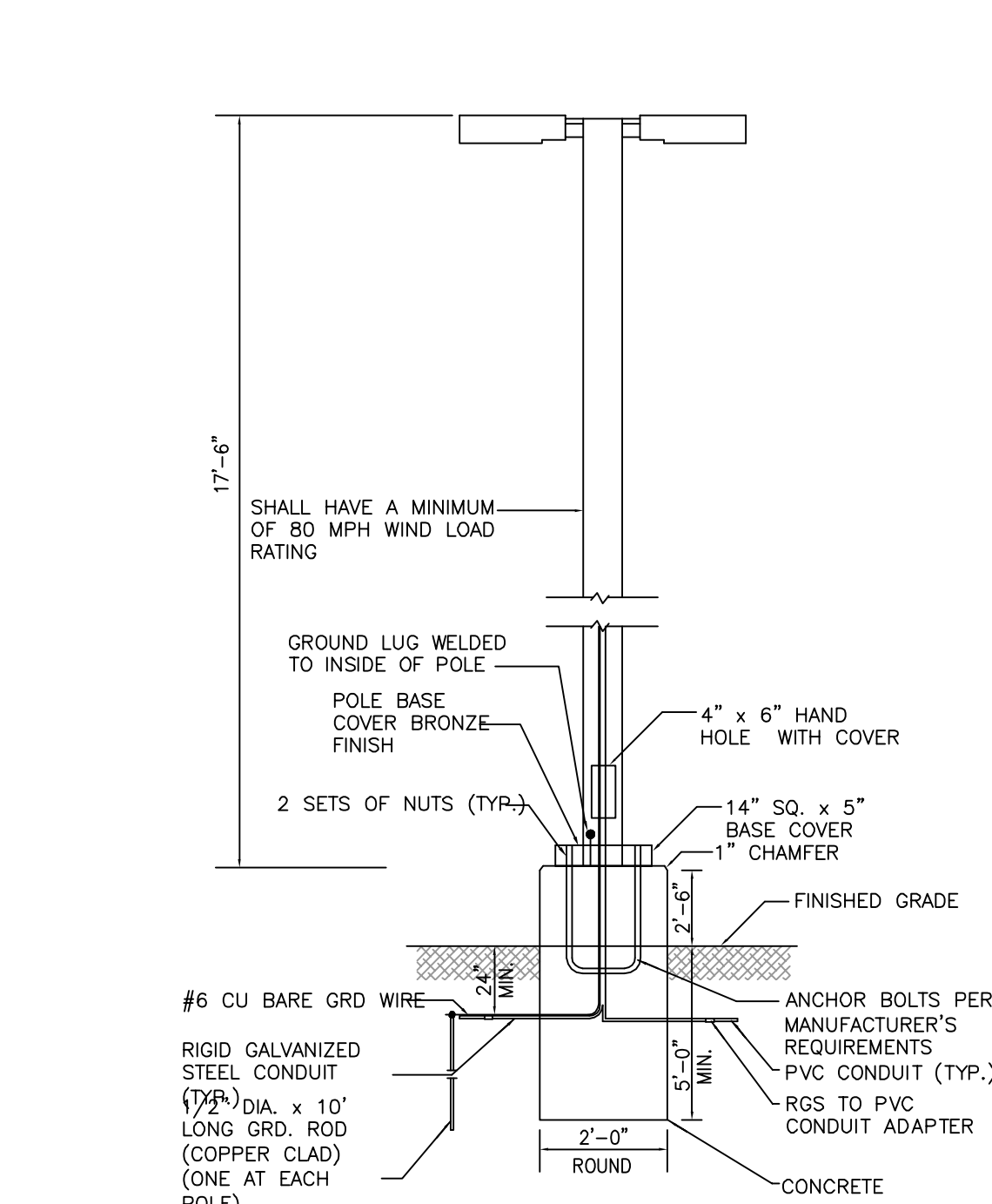
TOP-SOIL	3" IN DEPTH
GRASS SEED	218 LBS. PER ACRE
FERTILIZER	150 LBS. PER ACRE
STRAW MULCH	3" IN DEPTH 1.5 TO 2 TONS PER ACRE (ALL MULCHING MUST HAVE A TIE DOWN, SUCH AS TACKIFIER, NET BINDING, ETC.)
36. HYDRO-SEEDING IS NOT ACCEPTABLE FOR SLOPES EXCEEDING 1%, IN SUCH CASES STABILIZATION SHALL BE DONE WITH SEED AND STRAW MULCH WITH A TACKIFIER.

SANITARY SEWERS

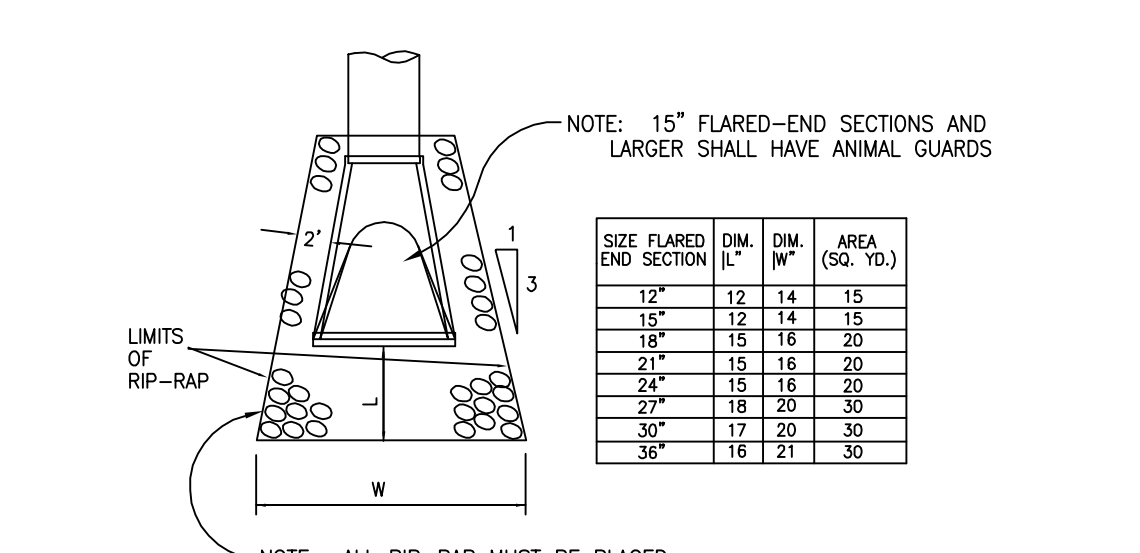
37. A TAP PERMIT WILL BE NEEDED BY THE OWNER/DEVELOPER OF THIS PROJECT TO TAP TO THE LEGALLY ESTABLISHED COUNTY STORM DRAIN. THE OWNER/DEVELOPER SHALL MAKE A WRITTEN REQUEST TO THE DRAIN COMMISSIONER TO REQUEST THE TAP TO THE STORM SEWER. THE FEES FOR SUCH TAP ARE AS FOLLOWS:
 A. NON REFUNDABLE ADMINISTRATIVE FEE OF \$50.00, TO BE PAID AT THE TIME OF APPLICATION.
 B. INSPECTION FEES ARE BASED ON TIME AND MATERIAL BASIS FROM PORT TO PORT FOR THE ON-SITE INSPECTOR. INSPECTORS RATE, VEHICLE MILEAGE, AND 0.5 HOURS OF REPORT PREPARATION TIME WILL BE CHARGED, AS WELL AS ANY NECESSARY MATERIALS. TIME AND MATERIAL FEES ARE PAID AT THE COMPLETION OF THE TAP INSTALLATION.

MAINTENANCE SCHEDULE FOR SOIL EROSION CONTROLS

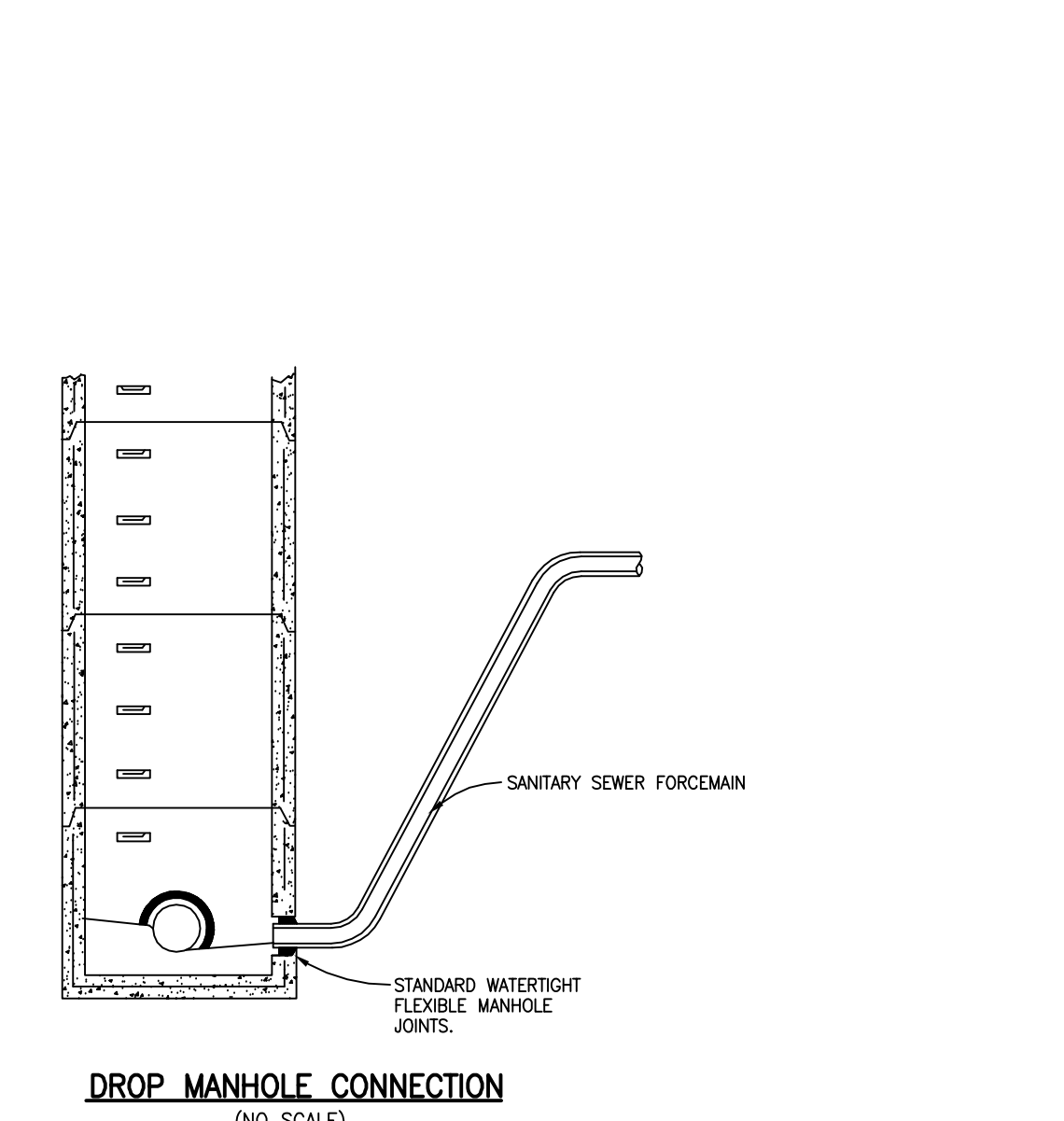
1. SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH MAJOR STORM EVENT. MAINTENANCE SHALL INCLUDE REMOVAL OF ACCUMULATED SILT AND REPLACEMENT OF TORN SECTIONS. SILT FENCE SHALL BE REMOVED WHEN ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
2. TRACKING PAD SHALL BE INSPECTED MONTHLY FOR ACCUMULATED DIRT. 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).



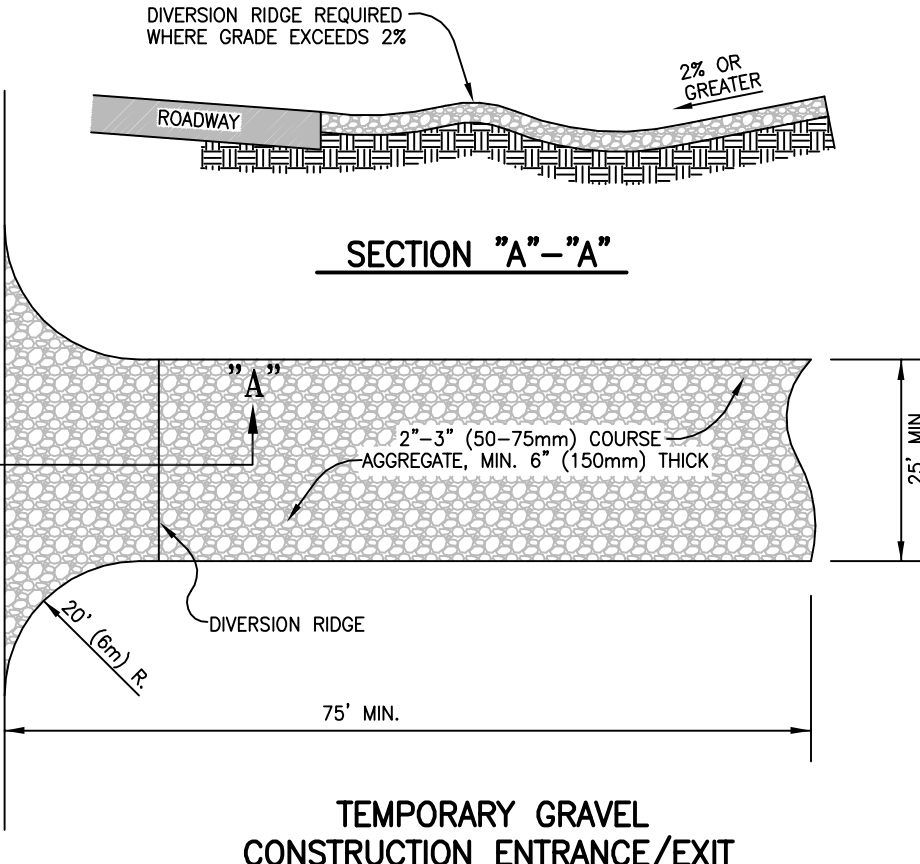
DOUBLE LIGHT FIXTURE DETAIL (TYP.)
(NO SCALE)



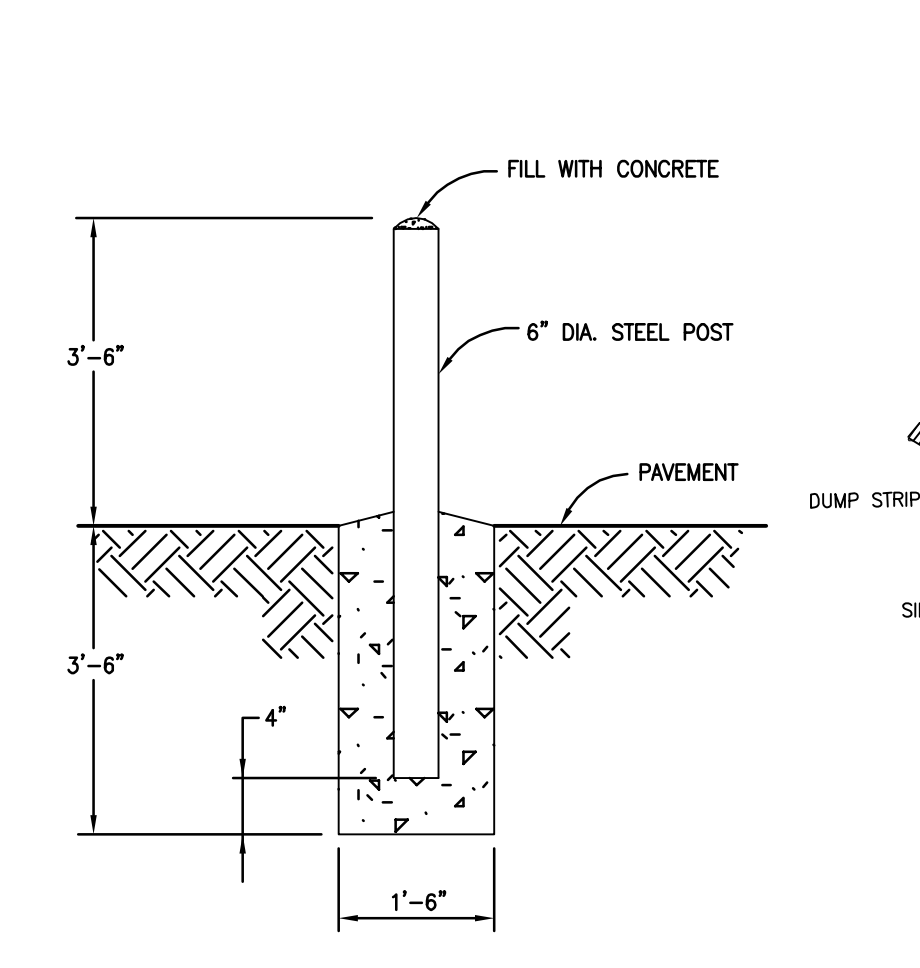
TYPICAL RIP-RAP DETAIL
(SCALE: NONE)



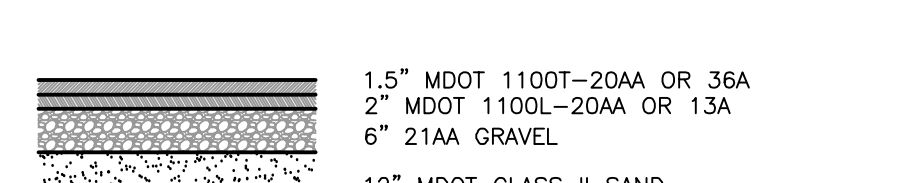
DROP MANHOLE CONNECTION
(NO SCALE)



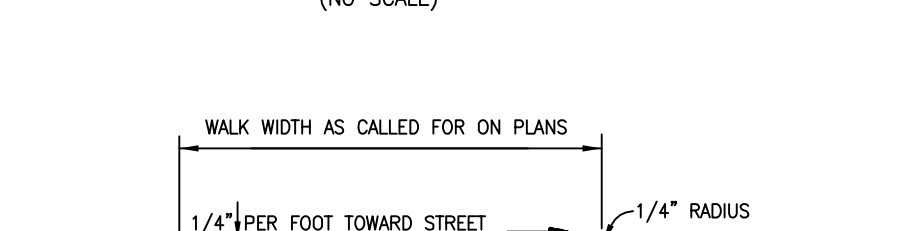
SECTION "A-A"
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
(NO SCALE)



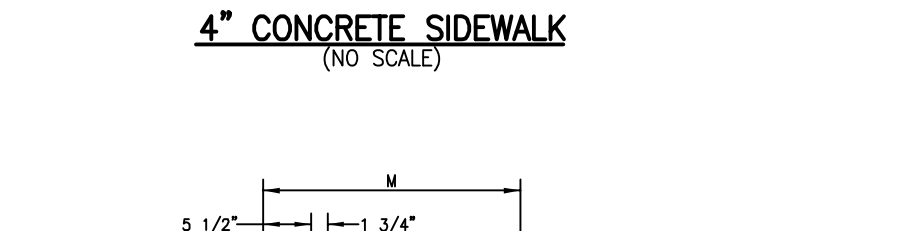
BOLLARD DETAIL
(NO SCALE)



ASPHALT SECTION
(NO SCALE)



4\"/>

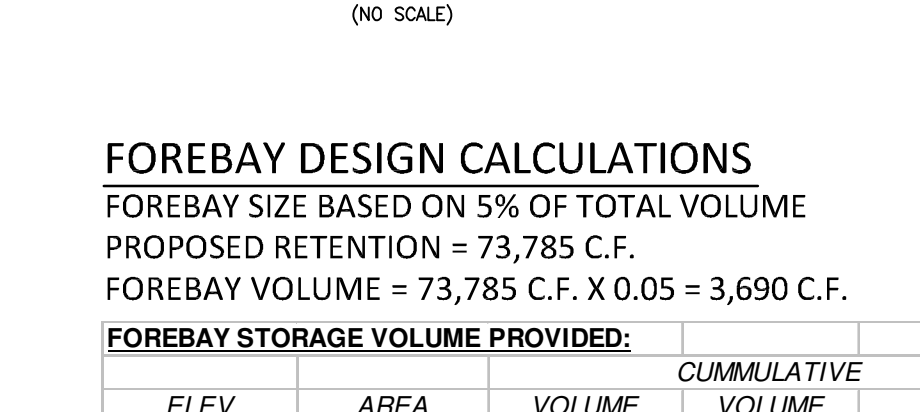


CONCRETE CURB & GUTTER TYPE F
(NO SCALE)

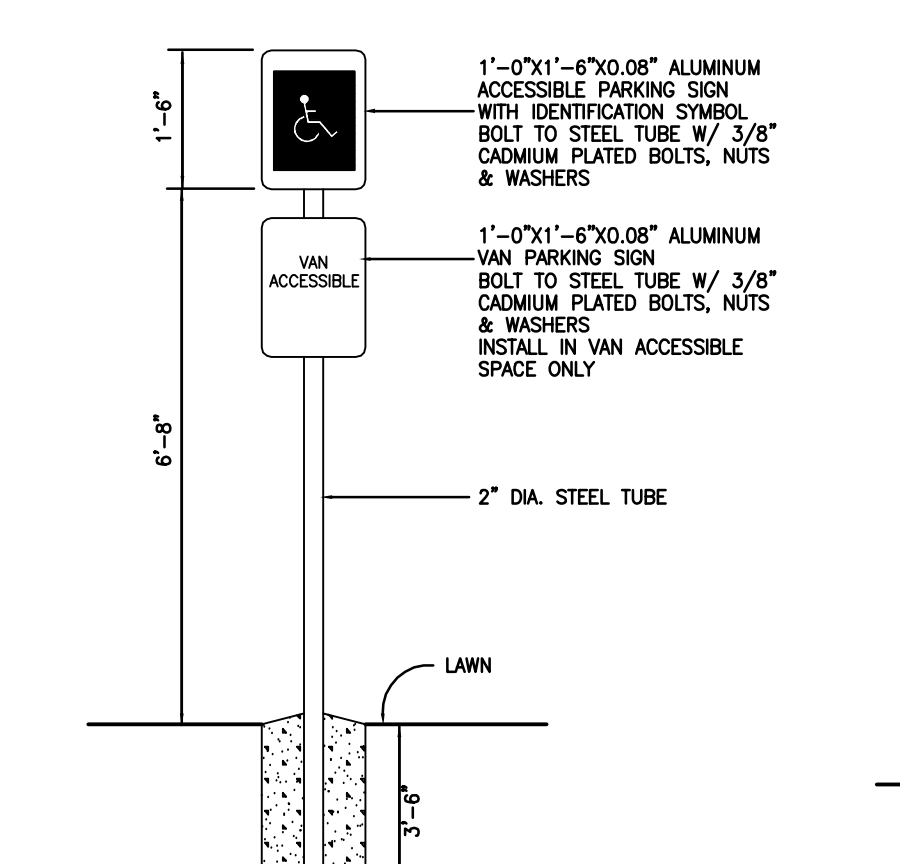
FOREBAY DESIGN CALCULATIONS
FOREBAY SIZE BASED ON 5% OF TOTAL VOLUME
PROPOSED RETENTION = 73,785 C.F.
FOREBAY VOLUME = 73,785 C.F. X 0.05 = 3,690 C.F.

FOREBAY STORAGE VOLUME PROVIDED:

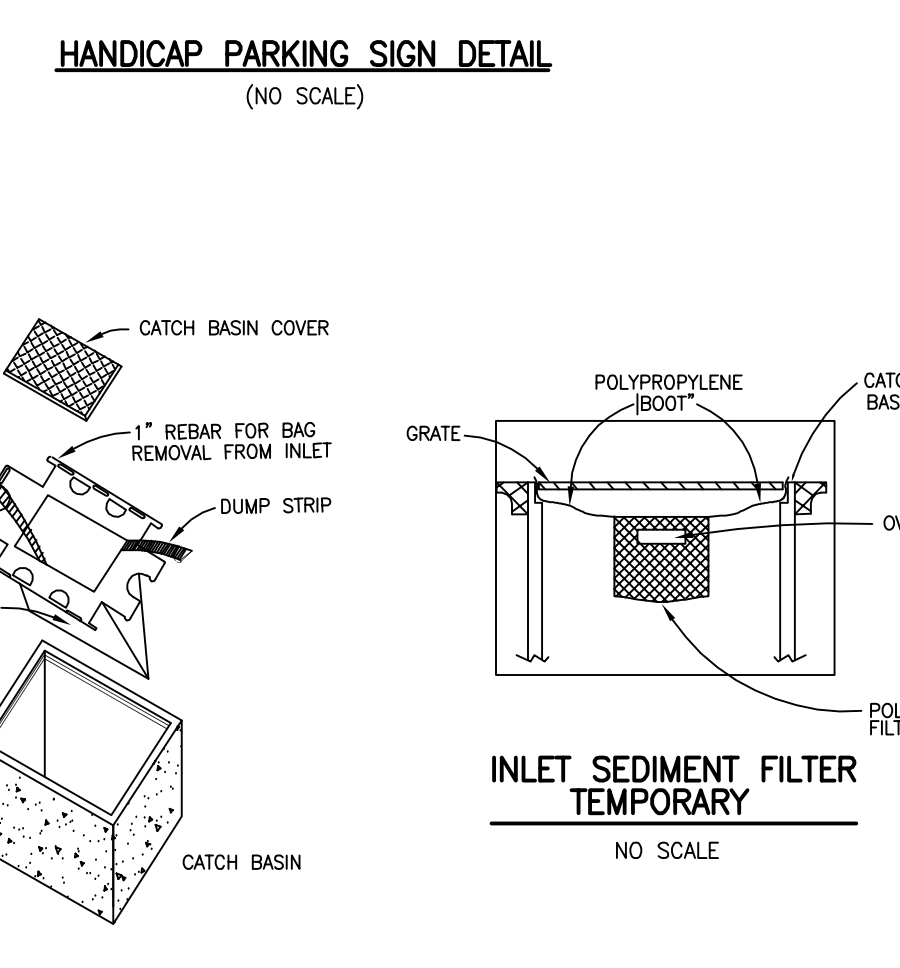
ELEV.	AREA	VOLUME	CUMMULATIVE VOLUME
958	8025	5740	10452
957	3454	2766	4712
956	2078	1493	1946
955	907	454	454
954	0		



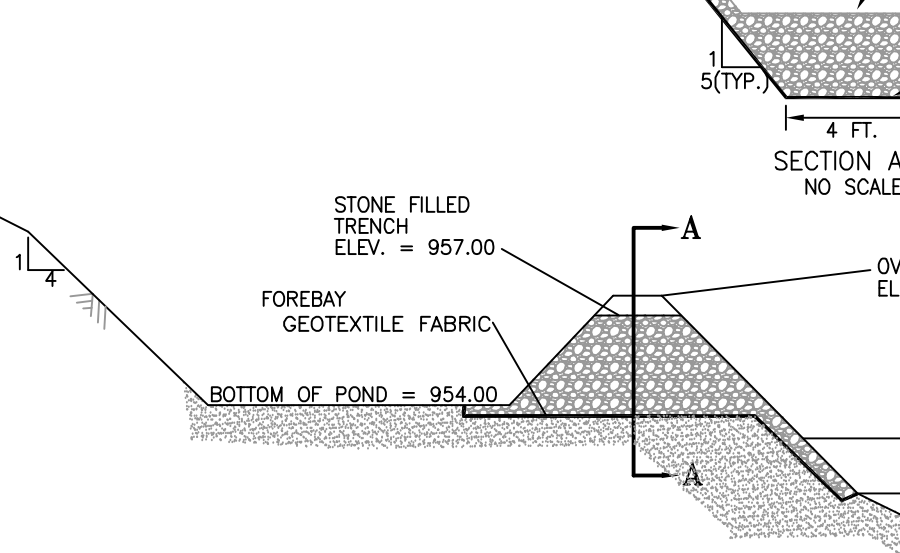
CONCRETE CURB & GUTTER TYPE F
(NO SCALE)



HANDICAP PARKING SIGN DETAIL
(NO SCALE)



INLET SEDIMENT FILTER TEMPORARY
(NO SCALE)



RETENTION BASIN
NOT TO SCALE



RETENTION BASIN DESIGN CALCULATIONS

RETENTION BASIN DESIGN CALCULATIONS
RETENTION BASIN SIZED FOR 2" OF RUNOFF OVER THE ENTIRE DRAINAGE AREA.
DRAINAGE = 10.02 AC. (436,498 S.F.)
REQUIRED RETENTION = 436,498 X 2/12 = 72,750 C.F.

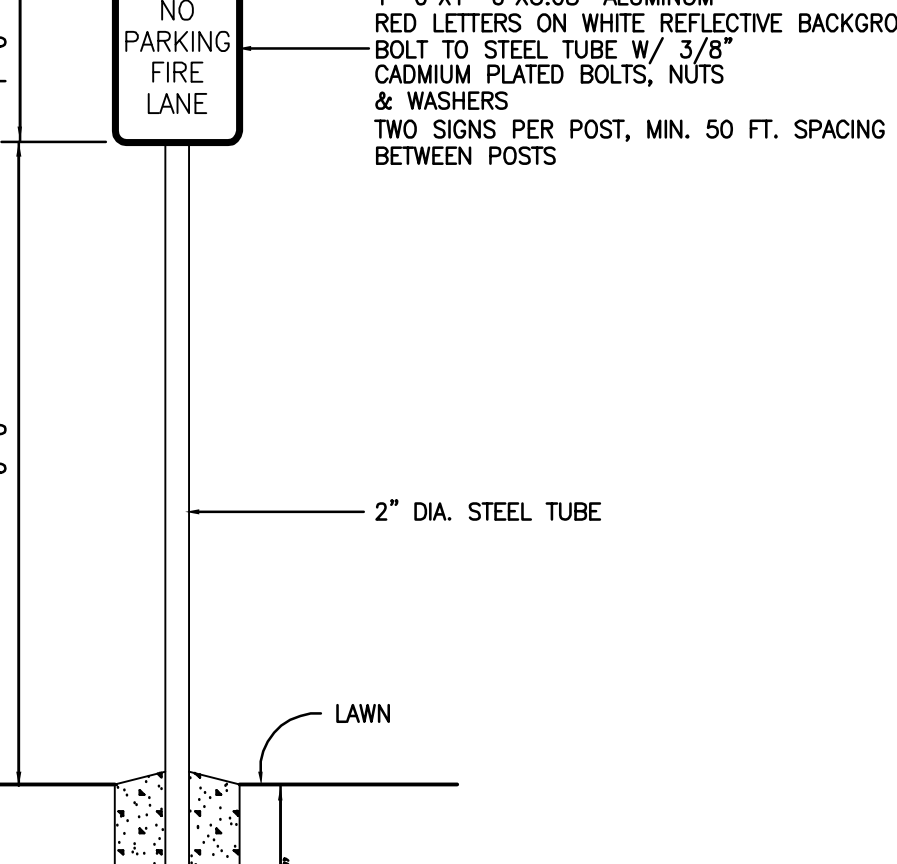
EX. BASIN STORAGE PROVIDED

ELEV.	AREA (FT²)	DEPTH (FT)	VOLUME (FT³)	TOTAL VOLUME (FT³)	DESCRIPTION
950	20561	1	19,368	95,789	FREEBOARD ELEVATION
949	18174	1	17,167	76,422	FREEBOARD ELEVATION
948	16160	1	15,233	59,255	FREEBOARD ELEVATION
947	14305	1	13,454	44,022	DESIGN HIGHWATER ELEVATION
946	12603	1	11,799	30,568	
945	10995	1	10,188	18,769	
944	9380	1	8,582	8,582	
943	7783	0	0	0	

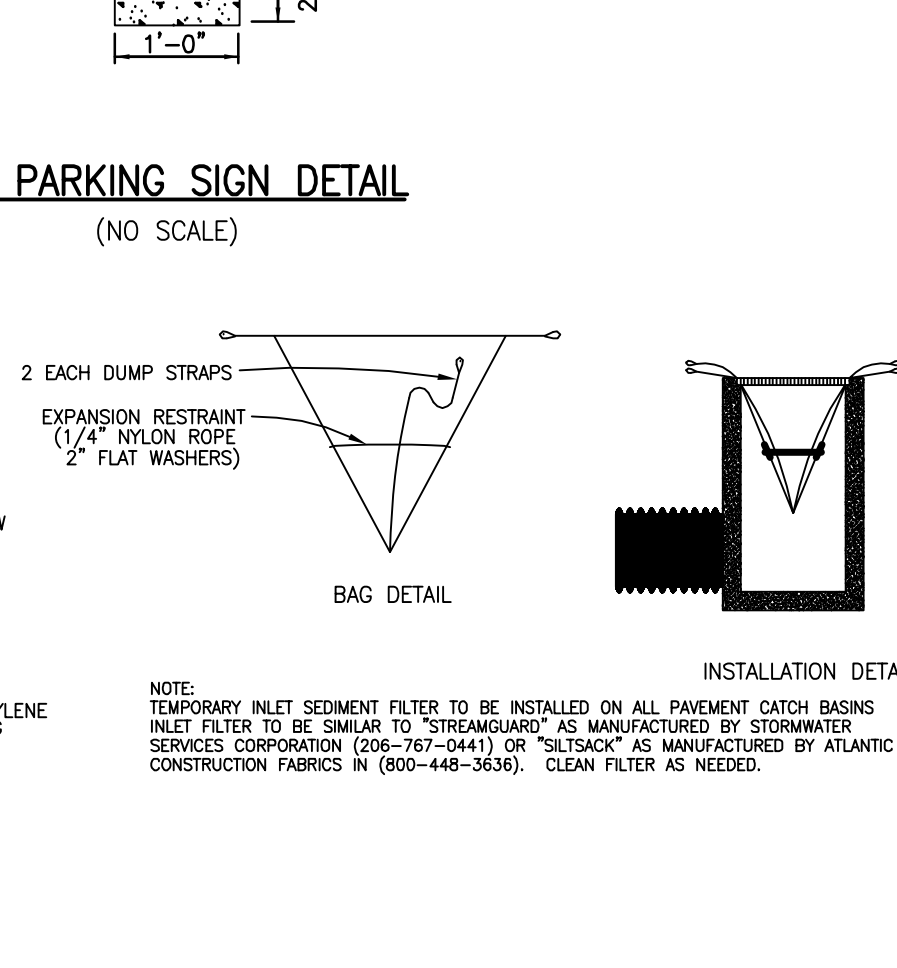
PROPOSED BASIN STORAGE

ELEV.	AREA (FT²)	DEPTH (FT)	VOLUME (FT³)	TOTAL VOLUME (FT³)	DESCRIPTION
950	29780	1	28,487	152,006	FREEBOARD ELEVATION
949	27194	1	26,021	123,519	FREEBOARD ELEVATION
948	24848	1	23,714	97,496	FREEBOARD ELEVATION
947	22579	1	21,533	73,785	DESIGN HIGHWATER ELEVATION
946	20487	1	19,458	52,252	
945	18428	1	17,398	32,794	
944	16367	1	15,397	15,397	
943	14426	0	0	0	

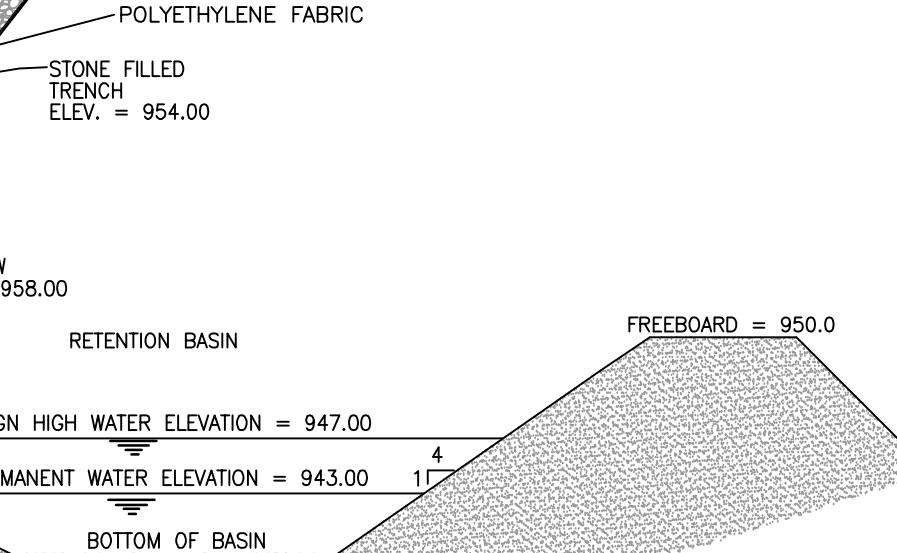
PROPOSED BASIN STORAGE



NO PARKING SIGN DETAIL
(NO SCALE)



NO PARKING SIGN DETAIL
(NO SCALE)



NO PARKING SIGN DETAIL
(NO SCALE)



NO PARKING SIGN DETAIL
(NO SCALE)

CONSTRUCTION NOTES & DETAILS

CONSTRUCTION NOTES & DETAILS

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HOWELL, MI 48843
(800) 246-6735 FAX (517) 546-1670

CONSTRUCTION NOTES & DETAILS

PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**
TITLE: **CONSTRUCTION NOTES & DETAILS**

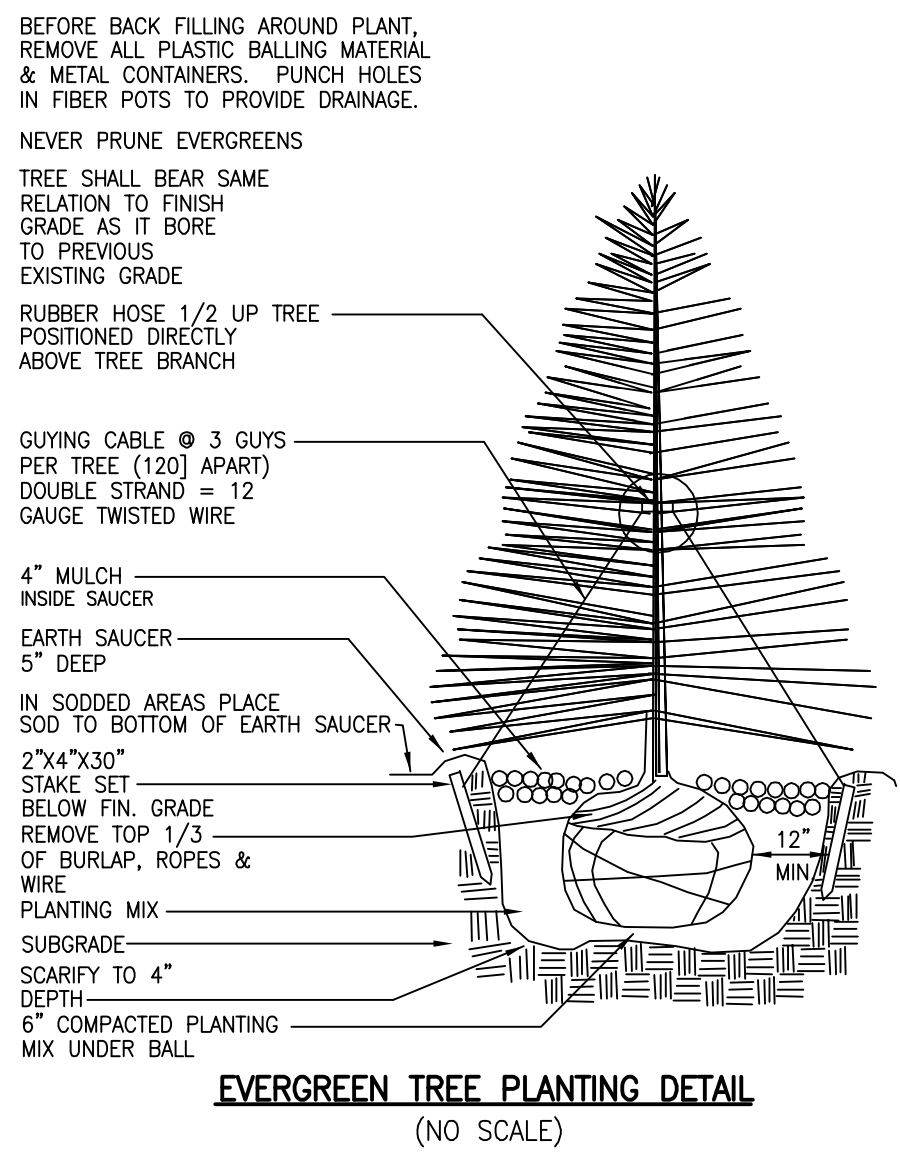
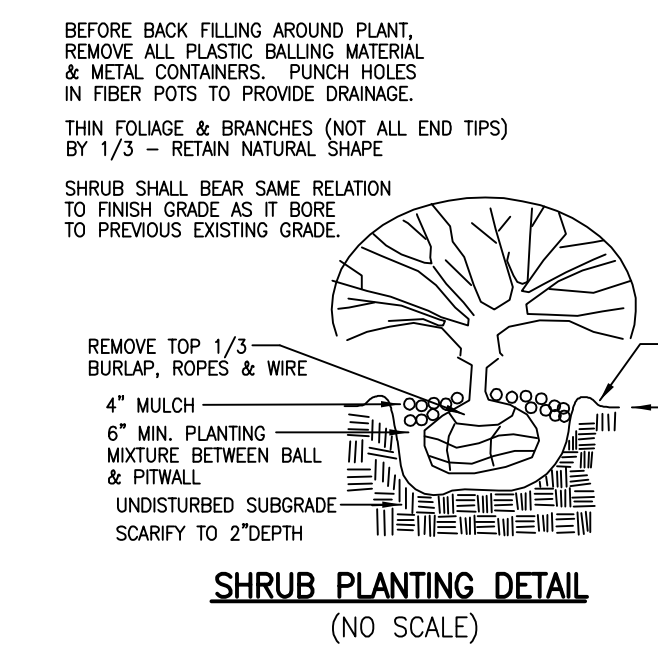
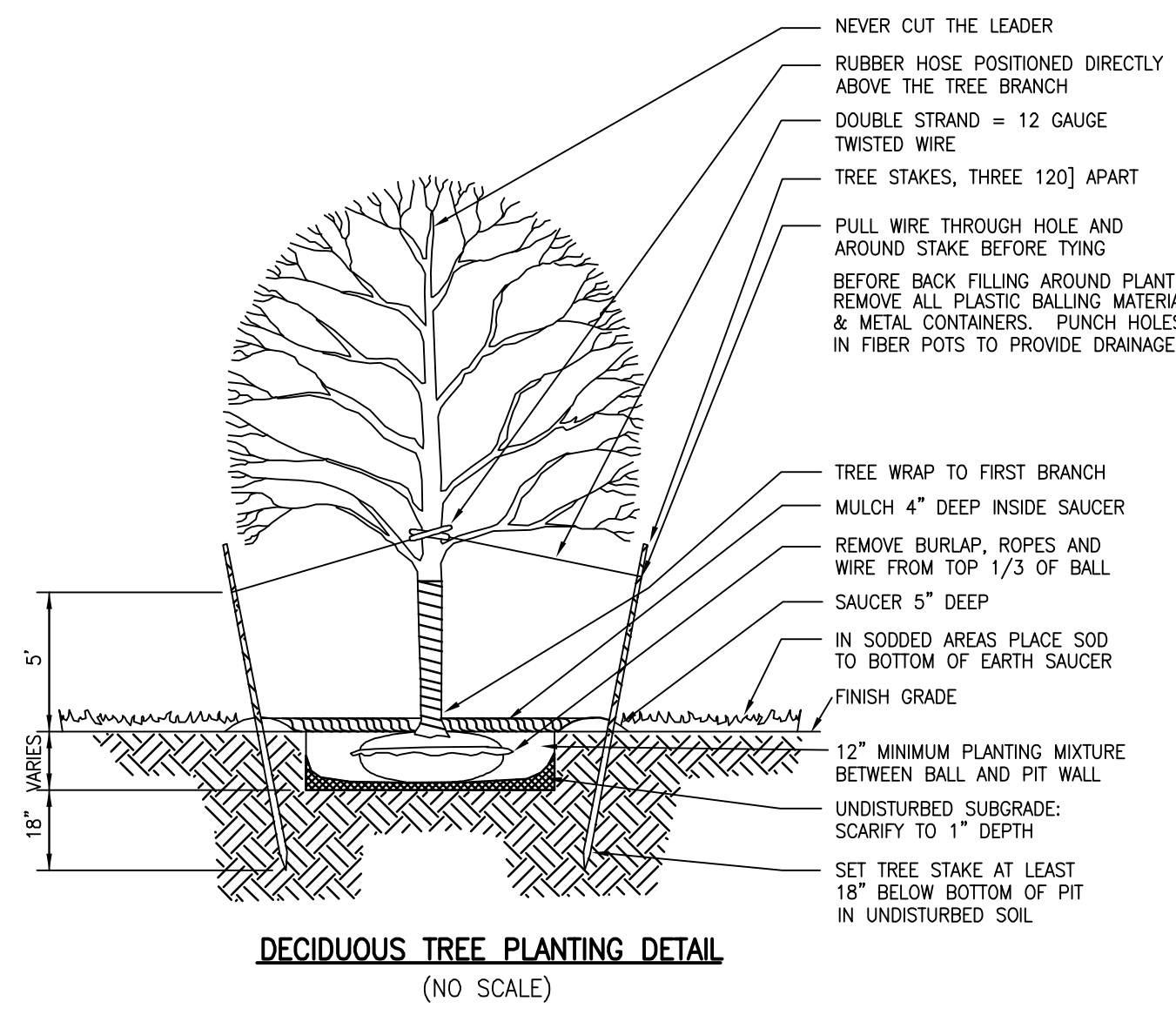
NO.	BY	DATE	REVISION PER
1	TD	7-29-13	
2	P. C. COMMENTS	8-26-13	
3	TWP. REVIEW	7-29-13	

DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY: TD

SCALE: _____
JOB NO. **13-182**
DATE: 07-09-13
SHEET NO. **C8**

GENERAL LANDSCAPE NOTES:

- ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY AND SHALL BE NURSERY GROWN. ALL SIZES AND MEASUREMENTS SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS. ALL PLANT MATERIAL SHALL BE OF SELECTED SPECIMEN QUALITY AND HAVE A NORMAL HABIT OF GROWTH. ALL PLANT MATERIAL IS SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED STOCK OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT AND SECURELY WRAPPED AND BOUND.
- ALL PLANT BEDS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND OTHER EXTRANEOUS OBJECTS AND POOR SOILS TO A MINIMUM DEPTH OF 12 INCHES AND BACKFILLED TO GRADE WITH PLANTING MIX (SEE BELOW).
- PLANTING MIXTURE SHALL CONSIST OF 4 PARTS TOPSOIL FROM ON SITE, 1 PART PEAT, AND 5 POUNDS OF SUPERPHOSPHATE PER CUBIC YARD OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED TO A UNIFORM CONSISTENCY.
- ALL PLANT BEDS AND INDIVIDUAL PLANTS SHALL BE MULCHED WITH A 4 INCH LAYER OF SHREDDED BARK MULCH.
- ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACCEPTED. IN WRITING, BY THE LANDSCAPE ARCHITECT, THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD TIME, ALL DEAD PLANTS, AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL REQUIREMENTS.
- EDGING, WHERE NOTED ON THE PLANS, SHALL BE BLACK ALUMINUM EDGING, 3/16" X 4". INSTALL PER MANUFACTURER'S INSTRUCTIONS. ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
- SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPOSED OF A BLEND OF AT LEAST TWO KENTUCKY BLUEGRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4 INCH, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10 INCHES BY 10 INCHES. SOD SHALL BE KEPT MOIST AND LAID WITHIN 36 HOURS AFTER CUTTING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ALL SODDED AREAS THAT BROWN OUT OR HAVE NOT FIRMLY KNITTED TO THE SOIL BASE WITHIN A PERIOD OF ONE MONTH SHALL BE REPLACED BY THE CONTRACTOR, AT NO COST TO THE OWNER.
- ALL AREAS OF THE SITE THAT BECOME DISTURBED DURING CONSTRUCTION AND ARE NOT TO BE PAVED, STONED, LANDSCAPED, OR SODDED SHALL BE SEEDED AND MULCHED.
SEED MIXTURE SHALL BE AS FOLLOWS:
KENTUCKY BLUEGRASS (CHOOSE 3 VARIETIES:
ADELPHI, RUGBY, GLADE OR PARADE) 30%
RUBY RED OR DAWSON RED FINE FESCUE 30%
ATLANTA RED FESCUE 20%
PENNFINE PERENNIAL RYE 20%



- THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 POUNDS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL LAYER SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-20-10 ANALYSIS:
- 10% NITROGEN: A MINIMUM OF 25% FROM A UREA-FORMALDEHYDE SOURCE
 - 20% PHOSPHATE
 - 10% POTASH: SOURCE TO BE POTASSIUM SULFATE OR POTASSIUM NITRATE.
- THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 POUNDS OF BULK FERTILIZER PER 1000 SQUARE FEET.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RESEEDED AND SUCH RESEEDING SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEEDED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
- ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 4 INCH LAYER OF CLEAN, FRIABLE TOPSOIL. THIS SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.
 - ALL PLANT MATERIALS SHALL BE FREE OF WEEDS, INSECTS AND DISEASE.

DESCRIPTION

The Streetworks Wal-Pak Series of wall luminaires provides traditional architectural style with high performance energy efficient illumination. Rugged die-cast aluminum construction, stainless steel hardware along with a sealed and gasketed optical compartment make the Wal-Pak virtually impervious to contaminants. IP65 Rated. UL and sUL wet location listed. The Wal-Pak wall luminaire is ideal for pathway illumination, building entrances, vehicle ramps, schools, tunnels, stairways and loading docks.

Catalog #	Type
Project	Date
Comments	
Prepared by	

SPECIFICATION FEATURES

Housing
Rugged one-piece die-cast aluminum housing and hinged, removable die-cast aluminum door. One-piece silicone gasket seals the optical chamber. UL 1566 wet location listed and IP65 Ingress protection rated. Not recommended for car wash applications.

Electrical
Ballast and related electrical components are hard mounted to the die-cast housing for optimal heat sinking and operating efficiency. Wiring is extended through a silicone gasket at the back of the housing. Three 1/2" threaded conduit entry points allow for thru-branch wiring. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from LED source. Integral LED electronic driver incorporates internal fusing designed to withstand a 3kV surge test and is Class 2 rated for 120V.

Optical
Highly reflective anodized aluminum reflectors provide high efficiency illumination. Optical assemblies include impact resistant borosilicate refractive glass. Solite™ flat diamond saturated glass and full coated ESDA compliant configurations. Patent pending, solid state LED luminaires are thermally optimized with 2400 or 4000 lumen packaged modules. HID models are offered in horizontal medium or mogul-based metal halide or high pressure sodium lamps. T5 ceramic metal halide and 4-pin compact fluorescent lamp models offer high efficiency energy-saving illumination.

Door Assembly
Single point, captive stainless steel hardware secures the removable hinged door allowing for ease of installation and maintenance. Door assembly is hinged at the bottom for easy removal, installation and re-lamping.

Finish
Housing and door are protected with 5-stage TGIC dark bronze polyester powder coat paint. Premium TGIC power coat finishes withstand extreme climate changes while providing optimal color and gloss retention. Optional premium colors are available.

TECHNICAL DATA
UL and sUL Wet Location Listed
IP65 Rated
40°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum
ESD-A, ANA, T50 Compliant

ENERGY DATA
Reactor Ballast Input Watts
60W MP NPF (82 Watts)
70W MP NPF (82 Watts)
100W MP NPF (118 Watts)
150W MP NPF (174 Watts)
High Pressure Ballast Input Watts
50W MP HPF (88 Watts)
70W MP HPF (88 Watts)
100W MP HPF (128 Watts)
150W MP HPF (128 Watts)
OSHA Ballast Input Watts
300W MP HPF (250 Watts)
200W MP HPF (227 Watts) @ 300W MP HPF (281 Watts) @ 300W MP HPF (400 Watts) @ 400W MP HPF (440 Watts)
400W MP HPF (442 Watts) @

SHIPPING DATA
Approximate Net Weight: 20.0 lbs. (9.07 kg) ADW10004
2012-03-23 13:11:16

COOPER Lighting
www.cooperlighting.com

DESCRIPTION

The Tribute is the most versatile, functionally designed, universally adaptable outdoor luminaire available. The Tribute brings outstanding performance to walkways, parking lots, roadways, loading docks, building areas, and any security lighting application. UL listed and CSA certified for wet locations. IP65 Rating.

Catalog #	Type
Project	Date
Comments	
Prepared by	

SPECIFICATION FEATURES

Construction
Rugged one-piece die-cast aluminum housing and door frame. One-piece silicone gasket protects the optical chamber from performance degrading contaminants. One (1) stainless spring-actuated and two (2) stainless hinges allow toolless opening and removal of door frame.

Electrical
Ballast and related electrical components are hard mounted to die-cast housing for optimal heat transfer and operating efficiency. Optional swing-down gavan and steel power tray with integral handle and quick disconnects allow tray to be completely removed from housing providing ample room for fixture installation and maintenance.

Reflector
Choice of nine (9) high efficiency optical distributions, including five (5) segmented optical systems constructed in premium 95% reflective anodized aluminum sheet. Optical segments are rigidly mounted inside a truck gauge aluminum housing for superior protection. All segment faces are clean of rivet heads, tabs or other means of attachment which may compromise performance in the light distribution. Optical modules are field replaceable in 90° increments and offered standard with mogul base attachments for High Pressure Sodium and 200-400W Metal Halide assemblies or medium base lamp holders for Metal Halide 150W and below.

Mounting
Extruded 8" aluminum arm features internal bolt guides for easy positioning of fixture during installation to pole or wall surface. Standard single carton packaging and round pole adapter allow for consolidated product arrival to site. Optional interior mast arm mount secures a 1 1/4" to 2 3/8" O.D. horizontal bar, while adjust clamping mechanism secures fixture. Cast leveling guides provide +/- 6° vertical leveling adjustment.

Finish
Housing and arm finished in a 5 stage premium TGIC urethane polyester powder coat paint. Optional colors include black, grey, white, dark aluminum and graphite metallic. RAL and custom color matches available.

TECHNICAL DATA
UL and sUL Wet Location Listed
IP65 Rated
40°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum
ESD-A, ANA, T50 Compliant

ENERGY DATA
Reactor Ballast Input Watts
60W MP NPF (82 Watts)
70W MP NPF (82 Watts)
100W MP NPF (118 Watts)
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400W MP HPF (442 Watts) @

SHIPPING DATA
Approximate Net Weight: 20.0 lbs. (9.07 kg) ADW10004
2012-03-23 13:11:16

COOPER Lighting
www.cooperlighting.com

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE APPROVAL OF THE LOCATION OR DEPTH OF UTILITY CROSSINGS FROM THE UTILITY COMPANY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE APPROVAL OF THE LOCATION OR DEPTH OF UTILITY CROSSINGS FROM THE UTILITY COMPANY PRIOR TO CONSTRUCTION.

