GENOA CHARTER TOWNSHIP BOARD
Regular Meeting
July 17, 2017
6:30 p.m.

AGENDA

Call to Order:

Pledge of Allegiance:

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

Approval of Consent Agenda:

1. Payment of Bills.

2. Request to Approve Minutes: June 19, 2017

3. Review of the three-month budget analysis of Funds 101, 212, 261, 264, 270, and 271.

4. Request to approve the annual rate adjustments for the Lake Edgewood Water and Pine Creek Sewer and Water customers served by the City of Brighton.

5. Request to reappoint Chris Grajek to the Planning Commission and Dean Tengel to the Zoning Board of Appeals for four-year terms.

6. Request for personnel changes related to the Liquor Law Enforcement Fund 212.

Approval of Regular Agenda:

7. Request to approve the 2017 Partnership with the Economic Development Council of Livingston County in the amount of $22,600.

8. Consideration of the Environmental Impact Assessment and Site Plan for a proposed 101 room 4-story "Hampton Inn and Suites" hotel located southwest of the Grand Oaks Drive and Latson Road intersection. The property is located within the Livingston Commons Phase 2 PUD on parcel #11-08-200-020. The request is petitioned by Howell Hospitality Inc.

9. Consideration of a PUD Amendment, Environmental Impact Assessment and Site Plan for a proposed multi-tenant commercial center to include two buildings including a drive-through restaurant located at the northwest corner of Grand Oaks Drive and Latson Road. The property is located within the Livingston Commons Phase 2 PUD on Parcel #11-08-200-017. The request is petitioned by USA 2 GO.

10. Review of supplemental information regarding the property at 5679 Richardson Road.

11. Request to enter into closed session to discuss pending litigation pursuant to MCL 15.268 § 8 (e) and material exempt from discussion of disclosure by state statue MCL 15.268 § 8 (h).

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: July 17, 2017

TOWNSHIP GENERAL EXPENSES: Thru July 17, 2017	$224,435.56
June 30, 2017 Bi Weekly Payroll	$92,050.86
July 14, 2017 Bi Weekly Payroll	$95,501.49
OPERATING EXPENSES: Thru July 17, 2017	$363,267.33
TOTAL:	$775,255.24

Check Date	Check	Vendor Name	Amount	
Bank FNBCK CHECKING ACCOUNT				
06/16/2017	33740	AT&T	278.39	
06/16/2017	33741	BULLSEYE TELECOM	398.68	
06/16/2017	33742	BUSINESS IMAGING GROUP	704.74	
06/16/2017	33743	COOPER'S TURF MANAGEMENT	925.00	
06/16/2017	33744	DELUXE FOR BUSINESS	145.39	
06/16/2017	33745	EHIM, INC	11,309.11	
06/16/2017	33746	ETNA SUPPLY COMPANY	16,220.00	
06/16/2017	33747	LAURA MROCZKA	43.41	
06/16/2017	33748	LIVINGSTON CO. REGISTER OF DEEDS	30.00	
06/16/2017	33749	OFFICE EXPRESS INC.	48.89	
06/16/2017	33750	TETRA TECH INC	1,590.00	
06/16/2017	33751	TRI COUNTY SUPPLY, INC.	144.66	
06/16/2017	33752	UNUM PROVIDENT	3,456.20	
06/16/2017	33753	USA BLUEBOOK	1,569.90	
06/16/2017	33754	VERIZON WIRELESS	373.13	
06/16/2017	33755	DETROIT CONCRETE CONSTRUCION INC.	26,928.00	V
		Void Reason: SPELLING WAS WRONG		
06/16/2017	33756	DETROIT CONCRETE CONSTRUCION INC.	26,928.00	
06/20/2017	33757	COMCAST	156.62	
06/20/2017	33758	FEDERAL EXPRESS	293.45	
06/20/2017	33759	GUARDIAN	2,307.51	
06/20/2017	33760	MASTER MEDIA SUPPLY	402.34	
06/20/2017	33761	US BANK EQUIPMENT FINANCE	1,698.34	
06/22/2017	33762	ADAMS WELL DRILLING, INC.	250.00	
06/22/2017	33763	BRANDON VANMARTER	150.00	
06/22/2017	33764	CHASE CARD SERVICES	1,336.22	
06/22/2017	33765	KELLY VANMARTER	56.65	
06/22/2017	33766	WALMART COMMUNITY	283.06	
06/22/2017	33767	WEST SHORE SERVICES, INC.	1,280.00	
06/26/2017	33769	HURON RIVER WATERSHED COUNCIL	1,094.36	
06/26/2017	33770	PERFECT MAINTENANCE CLEANING	565.00	
06/26/2017	33771	SPIRIT OF LIVINGSTON	604.88	
06/27/2017	33772	AT&T	28.97	
06/27/2017	33773	GFL ENVIRONMENTAL USA INC.	2,500.00	
06/27/2017	33774	MICHAEL ARCHINAL	500.00	
06/27/2017	33775	NETWORK SERVICES GROUP, L.L.C.	50.00	
06/27/2017	33776	NORTHERN PLUMBING, INC.	1,840.00	
06/27/2017	33777	TRI COUNTY SUPPLY, INC.	473.26	
06/28/2017	33778	MMRMA	26,890.18	
06/30/2017	33779	LIVINGSTON CTY ASSESSOR'S ASSN	25.00	
06/30/2017	33780	OFFICE EXPRESS INC.	134.15	
07/06/2017	33781	CONTINENTAL LINEN SERVICE	113.43	
07/06/2017	33782	COOPER'S TURF MANAGEMENT	865.00	
07/06/2017	33783	DTE ENERGY	1,211.94	V
07/06/2017	33784	DYKEMA GOSSETT, PLLC	3,355.00	
07/06/2017	33785	PONTEM SOFTWARE	471.00	
07/06/2017	33786	SEWARD PECK & HENDERSON PLLC	5,809.42	
07/06/2017	33787	TRI COUNTY SUPPLY, INC.	89.06	
07/06/2017	33788	DTE ENERGY	1,070.58	
07/10/2017	33789	CEI	2,950.00	
07/10/2017	33790	CRAMPTON ELECTRIC CO., INC.	4,800.00	
07/10/2017	33791	DTE ENERGY	129.62	
07/12/2017	33792	AMERICAN AQUA	64.00	
07/12/2017	33793	COMCAST	325.77	
07/12/2017	33794	CONSUMERS ENERGY	22.35	
07/12/2017	33795	ETNA SUPPLY COMPANY	17,845.88	
07/12/2017	33796	GFL ENVIRONMENTAL USA INC.	79,323.96	
07/12/2017	33797	MINNESOTA ELEVATOR, INC	115.00	

FNBCK TOTALS:

Total of 57 Checks:	252,575.50
Less 2 Void Checks:	28,139.94
Total of 55 Disbursements:	224,435.56

Check Register Report For Genoa Charter Township

For Check Dates 06/30/2017 to 06/30/2017

4

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
06/30/2017	FNBCK	12550	MCMANUS, JOHN	168.00	155.14	0.00	Open
06/30/2017	FNBCK	EFT123	FLEX SPENDING (TASC)	1,159.13	1,159.13	0.00	Open
06/30/2017	FNBCK	EFT124	INTERNAL REVENUE SERVICE	22,715.05	22,715.05	0.00	Open
06/30/2017	FNBCK	EFT125	PRINCIPAL FINANCIAL	2,875.00	2,875.00	0.00	Open
06/30/2017	FNBCK	EFT126	PRINCIPAL FINANCIAL	1,426.63	1,426.63	0.00	Open
Totals:			Number of Checks: 005	28,343.81	28,330.95	0.00	

Total Physical Checks: 1
Total Check Stubs: 4

Dir. Dep.
63,719.91

$92,050.86

Check Register Report For Genoa Charter Township

For Check Dates 07/14/2017 to 07/14/2017

5

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
07/14/2017	FNBCK	EFT127	FLEX SPENDING (TASC)	1,159.13	1,159.13	0.00	Open
07/14/2017	FNBCK	EFT128	INTERNAL REVENUE SERVICE	24,371.91	24,371.91	0.00	Open
07/14/2017	FNBCK	EFT129	PRINCIPAL FINANCIAL	3,025.00	3,025.00	0.00	Open
07/14/2017	FNBCK	EFT130	PRINCIPAL FINANCIAL	1,426.63	1,426.63	0.00	Open
Totals:			Number of Checks: 004	29,982.67	29,982.67	0.00	

Total Physical Checks:

Total Check Stubs: 4

Dir. Dep.
65,555.75

$95538.42
− 36.93 - Ryan McMahon Direct Deposit
$95501.49

Check Date	Check	Vendor Name	Amount
Bank 503FN DPW-UTILITIES #503			
06/19/2017	4011	AUTO ZONE Void Reason: AUTO ZONE PUT IN WRONG AMOUNT TO BANK	36.02 V
06/19/2017	4012	CHASE CARD SERVICES	5,160.30
06/19/2017	4013	DELUXE FOR BUSINESS	87.89
06/19/2017	4014	HOWELL TRUE VALUE HARDWARE	43.34
06/19/2017	4015	MWEA	70.00
06/19/2017	4016	OHM ENGINEERING ADVISORS	7,748.00
06/19/2017	4017	RED WING SHOE STORE	420.73
06/19/2017	4018	SPIRIT OF LIVINGSTON	509.76
06/19/2017	4019	USA BLUEBOOK	48.48
06/19/2017	4020	VERIZON WIRELESS	282.15
06/19/2017	4021	VICTORY LANE QUICK OIL CHANGE	74.98
06/19/2017	4022	WILSON MARINE	491.86
06/20/2017	4023	ADVANCED AUTO PARTS	35.96
06/20/2017	4024	BRIGHTON URGENT CARE	270.00
06/27/2017	4025	GREG TATARA	500.00
06/27/2017	4026	TESHA HUMPHRISS	250.00
06/28/2017	4027	AMERICAN WATER WORKS ASSOCIATION	75.00
06/28/2017	4028	MMRMA	19,418.45
07/07/2017	4029	PAETEC	34.34
07/07/2017	4030	PORT CITY COMMUNICATIONS, INC.	313.40
07/11/2017	4031	AUTO ZONE	47.17
07/11/2017	4032	BELLE TIRE	1,358.00
07/11/2017	4033	FASTENAL	20.79
07/11/2017	4034	GORDON FOOD SERVICE	148.37
07/11/2017	4035	HOWELL TRUE VALUE HARDWARE	26.98
07/11/2017	4036	LOWE'S	2,589.82
07/11/2017	4037	LUCITY, INC	23,373.02
07/11/2017	4038	MASTER MEDIA SUPPLY	114.66
07/11/2017	4039	RED WING SHOE STORE	369.73
07/11/2017	4040	TRACTOR SUPPLY CO.	53.44
07/11/2017	4041	USA BLUEBOOK	18.66
07/11/2017	4042	VICTORY LANE QUICK OIL CHANGE	181.94
07/12/2017	4043	STAPLES CREDIT PLAN	164.85
07/12/2017	4048	CHASE CARD SERVICES	2,144.94

503FN TOTALS:

Total of 34 Checks:	66,483.03
Less 1 Void Checks:	36.02
Total of 33 Disbursements:	66,447.01

Check Date	Check	Vendor Name	Amount	
Bank 592FN OAK POINTE OPERATING FUND #592				
06/15/2017	3970	AT&T	586.60	
06/15/2017	3971	BULLSEYE TELECOM	226.74	
06/19/2017	3972	COOPER'S TURF MANAGEMENT	310.00	
06/19/2017	3973	ETNA SUPPLY COMPANY	54.00	
06/19/2017	3974	FASTENAL COMPANY	83.18	
06/19/2017	3975	GENOA TOWNSHIP D.P.W. FUND	37,788.18	
06/19/2017	3976	GRUNDY ACE OF HOWELL	1.13	
06/19/2017	3977	HUGHES B	126.00	
06/19/2017	3978	NORTHWEST PIPE & SUPPLY	180.84	
06/19/2017	3979	TETRA TECH INC	4,658.30	
06/19/2017	3980	TLS CONSTRUCTION LLC	6,060.18	
06/19/2017	3981	UTILITIES INSTRUMENTATION SERVICE	1,680.50	
06/20/2017	3982	LIVINGSTON PRESS & ARGUS	600.00	
06/26/2017	3983	AT & T	30.01	
06/27/2017	3984	GENOA TOWNSHIP D.P.W. FUND	1,004.40	
06/27/2017	3985	GENOA TOWNSHIP D.P.W. FUND	1,944.10	V
		Void Reason: ALREADY PAID		
06/27/2017	3986	GENOA TOWNSHIP DPW FUND	218.55	
06/27/2017	3987	GENOA TOWNSHIP DPW FUND	420.86	V
		Void Reason: ALREADY PAID IN MAY 2017		
06/28/2017	3988	MMRMA	4,189.38	
07/06/2017	3989	CONSUMERS ENERGY	25.59	
07/06/2017	3990	DTE ENERGY	2,973.93	
07/06/2017	3991	DTE ENERGY	825.26	
07/07/2017	3992	AT&T LONG DISTANCE	55.00	
07/07/2017	3993	DTE ENERGY	69.06	
07/12/2017	3994	CORRPRO COMPANIES	920.00	
07/12/2017	3995	ALEXANDER CHEMICAL CORPORATION	1,368.00	
07/12/2017	3996	AMERICAN AQUA	699.00	
07/12/2017	3997	COOPER'S TURF MANAGEMENT	7,645.50	
07/12/2017	3998	DUBOIS-COOPER	47,655.00	
07/12/2017	3999	GENOA OCEOLA SEWER	13.96	
07/12/2017	4000	GENOA TOWNSHIP D.P.W. FUND	37,788.18	
07/12/2017	4001	K & J ELECTRIC, INC.	231.00	
07/12/2017	4002	K/E ELECTRIC SUPPLY CORP	15.70	
07/12/2017	4003	KENNEDY INDUSTRIES	5,641.00	
07/12/2017	4004	KEYENCE CORP	7.50	
07/12/2017	4005	MICHIGAN CAT	1,860.00	
07/12/2017	4006	NORTHERN PUMP & WELL	400.00	
07/12/2017	4007	TLS CONSTRUCTION	2,850.00	
07/12/2017	4008	UTILITIES INSTRUMENTATION SERVICE	402.00	
07/12/2017	4009	WATER SOLUTIONS UNLIMITED, INC	1,855.00	

592FN TOTALS:

Total of 40 Checks:	173,463.63
Less 2 Void Checks:	2,364.96
Total of 38 Disbursements:	171,098.67

:heck Date	Check	Vendor Name	Amount
3ank 593FN LAKE EDGEWOOD OPERATING FUND #593			
)6/16/2017	3182	BULLSEYE TELECOM	223.74
)6/16/2017	3183	COOPER'S TURF MANAGEMENT	564.00
)6/16/2017	3184	GENOA OCEOLA SEWER AUTHORITY	2,414.40
)6/16/2017	3185	GENOA TOWNSHIP D.P.W. FUND	10,721.59
)6/16/2017	3186	HUBBELL, ROTH & CLARK, INC	15,654.33
)6/16/2017	3187	PVS NOLWOOD CHEMICALS, INC	932.00
)6/20/2017	3188	BRIGHTON ANALYTICAL , L.L.C.	67.00
)6/26/2017	3189	GENOA TOWNSHIP D.P.W. FUND	66.49 V
		Void Reason: ALREADY PAID	
)6/26/2017	3190	GENOA TOWNSHIP D.P.W. FUND	25.57
)6/26/2017	3191	GENOA TOWNSHIP DPW FUND	23.47
)6/26/2017	3194	GENOA TOWNSHIP D.P.W. FUND	569.89 V
		Void Reason: ALREADY PAID INVOICE	
)6/26/2017	3195	GENOA TOWNSHIP D.P.W. FUND	734.57
)6/26/2017	3196	GENOA TOWNSHIP D.P.W. FUND	1,279.44
)6/27/2017	3197	BRIGHTON ANALYTICAL , L.L.C.	134.00
)6/27/2017	3198	GENOA TOWNSHIP DPW FUND	1,052.89
)6/28/2017	3199	MMRMA	860.00
)7/06/2017	3200	DTE ENERGY	3,880.34
)7/07/2017	3201	BRIGHTON ANALYTICAL , L.L.C.	67.00
)7/10/2017	3202	CHARTER TOWNSHIP OF BRIGHTON	932.50
)7/12/2017	3203	CONSUMERS ENERGY	18.30
)7/12/2017	3204	COOPER'S TURF MANAGEMENT	821.00
)7/12/2017	3205	GENOA TOWNSHIP DPW FUND	10,721.59
)7/12/2017	3206	HARTLAND SEPTIC SERVICE, INC.	1,500.00
)7/12/2017	3207	MICHIGAN CAT	700.00
)7/12/2017	3208	USA BLUEBOOK	394.15
)7/12/2017	3209	GENOA OCEOLA SEWER	127.75
)7/12/2017	3210	HI-TECH	25.00
)7/12/2017	3211	NORTHWEST PIPE & SUPPLY	11.02
)7/12/2017	3212	CITY OF BRIGHTON	27,007.71

593FN TOTALS:

Total of 29 Checks:	81,529.74
Less 2 Void Checks:	636.38
Total of 27 Disbursements:	80,893.36

:heck Date	Check	Vendor Name	Amount
3ank 595FN PINE CREEK OPERATING FUND #595			
)7/12/2017	2188	CITY OF BRIGHTON	44,828.29

595FN TOTALS:

Total of 1 Checks:	44,828.29
Less 0 Void Checks:	0.00
Total of 1 Disbursements:	44,828.29

GENOA CHARTER TOWNSHIP BOARD
Regular Meeting
June 19, 2017

MINUTES

Supervisor Rogers called the regular meeting of the Genoa Charter Township Board to order at 6:30 p.m., with the Pledge of Allegiance. The following members were present constituting a quorum for the transaction of business: Bill Rogers, Paulette Skolarus, Robin Hunt, Jim Mortensen, Terry Croft, Diana Lowe and Jean Ledford. Also present were Township Manager, Michael Archinal; Township Attorney, Joe Seward; and approximately 25 persons in the audience.

A Call to the Public was made with the following responses:

- Mark Behrendt – I oppose a gas station at Brighton and Chilson Roads because of the congested intersection and the angles of the road. Reference was made to the Master Plan and the configuration of the existing roads. There will be a problem with service vehicles in that location. There are plenty of service stations right off of Latson Road.
- Mortensen – There is a request here to extend sewer service not a rezoning. Also, there is a consent agreement in place for this property.
- Fred Novak - I have owned property here since 1975. Vic & Bob's had two gas pumps and a small store. We have enough gas stations and we don't need another convenience store at that location. This action could impact local wells and surface water. It is contrary to the Master Plan for the township.
- Bridget Klueger – Why do you need to run a line now? Tanker traffic is not appropriate for that area. We will be stuck with this development forever and it will harm Chilson Pond. Please protect our wetlands.
- Pam Thomas – A septic system will only last so many years. We have zoning issues that need to be addressed.
- Bob Baker – Why do they need to tie into Oak Pointe Sewer System? What is the capacity? Would this extension allow the tie-ins? The cut-off is dangerous at this location.
- Rogers – They would tie in just to the right of the dirt road. The owner would be responsible for the cost of the sewer extension.
- Jeff Terry – Before going forward, is there a traffic study being done? Please no more concentration of traffic in that area.
- Rogers – The existing traffic study is still viable.
- Kathleen Wisser – This is a dangerous intersection. They are in the watershed near Chilson Pond. Please don't allow a gas station here.

- Lindsey Gestro – I work for the Oakland County Health Department. Fumes from a gas station are bad. My research indicates that 1500 liters of gas spill every 10 years. There are sandy soils in this area and we will have more problems if you allow a gas station here. Heavy storms can also create problems. This is one of the 7 most dangerous intersections in the township.
- Jennifer D'Amico – My family has owned the Vic & Bob's store for over 38 years. All past development on this site has been a complete failure. Water from this site is an existing problem to my property. How can they guarantee that gas will not leak? This is our life and our community. We don't want late night business traffic at this intersection. We don't want a gas station here.
- Gary Mitter – The proposed additional fire lane on Gray Road for A & F Wood Products is a problem. I am in favor of their expansion but not the 2nd access. Theft is already a big problem for this area.

Approval of Consent Agenda:

Moved by Lowe and supported by Hunt to approve all items listed under the Consent Agenda and move payment of the bills to the regular agenda for consideration. The motion carried unanimously.

1. Request to Approve Minutes: June 5, 2017

2. Request for approval to file a Claim of Lien as well as levy Special Assessment, X0111 Demo/Maint., in the amount of $5,435.00 to the 2017 Summer Tax Roll for expenses paid for Parcel #4711-03-401-051, property address 692 Red Oaks as requested by the Township Treasurer.

Approval of Regular Agenda:

Moved by Ledford and supported by Mortensen to approve for action all items listed under the Regular Agenda with the addition of the Payment of Bills. The motion carried unanimously.

3. Payment of Bills

Moved by Mortensen and supported by Lowe to approve the payment of bills with a corrected total of $664,231.21. The motion carried unanimously.

4. Request to approve the 2017 Partnership with the Economic Development Council of Livingston County in the amount of $22,600.00.

Moved by Mortensen and supported by Croft to table this request until the reason for Brighton Township's withdrawal if considered. The motion carried unanimously.

5. Consideration of a request for approval of special land use, environmental impact assessment and site plan for a proposed 30,000 sq. ft. warehouse/storage addition to the existing A & F Wood Products located at 5665 Sterling Drive, Howell. The request is petitioned by Schonsheck Inc.

A. Disposition of Special Use Permit

Moved by Ledford and supported by Skolarus to approve the Special Use Application based upon consistency with the standards of section 19.03 of the Zoning Ordinance with the following conditions:

1. The existing vegetation is acceptable and no new buffer zone plantings are required.
2. The building materials are acceptable as it is the same material as the existing building and not visible from the road.
3. The applicant shall comply with all requirements of the Brighton Area Fire Authority; however, based on the theft at Wonderland Marine, the fact that there seems to be ample circulation on the property and there will be additional fire suppression on the entire property, the Township requests that the Brighton Area Fire Authority reconsider their requirement for a second access point. (This action will be handled through the Manager and Supervisor).

The motion carried unanimously.

B. Disposition Environmental Impact Assessment (05-01-17)

Moved by Hunt and supported by Skolarus to approve the Impact Assessment dated 5-1-17 with the following conditions:

1. "Dust control measures shall be used during construction" will be added to Item D..2
2. Hazardous Materials are addressed in both Items G&H. One shall be removed.

The motion carried unanimously.

C. Disposition of Site Plan (5-24-17)

Moved by Skolarus and Supported by Lowe to approve the Site Plan dated 5-24-17 with the following conditions:

1. If the three parcels are consolidated into two, the lot split and access easement(s) will be recorded prior to issuance of a land use permit.
2. The applicant shall comply with all requirements of the Brighton Area Fire Authority; however, based on the theft at Wonderland Marine, the fact that there seems to be ample circulation on the property and there will be additional fire suppression on the entire property, the Township requests that the Brighton Area Fire Authority reconsider their requirement for a second access point.
3. Per the Township Engineer's letter dated June 5, 2017, the applicant shall consult with the Brighton Area Fire Authority to determine the appropriate water main size and configuration per the fire flow chart.
4. Construction Plan review through the MHOG Utility will be required and utility easements shall be provided prior to issuance of a land use permit.

The motion carried unanimously.

6. Request to extend Oak Pointe sanitary service to 5033 Chilson Road with a private lead.

Pam Thomas - We are aware of Vic & Bob's parcel being in the sanitary sewer district. We didn't have the opportunity to tie-in at that time. We did receive a conditional estimate and wanted to investigate further. We would like to put a gas station there. Vic & Bob's did opt to

go with the abandonment of the gas pumps years ago. We, too, are concerned with the environment. Our septic system might fail in the next 8 to 10 years. Today, train loads of chemicals sit on the tracks – as many as 40 to 50 cars that create a greater threat to the environment. Any sewer extension will be bored under the road. This property is master planned for Neighborhood Service District. We are trying to find another use other than the existing zone of Low Density Residential. This property is unique and this is the first step in the process to obtain a gas station.

Dewey Thomas – The Chilson Pond pollution is coming from wherever. I am presuming from Crooked Lake. I would have filled this room with people who would like to see a gas station there. It just makes good sense.

Bridget Klueger – I am an environmental consultant and my specialty is gas stations. The problem is always underground and seepage that will go toward the lake. We need to keep our water clean. The Thomas's are not professional operators. They don't know how to calibrate equipment when alarms go off. In my 25 years of service I have found that only one single gas station has not leaked. With a septic field, contamination will not go beyond the parcel.

Attorney Joe Seward was asked for his response to the petition for a sewer extension:
Seward – For a different use on this property, the consent judgement would need to be amended. Should the Board choose to approve the sewer extension to this parcel that would be a problem if the petition comes back for a gas station. It would be difficult to say no when this application specifically states that their final request will be for rezoning and a gas station. Of course any final determination would be up to the judge.

Mortensen – Irrespective of a gas station, can we even extend sewer?

Hunt – This property is not within the sewer district.

Skolarus – A letter, received after the board packet was completed (dated June 14, 2017) from Fairways at Oak Pointe asks that the board reject the request to build a gas station on the corner of Brighton Road and Chilson Road. The memo from Greg Tatara, Utility Director, states that "A private lead would require a private easement from the Fairways Condominium Association."

Moved by Mortensen and supported by Skolarus to deny the request for a sewer extension to a parcel outside the district. The motion carried as follows: Ayes – Mortensen, Skolarus, Hunt and Ledford. Nays – Rogers, Lowe and Croft.

7. Discussion regarding interest charged on Fund #264 Special Assessment Revolving Fund.

It was the consensus of the board to ask Archinal to provide additional information before moving forward with this discussion.

Member discussion:

The board voiced no objection to a request for extending contractual services related to sewer and water.

8. Request to enter into closed session to discuss pending litigation pursuant to MCL 15.268 § 8 (e).

Moved by Lowe and supported by Skolarus to move to closed session at 8:20 p.m. The motion carried by roll call vote as follows: Ledford, Croft, Hunt, Lowe, Mortensen, Skolarus and Rogers. Nays – None. Absent – None.

The regular meeting of the board was reopened at 8:37 p.m. and then adjourned.

Paulette A. Skolarus, Clerk
Genoa Charter Township

June 29, 2017

To: Genoa Township Board

From: Polly Skolarus, Clerk

The following prepared documents include a record of revenue and expenditures for the first quarter of this fiscal year. No action is required of the Board.