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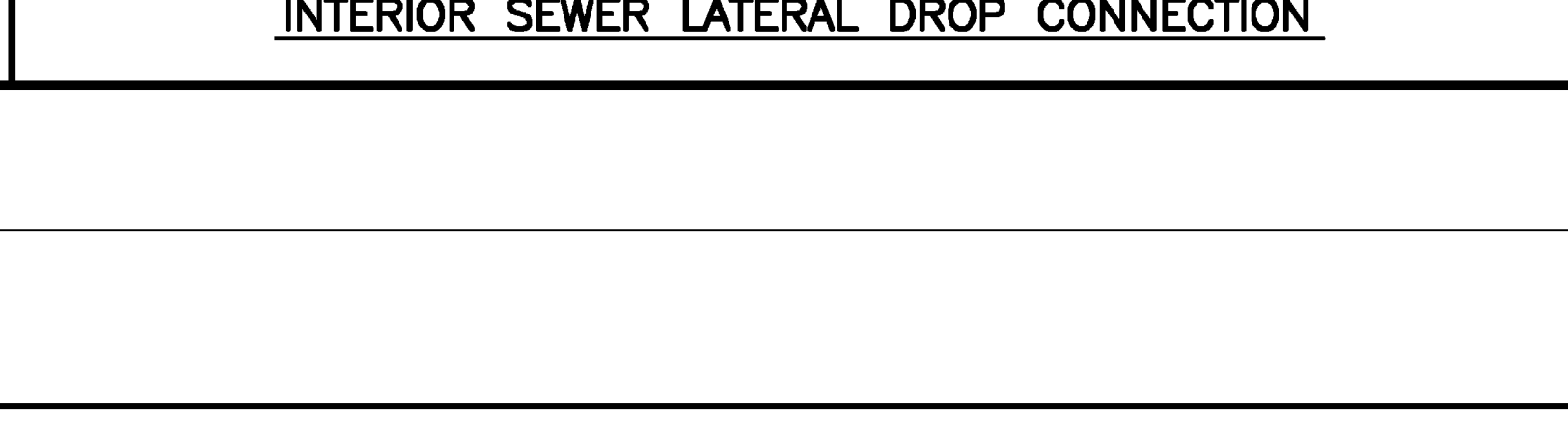
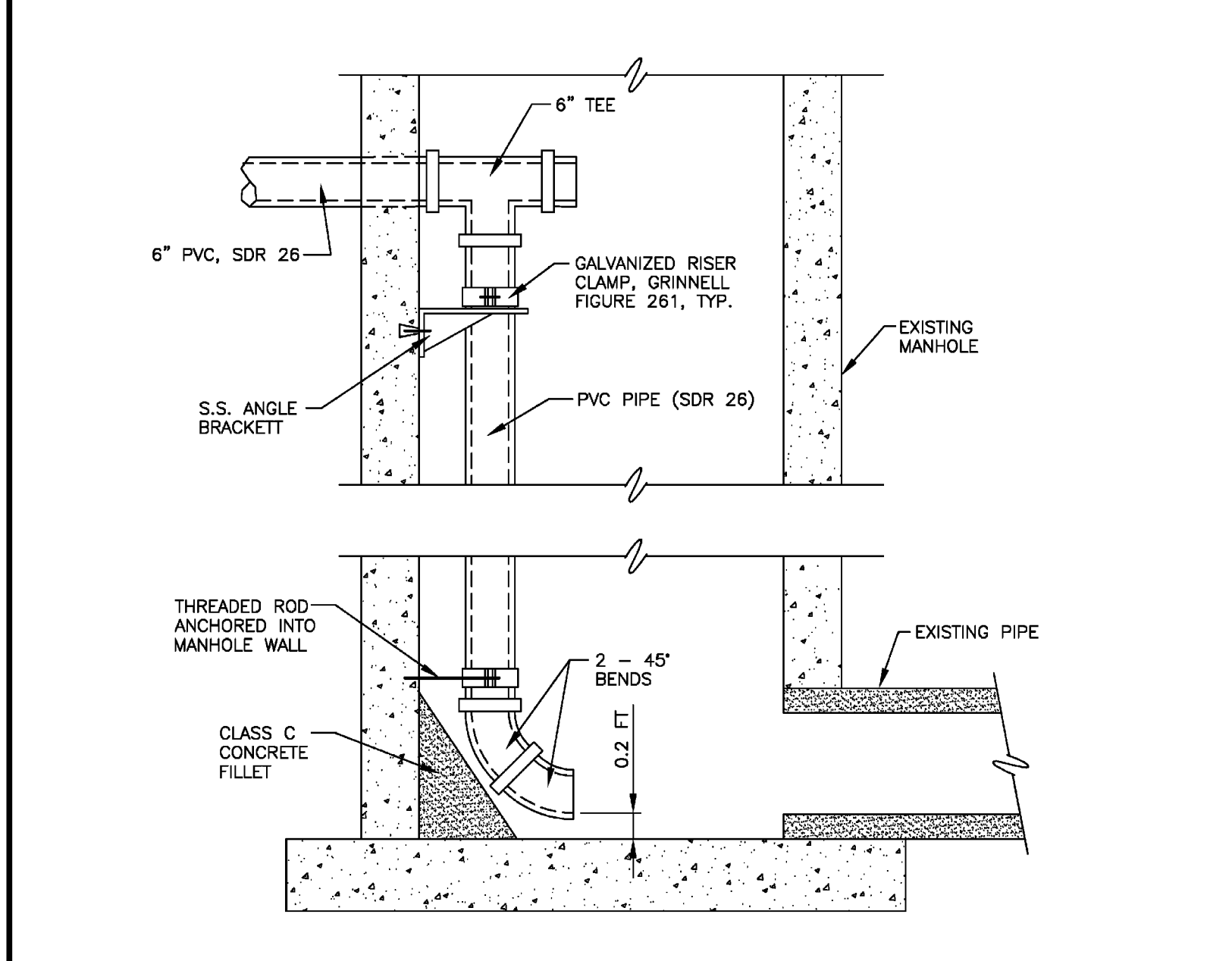
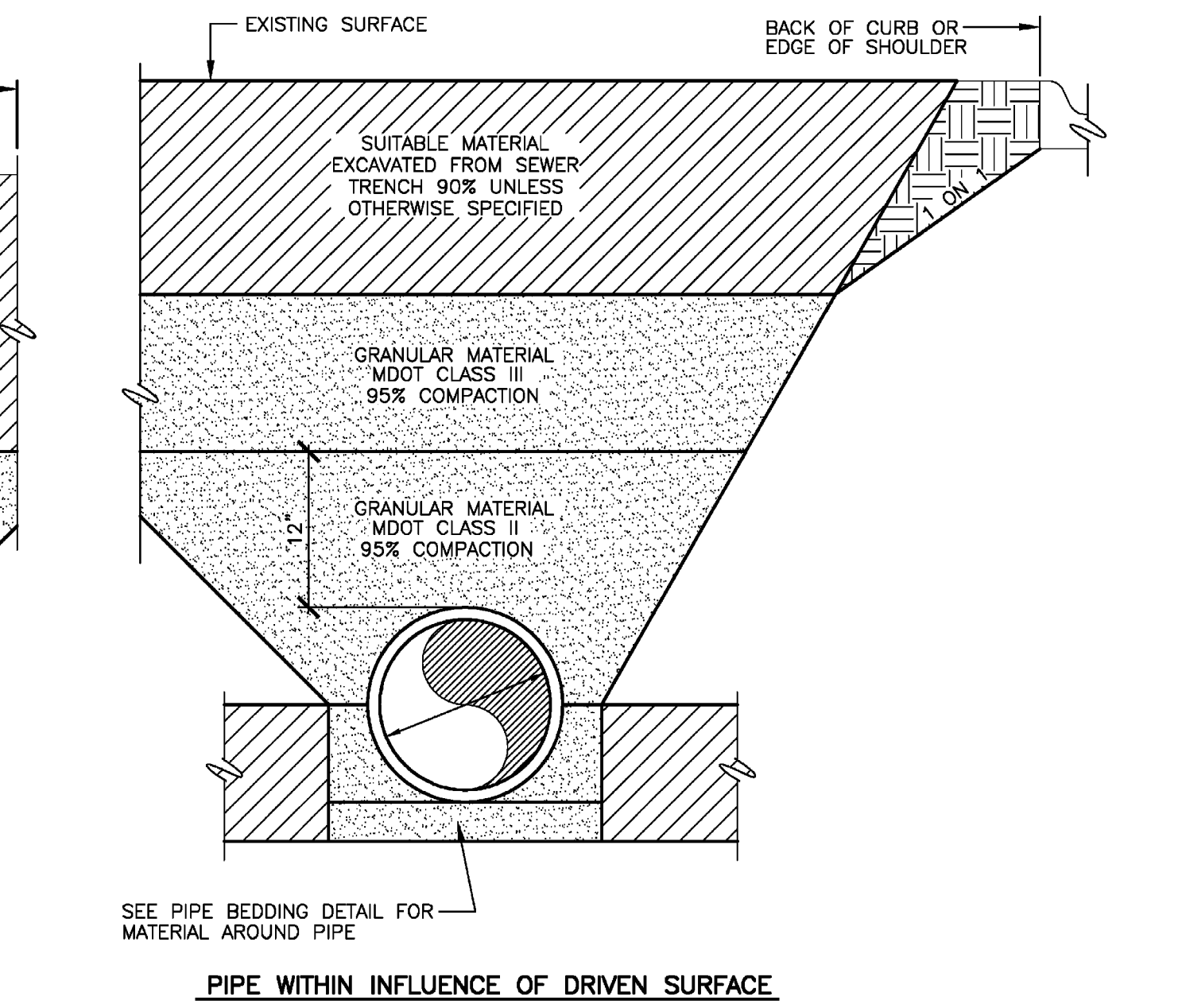
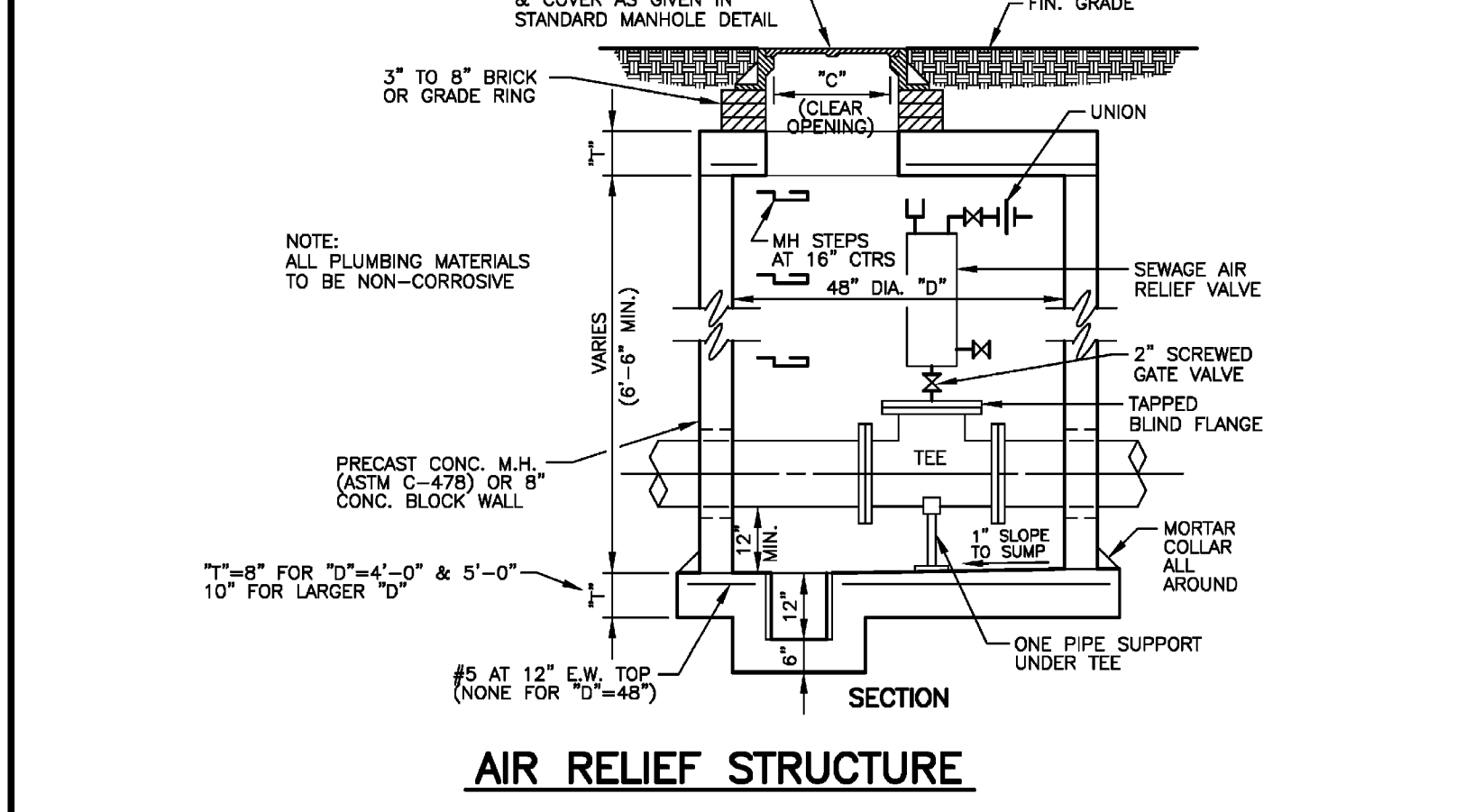
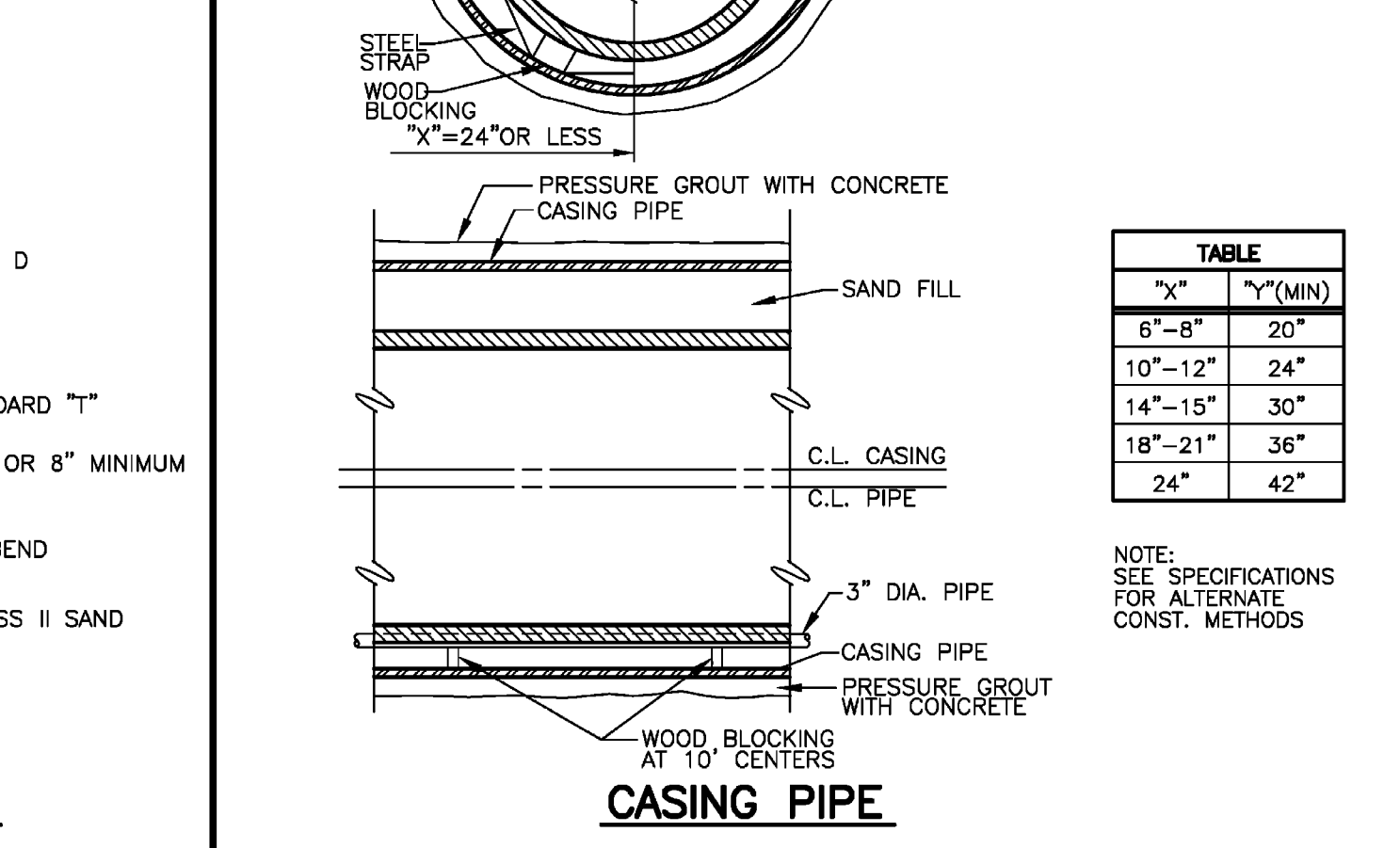
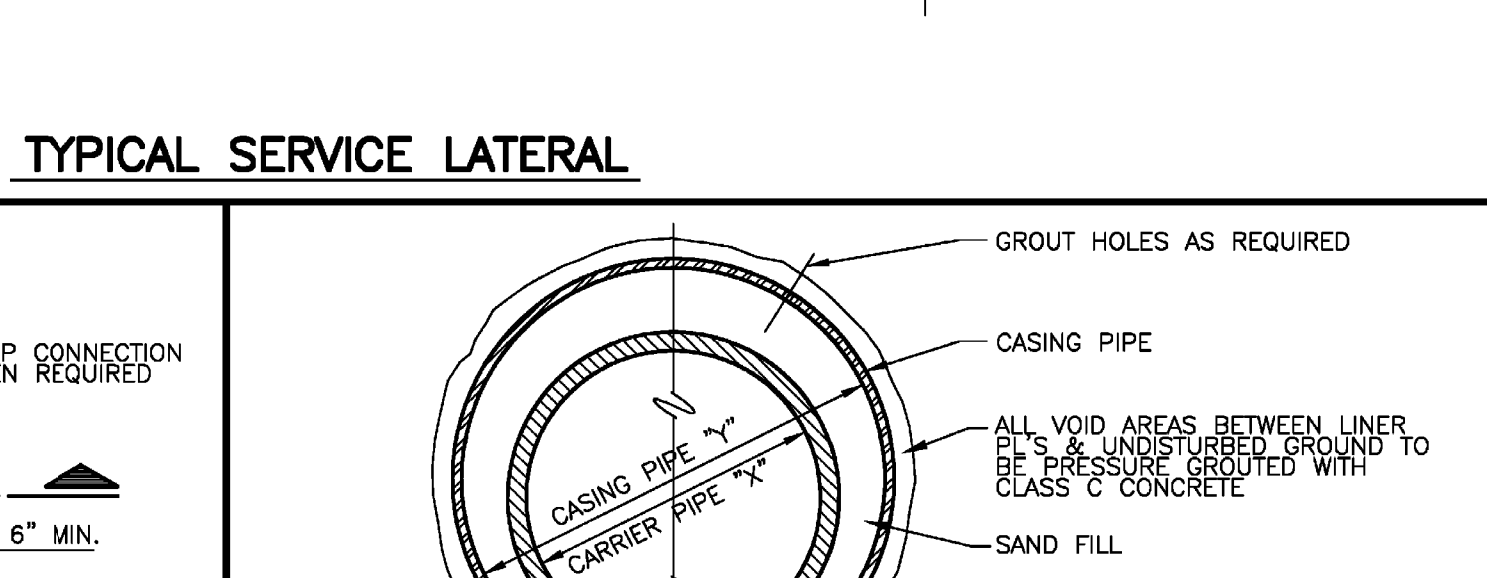
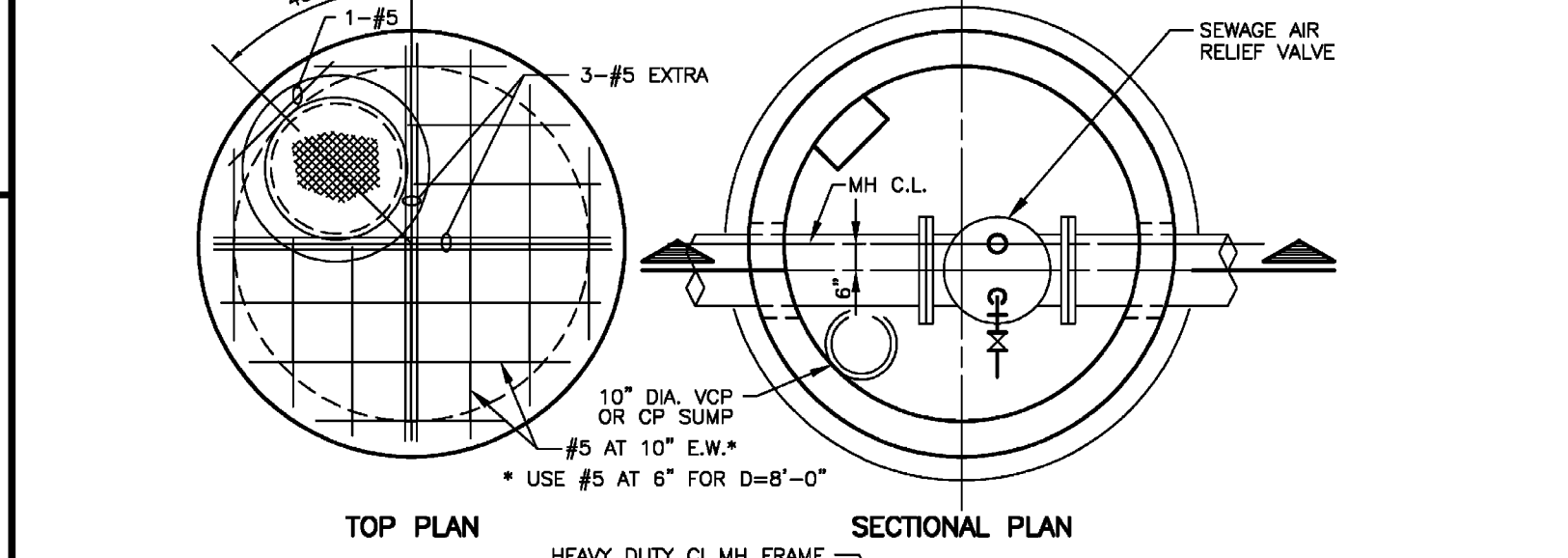
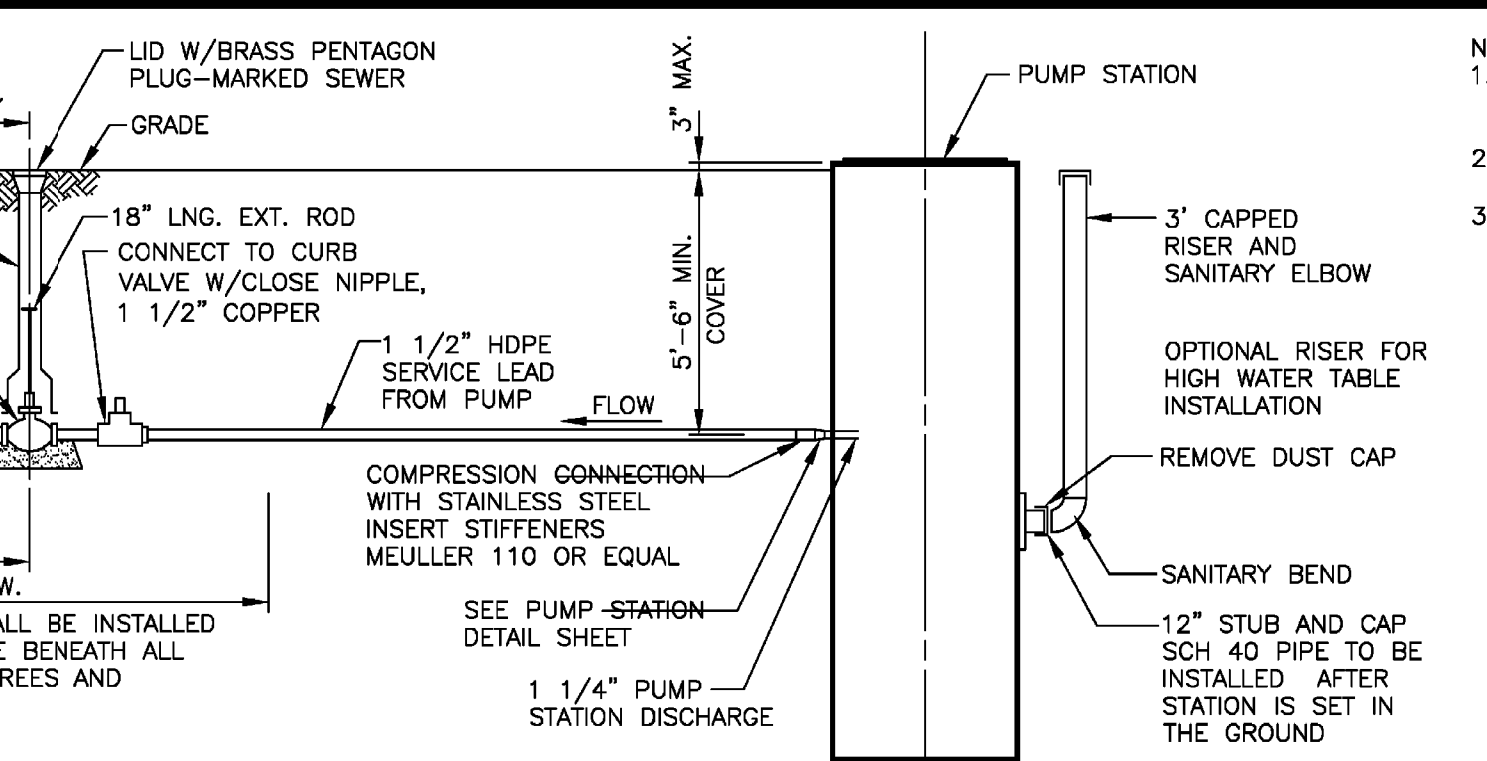
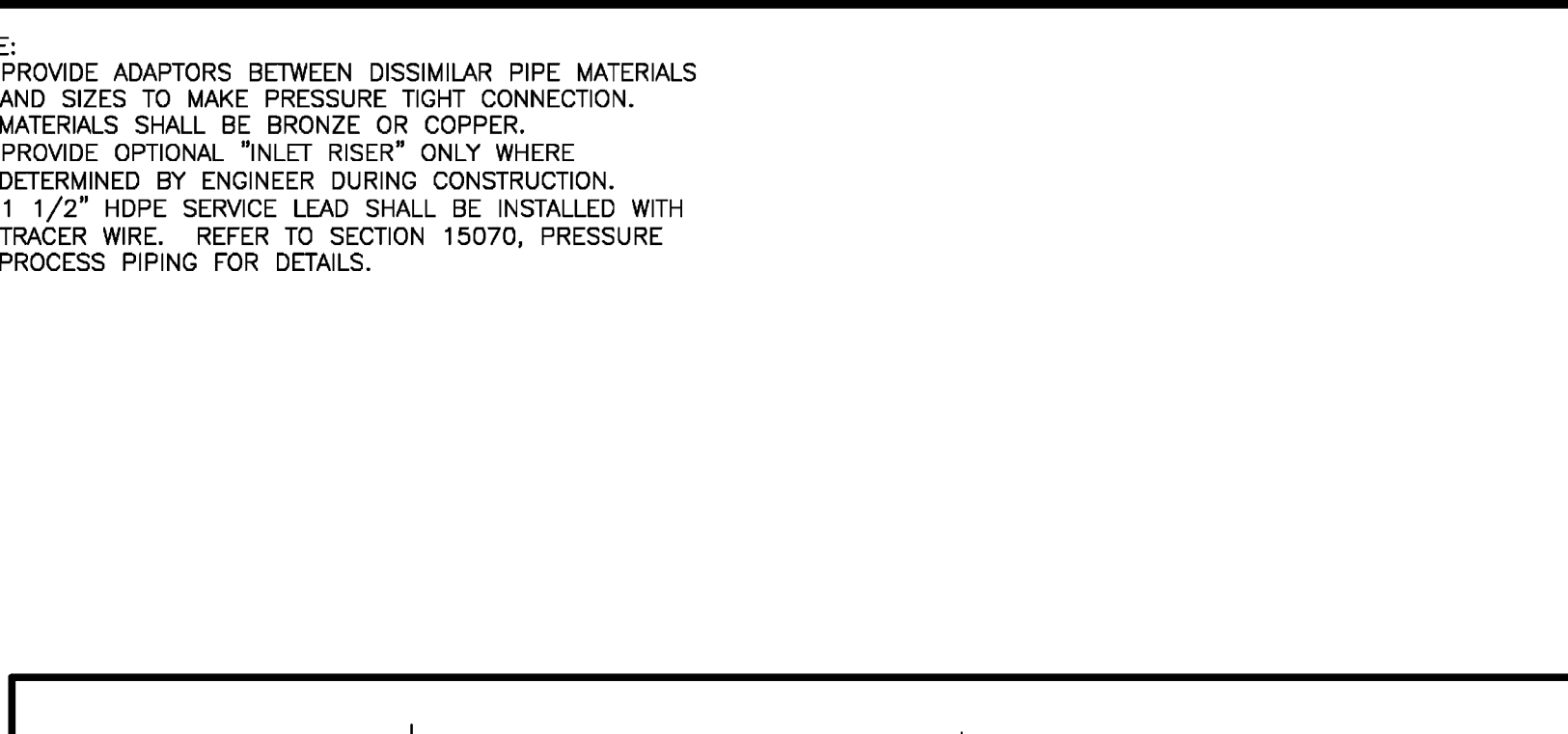
PROJECT: BOB MAXEY FORD DEALERSHIP EXPANSION
PREPARED FOR: BOB MAXEY FORD OF HOWELL
FOR: 2739 E. GRAND RIVER AVE. HOWELL, MI 48843 517.545.5700
TITLE: CONSTRUCTION NOTES & DETAILS

NO	BY	DATE	REVISION PER
1	P. C. COMMENTS	8-26-13	
2	TWP. REVIEW	7-29-13	
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY: TD

SCALE:
JOB NO.: 13-182
DATE: 07-09-13
SHEET NO.: C9

NO.	BY	DATE	REVISION PER
1	TD	7-29-13	TWP. REVIEW
2	TD	8-26-13	P. C. COMMENTS



GENOA OCEOLA
Sewer and Water Authority

SANITARY SEWER STANDARD DETAILS

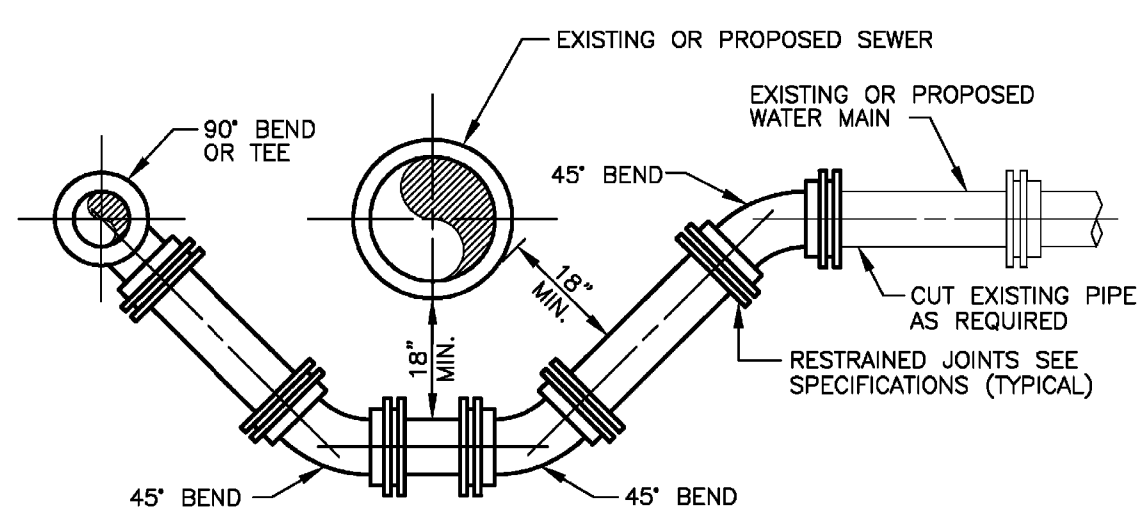
Scale: NONE
Issued Date: 10-22-2007

Wednesday, July 16, 2008 11:30:05 AM DRAWING: L:\Cadd\lib\WHOG\Mhog-std.dwg

PIPE RESTRAINT SCHEDULE
GROUND BURIED PRESSURE PIPE - POLYETHYLENE ENCASED DUCTILE IRON PIPE

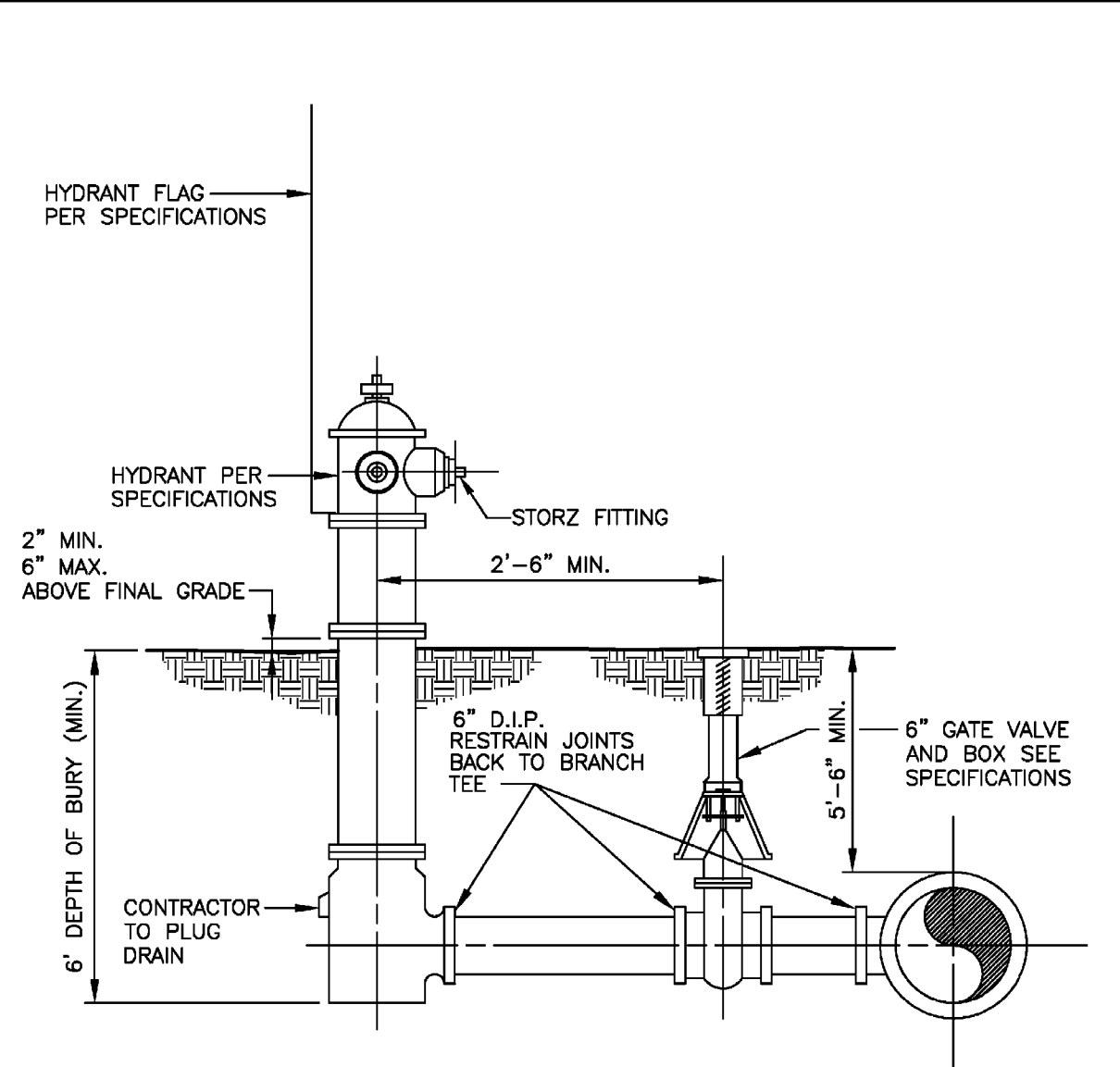
PIPE DIAMETER	TEES, 90° BENDS	45° BENDS	22-1/2° BENDS	11-1/4° BENDS	DEAD ENDS	REDUCERS (ONE SIZE REDUCTION)*	REDUCERS (TWO SIZE REDUCTION)*
4	13	5	3	1	40	--	--
6	19	8	4	2	58	31	--
8	24	10	5	2	75	30	70
12	34	14	7	3	107	57	116
16	43	18	9	4	139	59	137
20	52	22	10	5	169	59	134
24	61	25	12	6	199	60	132
30	73	30	15	7	242	85	168
36	84	35	17	8	281	84	188

- LENGTHS OF PIPE RESTRAINT ARE GIVEN IN FEET.
 - IF REQUIRED PIPE DIAMETER IS NOT LISTED IN THIS TABLE, THE NEXT LARGEST PIPE DIAMETER SHALL BE USED.
 - THIS TABLE IS BASED ON A TEST PRESSURE OF 180 PSI (OPERATING PRESSURE PLUS WATER HAMMER. FOR OTHER TEST PRESSURES, ALL VALUES TO BE INCREASED OR DECREASED PROPORTIONALLY.
 - THE VALUES PROVIDED OF RESTRAINT LENGTH ARE IN EACH DIRECTION FROM THE POINT OF DEFLECTION OR TERMINATION EXCEPT FOR TEES, AT WHICH ONLY THE BRANCH IN THE DIRECTION OF THE STEM.
 - IF THE RODS ARE USED, USE FOUR RODS MINIMUM AND ADD 1/8-INCH TO BAR DIAMETER AS CORROSION ALLOWANCE.
- * SIZE REDUCTION IS BASED UPON THE PIPE DIAMETER SHOWN IN THIS TABLE.
BASED UPON:
INTERNAL PRESSURE: 180
PIPE DEPTH: 5
BEDDING CLASS: TYPE 4
SOIL TYPE: GOOD SAND
SAFETY FACTOR: 2

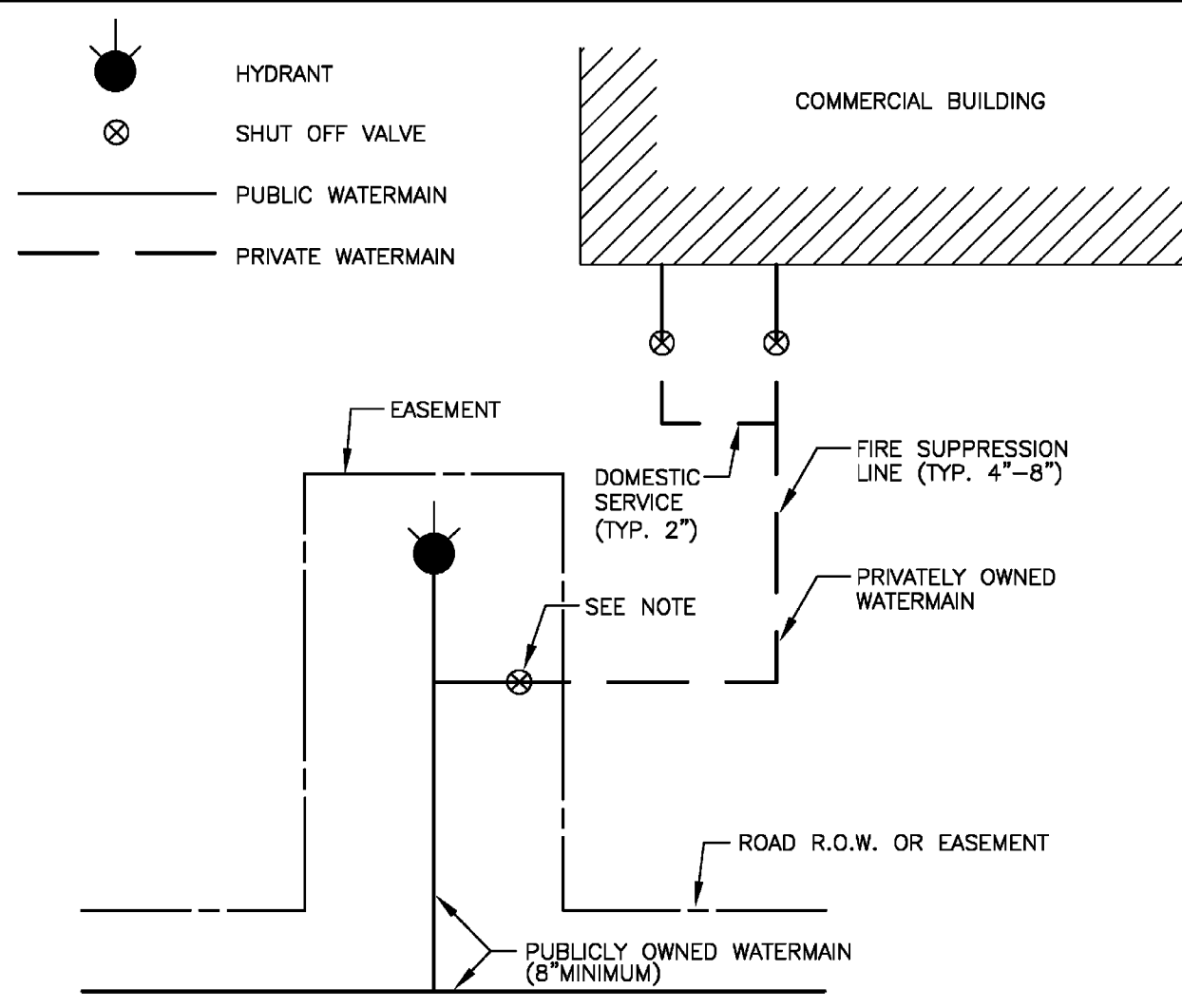


WATER MAIN RELOCATION

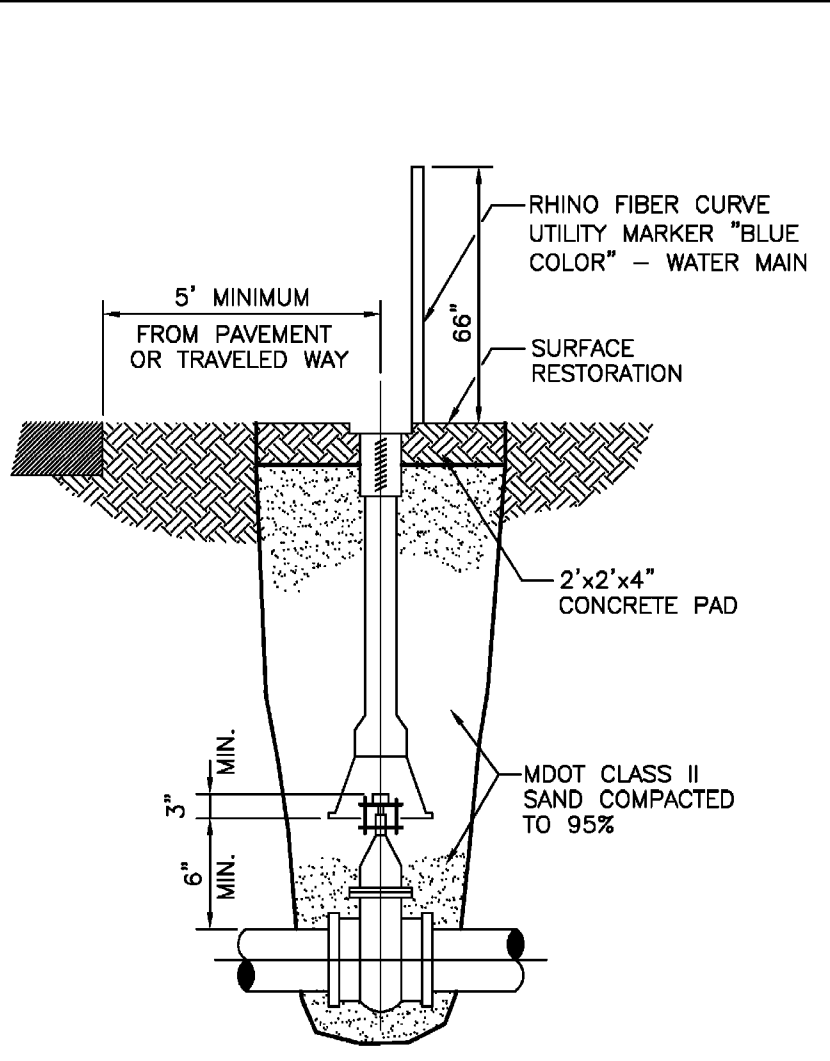
PRIOR TO CURB BOX INSTALLATION, CONTACT GENOA TOWNSHIP DPW FOR CURB BOX INSTALLATION REQUIREMENTS.



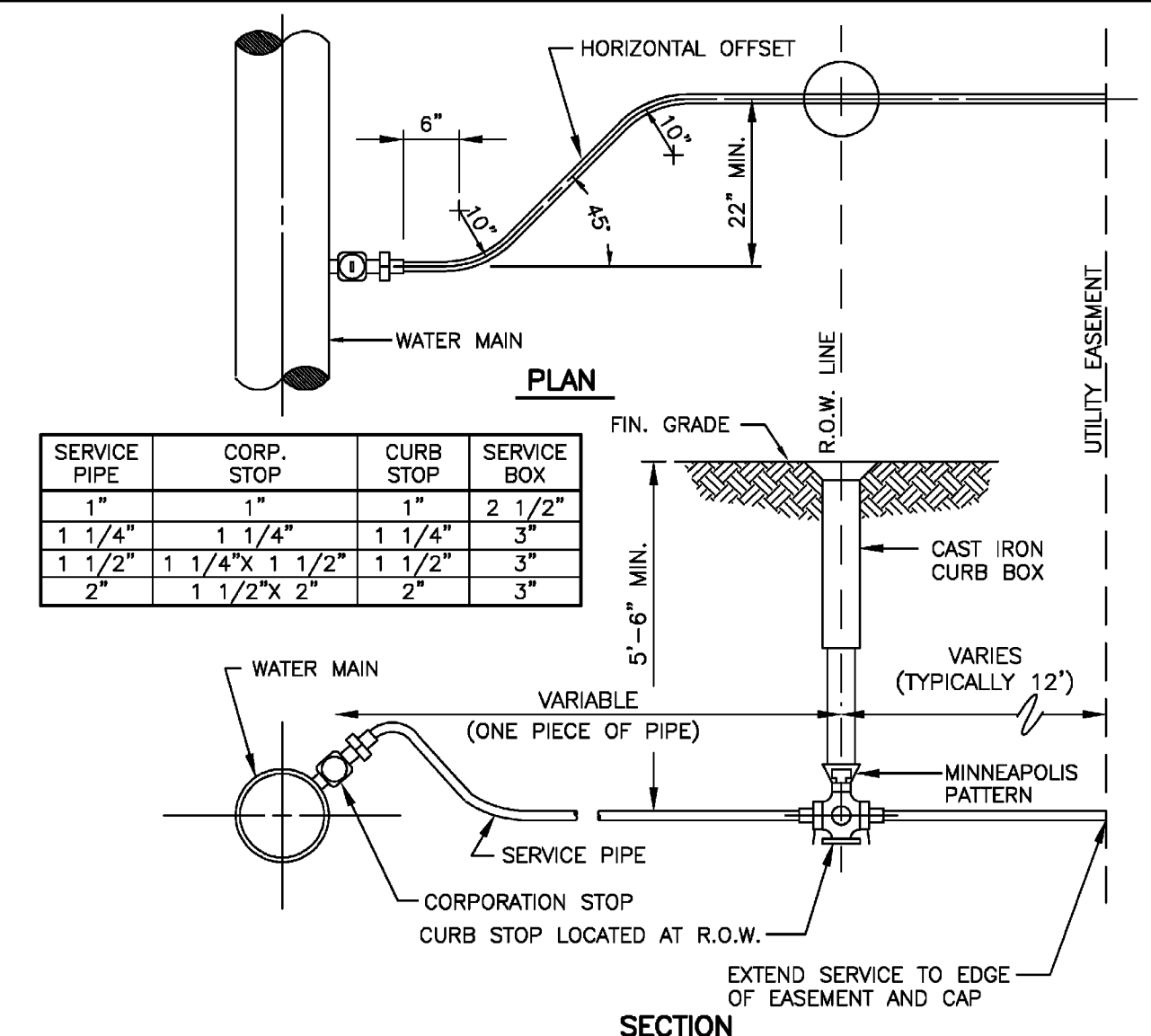
FIRE HYDRANT ASSEMBLY



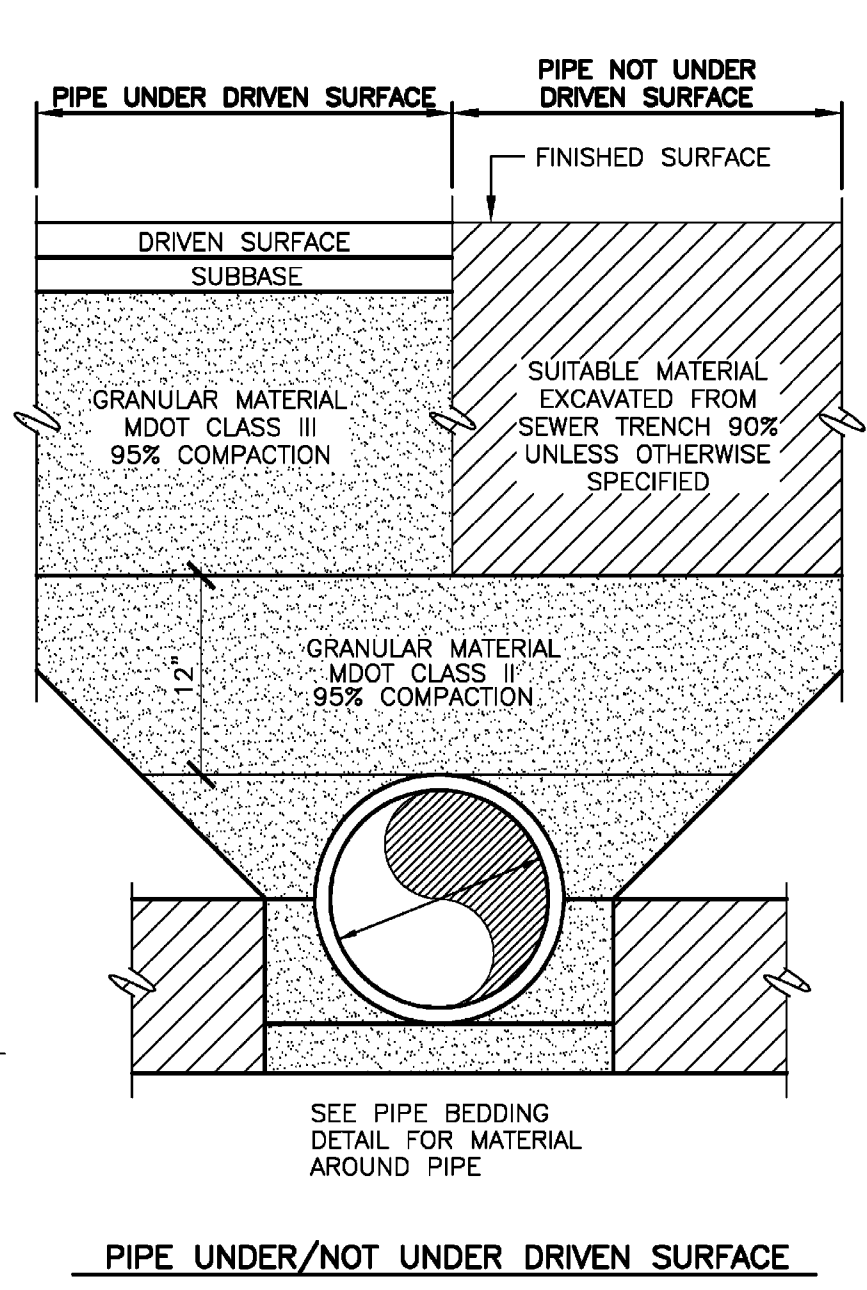
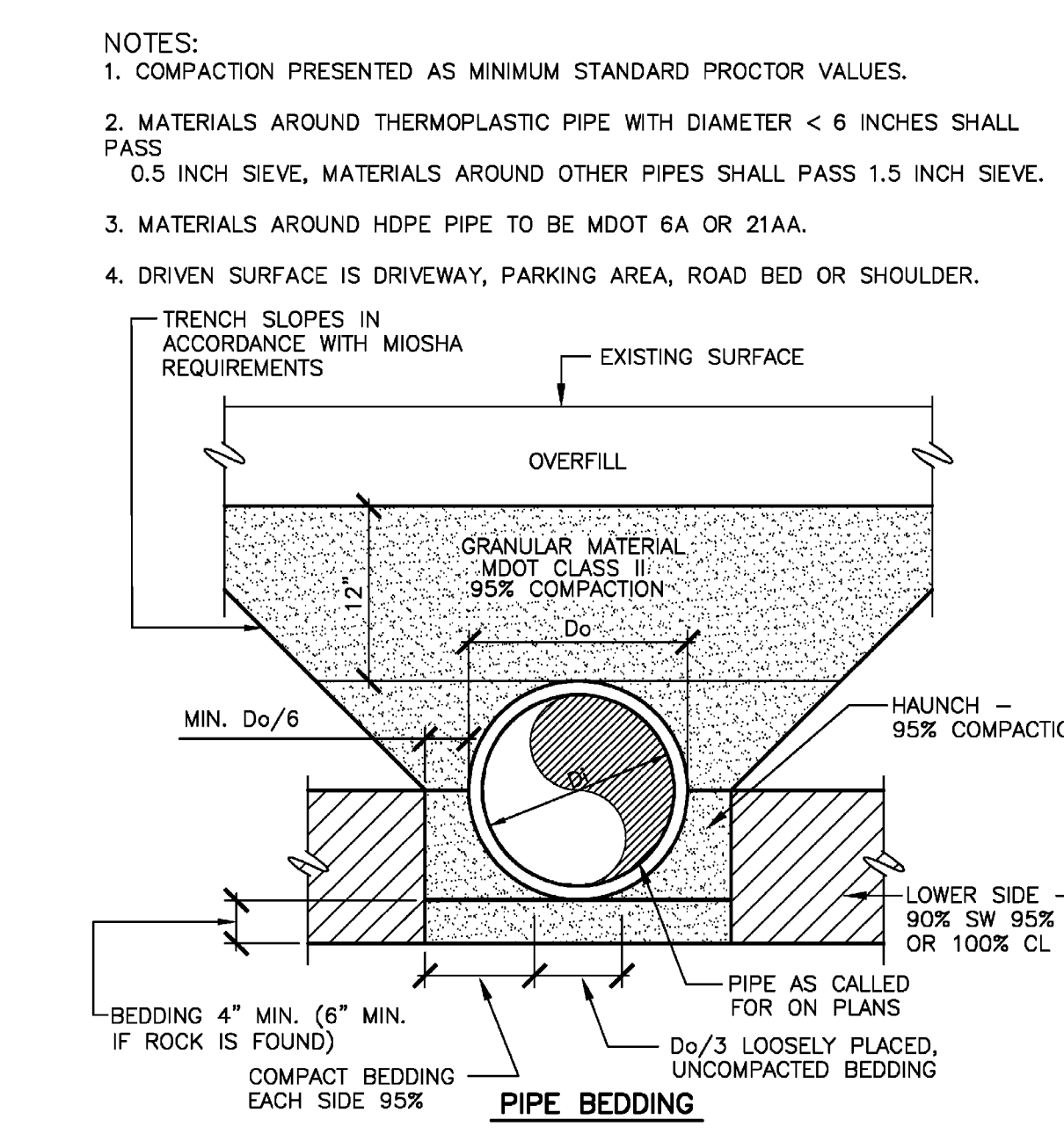
COMMERCIAL BUILDING WATER SERVICE LAYOUT



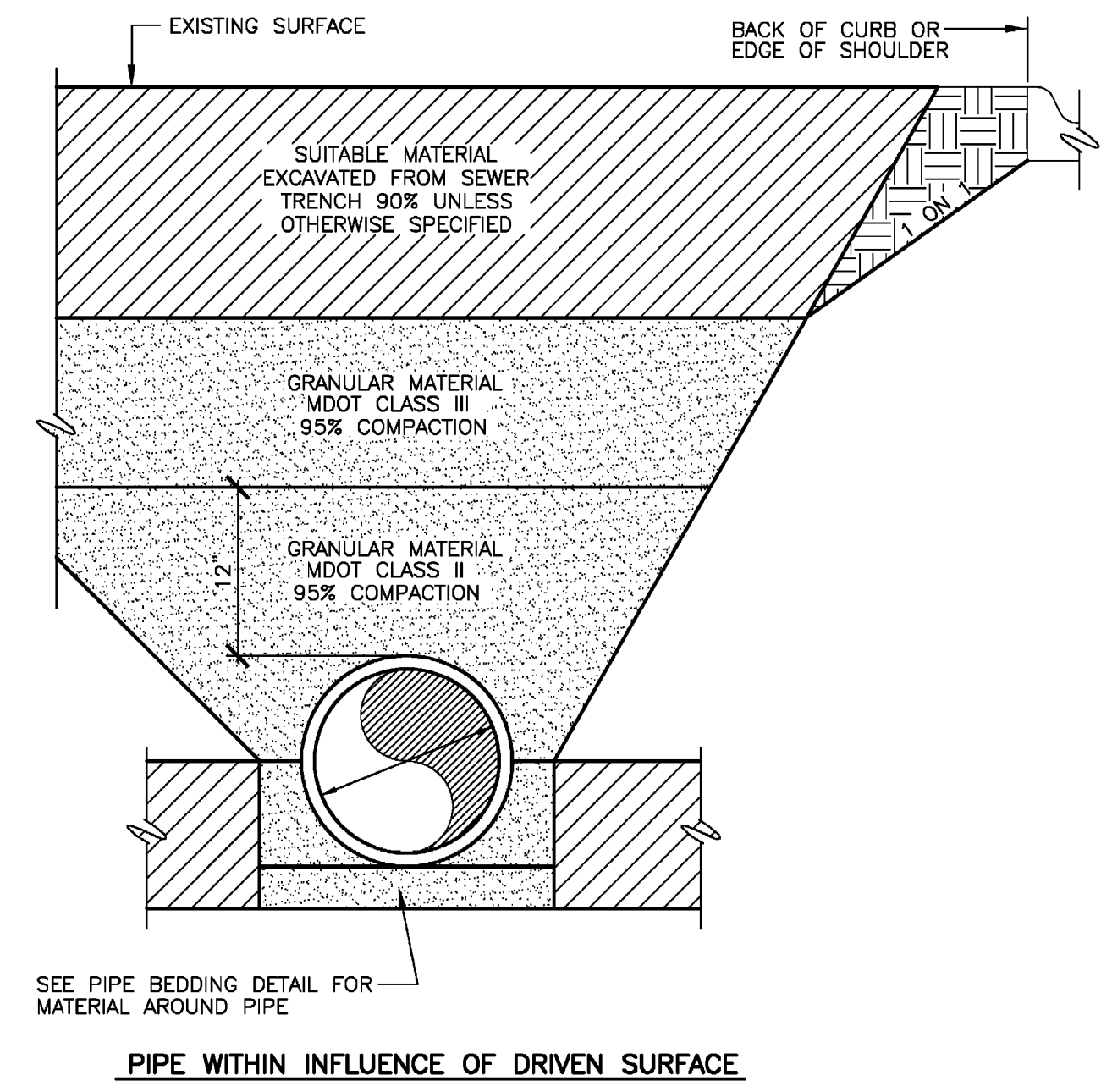
GATE VALVE AND BOX



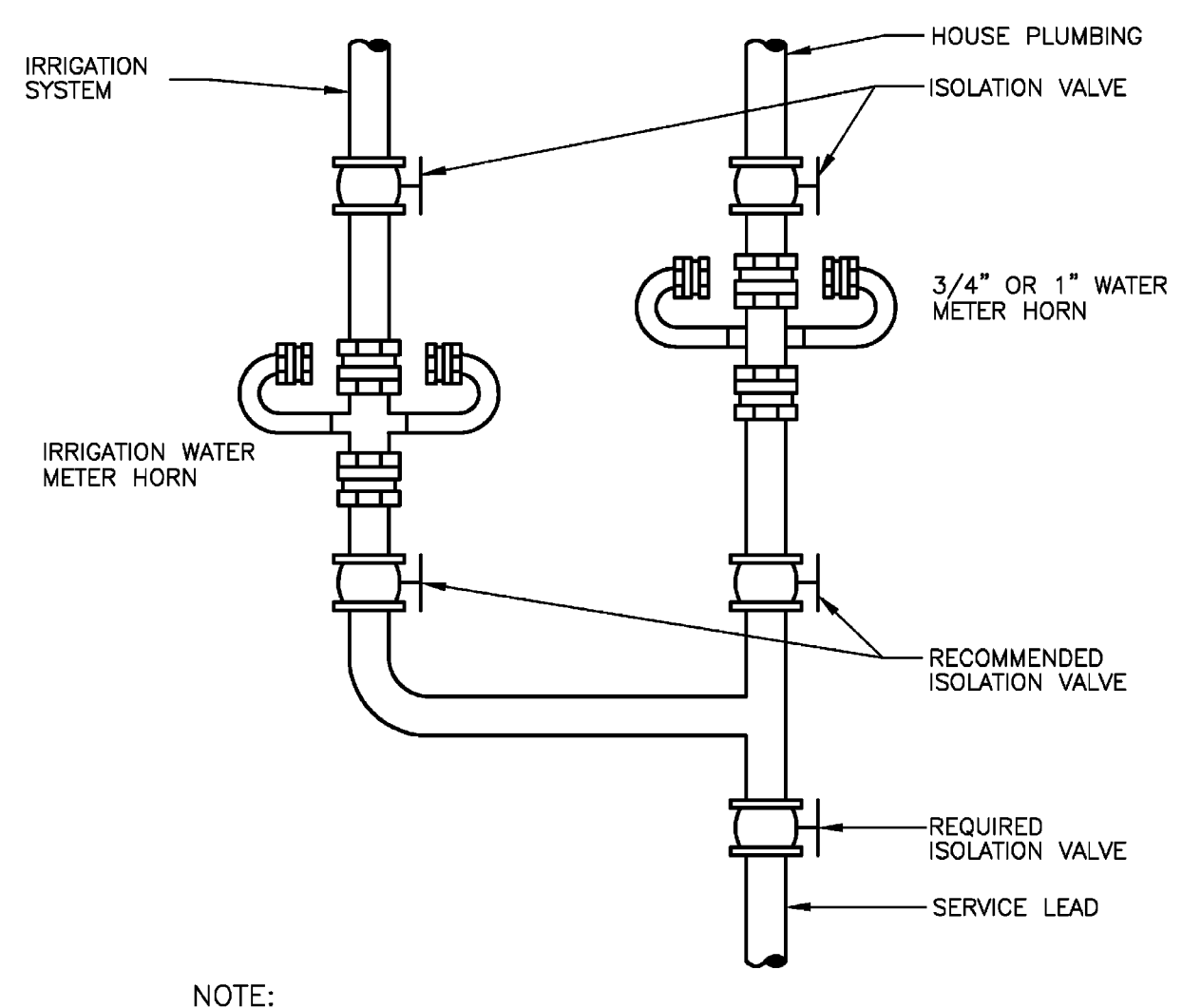
SECTION WATER SERVICE LATERAL



PIPE UNDER/NOT UNDER DRIVEN SURFACE TRENCH EXCAVATION & PIPE BEDDING



PIPE WITHIN INFLUENCE OF DRIVEN SURFACE



NOTE:
ALL METERS ARE TO BE INSTALLED HORIZONTALLY IN A DRY, CLEAN, SANITARY LOCATION THAT IS READILY ACCESSIBLE. THIS DRAWING IS NOT TO SCALE & IS ONLY A REPRESENTATION OF HOW THE METERS SHOULD BE INSTALLED. THE SECOND METER IS OPTIONAL FOR IRRIGATION USAGE. METERS SHOULD NOT BE INSTALLED IN LINE (ONE RIGHT AFTER THE OTHER).

TYPICAL METER HORN INSTALLATION

MARION HOWELL-GENOA OCEOLA
Sewer and Water Authority
WATER MAIN STANDARD DETAILS

Scale: NONE
Issued Date: 10-22-2007

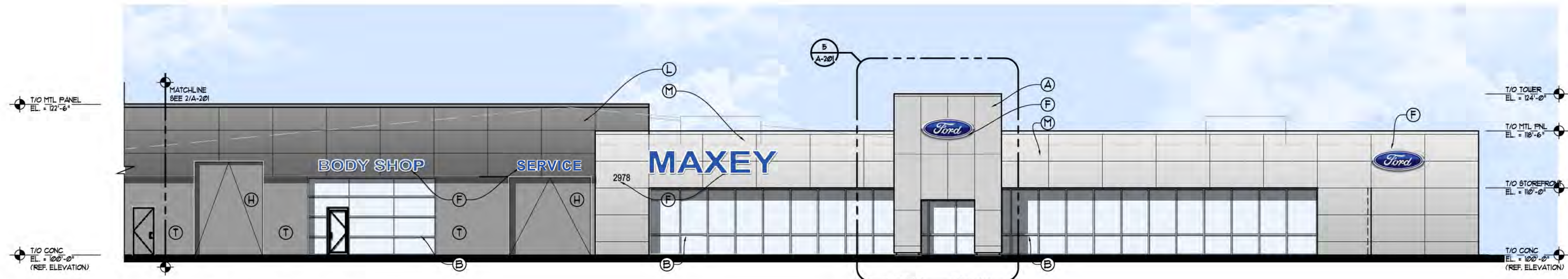
PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**
2798 E. GRAND RIVER AVE.
HOWELL, MI 48843
517-545-5700

NO.	BY	DATE	REVISION PER
1	P. C.	8-26-13	COMMENTS
2	T.W.P.	7-29-13	REVIEW

DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY:
SCALE
JOB NO. 13-182
DATE 07-09-13
SHEET NO. C11

BOSS ENGINEERING
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS
(E-MAIL: bob@bosseng.com)
3121 E. GRAND RIVER AVE.
HOWELL, MI 48843
(800) 246-6735 FAX (517) 546-1670

THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE PUBLIC UTILITIES OR OTHER AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE PUBLIC UTILITIES OR OTHER AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE PUBLIC UTILITIES OR OTHER AGENCIES.

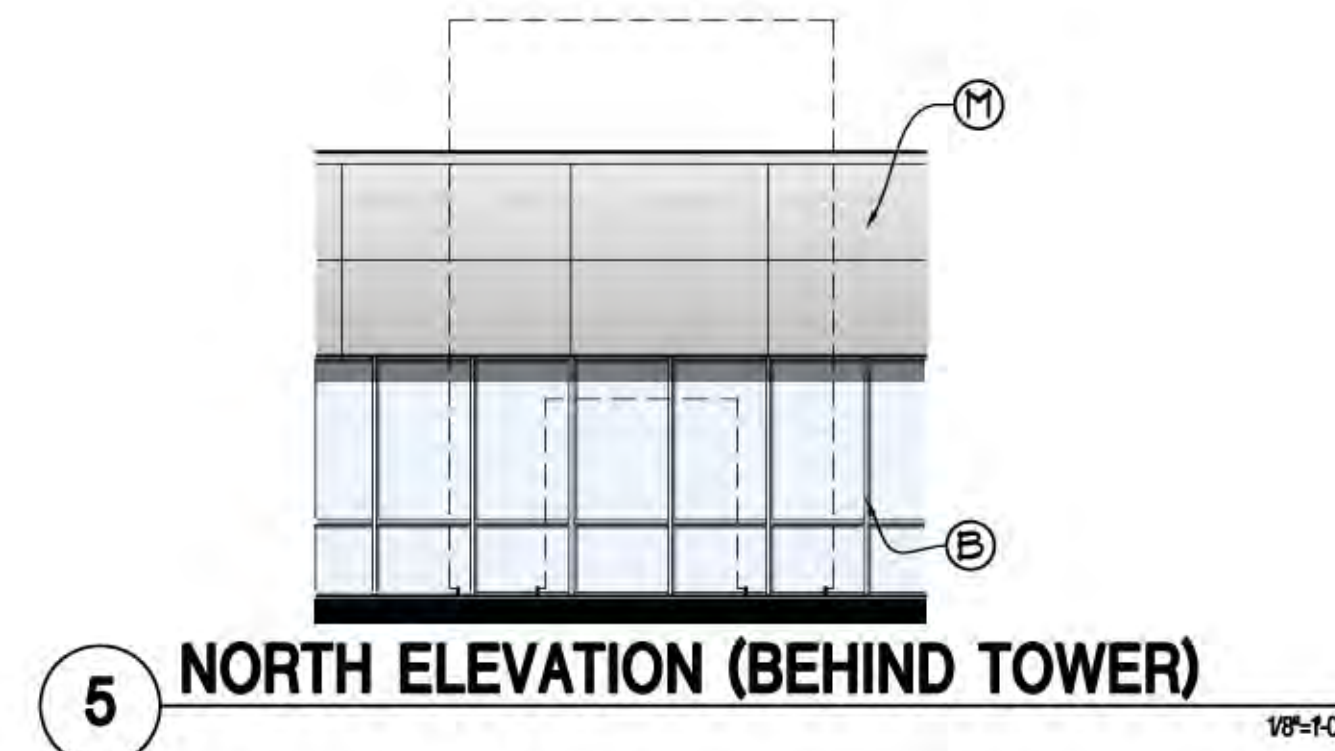


1 PROPOSED NORTH ELEVATION (PARTIAL)
1/8"=1'-0"

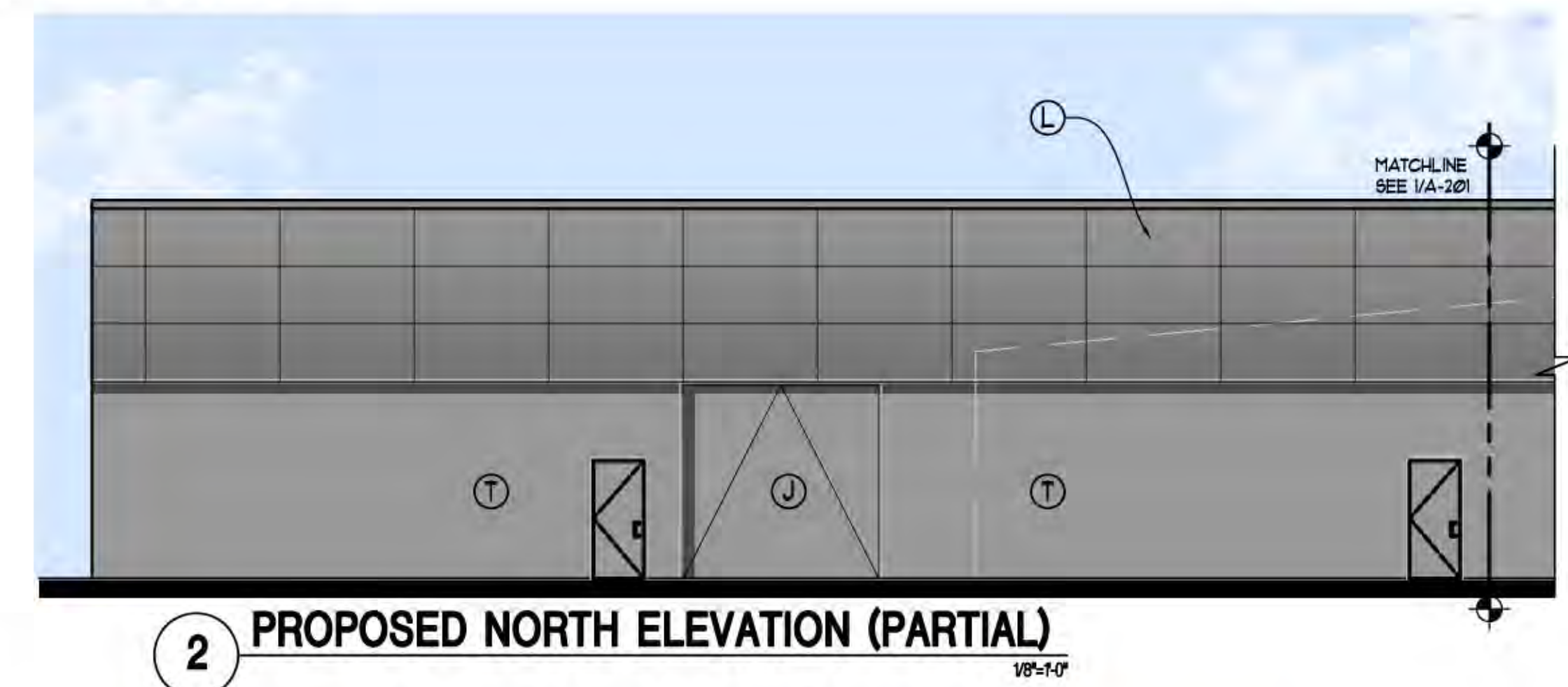
EXTERIOR FINISH SCHEDULE

- (A) FORD ENTRY ICON - PROVIDED AND INSTALLED BY AGI SIGN - FOUNDATION BY G.C.
- (B) WINDOW WALL: GLAZING SYSTEM 1" CLEAR INSULATED GLASS IN CLEAR ANODIZED ALUM FRAME - YKK YFW 400 TU OR APPROVED EDUAL
- (C) PROPOSED NICKEL-PLATED OVERFLOW SCUPPER LOCATION - PLUMBING BY OTHERS (DESIGN/BUILD)
- (D) NEW CORRUGATED METAL PANEL SIDING: 20 GA. 1/8" DEEP (EXPOSED, PAINTED FASTENERS) MANUFACTURER: ALCOA, COLOR: SLATE GREY ALL EXPOSED FASTENERS TO BE INSTALLED IN UNIFORM, ORTHOGONAL PATTERNS. PREFINISHED TRIM AND COPING TO MATCH SIDING COLOR.
- (E) HOLLOW METAL DOOR AND FRAME - PAINT DOOR AND FRAME: UNIVERSAL GREY, COGN 62/000 ORDER# A2004 MANUFACTURER: GLIDDEN PROFESSIONAL
- (F) SIGNAGE PROVIDED AND INSTALLED BY OTHERS - G.C. TO PROVIDE POWER AND BLOCKING - COORDINATE EXACT SIZE AND LOCATION WITH OWNER AND SIGNAGE SUPPLIER
- (G) STEEL BOLLARD TYP. EA. SIDE OF VEHICLE ACCESS DOORS - PAINT UNIVERSAL GREY, COGN 62/000 ORDER# A2004. MANUFACTURER: GLIDDEN PROFESSIONAL - SEE A-111
- (H) EXISTING OVERHEAD DOOR
- (J) NEW OVERHEAD DOOR
- (K) GLASS/ALUMINUM OVERHEAD DOOR - CLEAR ANODIZED ALUMINUM FINISH
- (L) PREFINISHED DRY JOINT ALUMINUM METAL PANEL SYSTEM WITH RAIN SCREEN INSTALLATION - ALPOLIC MICA GRAY 4"MMHZ (SEE SPEC'S) - SUBMIT SAMPLE FOR ARCHITECT & OWNER APPROVAL. SEE A-901 FOR DETAILS. - RUN 'GRAIN' HORIZONTAL, TYPICAL
- (M) PREFINISHED DRY JOINT ALUMINUM METAL PANEL SYSTEM WITH RAIN SCREEN INSTALLATION - ALPOLIC HAIRLINE ALUMINUM 4"MMHLZ (SEE SPEC'S) - SUBMIT SAMPLE FOR ARCHITECT & OWNER APPROVAL. SEE A-901 FOR DETAILS. - RUN 'GRAIN' HORIZONTAL, TYPICAL
- (P) GLASS & ALUMINUM ENTRY OR VEHICLE ACCESS DOOR - 1/4" CLEAR TEMPERED GLASS IN A CLEAR ANODIZED ALUMINUM DOOR FRAMING SYSTEM - INTEGRAL WITH CURTAIN WALL OR STOREFRONT WHERE ADJACENT
- (T) PAINT - COLOR: GRANITE GREY, COGN 31/000 ORDER# A2005 MANUFACTURER: GLIDDEN PROFESSIONAL
- (V) PAINT - COLOR: UNIVERSAL GREY, COGN 62/000 ORDER# A2004 MANUFACTURER: GLIDDEN PROFESSIONAL
- (W) KNOX BOX - GC TO COORDINATE EXACT LOCATION W/ FIRE MARSHALL - PROVIDE MISC METAL TRIM TO MATCH CORRUGATED METAL PANEL AS REQ'D
- (X) WALL PACK - SEE ELECTRICAL DRAWINGS

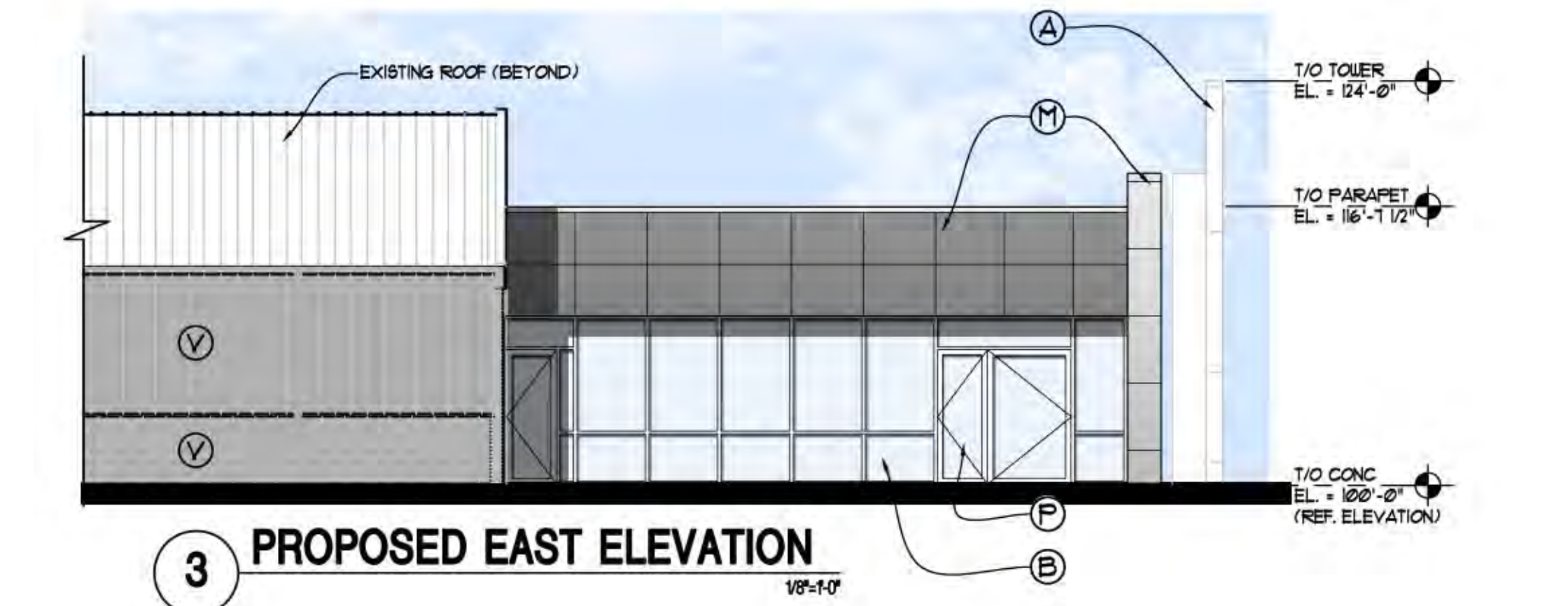
NOTE:
REFER TO DOOR SCHEDULE FOR H1 DOOR FACE COLORS



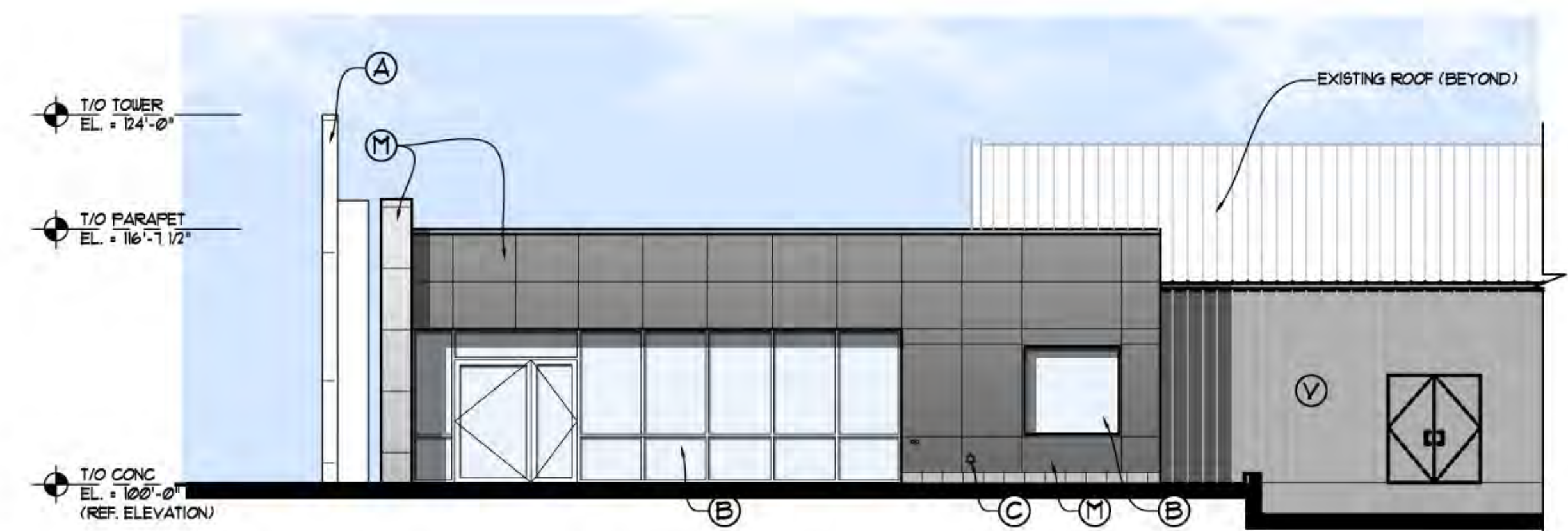
5 NORTH ELEVATION (BEHIND TOWER)
1/8"=1'-0"



2 PROPOSED NORTH ELEVATION (PARTIAL)
1/8"=1'-0"



3 PROPOSED EAST ELEVATION
1/8"=1'-0"



4 PROPOSED WEST ELEVATION
1/8"=1'-0"

client

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project title

MAXEY FORD

2798 E. Grand River Ave.
Howell, MI 48843

sheet title

RENOVATED SALES BLDG. FLOOR PLAN

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

project number

12032

drawn CAI

approved CAI

issued date

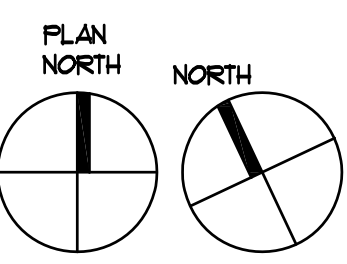
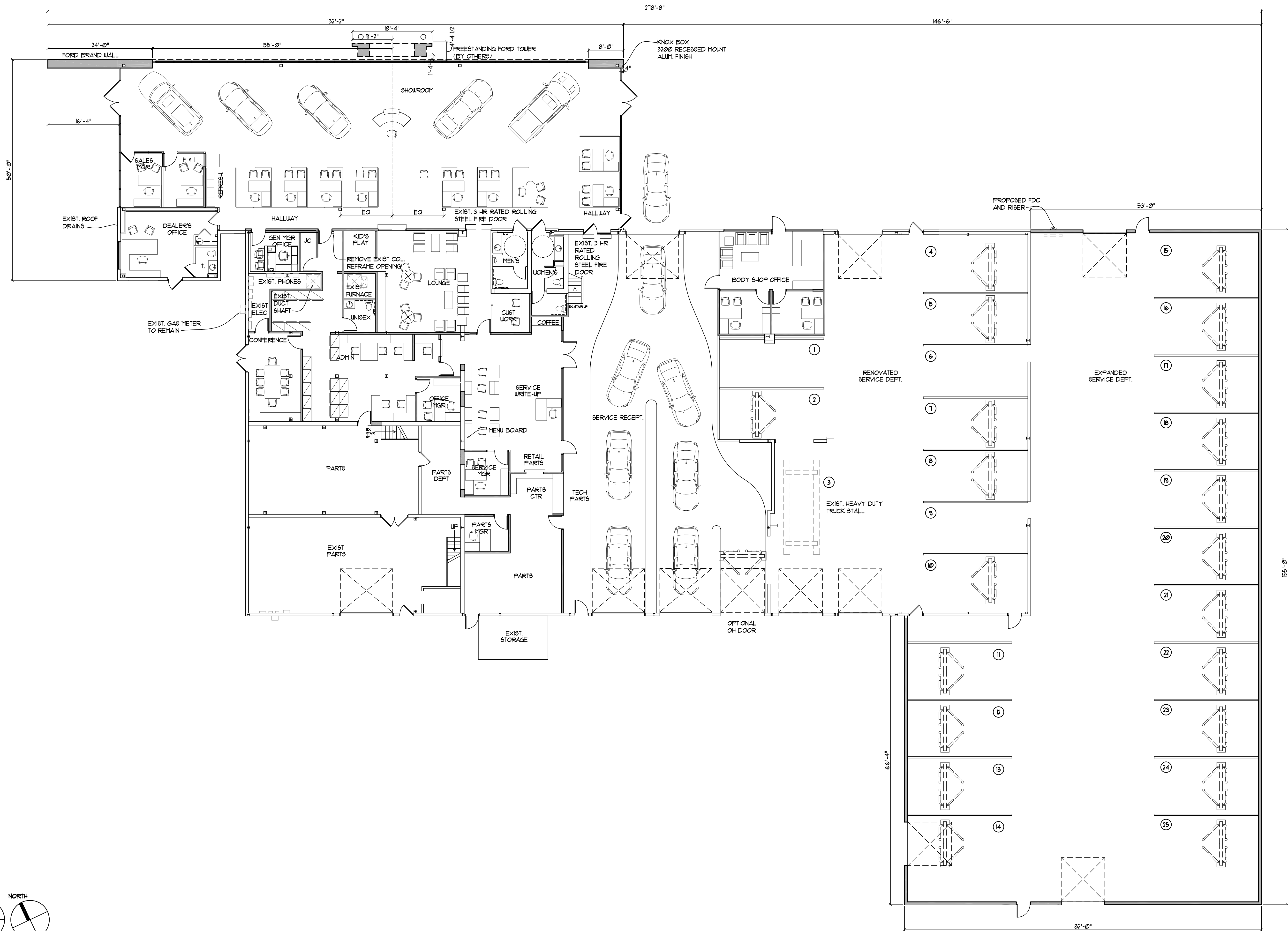
REVISION 07-02-13

SPA RESUBMITTAL 07-30-13

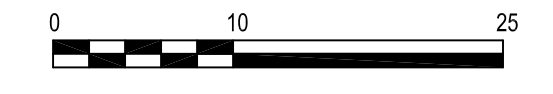
TWP BOARD 08-26-13

sheet number

A-101



1 FIRST FLOOR PLAN
3/32" = 1'-0"



client

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project title

**MAXEY
FORD**

2798 E. Grand River Ave.
Howell, MI 48843

sheet title

**PROPOSED BODY
SHOP PLAN**

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project number

12032

drawn CAI

approved CAI

issued date

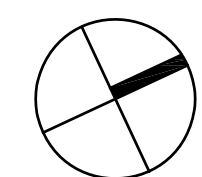
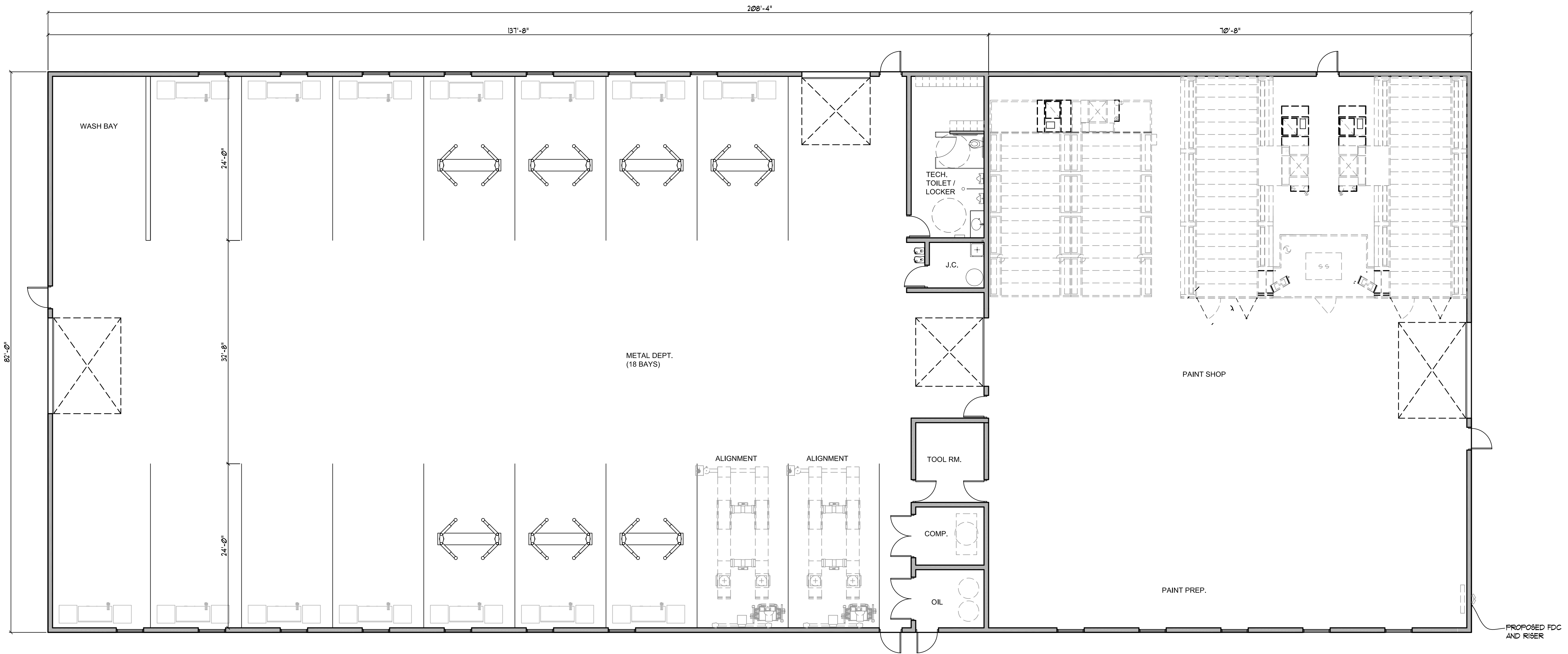
SITE PLAN APPROVAL 07-10-13

SPA RESUBMITTAL 07-30-13

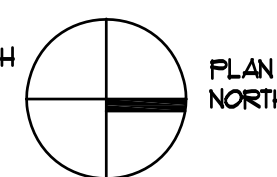
TWP BOARD 08-26-13

sheet number

A-103



NORTH



PLAN NORTH

1

PROPOSED BODY SHOP

1/8" = 1'-0"

notice

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project title

**MAXEY
FORD**

2798 E. Grand River Ave.
Howell, MI 48843

sheet title

**SALES:
EXTERIOR
ELEVATIONS**

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project number

12032

drawn CAI

approved CAI

issued date

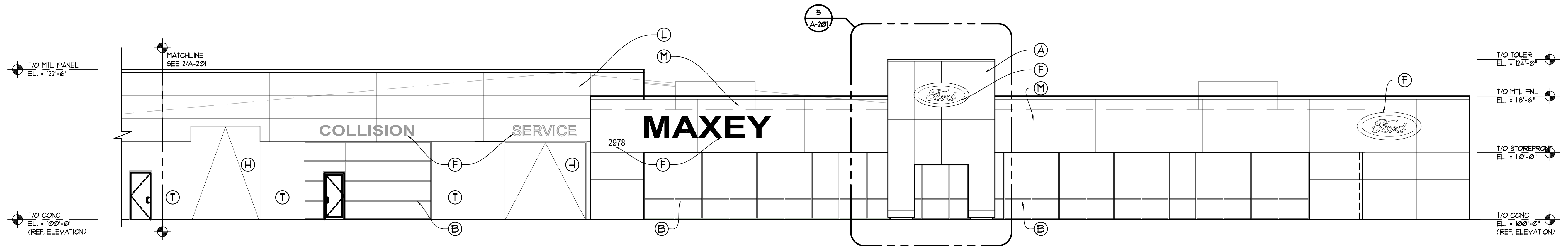
REVIEW 07-02-13

SPA RESUBMITAL 07-30-13

TWP BOARD 08-26-13

sheet number

A-201

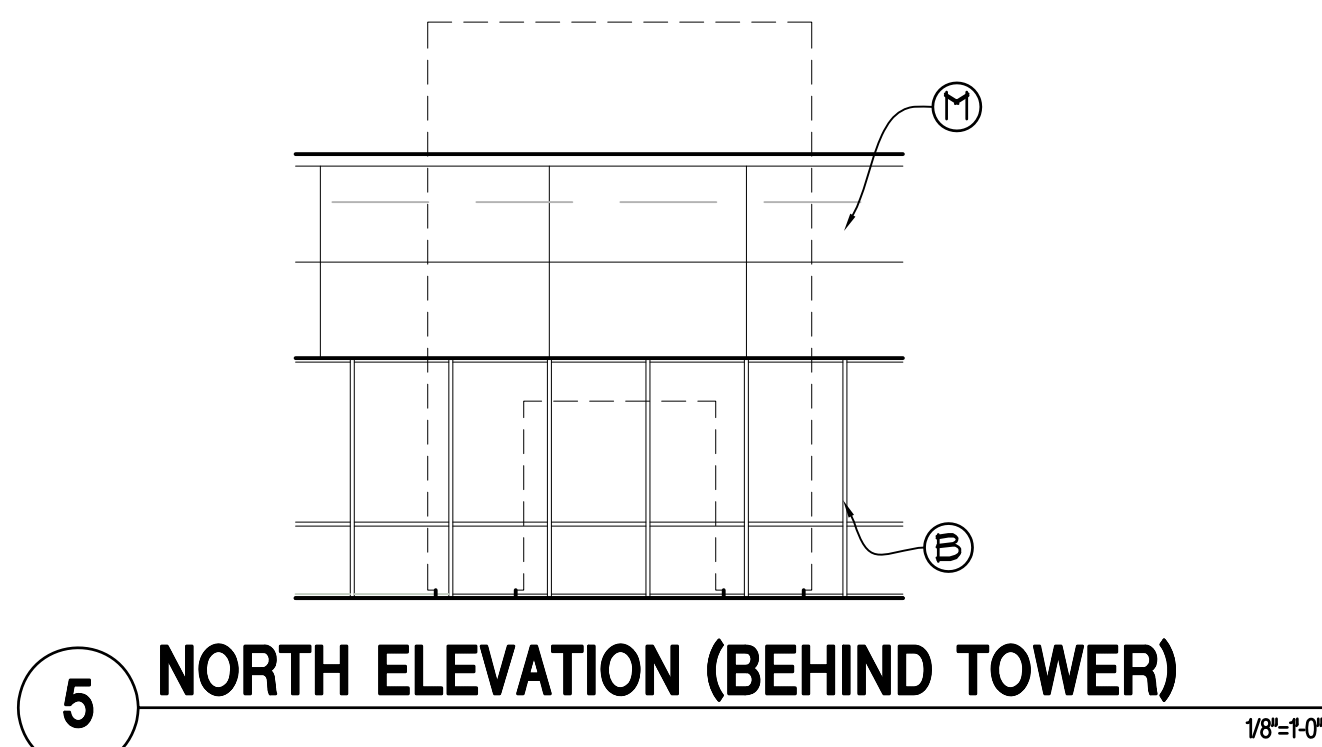


1 PROPOSED NORTH ELEVATION (PARTIAL)
1/8"=1'-0"

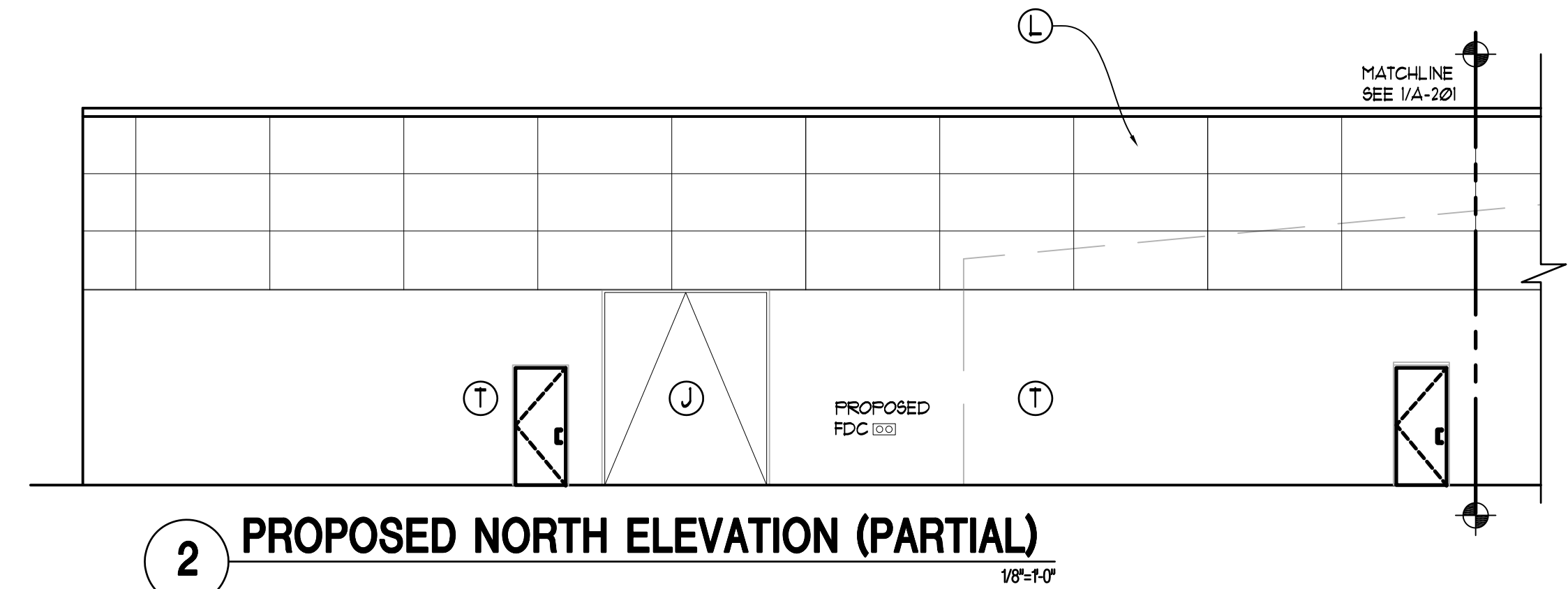
EXTERIOR FINISH SCHEDULE

- (A) FORD ENTRY ICON - PROVIDED AND INSTALLED BY AGI SIGN - FOUNDATION BY G.C.
- (B) WINDOW WALL GLAZING SYSTEM 1" CLEAR INSULATED GLASS IN CLEAR ANODIZED ALUM FRAME - YKK YFU 400 TU OR APPROVED EDUAL
- (C) PROPOSED NICKEL-PLATED OVERFLOW SCUPPER LOCATION - PLUMBING BY OTHERS (DESIGN/BUILD)
- (D) NEW CORRUGATED METAL PANEL SIDING: 20 GA. 1/8" DEEP (EXPOSED, PAINTED FASTENERS) MANUFACTURER: ALCOA COLOR: SLATE GREY ALL EXPOSED FASTENERS TO BE INSTALLED IN UNIFORM, ORTHOGONAL PATTERNS, PREFINISHED TRIM AND COPING TO MATCH SIDING COLOR.
- (E) HOLLOW METAL DOOR AND FRAME - PAINT DOOR AND FRAME: UNIVERSAL GREY, OONN 62/ 000 ORDER# A2004 MANUFACTURER: GLIDDEN PROFESSIONAL
- (F) SIGNAGE PROVIDED AND INSTALLED BY OTHERS - G.C. TO PROVIDE POWER AND BLOCKING - COORDINATE EXACT SIZE AND LOCATION WITH OWNER AND SIGNAGE SUPPLIER
- (G) STEEL BOLLARD TYP. EA. SIDE OF VEHICLE ACCESS DOORS - PAINT UNIVERSAL GREY, OONN 62/ 000 ORDER# A2004, MANUFACTURER: GLIDDEN PROFESSIONAL - SEE A-111
- (H) EXISTING OVERHEAD DOOR
- (J) NEW OVERHEAD DOOR
- (K) GLASS/ALUMINUM OVERHEAD DOOR - CLEAR ANODIZED ALUMINUM FINISH
- (L) PREFINISHED DRY JOINT ALUMINUM METAL PANEL SYSTEM WITH RAIN SCREEN INSTALLATION - ALPOLIC MICA GRAY - 4"X4"X1/2" (SEE SPEC'S) - SUBMIT SAMPLE FOR ARCHITECT & OWNER APPROVAL, SEE A-301 FOR DETAILS. - RUN 'GRAIN' HORIZONTAL, TYPICAL
- (M) PREFINISHED DRY JOINT ALUMINUM METAL PANEL SYSTEM WITH RAIN SCREEN INSTALLATION - ALPOLIC HAIRLINE ALUMINUM - 4"X4"X1/2" (SEE SPEC'S) - SUBMIT SAMPLE FOR ARCHITECT & OWNER APPROVAL, SEE A-301 FOR DETAILS. - RUN 'GRAIN' HORIZONTAL, TYPICAL
- (P) GLASS & ALUMINUM ENTRY OR VEHICLE ACCESS DOOR - 1/4" CLEAR TEMPERED GLASS IN A CLEAR ANODIZED ALUMINUM DOOR FRAMING SYSTEM - INTEGRAL WITH CURTAIN WALL OR STOREFRONT WHERE ADJACENT
- (R) VERTICAL METAL SIDING - PAINT: UNIVERSAL GREY, OONN 62/ 000 ORDER# A2004 MANUFACTURER: GLIDDEN PROFESSIONAL
- (T) PAINT - COLOR: GRANITE GREY, OONN 31/ 000 ORDER# A2005 MANUFACTURER: GLIDDEN PROFESSIONAL
- (V) PAINT - COLOR: UNIVERSAL GREY, OONN 62/ 000 ORDER# A2004 MANUFACTURER: GLIDDEN PROFESSIONAL
- (W) KNOX BOX - G.C. TO COORDINATE EXACT LOCATION W/ FIRE MARSHALL - PROVIDE MISC METAL TRIM TO MATCH CORRUGATED METAL PANEL AS REQ'D
- (X) WALL PACK - SEE ELECTRICAL DRAWINGS

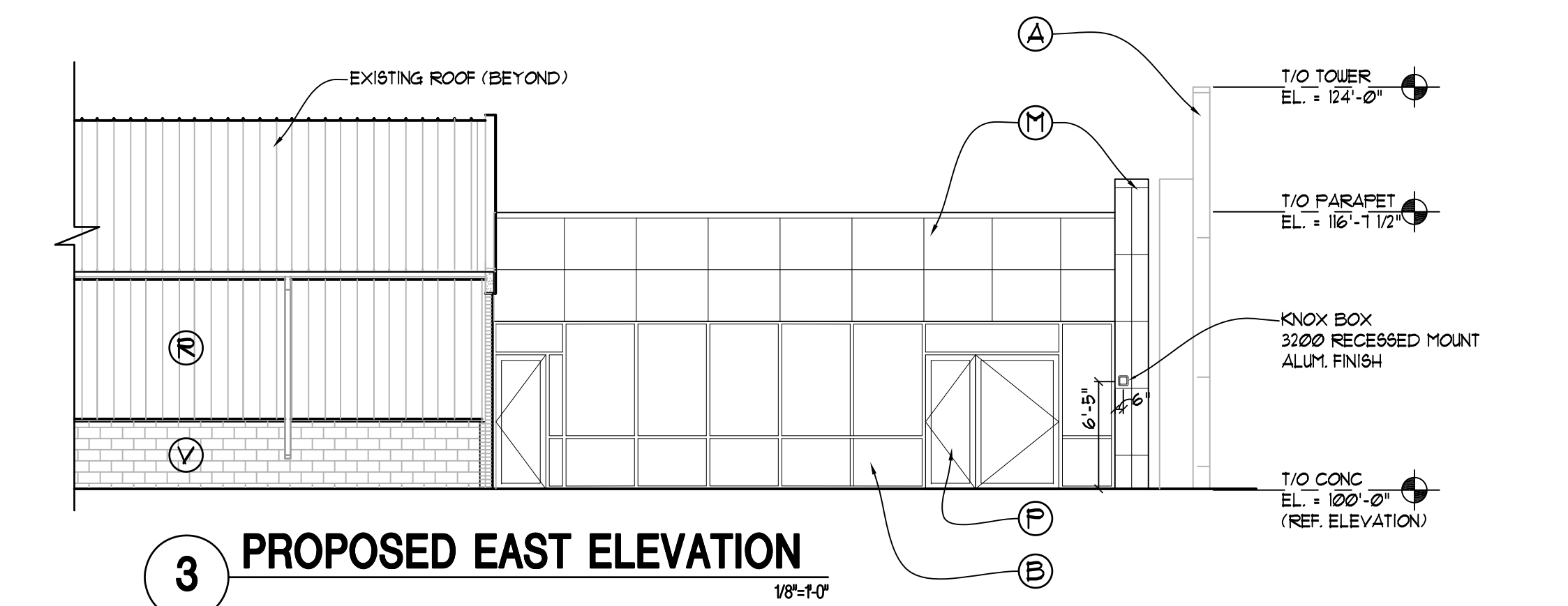
NOTE:
REFER TO DOOR SCHEDULE FOR H1 DOOR FACE COLORS



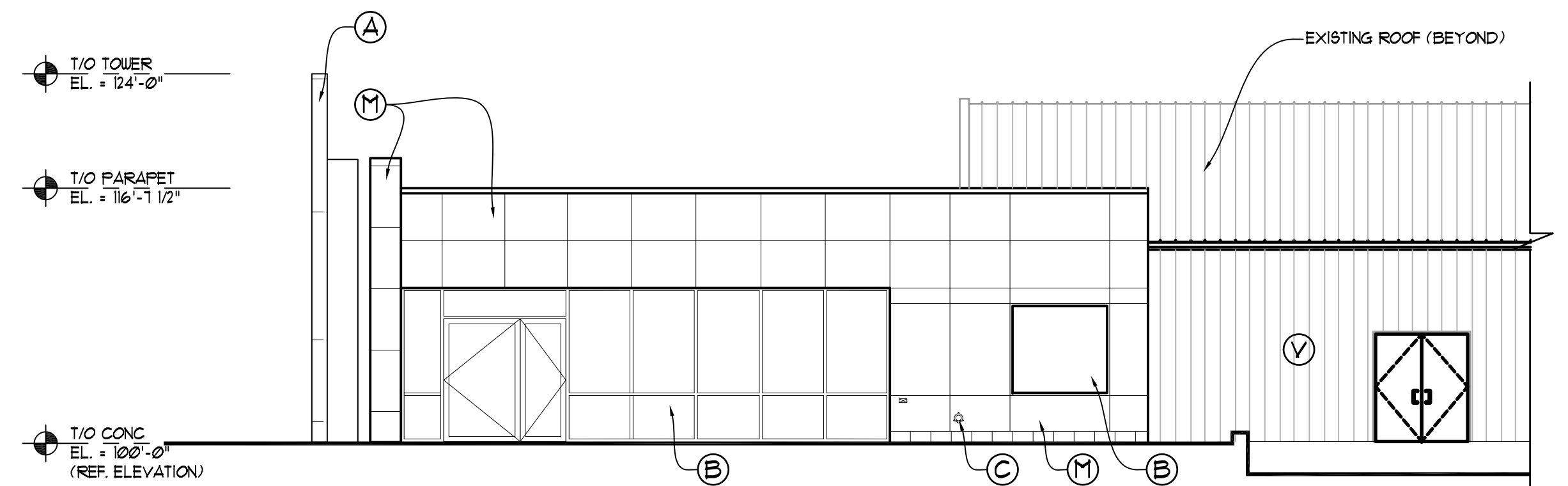
5 NORTH ELEVATION (BEHIND TOWER)
1/8"=1'-0"



2 PROPOSED NORTH ELEVATION (PARTIAL)
1/8"=1'-0"



3 PROPOSED EAST ELEVATION
1/8"=1'-0"



4 PROPOSED WEST ELEVATION
1/8"=1'-0"

client

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project title

**MAXEY
FORD**

2798 E. Grand River Ave.
Howell, MI 48843

sheet title

**BODY SHOP:
BUILDING
ELEVATIONS**

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project number

12032

drawn CAI

approved CAI

issued date

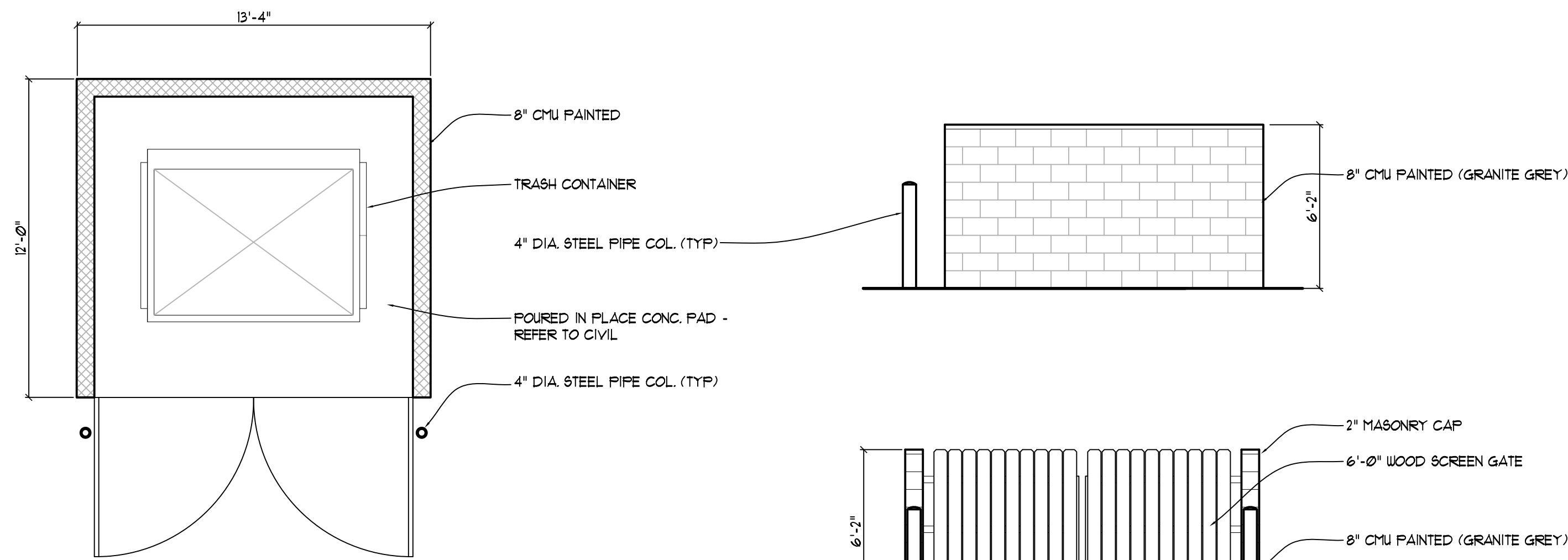
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SPA RESUBMITTAL 07-30-13

TWP BOARD 08-26-13

sheet number

A-202

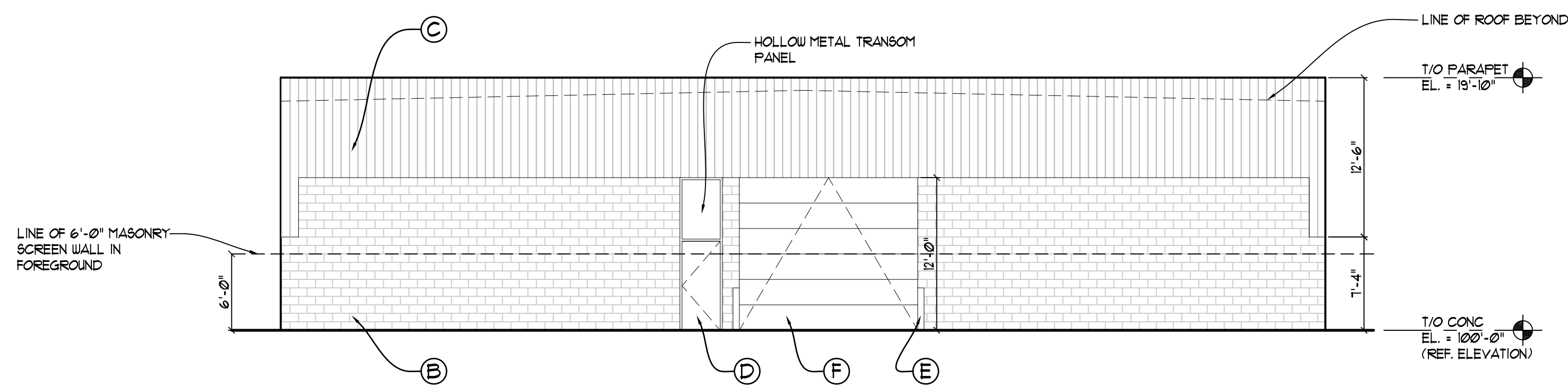


6 DUMPSTER ENCLOSURE PLAN
1/4"=1'-0"

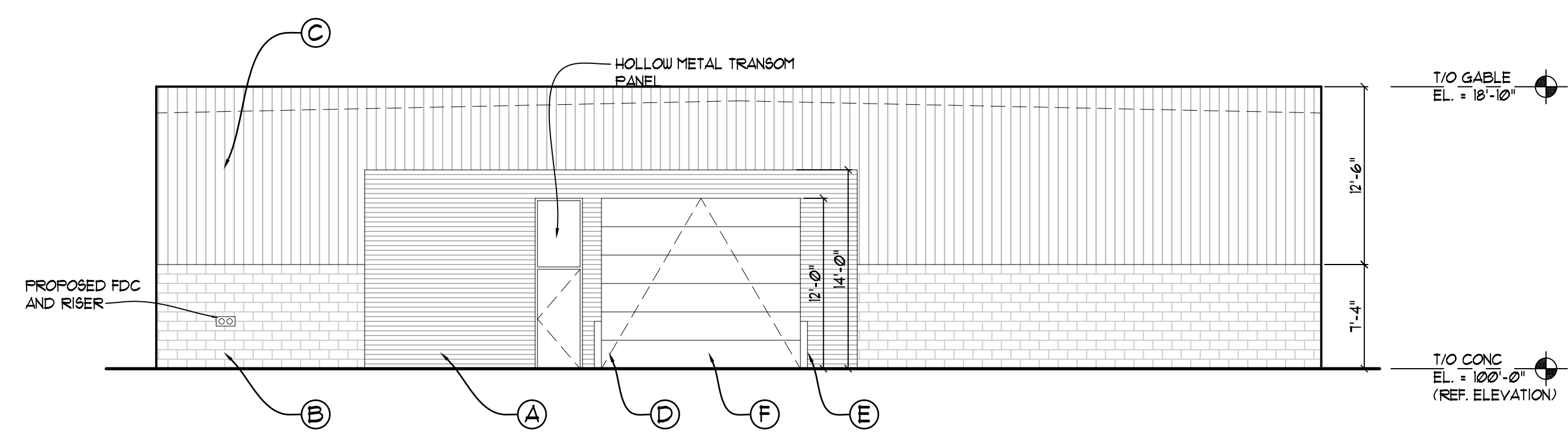
5 DUMPSTER ENCLOSURE ELEVATIONS
1/4"=1'-0"

EXTERIOR FINISH SCHEDULE	
(A)	CORRUGATED METAL PANEL SIDING, 20 GA, 1/8" DEEP (EXPOSED, PAINTED FASTENERS) MANUFACTURER: ALCOA, COLOR: SLATE GREY ALL EXPOSED FASTENERS TO BE INSTALLED IN UNIFORM, ORTHOGONAL PATTERNS, PREFINISHED TRIM AND COPING TO MATCH SIDING COLOR.
(B)	CMU - PAINT: GRANITE GREY, MANUFACTURER: GLIDDEN PROFESSIONAL
(C)	VERTICAL METAL SIDING - PAINT: UNIVERSAL GREY, COGN 62/ 000 ORDER# A2004 MANUFACTURER: GLIDDEN PROFESSIONAL
(D)	HOLLOW METAL DOOR AND FRAME - PAINT DOOR AND FRAME: UNIVERSAL GREY, COGN 62/ 000 ORDER# A2004 MANUFACTURER: GLIDDEN PROFESSIONAL
(E)	STEEL BOLLARD TYP. EA. SIDE OF VEHICLE ACCESS DOORS - PAINT UNIVERSAL GREY, COGN 62/ 000 ORDER# A2004, MANUFACTURER: GLIDDEN PROFESSIONAL - SEE A-111
(F)	NEW METAL OVERHEAD DOOR

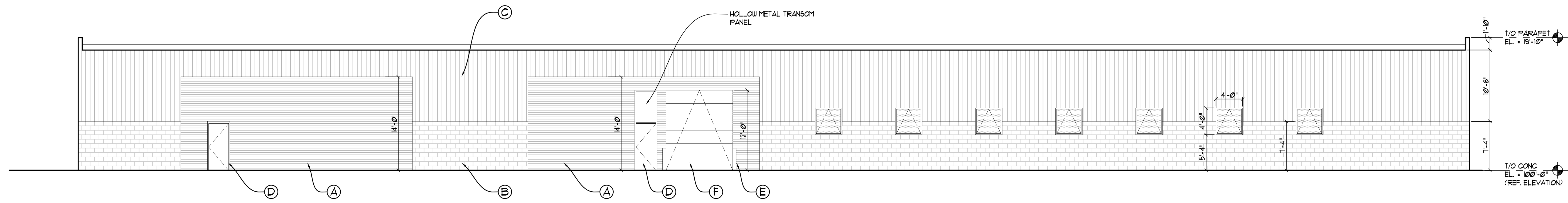
NOTE:
REFER TO DOOR SCHEDULE FOR HM DOOR FACE COLORS



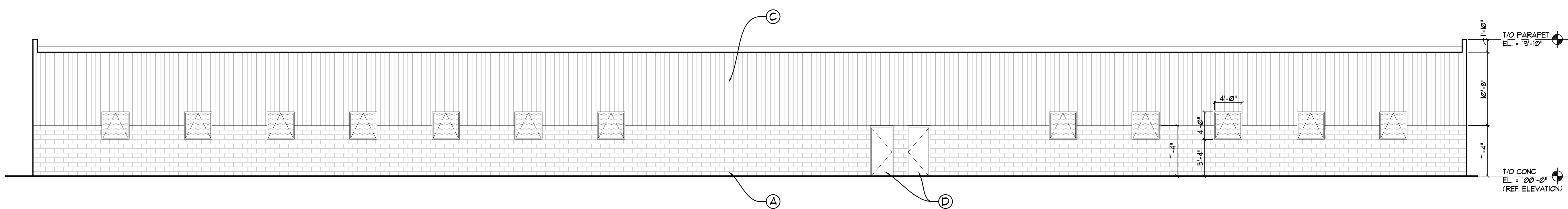
4 SOUTH ELEVATION
1/8"=1'-0"



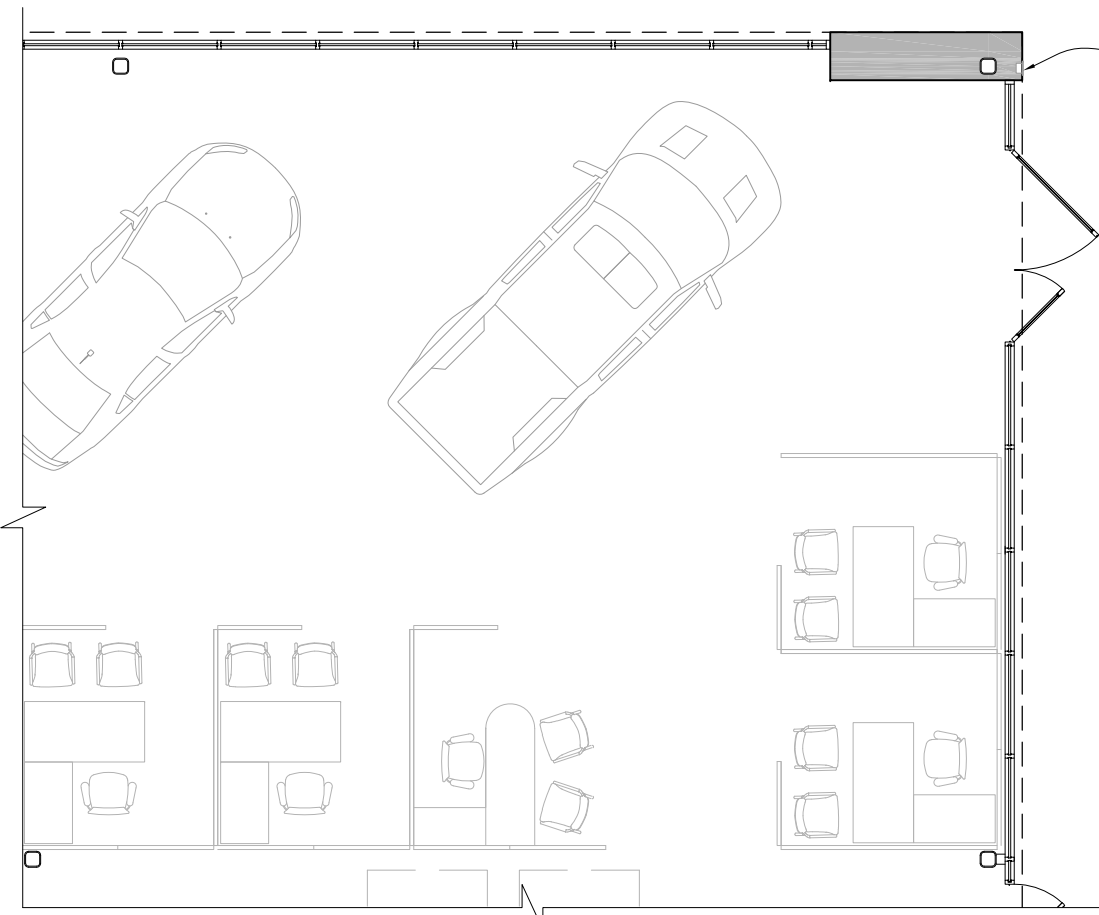
3 NORTH ELEVATION
1/8"=1'-0"



2 WEST ELEVATION
1/8"=1'-0"

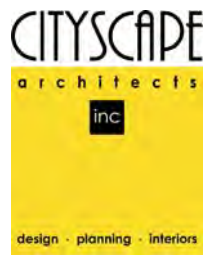
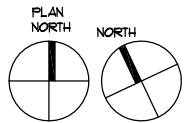


1 EAST ELEVATION
1/8"=1'-0"



2 PARTIAL FIRST FLOOR PLAN
PROPOSED

1/8" = 1'-0"



40850 Grand River Ave Suite 200
Novi, MI, 48375
248 471 7877 ph
248 471 7868 fax

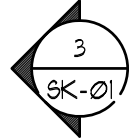
project title
Maxey Ford

2798 E. Grand River Ave.
Howell, MI 48843

sheet title
**Proposed
Knox Box Location
Plan & Elevation**

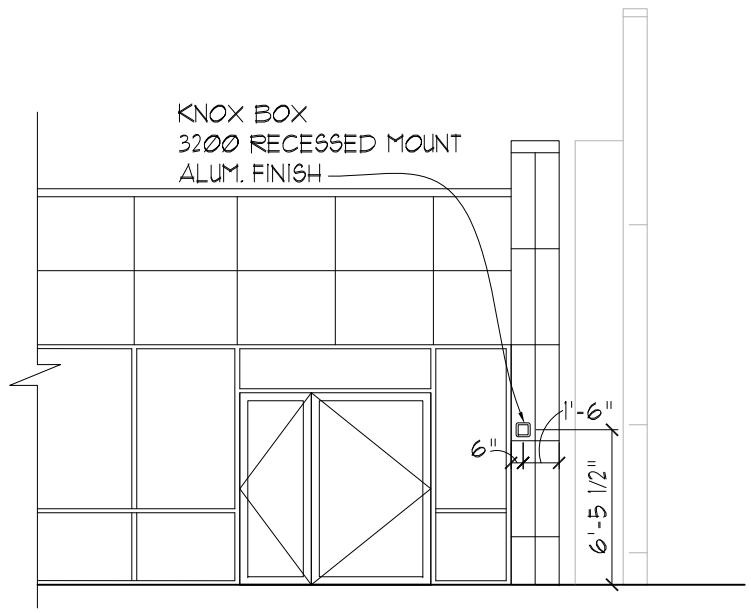
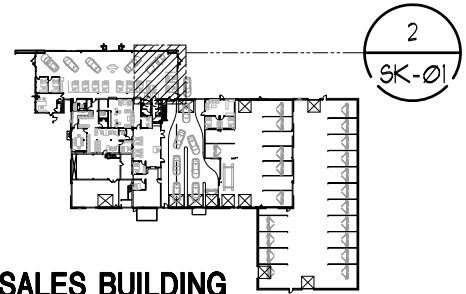
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KNOX BOX
3200 RECESSED MOUNT
ALUM. FINISH



1 KEY PLAN - SALES BUILDING
PROPOSED

NTS



3 PARTIAL EAST ELEVATION
PROPOSED

1/8" = 1'-0"

issued	date
REVIEW	08-12-13

project number
12032
approved CAI

sheet number
SK-01

DESCRIPTION

The Streetworks Wal-Pak Series of wall luminaires provides traditional architectural style with high performance energy efficient illumination. Rugged die-cast aluminum construction, stainless steel hardware along with a sealed and gasketed optical compartment make the Wal-Pak virtually impenetrable to contaminants. IP65 Rated. UL and cUL wet location listed. The Wal-Pak wall luminaire is ideal for pathway illumination, building entrances, vehicle ramps, schools, tunnels, stairways and loading docks.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Housing

Rugged one-piece die-cast aluminum housing and hinged, removable die-cast aluminum door. One-piece silicone gasket seals the optical chamber. UL 1598 wet location listed and IP65 ingress protection rated. Not recommended for car wash applications.

Electrical

Ballasts, LED driver and related electrical components are hard mounted to the die-cast housing for optimal heat sinking and operating efficiency. Wiring is extended through a silicone gasket at the back of the housing. Three 1/2" threaded conduit entry points allow for thru-branch wiring. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from LED source. Integral LED electronic driver incorporates internal fusing designed to withstand a 3kV surge test and is Class 2 rated for 120-

277V with an operating temperature of -30° to 60°C. Wal-Pak LED systems maintain greater than 70% of the initial light output after 50,000 hours of operation. UL listed HID high power factor ballasts are Class H insulation rated (metal halide: 150, 175, 200, 250, 320, 350, 400W [-30°C / -20°F], (high pressure sodium: 50, 70, 100, 150, 250, 400W [-40°C / -40°F]). High efficiency HID ballasts are available in 120V, 208V, 240V, 277V, 347V and 480V. Compact fluorescent high power factor ballasts are Class P insulation rated for 120-277V and have a starting temperature of -18°C / 0°F.

Optical

Highly reflective anodized aluminum reflectors provide high efficiency illumination. Optical assemblies include impact resistant borosilicate refractive glass, Solite™ flat diamond patterned glass and full cutoff IESNA compliant configurations. Patent pending, solid state LED luminaires

are thermally optimized with 2400 or 4000 lumen package modules. HID models are offered in horizontal medium or mogul-based metal halide or high pressure sodium lamps. T6 ceramic metal halide and 4-pin compact fluorescent lamp models offer high efficiency energy-saving illumination.

Door Assembly

Single point, captive stainless steel hardware secures the removable hinged door allowing for ease of installation and maintenance. Door assembly is hinged at the bottom for easy removal, installation and re-lamping.

Finish

Housing and door are protected with 5-stage TGIC dark bronze polyester powder coat paint. Premium TGIC power coat finishes withstand extreme climate changes while providing optimal color and gloss retention. Optional premium colors are available.