06/29/2017

BUDGET REPORT FOR GENOA TOWNSHIP
FUND 101 - GENERAL FUND

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
ESTIMATED REVENUES									
101-000-403-000	CURRENT REAL PROP TAX/INTEREST	810,177	797,463	805,572	820,731	845,920	860,328	866,000	27,954
101-000-407-000	DELINQ TAX - PERSONAL & REAL	9,851	6,264	8,906	7,414	6,088			
101-000-423-000	COLLECT FEES/EXCESS OF ROLL	318,946	290,896	295,138	296,125	299,329	339,440	340,400	8,448
101-000-423-100	COLLECTION FEE - SCHOOLS		24,555	28,410	24,771	24,897			
101-000-423-200	SET FEES COLLECTED			218	188	195			
101-000-445-000	PENALTIES & INTEREST ON TAXES	1,163	559	138	128				
101-000-475-000	ORDINANCE FINES	152							
101-000-476-000	LICENSES & PERMITS	12,122	12,380	15,488					270
101-000-476-100	LICENSE/PERMIT/CABLE FRANCHISE	305,838	325,763	336,385	371,686	399,976	412,994	420,000	102,437
101-000-477-000	METRO ACT REVENUE	13,500	12,268	11,212	9,579	9,579	13,670	13,000	13,606
101-000-480-000	TRAILER FEES	3,301	3,307	3,310	2,707	3,003	3,387	3,500	1,169
101-000-574-000	STATE SHARED REVENUE	1,630,181	1,441,910	1,477,501	1,571,139	1,575,600	1,580,438	1,650,000	284,172
101-000-608-000	CHARGES FOR SERV-APPL FEES	28,575	34,666	28,732	60,727	68,666	37,739	60,000	6,356
101-000-631-000	REFUSE COLLECTION FEES	731,289	761,543	762,623	767,616	782,652	790,688	844,000	35,311
101-000-664-000	INTEREST	17,353	10,984	7,083	6,671	9,444	3,928	10,000	750
101-000-676-000	ADMIN FEE/UTILITY-OPERATING	50,000	50,000	50,000	51,500	53,000	54,865	54,550	
101-000-676-100	ADM FEE LIQUOR LAW	3,500	3,500	3,500	3,500	3,500	2,680	3,500	
101-000-678-300	TAXES ON LAND TRANSFER	138,732	140,755	122,869	127,905	142,699	148,885	134,000	
101-000-678-700	WHITE PINES/STREET LIGHTING	729	752	18					
101-000-695-000	OTHER/CEMETERY/ SCHOOLS	7,539	3,469	10,888					
101-000-699-001	MISC/SCHOOL/CEMETERY/ELECTI	6,983	29,769	14,098	14,073	37,540	66,355	15,000	2,406
101-000-699-002	TRANS IN BUILDING RESERVE FUND	79,000							
101-000-699-505	TRANSFER IN FROM SELCRA			1,862					
TOTAL ESTIMATED REVENUES		4,168,931	3,950,803	3,983,951	4,136,460	4,262,088	4,315,397	4,413,950	482,879

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
APPROPRIATIONS									
101-101-703-000	SALARIES/TRUSTEES	20,655	23,593	27,705	24,730	26,766	23,436	30,000	10,739
101-171-703-000	SALARIES/TWP SUPERVISOR	49,980	49,980	51,479	52,500	53,400	53,400	54,500	14,608
101-191-703-000	SALARIES/ELECTION	20,526	67,216	25,046	50,923	69,749	69,353	15,000	317
101-209-703-000	CONTRACTUAL SALARIES	300,696	323,365	337,860	338,842	357,790	348,382	378,000	94,588
101-210-801-000	PROF.CONTR./LEGAL	88,883	128,713	107,757	73,424	99,355	65,412	100,000	10,249
101-215-703-000	SALARIES/TWP CLERK	48,980	48,980	50,500	51,500	52,400	52,400	53,500	12,323
101-223-801-000	PROF. CONTR. AUDITOR	16,850	16,800	17,600	21,100	22,375	20,600	25,000	3,835
101-241-801-000	PROF.CONSULTING/ENG/PLANNING	29,686	36,636	42,272	11,454	21,998	22,246	50,000	17,381
101-241-802-000	ENGINEERING/IN HOUSE	18,960	7,318						
101-247-703-000	BD OF REVIEW SALARIES	4,877	2,875	2,675	2,250	2,000	2,150	5,000	
101-247-964-000	REFUNDS & CHARGEBACKS	20,848	19,023	15,682	6,336	4,090	2,028	10,000	79
101-253-703-000	SALARIES/TWP TREASURER	48,961	48,980	50,500	51,500	52,400	52,400	53,500	14,338
101-265-775-000	REPAIRS & MAINTENANCE	83,665	93,676	146,599	86,257	100,754	115,969	125,000	32,204
101-265-910-000	INSURANCE BC/BS & MCM	236,566	219,201	259,377	262,144	248,964	257,793	328,000	81,585
101-265-911-000	WELLNESS IQ REIMBURSE						519	10,000	687
101-265-920-000	UTIL:ELECTRICITY & NAT.GAS	19,356	20,425	22,719	20,126	20,314	18,624	22,000	5,167
101-284-703-000	SALARIES	250,880	271,045	308,655	313,275	260,546	281,503	296,000	76,316
101-284-704-000	RETIREMENT	90,161	85,069	95,298	92,938	87,850	83,953	110,000	(29,867)
101-284-715-000	EMPLOYER'S SHARE FICA	62,557	56,806	67,543	70,839	68,190	64,111	80,000	17,539
101-284-720-000	M.E.S.C.			61				20,000	
101-284-727-000	PRINTG, POSTAGE, OFC SUPPLIES	72,499	74,889	86,219	92,671	83,863	79,119	95,000	13,150
101-284-728-000	ECONOMIC DEVELOPMENT		20,000	20,000	20,000	21,500	22,000	23,500	
101-284-850-000	TELEPHONE	20,791	23,105	21,775	18,056	19,452	19,756	25,000	5,334
101-284-861-000	MILEAGE & TRAVEL EXPENSE	12,202	12,312	17,996	14,497	12,269	11,589	15,000	2,603
101-284-957-000	DUES	17,726	18,855	17,622	19,702	17,124	21,236	20,000	11,170
101-284-958-000	MEETING FEES & MISC. EXPENSES	12,010	19,311	13,194	17,941	20,944	19,764	25,000	3,766
101-284-958-001	692 RED OAKS DR						5,335		
101-284-959-000	APPL FEES EXPENSES	12,275	21,227	28,800	42,233	59,987	42,900	60,000	11,028
101-284-959-001	PLANNING /ZBA SALARIES	27,344	27,491	29,754	30,016	31,437	28,545	32,000	8,775

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
101-284-970-000	BUILDING DEPT EXPENSE	28,799							
101-301-703-000	SALARY/ORDINANCE/ ZONING ADMIN	44,710	46,035	44,105	50,165	68,572	81,725	88,000	22,326
101-336-999-001	FIRE SUB STATION EXPENSES-DORR	6,861	991	359		1,435			
101-441-801-010	ROAD IMPROVEMENT	226,181	116,695	194,572	224,361				
101-441-803-000	DUMP MAINTENANCE	893,611	914,732	931,751	970,891	967,656	954,102	1,015,000	242,930
101-441-803-100	LG/BULKY ITEM DISPOSAL	9,088	8,600						
101-441-804-000	DUST CONTROL/CHLORIDE	48,806	66,307	55,621	55,861				
101-441-971-000	WHITE PINES/ST LIGHTING	746	751						
101-751-881-000	RECREATION	68,698	64,453	128,324	131,426				
101-916-962-000	DRAIN AT LARGE	27,515	23,201	24,908	25,912	30,055	28,421	30,000	
101-929-977-000	CAPITAL OUTLAY	90,031	58,056	88,266	28,079	94,020	88,953	125,000	29,473
101-966-999-010	TRANS OUT FUTURE RD IMPR #261	200,000	200,000	250,000	250,000	426,000	150,000	250,000	
101-966-999-011	SELCRA REIMBURSEMENT	10,000	10,000						
101-966-999-013	ADV FOR ROAD PROJECTS #264		350,000	500,000	250,000	450,000	600,000	300,000	
101-966-999-027	FUT DEV PARKS & REC.#270	725,000	379,000	250,000	350,000	592,500	300,000	300,000	
101-966-999-028	TRANS TO RESERVE BLDG/GRD #271	60,000		200,000		75,000	20,000	50,000	
101-966-999-110	CONTINGENCIES		6,154					50,000	
TOTAL APPROPRIATIONS		4,027,980	3,981,866	4,532,594	4,121,949	4,520,755	4,007,724	4,269,000	712,643
NET OF REVENUES/APPROPRIATIONS - FUND 101		140,951	(31,063)	(548,643)	14,511	(258,667)	307,673	144,950	(229,764)
BEGINNING FUND BALANCE		2,452,516	2,593,463	2,562,403	2,013,761	2,028,270	1,777,795	2,085,468	2,085,468
FUND BALANCE ADJUSTMENTS						8,190			
ENDING FUND BALANCE		2,593,467	2,562,400	2,013,760	2,028,272	1,777,793	2,085,468	2,230,418	1,855,704

06/29/2017

BUDGET REPORT FOR GENOA TOWNSHIP
FUND 212 - LIQUOR LAW

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
ESTIMATED REVENUES									
212-000-570-000	STATE SHARED REV LIQUOR LAW	13,018	12,871	12,328	13,034	13,660	13,833	13,900	248
TOTAL ESTIMATED REVENUES		13,018	12,871	12,328	13,034	13,660	13,833	13,900	248
APPROPRIATIONS									
212-000-956-000	MISC EXPENSE						200		
212-330-702-000	LIQUOR LAW ENF WAGES	8,000	8,000	8,240	8,240	8,240	8,240	8,240	
212-330-704-000	RETIREMENT	800	800	824	824	824	824	824	
212-330-715-000	EMPLOYER'S SHARE FICA	640	640	700	700	640	640	640	
212-330-716-000	LIQUOR LAW ADM FEE/GENOA TWP.	3,500	3,500	3,500	3,500	3,500	3,500	3,500	
212-330-717-000	AUDITING EXPENSE	500	350	300	300	200		200	
TOTAL APPROPRIATIONS		13,440	13,290	13,564	13,564	13,404	13,404	13,404	
NET OF REVENUES/APPROPRIATIONS - FUND 212		(422)	(419)	(1,236)	(530)	256	429	496	248
BEGINNING FUND BALANCE		3,021	2,599	2,180	944	415	671	1,100	1,100
ENDING FUND BALANCE		2,599	2,180	944	414	671	1,100	1,596	1,348

06/29/2017 BUDGET REPORT FOR GENOA TOWNSHIP

FUND 261 - ROAD IMPROVEMENT

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
ESTIMATED REVENUES									
261-000-664-000	INTEREST		900	520	801	612	130	800	185
261-000-674-000	NEW ACCOUNT			139,416					
261-000-695-000	OTHER						1		
261-000-699-000	OPERATING TRANSFER IN	200,000	200,000	250,000	250,000	426,000	150,000	250,000	
261-000-699-264	TRANS IN FROM 264						500,000		
TOTAL ESTIMATED REVENUES		200,000	200,900	389,936	250,801	426,612	650,131	250,800	185
APPROPRIATIONS									
261-330-717-000	MISC./AUDIT EXPENSE		400						
261-441-804-000	DUST CONTROL					59,209	56,790	60,000	23,868
261-441-968-000	I96/LATSON INTERCHANGE	277,239	537,702						
261-470-802-000	NORTH SHORE ROAD IMPROVEMENT					14,000			
261-471-803-000	GRAND OAKS ROAD IMPROVEMENT						200,000		
261-472-804-000	GOLF CLUB					33,116			
261-473-805-000	MCCLEMENTS					14,268			
261-477-809-000	TRI LAKES					136,999	11,714		
261-477-810-000	SUNDANCE TRAIL						30,000		
261-477-811-000	HUGHES ROAD						44,434		
261-477-813-000	WILDWOOD DRIVE						7,798		
261-477-817-000	LATSON ROAD SIGNAL							150,000	
261-477-818-000	HACKER AND LAWSON							130,000	
261-477-819-000	TIMBERVIEW							48,000	
261-477-820-000	OAP POINTE HONORS							48,000	
261-906-956-000	MISC EXPENSE/AUDIT	535	257	719	1,985	624	180	2,000	
261-906-968-001	COON LAKE OVERLAY			283,764					
261-966-999-264	TRANS OUT TO 264						500,000		
TOTAL APPROPRIATIONS		277,774	538,359	284,483	1,985	258,216	850,916	438,000	23,868
NET OF REVENUES/APPROPRIATIONS - FUND 261		(77,774)	(337,459)	105,453	248,816	168,396	(200,785)	(187,200)	(23,683)
BEGINNING FUND BALANCE		1,249,055	1,171,281	833,822	939,276	1,188,092	1,356,488	1,155,703	1,155,703
ENDING FUND BALANCE		1,171,281	833,822	939,275	1,188,092	1,356,488	1,155,703	968,503	1,132,020

06/29/2017

BUDGET REPORT FOR GENOA TOWNSHIP
FUND 264 - ROAD IMPROVEMENT FUND

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
ESTIMATED REVENUES									
264-000-664-000	INTEREST	912	558	918	811	1,121	680	1,000	228
264-000-695-000	OTHER		3,500						
264-000-699-000	OPERATING TRANSFER IN		350,000	500,000	250,000	450,000	600,000	300,000	
264-000-699-261	TRANS IN FROM 261						500,000		
264-451-695-000	PROFESSIONAL FEES	(1,700)	(2,559)	(2,000)	(2,000)				
264-453-672-000	LAKE CHEMUNG SAD-WEED	32,614	31,813	58,649	54,395	54,196	51,860	54,000	199
264-460-672-100	PARDEE LAKE WEED PROJ SAD	25,200	28,636	24,055	24,055	24,054	21,789	25,000	3,023
264-464-672-000	FENDT DRIVE EXPENSES	37,963	35,463				(915)		
264-465-672-000	EAST/WEST CROOKED LAKE WEED SAD			21,272	21,136	20,419	19,085	18,500	448
264-465-673-000	RED OAKS ROADS SAD REVENUE		2,469	69,149	69,143	59,762	48,832	56,000	11,918
264-468-676-000	GLENWAY DRIVE SAD		16,186	17,861	15,628	15,628	14,512		1,116
264-469-677-000	WHITE PINES STREET LIGHT SAD			758	891	848	705	800	27
264-470-678-000	NORTH SHORE ROAD IMPROVE SAD					11,897			
264-470-682-000	NORTH SHORE RDS ASSOCIATION					11,898			
264-471-679-000	GRAND OAKS ROAD IMPROVE SAD						133,075	138,000	4,962
264-474-682-000	SUNRISE PARK SAD						131,699	128,000	9,346
264-475-683-000	HOMESTEAD DRIVE SAD						38,333	39,000	
264-475-684-000	SUNDANCE TRAIL-SAD						37,020	36,000	6,170
264-475-686-000	E.COON LAKE TRAIL-SAD						25,735	19,000	1,225
264-475-688-000	GRAND BEACH-SAD						9,069	10,000	
264-477-687-000	OP HONORS-SAD						173,955		
264-477-688-001	OAK POINTE HONORS ASSOCIATION							30,000	
TOTAL ESTIMATED REVENUES		94,989	466,066	690,662	434,059	649,823	1,805,434	855,300	38,662