WKP WAL-PAK

2400 - 4000 Lumen LED

39 - 400W

High Pressure Sodium

Pulse Start Metal Halide

Metal Halide

Ceramic Metal Halide

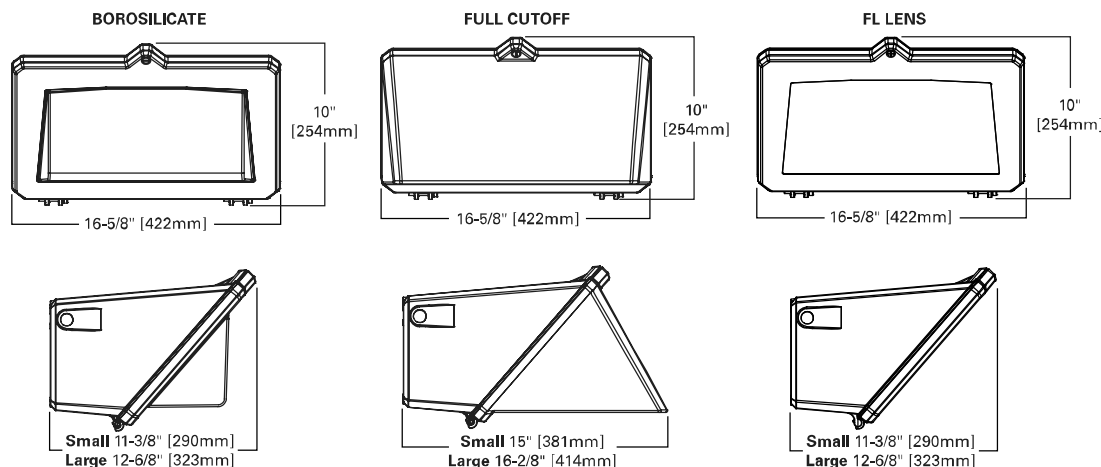
32 - 140W

Compact Fluorescent



WALL MOUNT LUMINAIRE

DIMENSIONS



TECHNICAL DATA

UL and cUL Wet Location Listed
 IP65 Rated
 40°C Maximum Ambient Temperature
 External Supply Wiring 90°C Minimum
 EISA ©, ARRA, Title 20 Compliant

ENERGY DATA

Reactor Ballast Input Watts

50W HPS NPF (58 Watts)
 70W HPS NPF (82 Watts)
 100W HPS NPF (118 Watts)
 150W HPS NPF (175 Watts)

High Reactance Ballast Input Watts

50W MP HPF (69 Watts)
 70W MP HPF (94 Watts)
 100W MP HPF (129 Watts)
 150W MP HPF (185 Watts)

CWA Ballast Input Watts

200W HPS HPF (250 Watts)
 200W MP HPF (227 Watts) ©
 250W MP HPF (283 Watts) ©
 320W MP HPF (365 Watts) ©
 350W MP HPF (400 Watts) ©
 400W HPS HPF (465 Watts)
 400W MP HPF (452 Watts) ©

SHIPPING DATA

Approximate Net Weight: ADW100024
 32-42 lbs. (15-19 kgs.)
 2012-05-23 13:21:15

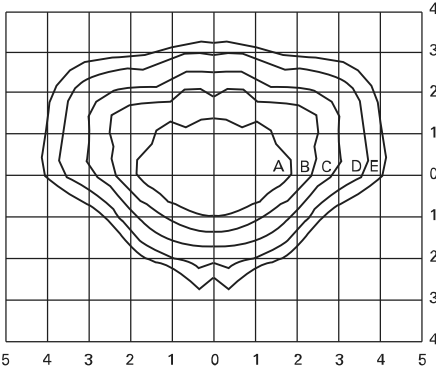
ORDERING INFORMATION

Sample Number: WKP10PC2GL

Product Family WKP= Wal-Pak	Lamp Wattage LED ¹ 2A=2 Package 28W 4A=4 Package 40W Metal Halide ^{2,3} 17=175W 25=250W 40=400W Pulse Start Metal Halide 39=39W 50=50W 70=70W 10=100W 20=200W 15=150W 25=250W 32=320W 35=350W 40=400W High Pressure Sodium 50=50W 70=70W 10=100W 15=150W 20=200W 25=250W 40=400W Ceramic Metal Halide 39=39W 70=70W 100=100W 150=150W Compact Fluorescent ⁴ 32=32W 42=42W 57=57W 70=70W 64=(2-32W) 84=(2-42W) 114=(2-57W) 140=(2-70W)	Lamp Type M= Metal Halide P= Pulse Start Metal Halide S=High Pressure Sodium LED=Solid State Light Emmitting Diodes CM= Ceramic Metal Halide CF= Compact Fluorescent	Ballast Type C=CWI H=Reac./HPF N=Hi Reac./NPF P=Hi Reac./HPF R=Reac./NPS W=CWA E=Electronic ⁵	Voltage 2=120V 0=208V 4=240V 7=277V 8=480V W=Multi-tap wired 120V N=Multi-tap wired 277V V=Multi-tap wired 240V U=Universal (120-277V)	Door/Lens Type ⁶ GL=Borosilicate Glass Door FL=Flat Solite Glass Door (150-175W max) FC= Full Cutoff Door PL= Polycarb Refractor Door (175W max)	Color AP=Gray BK=Black BZ=Bronze WH=White	Options 1=Single Fuse (120, 277 or 347V) ⁷ 2=Double Fuse, (208, 240, 480V) ⁷ 5=Non NEMA Photocontrol ⁷ B=Two Position Terminal Block SGL=Solite Glass Lens - for HID and CF Models ⁸ CGL=Clear Glass Lens ⁹ L=Lamp Included

- NOTES:** 1 LED Packages are 67 CRI/5000K
 2 MH products available for non-US markets only.
 3 MH and MP 175W and below are medium base all others are mogul base. 250 and 350W MP are not Title 20 Compliant. 400W MP must be ordered with Lamp option to be Title 20 Compliant.
 4 Electronic Ballast Standard with CF.
 5 Available with 70-150W Pulse Start or CM Lamps.
 6 Small housing offered for 175W and below, CF and LED Models. Large Housing for 200-400W. FL Door not available with CF or 200-400W Models.
 Polycarbonate lens available in models up to 175W max including LED. Polycarbonate lens not available with full cutoff door or FL models. Solite stipple glass is standard for FL lens. Clear glass is standard for full cutoff door types except for LED. LED full cutoff door is standard with solite glass.
 7 Specify voltage. 1 - 120, 277 or 347V, 2 - 208 or 240V
 8 SGL optional on HID and CF models only.
 9 Clear Glass not available with LED.

LAMP TYPE	WATTAGE
Pulse Start Metal Halide	50, 70, 100, 150, 200, 250, 320, 350, 400W
Metal Halide	175, 250, 400W
High Pressure Sodium	50, 70, 100, 150, 250, 400W
T6 Ceramic Metal Halide	39, 70, 100, 150W
Compact Fluorescent	(1) 32, (1) 42, (1) 57, (1) 70, (2) 32, (2) 42, (2) 57, (2) 70
LED	2A=28W, 4A=40W

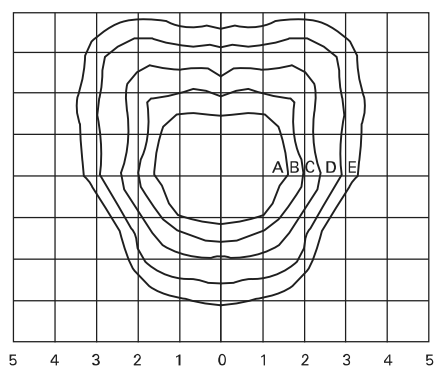


TRU40MXX3S
400-Watt MH Type III Segmented
40,000-Lumen Clear Lamp

Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	3.00	1.50	0.75	0.30	0.15
25'	2.00	1.00	0.50	0.20	0.10
30'	1.38	0.69	0.34	0.13	0.06

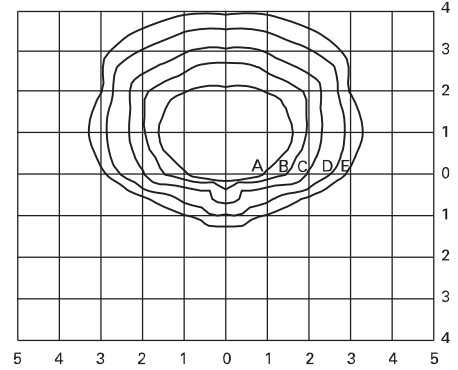


TRU40MXX4S
400-Watt MH Type IV Segmented
40,000-Lumen Clear Lamp

Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	3.00	1.50	0.75	0.30	0.15
25'	2.00	1.00	0.50	0.20	0.10
30'	1.38	0.69	0.34	0.13	0.06



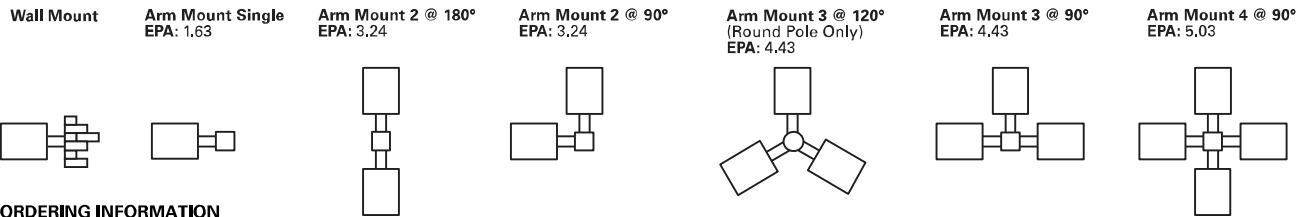
TRU40MXXSL
400-Watt MH Spill Light Eliminator
40,000-Lumen Clear Lamp

Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
20'	3.00	1.50	0.75	0.30	0.15
25'	2.00	1.00	0.50	0.20	0.10
30'	1.38	0.69	0.34	0.13	0.06

MOUNTING CONFIGURATIONS



ORDERING INFORMATION

Sample Number: TRU40MWWSLAP



Product Family ¹
TRU=Tribute (Arm Included)

Lamp Wattage ²
Pulse Start Metal Halide

- 10=100W
- 15=150W
- 17=175W
- 25=250W
- 32=320W
- 35=350W
- 40=400W³
- High Pressure Sodium
- 10=100W
- 15=150W
- 20=200W
- 25=250W
- 40=400W
- 24=250/400W wired 250W
- 42=400/250W wired 400W

M (Probe Start) ⁴

- 17=175W
- 25=250W
- 40=400W³

Lamp Type

- P=Pulse Start Metal Halide
- S=High Pressure Sodium
- M=Metal Halide

Ballast Type

- H=Reac./HPF
- K=10KV CWA
- N=Hi.Reac./NPF
- P=Hi. Reac./HPF
- R=Hi.Reac./NPF
- W=CWA

Voltage

- 2=120V
- 0=208V
- 4=240V
- 7=277V
- 8=480V
- 9=347V
- W=Multi-Tap wired 120V
- N=Multi-Tap wired 277V

Distribution

- 2F=Type II Formed
- 2S=Type II Segmented
- 3F=Type III Formed
- 3S=Type III Segmented
- 4F=Type IV Formed
- 4S=Type IV Segmented
- 5F=Type V Formed
- 5S=Type V Segmented
- SL=Spill Light Eliminator

Color

- AP=Grey
- BZ=Bronze
- BK=Black
- DP=Dark Platinum
- GM=Graphite Metallic
- WH=White

Options

- CEC=California Title 20 Compliant Ballast (Applies to 175-400W Pulse Start MH only)
- 1=Single Fused, Internally Mounted⁵ (120 or 277V)
- 2=Double Fuse, (208, 240, or⁵ 480V)
- 4=NEMA Twistlock Photocontrol Receptacle
- P=Button Photocontrol
- H=Plug-In Starter Receptacle
- T=Terminal Block
- U=U.L. Listed
- Q=Quartz Restrike (Hot Restrike⁶ Only)
- EM=Quartz Restrike with Delay⁶ (Also Strikes at Cold Start)
- TM=Trunnion Mount
- PT=Electrical Power Tray
- S=1 1/4" - 2 3/8" Internal Mast Arm Mount
- LA=Less Arm (Order Mounting Separately)
- K=Level Indicator
- B=House Side Shield⁷

Accessories ⁸

- MA1201=Direct Wall Mount Kit1
- MA1218=Direct Mount for Pole1
- MA1219=Wall Mounting Plate
- QA1090=Adjustable Slipfitter Arm for Tenon Mount 2 3/8" O.D.
- TRVS=Field Installed Vandal Shields⁹
- MA1221=External House Side Shield Kit [EPA=0.38]
- MA1222=Internal House Side Shield Kit for 2S/3S
- MA1223=Internal House Side Shield Kit for 4S
- MA1224=Internal House Side Shield Kit for 2F/3F
- MA1225=Internal House Side Shield Kit for 4F
- MA1010=Single Tenon Adapter for 3 1/2" O.D. Tenon
- MA1011=2 @ 180 Degrees Tenon Adapter for 3 1/2" O.D. Tenon
- MA1012=3 @ 120 Degrees Tenon Adapter for 3 1/2" O.D. Tenon
- MA1013=4 @ 90 Degrees Tenon Adapter for 3 1/2" O.D. Tenon
- MA1014=2 @ 90 Degrees Tenon Adapter for 3 1/2" O.D. Tenon
- MA1015=2 @ 120 Degrees Tenon Adapter for 3 1/2" O.D. Tenon
- MA1016=3 @ 90 Degrees Tenon Adapter for 3 1/2" O.D. Tenon
- MA1017=Single Tenon Adapter for 2 3/8" O.D. Tenon
- MA1818=2 @ 180 Degrees Tenon Adapter for 2 3/8" O.D. Tenon
- MA1019=3 @ 120 Degrees Tenon Adapter for 2 3/8" O.D. Tenon
- MA1045=4 @ 90 Degrees Tenon Adapter for 2 3/8" O.D. Tenon
- MA1048=2 @ 90 Degrees Tenon Adapter for 2 3/8" O.D. Tenon
- MA10149=3 @ 90 Degrees Tenon Adapter for 2 3/8" O.D. Tenon
- OA/RA1016=Photoelectric Control 105-285V NEMA Type
- OA/RA1027=Photoelectric Control 480V NEMA Type
- OA/RA1201=Photoelectric Control 347V NEMA Type
- OA/RA1013=Shorting Cap

DESCRIPTION

The Tribute is the most versatile, functionally designed, universally adaptable outdoor luminaire available. The Tribute brings outstanding performance to walkways, parking lots, roadways, loading docks, building areas, and any security lighting application. U.L. listed and CSA certified for wet locations. IP55 Rating.

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

Construction

Rugged one-piece die-cast aluminum housing and door frame. One-piece silicone gasket protects the optical chamber from performance degrading contaminants. One (1) stainless spring latch and two (2) stainless hinges allow toolless opening and removal of door frame.

Electrical

Ballast and related electrical componentry are hard mounted to die-cast housing for optimal heat transfer and operating efficiency. Optional swing-down galvanized steel power tray with integral handle and quick disconnects allows tray to be completely removed from housing providing ample room for fixture installation and maintenance.

Reflector

Choice of nine (9) high efficiency optical distributions, including five (5) segmented optical systems constructed of premium 95% reflective anodized aluminum sheet. Optical segments are rigidly mounted inside a thick gauge aluminum housing for superior protection. All segment faces are clean of rivet heads, tabs or other means of attachment which may cause streaking in the light distribution. Optical modules are field rotatable in 90° increments and offered standard with mogul-base lampholders for High Pressure Sodium and 200-400W Metal Halide assemblies or medium-base lampholders for Metal Halide 150W and below.

Mounting

Extruded 8" aluminum arm features internal bolt guides for easy positioning of fixture during installation to pole or wall surface. Standard single carton packaging of housing, square pole arm and round pole adapter allow for consolidated product arrival to site. Optional internal mast arm mount accepts a 1 1/4" to 2 3/8" O.D. horizontal tenon, while 4-bolt clamping mechanism secures fixture. Cast-in leveling guides provide +/-5° vertical leveling adjustment.

Finish

Housing and arm finished in a 5 stage premium TGIC bronze polyester powder coat paint. Optional colors include black, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.



TRU TRIBUTE

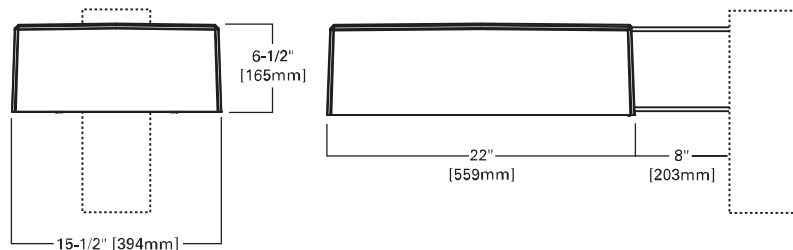
70 - 400W

- Pulse Start Metal Halide
- High Pressure Sodium
- Metal Halide
- Super Metal Halide

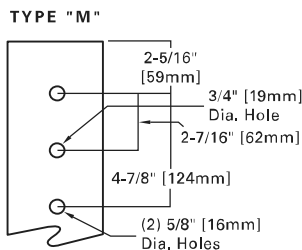
AREA LUMINAIRE



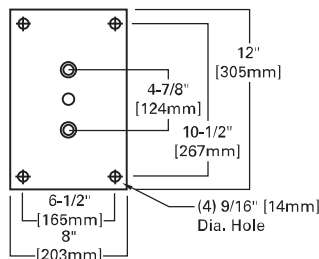
DIMENSIONS



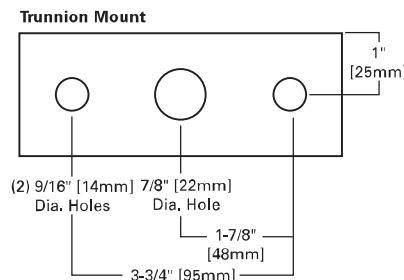
ARM DRILLING



WALL DRILLING



TRUNNION DRILLING



CERTIFICATIONS

- IP55 Rated
- UL Listed for Wet Locations
- CSA Certified for Wet Locations

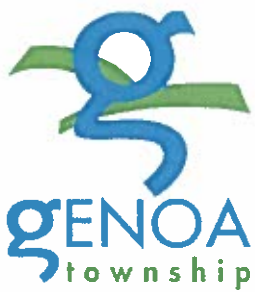
EPA

- Effective Projected Area:**
- Without Arm 1.19
- With Arm 1.63

SHIPPING DATA

- Approximate Net Weight:**
- 39 lbs. (18 kgs.)





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

MEMORANDUM

TO: Honorable Board of Trustees

FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director

DATE: August 28, 2013

RE: Rondeau Office Building- Special Land Use & Site Plan Approval

MANAGER'S REVIEW: 

I have reviewed the special land use request, revised site plan and environmental impact assessment for proposed grading within the natural features setback and construction of a new 2,368 sq. ft. dental office building for Dr. Brad Rondeau located on the north side of Grand River Avenue east of Kellogg Road. This project was recommended for approval by the Planning Commission on August 26th, 2013. My review of the revised submittal was focused on compliance with the outstanding items discussed at the Planning Commission and my recommendation is as follows:

Special Land Use Permit: I recommend approval of the Special Land Use for grading within the natural features setback with the following conditions:

1. The area within the setback will be restored and maintained in a natural undisturbed state following construction.
2. A recorded shared access easement shall be approved by the Township Attorney and provided prior to issuance of the land use permit. This should be a reciprocal ingress/egress easement that would require connection and use of the Dr. Bonine driveway in the event a higher traffic generating user occupied the Dr. Rondeau property.

This Special Land Use is recommended for approval because it complies with the standards provided in Sections 19.03.

Environmental Impact Assessment: I recommend approval of the impact assessment dated July 30, 2013 subject to the following:

1. The REU data in Item G will be corrected to reflect medical office.
2. A statement will be added that the grading in the natural features setback will be restored and maintained in a natural state post construction.
3. Appendix D will be added under Item L in regard to parking.

SUPERVISOR

Gary T. McCrie

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

MANAGER

Michael C. Archinal

TRUSTEES

H. James Mortensen

Jean W. Ledford

Todd W. Smith

Linda Rowell

Site Plan: I recommend approval of the site plan with the following conditions:

1. The conditions of the Township Engineer in the letter dated August 5, 2013 and the Brighton Fire Department letter of August 6, 2013 will be complied with.
2. Signage, as proposed, is not accepted by the Planning Commission and will be consistent with the ordinance or a variance will be sought from the Zoning Board of Appeals;
3. The proposed cross access easement with Dr. Bonine will be added to the site plan and an approved recorded document will be provided prior to issuance of the Land Use Permit.

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

Sincerely,

A handwritten signature in blue ink that reads "Kelly VanMarter". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Kelly VanMarter
Assistant Township Manager/Community Development Director

PERMANENT EASEMENT FOR INGRESS AND EGRESS

This PERMANENT EASEMENT FOR INGRESS AND EGRESS is granted on _____, 2013, by and between Fredric L. Bonine and Shawn E. Bonine, husband and wife, whose address is 3216 Golf Club Road, Howell, Michigan 48843, hereinafter called "Grantor", and Brad Lee Rondeau, whose address is 2278 Wild Cherry, Howell, MI 48843, hereinafter called "Grantee" and Ervin C. Campbell and Jeanette B. Campbell, husband and wife and Peter M. Sadowski, a single man, whose address is 4250 N. A1A Apt 501, Fort Pierce, FL 34949 and 4025 Thompson Ct., Kewadin, MI 49648, respectively, hereinafter jointly called "Original Owners".

RECITALS

1. Prior to October 4, 1993, Original Owners were the fee title owners of the lands legally described in Exhibit "A" attached hereto (the "Bonine Parcel").
2. On October 4, 1993, the Original Owners executed a Warranty Deed conveying the Bonine Parcel to Fredric L. Bonine and Shawn E. Bonine, his wife subject to a non-exclusive easement for ingress and egress. Said Warranty Deed is recorded with the Livingston County Register of Deeds in Liber 1744 Page(s) 0878 - 0880 Livingston County Records.
3. No other property of record was benefitted by the easement referenced in the deed for the Bonine Parcel.
4. Prior to April 01, 2013, the Original Owners were the fee title owners of the lands legally described in Exhibit "B" attached hereto (the "Rondeau Parcel")
5. The Rondeau Parcel is immediately East of and adjacent to the Bonine Parcel.
6. On July 19, 1993 the Genoa Township Board of Trustees approved the site plan for construction of a dental office on the Bonine Parcel contingent upon a driveway easement being provided for the Rondeau Parcel being issued.
7. Said "driveway easement" or an easement for ingress and egress specifically dedicated to the Rondeau Parcel was never executed or recorded with the Livingston County Register of Deeds.

8. On April 01, 2013, Original Owners executed a Warranty Deed conveying the Rondeau Parcel to Brad Lee Rondeau. Said Warranty Deed is recorded with the Livingston County Register of Dees as Instrument number 2013R-09220, Livingston County Records.

9. The Grantors now desire to grant a permanent easement for ingress and egress over and across the Bonine Parcel benefitting the Rondeau Parcel.

10. The Original Owners are joining in this grant of Permanent Easement for Ingress and Egress to clarify that the reservation of the easement referenced in the deed for the Bonine Parcel was intended to benefit the Rondeau parcel. They also join to confirm that no other benefitted property exists with respect to the easement reference in the deed for the Bonine Parcel, and to confirm that they concur with the grant contained herein and have no further or remaining interest in the Bonine Parcel.

NOW THEREFORE, for good and valuable consideration the adequacy and sufficiency of which is acknowledged by the parties the parties agree as follows:

1. **Easements Granted.** Grantors grant for the use and benefit of the owners and occupiers of the Rondeau Parcel and their employees, agents, invitees, and customers an irrevocable non-exclusive easement for ingress and egress over the area of the Bonine Parcel described in the attached Exhibit C for driveway and pedestrian use, subject to the express terms of this agreement. (the area described in Exhibit C is referred to as the "Easement").

2. **Necessity of Use.** Grantor and Grantee acknowledge and agree that the Rondeau parcel currently has access to Grand River, and that Genoa Township is not currently requiring use of the Easement for the presently proposed Rondeau site plan, and that to the greatest extent possible the Grantee shall continue to access the Rondeau parcel directly without utilizing the Easement. The Easement, therefore, shall be used only if required by the applicable governmental authority due to a change in use or a more intensive use.

3. **Interest in real property.** This Easement stated in this Agreement is to benefit the Rondeau Parcel and to burden the Bonine Parcel. The Easement shall be deemed to be appurtenant to and run with the land of both the Rondeau Parcel and the Bonine Parcel.

4. **Maintenance.** Grantee acknowledges that Grantor has invested significant sums developing the Bonine Parcel, including the landscaping and driveway, and that there is currently a secured gate at the entrance to the driveway. In the event, the Rondeau must utilize the Easement, the Grantee or his successors shall bear all costs incurred to make any required changes to the driveway, including re-locating the gate, and shall repair and restore the property, including the landscaping to the condition prior to any work or construction. Thereafter, the owners of the Rondeau Parcel and the Bonine Parcel shall each bear one-half of the full cost of repairing and maintaining the Easement area. Each said party agrees that aesthetics are very

important to the parcels and agrees to keep the Easement area in a good state of repair so that normal access to and across the Easement for each Parcel is not impeded, and so that the aesthetics are preserved.

5. **Insurance.** The owner of each Parcel shall obtain liability insurance as part of its owner's policy for its Parcel to cover any liabilities which arise as a result of the use by the owner of the Parcel of the Easement and the Owner of the Rondeau Parcel's liability policy shall name the owner of the Bonine Parcel as an insured party for the owner of the Rondeau Parcel's use of the Easement.

6. **Indemnification.** The owner of the Rondeau Parcel agrees to indemnify and hold the owner of the Bonine Parcel harmless from any and all claims, debts, causes of actions, or judgments for any damage to property or injury to any person that may arise out of the owner of the Rondeau Parcel's actions within, use of, or around the Easement, by themselves, their agents, employees, representatives, and contractors. This provision shall survive the termination of this Agreement.

7. **Entire Agreement.** This Agreement and all exhibits constitute the entire agreement between the parties with respect to the subject matter of this Agreement, and all prior negotiations and agreements with respect to the Easements between the parties, whether written or oral, shall be of no further force and effect. This Agreement may be amended only by written agreement signed by the owners of both Parcels and Genoa Township. This document shall be recorded with the Livingston County Register of Deeds.

8. **Notices.** Any notices sent under this Easement shall be in writing and shall be sent by first-class mail to each of the parties' mailing address set forth above, provided that any party may change such address by written notice to the other parties.

9. **Governing Law.** This easement shall be governed by and interpreted in accordance with the laws of the State of Michigan. Venue for any action brought under this easement shall lie in Livingston County, Michigan.

10. **Severability.** If any term, covenant, or condition of this Agreement or the application of which to an party or circumstance shall be to any extent invalid or unenforceable, the remainder of this Agreement, or the application of such term, covenant, or condition to persons or circumstances other than those to which it is held invalid or unenforceable, shall be effective , and each term, covenant, or condition of this Agreement shall be valid and enforced to the fullest extent permitted by law.

11. **Time is of the essence.** Time shall be of the essence in the performance of this Agreement.

12. **Effective Date.** This Agreement shall be effective as of the day and year first above written.

IN WITNESS WHEREOF, the Parties hereto have hereunto set their hands and seals on the day and year as herein set forth.

Original Owners:

Ervin C. Campbell

Jeanette B. Campbell

STATE OF MICHIGAN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by Ervin C. Campbell and Jeanette B. Campbell, husband and wife.

Notary Public

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

Original Owner:

Peter M. Sadowski

STATE OF MICHIGAN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by Peter M. Sadowski, a single man.

_____, Notary Public
_____ County, Michigan
My commission expires: _____
Acting in: _____ County, Michigan

Grantors:

Frederic L. Bonine

Shawn E. Bonine

STATE OF MICHIGAN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by Frederic L. Bonine and Shawn E. Bonine, husband and wife.

_____, Notary Public
_____ County, Michigan
My commission expires: _____
Acting in: _____ County, Michigan

By execution of this easement, the Grantee accepts the conveyance of the easement subject to the terms herein stated.

Grantee

Brad Lee Rondeau

STATE OF MICHIGAN)
)SS
COUNTY OF LIVINGSTON)

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by Brad Lee Rondeau.

_____, Notary Public
_____ County, Michigan
My commission expires: _____
Acting in: _____ County, Michigan

Drafted by and when recorded return to:

Frank J. Mancuso, Jr., Esq.
722 E. Grand River Ave.
Brighton, Michigan 48116
(810) 225-3300

Exhibit A

Township of Genoa, County of Livingston, State of Michigan:

Part of the Northeast ¼ of Section 14, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northeast Corner of said Section 14; thence along the North line of said Section 14, S 89°55'20" W, 353.13 feet to the POINT OF BEGINNING of the Parcel to be described; thence S 01°47'33" W, 766.60 feet; thence N 69°57'02" W, 339.38 feet; thence S 06°18'35" E, 391.73 feet; thence along the North line of Grand River Avenue (100 foot wide Right-of-Way), N 69°57'00" W, 63.14 feet; thence continuing along the North line of said Grand River Avenue, West on an arc right, having a length of 14.99 feet, a radius of 4861.15 feet, a central angle of 00°10'36", and a long chord which bears N 69°51'38" W, 14.99 feet; thence N 06°18'35" W, 1017.93 feet; thence along the North line of said Section 14, N 89°55'20" E, 485.00 feet to the POINT OF BEGINNING; Containing 7.58 acres, more or less, and subject to the rights of the public over the existing Grand River Avenue. Also subject to any other easements or restrictions of record.

Exhibit B

That part of the Northeast ¼ of the Northeast ¼ of Section 14, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as: Commencing at the Northeast corner of said section; thence South 89 degrees West 353.13 feet; thence South 01 degree West 766.60 feet for the Point of Beginning; thence South 01 degree West 369.61 feet; thence North 69 degrees West 281.24 feet; thence North 06 degrees West 391.73 feet; thence South 69 degrees East 339.38 feet to the Point of Beginning.

Exhibit C

Part of the Northeast ¼ of Section 14, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northeast Corner of said Section 14; thence along the North line of said Section 14, S 89°55'20" W, 353.13 feet; thence S 01°47'33" W, 766.60 feet; thence N 69°57'02" W, 339.38 feet thence S 06°18'35" E, 291.73 feet, to the POINT OF BEGINNING of the 100 foot wide Easement for Ingress and Egress to be described; thence S 06°18'35"E, 100.00 feet; thence along the North line of Grand River Avenue (100 foot wide Right-of-Way), N 69°57'00" W, 63.14 feet; thence continuing along the North line of said Grand River Avenue, West on an arc right, having a length of 14.99 feet, a radius of 4861.15 feet, a central angle of 00°10'36", and a long chord which bears N 69°51'38" W, 14.99 feet; thence N 06°18'35" W, 100.00 feet; thence S 69°55'51" E, 78.14 feet, to the POINT OF BEGINNING.



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

MEMORANDUM

TO: Honorable Board of Trustees

FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director

DATE: August 28, 2013

RE: Rondeau Office Building- Special Land Use & Site Plan Approval

MANAGER'S REVIEW: 

I have reviewed the special land use request, revised site plan and environmental impact assessment for proposed grading within the natural features setback and construction of a new 2,368 sq. ft. dental office building for Dr. Brad Rondeau located on the north side of Grand River Avenue east of Kellogg Road. This project was recommended for approval by the Planning Commission on August 26th, 2013. My review of the revised submittal was focused on compliance with the outstanding items discussed at the Planning Commission and my recommendation is as follows:

Special Land Use Permit: I recommend approval of the Special Land Use for grading within the natural features setback with the following conditions:

1. The area within the setback will be restored and maintained in a natural undisturbed state following construction.
2. A recorded shared access easement shall be approved by the Township Attorney and provided prior to issuance of the land use permit. This should be a reciprocal ingress/egress easement that would require connection and use of the Dr. Bonine driveway in the event a higher traffic generating user occupied the Dr. Rondeau property.

This Special Land Use is recommended for approval because it complies with the standards provided in Sections 19.03.

Environmental Impact Assessment: I recommend approval of the impact assessment dated July 30, 2013 subject to the following:

1. The REU data in Item G will be corrected to reflect medical office.
2. A statement will be added that the grading in the natural features setback will be restored and maintained in a natural state post construction.
3. Appendix D will be added under Item L in regard to parking.

SUPERVISOR

Gary T. McCrie

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

MANAGER

Michael C. Archinal

TRUSTEES

H. James Mortensen

Jean W. Ledford

Todd W. Smith

Linda Rowell

Site Plan: I recommend approval of the site plan with the following conditions:

1. The conditions of the Township Engineer in the letter dated August 5, 2013 and the Brighton Fire Department letter of August 6, 2013 will be complied with.
2. Signage, as proposed, is not accepted by the Planning Commission and will be consistent with the ordinance or a variance will be sought from the Zoning Board of Appeals;
3. The proposed cross access easement with Dr. Bonine will be added to the site plan and an approved recorded document will be provided prior to issuance of the Land Use Permit.

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

Sincerely,

A handwritten signature in blue ink that reads "Kelly VanMarter". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Kelly VanMarter
Assistant Township Manager/Community Development Director

PERMANENT EASEMENT FOR INGRESS AND EGRESS

This PERMANENT EASEMENT FOR INGRESS AND EGRESS is granted on _____, 2013, by and between Fredric L. Bonine and Shawn E. Bonine, husband and wife, whose address is 3216 Golf Club Road, Howell, Michigan 48843, hereinafter called "Grantor", and Brad Lee Rondeau, whose address is 2278 Wild Cherry, Howell, MI 48843, hereinafter called "Grantee" and Ervin C. Campbell and Jeanette B. Campbell, husband and wife and Peter M. Sadowski, a single man, whose address is 4250 N. A1A Apt 501, Fort Pierce, FL 34949 and 4025 Thompson Ct., Kewadin, MI 49648, respectively, hereinafter jointly called "Original Owners".

RECITALS

1. Prior to October 4, 1993, Original Owners were the fee title owners of the lands legally described in Exhibit "A" attached hereto (the "Bonine Parcel").
2. On October 4, 1993, the Original Owners executed a Warranty Deed conveying the Bonine Parcel to Fredric L. Bonine and Shawn E. Bonine, his wife subject to a non-exclusive easement for ingress and egress. Said Warranty Deed is recorded with the Livingston County Register of Deeds in Liber 1744 Page(s) 0878 - 0880 Livingston County Records.
3. No other property of record was benefitted by the easement referenced in the deed for the Bonine Parcel.
4. Prior to April 01, 2013, the Original Owners were the fee title owners of the lands legally described in Exhibit "B" attached hereto (the "Rondeau Parcel")
5. The Rondeau Parcel is immediately East of and adjacent to the Bonine Parcel.
6. On July 19, 1993 the Genoa Township Board of Trustees approved the site plan for construction of a dental office on the Bonine Parcel contingent upon a driveway easement being provided for the Rondeau Parcel being issued.
7. Said "driveway easement" or an easement for ingress and egress specifically dedicated to the Rondeau Parcel was never executed or recorded with the Livingston County Register of Deeds.

8. On April 01, 2013, Original Owners executed a Warranty Deed conveying the Rondeau Parcel to Brad Lee Rondeau. Said Warranty Deed is recorded with the Livingston County Register of Dees as Instrument number 2013R-09220, Livingston County Records.

9. The Grantors now desire to grant a permanent easement for ingress and egress over and across the Bonine Parcel benefitting the Rondeau Parcel.

10. The Original Owners are joining in this grant of Permanent Easement for Ingress and Egress to clarify that the reservation of the easement referenced in the deed for the Bonine Parcel was intended to benefit the Rondeau parcel. They also join to confirm that no other benefitted property exists with respect to the easement reference in the deed for the Bonine Parcel, and to confirm that they concur with the grant contained herein and have no further or remaining interest in the Bonine Parcel.

NOW THEREFORE, for good and valuable consideration the adequacy and sufficiency of which is acknowledged by the parties the parties agree as follows:

1. **Easements Granted.** Grantors grant for the use and benefit of the owners and occupiers of the Rondeau Parcel and their employees, agents, invitees, and customers an irrevocable non-exclusive easement for ingress and egress over the area of the Bonine Parcel described in the attached Exhibit C for driveway and pedestrian use, subject to the express terms of this agreement. (the area described in Exhibit C is referred to as the "Easement").

2. **Necessity of Use.** Grantor and Grantee acknowledge and agree that the Rondeau parcel currently has access to Grand River, and that Genoa Township is not currently requiring use of the Easement for the presently proposed Rondeau site plan, and that to the greatest extent possible the Grantee shall continue to access the Rondeau parcel directly without utilizing the Easement. The Easement, therefore, shall be used only if required by the applicable governmental authority due to a change in use or a more intensive use.

3. **Interest in real property.** This Easement stated in this Agreement is to benefit the Rondeau Parcel and to burden the Bonine Parcel. The Easement shall be deemed to be appurtenant to and run with the land of both the Rondeau Parcel and the Bonine Parcel.

4. **Maintenance.** Grantee acknowledges that Grantor has invested significant sums developing the Bonine Parcel, including the landscaping and driveway, and that there is currently a secured gate at the entrance to the driveway. In the event, the Rondeau must utilize the Easement, the Grantee or his successors shall bear all costs incurred to make any required changes to the driveway, including re-locating the gate, and shall repair and restore the property, including the landscaping to the condition prior to any work or construction. Thereafter, the owners of the Rondeau Parcel and the Bonine Parcel shall each bear one-half of the full cost of repairing and maintaining the Easement area. Each said party agrees that aesthetics are very

important to the parcels and agrees to keep the Easement area in a good state of repair so that normal access to and across the Easement for each Parcel is not impeded, and so that the aesthetics are preserved.

5. **Insurance.** The owner of each Parcel shall obtain liability insurance as part of its owner's policy for its Parcel to cover any liabilities which arise as a result of the use by the owner of the Parcel of the Easement and the Owner of the Rondeau Parcel's liability policy shall name the owner of the Bonine Parcel as an insured party for the owner of the Rondeau Parcel's use of the Easement.

6. **Indemnification.** The owner of the Rondeau Parcel agrees to indemnify and hold the owner of the Bonine Parcel harmless from any and all claims, debts, causes of actions, or judgments for any damage to property or injury to any person that may arise out of the owner of the Rondeau Parcel's actions within, use of, or around the Easement, by themselves, their agents, employees, representatives, and contractors. This provision shall survive the termination of this Agreement.

7. **Entire Agreement.** This Agreement and all exhibits constitute the entire agreement between the parties with respect to the subject matter of this Agreement, and all prior negotiations and agreements with respect to the Easements between the parties, whether written or oral, shall be of no further force and effect. This Agreement may be amended only by written agreement signed by the owners of both Parcels and Genoa Township. This document shall be recorded with the Livingston County Register of Deeds.

8. **Notices.** Any notices sent under this Easement shall be in writing and shall be sent by first-class mail to each of the parties' mailing address set forth above, provided that any party may change such address by written notice to the other parties.

9. **Governing Law.** This easement shall be governed by and interpreted in accordance with the laws of the State of Michigan. Venue for any action brought under this easement shall lie in Livingston County, Michigan.

10. **Severability.** If any term, covenant, or condition of this Agreement or the application of which to an party or circumstance shall be to any extent invalid or unenforceable, the remainder of this Agreement, or the application of such term, covenant, or condition to persons or circumstances other than those to which it is held invalid or unenforceable, shall be effective , and each term, covenant, or condition of this Agreement shall be valid and enforced to the fullest extent permitted by law.

11. **Time is of the essence.** Time shall be of the essence in the performance of this Agreement.

12. **Effective Date.** This Agreement shall be effective as of the day and year first above written.

IN WITNESS WHEREOF, the Parties hereto have hereunto set their hands and seals on the day and year as herein set forth.

Original Owners:

Ervin C. Campbell

Jeanette B. Campbell

STATE OF MICHIGAN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by Ervin C. Campbell and Jeanette B. Campbell, husband and wife.

Notary Public

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

Original Owner:

Peter M. Sadowski

STATE OF MICHIGAN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by Peter M. Sadowski, a single man.

_____, Notary Public
_____ County, Michigan
My commission expires: _____
Acting in: _____ County, Michigan

Grantors:

Frederic L. Bonine

Shawn E. Bonine

STATE OF MICHIGAN)
)SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by Frederic L. Bonine and Shawn E. Bonine, husband and wife.

_____, Notary Public
_____ County, Michigan
My commission expires: _____
Acting in: _____ County, Michigan

By execution of this easement, the Grantee accepts the conveyance of the easement subject to the terms herein stated.

Grantee

Brad Lee Rondeau

STATE OF MICHIGAN)
)SS
COUNTY OF LIVINGSTON)

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by Brad Lee Rondeau.

_____, Notary Public
_____ County, Michigan
My commission expires: _____
Acting in: _____ County, Michigan

Drafted by and when recorded return to:

Frank J. Mancuso, Jr., Esq.
722 E. Grand River Ave.
Brighton, Michigan 48116
(810) 225-3300

Exhibit A

Township of Genoa, County of Livingston, State of Michigan:

Part of the Northeast ¼ of Section 14, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northeast Corner of said Section 14; thence along the North line of said Section 14, S 89°55'20" W, 353.13 feet to the POINT OF BEGINNING of the Parcel to be described; thence S 01°47'33" W, 766.60 feet; thence N 69°57'02" W, 339.38 feet; thence S 06°18'35" E, 391.73 feet; thence along the North line of Grand River Avenue (100 foot wide Right-of-Way), N 69°57'00" W, 63.14 feet; thence continuing along the North line of said Grand River Avenue, West on an arc right, having a length of 14.99 feet, a radius of 4861.15 feet, a central angle of 00°10'36", and a long chord which bears N 69°51'38" W, 14.99 feet; thence N 06°18'35" W, 1017.93 feet; thence along the North line of said Section 14, N 89°55'20" E, 485.00 feet to the POINT OF BEGINNING; Containing 7.58 acres, more or less, and subject to the rights of the public over the existing Grand River Avenue. Also subject to any other easements or restrictions of record.

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That part of the Northeast ¼ of the Northeast ¼ of Section 14, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as: Commencing at the Northeast corner of said section; thence South 89 degrees West 353.13 feet; thence South 01 degree West 766.60 feet for the Point of Beginning; thence South 01 degree West 369.61 feet; thence North 69 degrees West 281.24 feet; thence North 06 degrees West 391.73 feet; thence South 69 degrees East 339.38 feet to the Point of Beginning.

Exhibit C

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**GENOA TOWNSHIP
APPLICATION FOR SITE PLAN REVIEW**

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS*: DR. BRAD RONDEAU, 7600 GRAND RIVER

OWNER'S NAME & ADDRESS: SUITE 295, BRIGHTON MI 48114

SITE ADDRESS: _____ PARCEL #(s): 4711-14-200-021

APPLICANT PHONE: (810) 225-8338 OWNER PHONE: () _____

LOCATION AND BRIEF DESCRIPTION OF SITE:

NORTH SIDE OF GRAND RIVER, JUST EAST OF
KELLOGG ROAD

BRIEF STATEMENT OF PROPOSED USE:

DENTAL OFFICE

THE FOLLOWING BUILDINGS ARE PROPOSED:

2,368 SQUARE FOOT BUILDING WITH FULL BASEMENT

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.

X BY: 

ADDRESS: 7600 GRAND RIVER SUITE 295, BRIGHTON MI 48114


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

Contact Information - Review Letters and Correspondence shall be forwarded to the following:
1.) Scott Tausignant of Boss Engineering at 517-548-1070
Name Business Affiliation Fax No

Scott Tausignant @ bosseng.com

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.

X SIGNATURE:  DATE: 7/10/13
 PRINT NAME: BRAD RONDEAU PHONE: 810-225-8338
 ADDRESS: 7600 GRAND RIVER, SUITE 295, BRIGHTON MI 48114

JUL 16 2013

**APPLICATION FOR SPECIAL LAND USE
GENOA TOWNSHIP**

APPLICANT NAME* & ADDRESS: Dr. Brad Rondeau, 7600 Grand River Ave., Suite 295, Brighton, MI 48114

OWNER NAME* & ADDRESS: Dr. Brad Rondeau, 7600 Grand River Ave., Suite 295, Brighton, MI 48114

SITE ADDRESS: _____ PARCEL #(s): 4711-14-200-021

APPLICANT PHONE: (810) 225-8338 OWNER PHONE: (810) 225-8338

Location and brief description of site and surroundings:

The area of the proposed development is a vacant lot. To the east of the vacant lot is the Rollerama Skating Complex, to the north is a dental office and to the west are retail businesses.

Proposed Use:
Dental office

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

- a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The proposed facility will be providing dental services to the Brighton and Howell areas.

- b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

The architectural and site design have been created to minimize any impacts on the wetland that is on-site. The proposed facility is surrounded by neighborhood services.

- c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

The facility has direct access onto Grand River. A detention basin will be constructed to service the storm water runoff from the drainage area. The building will be served by public water and sewer. The primary use of the facility places little burden on roads, police and fire protection.

- d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

Minimal traffic impact. No hazardous substances.

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)?
If so, describe how the criteria are met.

Sec. 3.03.02 - Nothing.

Sec. 7.02.02 - Nothing.

Sec. 8.02.02 - Nothing.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Dr. Brad Rondeau STATES THAT THEY ARE THE FREE OWNER* OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: Grand River Dental

ADDRESS: 7600 Grand River Ave., Suite 295 Brighton, MI, 48114

*Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

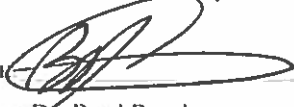
Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1) Scott Tousignant of Boss Engineering at (517) 548-1670
Name Business Affiliation Fax No.

Note: This application must be accompanied by a site plan review application and the associated site plan review submittal requirements. (The Zoning Administrator may allow a less detailed sketch plan for a change in use.)

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: 7-16-17
PRINT NAME: Dr. Brad Rondeau PHONE: (810) 225-8338
ADDRESS: 7600 Grand River Ave., Suite 295 Brighton, MI, 48114

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
AUGUST 12, 2013
6:30 P.M.**

MINUTES

CALL TO ORDER: The meeting of the Genoa Charter Township Planning Commission was called to order at 6:31 p.m. Present were Chairman Doug Brown, Barbara Figurski, James Mortensen, Dean Tengel, Diana Lowe, John McManus, and Eric Rauch. Also present were Assistant Township Manager, Kelly VanMarter, and Brian Borden of LSL Planning.

PLEDGE OF ALLEGIANCE: The Pledge of Allegiance was recited.

APPROVAL OF AGENDA: **Motion** by James Mortensen and supported by Barbara Figurski to approve the agenda as proposed. **Motion carried unanimously.**

CALL TO THE PUBLIC: Chairman Brown opened the call to the public at 6:32 p.m. with no response.

OPEN PUBLIC HEARING #1... Review of a special use application, impact assessment and site plan for proposed grading within the natural features setback and construction of a new 2,368 square foot office building located on the north side of Grand River Avenue, east of Kellogg Road, Sec. 14, petitioned by Dr. Brad Rondeau.

Dr. Rondeau appeared before the Planning Commission with Thom Dumond of Boss Engineering and Mike O'Leary of Lindhout Associates. There are 2.5 acres on the parcel with more than 1 acre of property being developable. It's a tricky site. The petitioner would like to allow for future expansion. There is an access drive off of Grand River with detention to the east. The petitioner's interest in theater has driven the design of the building.

The south elevation has a lot of glass. The grade drops on the west side of the building. There is a full basement. The dumpster enclosure will be in the back recess rather than an enclosure built around it.

Dean Tengel inquired as to the materials. It will be an earthy red tone of siding and perhaps some brick – 75% siding and 25% brick. The petitioner did not bring samples of the materials for the Commission to review. They were hoping the 3D computer model presented this evening would suffice. The brick will be partial on the east/west elevations. The petitioner can provide samples to the Township if required. Rooftop screening is not necessary because there is nothing that requires screening. The floor plan was discussed, as well.

Chairman Brown asked for the reason of grading. The corner of the building is at the 25' setback line. In order to fill that, they had to grade that area. The outlet for the detention basin will also be cutting into the setback area, but that area will be restored.

Brian Borden suggested there should be no issues under general special land use standards because the setbacks will be restored. The petitioner proposes to exceed the threshold for parking. This will require approval. He believes that it is excessive by definition only. There are 12 spaces required and they are requesting 17. He believes the requested parking is justified.

Brian Borden discussed the fact that the proposed driveway does not meet the access standards contained in the ordinance. The petitioner cannot meet the technical standards due to space. If the petitioner obtains a county permit, this can be reviewed. The parcel to the west has an easement over the driveway to allow for potential shared access to this site. This information was only provided to the petitioner a few hours ago. The petition has less than the minimum required distance between the proposed drive and those to either side – 133 from the east and 223 feet to the west. Brian Borden suggested it should be over 300 feet. Jim Mortensen and many other Commissioners feel that the petitioner should explore a shared drive with Dr. Bonine. The petitioner has been dealing with severe time constraints and feels that this is a hardship because of this knowledge coming to the petitioner at the last minute. The petitioner indicated that the easement was not on any deed or paperwork when he purchased the property. The safety factor is a concern to the Commission due to the location of the entrance to the Rollerama site 133 feet to the east of the proposed driveway.

Eric Rauch asked the petitioner to elaborate on any proposed future expansion. The petitioner is hopeful that at some point a partner will be brought in to assist. This would increase the building and parking toward the west. The petitioner would prefer not to expand into the basement because that would require an elevator be installed. Dean Tengel asked why the petitioner had not realized there would be a problem with the driveway placement. Dean Tengel indicated that he is not comfortable trying to push this through due to the petitioner's time constraints.

Mike Evans from the Brighton Fire Department addressed the Commission. He believes it would be dangerous to back out of this property onto Grand River and that is why the requirement for a turn around with a 150 driveway is in place. Mike Evans indicated that it would be acceptable to set up some sort of turnaround by going through Dr. Bonine's driveway. This would have to be maintained all year. Mike Evans feels that the current plan is close enough to meet the intent of the code. If the driveway is shared with Dr. Bonine, a turnaround would be required. Various alternatives for the placement of the driveway were discussed. Brian Borden explained the effect of having driveways too close to each other along Grand River. It's going to be dangerous for traffic.

There was discussion whether the building could be moved to the west and parking placed to the east. The petitioner was not interested in this alternative. The petitioner is willing to center the driveway between the driveways to the east and west. Dean Tengel is concerned about approving a plan where the driveway does not fit within the ordinance.

Chairman Brown asked why the petitioner dropped from 21 to 17 parking spaces between the two submittals. There are a total of four employees currently. It is hoped that a partner and second hygienist would be added within five years.

REU's were discussed. The petitioner has referred to himself as a medical office and a business office. The petitioner will meet with Township staff to work on this designation and the REU's for the same.

Barbara Figurski asked about the projecting wall sign. Brian Borden indicated it is marquis style and not permitted. The petitioner will be seeking a variance for this. The sign may be considered two sign spaces. Calculations will have to be made. The angle only allows the sign to extend 2' from the building at the farthest point.

Brian Borden discussed the fact that there is no dedicated load space. One isn't needed given the nature of the business.

Kelly VanMarter reminds the petitioner that although he has low windows in the back of the building, he may not manicure that area because of the natural features setback that must be maintained.

Chairman Brown asked if anyone from the public wishes to address the Planning Commission regarding this project. No one responded.

Motion by Jim Mortensen to table this item and reschedule it to a date of August 26. Support by Barbara Figurski. **Motion carried unanimously.**

Planning Commission disposition of petition

- A. Recommendation of Special Use.
- B. Recommendation of Environmental Impact Assessment.
- C. Recommendation of Site Plan.

OPEN PUBLIC HEARING #2... Review of a special use application, impact assessment and site plan for proposed outdoor storage and a 22,000 square foot addition of a manufacturing facility located at 1326 Grand Oaks Drive, Howell MI 48843, petitioned by Michigan Rod Products, Inc.

John Asselin from Flint, Michigan is the associate architect on this petition. He gave a brief overview of the proposed plan to the Planning Commission. The proposed addition is 22,000 square feet. It would also be necessary to increase parking. They want to bank a parking area at this time that would be paved in the future if needed to avoid water runoff issues at this point.

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION SPECIAL MEETING
PUBLIC HEARING
AUGUST 26, 2013
6:30 P.M.
MINUTES**

CALL TO ORDER: The meeting of the Genoa Charter Township Planning Commission was called to order at 6:30 p.m. Present were Chairman Doug Brown, Barbara Figurski, James Mortensen, Dean Tengel, John McManus and Eric Rauch. Also present were Assistant Township Manager, Kelly VanMarter and Gary Markstrom of TetraTech.

PLEDGE OF ALLEGIANCE: The Pledge of Allegiance was recited.

APPROVAL OF AGENDA: **Motion** by Barbara Figurski to approve the agenda as proposed. The motion was supported John McManus. **Motion carried unanimously.**

CALL TO THE PUBLIC: Chairman Brown made a call to the public at 6:33 p.m. No one wished to address the Planning Commission.

OPEN PUBLIC HEARING #1... Review of a special use application, impact assessment and site plan for proposed grading within the natural features setback and construction of a new 2,368 square foot office building located on the north side of Grand River Avenue, east of Kellogg Road, Sec. 14, petitioned by Dr. Brad Rondeau.

Piet Lindhout of Lindhout & Associates addressed the Planning Commission. Mr. Lindhout indicated that Dr. Bonine is agreeable to an easement. It is being drafted and the modifications have been discussed. Kelly VanMarter confirmed that the Township Attorney drafted the easement and it is progressing toward approval.

James Mortensen voiced his concern about the traffic flow issues. The easement will be shared ingress/egress. He supports that.

Mr. Lindhout indicated that they do not disagree with the Township Engineer's letter as it relates to REU's and parking. The environmental impact assessment should be changed to reflect that it's a medical office before it goes to the Township Board.

Planning Commission disposition of petition

- A. Recommendation of Special Use.
- B. Recommendation of Environmental Impact Assessment.

C. Recommendation of Site Plan.

Motion by James Mortensen to recommend to the Township Board approval of the special use permit. This will permit grading into the setback area of the natural feature and will require restoration to its original condition following the construction. This is consistent with special land use standards in article 19 of the ordinance and will be condition upon completion of an ingress/egress easement with the property to the west subject to the agreement of the Township Attorney and recorded prior to issuance of the land use permit.

Support by Dean Tengel. 5 in favor of motion; 1 against motion. **Motion carried.**

Motion by Barbara Figurski to recommend to the Township Board approval of the environmental impact assessment, subject to:

1. The REU's in item G shall be corrected;
2. The grading in the buffer shall be restored to a natural state;
3. Appendix D will be added under line item L in regard to parking.

Support by Dean Tengel. 5 in favor of motion; 1 against motion. **Motion carried.**

Motion by James Mortensen to recommend to the Township Board approval of the site plan, subject to:

1. Compliance with the issues raised by the Township Engineer in his letter of August 5, 2013 which reference the REU's and the Brighton Fire Department letter of August 6, 2013;
2. The building materials, including the hardy board or vinyl reviewed this evening by the Planning Commission are acceptable and become Township property;
3. The 17 parking spaces proposed are acceptable;
4. The loading/unloading will be limited to curb carts;
5. Signage, as proposed, is not accepted by the Planning Commission and will be consistent with the ordinance or a variance will be sought from the Zoning Board of Appeals;
6. The proposed easement will be added to the site plan.

Support by John McManus. 5 in favor of motion; 1 against motion. **Motion carried.**

OPEN PUBLIC HEARING #2... Consideration of the Capital Improvement Plan.

Christina Galinac and Kelly VanMarter addressed the Planning Commission regarding the proposed capital improvement plan. Any questions regarding the roads on the HRC chart should be directed to Mike Archinal.

Chairman Brown voiced his concern about income streams and adjusting the CIP. Kelly VanMarter indicated that the CIP should be adjusted annually.



LSL Planning, Inc.

Community Planning Consultants

August 22, 2013

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
Subject:	Dr. Rondeau Dental Office – Driveway placement
Location:	Grand River Avenue – north side of Grand River, east of Kellogg Road
Zoning:	OSD Office Service District

Dear Commissioners:

At the Township’s request, we have reviewed the supplemental information provided by the applicant. The new material includes a letter from the project architect and attachments related to the proposed driveway.

As you may recall, the proposed driveway was a major point of discussion at the Commission’s August 12th meeting. The primary concerns were related to the deficient spacing between driveways and the potential for a shared driveway with the existing drive to the west (Dr. Bonine’s property).

The Township’s access management standards (Section 15.06) require a minimum spacing of 330 feet between commercial driveways along roadways with speed limits of 50 MPH or above. As proposed, the driveway provides separations of approximately 220 feet from Dr. Bonine’s driveway (to the west) and 140 feet from the Rollerama driveway (to the east).

Given a property width of 281 feet and the placement of existing driveways, there is simply not enough room for compliance with the requirements of the Zoning Ordinance. As such, the Commission directed the applicant to investigate sharing access with Dr. Bonine’s site via the existing driveway to the west, which was to have had a shared access easement placed over it as a condition of the original site plan approval.

As is described in the letter from Lindhout Associates, use of a shared driveway was investigated and discussed with Township staff and the Township Engineer and determined to be unreasonable given a host of circumstances. It is further our understanding that discussions also took place with the Livingston County Road Commission to develop the best possible solution to the concerns presented.

Ultimately, it was determined that the original placement was deemed the best alternative and it is our understanding that staff, the Engineer and Road Commission are satisfied with this approach. Based on the information provided and the support of those with more expertise in this area, we concur with the proposal.

Section 15.06.02(d) provides the Commission with the authority to reduce the spacing requirement where it can be demonstrated that pre-existing conditions are present that prohibit strict compliance. While this section specifically references an “expansion, alteration or redesign of an existing development,” we believe the intent is applicable to this situation.

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

Sincerely,

LSL PLANNING, INC.

Brian V. Borden, AICP
Senior Planner



August 21, 2013

Genoa Township Planning Commission
2911 Dorr Road
Brighton, MI 48116

Re: Site Plan Approval for Grand River Dental-Dr. Brad Rondeau

Dear Commission Members,

As discussed at the Planning Commission meeting held on August 12, 2013 the connection to the existing drive on the west side of the Dr. Brad Rondeau site has been investigated fully. We have reviewed the impacts of the shared access drive, discussed it with Dr. Frederick Bonine and our client, and met with Genoa Township Planning Staff in our efforts to seek the best possible solution for the project site plan.

We reviewed the Genoa Township Zoning Ordinance, Section 15.06 ACCESS MANAGEMENT, section to gain an understanding of the objectives of the shared access requirements. We agree that in most commercial zoning districts common points of access provide safe, effective site plan solutions. However, we have found that in this particular case, there are enough pre-existing conditions that merit modification of the driveway spacing standards. This is permitted under Section 15.06.02(d).

The pre-existing conditions for this specific site plan are as follows:

1. Existing soils indicate a large amount of fill on the site. A review of the soil boring log shows the better soils are to the east and more fill to the west. Along Grand River, there was 6.5 feet of fill to the west, and 1.5 feet of fill at the east. Along the center of the building area, there was 11.5 feet of fill to the west and 5.5 feet of fill to the east. This existing condition resulted in our decision to move our proposed building to the east. See Soil Boring Log attached for reference.
2. The existing wetlands on the site cause a taper of usable land. The eastern portion of the site is less impacted by the wetlands and far more developable. Please refer to the site plan to see the lesser depth to the west.
3. The existing International Fire Code requires that any driveway longer than 150 feet provide a turnaround at any dead end. Appendix D illustrates the various options available to the site designer to accommodate a fire truck turnaround. A 96 foot diameter cul-de-sac, a 120 foot wide hammerhead, a 60 foot (120+ total) "Y", and a 70 foot alternative hammerhead are shown. Given our existing site dimensions and existing wetlands, there is very little room to build on this site. This tight site would be completely consumed by the fire truck turnaround of either design. Without the turnaround, the only other option is another curb cut on Grand River with a emergency access gate across the drive. This would cause a great deal of traffic concerns as people tried to enter the site before seeing the gate. Appendix D is attached.
4. The existing oral surgery office and the proposed dental office are very low traffic generators. Using the "Bible" of traffic planning, *Trip Generation*, by the Institute of Transportation Engineers, we note that each building's traffic would be quite small. For employees, the week day traffic data starts at either 30 or 10 employees. This is more than either practice typically has on site. The charts for total traffic generation start at 10,000 s.f. buildings. Dr. Bonine is 3,770 s.f. and Dr. Rondeau is 2,368 s.f. The traffic counts generated by the 2 buildings (existing and proposed) will be quite minimal and nowhere near that of an active retail center or similar commercial activity. Pages from the manual are attached.

Our Mission

Integrity

in architecture and design
in client relationships
in employee relationships
in community relationships

advancement

in all these efforts

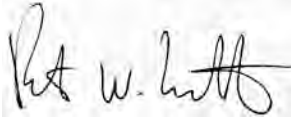
5. The pre-existing conditions at Dr. Bonine's facility are substantial. Please refer to the attached photographs. There is a handsome sign, a discrete security gate, and a huge amount of mature landscaping that would be destroyed by the potential shared drive. Further, the pre-existing driveway does not meet current County standards and would need to be re-constructed. There is also a detrimental impact on Dr. Bonine's pre-existing practice, as he does not wish to have other area dentist stop referring oral surgery patients to him because it appears he's in business with Dr. Rondeau.

Our site designs included serious attempts at the shared access drive. In each case the result was either a dangerous gated access to Grand River, or a very poorly designed site plan that destroyed one of the prettiest sections along Grand River in the Township. After reviewing these designs with Staff, it was determined that the best solution was to leave the drive location as proposed and to consult with the Township Engineer as to the best design of the curb cut.

We discussed the plan with Gary Markstrom. He visited the site and once again reviewed our plan. His recommendation was to avoid the use of a "porkchop" curb cut detail and to limit the access drive to 2 cars. He suggested a 22 foot wide drive. This is in conflict with the County minimum requirement of 30 ft. that was shown on our plan. The County was contacted to determine if we had any option available to reduce the width. Their response negative so, our original plan has been resubmitted for your review and action.