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
264-453-801-000	PROF CONTR SERV-LK CHEM WEED	52,818	46,616	48,222	43,728	52,169	55,672	55,000	4,920
264-460-801-000	PROF CON EXP-PARDEE LK WEED	19,260	26,360	25,095	30,071	21,456	23,678	30,000	12,575
264-465-801-000	E/W CROOKED LAKE WEED-EXPENSES		4,673	47,226	8,906	12,851	10,920	50,000	13,308
264-465-802-000	RED OAKS ROADS		25,194	740,703					
264-466-801-000	MOUNTAIN/MYSTIC/MILROY-EXPENSES		3,362				508	800	
264-467-801-000	TIMBERVIEW				6,170			255,000	
264-468-801-000	GLENWAY DRIVE EXPENSES		107,904						
264-469-801-000	WHITE PINES STREET LIGHT-EXPENSES			700	824	661	841		190
264-470-802-000	NORTH SHORE ROAD IMPROVEMENT					22,197			
264-471-803-000	GRAND OAKS ROAD IMPROVE EXPENSES					1,980	619,730		
264-474-780-600	SUNRISE PARK-EXPENSES					4,415	535,114		850
264-475-807-000	HOMESTEAD DRIVE-EXPENSES					1,320	177,880		
264-477-810-000	SUNDANCE TRAIL-EXPENSES					1,700	155,742		
264-477-811-000	E.COON LAKE TRAIL-EXPENSES						124,405		
264-477-814-000	GRAND BEACH WEED-EXPENSES						1,080	10,000	7,080
264-477-815-000	OAK POINTE HONORS SAD-EXPENSES						660	179,000	(4,045)
264-477-815-001	OAK POINTE HONORS ASSOCIATION							30,000	
264-477-816-000	PINE RIDGE PAVING-EXPENSES						1,007		
264-906-956-000	MISC EXPENSE			638	599	729	3,529	3,000	
264-966-999-261	TRANS OUT TO 261 LOAN FEB 2017						500,000		
TOTAL APPROPRIATIONS		72,078	214,109	862,584	90,298	119,478	2,210,766	612,800	34,878
NET OF REVENUES/APPROPRIATIONS - FUND 264		22,911	251,957	(171,922)	343,761	530,345	(405,332)	242,500	3,784
BEGINNING FUND BALANCE		541,780	564,691	816,648	644,725	988,487	1,518,832	1,113,500	1,113,500
ENDING FUND BALANCE		564,691	816,648	644,726	988,486	1,518,832	1,113,500	1,356,000	1,117,284

06/29/2017

BUDGET REPORT FOR GENOA TOWNSHIP
FUND 270 - PARKS AND RECREATION

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
ESTIMATED REVENUES									
270-000-664-000	INTEREST	2,152	2,561	1,219	1,862	1,276	1,429	2,000	256
270-000-670-000	CONTRIBUTIONS		30,851						
270-000-680-000	RENTAL INCOME		9,200	12,750	10,450	11,400	11,450	11,750	3,000
270-000-699-000	OPERATING TRANSFER IN #101	725,000	379,000	250,000	350,000	592,500	300,000	300,000	
270-000-699-001	MISC REVENUE-OTHER							500	
270-330-698-000	SIDEWALKS/GRAND RIVER	(198,051)							
TOTAL ESTIMATED REVENUES		529,101	421,612	263,969	362,312	605,176	312,879	314,250	3,256
APPROPRIATIONS									
270-000-801-000	PROFESSIONAL FEES-ENGINEERING		2,883						
270-241-801-000	ATTORNEY/ENGINEERING				19,226	24,921	32,690	35,000	240
270-241-802-000	ENGINEERING				25,063				
270-265-775-000	MAINTENANCE				50,683	51,883	62,919	75,000	14,679
270-265-920-000	UTILITIES					479		1,000	
270-330-694-002	RENTAL HOUSE EXPENSE		6,174		1,391			2,000	
270-330-695-002	MISC EXPENSE/AUDIT	1,090	2,047	800	500	368	1,291	1,500	194
270-330-696-002	GENOA TWP ATHLETIC FIELD	200,471	62,570	91,569	17,000				
270-330-697-002	RECREATION BIKE PATH		49,392	1,573	168,258	134,224	412,158		
270-330-701-000	SELCRA/HOWELL PARKS AND REC					177,283	103,225	115,000	50,806
270-536-972-100	LAND FOR RECREATION	10,000	206,224					200,000	
270-536-972-200	I-96 INTERCHANGE WALK		77,509	391,232					
TOTAL APPROPRIATIONS		211,561	406,799	485,174	282,121	389,158	612,283	429,500	65,919
NET OF REVENUES/APPROPRIATIONS - FUND 270		317,540	14,813	(221,205)	80,191	216,018	(299,404)	(115,250)	(62,663)
BEGINNING FUND BALANCE		385,687	703,227	718,042	496,837	577,027	793,045	493,641	493,641
ENDING FUND BALANCE		703,227	718,040	496,837	577,028	793,045	493,641	378,391	430,978

APPROVED BUDGET - March 2017
BUILDINGS AND GROUNDS #271

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
ESTIMATED REVENUES									
271-000-664-000	INTEREST	731	400	275	84	77	132	300	33
271-000-699-000	OPERATING TRANSFER IN #101	60,000		200,000		75,000	20,000	50,000	
TOTAL ESTIMATED REVENUES		60,731	400	200,275	84	75,077	20,132	50,300	33

APPROVED BUDGET - March 2017
BUILDINGS AND GROUNDS #271

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
APPROPRIATIONS									
271-906-956-000	MISC EXPENSE			31			465	1,000	
271-906-957-000	CEMETARY PURCHASE						40,440		
271-906-958-000	CEMETARY MAINTENANCE							5,500	5,500
271-929-977-000	CAPITAL OUTLAY/PAVEMENT/PARKING			118,622	10,882	174,286	1,000	2,000	
271-966-999-101	TRANS OUT TO GF # 101	79,000							
TOTAL APPROPRIATIONS		79,000		118,653	10,882	174,286	41,905	3,000	5,500

APPROVED BUDGET - March 2017
BUILDINGS AND GROUNDS #271

GL NUMBER	DESCRIPTION	2011-12 ACTIVITY	2012-13 ACTIVITY	2013-14 ACTIVITY	2014-15 ACTIVITY	2015-16 ACTIVITY	2016-17 ACTIVITY	2017-18 APPROVED BUDGET	2017-18 ACTIVITY
NET OF REVENUES/APPROPRIATIONS - FUND 271		(18,269)	400	81,622	(10,798)	(99,209)	(21,773)	47,300	(5,467)
BEGINNING FUND BALANCE		218,790	200,521	200,921	282,543	271,745	172,537	150,764	150,764
ENDING FUND BALANCE		200,521	200,921	282,543	271,745	172,536	150,764	198,064	145,297

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

MEMO

TO: Honorable Members of the Genoa Charter Township Board

FROM: Greg Tatara, Utility Director

DATE: July 5, 2017

SUBJECT: Annual Rate Adjustments for the Lake Edgewood Water and Pine Creek Sewer & Water Customers served by the City of Brighton

MANAGER REVIEW:

For consideration at the July 17th Board Meeting is the proposed annual rate adjustments for the Lake Edgewood Water and Pine Creek Water/Sewer Systems serviced by the City of Brighton.

Please find attached a letter dated June 29, 2017 from the City of Brighton regarding their adopted 2017-2018 fee schedule for sewer and water use as well as connection fees. Correspondingly, please find attached a letter from Pfeffer, Hanniford, and Palka, which recommends the adjusted rates for these fees. These rates include the $0.20 per 1,000 gallon administrative charge from Genoa Township to cover meter reading, meter replacement, billing, postage, collection, and other fees. As staff, we concur with the proposed adjustments, and we recommend that the effective date of the changes be September 1st, 2017. This date corresponds with a new billing cycle for Lake Edgewood Water and Pine Creek Sewer and Water Customers.

Based on the above explanation and the attached documents, please consider the following motion:

Moved by_____, supported by_____ that September 1, 2017, the following sewer and water rate adjustments will become effective:

- Decrease the Lake Edgewood Conference Center Quarterly Water Fee to $4.14 /1,000 gallons from $4.28/1,000 gallons;
- Decrease the Lake Edgewood Other Quarterly water fee to $3.97 /1,000 gallons from $4.10 per 1,000 gallons;
- Decrease the Pine Creek quarterly water fee to $3.62 / 1,000 gallons from $3.74 per 1,000 gallons and decrease the Quarterly Sewer Fee to $4.24 / 1,000 gallons from $4.31 per 1,000 gallons; and
- Hold the applicable Brighton City water connection fee at $2,852 per REU and the sewer connection at $7,248 per REU.

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

CITY OF BRIGHTON

June 29, 2017

Mike Archinal, Manager
Genoa Township
2911 Dorr Road
Brighton, MI 48116

Mr. Archinal:

The City of Brighton's adopted FY 2017-2018 Fee Schedule for Sewer and Water user and connection fees, as they relate to Genoa Township, are listed below. These rates are effective July 1, 2017.

	Pine Creek	Dillon	Northstar	Lake Edgewood
Water:				
Commodity (1,000 gal.)-	$3.42	$3.77	$3.94	$3.77
PILOT (bi-monthly)	$16.66			
Sewer:				
Commodity	$4.04			
Administrative	$18.73			

Connection Fees
(Per REU):

Water	$2,802
Sewer	$7,198

Please contact me if you have any questions at 810.225.9283.

Sincerely,

Gretchen Gomolka

Gretchen Gomolka, Finance Director

Cc: Nate Geinzer, City Manager
Tim Krugh, Utilities Director
Ken Palka, Pfeffer, Hanniford & Palka
File

200 N. First St. Brighton, MI 48116
(810) 227-1911
www.brightoncity.org

PHP

PFEFFER ▪ HANNIFORD ▪ PALKA
Certified Public Accountants

John M. Pfeffer, C.P.A.
Patrick M. Hanniford, C.P.A.
Kenneth J. Palka, C.P.A.
Members
AICPA Private Practice Companies Section
MACPA

225 E. Grand River - Suite 104
Brighton, Michigan 48116-1575
(810) 229-5550
FAX (810) 229-5578

July 5, 2017

Mr. Gregory Tatara
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Dear Greg:

As you have requested we have reviewed the City of Brighton's revised fee schedule effective July 1, 2017 for Lake Edgewood Water and Pine Creek Water/Sewer.

Based on our review we recommend the following rate changes be implemented by Genoa Township.

1. Lake Edgewood - Conference Center Quarterly Usage Fee - Water
   The water fee should decrease to $4.14 per 1,000 gallons from $4.28 per 1,000 gallons.

2. Lake Edgewood - Other Quarterly Usage Fee - Water
   The water fee should decrease to $3.97 per 1,000 gallons from $4.10 per 1,000 gallons.

3. Pine Creek Quarterly Usage Fee - Water and Sewer
   The water fee should decrease to $3.62 per 1,000 gallons from $3.74 per 1,000 gallons.
   The sewer fee should decrease to $4.24 per 1,000 gallons from $4.31 per 1,000 gallons.

4. Pine Creek Connection Fees
   The water connection fee remains the same at $2,852 per REU.
   The sewer connection fee remains the same at $7,248 per REU.

If you should have any questions please call.

Sincerely,

PFEFFER, HANNIFORD & PALKA
Certified Public Accountants

Kenneth J. Palka

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

MEMORANDUM

TO: Genoa Township Board

FROM: Michael Archinal

DATE: 7-17-17

RE: Re-appointments to the Planning Commission and Zoning Board of Appeals

---

The terms of Planning Commissioner Chris Grajek and Dean Tengel, a member of the Zoning Board of Appeals, expired on June 30, 2017. It is recommended that they be re-appointed to four-year terms with a retroactive starting date of July 1, 2017.

Please consider the following action:

Moved by _____, supported by _____, to re-appoint Chris Grajek to the Planning Commission for a term ending July, 1, 2021 and Dean Tengel to the Zoning Board of Appeals for a term ending July 1, 2021.

SUPERVISOR
Bill Rogers

CLERK
Paulette A. Skolarus

TREASURER
Robin L. Hunt

TRUSTEES
Jean W. Ledford
H. James Mortensen
Terry Croft
Diana Lowe

MANAGER
Michael C. Archinal

MEMORANDUM

TO: Township Board

FROM: Michael Archinal

DATE: 7/11/2017

RE: Liquor Law Fund #212

Local jurisdictions receive state shared revenue to assist in the enforcement of Michigan's liquor laws. Shared revenue is based on the number of liquor licenses in the community. Funds received must be spent on enforcement. In Genoa Township this function has historically been the responsibility of the Code Enforcement Officer. Compensation for liquor law enforcement is $8,240. His role has since changed to IT and facilities management. These responsibilities especially related to Utilities Department IT services no longer make it practical for him to perform the liquor law enforcement duties.

The Administrative Committee proposes that liquor enforcement responsibilities be shifted to the Zoning Official and Code Enforcement Officer. The interaction between code enforcement personnel and our liquor license holding business owners is beneficial. Code enforcement personnel are in the field daily. While enforcing the liquor laws they can check for other violations and/or build rapport with the business community. Adam's compensation inclusive of the $8,240 for liquor law enforcement is $60,329 which is at or slightly below market average for and IT/Facilities Manager. Our goal is to not reduce his total compensation but to shift funding sources as described below:

- The IT/Facilities Manager's compensation from the General Fund will be increased by $8,240. He will no longer be compensated out of Fund #212 as he will no longer be performing liquor law enforcement.

- The Code Enforcement Officer's compensation from the General Fund will be reduced by $2,000. Her compensation for performing liquor law enforcement funded by Fund #212 will be half of the $8,240 or $4,120. Her net compensation adjustment for increased responsibilities will be $2,120.

- The Zoning Official's compensation from the General Fund will be reduced by $2,000. Her compensation for performing liquor law enforcement funded by Fund #212 will be

half of the $8,240 or $4,120. Her net compensation adjustment for increased responsibilities will be $2,120.

The net General Fund impact from these changes will be an increased personnel cost of $4,240.

Please consider the following action:

Moved by , supported by , to approve the personnel changes related to liquor law enforcement as proposed.

Economic Development Council of Livingston County

INVOICE

218 E. Grand River, Brighton, MI 48116
Phone: (517) 586-0822

Bill To:

Genoa Charter Township
2911 Dorr Road
Brighton, MI 48116

Invoice Number: 9659GT-170530

Date: May 30, 2017

Due Date: June 30, 2017

DESCRIPTION	AMOUNT
2017 Partnership - Contract Services	$22,600.00

SPARK and the EDC will provide additional information prior to Monday's meeting. They will also be present Monday evening.

Mike Archinal

From: Jean Ledford <jeanledford@att.net>
Sent: Thursday, July 13, 2017 9:44 AM
To: Mike Archinal; Bill Rogers
Subject: Fw: Spark

Mike, is there still time to include this e-mail in the packet for the July 17 Board Meeting? Board members might want to consider these points in advance of the meeting.

Jean

On Wednesday, July 12, 2017 2:51 PM, Joseph A. Rapai <jarapai@sbcglobal.net> wrote:

Hello Jean,

Unfortunately, I will not be able to attend the July 16 Board Meeting.

Things to consider in evaluating continued association with Ann Arbor Spark:

Thorough evaluation of Form 990 for nonprofit organizations, including nonprofit accounting practices, salary distribution, and ongoing fund balances.

Be aware of collaborative associations with other entities to boost organization acceptance by the public .

Be aware of mutually contrived research with multiple entities to justify recommendations and development goals.

Be aware of organizations proclaiming altruism.

Evaluate thoroughly grant methodology, bias, discrimination against startup non-grantees.

Consider a national search for organizations which can provide an unbiased evaluation of township priorities and development.

Ascertain the political philosophy of the organization to assist in matching promotional goals with longstanding community values.

Regards,

J A Rapai

On Tuesday, June 27, 2017 7:08 PM, Jean Ledford <Jean@genoa.org> wrote:

genoa township

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: July 12, 2017

RE: Hampton Inn and Suites

MANAGER'S REVIEW: _____

Attached please find the project case file for the proposed new 101-room, 4-story Hampton Inn and Suites located southwest of the Grand Oaks Drive and Latson Road intersection on parcel #11-08-300-020. This project is part of the Livingston Commons Phase 2 PUD and is zoned NR-PUD.

Procedurally, projects within a PUD require the Planning Commission to make a recommendation to the Township Board for both the site plan and the Environmental Impact Assessment. At the June 12, 2017 meeting the Commission recommended approval of the Site Plan and Impact Assessment. A revised Site Plan and Impact Assessment were received from the applicant on June 26, 2017 which incorporated the Planning Commission comments. Based on the action of the Planning Commission and in response to the revised materials I suggest Board consideration of the following action:

Moved by _____, Supported by _____ to approve the Environmental Impact Assessment dated 05-01-17.

Moved by _____, Supported by _____ to approve the Site Plan dated 06-23-17 with the following conditions:

1. The 10' buffer zone on the southeast portion of the parking lot is acceptable.
2. Signage as shown on the renderings is approved and must comply with the Township Ordinance in terms of size.
3. Recorded copies of easements for cross access to all adjacent parcels shall be provided in a format acceptable to the Township Attorney prior to a land use permit being issued.
4. All site plan application fee exceedances and tap fees shall be paid prior to issuance of the Land Use Permit.
5. Construction plan review is required per the MHOG Connection Manual.
6. All requirements of the Brighton Area Fire Authority's letter of May 31, 2017 shall be met.

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

SUPERVISOR
Bill Rogers

CLERK
Paulette A. Skolarus

TREASURER
Robin L. Hunt

TRUSTEES
Jean W. Ledford
H. James Mortensen
Terry Croft
Diana Lowe

MANAGER
Michael C. Archinal

GENOA CHARTER TOWNSHIP

Application for Site Plan Review

GENOA TOWNSHIP
FEB - 2 2017
RECEIVED

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Howell Hospitality, Inc., 26100 American Drive Ste 605 Southfield, MI 48034

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

OWNER'S NAME & ADDRESS: Howell Hospitality, Inc., . 26100 American Drive Ste 605 Southfield, MI 48034

SITE ADDRESS: Vacant Parcel PARCEL #(s): 47-11-08-200-020

APPLICANT PHONE: (248) 281-4168 OWNER PHONE: (Same)

OWNER EMAIL: akramnamouhosp@aol.com

LOCATION AND BRIEF DESCRIPTION OF SITE: Property is located on the south side of Grand Oaks Drive along the shared access drive within the Livingston Commons Phase 2 development.

BRIEF STATEMENT OF PROPOSED USE: Proposed Hampton Inn & Suites 4-story hotel with associated parking.

THE FOLLOWING BUILDINGS ARE PROPOSED: Proposed Hampton Inn & Suites 4-story hotel

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: Akram Namou Akram Namou-President

ADDRESS: 26100 American Drive Suite #605 Southfield, MI 48034

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

1.) Andy Andre (Name) of Bud Design & Engineering (Business Affiliation) at andy@buddesign.com (E-mail Address)

FEE EXCEEDANCE AGREEMENT

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

SIGNATURE: Akram Namou DATE: 01/31/2017

PRINT NAME: Akram Namou PHONE: 248-281-4168

ADDRESS: 26100 American Drive Suite #605 Southfield, MI 48034

- The building to the south will allow for three wall signs for one tenant and if there are two tenants, they will be allowed two signs each.
- The recommendation by the Township Engineer in their letter dated June 6, 2017 regarding the sanitary sewer routing and connection shall be met.
- The PUD Agreement shall specify right-in only access off of Grand Oak Drive.
- There shall be "Keep Right" signs on both the south Grand Oaks entrance and the north entrance off of the Lowes Service Drive to keep traffic flowing in a counterclockwise direction.
- The sidewalk at the south of the site along Grand Oaks shall be stopped at the access point into the project; however, the sidewalk shall be installed when deemed appropriate by the Township, and the funds for its construction shall be kept in escrow by the Township.
- The handicap access across Latson Road shall line up with the access on the other side.
- The three parking spaces on the west side of the concrete area shall be labeled "Employee Parking Only".
- The applicant shall comply with all requirements of the Brighton Area Fire Department's letter dated May 31, 2017.
- The colored renderings for the buildings are acceptable to the Planning Commission.
- A bollard shall be placed at the southwest corner of the southernmost building.
- Drive thru waiting spaces shall be designated across from the drive thru exit
- The walkway and curbcut located southwest of the proposed north restaurant will be eliminated.

The motion carried (Rauch – yes; McManus – yes; Brown – yes; Figurski – yes; Rickard – no; Grajek – yes).

OPEN PUBLIC HEARING #2… (Tabled 3-13-17) Review of site plan application, environmental impact assessment and site plan for a proposed 101-room, 4-story "Hampton Inn and Suites" hotel located southwest of the Grand Oaks Drive and Latson Road intersection. The property is located within the Livingston Commons Phase 2 PUD on Parcel #11-08-300-020. The request is petitioned by Howell Hospitality, Inc. (17-01)

<u>Planning Commission disposition of petition:</u>

A. Recommendation of Impact Assessment (5-1-17)
B. Recommendation of Site Plan (5-24-17)

Mr. Andy Andre of Bud Design & Engineering and Bo Gunlock, of RG Properties were present.

Mr. Gunlock gave a review of the PUD agreement. This was developed in two phases. Phase I has already been approved and Phase II is being developed since the new

DRAFT

interchange has been completed. He gave a review of the projects that that he has developed in the Township, such as Pet Smart (which replaced the vacant Staples store), USA 2 GO and Tim Hortons, Red Olive, Culvers and Panera Bread, Gilden Woods Day Care, and the project that they are proposing this evening, Hampton Inn.

He stated that he gave 17 acres of property and $250,000 to help the interchange get built.

He showed the changes that were made to the original Phase II portion of this PUD based on what users were interested in these sites. The second access drive was requested by the Brighton Area Fire Authority. The primary access to Hampton Inn is to from the driveway proposed. He noted Mr. Markstrom's concerns regarding the western most drive and the possible stacking that will be caused when people are exiting the site. That solves the problem for the traffic; however, it will be difficult for him to sell the other piece of property because the only way to access them would be through Hampton Inn. They revised the western most drive to be the access drive; however, when the north or west parcels are developed this can be abandoned and become the secondary access for the BAFA.

He presented the most recent revised Site Plan. He noted that the site plan presented with the PUD Agreement was only conceptual; however, interested users have caused the needed changes.

He would like the Hampton Inn to begin to be developed and then determine what others users would be interested in the parcel to the north and to the west.

Chairman Brown thanked Mr. Gunlock for the explanation and the revised site plan. He now understands the plan for this site.

Mr. Borden reviewed his letter dated June 6, 2017. The applicant has addressed most of his concerns. He has two outstanding items:

- Portions of the southerly buffer zone are deficient in width and the required wall or berm is not provided; however, the Township can waive or modify these requirements.
- A separate permit/approval will be required for the proposed signage.

Mr. Andre cited the discussion from the March 2017 Planning Commission meeting whereas it was agreed that due to the narrowness of the greenspaces, a wall or berm will not be possible.

Mr. Markstrom stated he has spoken to Mr. Gunlock in depth regarding the access points for this site. He would like to ensure than when either the north or west parcels are developed and the access points are constructed, the west driveway will be closed off and used only for secondary access.

He has some outstanding items regarding the utilities; however, they can be addressed during the construction phase of the project.

They have addressed all of the concerns from the BAFA.

The call to the public was made at 8:20 pm with no response.

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Moved by Commissioner Figurski, seconded by Commissioner Grajek, to recommend to the Township Board approval of the Impact Assessment dated May 1, 2017 for a proposed 101-room, 4-story "Hampton Inn and Suites" hotel located southwest of the Grand Oaks Drive and Latson Road intersection. **The motion carried unanimously**.

Moved by Commissioner McManus, seconded by Commissioner Grajek, to recommend to the Township Board approval of the Site Plan dated May 24, 2017 for a proposed 101-room, 4-story "Hampton Inn and Suites" hotel located southwest of the Grand Oaks Drive and Latson Road intersection with the following conditions:

- The buffer zone of 10 feet on the southeast portion of the parking lot is acceptable.
- All signage all shown on the renderings are approved and must comply with the Township Ordinance in terms of size.
- The applicant shall grant easements for water and sewer and cross access prior to a land use permit being issued.
- The concept plan submitted this evening shall become part of the Site Plan package and shall be amended to show the proposed west access drive off of Grand Oaks Drive may be abandoned once drives to the northern or west parcel are constructed.
- All requirements of the Brighton Area Fire Authority's letter of May 31, 2017 shall be met.

The motion carried unanimously.

OPEN PUBLIC HEARING #3… Review of special use application, site plan application, environmental impact assessment and site plan for a proposed 30,000 sq. ft. warehouse/storage addition to the existing A&F Wood Products located at 5665 Sterling Drive, Howell. The request is petitioned by Schonsheck, Inc. (17-06)

<u>Planning Commission disposition of petition:</u>

A. Recommendation of Special Use Application
B. Recommendation of Impact Assessment (5-1-17)
C. Recommendation of Site Plan (5-24-17)

Craig Zokas of Schonsheck, Inc. and Steve Korte of Korich, Inc. were present. They presented the site plan, showing the building and parking lot additions.

Mr. Borden stated that this is a Special Land Use because of the size of the building. It is generally consistent with the special use standards of Section 19.03. He had the following comments.

- The Planning Commission has the authority to approve the building elevations, including materials and colors. While the amount of metal siding as allowed by ordinance, it is consistent with the existing building and the Planning Commission has the discretion to waive or modify this requirement.
- The applicant is requesting that the Planning Commission waive the landscape requirement because of the present of existing vegetation and the nature of the

DRAFT

GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
MARCH 13, 2017
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, James Mortensen, Chris Grajek, John McManus, Eric Rach and Jill Rickard. Absent was Barbara Figurski. Also present was Kelly VanMarter, Community Development Director/Assistant Township Manager, Gary Markstrom of Tetra Tech, Brian Borden of LSL Planning and an audience of 1.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

ELECTION OF OFFICERS:

Ms. VanMarter stated that the Planning Commission must elect a Chairperson, Vice-Chairperson, and Secretary.

Moved by Commissioner Mortensen, seconded by Commission Grajek to elect Doug Brown as Chairman, Eric Rauch as Vice-Chairman, and Barbara Figurski as Secretary. **The motion carried unanimously**.

APPROVAL OF AGENDA: **Moved** by Commissioner McManus, seconded by Commissioner Mortensen, to approve the agenda as presented. **The motion carried unanimously.**

CALL TO THE PUBLIC: The call to the public was made at 6:33 pm with no response.

OPEN PUBLIC HEARING #1…Review of Site Plan Application and Impact Assessment for a proposed 101 room, 4 story "Hampton Inn and Suites" hotel located southwest of the Grand Oaks Drive and Latson Road intersection. The property is located within the Livingston Commons Phase 2 PUD on Parcel #11-08-200-020. The request is petitioned by Howell Hospitality, Inc.
Planning Commission Recommendation of Petition

A. Recommendation of Impact Assessment (2-21-17)
B. Recommendation of Site Plan (2-21-17)

Andy Andre of Bud Design & Engineering and Chris Abbo, a representative for the owner and applicant, were present.

Mr. Andre gave a review of the proposed project. It is a four-story, 101-room hotel situated in the center of the PUD property. It is proposed to be a Hampton Inn and Suites. He showed colored renderings and material samples.

There would be a shared drive throughout the PUD property off of Grand Oaks Drive. They are proposing a secondary means of ingress and egress further down Grand Oaks, directly across from the driveway of the existing preschool. They will be connecting to the existing water and sewer.

In order to meet the requirements outlined in the planner's review letter, they will be replacing the CMU with more stone and brick.

Mr. Borden reviewed his letter of March 7, 2017. He reiterated the concerns regarding the amount of CMU and advised that the Planning Commission can approve what is proposed on the plans. After a brief discussion, it was agreed to replace the current CMU with brick on the columns on all sides.

The applicant must provide details of the proposed storage building. Mr. Andre agreed to provide this information.

Mr. Borden is concerned with the future vehicular circulation patterns due to the odd lot shapes and the remaining vacant land on the site. He would like the applicant to evaluate alternative circulation patterns. Commissioner Mortensen agrees. He feels a conceptual plan of the interior roadway should be presented before this is sent to the Township Board. He also feels that the developer of the PUD should be involved in the planning of the roadway. Commissioner Rauch agrees. Chairman Brown agrees and would like it to show the boundary lines of the outlots. Mr. Andre stated he will need to work with the owner of the property.

The proposed lighting underneath the entrance canopy exceeds the maximum on-site lighting intensity; however, it does not spill out onto the property or onto adjacent ones. Mr. Andre stated they will meet the ordinance requirements.