We are available to discuss this issue in more detail prior to the scheduled meeting on August 26, 2013. Please call me at any time. (810) 599-6082 (cell)

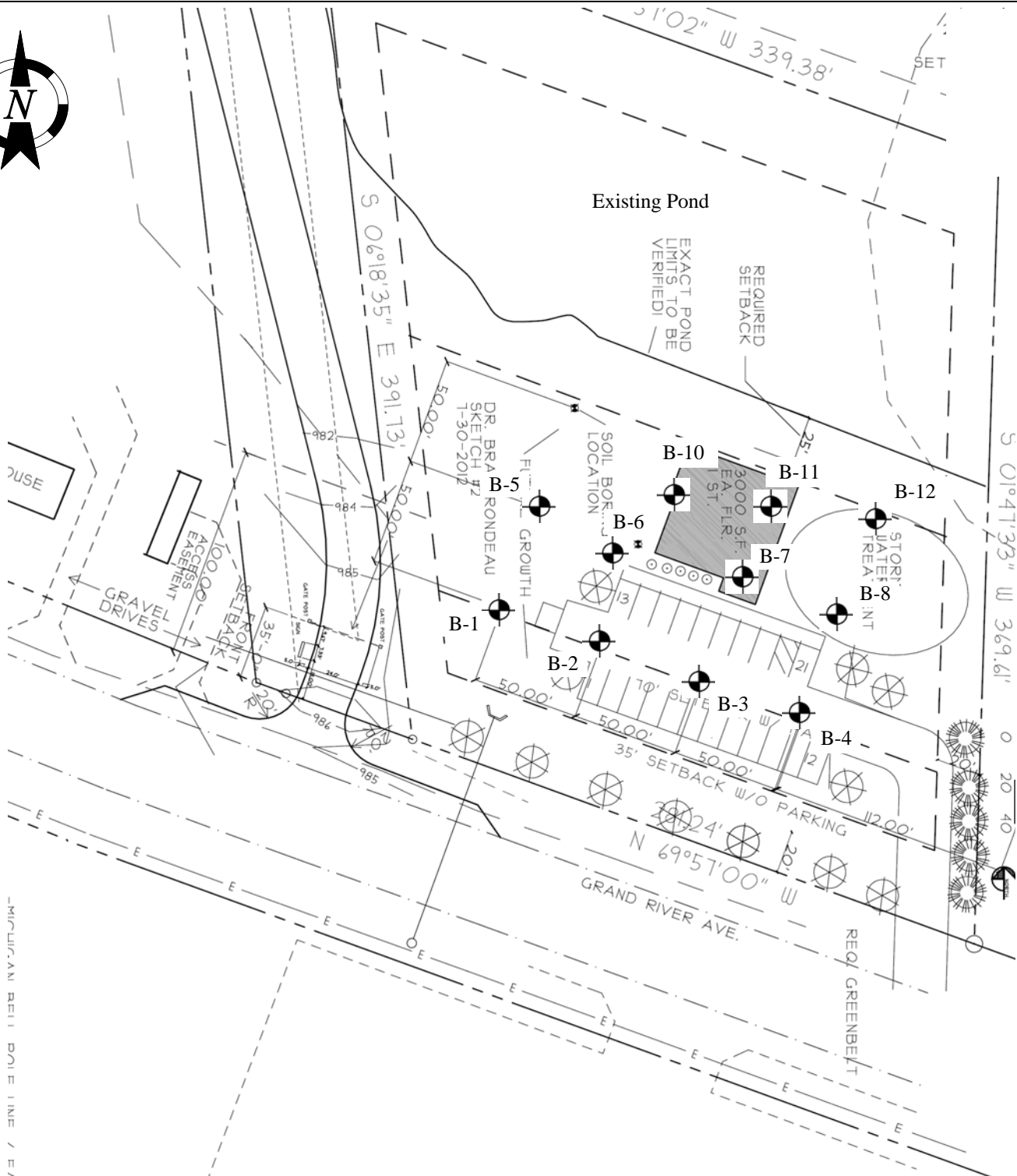
Respectfully submitted,



Piet W. Lindhout, CEO

Cc: Kelly VanMarter
Dr. Brad Rondeau
Dr. Fred Bonine





Legend

Borings B-1 through B-8 and B-10 through B-12 were drilled on February 4 and 5, 2013

Boring Location Plan				
Proposed Single Story Building Across from 6893 Grand River Avenue Brighton, Michigan				
 G2 CONSULTING GROUP 1866 Woodlee Street Troy, Michigan 48083	Project No. 130083			
	Drawn by: JMH			
	<table border="1" style="width: 100%;"> <tr> <td>Date: 1/31/13</td> <td>Plate No. 1</td> </tr> <tr> <td>Scale: NTS</td> <td></td> </tr> </table>	Date: 1/31/13	Plate No. 1	Scale: NTS
Date: 1/31/13	Plate No. 1			
Scale: NTS				

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. B-1

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Clayey Sand (8 inches)	0.7						
		Fill: Dark Brown Sandy Clay	1.8		3				
		Fill: Medium Compact Brown and Gray Silty Sand with trace gravel, clay, and concrete debris	3.5	S-1	8 13	21			
5		Fill: Very Loose Brown and Gray Silty Sand with trace gravel	5	S-2	2 1 1	2			
			8.5	S-3	2 1 2	3			
10		Loose Brown Clayey Sand with trace silt and gravel	10	S-4	3 4 4	8			
15			15	S-5	2 2 3	5			
		Very Loose Brown Silty Sand	17.5						
20		End of Boring @ 20ft	20.0	S-6	1/12" 1	---			
25			25						
30			30						
35			35						

Total Depth: 20ft
 Drilling Date: February 5, 2013
 Inspector:
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 17-1/2 feet during drilling; 17 feet upon completion of drilling

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Figure No. 1

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. **B-2**

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsail: Silty Sand (10 inches)	0.8						
		Fill: Loose Light Brown Silty Sand with trace gravel	3.5	S-1	4 5 5	10			
5		Stiff Brown Silty Clay with trace sand and gravel	5	S-2	2 3 3	6	18.1		2000*
		Medium Compact Brown Sand with trace silt, gravel, and cobbles	7.0	S-3	5 7 12	19			
10			10	S-4	14 9 7	16			
		Medium Compact Brown Silty Sand	13.0						
15			15	S-5	3 6 6	12			
		Very Stiff Brown Silty Clay with trace sand and gravel	18.5						
20			20	S-6	4 5 5	10	12.6		7000*
		End of Boring @ 20ft							
25			25						
30			30						
35			35						

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Total Depth: 20ft
 Drilling Date: February 5, 2013
 Inspector:
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 17 feet during drilling

Notes:
 Dry cave at 10 feet
 Borehole collapsed at 10 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

Figure No. 2

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. **B-3**

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Sand (11 inches)	0.9						
		Fill: Loose Light Brown Silty Sand with trace gravel	3.0	S-1	8 4 3	7			
5		Very Stiff Brown Silty Clay with trace sand and gravel	5	S-2	3 5 9	14	15.5		5000*
		Medium Compact Brown Sand with trace silt, gravel, and cobbles	6.5	S-3	3 10 14	24			
10		Medium Compact Brown Silty Sand	10	S-4	7 14 13	27			
		Medium Compact Brown Silty Sand	11.0						
15		Medium Compact Brown Silty Sand	15	S-5	4 7 5	12			
		Medium Compact Brown Sandy Silt with trace gravel	18.5						
20		Medium Compact Brown Sandy Silt with trace gravel	20.0	S-6	5 7 5	12			
		End of Boring @ 20ft							
25			25						
30			30						
35			35						

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Total Depth: 20ft
 Drilling Date: February 5, 2013
 Inspector:
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 18-1/2 feet during drilling

Notes:
 Dry cave at 8 feet
 Borehole collapsed at 8 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

Figure No. 3

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. **B-4**

SUBSURFACE PROFILE			SOIL SAMPLE DATA						
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Sand (11 inches)	0.9						
		Fill: Sand and Gravel	1.5						
		Sandy Clay	2.0	S-1	3 5 5	10	12.0		4000*
5		Stiff to Very Stiff Brown Sandy Clay with trace gravel and roots	5	S-2	2 4 4	8	14.9		2000*
			6.5	S-3	5 6 12	18			
10		Medium Compact Brown Sand with trace silt, gravel, and cobbles	10	S-4	4 7 9	16			
15			15	S-5	3 7 7	14			
20		Medium Compact Brown Sandy Silt with trace gravel	18.0	S-6	4 7 8	15			
		End of Boring @ 20ft	20.0						
25			25						
30			30						
35			35						

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Total Depth: 20ft
 Drilling Date: February 5, 2013
 Inspector:
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 18 feet during drilling

Notes:
 Dry cave at 8 feet
 Borehole collapsed at 8 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

Figure No. 4

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. **B-5**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Sand (6 inches)	0.5						
		Fill: Loose Dark Brown Silty Sand with trace gravel		S-1	4 5 4	9			
5		Fill: Very Stiff Dark Brown and Black Sandy Clay with trace gravel and roots (organic matter content = 4.0%)	3.5	S-2	5 5 5	10	15.5		6000*
		Fill: Medium to Stiff Dark Brown and Black Sandy Clay with trace gravel (organic matter content = 2.4% - 6.2%)	6.0	S-3	1 1 1	2	14.5		1000*
10				S-4	5 2 1	3	21.2		2000*
		Medium Brown Silty Clay with trace sand and gravel	11.5	S-5	2 3 3	6	20.3		1000*
15				S-6	2 1 1	2			
20		Very Loose Brown Silty Sand with trace gravel	20	S-7	4 8 9	17			
25		Medium Compact Brown Sandy Silt with trace gravel	25	S-8	4 6 7	13			
30		Medium Compact Gray Sandy Silt with trace gravel	30.0						
		End of Boring @ 30ft	30						
35			35						

Total Depth: 30ft
 Drilling Date: February 4, 2013
 Inspector:
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 17 feet during drilling

Notes:
 Dry cave at 11 feet
 Borehole collapsed at 11 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Figure No. 5

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. B-6

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Sand (11 inches)	0.9						
		Fill: Dark Brown Sandy Clay	2.0		13				
		Fill: Medium Compact Light Brown Gravelly Sand with trace silt	3.5	S-1	15	23			
5		Fill: Loose Light Brown Silty Sand with trace gravel	5	S-2	4 3 2	5			
			8.0	S-3	6 4 3	7			
10		Stiff Brown Silty Clay with trace sand and gravel	10	S-4	3 2 3	5	14.7		3000*
			13.5						
15		Medium Compact Brown Silty Sand with trace gravel	15	S-5	3 6 7	13			
			17.0						
20		Loose Gray Gravelly Sand with trace silt	20	S-6	3 4 6	10			
			23.0						
25		Very Stiff Brown Sandy Clay with trace gravel	25	S-7	5 6 6	12	12.5		4000*
			28.0						
30		Loose Brown Silty Sand	30	S-8	3 3 5	8			
		End of Boring @ 30ft	30.0						
35			35						

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Total Depth: 30ft
 Drilling Date: February 4, 2013
 Inspector:
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 13-1/2 feet during drilling; 22 feet upon completion of drilling

Notes:
 Wet cave at 22 feet
 Borehole collapsed at 22 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

Figure No. 6

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. B-7

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Clayey Sand (6 inches)	0.5						
		Fill: Medium Brown Sandy Clay with trace gravel (organic matter content = 1.8%)		S-1	1 3 3	6	15.9		1750*
5		Fill: Very Loose Brown Silty Sand with trace gravel and concrete cobbles (organic matter content = 1.1%)	3.5	S-2	2 1 3	4			
		Stiff Brown Sandy Clay with trace gravel	6.0	S-3	3 3 3	6	15.7		2000*
10		Stiff Brown Silty Clay with trace sand and gravel	9.0	S-4	4 2 6	8	14.3		2500*
		Medium Compact Brown Sand with trace silt and gravel	12.0	S-5	4 7 7	14			
15				S-6	5 6 7	13			
20				S-7	13 4 6	10	11.2		1000*
25		Medium Gray Silty Clay with trace sand and gravel	22.0	S-8	4 2 2	4	11.5		1000*
30		End of Boring @ 30ft	30.0						
35			35						

Total Depth: 30ft
 Drilling Date: February 4, 2013
 Inspector: J. Clay
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 18 feet during and upon completion of drilling

Notes:
 Dry cave at 12-1/2 feet
 Borehole collapsed at 12-1/2 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. **B-8**

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Sand (6 inches)	0.5						
		Fill: Loose to Medium Compact Brown Sand with trace silt and gravel		S-1	7 6 6	12			
5			5	S-2	8 5 3	8			
		Stiff Brown Silty Clay with trace sand and gravel	5.5						
				S-3	3 5 8	13	20.8		2000*
		Medium Compact Brown Silty Sand with trace gravel	8.5						
10				S-4	3 5 7	12			
		Medium Compact Brown Silty Sand with trace gravel							
15				S-5	9 11 11	22			
		Medium Compact Gray Silty Sand with trace gravel							
20				S-6	8 10 10	20			
		Medium Compact Gray Silty Sand with trace gravel	23.0						
25				S-7	10 10 13	23			
		Stiff Gray Silty Clay with trace gravel	27.0						
30				S-8	6 5 8	13	12.0		2250*
		End of Boring @ 30ft	30.0						
35			35						

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Total Depth: 30ft
 Drilling Date: February 4, 2013
 Inspector: J. Clay
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 No Groundwater encountered during or upon completion of drilling

Notes:
 Dry cave at 12-1/2 feet
 Borehole collapsed at 12-1/2 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

Figure No. 8

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. **B-10**

Consulting Group, LLC

SUBSURFACE PROFILE			SOIL SAMPLE DATA						
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsail: Silty Sand (12 inches)	1.0		3				
		Fill: Loose to Medium Compact Dark Brown Silty Sand with trace gravel and roots (organic matter content = 2.2%)		S-1	4	7			
5			5		3				
		Fill: Medium Compact Black Sand with trace gravel (organic matter content = 5.4 %)			8				
			6.0	S-2	12	26			
					13				
			9.0	S-3	11	13			
10		Very Stiff Brown Silty Clay with trace sand and gravel	10	S-4	5	12	11.0		6000*
					6				
					4				
15			15	S-5	5	12	12.8		7000*
					7				
			17.0						
		Medium Compact Brown Silty Sand with trac gravel			3				
20			20	S-6	5	13			
					8				
			25	S-7	3	13			
		Medium Compact Gray Silty Sand			6				
25			25		7				
					3				
			26.0						
		End of Boring @ 30ft			3				
30			30	S-8	5	12			
					7				
			30.0						
35			35						

Total Depth: 30ft
 Drilling Date: February 5, 2013
 Inspector:
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 17 feet during drilling; 23 feet upon completion of drilling

Notes:
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Figure No. 9

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. **B-11**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Fill: Dark Brown Silty Clay	1.5		11				
		Fill: Medium Compact Black Silty Sand trace gravel (organic matter content = 5.8%)	3.0	S-1	6 7	13			
5		Fill: Very Loose Brown Silty Sand with trace gravel (organic matter content = 1.5%)	5.5	S-2	3 2 2	4			
		Loose Brown Silty Sand with trace roots	8.5	S-3	2 3 3	6			
10		Very Loose to Loose Brown Silty Sand with trace gravel and occasional clay layers	10	S-4	3 4 6	10			
15			15	S-5	1 1 1	2			
20		Medium Compact Gray Silty Sand with trace gravel	20	S-6	3 4 8	12			
25		Medium to Stiff Gray Silty Clay with trace sand and gravel	25	S-7	3 3 5	8	10.0		1500*
30		End of Boring @ 30ft	30	S-8	2 4 6	10	10.5		2000*
35			35						

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Total Depth: 30ft
 Drilling Date: February 4, 2013
 Inspector:
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 12 feet during drilling

Notes:
 Dry cave at 11 feet
 Borehole collapsed at 11 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

Figure No. 10

Project Name: Proposed Single Story Building
 Project Location: Across from 6893 Grand River Avenue
 Brighton, Michigan
 G2 Project No. 130083
 Latitude: N/A Longitude: N/A



Soil Boring No. **B-12**

Consulting Group, LLC

SUBSURFACE PROFILE			SOIL SAMPLE DATA							
DEPTH (ft)	PRO-FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)	
5		Fill: Medium to Stiff Brown and Black Sandy Clay with trace gravel and asphalt millings (organic matter content = 2.1% - 3.9%)		S-1	2 3 2	5	17.2		3000*	
5			S-2	1 1 3	4	17.9		1000*		
6.0				S-3	1 3 8	11	11.8		2000*	
8.5				S-4	9 17 12	29				
10					S-5	3 3 2	5			
15					S-6	4 7 8	15			
17.0					S-7	3 6 8	14	10.1		4000*
20					S-8	3 3 3	6			
21.0		Medium Compact Gray Silty Sand with trace gravel	20							
25		Very Stiff Gray Silty Clay with trace sand and gravel	25							
27.0		Loose Gray Silty Sand with trace gravel and clay	30							
30		End of Boring @ 30ft	30							
35			35							

SOIL / PAVEMENT BORING 130083.GPJ G2_CONS.GDT 2/14/13

Total Depth: 30ft
 Drilling Date: February 4, 2013
 Inspector: J. Clay
 Contractor: Strata Drilling
 Driller: B. Sienkiewicz

Water Level Observation:
 Groundwater encountered at 15-1/2 feet during drilling; 11 feet upon completion of drilling

Notes:
 Wet cave at 11 feet
 Borehole collapsed at 11 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger trimmings

Figure No. 11

APPENDIX D

FIRE APPARATUS ACCESS ROADS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION D101 GENERAL

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *International Fire Code*.

SECTION D102 REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an *approved* fire apparatus access road with an asphalt, concrete or other *approved* driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

SECTION D103 MINIMUM SPECIFICATIONS

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent as *approved* by the fire chief.

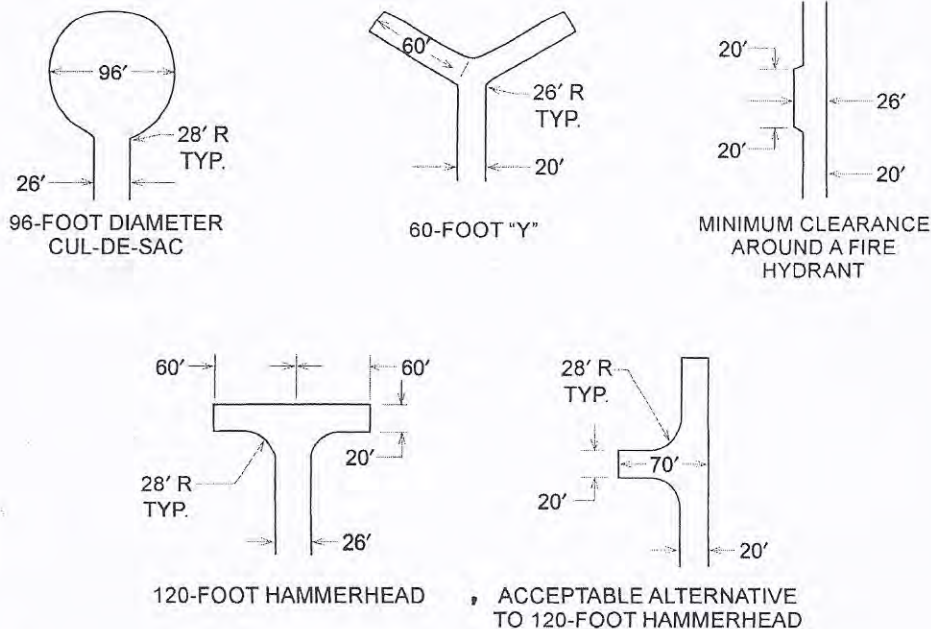
D103.3 Turning radius. The minimum turning radius shall be determined by the *fire code official*.

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

**TABLE D103.4
REQUIREMENTS FOR DEAD-END
FIRE APPARATUS ACCESS ROADS**

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501-750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special approval required	

For SI: 1 foot = 304.8 mm.



For SI: 1 foot = 304.8 mm.

**FIGURE D103.1
DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND**

Medical-Dental Office Building (720)

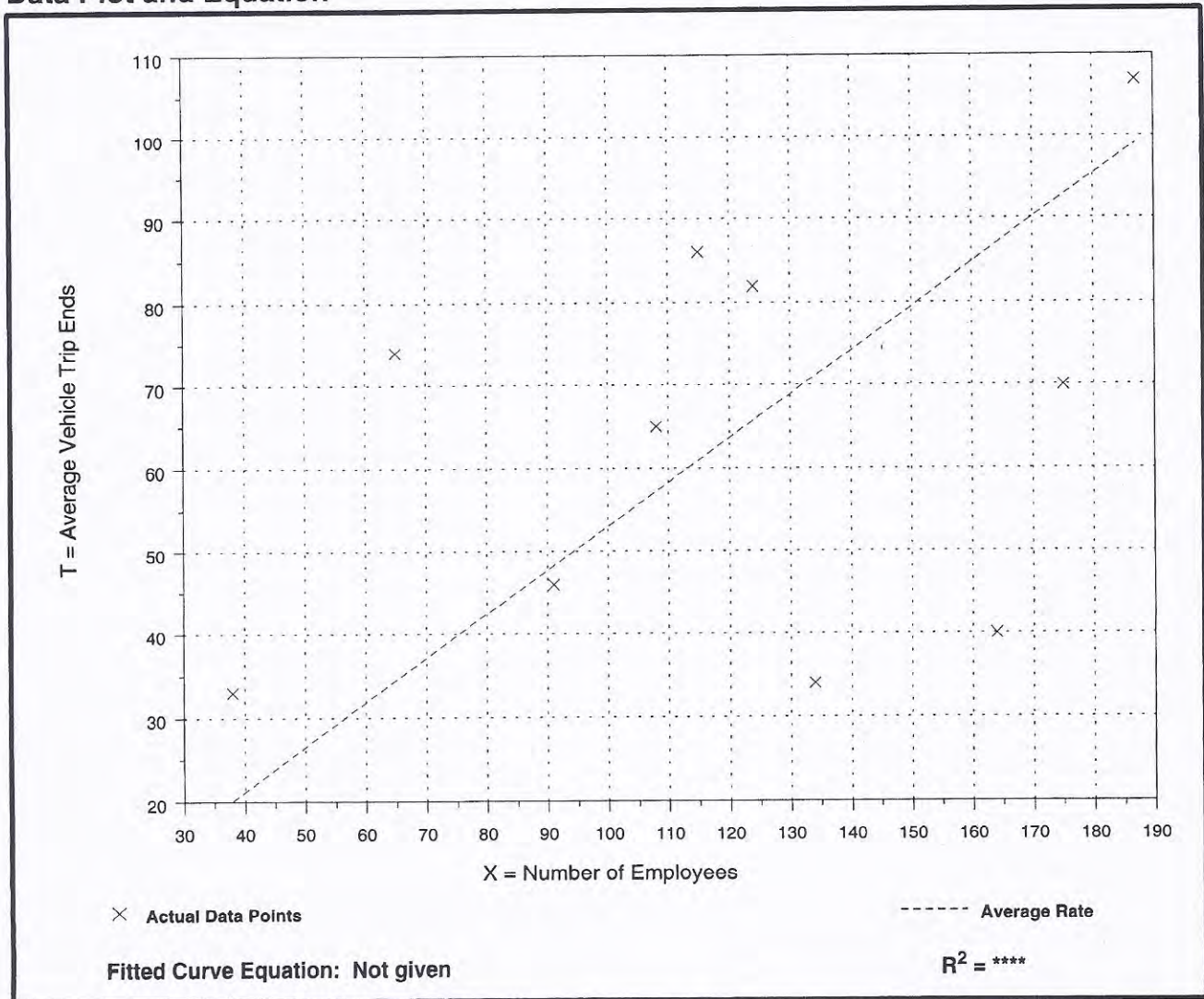
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 10
 Avg. Number of Employees: 120
 Directional Distribution: 79% entering, 21% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.53	0.24 - 1.14	0.76

Data Plot and Equation



Medical-Dental Office Building (720)

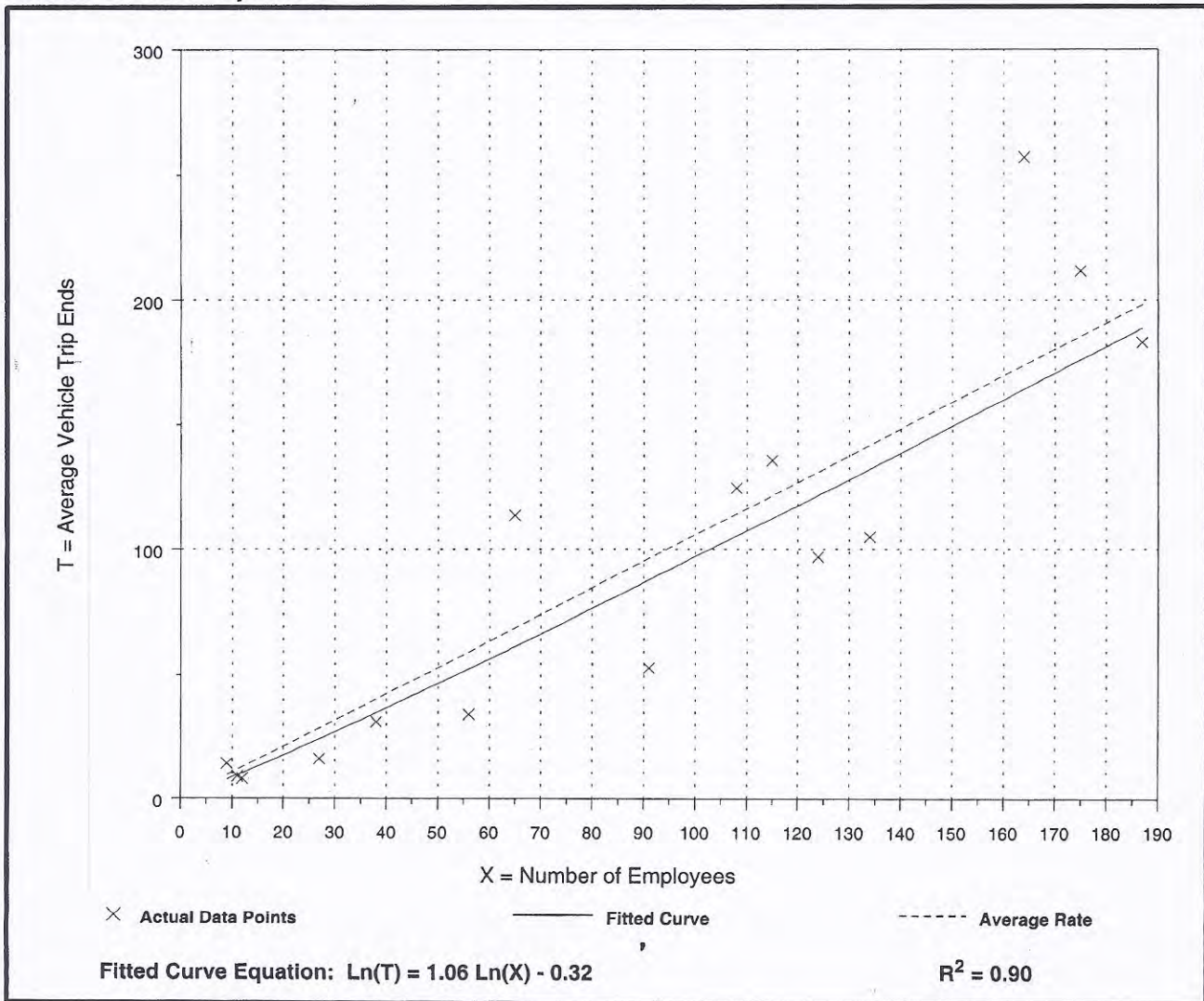
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 15
 Avg. Number of Employees: 88
 Directional Distribution: 34% entering, 66% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.06	0.58 - 1.75	1.08

Data Plot and Equation



Medical-Dental Office Building (720)

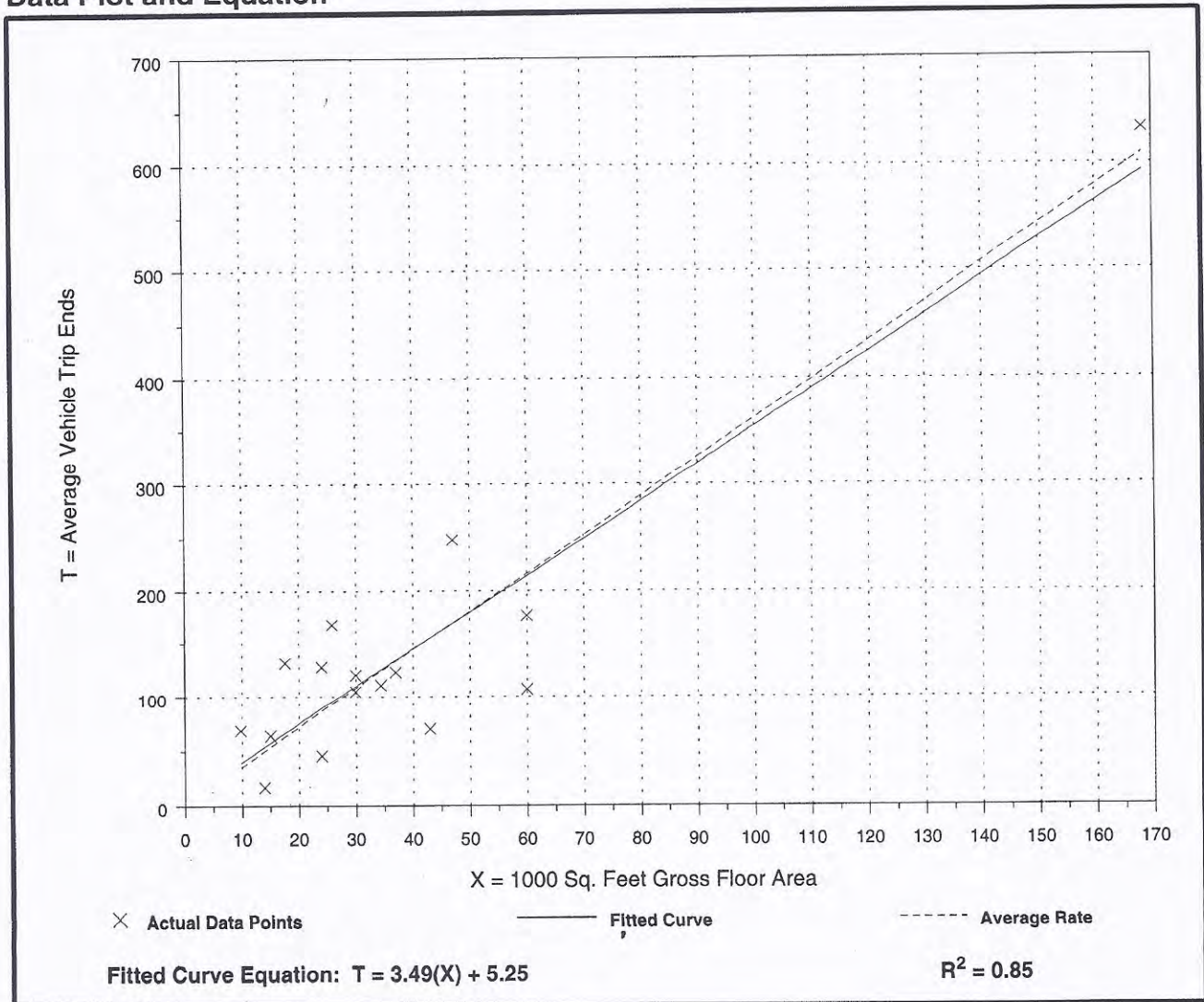
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator


Number of Studies: 16
 Average 1000 Sq. Feet GFA: 40
 Directional Distribution: 66% entering, 34% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.62	1.21 - 7.49	2.38

Data Plot and Equation





Dr. Boni

Oral & Maxillofacial

6802



Dr. Bonine

Plastic Surgery

6893



GENOA TOWNSHIP

AUG 19 2013



Oral and Maxillofacial Surgery

6893 GRAND RIVER
BRIGHTON, MI 48114

July 16, 2013

Dear friends at the Genoa Township Planning Committee,

I've had the opportunity to review Dr. Rondeau's proposed office in the adjoining land east of my driveway. I appreciated that the sight lines for signage were preserved. I think this addition to our micro-community will be an asset and great utilization of the land.

I have grave concerns about your recommendation for requiring him to use an additional easement through my Grand River access. The construction and development of my site included gating for security reasons because of the large number of controlled substances kept on site. Nineteen years to date, we have not had a break in, for which I consider ourselves to be fortunate, considering the number of businesses on Grand River in our area, which have been violated. Heroin use in the county is escalating at alarming rates, and we will also see crime follow quickly. I have long felt that the presence of the gate creates an environment where we are not easily cased after hours. We have maximized security systems and features at the office but none-the-less do not want to become a target, or repeated target, because of our isolation 700 feet down our driveway. The gate has been a god-send. Requiring Dr. Rondeau to use that access will eliminate the security, which, according to the local sheriff detective, cannot always be provided. It would force him to gate his entrance way, require us to open up our secure system to his employees, and require obsessive compulsive closure at the end of business days to make certain that the gate is locked. We even have protocols for chaining the gates shut in the event of malfunction, and they are also on our emergency generator back-up system. This would present a burden to him and, given his fire department secondary access, would require him to gate that as well to maintain our level of security.

Notwithstanding the gate is the issue of delineation of two businesses. Where will present signage be placed in order to get patients in to his office, when I have been branded with the flowerbeds and the secluded driveway for my practice? How will signage direct people to come in Dr. Bonine's entrance way? Additionally, while we are in complimentary fields, having the perception that Dr. Rondeau's office is a part of mine is one that I've tried to avoid. Having the presence of general dentists might give appearance to my referring doctors that we would be in collusion. I see real obstacles in maintaining our individual identity and it is suicide for me to have appearance of collusion with a general dentist.

Assuming that you have been back to my office, you appreciate its unique setting, including the half-mile, nationally recognized poetry walk, on which are found 25 pieces of sculpture, creating our Oaken Transformation Sculpture and Poetry Walk as a give-back to the community. The artists also count on the security of our gate for this.

Our setting also provides for an experiential health care model where patient acceptance is improved because of the emotional experience evoked by coming down our specifically designed S-curved and naturally landscaped areas. I have concerns on how this could be maintained if visual access to his office through a cut-through of my plantings were to be provided.

While welcoming Dr. Rondeau to the immediate neighborhood, I have grave concerns regarding the impact of your request to have him link to our driveway in terms of security, branding, accessibility, and experiential health care modeling. As such, I would request that you please approve his request before you.

Sincerely,

F.L. Bonine D.D.S., M.S.

cc: Piet Lindhout. Brad Rondeau D.D.S.

Diplomate of The American Board of Oral and Maxillofacial Surgery
Fellow of American Association of Oral and Maxillofacial Surgery
Adjunct Clinical Professor, University of Michigan



LSL Planning, Inc.

Community Planning Consultants

August 5, 2013

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
Subject:	Dr. Rondeau Dental Office – Special Land Use and Site Plan Review #2
Location:	Grand River Avenue – north side of Grand River, east of Kellogg Road
Zoning:	OSD Office Service District

Dear Commissioners:

At the Township’s request, we have reviewed the revised site plan (dated 7/30/13) proposing development of a 2,368 square foot building for use as a dental office. Additionally, the applicant seeks special land use approval for grading activities within the required natural feature setback. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance and Master Plan.

A. Summary

1. Provided the disturbed area is returned to its natural condition upon completion of construction activities, the proposed grading within the natural feature setback is generally consistent with the general special land use standards of Article 19.
2. Any issues raised by the Township Engineer must be addressed.
3. The Planning Commission has approval authority over the building elevations.
4. The amount of parking requires Planning Commission approval.
5. The proposed driveway does not meet the spacing or offset requirements of Section 15.06.02.
6. The site plan does not provide a dedicated loading/unloading space.
7. The submittal indicates that the applicant will seek a variance to permit a projecting wall sign.

B. Proposal/Process

The applicant requests site plan review and approval for development of a 2,368 square foot dental office on the vacant 2.4-acre site. Table 7.02 lists medical offices with up to 15,000 square feet of gross floor area as a permitted use in the OSD.

There is a large wetland area immediately north of the proposed building placement and construction will require grading within 25 feet of the wetland. As such, special land use approval is also required by Section 13.02.04.

Following a public hearing on the request, the Planning Commission may forward its recommendation on the project to the Township Board for a final decision.



Aerial view of site and surroundings (looking north)

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

- 1. Master Plan.** The Master Plan and Future Land Use Map identify the site and adjacent properties to the east and west as Neighborhood Commercial, which is intended to provide “retail and service establishments whose primary market area includes residents and employees from within a two mile radius.” The proposed use is consistent with this description; however, it is not the principal use, but rather the grading activity that requires special land use approval.

As part of its discussion on environmental features, the Master Plan states that “the plan recommends a number of means to accommodate development while protecting the valuable resources that are critical to Genoa Township’s quality of life.” The natural feature setback is one “means” of accomplishing this goal. Since the project entails only grading within the 25-foot setback, we are of the opinion that the project is consistent with the stated goal. This statement is made provided the disturbed area is returned to its natural condition upon completion of construction activities.

- 2. Compatibility.** The site is located on the north side of Grand River and appears to be the only undeveloped site in the immediate area. Surrounding properties include a mix of office, commercial, recreational and industrial uses. The proposed use and grading activity are expected to be compatible with the surrounding properties. Similar to item 1 above, this statement is made provided the disturbed area is returned to its natural condition upon completion of construction activities.
- 3. Public Facilities and Services.** So long as soil erosion protection measures are put in place, the proposed grading activity is not expected to impact public facilities and services. With that being said, the Township should also consider any comments provided by the Township Engineer with respect to this criterion.

4. **Impacts.** Given the project entails only grading within the natural feature setback and does not actually encroach into the wetland area itself, the project is not expected to be harmful to environmental features. Once again, this statement is made provided the disturbed area is returned to its natural condition upon completion of construction activities.
5. **Mitigation.** If any additional concerns arise as part of this review process, the Township may require mitigation necessary to limit or alleviate any potential adverse impacts as a result of the proposed project.

D. Site Plan Review

1. **Dimensional Requirements.** As described in the table below, the project complies with the dimensional standards of the OSD:

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
OSD	1	100	70	20	40	20 front 10 side/rear	35'	35% building 60% impervious
Proposal	2.4	281	91.68	42.19 (E) 170 (W)	204.68	20 front 58 side	21'	2.27% building 10.88% impervious

2. **Building Materials and Design.** Proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission. The submittal includes elevation views of each side of the building as well as material calculations. The predominant material is brick, which is supplemented by split face block and siding. Based upon the calculations provided, the proposed building meets the wall material requirements of the Zoning Ordinance.
3. **Parking.** In accordance with Section 14.04, medical offices require 1 parking space for each 200 square feet of gross floor area. Based upon the size of the proposed building, 12 spaces are required, while 17 are provided.

In accordance with Section 14.02.06, Planning Commission approval is required since the amount parking proposed exceeds the minimum requirement by more than 20%. In this instance, the amount of parking represents an overage of approximately 42%. In response, the applicant describes the amount of parking in terms of need, noting that 6 spaces will be reserved for employees, 5 will be reserved for operations, and 6 will be reserved for waiting.

The parking spaces, drive aisles and number of barrier free spaces comply with Article 14.

4. **Pedestrian Circulation.** Section 12.05 requires a 5-foot wide concrete sidewalk for properties along Grand River east of the 141 interchange. The site plan includes the required sidewalk along Grand River, as well as a sidewalk between the parking lot and building entrance.
5. **Vehicular Circulation.** The proposed driveway does not meet the minimum spacing requirement from the existing driveways to the east and west. Additionally, the proposed driveway does not meet the offset requirement from the existing driveway on the south side of Grand River to the east.

Given the placement of the existing driveways and the size of the property, full compliance is not possible. As such, the Township may allow the proposed placement so long as necessary driveway permits are obtained. As an alternative, the Township could direct the applicant to look into the possibility of a shared driveway agreement with one of the adjacent property owners.

- 6. Loading.** Given the size of the building, Section 14.08.08 requires 1 loading space, which is to be located in a rear or side yard not directly visible to a public street. The site plan does not identify the required space, which is to contain 500 square feet, unless otherwise approved by the Planning Commission.

In this instance, Sheet C2 includes a note stating that deliveries will be via Fed Ex/UPS sized trucks and that loading/unloading will occur at the walk along the front of the building. The Commission must determine whether this proposal is acceptable or whether to require a dedicated loading space.

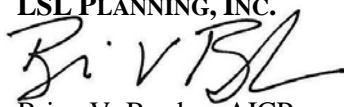
- 7. Landscaping.** The following table is a summary of the landscaping required by Section 12.02:

Location	Requirements	Proposed	Comments
Front yard greenbelt	7 canopy trees 20-foot width	7 canopy trees 20-foot width	Requirement met
Detention pond	7 canopy OR evergreen trees 69 shrubs	7 canopy trees 3 evergreen trees 69 shrubs	Requirement met
Parking lot	2 canopy trees 2' tall hedgerow 200 s.f. of landscaped area	3 canopy trees 2-3' tall hedgerow 635 s.f. of landscaped area	Requirement met

- 8. Waste Receptacle and Enclosure.** The applicant has addressed previous concerns over the placement of a waste receptacle in the front yard by removing the waste receptacle and utilizing curbside waste carts. Sheet C2 illustrates a proposed 5'x6' concrete pad adjacent to the east side door for storage of these carts.
- 9. Exterior Lighting.** Sheet C6 proposes two light poles in the parking lot. Pole height and light intensity readings comply with Section 12.03. A fixture detail has been added to Sheet C9, indicating use of downward directed, cut off fixtures, as required.
- 10. Signs.** Sheet A1 identifies a projecting sign on the building's south elevation, as well as details for a proposed monument sign. Projecting signs are not expressly permitted in the OSD, which the applicant acknowledges via a note stating the proposed signage will require a variance. Meanwhile, the proposed monument sign complies with the height, size and location requirements of Article 16.
- 11. Impact Assessment.** The submittal includes a revised Impact Assessment (dated 7/30/13). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at borden@lslplanning.com.

Sincerely,
LSL PLANNING, INC.



Brian V. Borden, AICP
 Senior Planner



August 5, 2013

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

**Re: Rondeau Dental Office
Site Plan Review #2**

Dear Ms. Van Marter:

We have reviewed the resubmitted site plan documents and the letter from Boss Engineering dated July 30, 2013. The petitioner is planning a 1,607 square foot dental office on a previously undeveloped 2.5 acre parcel located on the north side of Grand River Avenue between Kellogg and Euler Roads. Tetra Tech reviewed the updated documents and offers the following additional comments:

IMPACT ASSESSMENT

1. G. Pre- and post- development flow calculations were submitted in the updated Impact Assessment, however the applicant chose to classify the space as an office building, which resulted in an equivalent user factor of 0.95 REUs. It has been our experience that these uses are typically documented as Doctor's Offices, which would result in an equivalent factor of $(1.0 \text{ to } 0.5 * \# \text{ of exam rooms } (4)) = 3 \text{ REUs}$.

The petitioner should confirm and revise the projected REUs for Part G of the Impact Assessment to the satisfaction of the Township prior to gaining site plan approval.

Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Markstrom'.

Gary J. Markstrom, P.E.
Unit Vice President

A handwritten signature in blue ink, appearing to read 'Joseph C. Siwek'.

Joseph C. Siwek, P.E.
Project Engineer

copy: Scott Tousignant, P.E., Boss Engineering



Brighton Area Fire Department

615 W. Grand River

Brighton, Michigan 48116

810-229-6640 Fax: 810-229-1619

August 6, 2013

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Rondeau Dental Office
N. side of Grand River – East of Kellogg Rd.
Revised Site Plan Review

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on August 1, 2013 and the drawings are dated July 30, 2013. The project is based on a new 2,368 square foot building (business use). The building is a single story with a basement level. The plan review is based on the requirements of the International Fire Code (IFC) 2012 edition. Previous comments appear to be addressed by the applicant in the revised submittal.

It is recommended that the Township consider the following comments as this project moves forward.

1. Future project submittals shall include the address and street name of the project in the title block.
IFC 105.4.2
2. The building shall include the building address on the building. The address shall be a **minimum of 6"** high letters of contrasting colors and be clearly visible from the street. The location and size shall be verified prior to installation. ***This should be noted on the plans.***
IFC 505.1
3. The location of a key box (Knox Box) shall be indicated on future submittals. The Knox box will be located adjacent to the front door of the structure. ***This should be noted on the plans.***
IFC 506.1

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). If you have any questions about the comments on this plan review please contact me at 810-229-6640.

August 6, 2013
Rondeau Dental Office
N. side of Grand River – E. of Kellogg Rd.
Revised Site Plan Review
Page 2 of 2

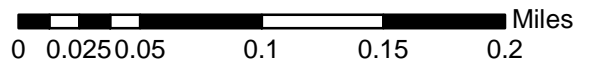
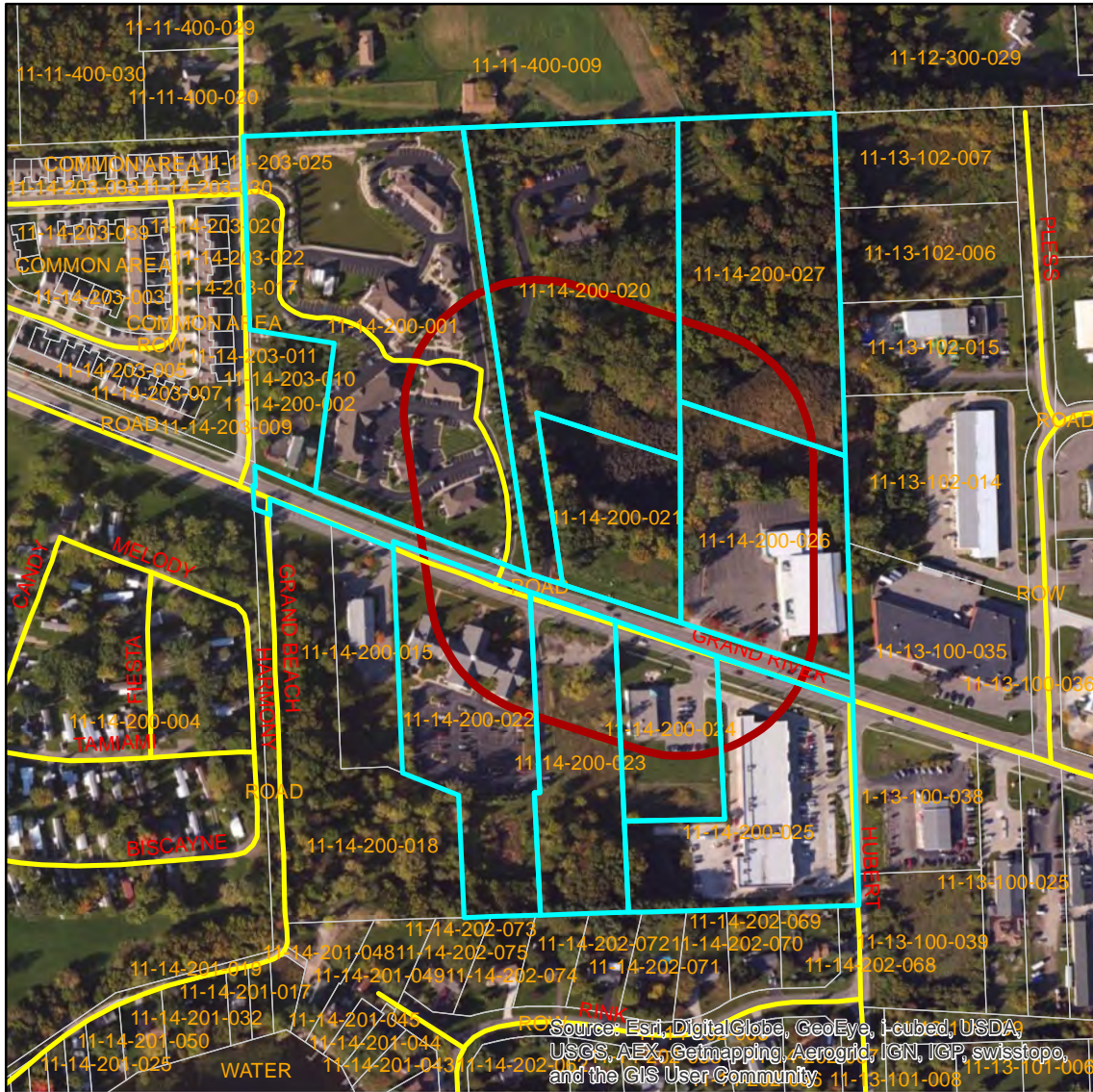
Cordially,

A handwritten signature in black ink, appearing to read "Michael Evans". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael Evans
Deputy Fire Chief

cc: Kathryn Poppy - Kathryn@Genoa.org

300 Ft Buffer for Noticing



Rondeau Dental Office Building

Applicant: Dr. Brad Rondeau

Parcel: 11-14-200-021

Meeting Date: August 12, 2013

July 12, 2013



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

July 26, 2013

To Whom It May Concern:

There will be a hearing for a Special Land Use Permit in your general vicinity on Monday, August 12 at 6:30 p.m. at Genoa Township Hall, located at 2911 Dorr Road, Brighton, Michigan.

The property in question is located on the north side of Grand River Avenue, east of Kellogg Road in Sec. 14. The Special Land Use has been requested for proposed grading within the natural features setback to construct a new 2,368 square foot office building. The request is petitioned by Dr. Brad Rondeau.

Materials relating to this request are available for public inspection at the Genoa Township Hall during regular business hours. If you have any questions or objections in this regard, please be present at the public hearing noted above. Written comments may be addressed to the Planning Commission.

Sincerely,

Kelly VanMarter
Assistant Township Manager / Community Development Director
KKV/kp

SUPERVISOR
Gary T. McCririe

CLERK
Paulette A. Skolarus

TREASURER
Robin L. Hunt

MANAGER
Michael C. Archinal

TRUSTEES
H. James Mortensen
Jean W. Ledford
Todd W. Smith
Linda Rowell

**IMPACT ASSESSMENT
FOR
SITE PLAN PETITION
“RONDEAU DENTAL OFFICE“
GENOA TOWNSHIP, LIVINGSTON COUNTY
MICHIGAN**

Prepared for:

**LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC
10465 CITATION DRIVE
BRIGHTON, MI 48116
(810) 227-5668**

Prepared by:

**BOSS ENGINEERING COMPANY
3121 E. GRAND RIVER
HOWELL, MI 48843
(517) 546-4836**

July 30, 2013

13-026EIA

INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development may have on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Submittal Requirements For Impact Assessment* guidelines in accordance with Section 18.07 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

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 :
BOSS ENGINEERING COMPANY
Civil Engineers, Land Surveyors, Landscape Architects and Planners
3121 E. Grand River
Howell, MI 48843
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Prepared For :
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Client
10465 Citation Drive
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B. Map(s) and written description / analysis of the project site including all existing structures, manmade facilities, and natural features. The analysis shall also include information for areas within 10 feet of the property. An aerial photograph or drawing may be used to delineate these areas.

The site is located on the north side of Grand River Avenue, approximately 900 feet east of the Kellogg Road intersection. The property has frontage on Grand River at one location. There is 281 feet of Grand River road frontage. Across Grand River there exist properties in the neighborhood service district, and immediately adjacent to the site are office and general commercial uses. To the west and north is Dr. Fredric Bonine. To the east of the property line is Rollerama Skating. The subject property is currently undeveloped, and currently zoned Office Service District (OSD).

C. Impact on natural features: A written description of the environmental characteristics of the site prior to development and following development, i.e., topography, soils, wildlife, woodlands, mature trees (eight inch caliper or greater), wetlands, drainage, lakes, streams, creeks or ponds. Documentation by a qualified wetland specialist shall be required wherever the Township determines that there is a potential regulated wetland. Reduced copies of the Existing Conditions Map(s) or aerial photographs may accompany written material.

The total site area is 2.50 acres. There are 1.36 acres of wetlands and 0.10 acres of right-of-way for Grand River Avenue leaving a total of 1.04 acres of upland. With regards to the wetlands, there is one large area on the property. The large area makes up the northern half of the site. The site slopes north towards the large wetland area. Many of the trees on site are west and north of the proposed building and parking lot. Most of the upland area is open. Most of the trees are box elder and American elm. Four(4) trees will need to be removed, all of which are box elders. The USDA Soil Conservation Service soil classification for the site is Miami-Loam 6-12% slopes.

There will be proposed grading taking place within the 25 foot wetland setback but does not encroach into the wetland area itself. The disturbed area is to be returned to its natural condition upon completion of construction activities.

D. Impact on storm water management: Description of measures to control soil erosion and sedimentation during grading and construction operations and until a permanent ground cover is established. Recommendations for such measures may be obtained from County Soil Conservation Service.

Surface runoff during periods of construction will be controlled by proper methods set forth by the Livingston County Drain Commissioner, including silt fence, pea stone filters, and seed and mulch. A meeting was held with the Livingston County Drain Commissioner to address stormwater management. Their primary recommendation is to maintain the existing drainage patterns as closely as possible.

At the time of construction, there may be some temporary dust, noise, vibration and smoke, but these conditions will be of relatively short duration and shall be controlled by applying appropriate procedures to minimize the effects, such as watering if necessary for dust control.

The Site Plan documents show the proposed locations of all site improvements along with detailed soil erosion control information. The plans will be reviewed by the Livingston County Drain Commissioner's office for compliance with their regulations prior to issuance of a Soil Erosion Control permit.

E. Impact on surrounding land use: Description of the types of proposed uses and other man made facilities, including any project phasing, and an indication of how the proposed use conforms or conflicts with existing and potential development patterns. A description shall be provided of any increases of light, noise or air pollution which could negatively impact adjacent properties.

The applicant is planning on constructing a single office building totaling 2,368 square feet in size, with the required parking, pedestrian circulation and storm water management system associated with it.

The applicant is anticipating constructing the development in one phase.

With the proposed use being office, most of the activity on the property would be weekdays 8 AM to 5 PM. Unlike a commercial use, there would be limited evening or weekend traffic.

The increase in light, noise or air pollution would be far less than what is typically associated with a commercial development. Developing a single small office building on the property will have minimal impact on surrounding properties.

F. Impact on public facilities and services: Description of number of expected residents, employees, visitors, or patrons, and the anticipated impact on public schools, police protection and fire protection. Letters from the appropriate agencies may be provided, as appropriate.

The site is serviced by public water and sanitary sewer. The public water is provided by MHOG. There is no expected impact on Brighton Area Schools and very minimal impact on the police and fire departments.

G. Impact on public utilities: Description of the method to be used to service the development with water and sanitary sewer facilities, the method to be used to control drainage on the site and from the site, including runoff control during periods of construction. For sites service with sanitary sewer, calculations for pre- and post development flows shall be provided in equivalents to a single family home. Where septic systems are proposed, documentation or permits from the Livingston County Health Department shall be provided.

The development will be served by both public water and sanitary sewer. With regards to storm water management, the project would be required to meet all local, county and state storm water and erosion control requirements. All of the required information is included in the Site Plan documents.

The pre-development sanitary flow from this site is zero. Post-development flows based on MHOG sewer standards for an office building is equivalent to 0.95 REU's.

Office Building = $0.4 \times (2,368 \text{ s.f.}/1000) = 0.95 \text{ REU}$

An alternative method shows a post development flow of 0.49 REU's. This provides 15 gallons per day employee which accounts for all employee water usage through the course of a typical day. This yields 5 employees x 15 gal/emp. = 75 gallons. Add to that patient usage of 33.6 gallons (16 trips to lavatory at 2.1 gallons/trip). In addition, assuming 1 dishwasher cycle per day at 8 gallons, the total usage is 116.6 gallons, or 0.49 REU's.

H. Storage or handling of any hazardous materials: Description of any hazardous substances expected to be used, stored or disposed of on the site. The information shall describe the type of materials, location within the site and method of containment. Documentation of compliance with federal and state requirements, and a Pollution Incident Prevention Plan (PIPP) shall be submitted, as appropriate.

There will be no hazardous materials used or disposed of on this site.

I. Impact on traffic and pedestrians: A description of the traffic volumes to be generated based on national reference documents, such as the most recent edition of the Institute of Transportation Engineers Trip Generation Manual, other published studies or actual counts of similar uses in Michigan.

According to the Institute of Transportation Engineers Trip Generation 6th addition, the number of trips generated by this development would be an average of 9 vehicle trips per hour during the AM peak hours, and 10 vehicle trips per hour during the PM peak hours. This is based on a Medical-Dental Office Building.

J. A detailed traffic impact study shall be submitted for any site over ten (10) acres in size which would be expected to generate 100 directional vehicle trips (i.e. 100 inbound or 100 outbound trips) during the peak hour of traffic of the generator or on the adjacent streets.

The anticipated number of directional vehicle trips during the peak hour of traffic is 10. Therefore a detailed traffic impact study is not necessary.

K. Special Provisions: General description of any deed restrictions, protective covenants, master deed or association bylaws.

None

L. A list of all sources shall be provided.

Genoa Township's *Submittal Requirements For Impact Assessment*

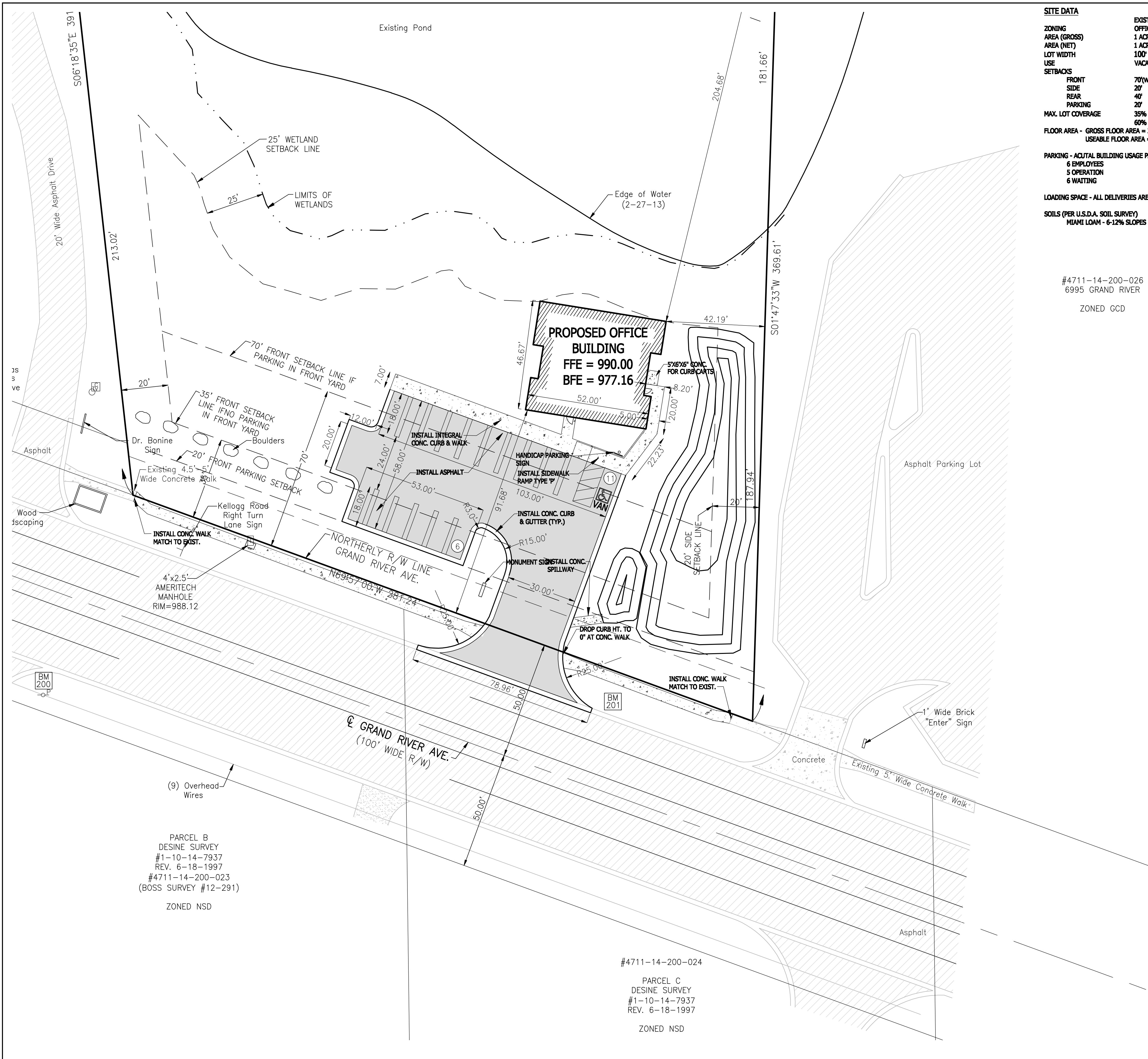
Genoa Township Zoning Ordinances

Soil Survey of Livingston County, Michigan, U.S.D.A. Soil Conservation Service

National Wetland Inventory Plan, United States Department of the Interior, Fish and Wildlife Service

Trip Generation manual, 6th edition, Institute of Transportation Engineers

APPENDIX



SITE DATA

	EXISTING/REQUIRED OFFICE SERVICE (OSD)	PROPOSED OFFICE SERVICE (OSD)
ZONING	1 ACRES	2.5 ACRES
AREA (GROSS)	1 ACRES	2.4 ACRES
AREA (NET)	100'	292.84'
LOT WIDTH	VACANT	DENTAL OFFICE
USE		
SETBACKS		
FRONT	70'(WITH FRONT PARKING LOT)	91.68'
SIDE	20'	42.19'
REAR	40'	204.68'
PARKING	20'	20'
MAX. LOT COVERAGE	35% BLDG. 60% IMPERVIOUS	2.27% 10.88%
FLOOR AREA - GROSS FLOOR AREA = 2,368 S.F. USEABLE FLOOR AREA = 1,645 S.F.		