Portions of the southerly buffer zone is deficient in width and does not include the wall or berm; however, due to the width of the greenspace a wall or berm will not be possible. The Township can waive or modify these requirements.

Mr. Markstrom reviewed his letter of March 7, 2017. He reiterated the concerns of Mr. Borden regarding the interior roadway. He is also concerned with the design of the shared driveway off of Grand Oaks and how it relates to access to the remaining outlots. Mr. Andre stated that the access road and the roadway around their building were designed based on the Fire Department's requirements for adequate turning radii for emergency vehicles. He does agree there are changes that may be able to be made.

Chairman Brown stated that the Brighton Area Fire Authority's latest review letter advised the applicant has met all of their requirements.

Chairman Brown noted some changes that need to be made to the Environmental Impact Assessment.

Commissioner Grajek agrees with Commissioner Mortensen that the developer of the PUD should be involved in the discussion regarding the design of the vehicular circulation on the site. Commissioner McManus agrees also.

It was suggested that this item be tabled until the next Planning Commission meeting or a special meeting can be held.

The call to the public was made at 7:48 pm with no response.

Moved by Mortensen, seconded by Grajek, to table Agenda Item #1, a request by Howell Hospitality, Inc., as requested by the petitioner. **The motion carried unanimously**.

Administrative Business:

- Staff Report

Ms. VanMarter stated there will be three items on the April Planning Commission meeting agenda.

Staff is continuing to work with LSL Planning on the zoning code update.

- Approval of the November 14, 2016 Planning Commission meeting minutes

Moved by Commissioner McManus, seconded by Commissioner Rauch, to approve the minutes of the November 14, 2016 Planning Commission Meeting as presented. **The motion carried unanimously.**

- Annual Report – 2016

Ms. VanMarter stated this report is required by State law to be presented to the Township Board. She has provided it to the Planning Commission for their information.

- Member Discussion

Chairman Brown welcomed Jill Rickard to the Planning Commission.

- Adjournment

Moved by Commissioner McManus, seconded by Commissioner Mortensen, to adjourn the meeting at 8:02 pm. **The motion carried unanimously.**

June 6, 2017

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
Subject:	Hampton Inn & Suites – Site Plan Review #4
Location:	Vacant property southwest of the Grand Oaks Drive and Latson Road intersection
Zoning:	NR-PUD Non-Residential Planned Unit Development District

Dear Commissioners:

At the Township's request, we have reviewed the revised site plan (most recently dated 5/23/17) proposing a new hotel for a vacant 2.56-acre site located southwest of the Grand Oaks Drive and Latson Road intersection.

The site is immediately southwest of the recent USA-2-Go development and is part of the Livingston Commons PUD. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance, as well as the PUD Agreement for this property.

A. Summary

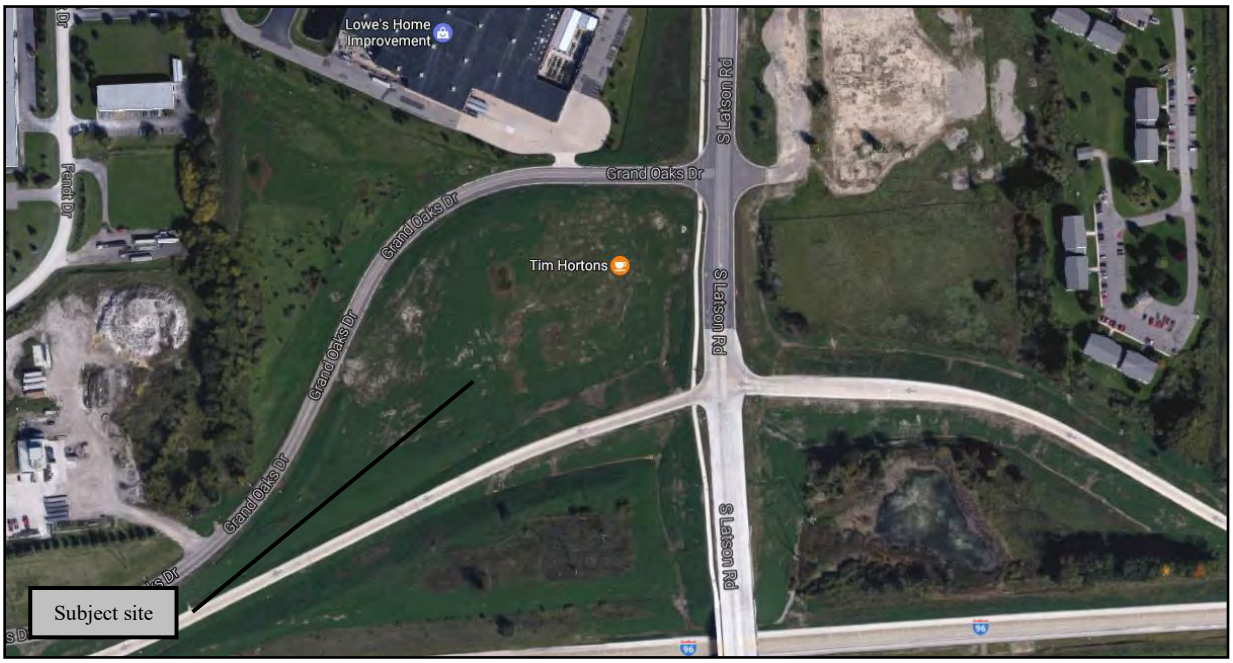
1. The Planning Commission has approval authority over the building elevations, including materials and colors.
2. The revised building elevations include less decorative CMU and more stone, as was discussed at the prior meeting.
3. Portions of the southerly buffer zone are deficient in width and the required wall or berm is not provided; however, Section 12.02.13 allows the Township discretion to waive or modify these requirements under certain circumstances.
4. A separate permit/approval will be required for the proposed signage.

B. Proposal

The applicant requests site plan review and approval of a new 101-room hotel. The proposed building is 4 stories tall with a footprint of 17,934 square feet.

Hotel and convention centers are permitted uses in Phase II of the Livingston Commons PUD. As such, site plan review is the only process needed.

Since this is a final PUD plan, procedurally the Planning Commission is to make a recommendation to the Township Board on both the Environmental Impact Assessment and Site Plan Review.



Aerial view of site and surroundings (looking north)

C. Site Plan Review

1. **Dimensional Requirements.** As shown in the table below, the proposal complies with the dimensional requirements for Phase II of the Livingston Commons PUD (Zone 2):

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
NR-PUD (Zone 2)	1	120	20	10	20	20 front 10 side/rear	75' 5 stories	35% building 85% impervious
Proposal	2.56	182	46 (N)	76.9 (E) 64.5 (W)	59.4 (S)	20 front 10 side/rear	57'-2" 4 stories	16.1% building 65.7% impervious

2. **Building Materials and Design.** The proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission. Building elevation drawings are found on Sheet A5.00.

   The PUD Agreement for this site requires that all wall surfaces contain at least 80% natural materials. The Zoning Ordinance (Table 12.01.03) provides additional regulations.

   Building materials include decorative CMU, brick, EIFS and cast stone. The design includes a variety of projections, vertical columns, horizontal bands and material changes to break up the large building expanse, as required.

   Per discussion at the prior meeting, the revised drawings include a reduction in the amount of decorative CMU and a corresponding increase in the amount of stone. Brick remains the predominant material and EIFS accounts for less than 20% on each wall face.

3. **Parking.** Per Section 14.04, 107 parking spaces are required, while 114 are proposed, including the 5 required barrier free spaces. The parking spaces and drive aisles meet or exceed the dimensional standards of Section 14.06 and the plan shows the use of looped spaces, as required.

4. **Pedestrian Circulation.** The site plan identifies a 7-foot wide concrete sidewalk around the building. The plan also includes crosswalk striping and 5-foot wide concrete sidewalks providing pedestrian connections to future developments north and east of the site.

5. **Vehicular Circulation.** Vehicular access is proposed in two locations: one via an internal shared driveway that connects to Grand Oaks Drive and another via a cross-access easement connection directly to Grand Oaks, which is aligned with the drive on the opposite side of the road.

   As shown on Sheet C3.1, the cross-access connection was added as a result of discussion at the prior meeting and will provide direct access to the subject site and vacant parcel to the south/west, as well as indirect access to the vacant parcel to the north/east (via the Hampton Inn site). Future connection to the vacant parcel to the north/east will cause the removal of 4 parking spaces; however, the proposed plan has a surplus of 7 spaces.

   Given the discussion on this matter and the resulting changes to the design, we believe the current proposal is the best layout presented to date. With that being said, the Commission should consider any comments or suggested improvements provided by the Township Engineer.

6. **Loading.** While there is no designated loading zone provided, guests of the hotel will use the space under the canopy for check-in/out and drop-off/pick-up. Additionally, there is ample room around the site to accommodate short-term deliveries (USPS, FedEX, UPS, etc.).

7. **Waste Receptacle and Enclosure.** The project includes a new waste receptacle and enclosure in the southwest corner of the property (details on Sheet C6.1). The proposed placement, base design and enclosure comply with the standards of Section 12.04.

8. **Landscaping**. We reviewed the landscape plan based on the conventional standards of Section 12.02. As described in our previous review letters, given the unique nature of the site, we applied buffer zone requirements to all 4 sides.

Location	Requirements	Proposed	Comments
Buffer zone "C" (N – commercial to commercial)	10' width 20 canopy trees OR 20 evergreens OR 80 shrubs (OR combination thereof)	20' width 5 canopy trees 4 evergreen trees 44 shrubs	Requirements met
Buffer zone "B" (S – along I-96)	20' width 6' wall or 3' berm 14 canopy trees 14 evergreens 56 shrubs	10-40' width 14 canopy trees 14 evergreen trees 56 shrubs	Deficient by width and wall/berm. The PC has the discretion to waive or modify these requirements.
Buffer zone "C" (E – commercial to commercial)	10' width 13 canopy trees OR 13 evergreens OR 52 shrubs (OR combination thereof)	14' width 5 canopy trees 32 shrubs	Requirements met
Buffer zone "C" (W – commercial to commercial)	10' width 13 canopy trees OR 13 evergreens OR 52 shrubs (OR combination thereof)	10' width 7 canopy trees 2 evergreen trees 16 shrubs	Requirements met
Parking lot	10 canopy trees 1,000 SF landscaped area	10 canopy trees 1,837 SF landscaped area	Requirements met

9. **Exterior Lighting.** The submittal includes a revised lighting plan (Sheet C3.2), which proposes the installation of 6 light poles around the perimeter of the parking lot. The plan also shows the use of decorative building-mounted lighting and fixtures underneath the entrance canopy.

   The proposed lighting plan, including pole heights, fixture details and light intensities, complies with current Township standards.

10. **Signs.** The building elevation drawings identify 2 wall signs – one on the north elevation and another on the south side.

    While specific details are not provided, the signs appear to provide channel cut letters as opposed to panel signs, which are consistent with the PUD Agreement for this site.

    As noted in our previous review letters and discussed at the prior meeting, the signs shown are "for reference only" at this time. If /when the site plan is approved, the applicant must obtain a sign permit prior to installation of any signage.

11. **Impact Assessment.** The submittal includes an updated Impact Assessment (most recently dated May 1, 2017). 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.

Respectfully,
LSL PLANNING, A SAFEBUILT COMPANY

Brian V. Borden, AICP
Planning Manager

June 7, 2017

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

Re: Hampton Inn – Site Plan Review #4

Dear Ms. Van Marter:

Tetra Tech has reviewed the updated site plan documents from Bud Design & Engineering Services, Inc. dated May 23, 2017. The applicant is proposing to build an 18,000 sft hotel with access from Grand Oaks Drive. The hotel is located just north of the I-96 westbound access ramp in the southwest quadrant of the Latson Road and Grand Oaks Drive intersection. This area is zoned as NR-PUD and access to Grand Oaks drive is provided through a shared access easement.

SUMMARY

1. Future access for north parcel.
2. Provide driveway cross-connection easements.
3. Construction plan review.

SITE PLAN

1. The petitioner previously provided a future plan that incorporates development of the three parcels surrounding the current parcel under review. The future access to the north parcel on the east drive will need to be moved further south per the sketch provided in the previous review. This comment will remain as documentation of the request for any future site plan reviews concerning the north parcel.
2. The future plan, as attached to this letter, has potential for parallel and redundant drives. To allow for future traffic flow, cross-connection easements must be added to the southwest and southeast corners and along the north parcel line of the proposed parcel currently under review.
3. A construction plan review will be required for the proposed site per the MHOG Connection Manual. The preliminary comments below will require correction prior to construction plan approval.
    a. The public utility easement width requirement, per the MHOG Utility Department, is a minimum of 20' for both water mains and sanitary sewer. The proposed 12-foot-wide easement needs to be increased to meet these standards and the easement documents need to be executed prior to permitting.
    b. There exists two additional water service leads from the 12-inch water main on the north side of Grand Oaks Drive. These leads must be shown on the plans and incorporated into the system to provide a loop back to Grand Oaks and fire service to the proposed building.

The petitioner should revise and resubmit the site plan to address the above comments prior to approval.