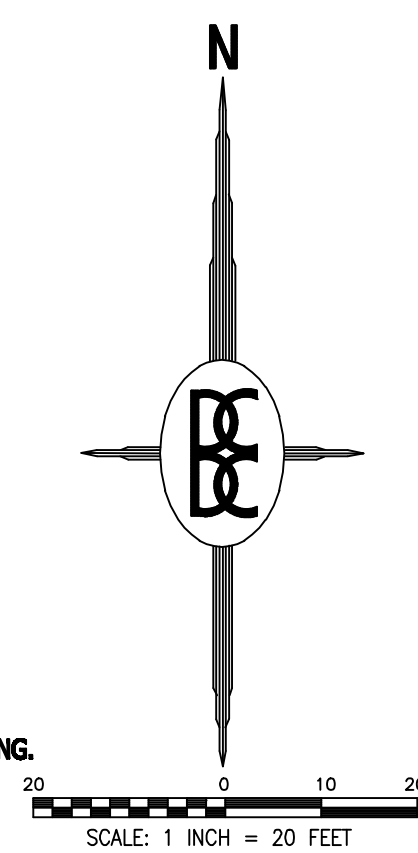
PARKING - ACTUAL BUILDING USAGE PARKING CALCULATIONS

6 EMPLOYEES
5 OPERATION
6 WAITING

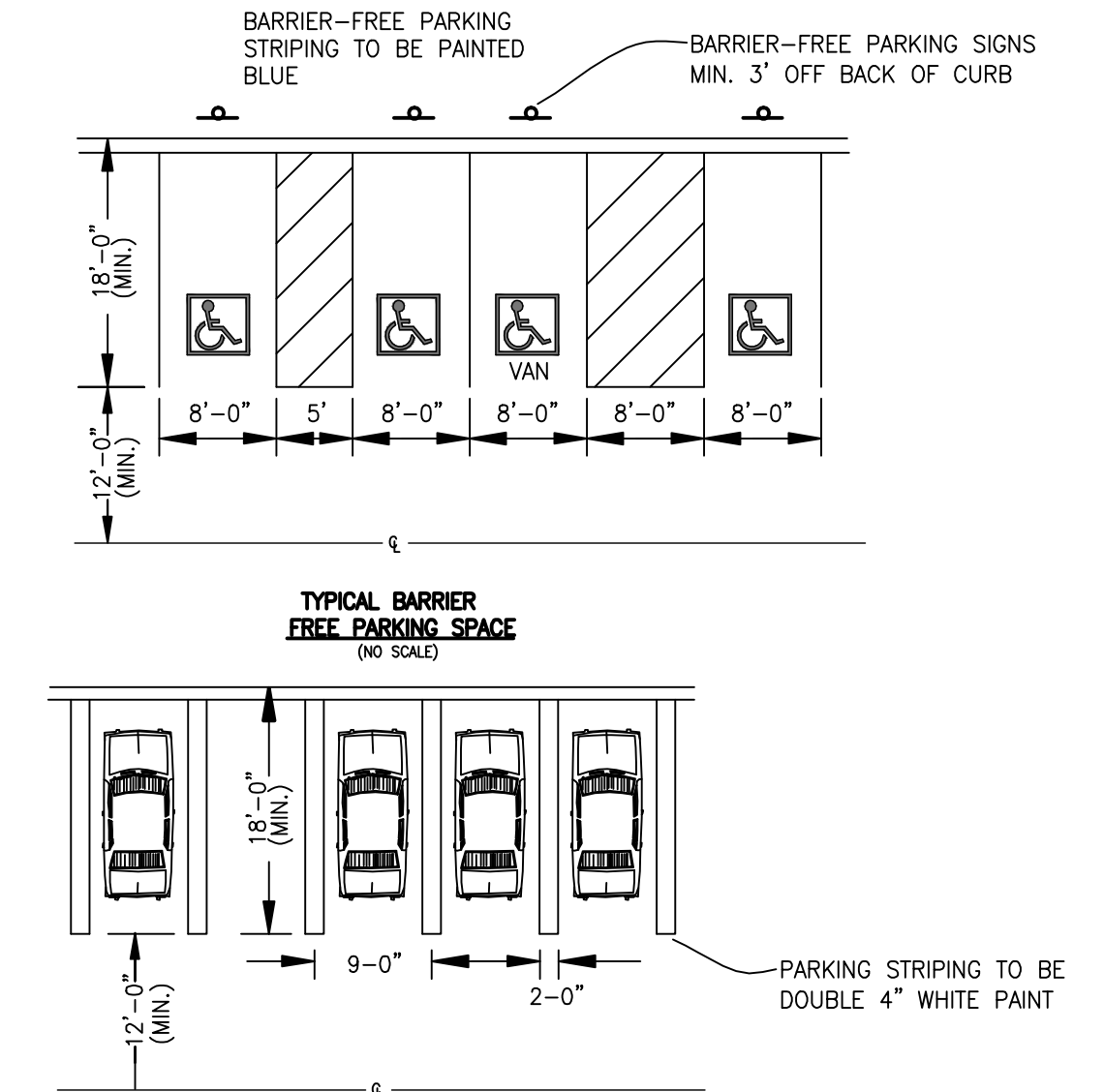
PROVIDED: 17 SPACES (INCLUDES 1 BARRIER-FREE SPACE)

LOADING SPACE - ALL DELIVERIES ARE BY UPS/FED EX TYPE TRUCKS LOADING/UNLOADING AT WALK AT FRONT OF BUILDING.

SOILS (PER U.S.D.A. SOIL SURVEY)
MIAMI LOAM - 6-12% SLOPES



#4711-14-200-026
6995 GRAND RIVER
ZONED GCD



TYPICAL PARKING SPACE (NO SCALE)

PROPOSED (PR)	EXISTING (EX)	LEGEND
900	900	CONTOUR
T/C	+922.08	STORM DRAINAGE FLOW
XXX.XX		SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
T/A	T/A	FINISHED GRADE ELEVATION
T/C	T/C	TOP OF ASPHALT
T/W	T/W	TOP OF CURB / CONCRETE
F/L	F/L	TOP OF WALK
T/P	T/P	FLOW LINE
B/P	B/P	TOP OF PIPE
RIM	RIM	BOTTOM OF PIPE
INV	INV	RIM ELEVATION
MH	MH	INVERT ELEVATION
IN	IN	MANHOLE STRUCTURE
CB	CB	INLET STRUCTURE
RY	RY	CATCHBASIN STRUCTURE
ES	ES	REARWARD STRUCTURE
OV	OV	END-SECTION
UP	UP	GATEVALVE STRUCTURE
SN	SN	HYDRANT
SL	SL	UTILITY POLE
FM	FM	SANITARY SEWER
PS	PS	SANITARY LEAD
ST	ST	FORCE MAIN
WM	WM	PRESSURE SEWER
WL	WL	STORM SEWER
FO	FO	WATER SEWER
OH	OH	WATER MAIN
C	C	WATER LEAD
E	E	FIBER OPTIC
G	G	OVERHEAD WIRE
T	T	CABLE
○	○	ELECTRIC
□	□	GAS
●	●	TELEPHONE
○	○	MANHOLE
○	○	INLET / CATCHBASIN
○	○	FLARED END-SECTION
○	○	GATE VALVE
○	○	HYDRANT
○	○	UTILITY POLE
○	○	FENCE
○	○	SIGN
○	○	NOT FIELD VERIFIED TO BE REMOVED
○	○	WETLAND BOUNDARY

- NOTES:**
- CLEAR VISION REQUIREMENTS WILL BE MET. THE CLEAR VISION AREAS WERE FIGURED FOR A SIGHT DISTANCE OF 600 FT
 - THE ADDRESS OF THE BUILDING SHALL BE A MINIMUM OF 6" HIGH LETTERS OF CONTRASTING COLORS AND BE CLEARLY VISIBLE FROM THE STREET. LOCATION AND SIZE TO BE VERIFIED PRIOR TO INSTALLATION.
 - THE LOCATION OF A KEY BOX WILL BE LOCATED ADJACENT TO THE FRONT DOOR OF THE STRUCTURE.
 - SIDEWALK RAMPS AT THE DRIVEWAY APPROACH WILL BE CONSTRUCTED IN COMPLIANCE WITH ADA REQUIREMENTS.
 - DOVE STRIPS WILL NOT BE INSTALLED ON SIDEWALK RAMPS AT DRIVEWAY APPROACH.

THE DESIGN AND CONSTRUCTION OF THIS PROJECT IS THE RESPONSIBILITY OF THE ENGINEER. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THE INFORMATION SHOWN ON THESE DRAWINGS. THE ENGINEER IS NOT RESPONSIBLE FOR THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN ON THESE DRAWINGS. THE ENGINEER IS NOT RESPONSIBLE FOR THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN ON THESE DRAWINGS. THE ENGINEER IS NOT RESPONSIBLE FOR THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN ON THESE DRAWINGS.

BEFORE YOU DIG CALL MISS DIG

1-800-487-4874

BOSS ENGINEERING
ENGINEERS, SURVEYORS & PLANNERS
LANDSCAPE ARCHITECTS

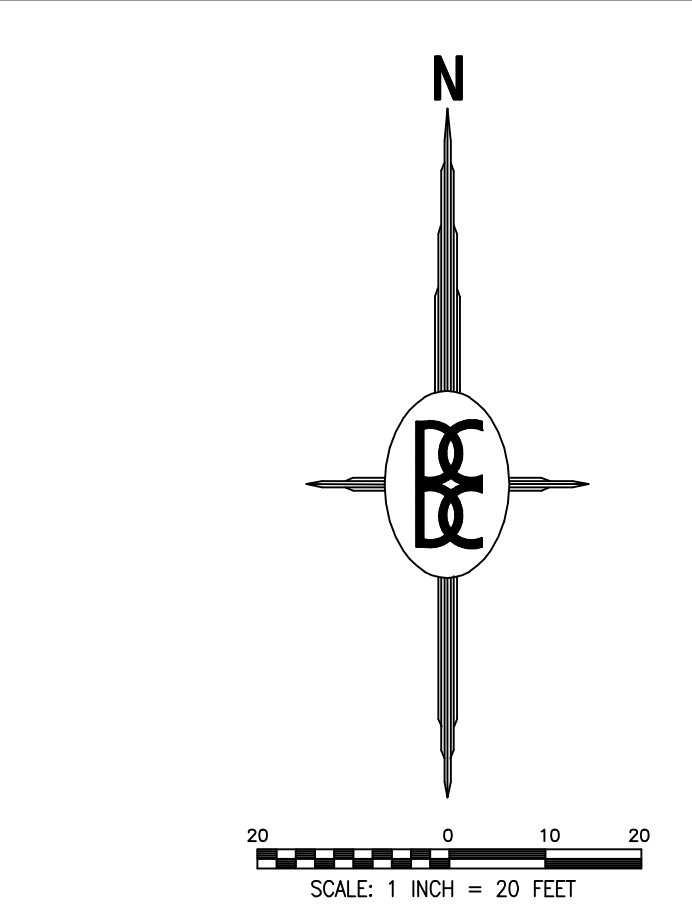
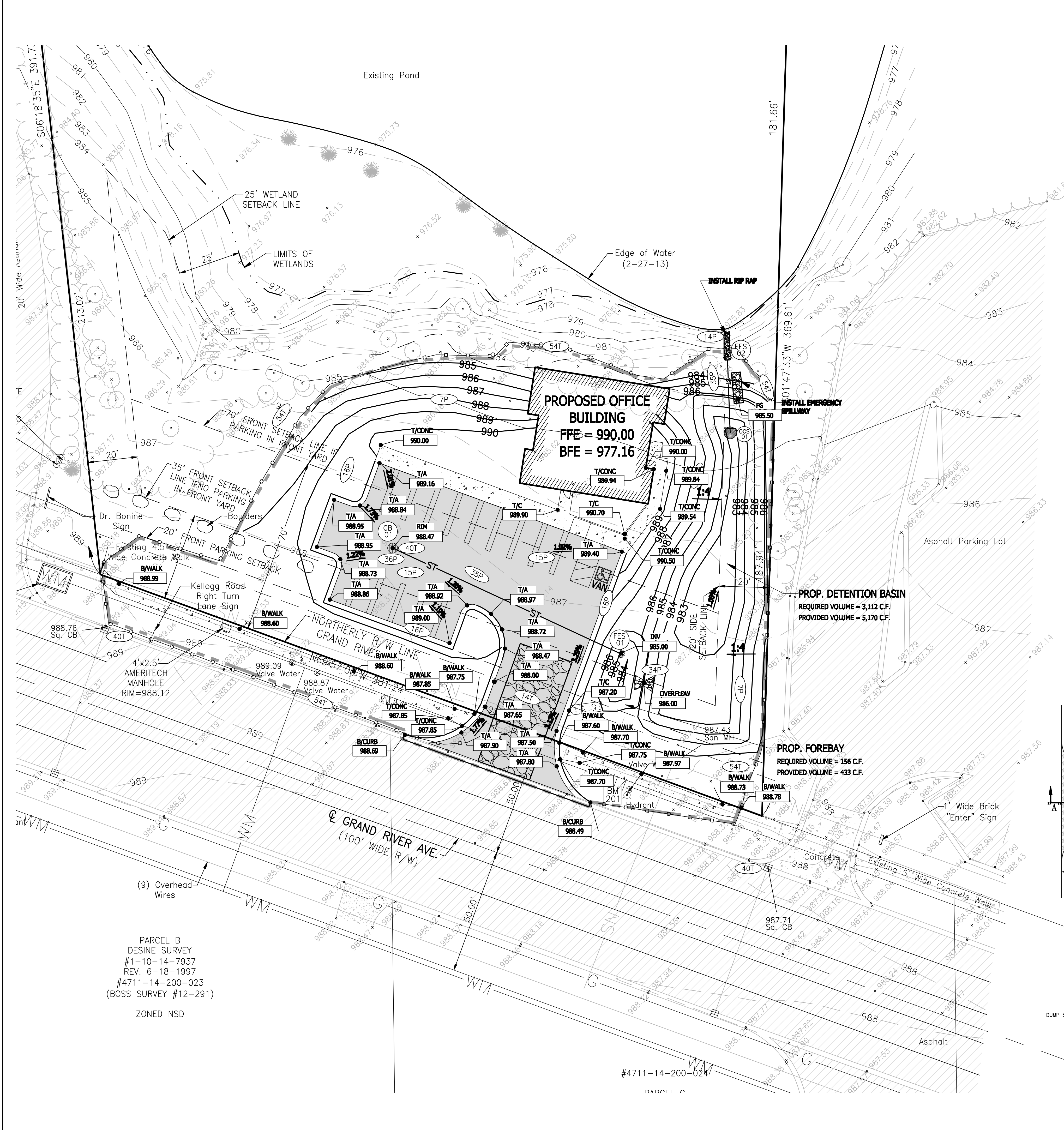
(E-MAIL: BOSS@BOSS-ENR.COM)
3121 E. GRAND RIVER AVE.
HOWELL, MI 48843
(800) 246-6735 FAX (517) 548-1870

RONDEAU DENTAL OFFICE
PREPARED FOR
LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC
10465 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668

SITE PLAN

NO	BY	DATE
1	ST	7-30-13
	TMP REVIEW	
	REVISION PER	

DESIGNED BY: ST
DRAWN BY:
CHECKED BY:
SCALE: 1" = 20'
JOB NO. 13-026
DATE: 7/10/13
SHEET NO. C2



BENCHMARKS:
SITE BENCHMARKS (NGVD29 DATUM):
- BM #200 NAIL/TAG SET N/S P.POLE. ELEV.=990.14
- BM #201 NE BOLT ON 2ND FLANGE OF HYDRANT ELEV.=989.58

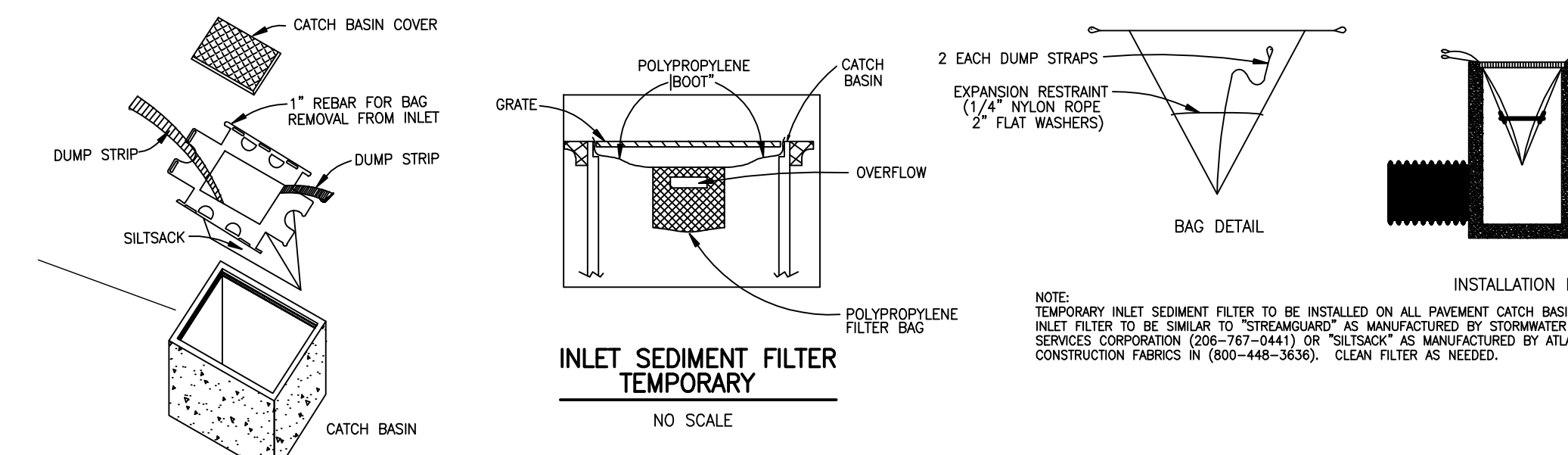
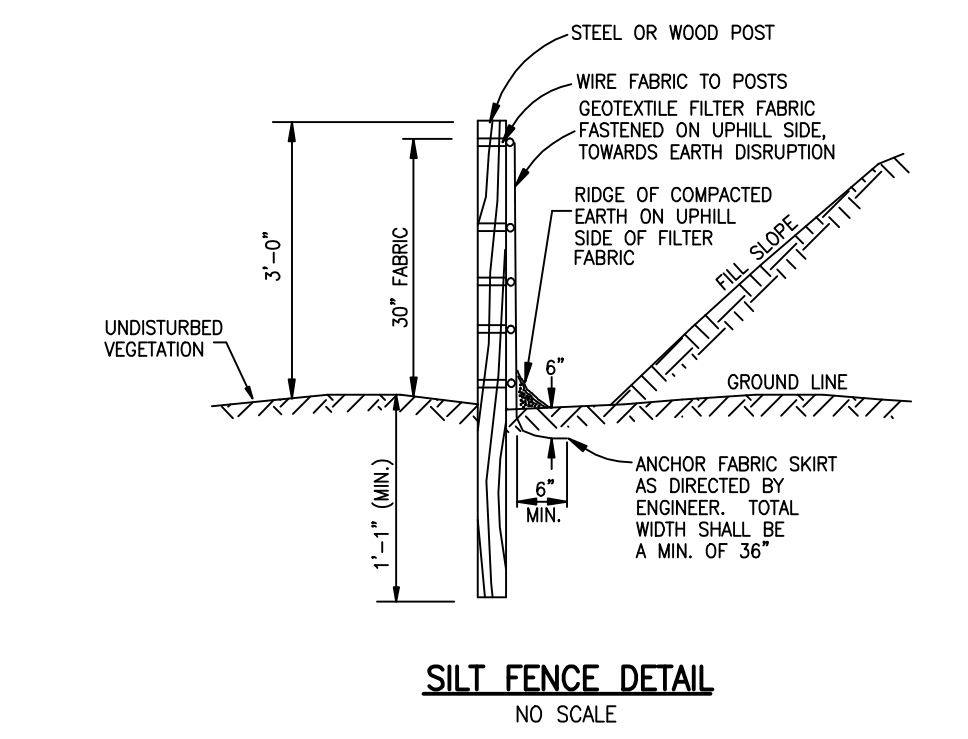
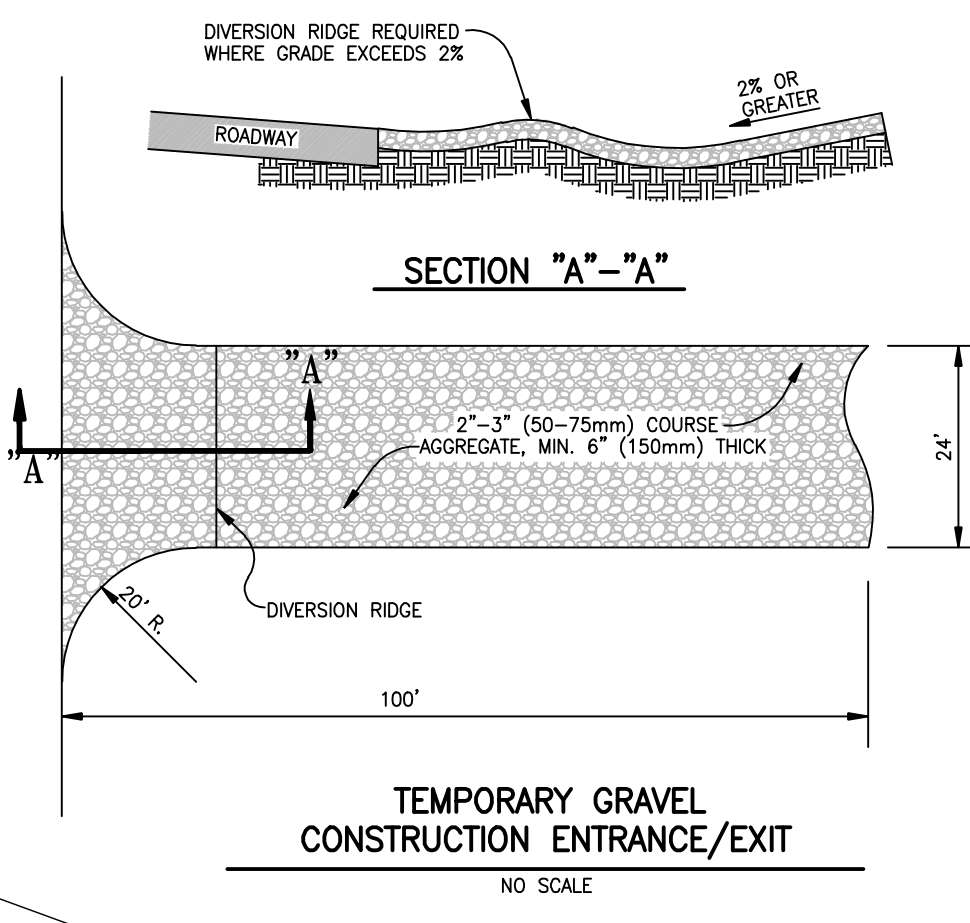
LEGEND	
PROPOSED (PR)	EXISTING (EX)
900	900
T/C	FF
XXX.XX	FG
FF	T/A
FG	T/C
T/A	T/W
T/C	RIM
T/W	INV
RIM	MH
INV	CB
MH	HY
CB	SN
HY	SL
SN	FM
SL	PS
FM	ST
PS	WM
ST	WL
WM	FO
WL	OH
FO	C
OH	E
C	G
E	T
G	U
T	S
U	NSV
S	CSB
NSV	SN
CSB	CB
SN	54T
CB	
54T	

CONTOUR
STORM DRAINAGE FLOW
SPOT ELEVATION
FINISHED FLOOR ELEVATION
FINISHED GRADE ELEVATION
TOP OF ASPHALT
TOP OF CURB / CONCRETE
TOP OF WALK
RIM ELEVATION
INVERT ELEVATION
MANHOLE STRUCTURE
CATCHBASIN STRUCTURE
HYDRANT
UTILITY POLE
SANITARY SEWER
SANITARY LEAD
FORCE MAIN
PRESSURE SEWER
STORM SEWER
WATER MAIN
WATER LEAD
FIBER OPTIC
OVERHEAD WIRE
CABLE
ELECTRIC
GAS
TELEPHONE
MANHOLE
INLET / CATCHBASIN
FLARED END-SECTION
GATE VALVE
HYDRANT
UTILITY POLE
SIGN
NOT FIELD VERIFIED
TO BE REMOVED
COMPACTED SAND BACKFILL
SANITARY SEWER LABEL
STORM SEWER LABEL
SOIL EROSION CONTROL MEASURE
(P=PERMANENT, T=TEMPORARY)
SILT FENCE
LIMITS OF GRADING/CLEARING
WETLAND BOUNDARY

SOIL EROSION CONTROL MEASURES

1	STOPPING & STOCKPILE TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION. STOCKPILE SHOULD BE TEMPORARILY SEEDED.
7	MULCH SEEDING	EFFECTIVE ON LARGE AREAS. MULCH TACKING AGENT USED TO PROVIDE IMMEDIATE PROTECTION UNTIL GRASS IS ROOTED. SHOULD INCLUDE PREPARED TOPSOIL (B).
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, REDUCES MINOR EROSION. PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER. MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS.
15	PAVING	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY. IRREGULAR SURFACE WILL HELP SLOW VELOCITY.
16	CURB & GUTTER	KEEPS HIGH VELOCITY RUNOFF ON PAVED AREAS FROM LEAVING PAVED SURFACE. COLLECTS AND CONDUCTS RUNOFF TO ENCLOSED DRAINAGE SYSTEM OR PREPARED DRAINAGE.
34	SEDIMENT BASIN	TYPES SEDIMENT. RELEASES RUNOFF AT NON-EROSIVE RATES. CONTROLS RUNOFF AT SYSTEM OUTLETS. CAN BE USED IN ADVERSE WEATHER.
35	SEDIMENT TRAP	SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS. CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF. CONDUCTS RUNOFF TO MUNICIPAL SEWER SYSTEM OR STABILIZED OUTFALL LOCATION. USE CAREFUL DESIGN TO COLLECT SEDIMENT.
36	CATCH BASIN	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.
40	INLET SEDIMENT FILTER	EASY TO SHAKE. COLLECTS SEDIMENT. MAY BE CLEANED AND EXPANDED AS NEEDED. (SEE DETAIL THIS SHEET)
54	SILT FENCE	USES GEOTEXTILE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.

P = PERMANENT T = TEMPORARY
TOTAL DISTURBED AREA = 0.66 ACRES



THE DESIGN AND CONSTRUCTION OF THIS PROJECT HAS BEEN REVIEWED BY THE STATE OF MICHIGAN. THE REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE PROJECT AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN ON THESE DRAWINGS. NO LIABILITY IS ASSUMED BY THE ENGINEER FOR ANY DAMAGE TO PERSONS OR PROPERTY CAUSED BY THE USE OF THESE DRAWINGS. THE CONTRACTOR SHALL VERIFY THE EXISTING UTILITIES, DETERMINING THE EXACT LOCATION AND DEPTH OF ANY UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES BEFORE ANY CONSTRUCTION BEGINS. THE CONTRACTOR SHALL VERIFY THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

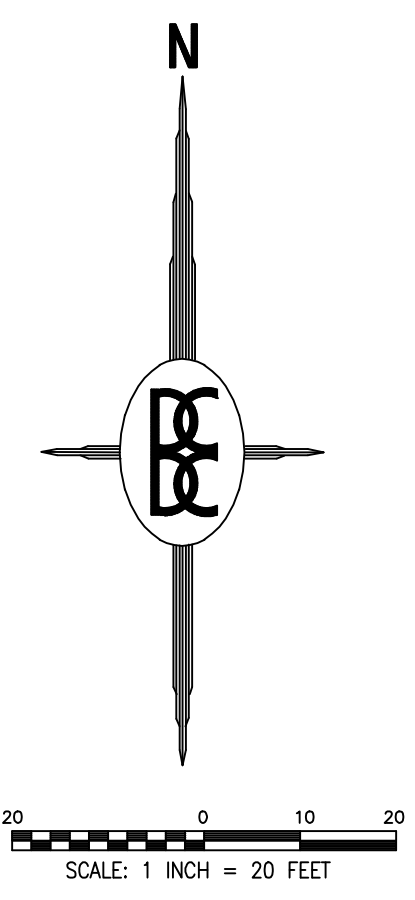
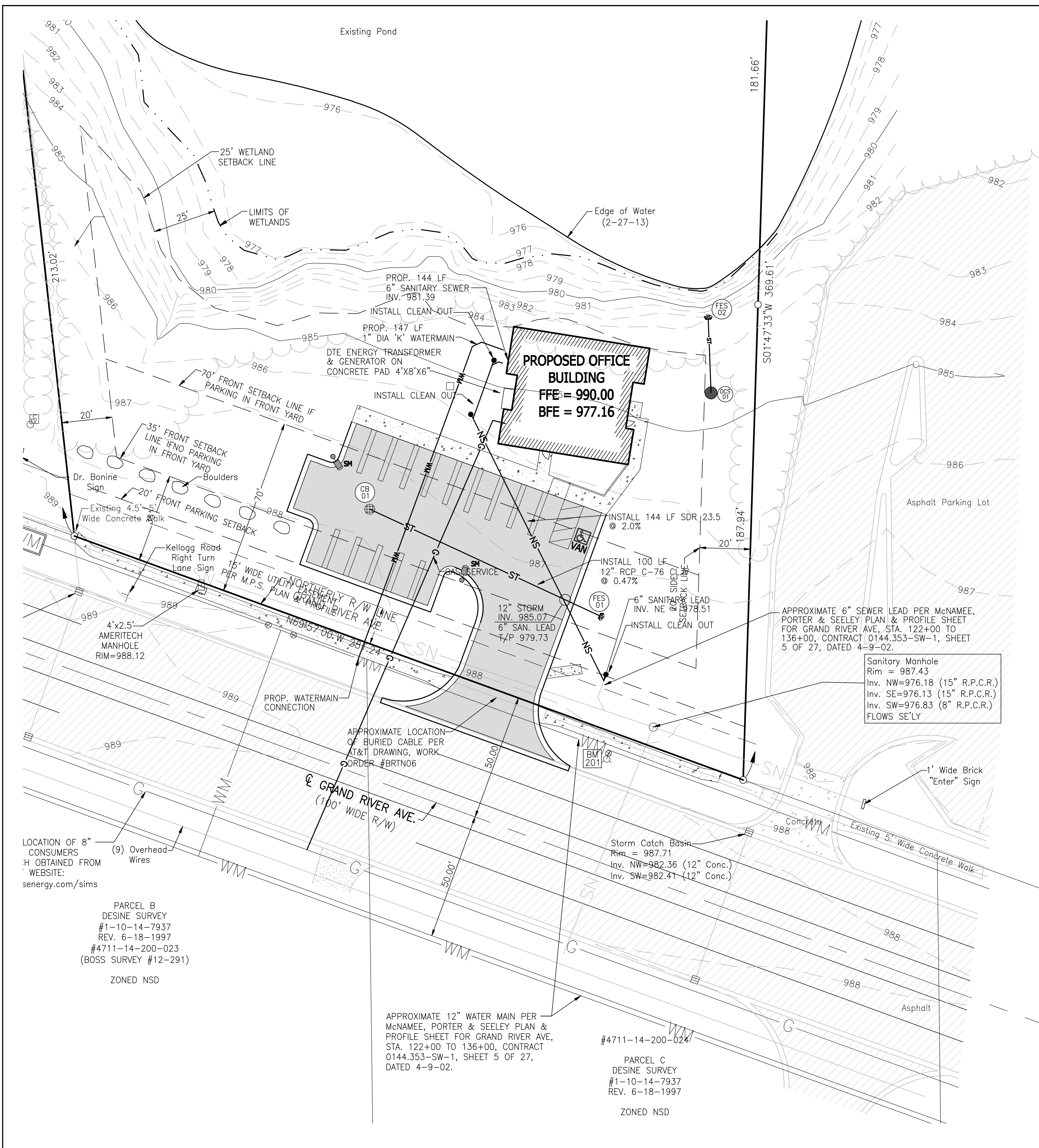
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(E-MAIL: BOSS@BOSS-ENG.COM)
HOWELL, MI 48843
3121 E. GRAND RIVER AVE.
(800) 246-6735 FAX (517) 548-1870

PROJECT: **RONDEAU DENTAL OFFICE**
PREPARED FOR: **LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC**
10465 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668

TITLE: **GRADING, DRAINAGE, & SEC PLAN**

NO.	DATE	BY	REVISION
1	7-30-13	ST	TMP REVIEW
			NO BY

DESIGNED BY: ST
DRAWN BY:
CHECKED BY:
SCALE: 1" = 20'
JOB NO. 13-026
DATE: 7/10/13
SHEET NO. **C3**



PROPOSED (PR)	EXISTING (EX)	
900	900	CONTOUR
T/C XXXXXX	+ 922.08	STORM DRAINAGE FLOW
FF	FF	SPOT ELEVATION
FG	FG	FINISHED FLOOR ELEVATION
T/A	T/A	FINISHED GRADE ELEVATION
T/C	T/C	TOP OF ASPHALT
T/W	T/W	TOP OF CURB / CONCRETE
RIM	RIM	TOP OF WALK
INV	INV	RIM ELEVATION
MH	MH	INVERT ELEVATION
CB	CB	MANHOLE STRUCTURE
UP	UP	CATCHBASIN STRUCTURE
HY	HY	HYDRANT
SN	SN	UTILITY POLE
SL	SL	SANITARY SEWER
FM	FM	SANITARY LEAD
PS	PS	FORCE MAIN
ST	ST	PRESSURE SEWER
WM	WM	STORM SEWER
WL	WL	WATER MAIN
FO	FO	WATER LEAD
OH	OH	FIBER OPTIC
C	C	OVERHEAD WIRE
E	E	CABLE
T	T	ELECTRIC
G	G	GAS
○	○	TELEPHONE
□	□	MANHOLE
○	○	INLET / CATCHBASIN
○	○	FLARED END-SECTION
○	○	GATE VALVE
○	○	HYDRANT
○	○	UTILITY POLE
○	○	FENCE
○	○	SIGN
○	○	NOT FIELD VERIFIED
○	○	TO BE REMOVED
○	○	COMPACTED SAND BACKFILL
○	○	SANITARY SEWER LABEL
○	○	STORM SEWER LABEL
○	○	WATER MAIN LABEL
○	○	SOIL EROSION CONTROL MEASURE
○	○	(P=PERMANENT, T=TEMPORARY)
○	○	SILT FENCE
○	○	LIMITS OF GRADING/CLEARING
○	○	WETLAND BOUNDARY

#4711-14-200-026
6995 GRAND RIVER
ZONED GCD

NOTE:
PRIOR TO CONSTRUCTION,
SANITARY LEAD INVERT IS
TO BE VERIFIED.

PROP. CATCH BASIN
2' DIA., COVER MDOT 'D'
RIM = 988.47
12" INV. SE. = 985.47
W/2'SUMP

STRUCTURE FRAMES & COVERS					
COVER	TYPE	USE	MANUFACTURER OR EQUIV.		TYPE OF COVER OR GRATE
			EAST JORDAN	NEENAH	
A	MH	ALL	1120	R-1415	SANITARY-SELF SEALING STORM-VENTED
B	CB & INLET	TYPE B2 CURB	7085	R-3038-A	
K	CB & INLET	TYPE C & F CURB	7045	R-3031-B	FLAT GRATE WITH VERT. 4" OPEN THROAT
C	CB & INLET	VALLEY CURB	7065	R-3034-B	
D	CB & INLET	PARKING LOTS	1020-MI	R-2560-D	FLAT GRATE
E	CB & INLET	LAWN AREA OR DITCH	1020-01		BEEHIVE GRATE 4" HIGH

BENCHMARKS:
SITE BENCHMARKS (NGVD29 DATUM):
- BM #200 NAIL/TAG SET N/S P.POLE. ELEV.=990.14
- BM #201 NE BOLT ON 2ND FLANGE OF HYDRANT ELEV.=989.58

LOCATION OF 8" CONSUMERS Wires OBTAINED FROM WEBSITE: senergy.com/sims

PARCEL B
DESINE SURVEY
#1-10-14-7937
REV. 6-18-1997
#4711-14-200-023
(BOSS SURVEY #12-291)
ZONED NSD

APPROXIMATE 12" WATER MAIN PER McNAMEE, PORTER & SEELEY PLAN & PROFILE SHEET FOR GRAND RIVER AVE, STA. 122+00 TO 136+00, CONTRACT 0144.353-SW-1, SHEET 5 OF 27, DATED 4-9-02.

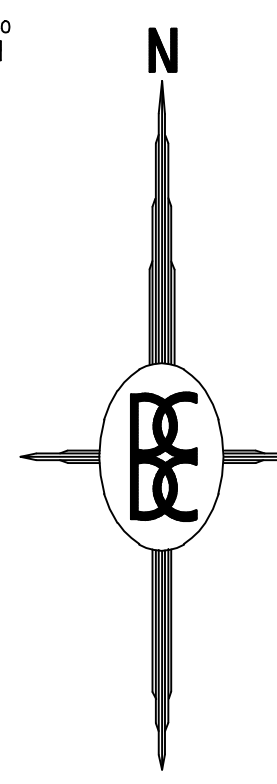
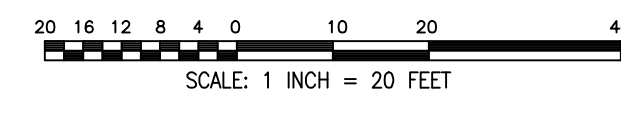
#4711-14-200-024
PARCEL C
DESINE SURVEY
#1-10-14-7937
REV. 6-18-1997
ZONED NSD

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PROJECT: **RONDEAU DENTAL OFFICE**
PREPARED FOR: **LANDHOUT ASSOCIATES ARCHITECTS, AIA, PC**
10465 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668
TITLE: **UTILITY PLAN**

NO.	BY	DATE
1	ST	7-30-13

DESIGNED BY: ST
DRAWN BY:
CHECKED BY:
SCALE: 1" = 20'
JOB NO. 13-026
DATE: 7/10/13
SHEET NO. **C4**



THE DRAWING AND ALL INFORMATION THEREON, INCLUDING BUT NOT LIMITED TO THE LOCATION AND DEPTH OF EXISTING UTILITIES, ARE SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITIES, MANHOLES, AND STRUCTURES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR STRUCTURES CAUSED BY THE CONTRACTOR'S NEGLIGENCE OR INEPTITUDE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. BEFORE YOU DIG CALL MISS DIG 811.

PROPOSED (PR)	EXISTING (EX)	
900	900	CONTOUR
T/C	+922.08	SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
FG	FG	FINISHED GRADE ELEVATION
T/A	T/A	TOP OF ASPHALT
T/C	T/C	TOP OF CURB / CONCRETE
T/W	T/W	TOP OF WALK
F/L	F/L	FLOW LINE
T/P	T/P	TOP OF PIPE
B/P	B/P	BOTTOM OF PIPE
RIM	RIM	RIM ELEVATION
INV	INV	INVERT ELEVATION
MH	MH	MANHOLE STRUCTURE
IN	IN	INLET STRUCTURE
CB	CB	CATCHBASIN STRUCTURE
RY	RY	REARYARD STRUCTURE
ES	ES	END-SECTION
GV	GV	GATEVALVE STRUCTURE
HY	HY	HYDRANT
UP	UP	UTILITY POLE
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAIN
PS	PS	PRESSURE SEWER
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
FO	FO	FIBER OPTIC
OH	OH	OVERHEAD WIRE
C	C	CABLE
E	E	ELECTRIC
GS	GS	GAS
MANHOLE	MANHOLE	MANHOLE
INLET / CATCHBASIN	INLET / CATCHBASIN	INLET / CATCHBASIN
FLARED END-SECTION	FLARED END-SECTION	FLARED END-SECTION
GATE VALVE	GATE VALVE	GATE VALVE
HYDRANT	HYDRANT	HYDRANT
UTILITY POLE	UTILITY POLE	UTILITY POLE
FENCE	FENCE	FENCE
SIGN	SIGN	SIGN
NOT FIELD VERIFIED	NOT FIELD VERIFIED	NOT FIELD VERIFIED
TO BE REMOVED	TO BE REMOVED	TO BE REMOVED
COMPACTED SAND BACKFILL	COMPACTED SAND BACKFILL	COMPACTED SAND BACKFILL
SANITARY SEWER LABEL	SANITARY SEWER LABEL	SANITARY SEWER LABEL
STORM SEWER LABEL	STORM SEWER LABEL	STORM SEWER LABEL
WATER MAIN LABEL	WATER MAIN LABEL	WATER MAIN LABEL
SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
SILT FENCE	SILT FENCE	SILT FENCE
LIMITS OF GRADING/CLEARING	LIMITS OF GRADING/CLEARING	LIMITS OF GRADING/CLEARING
WETLAND BOUNDARY	WETLAND BOUNDARY	WETLAND BOUNDARY
CONCRETE	CONCRETE	CONCRETE
ASPHALT	ASPHALT	ASPHALT
MODIFIED CURB	MODIFIED CURB	MODIFIED CURB

LANDSCAPE REQUIREMENTS

- STREET FRONTAGE**
- REQUIRED - 1 TREE PER 40 L.F. OF FRONTAGE (281 L.F. / 40 = 7 TREES)
- PROVIDED - 7 TREES
- BUFFER ZONES**
- REQUIRED - NO BUFFER REQUIRED BECAUSE SITE IS ZONED OFFICE-SERVICE AND IT IS ADJACENT TO EITHER OFFICE OR COMMERCIAL ZONED DISTRICTS.
- PARKING AREA LANDSCAPING**
- REQUIRED - 1 CANOPY TREE AND 100 S.F. OF LANDSCAPED AREA PER 10 SPACES (17 SPACES / 10 = 2 & 200 S.F.)
- PROVIDED - 3 TREES & 635 S.F.
- DETENTION BASIN LANDSCAPING**
- REQUIRED - 1 TREE AND 10 SHRUBS PER 50 L.F. OF BASIN PERIMETER
DETENTION BASIN - 344 L.F. = 7 TREES & 69 SHRUBS
PROPOSED - 10 TREES & 69 SHRUBS

PLANT LIST

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
TREES					
AS	2	Acer saccharum 'Legacy'	Legacy Sugar Maple	2 1/2" cal.	B-B
AR	5	Acer rubrum 'Red Sunset'	Red Sunset Maple	2 1/2" cal.	B-B
BN	4	Betula nigra	River Birch	2 1/2" cal.	B-B
QR	3	Quercus rubra	Red Oak	2 1/2" cal.	B-B
TC	3	Tilia cordata 'Greenspire'	Greenspire Linden	2 1/2" cal.	B-B
PP	3	Picea pungens var. 'Glauca'	Colorado Blue Spruce	6'-8" ht.	B-B
SHRUBS					
BV	5	Buxus x microphylla 'Green Velvet'	Green Velvet Boxwood	15"-18" ht.	B-B
CS	37	Cornus sericea	Redosier Dogwood	24"-36" ht.	B-B
EA	29	Euonymus alatus var. Compactus	Dwarf Burning Bush	24"-36" ht.	B-B
QR	9	Quercus rubra	Red Oak	24" ht.	Cont.
RS	9	Rosa 'RADIX'	Double Red Knockout	24"-36" ht.	Cont.
SPM	32	Syringa patula 'Miss Kim'	Miss Kim Dwarf Lilac	6'-8" ht.	B-B
TE	5	Thuja occidentalis 'Emerald'	Emerald Arborvitae	24"-36" ht.	B-B

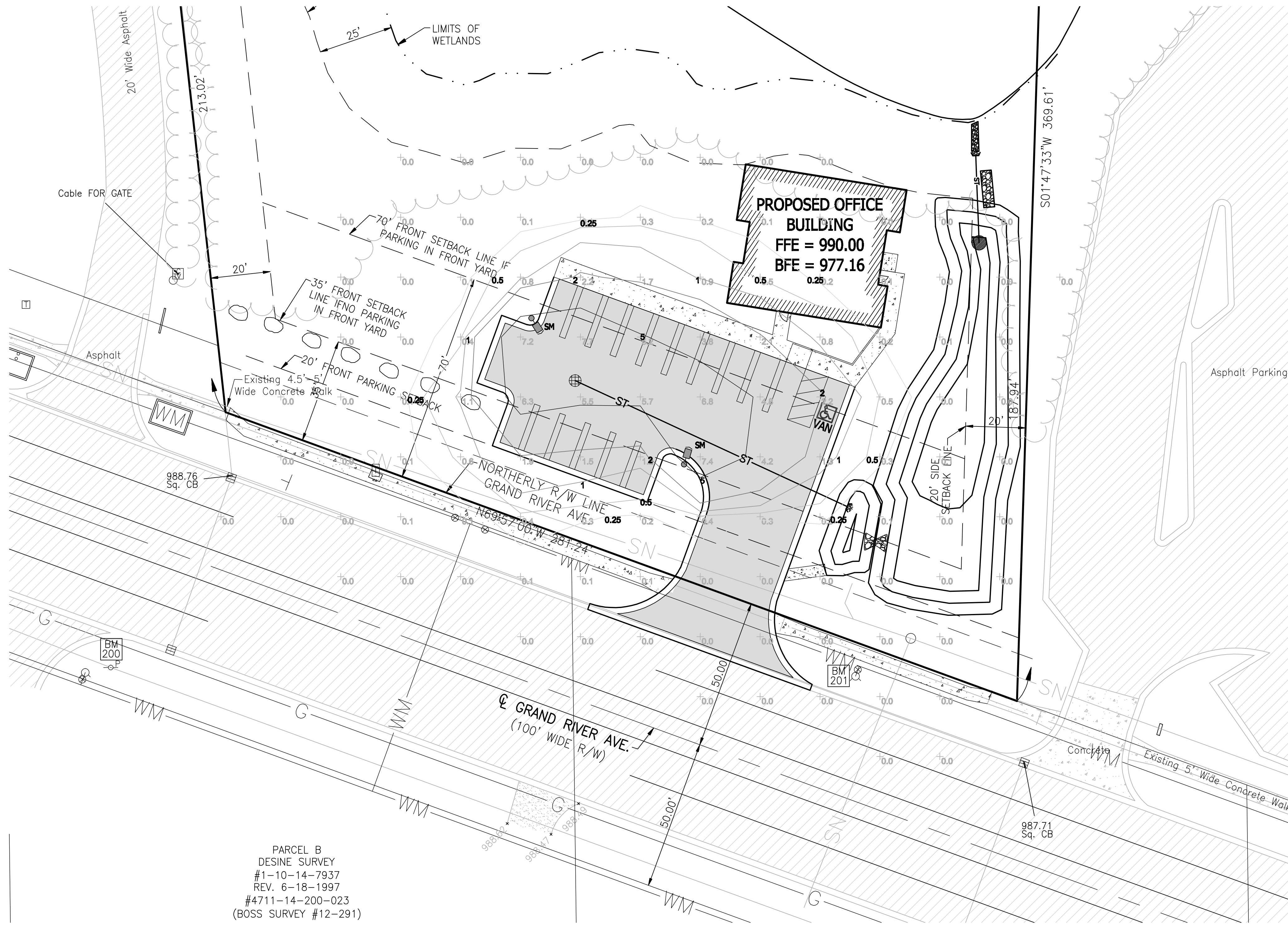
PARCEL B
DESINE SURVEY
#1-10-14-7937
REV. 6-18-1997
#4711-14-200-023
(BOSS SURVEY #12-291)

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LANDSCAPE ARCHITECTS
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HOWELL, MI 48843
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RONDEAU DENTAL OFFICE
PREPARED FOR
LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC
10465 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668

NO.	DATE	REVISION PER	TWP.	BY
1	7-30-13			

DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY:
SCALE: 1" = 20'
JOB NO. 13-026
DATE: 7/10/13
SHEET NO. **C5**



PARCEL B
DESINE SURVEY
#1-10-14-7937
REV. 6-18-1997
#4711-14-200-023
(BOSS SURVEY #12-291)

PROPOSED (PR)	EXISTING (EX)	LEGEND
900	900	CONTOUR
T/C	+922.08	SPOT ELEVATION
XXX.XX		FINISHED FLOOR ELEVATION
FF		FINISHED GRADE ELEVATION
FG		TOP OF ASPHALT
T/A		TOP OF CURB / CONCRETE
T/C		TOP OF WALK
T/W		FLOW LINE
F/L		TOP OF PIPE
T/P		BOTTOM OF PIPE
B/P		RIM ELEVATION
RIM		RIM
INV		INVERT ELEVATION
MH		MANHOLE STRUCTURE
IN		INLET STRUCTURE
CB		CATCHBASIN STRUCTURE
RY		REARYARD STRUCTURE
ES		END-SECTION
GV		GATEVALVE STRUCTURE
HY		HYDRANT
UP		UTILITY POLE
SN		SANITARY SEWER
SL		SANITARY LEAD
FM		FORCE MAIN
PS		PRESSURE SEWER
ST		STORM SEWER
WM		WATER MAIN
WL		WATER LEAD
FO		FIBER OPTIC
OH		OVERHEAD WIRE
C		CABLE
E		ELECTRIC
G		GAS
T		TELEPHONE
O		MANHOLE
I		INLET / CATCHBASIN
E		FLARED END-SECTION
G		GATE VALVE
H		HYDRANT
U		UTILITY POLE
F		FENCE
S		SIGN
NFV		NOT FIELD VERIFIED TO BE REMOVED
TBR		COMPACTED SAND BACKFILL
CSB		
SAN #1		SANITARY SEWER LABEL
CB 02		STORM SEWER LABEL
WM 12		WATER MAIN LABEL
54T		SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
		SILT FENCE
		LIMITS OF GRADING/CLEARING
		WETLAND BOUNDARY
		CONCRETE
		ASPHALT
		MODIFIED CURB
		DOUBLE FIXTURE LIGHT POLE
		SINGLE FIXTURE LIGHT FIXTURE
		WALL MOUNTED LIGHT FIXTURE
		GROUND LIGHT FIXTURE
		FOOT CANDLES ON SITE
		FOOT CANDLES OFF SITE
		FOOT CANDLES CONTOURS

SITE LIGHTING SUMMARY
LIGHTING LEVELS ARE SHOWN IN FOOTCANDLES AT 5' ABOVE GRADE

- GENERAL LIGHTING NOTES**
1. THE LIGHTING PATTERN 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.
 2. ALL POLES ARE TO BE MOUNTED ON CONCRETE PEDESTALS 2' ABOVE GRADE IN PARKING LOTS AS SHOWN IN DETAIL.
 3. ALL POLES LOCATED OUTSIDE OF THE PARKING AREA SHALL BE LOCATED 3' FROM BACK OF CURB OR EDGE OF SIDEWALKS.
 4. SHOP DRAWINGS FOR THE ELECTRICAL WIRING OF THE POLES NEED TO BE SUBMITTED TO THE ENGINEER FOR COORDINATION OF UNDERGROUND CONDUIT AND APPROVAL OF LAYOUT.

LUMINAIRE SCHEDULE

SYMBOL	LABEL	QTY.	DESCRIPTION	CATALOG NUMBER	LAMP	FILE	LUMENS	LLF	POLE DESCRIPTION	POLE HEIGHT	BASE HEIGHT	TOTAL HEIGHT
SM	SM	2	MCGRAW-EDISON GALLERIA SQUARE	GSM-AIS-400-MP-277-SL-FG-BZ-F	400 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN	GSM-XX-400-MP-XX-SL-FG.1 ES	40,000	.75	SSS4A23SF-BZ	23'	2'	25'

ALL IES FILES PROVIDED BY MANUFACTURER FOR CALCULATION OF LIGHTING LEVEL.

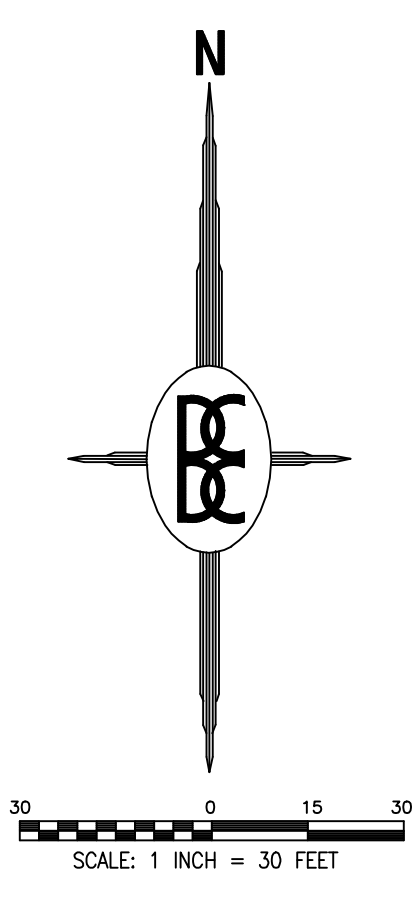
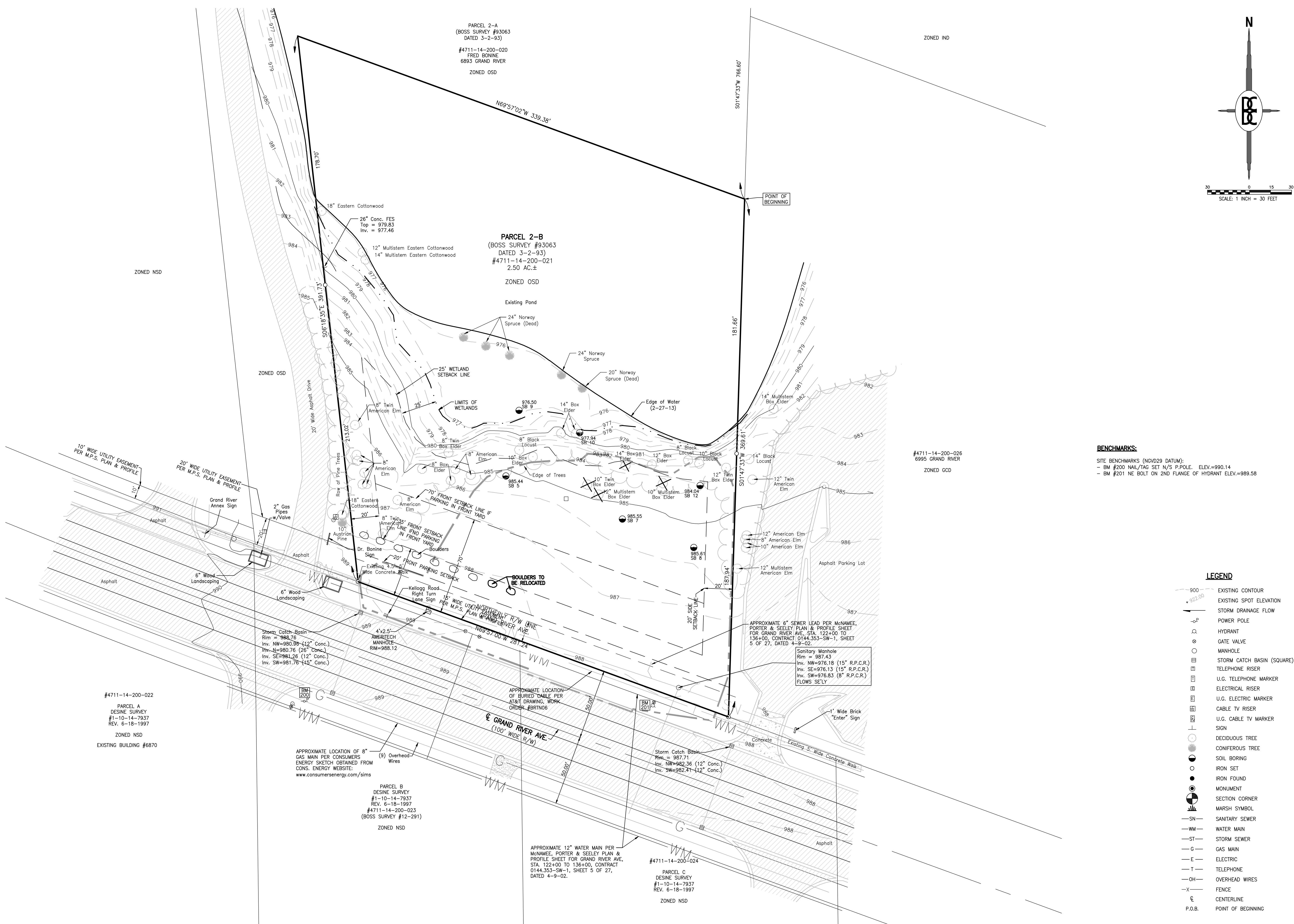
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RONDEAU DENTAL OFFICE
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10465 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668

LIGHTING PLAN

PROJECT: RONDEAU DENTAL OFFICE
DATE: 7-30-13
TWP. REVIEW: TD
REVISION PER: TD
DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY:
SCALE: 1" = 20'
JOB NO. 13-026
DATE: 7/10/13
SHEET NO. C6

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THE DESIGN AND CONSTRUCTION OF ANY PROJECT UNDER THE SUPERVISION OF AN ENGINEER OR ARCHITECT IS GUARANTEED TO BE ACCURATE AND COMPLETE. THE ENGINEER OR ARCHITECT DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA PROVIDED TO HIM BY OTHERS. THE ENGINEER OR ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION OF ANY PROJECT UNDER HIS SUPERVISION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR ARCHITECT IMMEDIATELY IN WRITING OF ANY DISCREPANCY, OMISSION, OR ERROR IN THE PLANS. THE ENGINEER OR ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION OF ANY PROJECT UNDER HIS SUPERVISION IF THE CONTRACTOR DOES NOT NOTIFY HIM IMMEDIATELY IN WRITING OF ANY DISCREPANCY, OMISSION, OR ERROR IN THE PLANS.

BEFORE YOU DIG
CALL MISS DIG
1-800-368-3673

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PROJECT: RONDEAU DENTAL OFFICE
PREPARED FOR: LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC
10465 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668

TITLE: EXIST. CONDITIONS & DEMO.