Sincerely,

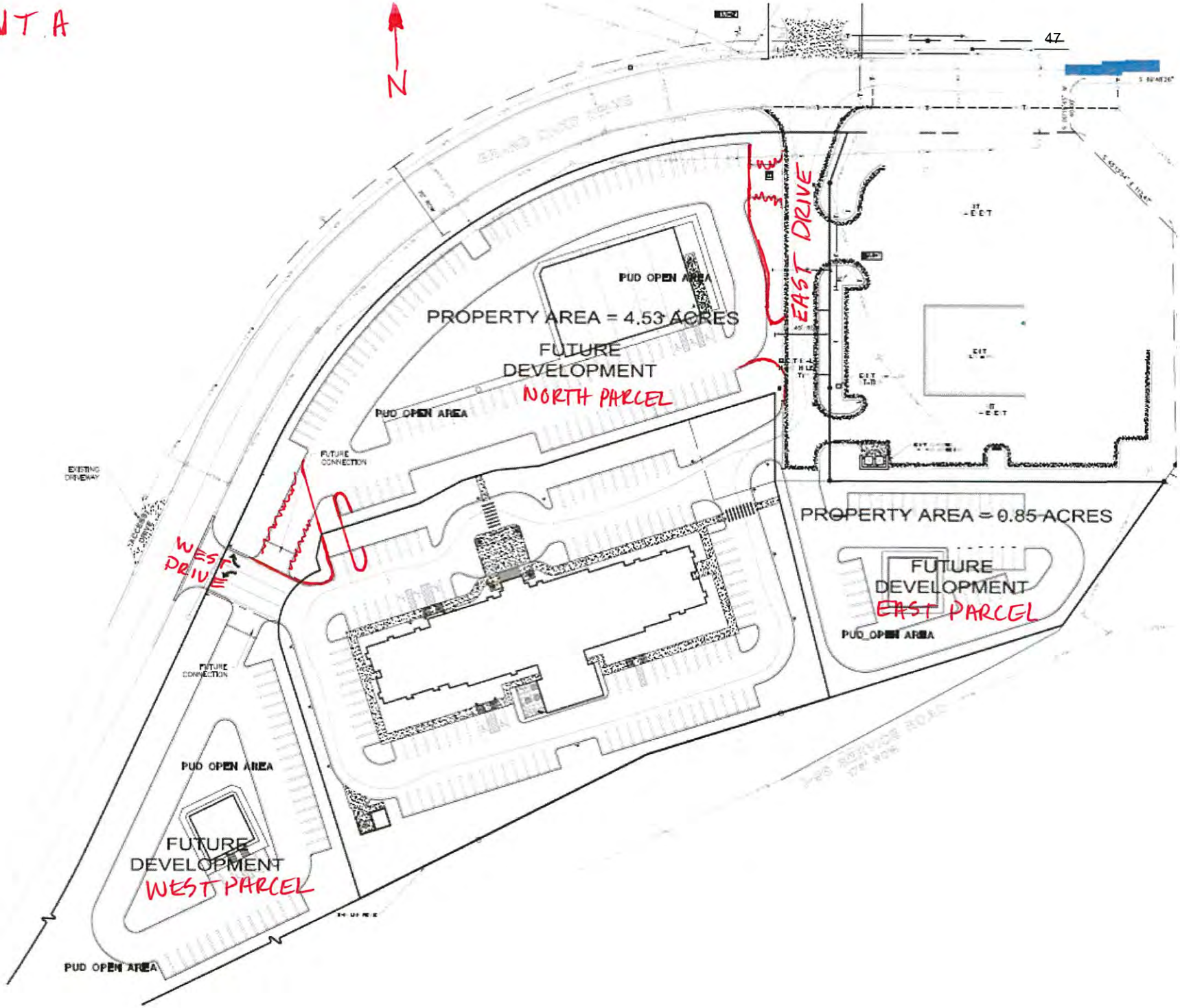
Gary J. Markstrom, P.E.
Unit Vice President

Marguerite K. Davenport
Project Engineer

Attachment

Copy: Andrew Andre, P.E., Bud Design & Engineering Services, Inc.

ATTACHMENT A



5/18/2017 MKD

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

May 31, 2017

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Hampton Inn & Suites
Grand Oaks Dr.
Genoa Twp., MI

Dear Kelly,
The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on May 24, 2017 and the drawings are dated Feb. 1, 2017 with latest revisions dated May 23, 2017. The project is based on the proposed construction of a new 4-story Hotel. The actual square footage is not shown on provided drawings but is estimated at 72,000 square feet.

This plan review is based on the requirements of the International Fire Code (IFC) 2015 edition.

All comments and associated corrections made on previous submittals have been made regarding fire protection and emergency vehicle access.

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

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

Cordially,

Capt. Rick Boisvert, CFPS
Fire Inspector

genoa township

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

MEMORANDUM

TO: Andy Andre, Bud Design and Engineering

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

DATE: March 8, 2017

RE: Hampton Inn and Suites Hotel

This memo will describe the connection fees required for a new 17,934 sq. ft. hotel with 101 rooms located on parcel 11-08-200-020 southwest of the Grand Oaks Drive and Latson Road intersection. The hotel also includes 580 sq. ft. swimming pool.

101 Rooms @ .38 per bedroom =	**38.38 REUs**
580 sq.ft. Swimming Pool @ 3 REUs per 1,000 sq.ft.=	**1.74 REUs**
TOTAL REU NEW HOTEL =	**40.12 REUs**

40.12 REU x $7,200 per Sewer REU =	$ 288,864.00
40.12 REU x $7,900 per Water REU =	$ 316,948.00
TOTAL DUE =	**$ 605,812.00**

Connection Fees must be paid at time of land use permit issuance.

A meter package may also need to be purchased including the appropriate sized meter and a MIU (meter interface unit). Should you have any questions please feel free to contact me at 810-227-5225.

SUPERVISOR
Bill Rogers
CLERK
Paulette A. Skolarus
TREASURER
Robin L. Hunt
TRUSTEES
Jean W. Ledford
H. James Mortensen
Terry Croft
Diana Lowe
MANAGER
Michael C. Archinal

Bud Design & Engineering Services, Inc.

10775 S. Saginaw St. Suite B | Grand Blanc, MI 48439 | Ph: 810.695.0793 | Fax: 810.695.0569 | www.buddesign.com

ENVIRONMENTAL IMPACT ASSESSMENT

HAMPTON INN & SUITES
GRAND OAKS DRIVE

A. Name and address of person responsible for preparation:
Andrew Andre, P.E.
Bud Design & Engineering Services, Inc.
10775 S. Saginaw St., Suite B
Grand Blanc, MI 48439
Mr. Andre is a professional engineer the State of Michigan and has 20-years of experience with site development projects. Several projects have been located within Genoa Township.

B. Map and written description/analysis of the project site:
The proposed project is a vacant parcel located south of Grand Oaks Drive and west of Latson Road. The property is bordered to the south by the new access entry to I-96 from Latson Road. Northeast of the subject property is the USA2GO/Tim Horton's development. The project is located within the development commonly known as "Livingston Commons Phase 2".

The property is 2.56-acres in size and within the NR-PUD zoning district. The proposed project is a 4-story Hampton Inn & Suites project, which a hotel is a permitted use within the NR-PUD district.

Bud Design & Engineering Services, Inc.

10775 S. Saginaw St. Suite B | Grand Blanc, MI 48439 | Ph: 810.695.0793 | Fax: 810.695.0569 | www.buddesign.com

C. Impact on natural features:

The existing site is presently vacant and is predominately covered with low-lying vegetation. No trees were located during the field survey. The existing topography is generally sloping from west to east. The subject area has been mass graded as part of the Grand Oaks Drive re-alignment and "Livingston Commons Phase 2" development. There are several areas of poor drainage that will be rectified as part of the project where positive drainage will be provided.

An existing Access Drive is provided to service the development from Grand Oaks Drive. A commercial driveway connection is proposed to connect to the existing Access Drive. In addition, a full-access commercial driveway on the western portion of the hotel property is proposed to connect to Grand Oaks Drive. This driveway also includes drive and curb locations for adjacent future developments to the north and west of the hotel. The accomplishment of a secondary means of ingress and egress to emergency vehicles as well as providing cross-access between adjacent developments is achieved with this driveway. The drive is located across from the existing Gilden Woods driveway.

Based on review of the USDA-NRCS Web Soil Survey for Livingston County, the predominant soil group over the project site is MoB (Miami-Loam) 2 to 6 percent slopes group. Included within this soil type are small wet areas of somewhat poorly drained Conover soils and poorly drained Brookston soils, and, in some of the depressions, very poorly drained Linwood soils. Also, included on small higher knolls, are small areas of coarser textured Owosso soils and Spinks-Oakville loamy sands. Small areas that have a dark yellowish-brown surface layer are included. Surface runoff is slow, permeability is moderate, and the erosion hazard is slight.

The contractor shall practice dust control measures at all times during earth change activities in accordance with the standards for soil erosion and sedimentation control of the Livingston County Drain Commissioner. Typical measures include spraying the site with water to prevent dust migration.

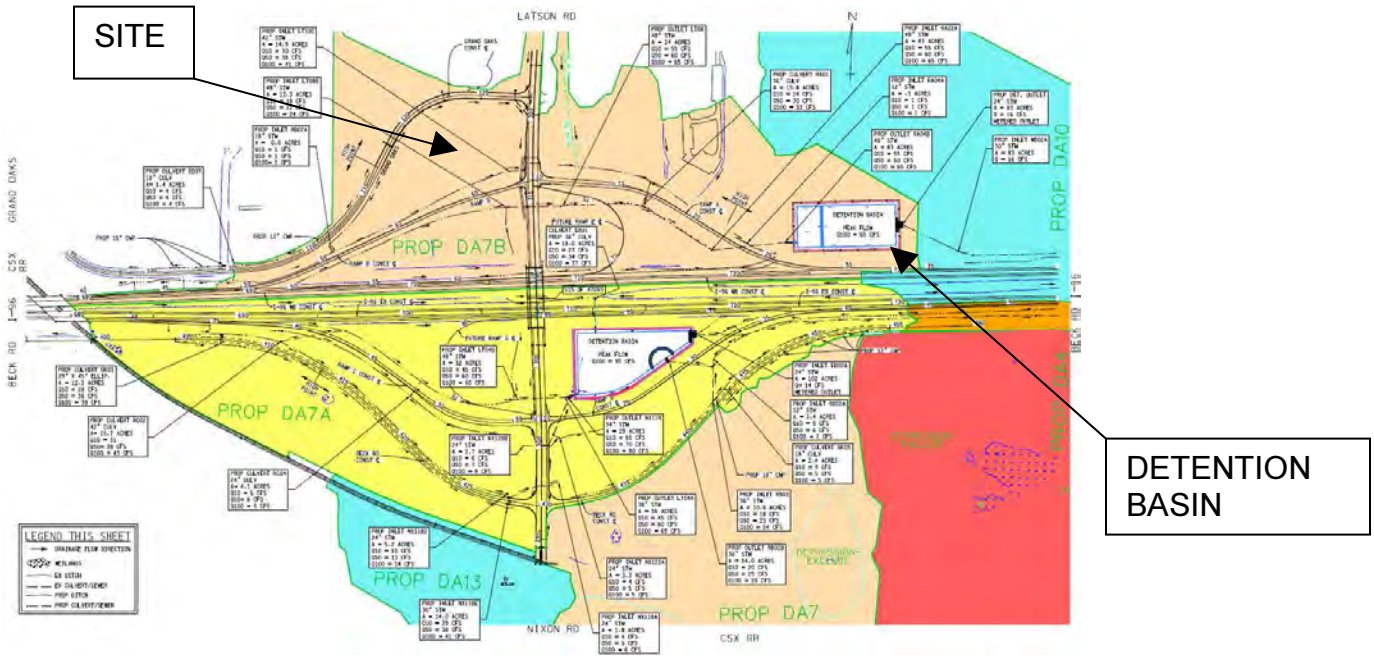
Based on the existing conditions and proposed development, little impact on natural features is anticipated.

D. Impact on stormwater management:

The property is part of the drainage district that was incorporated within the "I-96 Interchange at Latson Road…Revised Final Drainage Study May 2011" that was completed as part of the MDOT project with I-96 and Latson Road. The entire site is tributary to a detention basin that was constructed as part of the MDOT interchange project. The property is part of the "PROP DA7B" sub-drainage area (refer to map below) within the overall tributary area. The detention basin was sized for the 100-year storm event to provide the necessary storage and restricted release. As a result of the property being part of the existing detention basin, no on-site detention is proposed as part of the hotel development. Connection to the existing storm sewer network that leads to the detention basin in proposed. No impact on the stormwater management system is anticipated based on the prior design and construction activities.

Bud Design & Engineering Services, Inc.

10775 S. Saginaw St. Suite B | Grand Blanc, MI 48439 | Ph: 810.695.0793 | Fax: 810.695.0569 | www.buddesign.com



E. Impact on surrounding land use:

The proposed project is part of the greater NR-PUD zoning within the immediate area and would be consistent with the surrounding commercial and retail developments. Landscaping within the parking lot and along the perimeter of the developed area will provide for an aesthetically pleasing visual appearance for the area. Landscaping along the southern portion of the property will provide buffering and screening with the I-96 entrance ramp. Increased screening and landscaping is provided with the project because the existing site is vacant and covered with low-quality low-lying vegetation.

As part of the project design, LED site lighting will be utilized in order to reduce off-site light trespass. In addition, photometric motion sensors will be installed on the exterior lighting that will reduce light levels within the parking lot when motion is not detected over a 15-minute time period. When motion is detected, the lighting will increase to normal levels and will then reduce again once no motion is detected. This lighting feature decreases unnecessary light levels for periods of time when the parking lot is not in use.

F. Impact on public facilities and services:

The surrounding area is a well-developed location with Genoa Township. Public services such as fire and police currently service the surrounding area and the development will be consistent with the similar developments. Access to the property is provided for both fire and police with full-circulation provided around the proposed building. Fire lanes of at least 26-feet have been

Bud Design & Engineering Services, Inc.

10775 S. Saginaw St. Suite B | Grand Blanc, MI 48439 | Ph: 810.695.0793 | Fax: 810.695.0569 | www.buddesign.com

provided. The proposed building will be fully suppressed with a fire protection system and fire hydrants have been proposed that would be used as necessary.

G. Impact on public utilities:
Utilities for the Livingston Commons Phase 2 were originally designed by Fishbeck, Thompson, Carr & Huber, Inc., as noted in the Record Drawings, last dated 11/20/13. Adequate capacity was incorporated within the design and connectivity to public utilities are in the general vicinity of the project.

Water main was installed along Grand Oaks Drive and also extended along the Access Drive. It is proposed to extend the water main from an existing location along the eastern side of the Access Drive. The water main will be extended within a dedicated water main easement to the proposed hotel property. A loop around the hotel is proposed for redundancy within the network and to provide adequate fire hydrant coverage. There are four (4) locations provided for the future connection and extension of the water main in order to service adjacent developments.

Sanitary sewer main is located along the south side of Grand Oaks Drive installed as part of the roadway re-alignment. The connection of a service lead from the hotel development via gravity flow is proposed as part of the project.

The franchise companies, such as gas, electric and telephone, have been contacted to coordinate service and extensions necessary for the proposed development.

H. Storage and handling of any hazardous materials:
No hazardous materials, as classified by National Fire Protection Association (NFPA), will be handled or stored as part of this project.