NO	BY	DATE	REVISION PER
1	ST	7-30-13	TMP REVIEW



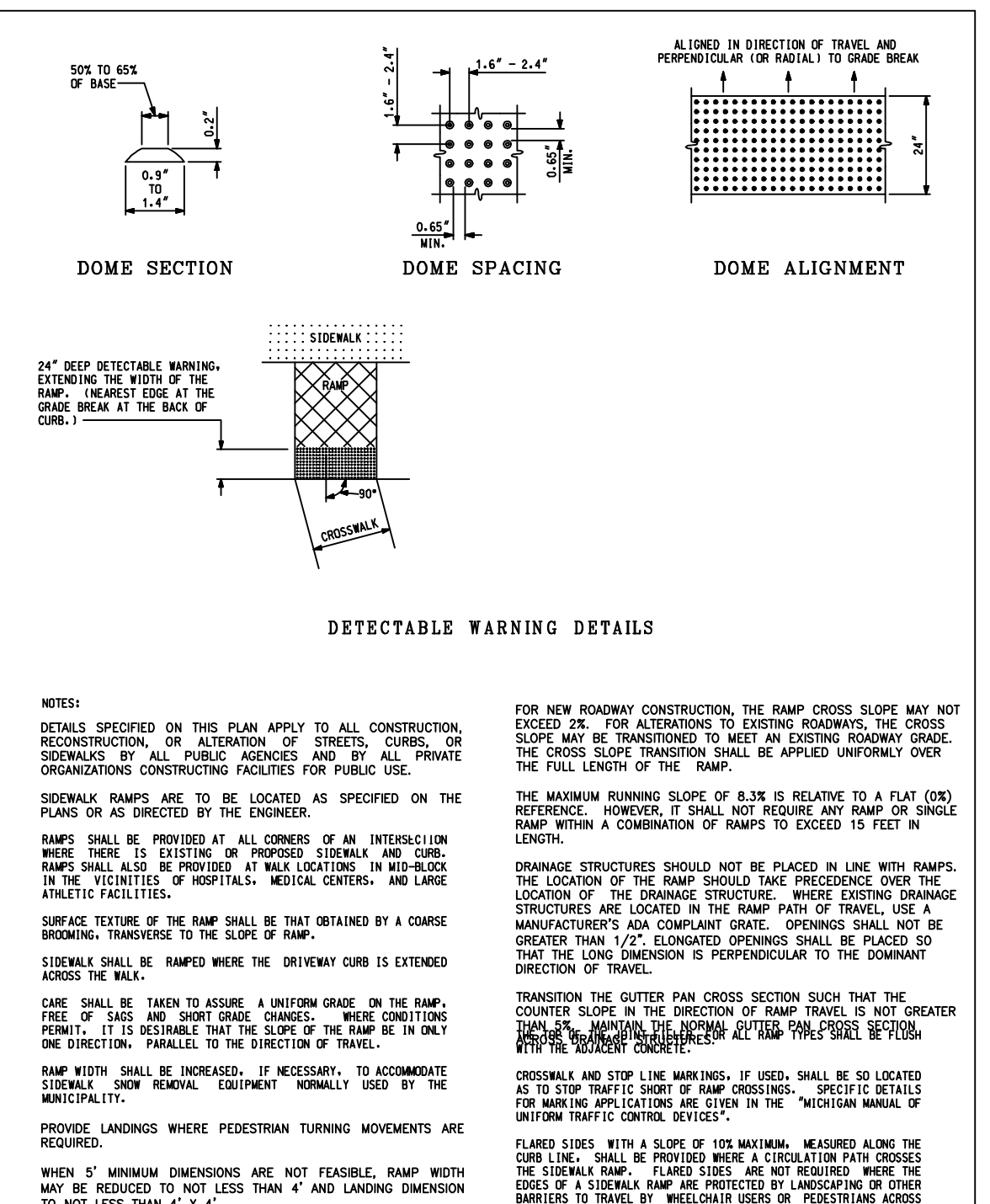
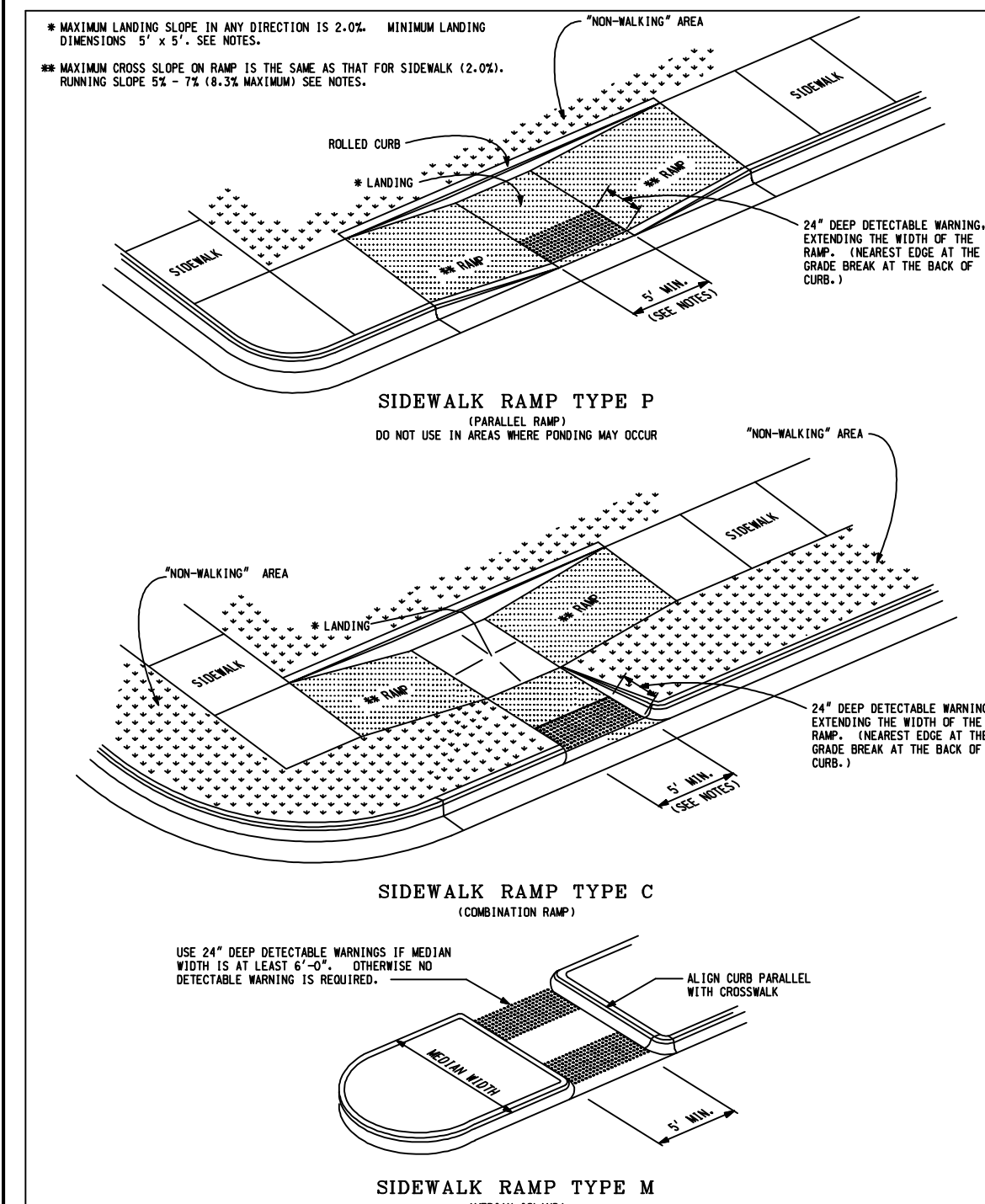
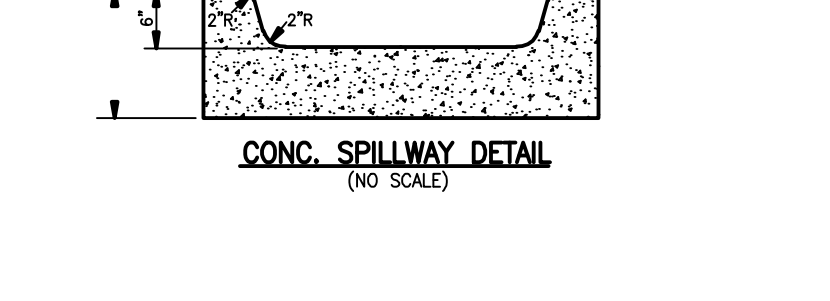
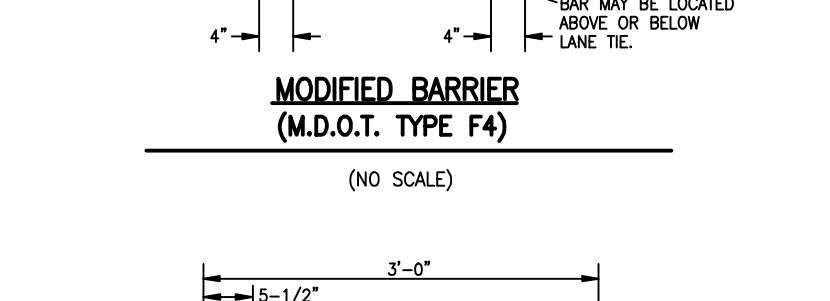
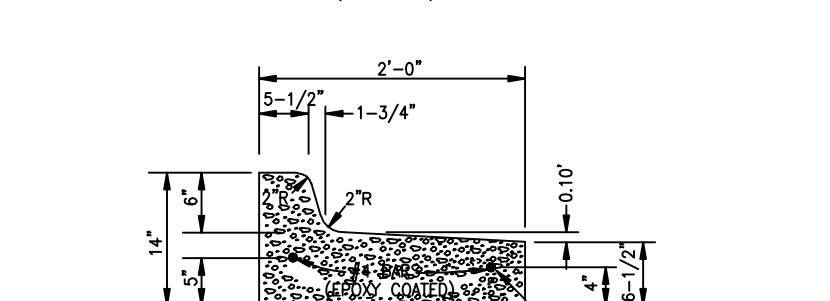
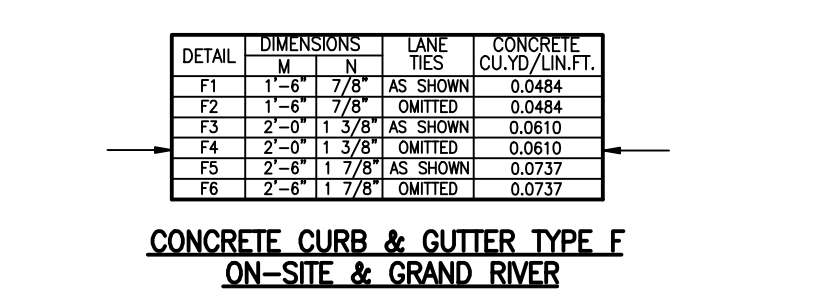
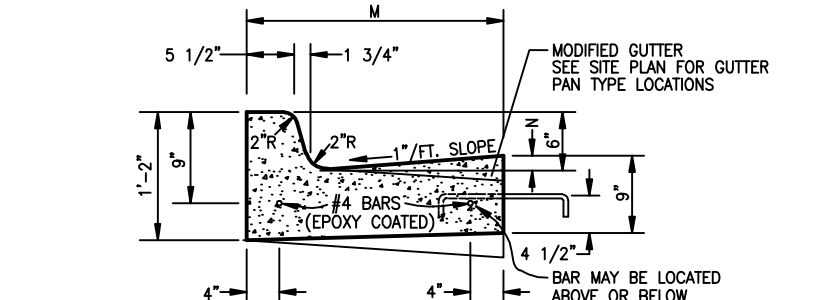
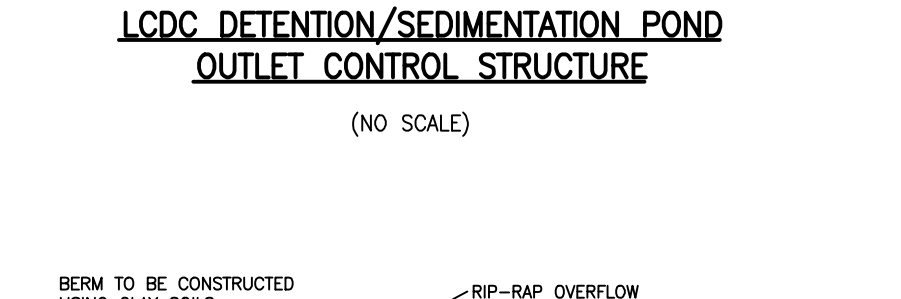
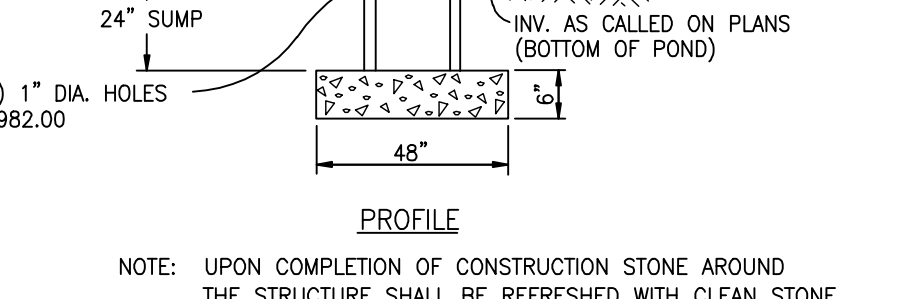
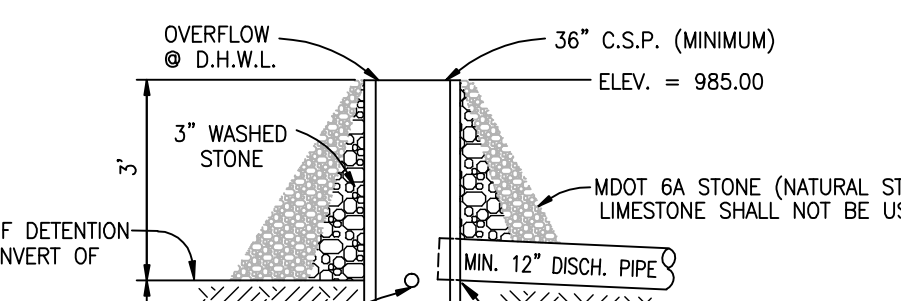
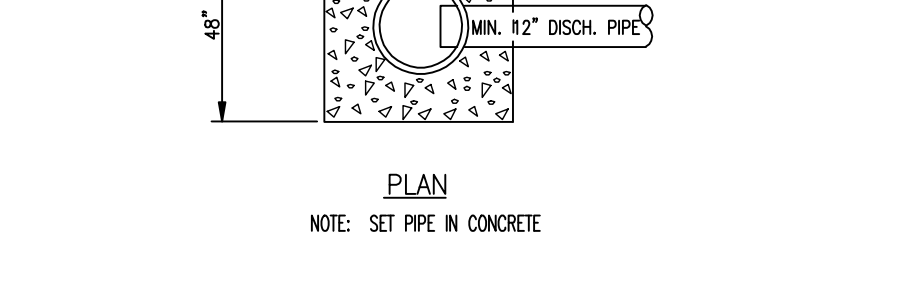
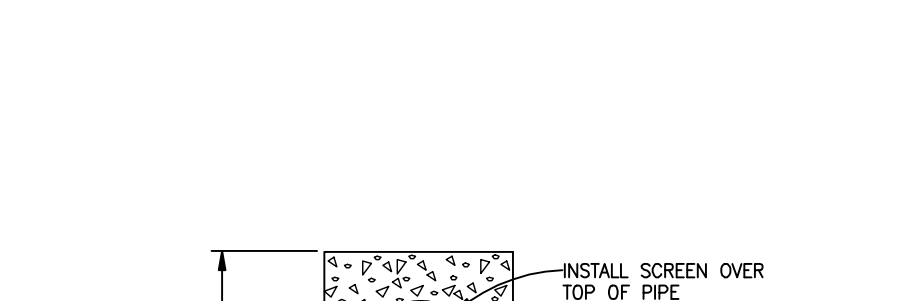
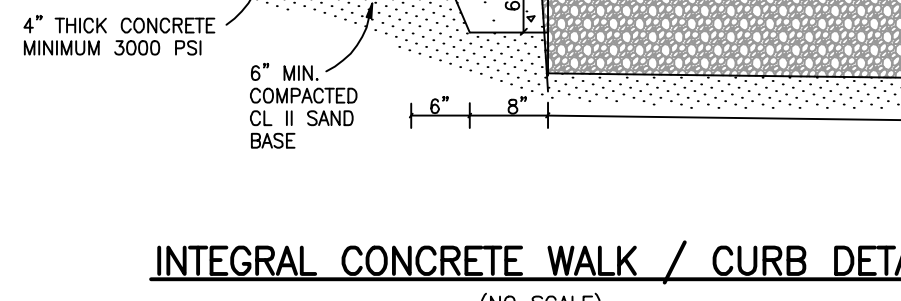
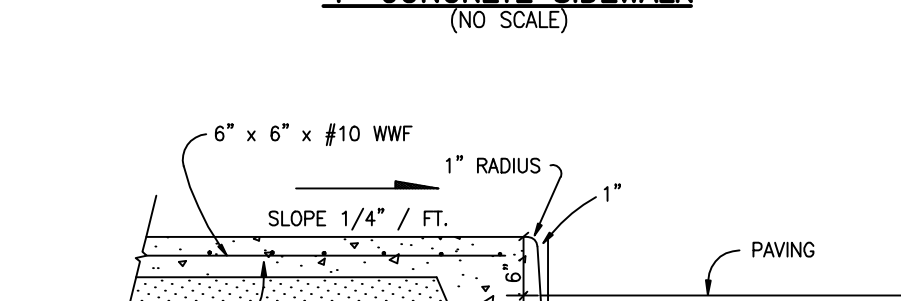
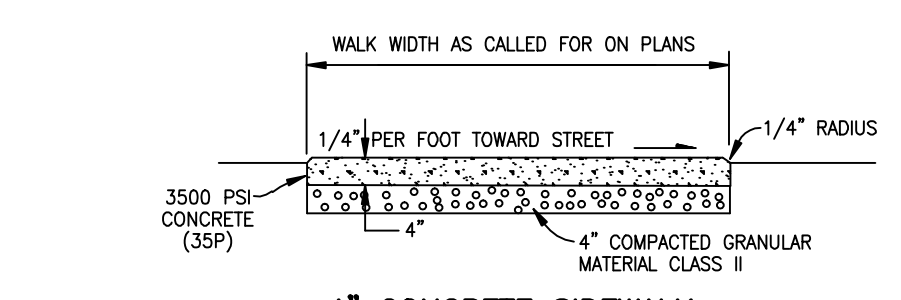
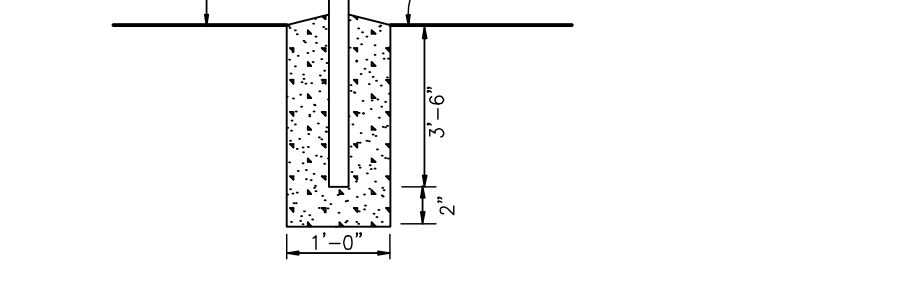
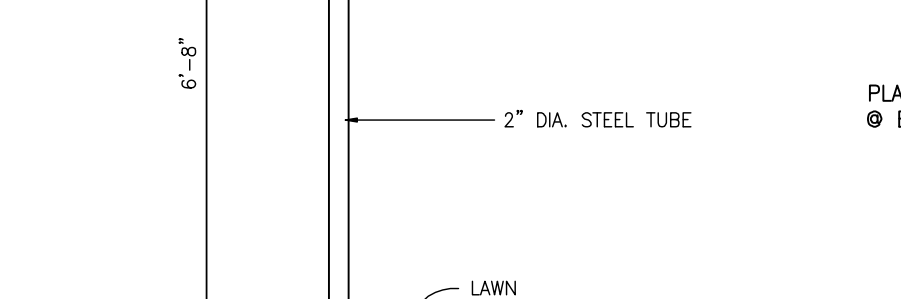
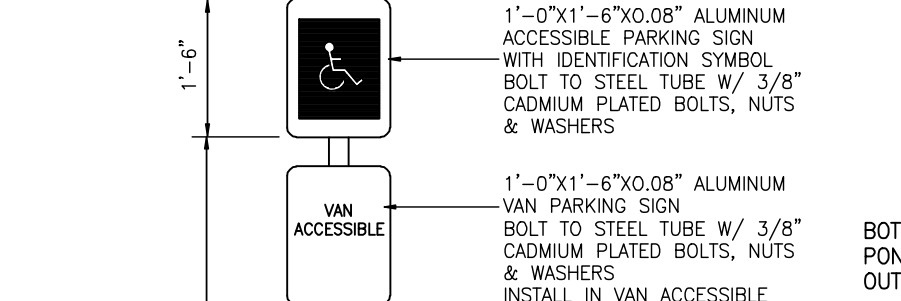
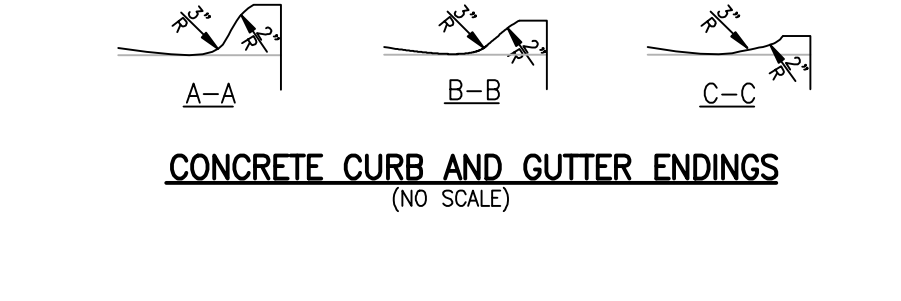
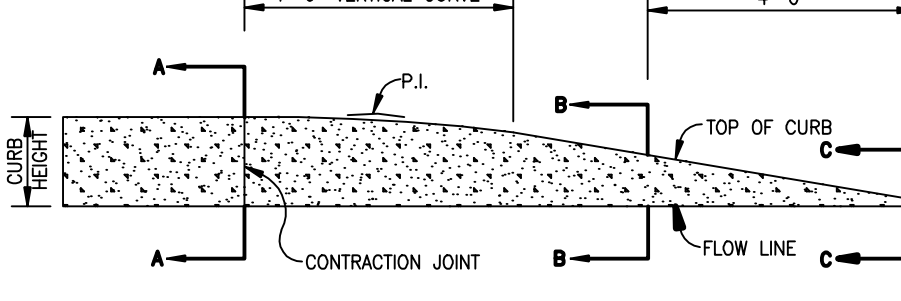
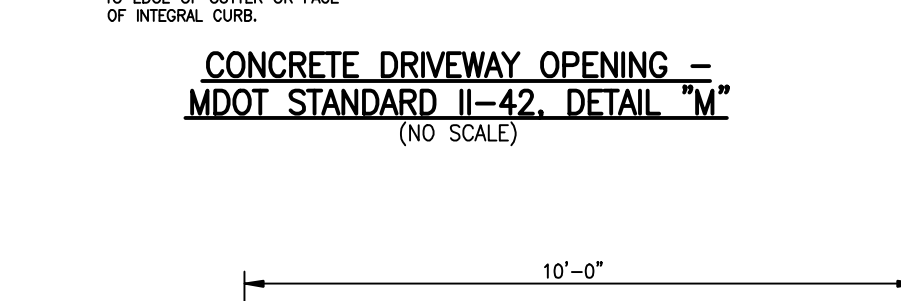
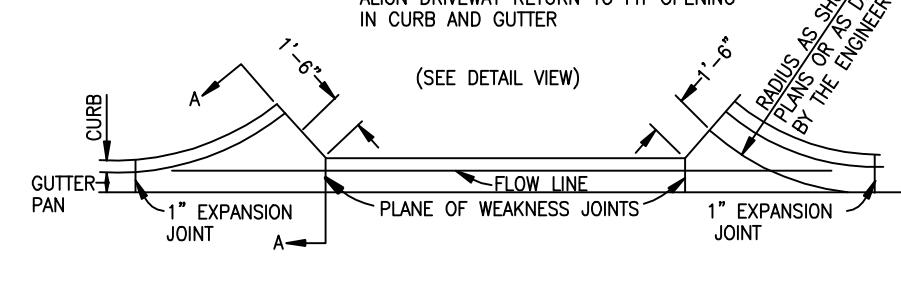
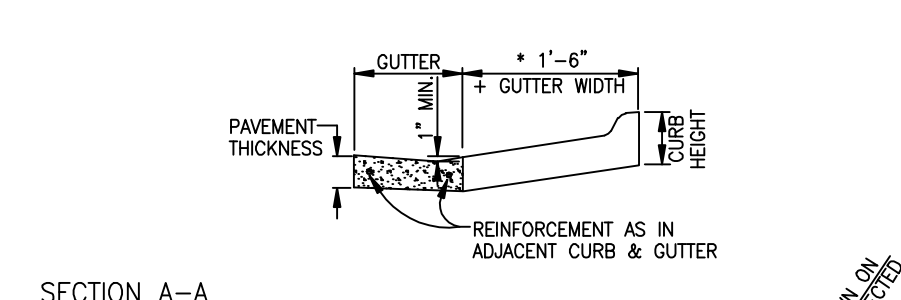
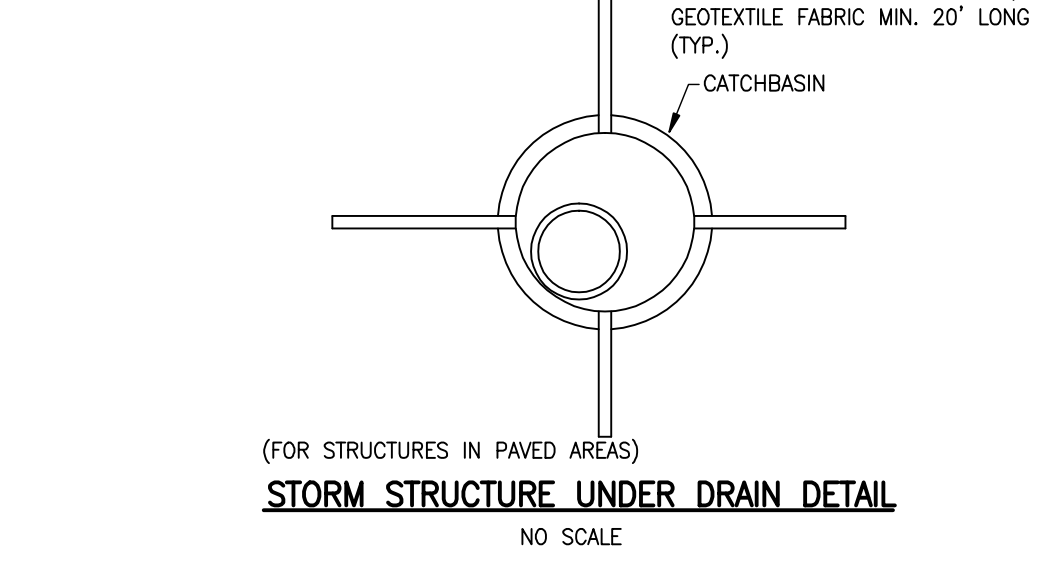
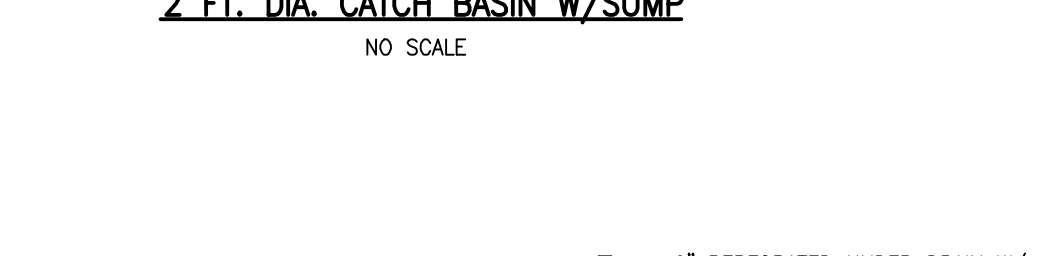
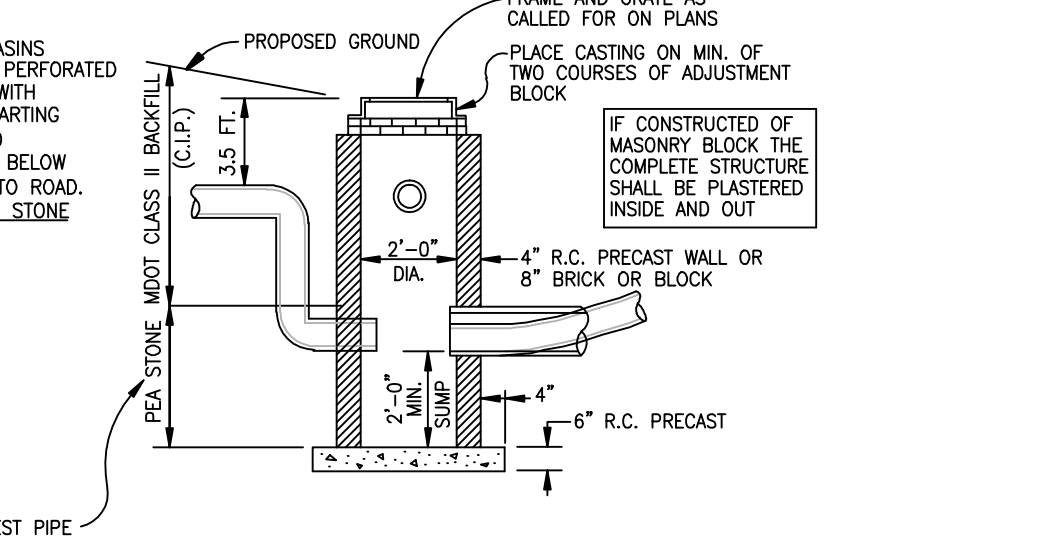
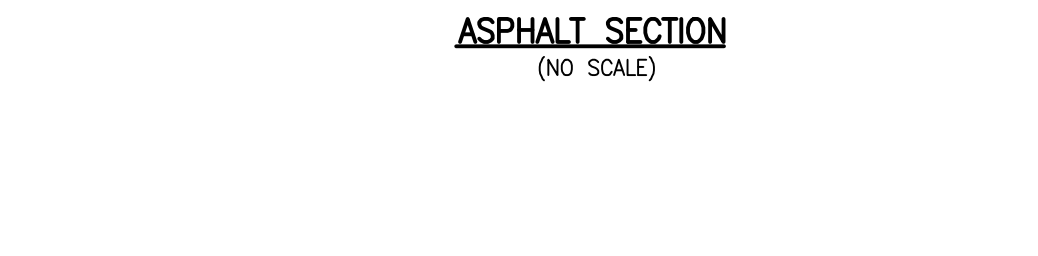
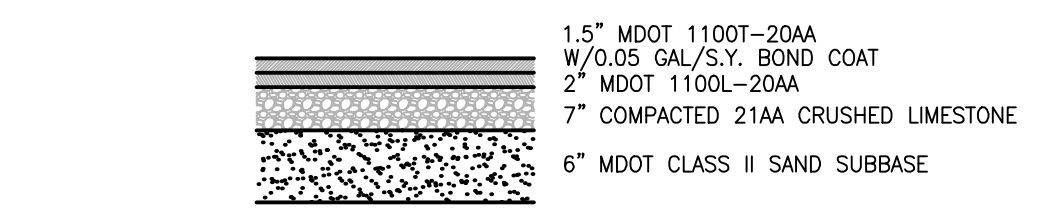
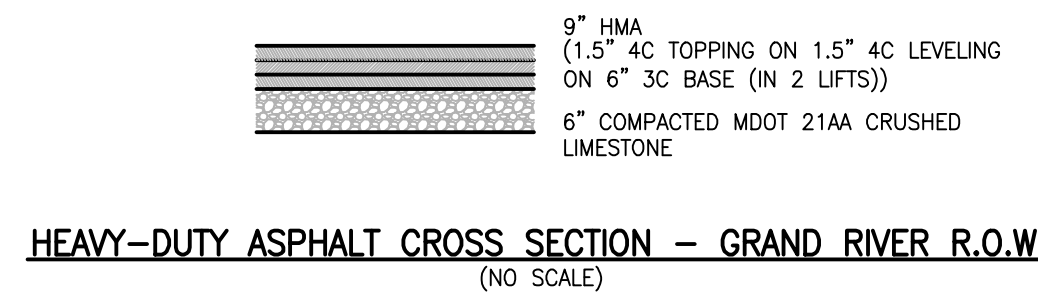
**LIVINGSTON COUNTY SOIL EROSION PERMIT TEMPLATE
TEMPORARY CONTROLS AND SEQUENCE**

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, SEEDDED, 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. 36" M.D.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 DIAPERS SHALL BE INSTALLED AT ALL INGRESS/EGRESS AREAS OF THE SITE PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. DIAPERS 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, SEEDDED, 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 DICES 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 SODDED AND PEGGED, OR RIP RAPPED, 15 FEET PAST THE TOE OF THE SLOPE OF THE BERM.
 10. DICES 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 3 FT. HORIZONTAL TO 1 FT. VERTICAL SIDE SLOPES 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 ONSITE DURING THE EXCAVATING STAGE. TOPSOIL PILES SHALL BE SEEDDED 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.
 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 BAFFLED TO THE CORRECT SIZE. ALL PIPE SHALL MEET THE 12"
 21. ALL STORM DRAIN OUTLETS 15" IN DIAMETER OR LARGER SHALL HAVE ANIMAL GUARDS INSTALLED TO PREVENT ENTRANCE TO THE 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. OUTLETS DO DENOTE RIP RAP. ALL OUTLETS SHALL BE RIP RAPPED OVER KEYED FILTER FABRIC WITH A MINIMUM OF 15 SQ. 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, SEEDDED, 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. PERMIT FEES DURING THE WINTER PERIOD OF NON-CONSTRUCTION, (DECEMBER 1 THROUGH MARCH 31), SHALL NOT BE IMPOSED IF THE PERMIT HOLDER TEMPORARILY STABILIZES THE EXPOSED AREAS WITH STRAW MATTING, AND OTHER APPROVED CONTROLS, AND OBTAINS A WINTER STABILIZATION CERTIFICATE FROM THIS OFFICE.
 32. 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.
 33. THIS COMMERCIAL 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 WAIVERS AND OR PERMITS AS NECESSARY FOR EACH LOT IN THIS DEVELOPMENT AT THE TIME APPLICATION FOR SINGLE FAMILY RESIDENCE IS MADE.
 34. 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.
 35. 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 BINDING, 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).



MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY CONSTRUCTION PLANS FOR			
SIDEWALK RAMP AND DETECTABLE WARNING DETAILS			
8-10-2010 F.S.K.E.L. APPROVE	7-28-2010 P.L.M. DATE	R-28-G	SHEET 3 OF 7

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY CONSTRUCTION PLANS FOR			
SIDEWALK RAMP AND DETECTABLE WARNING DETAILS			
8-10-2010 F.S.K.E.L. APPROVE	7-28-2010 P.L.M. DATE	R-28-G	SHEET 7 OF 7

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PROJECT: **RONDEAU DENTAL OFFICE**
PREPARED FOR: **LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC**
10465 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668

TITLE: **CONSTRUCTION NOTES & DETAILS**

NO. BY	DATE
1 ST	7-30-13
REVISION PER	

DESIGNED BY: NO SCALE
DRAWN BY:
CHECKED BY:
SCALE: NO SCALE
JOB NO. 13-026
DATE: 7/10/13
SHEET NO. **C8**

LIVINGSTON COUNTY DETENTION BASIN CALCULATIONS

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
0.26	0.9	0.23
0	0.7	0.00
0.22	0.2	0.04

COMPOUND C: 0.58
TOTAL DRAINAGE AREA: 0.48 ACRES

K1 = Ax C (Design Constant) = 0.278
Qa = MAX ALLOW OUTFLOW (.2CFS / ACRE) = 0.096 CFS

DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF x Ax C	OUTFLOW DURATION x Qa	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2751	765	29	736
10	600	7.86	4716	1311	58	1253
15	900	6.88	6192	1721	86	1635
20	1200	6.11	7332	2038	115	1923
30	1800	5.00	9000	2502	173	2329
60	3600	3.24	11664	3243	346	2897
90	5400	2.39	12906	3588	518	3069
120	7200	1.90	13680	3803	691	3112
180	10800	1.34	14472	4023	1037	2986

REQUIRED 100 YEAR DETENTION VOLUME = 3112 CF

BANKFULL FLOOD VOLUME
V_{BF} = 8160 x A x C = 2268 CF

FIRST FLUSH VOLUME
V_{FF} = 1815 x A x C = 505 CF

STORAGE PROVIDED

ELEV.	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)	FREEBOARD ELEVATION
986	4919	1	4,258	9,428	DESIGN HIGHWATER ELEVATION
985	3596	1	3,012	5,170	
984	2427	1	1,686	2,159	
983	945	1	473	473	
982	0	0	0	0	

FIRST FLUSH

X_{FF} = 982.47

BANKFULL

X_{BF} = 984.04

100 YEAR

X₁₀₀ = 984.32

OUTLET CONTROL STRUCTURE

FIRST FLUSH OF RUNOFF
THE AVERAGE ALLOWABLE RELEASE RATE FOR RUNOFF IS 0.5" OVER AREA OF SITE IN 24 HRS.

Q_{FF} = V_{FF} x (1/24HRS) x (1HR/3600SEC) = 0.006 CFS

PLACE OPENINGS IN STANDPIPE AT BOTTOM OF BASIN = 0.00

HEAD = h = X₁₀₀ - BOTTOM BASIN ELEV = 984.32 FT

A = Q_{FF} / (0.62 x (2 x 32.2 x h)^{0.5}) = 0.000 FT²

A 1 INCH DIAMETER ORIFICE HAS AN AREA OF 0.0055 SF

A / 0.0055 = 0.01

THEREFORE, USE THE FOLLOWING NUMBER OF 1 INCH DIAMETER HOLES
1.00 HOLES AT ELEV. 982.00

Q_{FFACTUAL} = 0.851 CFS

BANKFULL FLOOD
FOR THE ALLOWABLE RELEASE RATE OF 24-40 HOURS, CHECK THE DISCHARGE THROUGH THE FIRST FLUSH ORIFICE TO SEE IF ADDITIONAL HOLES ARE NECESSARY.

HEAD = h = X₁₀₀ - BOTTOM BASIN ELEV = 984.32 FT

Q_{90.0} = 0.62 x #HOLES x (AREA EACH HOLE) x (2 x 32.2 x h)^{0.5} = 0.851 CFS

T_{90.0} = (1 SEC / Q_{90.0}) x V_{BF} x (1 HR / 3600 SEC) = 0.74 HRS

SINCE HOLDING TIME IS LESS THAN 40 HRS, ADDITIONAL ORIFICE IN STANDPIPE ARE NOT REQUIRED.

SUMMARY OF REQUIRED STANDPIPE HOLES:

ELEVATION	# OF HOLES	DIAMETER OF HOLES
984.04	0	2 INCHES
982.00	1	1 INCHES

LIVINGSTON COUNTY FOREBAY CALCULATIONS

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
0.26	0.9	0.23
0	0.7	0.00
0.22	0.2	0.04

COMPOUND C: 0.58
TOTAL DRAINAGE AREA: 0.48 ACRES

K1 = Ax C (Design Constant) = 0.278
Qa = MAX ALLOW OUTFLOW (.2CFS / ACRE) = 0.096 CFS

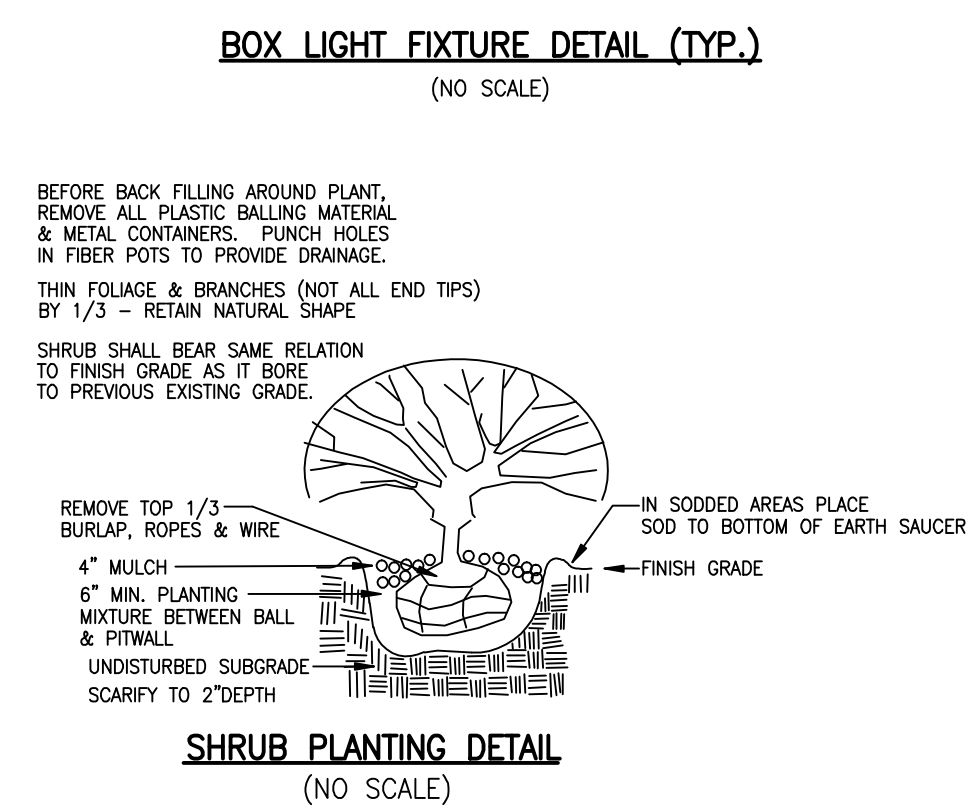
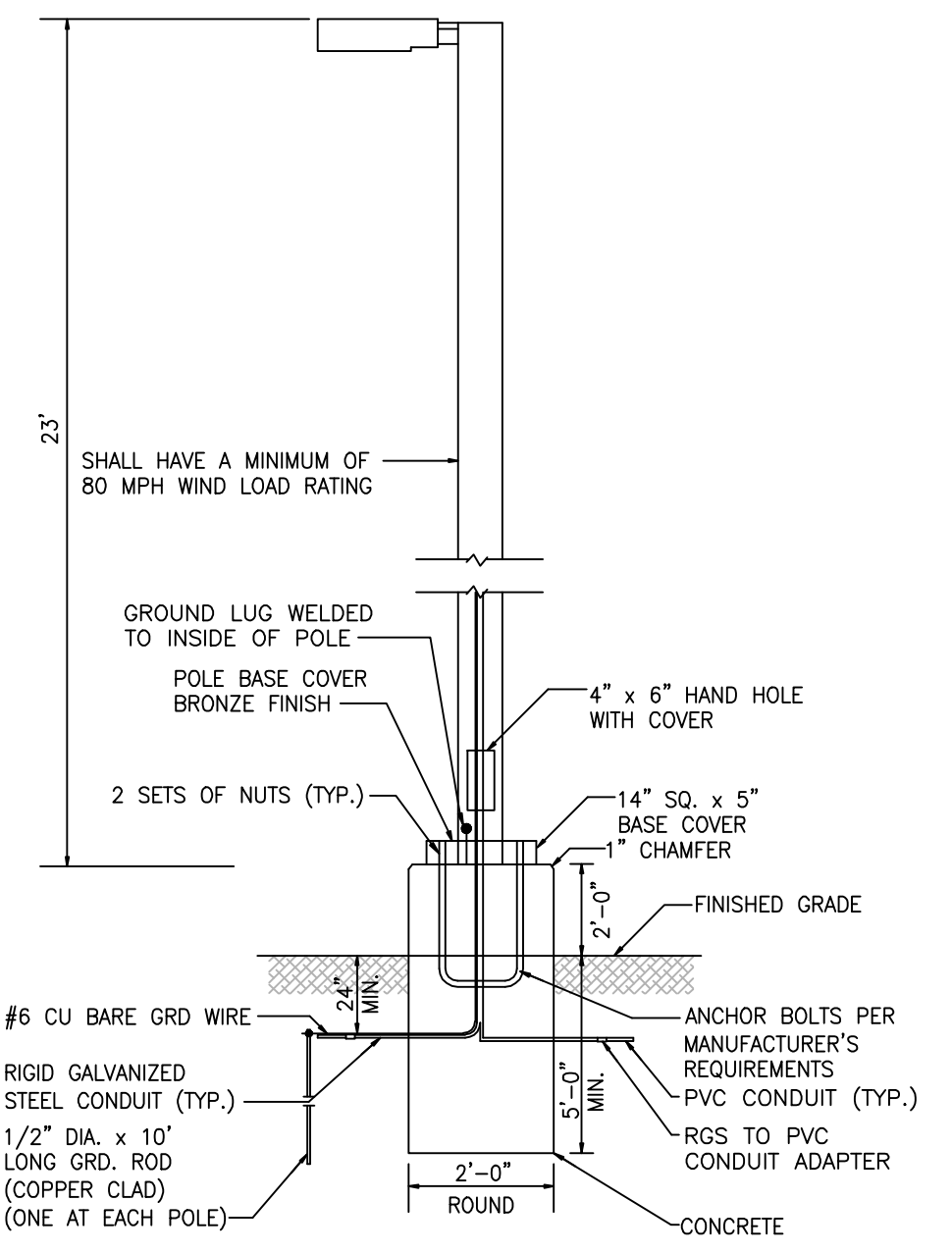
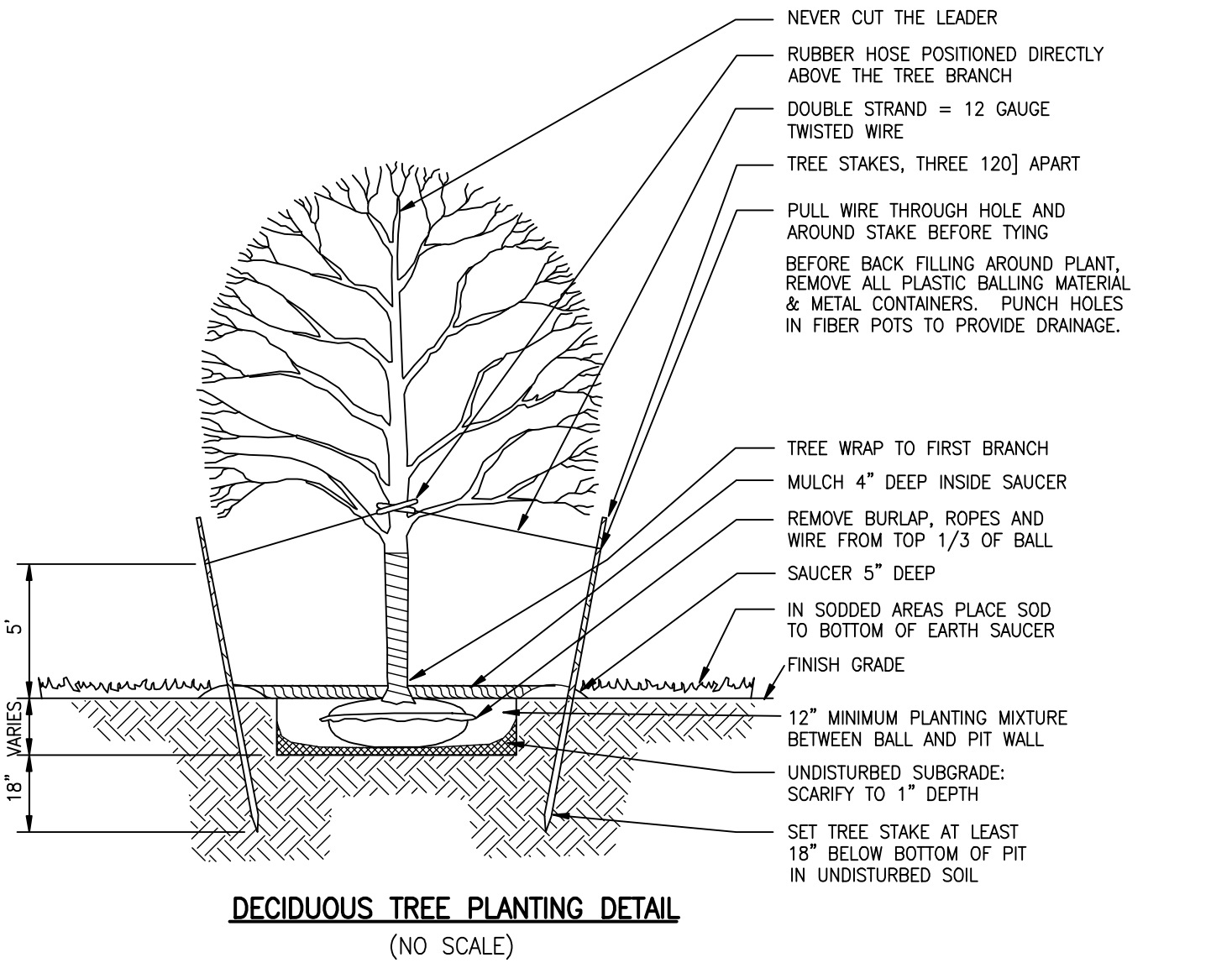
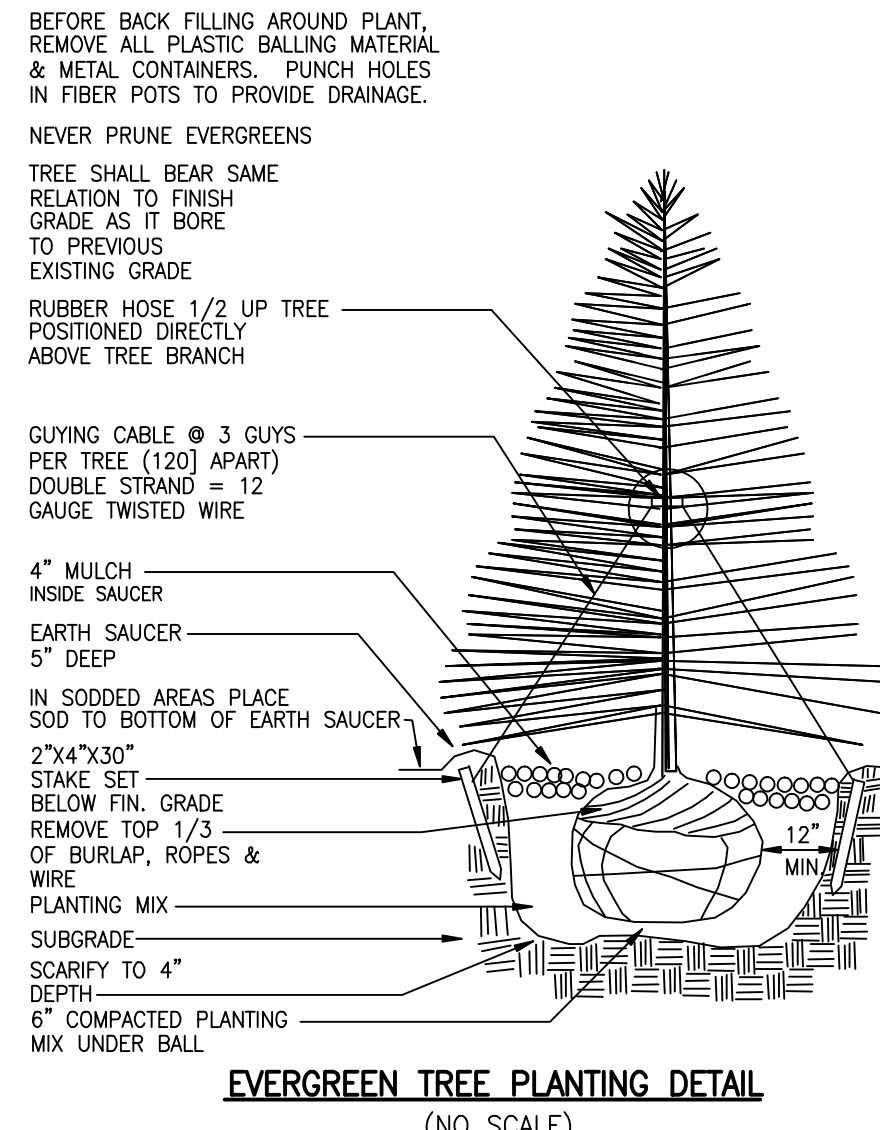
DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF x Ax C	OUTFLOW DURATION x Qa	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2751	765	29	736
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90	5400	2.39	12906	3588	518	3069
120	7200	1.90	13680	3803	691	3112
180	10800	1.34	14472	4023	1037	2986

REQUIRED 100 YEAR DETENTION VOLUME = 3112 CF

FOREBAY VOLUME
V(F) = 5% OF THE 100-YEAR STORM VOLUME BASED ON THE AREA TRIBUTARY TO THE INLET

V(F) = (.05 x V(100)) = 156 CF
STORAGE VOLUME REQUIRED: 156 CF

ELEV.	AREA	VOLUME	CUMULATIVE VOLUME
986	467	330	433
985	192	103	103
984	14	7	
983	0	0	



McGRAW-EDISON

GSS/GSM/GSL GALLERIA SQUARE

70 - 1000W Pulse Start Metal Halide High Pressure Sodium Metal Halide Architectural Area Luminaire

ARM DRILLING TYPE 'M'

DARK SKY ECO COMPLIANT

ENERGY DATA

Fixture	A	B	C	D	E	F
GSS	5'-10"	1'-10"	12'-2"	15'-4"	8' or 9'	13'-14"
GSM	28mm	38mm	307mm	180mm or 228mm	327mm	18" or 19"
GSL	14'-12"	4'-4"	25'-2"	27"	8' or 14'	18'-2" or 18'-4"

WATTAGE TABLE

Fixture	Lens Type	Wattage
GSS (Galileo Grid)	Pulse Start Metal Halide (PHF)	70, 100, 150W
	High Pressure Sodium (HPS)	70, 100, 150W
	Metal Halide (MH)	77W
GSM (Galileo Multi)	Pulse Start Metal Halide (PHF)	70, 100, 150, 200, 300, 330, 360, 400, 480, 760, 910W
	High Pressure Sodium (HPS)	70, 100, 150, 200, 300, 330, 360, 400, 480, 760, 910W
	Metal Halide (MH)	77, 200, 400, 1000W
GSL (Galileo Long)	Pulse Start Metal Halide (PHF)	250, 300, 360, 400, 480, 760, 1000W
	High Pressure Sodium (HPS)	250, 400, 760, 1000W
	Metal Halide (MH)	250, 400, 1000W

TREE PROTECTION NOTES:

- THE LANDSCAPE ARCHITECT SHALL SUPERVISE THE TAGGING OF TREES TO BE TRANSPLANTED, TREES TO REMAIN, AND TREES TO BE REMOVED. FOR IDENTIFICATION OF PROPOSED ACTION FOR EXISTING TREES, THE FOLLOWING METHODS WILL BE USED: AN ORANGE PAINTED "X" FOR TREES TO BE REMOVED; YELLOW FLAGGING FOR TREES TO BE TRANSPLANTED; AND SNOW FENCE PROTECTION AS SHOWN IN THE DETAIL FOR TREES TO REMAIN.
- EXISTING TREES WITHIN FIFTEEN FEET (15') OF BUILDINGS ARE TO BE PRUNED AFTER CONSTRUCTION BY A PROFESSIONAL TREE CONTRACTOR AS SPECIFIED BY THE LANDSCAPE ARCHITECT.
- NO DAMAGING ATTACHMENTS SUCH AS WIRES (OTHER THAN CABLE WIRES FOR TREES) SIGNS, OR PERMITS MAY BE FASTENED TO ANY TREE PROTECTED BY THE ORDINANCE.
- FOR TREES TO BE SAVED A FOUR FOOT (4') HIGH SNOW FENCE SHALL BE ERRECTED AROUND THE TREE DRIP LINE PRIOR TO LAND CLEARING AND CONSTRUCTION AND MAINTAINED THROUGHOUT SITE DEVELOPMENT. NO CUTTING, FILLING, OR TRESPASSING SHALL OCCUR INSIDE THE FENCED AREA WITH OUT APPROVAL OF THE CITY/TOWNSHIP. THE SNOW FENCING SHALL REMAIN IN ITS APPROVED LOCATION UNTIL SUCH TIME AS IT IS AUTHORIZED TO BE REMOVED BY THE CITY OR ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY.
- NO ACTIVITY SHALL BE CONDUCTED WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO BE RETAINED, INCLUDING BUT NOT LIMITED TO THE PLACING OF ANY SOLVENTS, MATERIAL, CONSTRUCTION MACHINERY, OR SOIL WITHIN SUCH DRIP LINE.
- THE DEVELOPER AND/OR THE BUILDER SHALL ERECT SIGNS THROUGHOUT THE PROJECT THAT ARE CLEARLY VISIBLE STATING WORDS TO THE EFFECT THAT ALL SUBCONTRACTORS, SUPPLIERS AND TRADESMEN ARE TO HELP MAINTAIN THE TREES AND WILL BE HELD RESPONSIBLE FOR ANY UNAUTHORIZED DAMAGE TO TREES AND WOODLANDS.
- ALL PURCHASED REPLACEMENT TREES SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMAN STANDARDS, SUCH AS:
 - NURSERY GROWN;
 - STATE DEPARTMENT OF AGRICULTURE INSPECTED;
 - NO. 1 GRADE WITH STRAIGHT, UNSCARRED TRUNK AND WELL DEVELOPED UNIFORM CROWN (PARK GRADE TREES WILL NOT BE ACCEPTED);
 - STAKED, WRAPPED, WATERED AND MULCHED IN ACCORDANCE WITH STANDARD PLANTING PRACTICES;
 - GUARANTEED FOR ONE (1) YEAR, INCLUDING LABOR, TO REMOVE AND DISPOSE OF DEAD MATERIALS.

GENERAL LANDSCAPE NOTES:

- ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY AND SHALL BE NURSERY GROWN. ALL SIZES AND MEASUREMENTS SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS. ALL PLANT MATERIAL SHALL BE OF SELECTED SPECIMEN QUALITY AND HAVE A NORMAL HABIT OF GROWTH. ALL PLANT MATERIAL IS SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED STOCK OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT AND SECURELY WRAPPED AND BOUND.
- ALL PLANT BEDS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND OTHER EXTRANEOUS OBJECTS AND POOR SOILS TO A MINIMUM DEPTH OF 12 INCHES AND BACKFILLED TO GRADE WITH PLANTING MIX (SEE BELOW).
- PLANTING MIXTURE SHALL CONSIST OF 4 PARTS TOPSOIL FROM ON SITE, 1 PART PEAT, AND 5 POUNDS OF SUPERPHOSPHATE PER CUBIC YARD OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED TO A UNIFORM CONSISTENCY.
- ALL PLANT BEDS AND INDIVIDUAL PLANTS SHALL BE MULCHED WITH A 4 INCH LAYER OF SHREDDED BARK MULCH.
- ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACCEPTED, IN WRITING, BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD TIME, ALL DEAD PLANTS, AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL REQUIREMENTS.
- EDGING, WHERE NOTED ON THE PLANS, SHALL BE BLACK ALUMINUM EDGING, 3/16" x 4". INSTALL PER MANUFACTURER'S INSTRUCTIONS. ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
- SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPRISED OF A BLEND OF AT LEAST TWO KENTUCKY BLUEGRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4 INCH, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10 INCHES BY 18 INCHES. SOD SHALL BE KEPT MOIST AND LAID WITHIN 36 HOURS AFTER CUTTING.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ALL SODDED AREAS THAT BROWN OUT OR HAVE NOT FIRMLY KNITTED TO THE SOIL BASE WITHIN A PERIOD OF ONE MONTH SHALL BE REPLACED BY THE CONTRACTOR, AT NO COST TO THE OWNER.

SEED MIXTURE SHALL BE AS FOLLOWS:

KENTUCKY BLUEGRASS (CHOOSE 3 VARIETIES: ADELPHI, RUGBY, GLADE OR PARADE)	30%
RUBY RED OR DAWSON RED FINE FESCUE	30%
ATLANTA RED FESCUE	20%
PENNFINE PERENNIAL RYE	20%

THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 POUNDS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL LAYER SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-0-10 ANALYSIS:

10% NITROGEN: A MINIMUM OF 25% FROM A UREA-FORMALDEHYDE SOURCE
0% PHOSPHATE
10% POTASH: SOURCE TO BE POTASSIUM SULFATE OR POTASSIUM NITRATE.

THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 POUNDS OF BULK FERTILIZER PER 1000 SQUARE FEET.

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RESEEDED AND SUCH RESEEDING SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEEDING AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
- ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 4 INCH LAYER OF CLEAN, FRIABLE TOPSOIL. THIS SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.
- ALL PLANT MATERIALS SHALL BE FREE OF WEEDS, INSECTS AND DISEASE.

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CONSTRUCTION NOTES & DETAILS

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1	TD	7-30-13			

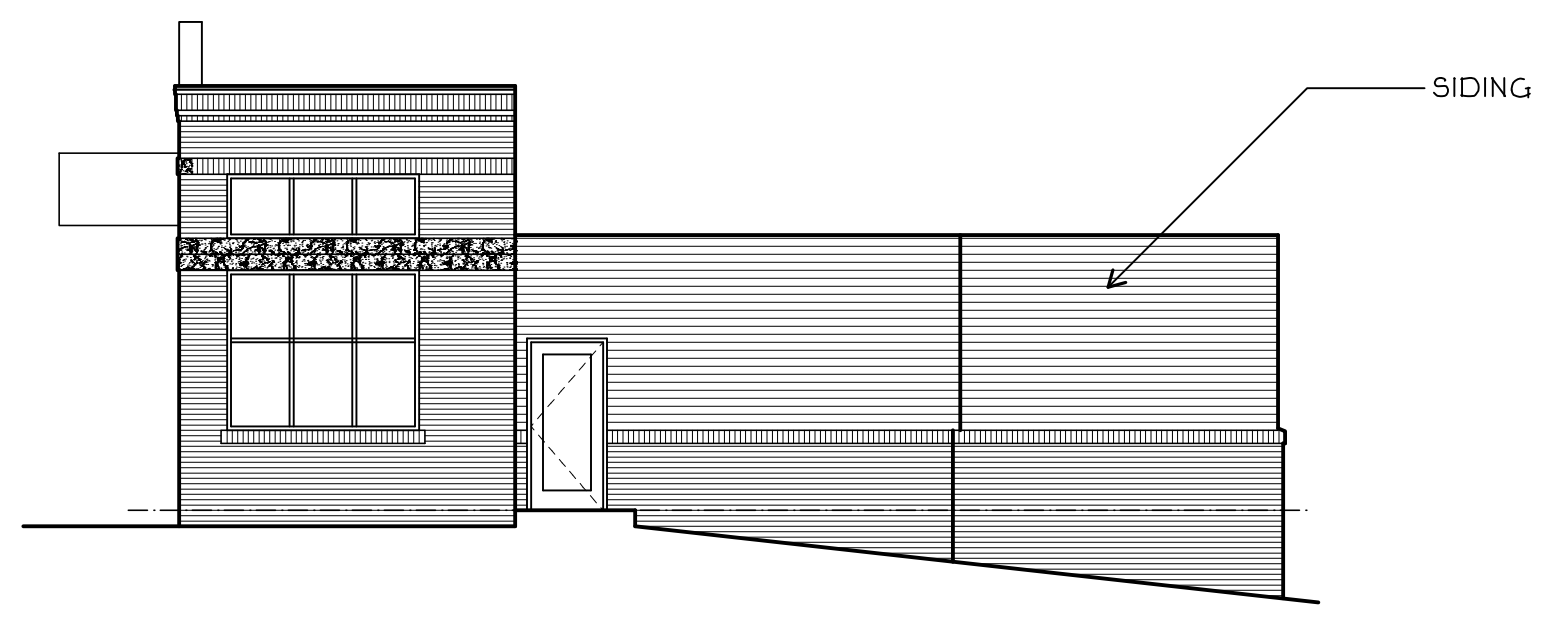
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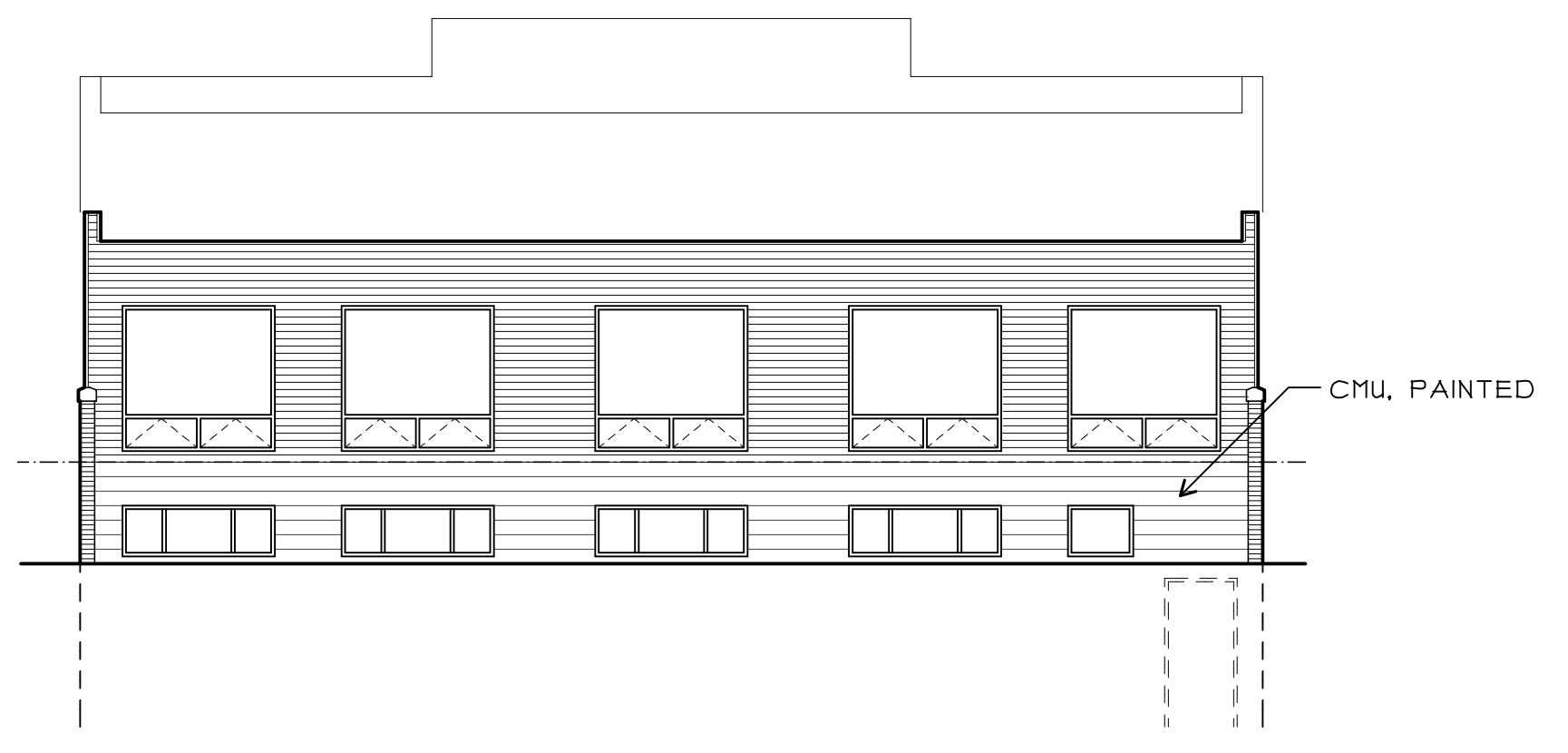
SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



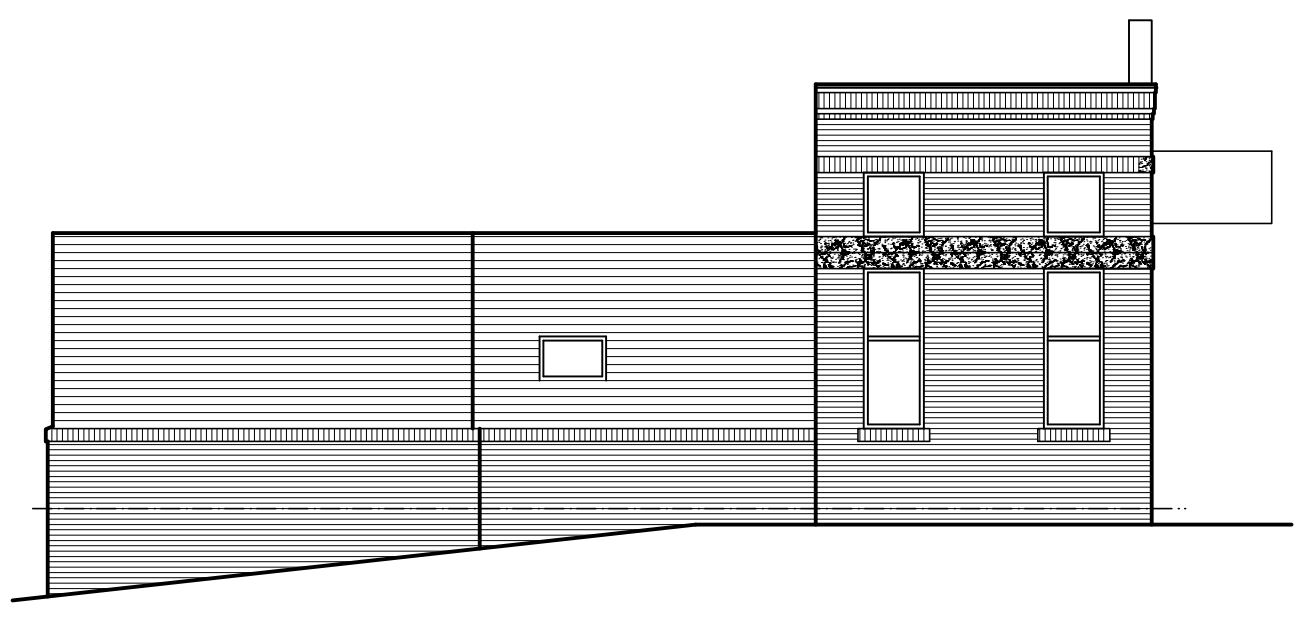
EAST ELEVATION

SCALE: 1/8" = 1'-0"



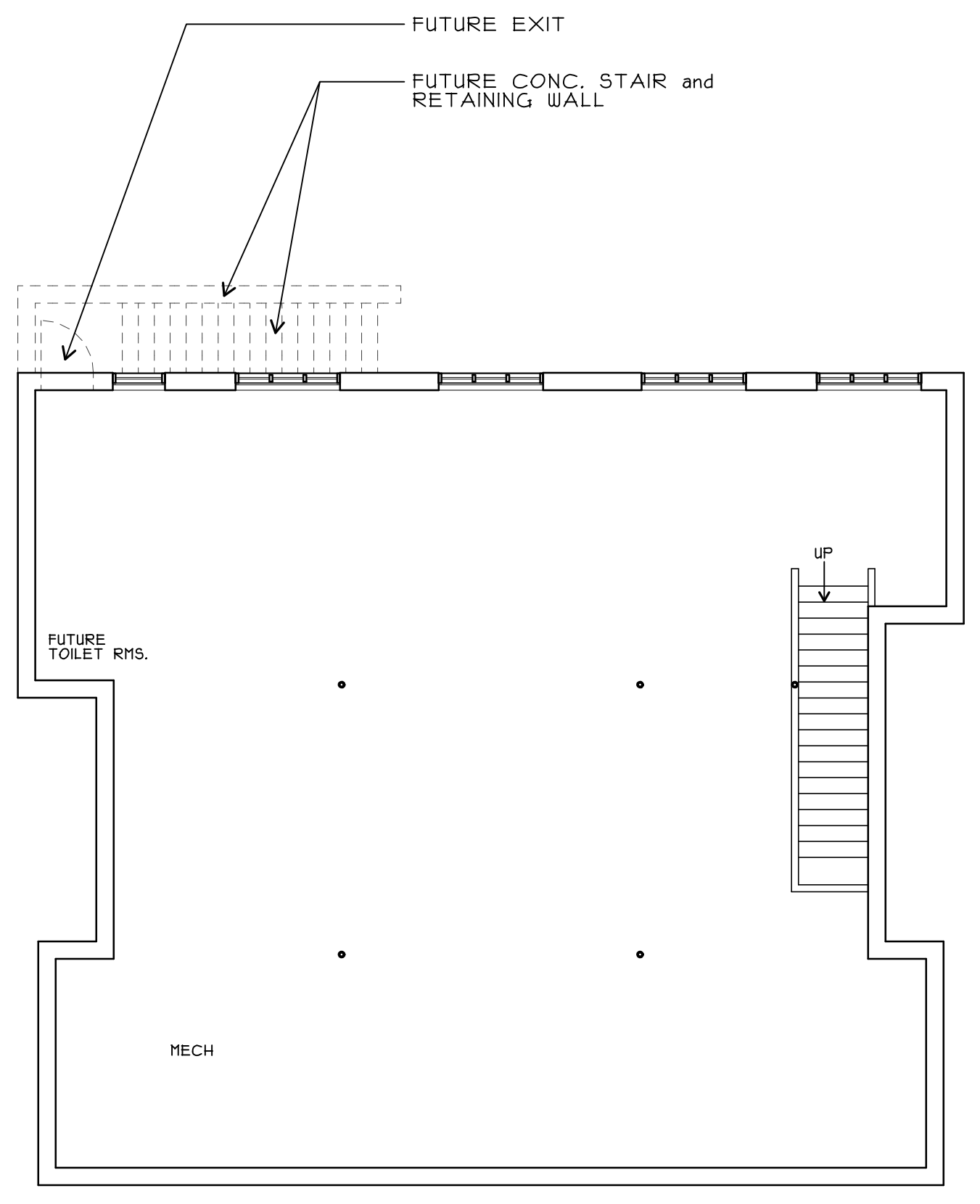
NORTH ELEVATION

SCALE: 1/8" = 1'-0"



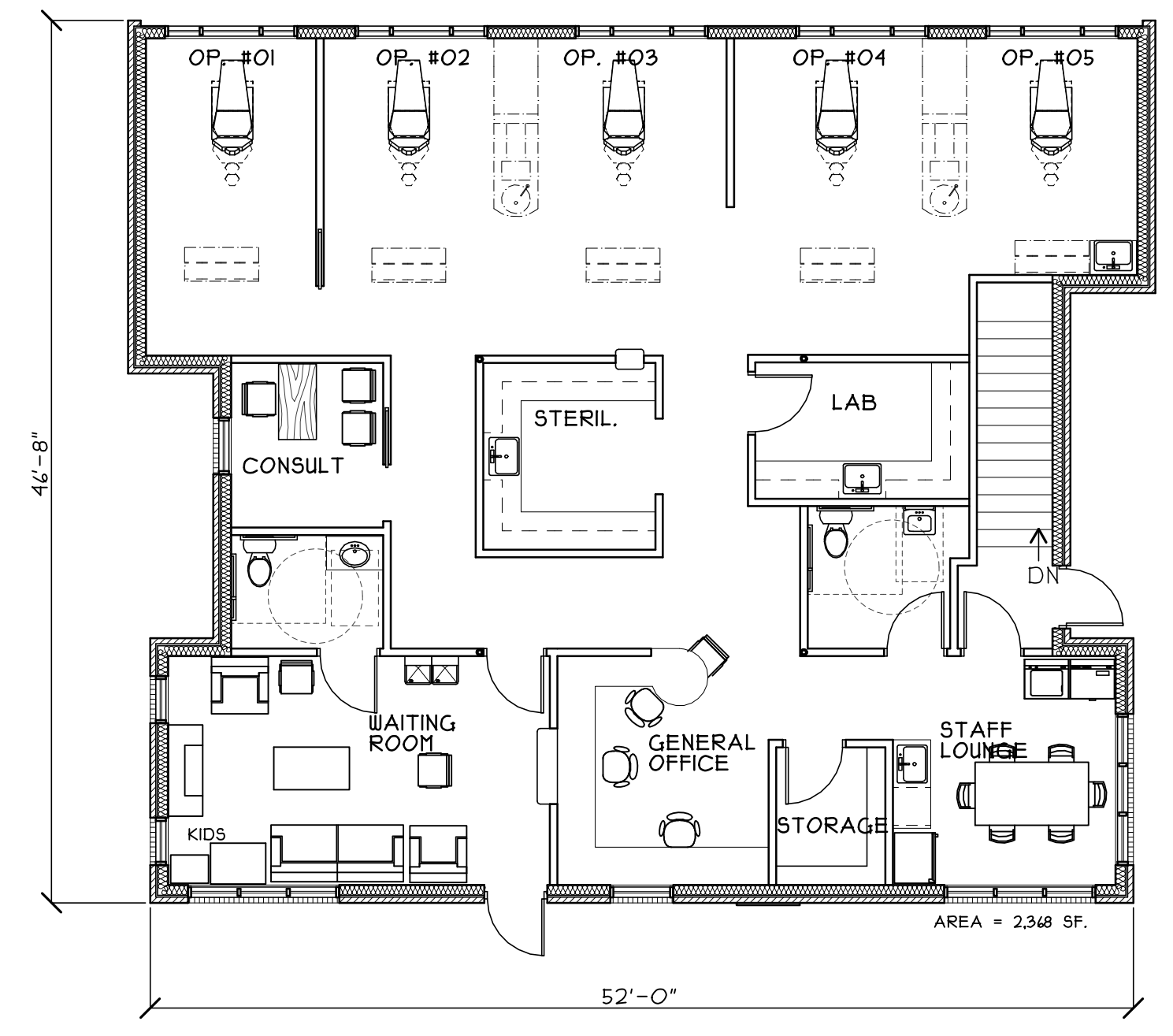
WEST ELEVATION

SCALE: 1/8" = 1'-0"



BASEMENT FLOOR PLAN

SCALE: 1/8" = 1'-0"



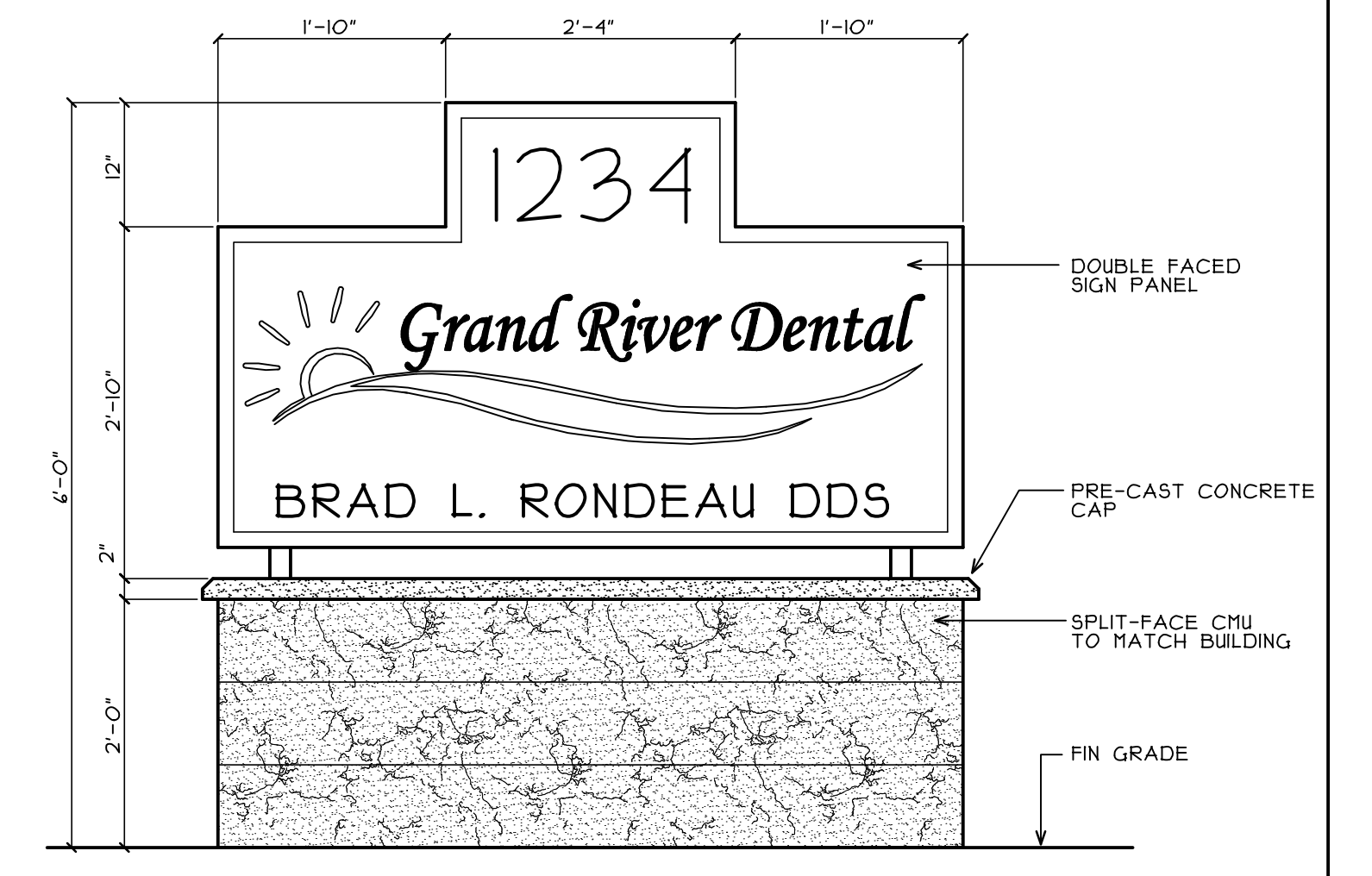
FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

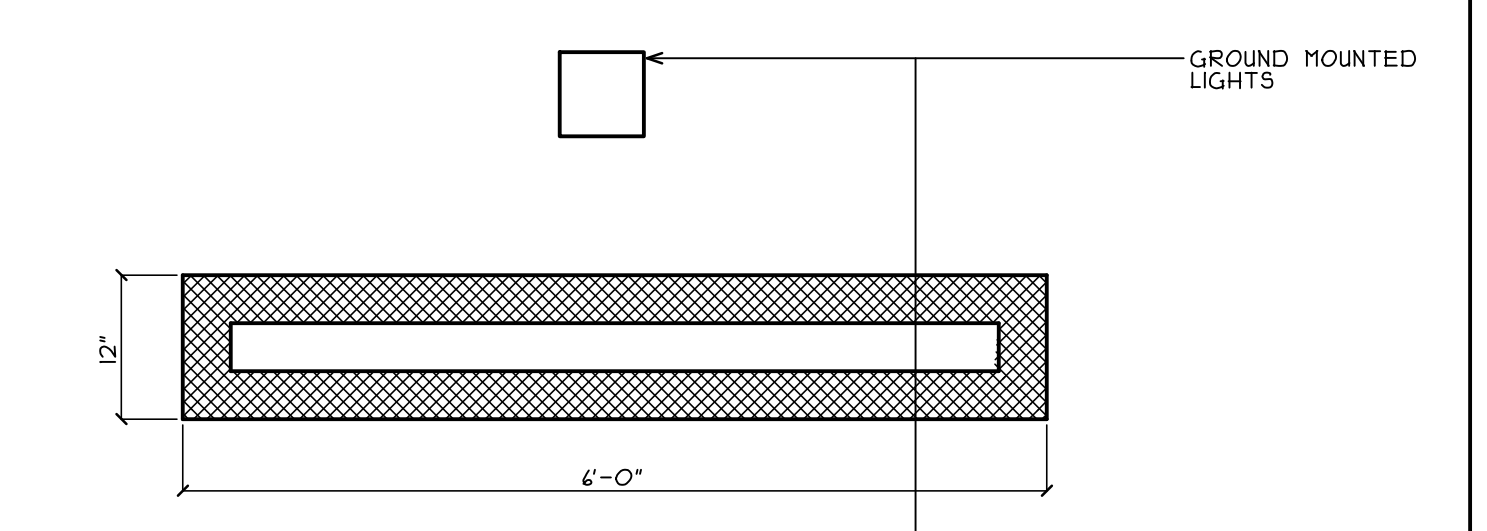
FACADE MATERIALS SUMMARY

EXTERIOR WALLS VISABLE FROM A PUBLIC AREA - EAST, SOUTH, WEST

- BRICK = 1,601 SF 12%
- SPLIT FACE = 10 SF 3%
- SIDING (VINYL OR CEMENT) = 542 SF 25%
- DOORS/WINDOWS = 351 SF (NOT INCLUDED)
- TOTAL AREA = 2,239 SF



ELEVATION

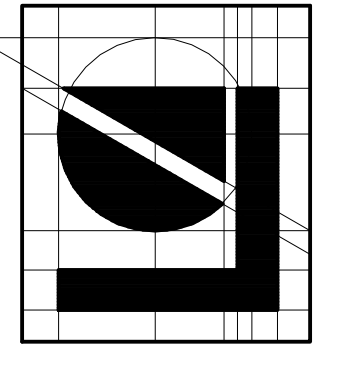


PLAN VIEW

LINE LEGEND	
	NEW CONSTRUCTION
	EXISTING TO REMAIN
	HIDDEN WORK
	EXISTING TO BE REMOVED

GROUND MOUNTED SIGN

SCALE: 3/4" = 1'-0"



Lindhout Associates
architects aia pc
 10465 citation drive, brighton, michigan 48116-9510
 www.lindhout.com (810)227-5666 fax (810)227-5855

consultant

REVISED FOR SITE PLAN APPROVAL
 SITE PLAN APPROVAL
 OWNER REVIEW
 issued for

1-24-13
 4-28-13
 5-04-13
 date
 dr: XXX
 ck'd: XXX
 app'd: XXX

NEW DENTAL FACILITY for:
DR. BRAD RONDEAU
 GENOA TOWNSHIP, MICHIGAN
PLANS & ELEVATIONS

A1
 1305

Genoa Township Millage Proposal:

Vote Nov. 5!

Declining gas tax revenues, increased traffic and overall deterioration has resulted in 97% of roads in Genoa Township being rated in either poor or fair condition. (1)

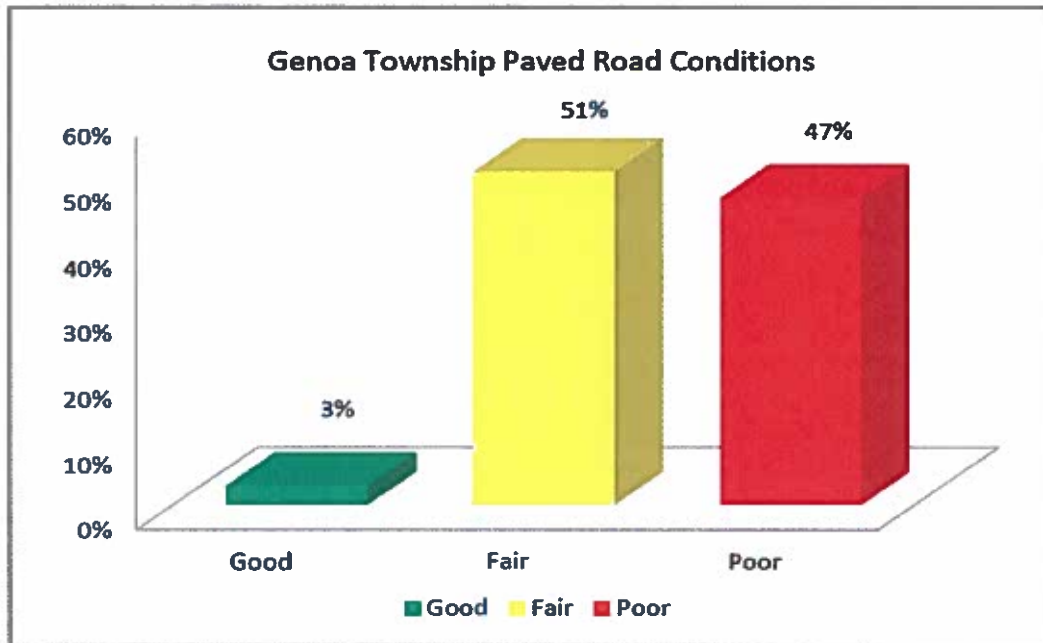


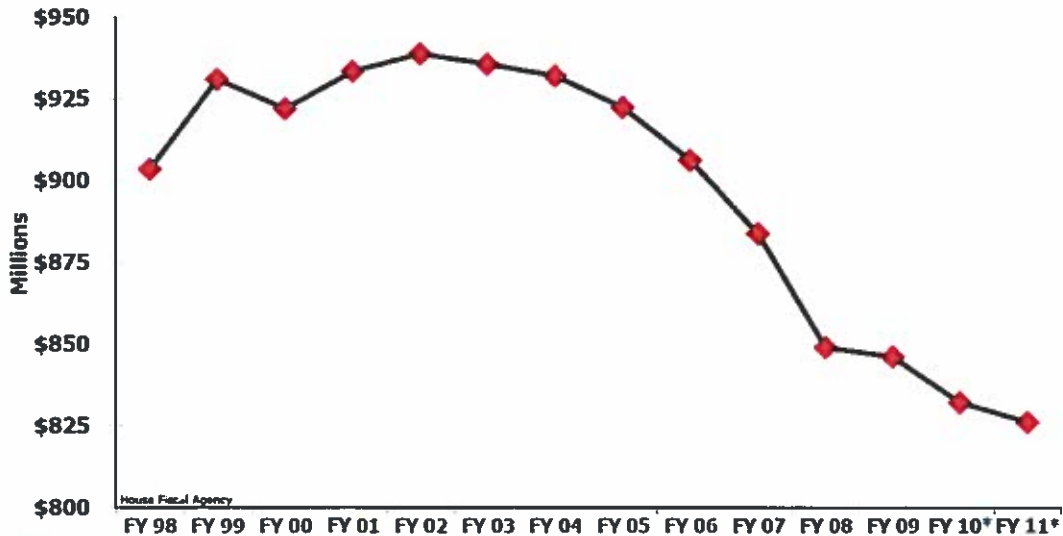
Table courtesy of Livingston County Road Commission

- Roads in Genoa Charter Township are under the jurisdiction of the Livingston County Road Commission or the Michigan Department of Transportation.
- Road maintenance in Michigan is paid for by a combination of gas tax and vehicle registration fees. The formula for distributing this money is based on lane miles not population or traffic counts. In fact out of the 83 counties in Michigan, Livingston ran last in Michigan Transportation Fund Distributions per capita.

- Road maintenance revenues have been in decline.



Michigan Gasoline Tax Revenue



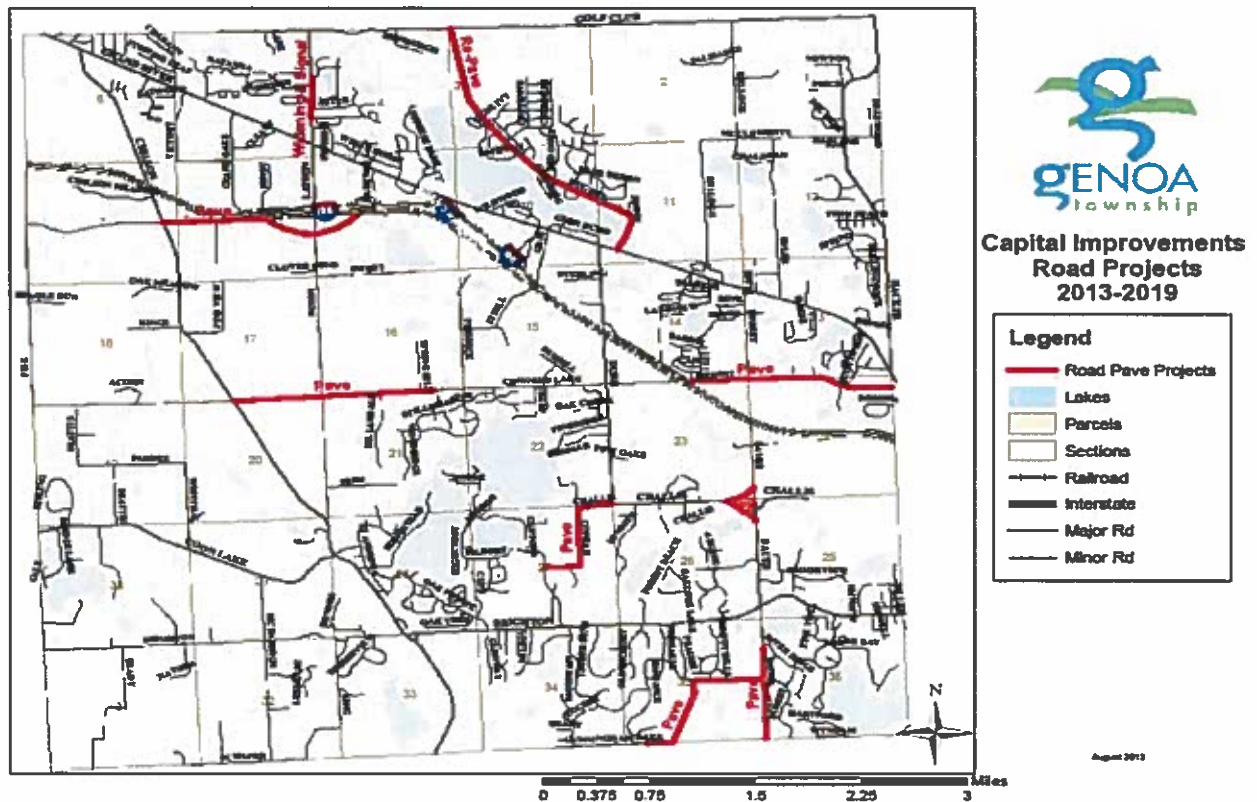
HOUSE FISCAL AGENCY

*Michigan Department of Treasury, May 2010 February 2011 14

- In April of 2013, a survey was sent to every Genoa Township resident. 65.65% of respondents said they would support paying additional taxes for road paving/maintenance.
- Road improvements had over 20% more support than the next highest category in the survey. The categories included police, fire and emergency medical services.
- On May 6, 2013 the Township Board authorized a Road Improvement Master Plan that identified \$22,599,000 of improvements. A complete copy can be viewed at www.genoa.org.
- Genoa Township has typically spent between \$500,000 and \$600,000 out of the General Fund on road maintenance.
- If the voters approve the road millage on November 5, 2013, the Township will issue capital improvement bonds to finance \$22,599,000 worth of work over the next three years. The Township Board will continue its General Fund commitment to roads.

\$250,000 per year will be used to finance debt and \$250,000 + will be used for other road-related improvements and maintenance.

What will happen if the road millage passes?



The following road projects, affecting all areas of the Township, would be completed over the next three years beginning in 2014:

2014

- **Crooked Lake Road** would be paved from Chilson Road to Spring Hill Road. The paved roadway west of Lakewood Shores Drive will be crushed and shaped to provide a uniform, consistent cross section.
- **Latson Road** from Aster Boulevard north past Conover Court will have a consistent 3-lane cross section with a center left turn lane. Acceleration and deceleration lanes will be provided for all of the residential developments within the project limits. This project will also include a traffic signal at the intersection of Latson and Hampton Ridge Boulevard.

2015

- The intersection of Challis and Bauer will be improved the installation of a roundabout. Other road alignment changes will include the abandonment of Bauer Road between the staggered legs of Challis and the connection to existing Challis to the west. Challis Road will be paved east toward the railroad tracks.
- Beck Road would be paved from Chilson to Nixon Road (Nixon Road will become Latson Road after the interchange is opened).
- Conrad and Challis Roads will be repaved from Dorr Road to Clifford. This project involves significant grade and right-of-way issues.

2016

- Herbst Road will be improved along its entire length. On the western end, from Dorr Road to Acre Hill, the existing roadway will be crushed, shaped and repaved. On the eastern end, Acre Hill to Grand River, the gravel portion of the Herbst will be paved.
- Cunningham Lake and Bauer Roads will be paved. Cunningham Lake will be improved from Sundance Trail to Bauer Road then north on Bauer Road from Cunningham Lake to the end of the pavement south of River Ridge. The existing paved portion of Bauer, from River Ridge to Brighton Road, will be crushed, shaped and repaved. Finally, the gravel portion of Bauer will be paved to the Township limit.
- Hughes Road will be repaved. The southern section from Grand River to Cherokee Bend will be milled and overlaid. The area north of Cherokee Bend to Golf Club Drive will be crushed shaped and paved.

What will the road millage cost me?

Market Value of Home	Current Property Taxes Paid			Additional Property Taxes Requested		
	Taxable Value of Home	2013 Genoa Taxes at .8146 mills	Monthly Cost	Total with additional 1.5 mills (2.3146)	Annual Increase	Extra Monthly Cost at 2.3146 mills
\$100,000.00	\$50,000.00	\$40.73	\$3.39	\$115.73	\$75.00	\$6.25
\$150,000.00	\$75,000.00	\$61.10	\$5.09	\$173.60	\$112.50	\$9.38
\$200,000.00	\$100,000.00	\$81.46	\$6.79	\$231.46	\$150.00	\$12.50
\$213,000.00	\$106,500.00	\$86.75	\$7.23	\$246.50	\$159.75	\$13.31
\$250,000.00	\$125,000.00	\$101.83	\$8.49	\$289.33	\$187.50	\$15.63
\$300,000.00	\$150,000.00	\$122.19	\$10.18	\$347.19	\$225.00	\$18.75

Median Housing Value: \$213,000 (2010 Census Data)

Important Dates:

- Oct. 7:
Last Day to register to vote
- Nov. 5:
Election Day

Click here for important information about voting and absentee ballots:

<http://www.genoa.org/government/elections>

Ballot Language:

The following paragraph is the language that Genoa Township voters will see on the Nov. 5, 2013 special election ballot:

Shall the limitation upon the amount of taxes which may be levied by Genoa Charter Township on all property within the Township be increased by 1.5 mills (\$1.50 on each \$1,000.00 of taxable valuation) for a period of fifteen (15) years, for the years 2013 through 2027 inclusive, for the purpose of raising funds for road improvement projects in Genoa Charter Township, including paying debt service on bonds to be issued for the purpose of financing road improvement projects. If approved and levied in full, this millage will raise an estimated \$1,492,003 in the first year the millage is levied.

- (1) Livingston County Road Commission
- (2) Link to Township survey results.
- (3) http://www.michigan.gov/documents/mdot/MDOT_fastfacts02-2011_345554_7.pdf?20130722174919

OAK WILT RESOLUTION

by Paulette Skolarus

Michigan has lost millions of trees due to Dutch Elm disease and the Emerald Ash Borer. Now our oak trees are in jeopardy. *Red* oak wilt is identified by the rapid wilting of the infected tree and is dead in two to six weeks. *White* oaks die slowly one branch at a time over the course of several years. Oak wilt is caused by the fungus that is spread by improper tree trimming/ and removal practices. It is spread in two ways – from tree to tree through connected roots and/or from spores being moved by insects. To prevent the spread of oak wilt diseases please consider the following:

- Oak trees **should not be pruned or trimmed between April 1 and October 15.**
- Oak trees that are inadvertently injured or pruned between April 1 and October 15 should be promptly sealed with a tree pruning sealer or latex paint. The repair should take place within hours of the injury.
- Any developer, contractor and/or owner(s) of property preparing a site for construction during April 1st through October 15th should adhere to the above oak wilt prevention practices.
- Members of the white oak family diseased with oak wilt may be saved with tree injections of the fungicide Alamo by a registered company.
- Dead oak trees should be removed along with the stump and properly disposed of by chipping to less than 3 inches or removed to a disposal site for debarking, burning or burial.
- Oak wood retained as firewood should be sealed with a tarp.

The above is a condensed version of the resolution approved by the township board. Please refer to the Genoa Township web site (ww.genoa.org) for the complete resolution with regard to oak wilt.



Brian Jonckheere

Livingston County Drain Commissioner

2300 E. Grand River Ave., Ste. 105

Howell, MI 48843-7581

Phone: 517-546-0040 FAX: 517-545-9658

Website: www.livgov.com/drain Email: drain@co.livingston.mi.us

August 22, 2013

Mr. Gary McCririe
Genoa Township Supervisor
Genoa Township Hall
2911 Dorr Road
Brighton, MI 48116

Dear Mr. McCririe:

Enclosed is a copy of a Notice of Assessment and Apportionment Hearing with respect to the assessment for inspection, maintenance and repair with respect to public health, welfare and convenience benefits.

It is tentatively estimated that the assessments for this hearing will be:

Marion and Genoa	\$4,461.92
Mystic Lake Hills No. 2	\$1,250.00
Genoa No. 10	\$ 312.50

In addition to the above drains that are having apportionment hearings this year, we are assessing the following drains in your community without a hearing. These drains have had apportionment hearings in the last three to five years and the assessment roll has not changed. The following are the township's at-large assessments for these drains:

Sunrise Park (3 rd of 10)	\$16,313.00
Brighton Estates	\$ 625.00
Brighton Genoa	\$ 430.87
Shiawassee River ICD	\$ 2,078.09

Therefore, based on the above listed totals the total drain assessment for the township is **\$25,471.38**.

Sincerely,

Brian Jonckheere
Livingston County Drain Commissioner

Enclosure

**GENOA NO. 10 DRAIN APPORTIONMENT
AND SPECIAL ASSESSMENT HEARING
GENOA NO. 10 DRAIN DRAINAGE DISTRICT
DRAIN NO. X13010**

Notice is hereby given that on Friday, August 30, 2013, from 9:00 A.M. local time until 5:00 P.M. at the Office of the Livingston County Drain Commissioner, 2300 East Grand River, Suite 105, Howell, Michigan 48843, the reviewing of Special Assessments and Apportionments for costs incurred for inspection, maintenance and repair on the Genoa No. 10 Drain located in the Township of Genoa, Livingston County will be held. The Genoa No. 10 Drain serves properties in the Genoa No. 10 Drain Drainage District.

At said Day of Review, the drain commissioner will have available to review the tentative apportionments against parcels and municipalities within the district for the costs incurred for inspection, maintenance and repair. All parcels of land being in the Genoa No. 10 Drain Drainage District benefited from the above improvements are subject to the assessment. The special assessment is pursuant to Act 40 of the Public Acts of 1956, as amended, of the State of Michigan. All lands and Public Corporations within the boundaries of the Genoa No. 10 Drain Drainage District receiving benefits for the above work may be subject to assessments. The drain assessments against land in the drainage district will be collected in the same manner as property taxes. If the drain assessments against land are collected by installment, the land owner may pay the assessment in full with any interest (if applicable) to date and thereby avoid further interest charges. The computation of cost of inspection, maintenance and repair of the drain will also be open for public inspection by any parties interested. The Genoa No. 10 Drain Drainage District boundaries are described as follows:

A part of Section 10 of T2N-R5E, Genoa Township, Livingston County, Michigan and is more particularly described as Beginning at a point distant N01° 34' 47" W, 2414.74 feet; thence N71° 07' 12" E, 1294.75 feet from the Southwest Corner of said Section 10, thence; N71° 00' 00" W, 270 feet; thence N18° 00' 00" W, 220.001 feet; thence N12° 00' 00" E, 203.5 feet; thence S68° 13' 46" E, 4.529 feet; thence S67° 44' 01" E, 32.51 feet; thence S65° 02' 15" E, 19.203 feet; thence S63° 00' 34" E, 19.82 feet; thence S60° 28' 30" E, 28.802 feet; thence S57° 06' 01" E, 36.005 feet; thence S54° 13' 33" E, 19.20 feet; thence S50° 07' 33" E, 9.05 feet; thence S53° 32' 46" E, 18.75 feet; thence S55° 03' 7" E, 9.38 feet; thence S56° 27' 29" E, 17.10 feet; thence S58° 22' 15" E, 18.75 feet; thence S60° 22' 18" E, 18.75 feet; thence S62° 12' 51" E, 15.78 feet; thence S64° 03' 15" E, 18.747 feet; thence S66° 03' 17" E, 18.747 feet; thence S67° 39' 37" E, 11.379 feet; thence N89° 00' 00" E, 110 feet; thence S47° 00' 00" E, 60 feet; thence S30° 00' 00" W, 70 feet; thence S13° 44' 29" E, 45.1 feet; thence S60° 00' 00" E, 196 feet; thence S22° 30' 00" W, 149.5 feet; thence S71° 06' 13" E, 370 feet; thence S19° 08' 12" W, 44.048 feet; thence N70° 47' 14" W, 605.41 feet to the POB.

If you have an interest in real property in said drainage district your appearance and protest at the above mentioned hearing is required in order to appeal the amount of the apportionment and special assessment to the Probate Court of Livingston County.

Please take further notice that a person or Public Corporation representative appearing at the time for hearing, may sign his name and indicate the property or Public Corporation affected by the apportionment and special assessment on the record of parties, which is available. The person or Public Corporation representative shall indicate on such record with an X or check mark in the column of the record marked YES or NO whether he or she is protesting their special assessment. A property owner or a party in interest, or his or her agent, or a Public Corporation may appear in person at the hearing to protest the apportionment or special assessment or shall be permitted to file his or her appearance or protest by letter and his or her personal appearance shall not be required. A Public Corporation may also file their protest by letter. The owner of any land in the drainage district or any city, township, village, district or county having control of any highway which may feel aggrieved by the apportionment of benefits so made by the commissioner, may, within 10 days after the day of review of such apportionments, appeal therefrom and for such purpose make an application to the probate court of the proper county for the appointment of a board of review, by filing with said probate court a notice of appeal and at the same time filing with said court a bond in such sum as the judge of probate may require, with 1 or more sureties to be approved by the judge of probate, conditioned upon the payment of all costs in case the apportionment made by the commissioner shall be sustained. Such appeal may be taken by the county or district road commissioners in behalf of the county, the mayor of any city in behalf of the city, by the supervisor in behalf of any township, or by the president of any village in behalf of the village when authorized by the village or city council, township board or road commission,

persons, owners and persons who are owners of land or have interest in lands in the Mystic Lake Hills No. 2 Drain Drainage District and you, Margaret M. Dunleavy, Clerk for the County of Livingston, the Board of Commissioners for Livingston County, its members, and members of the Livingston County Board of Road Commissioners who are interested parties who are assessed for road benefits, Gary McCririe, Supervisor of Genoa Township, which Public Corporation is being assessed for public health benefits are hereby given notice that the special assessments of benefits for the inspection, maintenance and repair expenses on the Mystic Lake Hills No. 2 Drain will be subject to review.

At the Review, the Livingston County Drain Commissioner shall hear the proofs and allegations of all interested parties, and shall carefully reconsider and review the description of land comprised within the Special Assessment District, the several descriptions and special assessment and apportionment of benefits, and define and equalize the land or Public Corporation apportionment and special assessments as is just and equitable.

After the Public Hearing and Review, I will confirm the apportionment and special assessment roll of said drain.

This Notice is given pursuant to Acts 162 of the Public Acts of Michigan of 1962 as amended, by Act 64 of the Public Acts of 1989 of the State of Michigan, and Act 40 of the Public Acts of 1956 as amended of the State of Michigan.

Dated this 16th day of August, 2013.

A handwritten signature in black ink, appearing to read "Brian Jonckheere". The signature is written in a cursive style with a large initial "B".

Brian Jonckheere
Livingston County Drain Commissioner

Official Publication Notice

**MYSTIC LAKE HILLS NO. 2 DRAIN APPORTIONMENT
AND SPECIAL ASSESSMENT HEARING
MYSTIC LAKE HILLS NO. 2 DRAIN DRAINAGE DISTRICT
DRAIN NO. X13027**

Notice is hereby given that on Friday, August 30, 2013, from 9:00 A.M. local time until 5:00 P.M. at the Office of the Livingston County Drain Commissioner, 2300 East Grand River, Suite 105, Howell, Michigan 48843, the reviewing of Special Assessments and Apportionments for costs incurred for inspection, maintenance and repair on the Mystic Lake Hills No. 2 Drain located in the Township of Genoa, Livingston County will be held. The Mystic Lake Hills No. 2 Drain serves properties in the Mystic Lake Hills No. 2 Drain Drainage District.

At said Day of Review, the drain commissioner will have available to review the tentative apportionments against parcels and municipalities within the district for the costs incurred for inspection, maintenance and repair. All parcels of land being in the Mystic Lake Hills No. 2 Drain Drainage District benefited from the above improvements are subject to the assessment. The special assessment is pursuant to Act 40 of the Public Acts of 1956, as amended, of the State of Michigan. All lands and Public Corporations within the boundaries of the Mystic Lake Hills No. 2 Drain Drainage District receiving benefits for the above work may be subject to assessments. The drain assessments against land in the drainage district will be collected in the same manner as property taxes. If the drain assessments against land are collected by installment, the land owner may pay the assessment in full with any interest (if applicable) to date and thereby avoid further interest charges. The computation of cost of inspection, maintenance and repair of the drain will also be open for public inspection by any parties interested. The Mystic Lake Hills No. 2 Drain Drainage District boundaries are described as follows:

A part of the NE ¼ and SE of Section 5, T1N-R6E, Green Oak Township, Livingston County, Michigan and is more particularly described as being all real property within the plat of "Mirror Lake" Subdivision as recorded in Liber 40, Pages 1-6 of Livingston County records.

If you have an interest in real property in said drainage district your appearance and protest at the above mentioned hearing is required in order to appeal the amount of the apportionment and special assessment to the Probate Court of Livingston County.

Please take further notice that a person or Public Corporation representative appearing at the time for hearing, may sign his name and indicate the property or Public Corporation affected by the apportionment and special assessment on the record of parties, which is available. The person or Public Corporation representative shall indicate on such record with an X or check mark in the column of the record marked YES or NO whether he or she is protesting their special assessment. A property owner or a party in interest, or his or her agent, or a Public Corporation may appear in person at the hearing to protest the apportionment or special assessment or shall be permitted to file his or her appearance or protest by letter and his or her personal appearance shall not be required. A Public Corporation may also file their protest by letter. The owner of any land in the drainage district or any city, township, village, district or county having control of any highway which may feel aggrieved by the apportionment of benefits so made by the commissioner, may, within 10 days after the day of review of such apportionments, appeal therefrom and for such purpose make an application to the probate court of the proper county for the appointment of a board of review, by filing with said probate court a notice of appeal and at the same time filing with said court a bond in such sum as the judge of probate may require, with 1 or more sureties to be approved by the judge of probate, conditioned upon the payment of all costs in case the apportionment made by the commissioner shall be sustained. Such appeal may be taken by the county or district road commissioners in behalf of the county, the mayor of any city in behalf of the city, by the supervisor in behalf of any township, or by the president of any village in behalf of the village when authorized by the village or city council, township board or road commission, respectively. Only 1 board shall be appointed by such probate court.

Notice is further given that on the above date and time the special assessment and apportionment for Public Health benefits for Genoa Township, and for the County of Livingston and Livingston County Road Commissioners for road or highway benefits incurred for inspection, maintenance and repair expenses on the above drain will be subject to review. A computation of estimated costs of inspection, maintenance and repair will be available for review by any owner of property subject to assessment or a representative of a public corporation. Now, therefore, all unknown and non-resident

respectively. Only 1 board shall be appointed by such probate court.

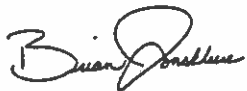
Notice is further given that on the above date and time the special assessment and apportionment for Public Health benefits for Genoa Township, and for the County of Livingston and Livingston County Road Commissioners for road or highway benefits incurred for inspection, maintenance and repair expenses on the above drain will be subject to review. A computation of estimated costs of inspection, maintenance and repair will be available for review by any owner of property subject to assessment or a representative of a public corporation. Now, therefore, all unknown and non-resident persons, owners and persons who are owners of land or have interest in lands in the Genoa No. 10 Drain Drainage District and you, Margaret M. Dunleavy, Clerk for the County of Livingston, the Board of Commissioners for Livingston County, its members, and members of the Livingston County Board of Road Commissioners who are interested parties who are assessed for road benefits, Gary McCririe, Supervisor of Genoa Township, which Public Corporation is being assessed for public health benefits are hereby given notice that the special assessments of benefits for the inspection, maintenance and repair expenses on the Genoa No. 10 Drain will be subject to review.

At the Review, the Livingston County Drain Commissioner shall hear the proofs and allegations of all interested parties, and shall carefully reconsider and review the description of land comprised within the Special Assessment District, the several descriptions and special assessment and apportionment of benefits, and define and equalize the land or Public Corporation apportionment and special assessments as is just and equitable.

After the Public Hearing and Review, I will confirm the apportionment and special assessment roll of said drain.

This Notice is given pursuant to Acts 162 of the Public Acts of Michigan of 1962 as amended, by Act 64 of the Public Acts of 1989 of the State of Michigan, and Act 40 of the Public Acts of 1956 as amended of the State of Michigan.

Dated this 16th day of August, 2013.



Brian Jonckheere
Livingston County Drain Commissioner

Official Publication Notice

MARION & GENOA DRAIN APPORTIONMENT
AND SPECIAL ASSESSMENT HEARING
MARION & GENOA DRAIN DRAINAGE DISTRICT
DRAIN NO. X13023

Notice is hereby given that on Friday, August 30, 2013, from 9:00 A.M. local time until 5:00 P.M. at the Office of the Livingston County Drain Commissioner, 2300 East Grand River, Suite 105, Howell, Michigan 48843, the reviewing of Special Assessments and Apportionments for costs incurred for inspection, maintenance and repair on the Marion & Genoa Drain located in the Townships of Marion, Genoa and the City of Howell, Livingston County will be held. The Marion & Genoa Drain serve properties in the Marion & Genoa Drain Drainage District.

At said Day of Review, the drain commissioner will have available to review the tentative apportionments against parcels and municipalities within the district for the costs incurred for inspection, maintenance and repair. All parcels of land being in the Marion & Genoa Drain Drainage District benefited from the above improvements are subject to the assessment. The special assessment is pursuant to Act 40 of the Public Acts of 1956, as amended, of the State of Michigan. All lands and Public Corporations within the boundaries of the Marion & Genoa Drain Drainage District receiving benefits for the above work may be subject to assessments. The drain assessments against land in the drainage district will be collected in the same manner as property taxes. If the drain assessments against land are collected by installment, the land owner may pay the assessment in full with any interest (if applicable) to date and thereby avoid further interest charges. The computation of cost of inspection, maintenance and repair of the drain will also be open for public inspection by any parties interested. The Marion & Genoa Drain Drainage District boundaries are described as follows:

A part of Sections 1, 2, 11, 12 and 13 of T2N-R4E, Marion Township, a part of Sections 5, 6, 7, 8, 9, 16, 17, 18, 19, 21 and 30 of T2N-R5E, Genoa Township and a part of the City of Howell within Sections 35 and 36 of T3N-R4E, Howell Township and Section 1 of T2N-R4E, Marion Township and is more particularly described as follows: Beginning at a point distant S89°17'59" W, 396.69 feet from the Southeast Corner of Section 35 of T3N-R4E, Howell Township; Thence N26°46'11" E, 930.97 feet; Thence S64°45'37" E, 277.35 feet; Thence S58°02'01" E, 330.13 feet; Thence S46°21'29" E, 701.45 feet; Thence S01°27'10" E, 33.89 feet; Thence N89°11'01" E, 260.72 feet; Thence N00°29'43" W, 1738.95 feet; Thence N25°45'53" E, 263.95 feet; Thence S64°42'20" E, 66 feet; Thence N25°53'12" E, 319.07 feet; Thence N25°57'52" E, 104.02 feet; Thence N26°17'52" E, 470.20 feet; Thence S88°03'45" E, 711.66 feet; Thence S78°52'48" E, 118.23 feet; Thence S32°13'09" W, 57.54 feet; Thence S24°15'23" W, 132 feet; Thence S03°29'55" E, 81.86 feet; Thence S29°12'56" W, 66.10 feet; Thence S64°00'10" E, 201.71 feet; Thence S71°09'31" E, 61.73 feet; Thence S64°00'10" E, 264 feet; Thence S61°41'03" E, 60.99 feet; Thence S64°00'10" E, 132 feet; Thence S25°59'51" W, 132 feet; Thence S63°57'42" E, 268.08 feet; Thence S73°36'47" E, 62.78 feet; Thence S63°31'23" E, 150 feet; Thence N26°28'37" E, 150 feet; Thence S71°06'44" E, 112.94 feet; Thence N89°9'53" E, 160.01 feet; Thence S00°39'25" E, 42.71 feet; Thence N89°06'40E 122 feet; Thence N00°53'20" W, 165 feet; Thence N89°06'40" E, 173 feet; Thence S75°45'18" E, 63.20 feet; Thence N89°06'40" E, 129.41 feet; Thence S01°08'18" E, 594.01 feet; Thence N89°06'40" E, 131.93 feet; Thence N00°57'32" W, 724.5 feet; Thence S54°48'24" E, 196.91 feet; Thence S34°43'54" E, 863.34 feet; Thence S27°6'16" E, 149.9 feet; Thence S00°57'19" E, 617.54 feet; Thence N66°13'18" W, 170.33 feet; Thence S17°25'26" W, 36.80 feet; Thence S64°13'50" E, 59.22 feet; Thence S02°39'02" E, 198.84 feet; Thence S88°16'29" W, 610.86 feet; Thence S08°28'16" E, 87.39 feet; Thence S14°02'10" W, 22.75 feet; Thence S56°18'35" W, 46.42 feet; Thence S90°00'00" W, 53.33 feet; Thence S24°04'32" W, 94.67 feet; Thence S23°57'44" E, 54.34 feet; Thence N84°57'27" E, 188.32 feet; Thence N82°45'47" E, 116.80 feet; Thence S80°16'21" E, 130.62 feet; Thence N77°54'18" E, 52.66 feet; Thence N58°17'55" E, 73.50 feet; Thence N45°00'00" E, 46.82 feet; Thence N33°41'24" E, 59.68 feet; Thence S87°16'26" E, 38.67 feet; Thence S68°57'44" E, 51.23 feet; Thence S60°04'06" E, 70.03 feet; Thence S36°18'07" E, 106.25 feet; Thence N89°10'42" E, 1.69 feet; Thence S01°15'04" E, 494.92 feet; Thence N87°52'20" E, 916.75 feet; Thence S63°41'15" E, 1414.24 feet; Thence S09°04'44" E, 250.77 feet; Thence S66°25'31" E, 329.94 feet; Thence N46°00'18" E, 110.82 feet; Thence S88°32'59" E, 217.25 feet; Thence N81°40'57" E, 475.09 feet; Thence S77°39'58" E, 587.11 feet; Thence S63°09'10" E, 2011.28 feet; Thence S63°49'43" E, 1442.30 feet; Thence S00°58'02" E, 2597.03 feet; Thence N86°28'51" E, 618.91 feet; Thence S02°33'33" E, 2676.01 feet; Thence N87°06'46" E, 491.68 feet; Thence S50°34'54" E, 76.26 feet; Thence S53°44'59" E, 237.14 feet; Thence S59°24'00" E, 321.72 feet; Thence S65°09'34" E, 960.84 feet; Thence S02°09'21" E, 1860.11 feet; Thence N86°51'05" E, 1293.12 feet; Thence N02°14'12" W, 1346.70 feet; Thence S74°24'57" E, 817.44 feet; Thence S71°05'21" E, 281.26 feet; Thence S71°49'34" E, 553.87 feet; Thence S72°49'20" E, 441.34 feet; Thence S68°01'01" E, 208.99 feet; Thence S64°01'47" E, 232.28 feet; Thence S61°00'08" E, 719.43 feet; Thence N86°51'50" E, 2329.49 feet; Thence S02°26'10" E, 2653.25 feet; Thence S86°20'42" W, 1351.17 feet; Thence S01°52'35" E, 2663.60 feet; Thence S85°54'02" W, 1330.87 feet; Thence S02°19'36" E, 1006.92 feet; Thence S86°20'59" W, 1324.74 feet; Thence S02°17'43" E, 336.69 feet; Thence S86°35'47" W, 1327.79 feet; Thence N02°04'47" W, 1344.37 feet; Thence S87°08'12" W, 1309.18 feet; Thence S87°02'38" W, 3924.37 feet; Thence S88°32'03" W, 642.90 feet; Thence S01°31'49" E, 2672.50 feet; Thence N88°05'09" E, 672.78 feet; Thence S02°07'05" E, 2664.88 feet; Thence S01°55'38" E, 1172.13 feet; Thence N66°36'24" W, 359.87 feet; Thence N67°18'55" W, 307.69 feet; Thence N66°45'49" W, 297.76 feet; Thence N62°26'32" W, 290.67 feet; Thence N57°49'02" W, 259.19 feet; Thence N02°07'21" W, 1816.40 feet; Thence S87°35'42" W, 1342.34 feet; Thence N02°04'47" W, 4023.59 feet; Thence S88°32'17" W, 2916.26 feet; Thence N01°38'58" W, 702.73 feet; Thence S86°15'02" W, 208.33 feet; Thence N33°10'27" W, 345.63 feet; Thence N04°30'50" E, 239.41 feet; Thence N16°59'02" W, 1148.13

feet; Thence N86°08'58" E, 345.50 feet; Thence N01°42'48" W, 2303.5 feet; Thence S86°14'13" W, 1219.06 feet; Thence N02°48'53" W, 327.56 feet; Thence N37°51'13" E, 134.06 feet; Thence N16°25'54" W, 228.72 feet; Thence N74°03'17" W, 520.94 feet; Thence N44°07'31" W, 947.03 feet; Thence S57°12'28" W, 339.99 feet; Thence S70°47'14" W, 466.09 feet; Thence N81°38'25" W, 405.12 feet; Thence N02°19'22" W, 328.65 feet; Thence S86°14'26" W, 680.98 feet; Thence N50°14'21" W, 491.64 feet; Thence N89°18'30" W, 220.04 feet; Thence N03°01'40" W, 2930.59 feet; Thence S88°22'15" W, 337.83 feet; Thence N01°19'59" W, 659.99 feet; Thence S88°33'03" W, 575.63 feet; Thence N01°10'16" W, 1231.46 feet; Thence S88°00'12" W, 1030.55 feet; Thence N01°43'20" W, 1398.53 feet; Thence S88°47'37" W, 674 feet; Thence N01°18'05" W, 1310.12 feet; Thence N88°50'14" E, 2629.37 feet; Thence N01°16'36" W, 2548.77 feet; Thence S89°20'38" W, 0.09 feet; Thence S89°17'59" W, 504.44 feet; to the POB.

If you have an interest in real property in said drainage district your appearance and protest at the above mentioned hearing is required in order to appeal the amount of the apportionment and special assessment to the Probate Court of Livingston County.

Please take further notice that a person or Public Corporation representative appearing at the time for hearing, may sign his name and indicate the property or Public Corporation affected by the apportionment and special assessment on the record of parties, which is available. The person or Public Corporation representative shall indicate on such record with an X or check mark in the column of the record marked YES or NO whether he or she is protesting their special assessment. A property owner or a party in interest, or his or her agent, or a Public Corporation may appear in person at the hearing to protest the apportionment or special assessment or shall be permitted to file his or her appearance or protest by letter and his or her personal appearance shall not be required. A Public Corporation may also file their protest by letter. The owner of any land in the drainage district or any city, township, village, district or county having control of any highway which may feel aggrieved by the apportionment of benefits so made by the commissioner, may, within 10 days after the day of review of such apportionments, appeal therefrom and for such purpose make an application to the probate court of the proper county for the appointment of a board of review, by filing with said probate court a notice of appeal and at the same time filing with said court a bond in such sum as the judge of probate may require, with 1 or more sureties to be approved by the judge of probate, conditioned upon the payment of all costs in case the apportionment made by the commissioner shall be sustained. Such appeal may be taken by the county or district road commissioners in behalf of the county, the mayor of any city in behalf of the city, by the supervisor in behalf of any township, or by the president of any village in behalf of the village when authorized by the village or city council, township board or road commission, respectively. Only 1 board shall be appointed by such probate court.

Notice is further given that on the above date and time the special assessment and apportionment for Public Health benefits for Marion and Genoa Townships and the City of Howell, and for the County of Livingston and Livingston County Road Commissioners for road or highway benefits incurred for inspection, maintenance and repair expenses on the above drain will be subject to review. A computation of estimated costs of inspection, maintenance and repair will be available for review by any owner of property subject to assessment or a representative of a public corporation. Now, therefore, all unknown and non-resident persons, owners and persons who are owners of land or have interest in lands in the Marion & Genoa Drainage District and you, Margaret M. Dunleavy, Clerk for the County of Livingston, the Board of Commissioners for Livingston County, its members, and members of the Livingston County Board of Road Commissioners who are interested parties who are assessed for road benefits, Robert Hanvey, Supervisor of Marion Township, Gary McCrie, Supervisor of Genoa Township, and Phillip Campbell, Mayor of the City of Howell, which Public Corporation is being assessed for public health benefits are hereby given notice that the special assessments of benefits for the inspection, maintenance and repair expenses on the Marion & Genoa Drain will be subject to review.

At the Review, the Livingston County Drain Commissioner shall hear the proofs and allegations of all interested parties, and shall carefully reconsider and review the description of land comprised within the Special Assessment District, the several descriptions and special assessment and apportionment of benefits, and define and equalize the land or Public Corporation apportionment and special assessments as is just and equitable.

After the Public Hearing and Review, I will confirm the apportionment and special assessment roll of said drain.

This Notice is given pursuant to Acts 162 of the Public Acts of Michigan of 1962 as amended, by Act 64 of the Public Acts of 1989 of the State of Michigan, and Act 40 of the Public Acts of 1956 as amended of the State of Michigan.

Dated this 16th day of August, 2013.



Brian Jonckheere
Livingston County Drain Commissioner