I. Impact on traffic and pedestrians:
The project site is located within the “Livingston Commons Phase 2” development. As part of the project, the re-alignment of Grand Oaks Drive was completed. In addition, the I-96 and Latson Road interchange has been completed in the recent past. The surrounding surface transportation network is well established and with the recent construction provides for adequate capacity for both the existing properties and planned development.

There is an existing Access Drive that connects to the south side of Grand Oaks Drive. Multiple commercial developments are intended to utilize this Access Drive. A shared commercial access drive to Grand Oaks is proposed. Both the location and intent of the driveway to Grand Oaks is consistent with the conceptual PUD plans. No direct access to Latson Road is proposed.

There are no existing sidewalks along Grand Oaks Drive, Access Drive, or as part of the USA2GO/Tim Horton’s property. In the event that sidewalks are incorporated along either, connection could provided from the proposed hotel development.

Bud Design & Engineering Services, Inc.

10775 S. Saginaw St. Suite B | Grand Blanc, MI 48439 | Ph: 810.695.0793 | Fax: 810.695.0569 | www.buddesign.com

Future Site Trip Generation

The number of AM and PM peak hour trips that would be generated by the proposed development was forecasted based on data published by ITE in the "Trip Generation Manual", 9th Edition. The number of trips expected to be generated by the proposed project during the weekday AM peak and PM peak was calculated. The trip generation shown represents the trip generation using ITE Land Use code, as shown in Table 1. The development is estimated to generate 48 trips in the AM Peak Hour and 54 trips in the PM peak Hour.

Table 1

Land Use	Land Use Code	Unit	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Hampton Inn & Suites	310	101 Rooms	28	20	48	28	26	54

HAMPTON INN & SUITES

GRAND OAKS DRIVE

GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

SITE PLAN APPROVAL

APPLICANT

HOWELL HOSPITALITY, INC.
26100 AMERICAN DRIVE #605
SOUTHFIELD, MI 48034

CONTACT: CHRIS ABBO
PHONE: (248) 281-4168

ARCHITECT

BOWERS+ASSOCIATES
2400 SOUTH HURON PARKWAY
ANN ARBOR, MI. 48104

CONTACT: SCOTT BOWERS, AIA, NCARB
PHONE: (734) 975-2400

CIVIL ENGINEER

BUD DESIGN & ENGINEERING SERVICES, INC.
10755 S. SAGINAW ST., SUITE B
GRAND BLANC, MI 48439

CONTACT: ANDREW ANDRE, P.E.
PHONE: (810) 695-0793

STATE OF MICHIGAN
ANDREW ANDRE
No. 47380
LICENSED PROFESSIONAL ENGINEER

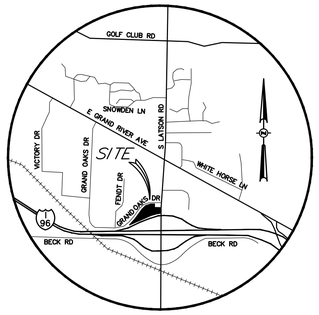
ANDREW ANDRE, P.E.
MICHIGAN PE 47380
BUD DESIGN & ENGINEERING SERVICES, INC.

STANDARD LEGEND

DESCRIPTION	PROPOSED	EXISTING
BUILDING		
STORM SEWER	12"	12"
SANITARY SEWER	S	S
WATER	W	W
GAS LINE	G	G
ELECTRIC LINE	E	E
TELEPHONE LINE	T	T
MANHOLE		
CATCH BASIN		
ENDSECTION		
FIRE HYDRANT		
GATE VALVE & WELL		
UTILITY POLE		
UTILITY RISER		
SIGN		
LIGHT POLE		
CURB & GUTTER		
FENCE		
SILT FENCE		
TREE – DECIDUOUS	AS NOTED ON PLANS	
TREE LINE		
SPOT ELEVATION	+ 100.00	x 100.00
CONTOUR LINE	100	
SECTION CORNER		
FOUND PROPERTY IRON		
SET PROPERTY IRON		
GAS METER		
ELECTRICAL METER		
TELEPHONE RISER		TPED
MAILBOX		
SOIL BORING LOCATION		

GENERAL CONTRACTOR INFORMATION

NAMOU HOTEL GROUP
26100 AMERICAN DRIVE #605
SOUTHFIELD, MI 48034
PH 248-281-4168
FX 248-281-4170
CONTACT: CHRIS ABBO cabbo@namouhotels.com
SUPERVISOR: MARK REAUME mreaume@namouhotels.com
CELL 248-924-1027



LOCATION MAP
NOT TO SCALE

UTILITY NOTE

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OF COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIGG (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

UTILITY CONTACTS

TELEPHONE/CABLE
TELEPHONE: AT&T
(800) 464-7928
CABLE: COMCAST
(800) 266-2278

GAS AND ELECTRIC
ELECTRIC: DTE ENERGY
(800) 477-4747
GAS: CONSUMERS ENERGY
(800) 477-5050

ZONING
GENOA TOWNSHIP
2911 DORR ROAD
BRIGHTON, MICHIGAN 48116
(810) 227-5225

WATER/SEWER
GENOA TOWNSHIP
2911 DORR ROAD
BRIGHTON, MICHIGAN 48116
(810) 227-5225

DRAWING INDEX

C1.0	COVER SHEET
C2.0	ALTA/NSPS LAND TITLE SURVEY
C3.0	SITE LAYOUT AND PAVING PLAN
C3.1	CONCEPTUAL AREA PLAN
C3.2	PHOTOMETERIC PLAN
C4.0	GRADING PLAN
C4.1	EROSION CONTROL PLAN
C5.0	UTILITY PLAN
C5.1	STORM MANAGEMENT PLAN
C6.0	SITE DETAILS
C6.1	SITE DETAILS
L1.0	LANDSCAPE PLAN AND DETAILS
	MHOG STANDARD DETAILS
	MHOG STANDARD DETAILS

PLANS AS PROVIDED BY BOWERS+ASSOCIATES

A1.00	FIRST FLOOR PLAN
A1.01	SECOND FLOOR PLAN
A1.02	THIRD FLOOR PLAN
A1.03	FOURTH FLOOR PLAN
A5.00	EXTERIOR ELEVATIONS

SCHEDULE "B" EXCEPTIONS

CHICAGO TITLE INSURANCE COMPANY
COMMITMENT NO. 16089864
COMMITMENT DATE: OCTOBER 3, 2016 @ 8:00 AM

N. GAS STORAGE AGREEMENT AND OIL AND GAS LEASE BETWEEN HENRY J. ITSELL AND EFFIE L. ITSELL, HIS WIFE AS LESSOR, AND PANHANDLE EASTERN PIPE LINE COMPANY, AS LESSEE, DATED SEPTEMBER 22, 1961, AND RECORDED OCTOBER 12, 1961 IN LIBER 400, PAGE 278, AND AS AMENDED BY RELEASE OF SURFACE RIGHTS, DATED NOVEMBER 17, 1983 AND RECORDED IN LIBER 1090, PAGE 9, AND AFFIDAVIT OF NOTICE OF INTENTION TO RETAIN MINERAL RIGHTS, DATED SEPTEMBER 26, 1984 AND RECORDED IN LIBER 1106, PAGE 848. BLANKET EASEMENT

O. TERMS, CONDITIONS, AND PROVISIONS WHICH ARE RECITED IN PLANNED UNIT DEVELOPMENT AS RECORDED IN LIBER 2609, PAGE 205, INSTRUMENT NO. 2009R-023916 AND INSTRUMENT NO. 2015R-021742. NOT A SURVEY MATTER

P. EASEMENTS AND THE TERMS, CONDITIONS, AND PROVISIONS THEREOF WHICH ARE RECITED IN DECLARATION OF RESTRICTIONS AND EASEMENTS AS RECORDED IN LIBER 2652, PAGE 82, LIBER 2764, PAGE 262, LIBER 3993, PAGE 419 AND INSTRUMENT NO. 2015R-036623. DOES NOT APPEAR TO CROSS SUBJECT PROPERTY.

Q. TERMS, CONDITIONS, AND PROVISIONS WHICH ARE RECITED IN AGREEMENT FOR ADDING LANDS TO AN EXISTING COUNTY DRAIN AND DRAINAGE DISTRICT AS RECORDED IN INSTRUMENT NO. 2013R-023228. BLANKET EASEMENT

R. TERMS, CONDITIONS, AND PROVISIONS WHICH ARE RECITED IN AGREEMENT REGARDING SHARED ACCESS DRIVE AS RECORDED IN INSTRUMENT NO. 2014R-033945. AS SHOWN

S. TERMS, CONDITIONS, AND PROVISIONS WHICH ARE RECITED IN DECLARATION OF USE RESTRICTIONS AS RECORDED IN INSTRUMENT NO. 2014R-033946. BLANKET EASEMENT

T. UNDERGROUND EASEMENT GRANTED TO DTE ELECTRIC COMPANY AS SET FORTH IN INSTRUMENT RECORDED IN INSTRUMENT NO. 2015R-036189. AS SHOWN

U. EASEMENTS AND THE TERMS, CONDITIONS, AND PROVISIONS THEREOF WHICH ARE RECITED IN DECLARATION OF RESTRICTIONS AND EASEMENTS AS RECORDED IN INSTRUMENT NO. 2016R-016340. DOES NOT APPEAR TO CROSS SUBJECT PROPERTY.

LEGAL DESCRIPTION – PARCEL "A"

CHICAGO TITLE INSURANCE COMPANY
COMMETMENT NO. 16089864
COMMITMENT DATE: OCTOBER 3, 2016 @ 8:00 AM

THE LAND REFERRED TO IN THIS COMMITMENT IS DESCRIBED AS FOLLOWS:
LAND SITUATED IN THE TOWNSHIP OF GENOA, COUNTY OF LIVINGSTON, STATE OF MICHIGAN, DESCRIBED AS:

LAND SITUATED IN THE TOWNSHIP OF GENOA, COUNTY OF LIVINGSTON, STATE OF MICHIGAN, DESCRIBED AS: SECTION 8, TOWN 2 NORTH, RANGE 5 EAST, COMMENCING AT THE NORTHEAST CORNER THENCE SOUTH 87 DEGREES 16 MINUTES 42 SECONDS WEST 3.27 FEET; THENCE ALONG ARC OF A CURVE, CHORD BEARING SOUTH 00 DEGREES 40 MINUTES 20 SECONDS WEST 159.72 FEET; THENCE SOUTH 01 DEGREES 07 MINUTES 48 SECONDS WEST 913.15 FEET; THENCE ALONG ARC OF A CURVE LEFT, CHORD BEARING SOUTH 00 DEGREES 42 MINUTES 13 SECONDS WEST 148.82 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 26 SECONDS WEST 159.53 FEET; THENCE SOUTH 00 DEGREES 15 MINUTES 45 SECONDS WEST 40.00 FEET; THENCE SOUTH 45 DEGREES 13 MINUTES 54 SECONDS EAST 112.47 FEET; THENCE ALONG ARC OF A CURVE LEFT, CHORD BEARING SOUTH 00 DEGREES 57 MINUTES 11 SECONDS EAST 192.62 FEET; THENCE SOUTH 35 DEGREES 12 MINUTES 51 SECONDS WEST 16.76 FEET; THENCE SOUTH 89 DEGREES 48 MINUTES 26 SECONDS WEST 319.20 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 14 DEGREES 21 MINUTES 05 SECONDS EAST 182.73 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF ISERVICE ROAD; THENCE SOUTH 72 DEGREES 24 MINUTES 04 SECONDS WEST 156.85 FEET ALONG SAID RIGHT OF WAY LINE; THENCE SOUTH 63 DEGREES 09 MINUTES 06 SECONDS WEST 263.25 FEET; THENCE NORTH 17 DEGREES 35 MINUTES 56 SECONDS WEST 214.73 FEET; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT, AN ARC DISTANCE OF 78.87 FEET, SAID CURVE HAVING A RADIUS OF 51.50 FEET, CHORD BEARING AND DISTANCE OF NORTH 26 DEGREES 16 MINUTES 26 SECONDS EAST 71.39 FEET; THENCE NORTH 17 DEGREES 35 MINUTES 54 SECONDS WEST 10.72 FEET; THENCE NORTH 12 DEGREES 24 MINUTES 06 SECONDS EAST 20.00 FEET; THENCE NORTH 72 DEGREES 24 MINUTES 06 SECONDS EAST 84.00 FEET; THENCE NORTH 61 DEGREES 39 MINUTES 33 SECONDS EAST 39.34 FEET; THENCE NORTH 72 DEGREES 24 MINUTES 04 SECONDS EAST 28.77 FEET; THENCE NORTH 84 DEGREES 01 MINUTES 59 SECONDS EAST 36.37 FEET; THENCE NORTH 72 DEGREES 24 MINUTES 02 SECONDS EAST 202.29 FEET; THENCE SOUTH 00 DEGREES 11 MINUTES 34 SECONDS EAST 72.82 FEET TO THE POINT OF BEGINNING.
TOGETHER WITH A PERPETUAL, NON-EXCLUSIVE EASEMENT FOR VEHICULAR AND PEDESTRIAN ACCESS, INGRESS AND EGRESS, OVER THE SHARED ACCESS DRIVE, AS DESCRIBED IN THE AGREEMENT REGARDING SHARED ACCESS DRIVE, DATED NOVEMBER 26, 2014, RECORDED DECEMBER 1, 2014 IN INSTRUMENT NO. 2014R-033945.
NOTE FOR INFORMATIONAL PURPOSES ONLY: COMMONLY KNOWN AS: VACANT LAND TAX ID NUMBER: 4711-08-200-015

BENCHMARKS

B.M. #1 ARROW ON OPERATING NUT OF HYDRANT SOUTH OF WEST ENTRANCE OF TIM HORTON CAFE EASTSIDE OF SERVICE DRIVE SOUTH OF GRAND OAKS DRIVE
ELEV. 1020.73 NAVD 88

B.M. #2 ARROW ON OPERATING NUT OF HYDRANT WEST OF SOUTH ENTRANCE TO LOWE'S ON NORTH SIDE OF GRAND OAKS DRIVE
ELEV. 1016.17 NAVD 88

FLOODPLAIN INFORMATION

TOWNSHIP OF GENOA
LIVINGSTON COUNTY, MICHIGAN
MAP NUMBER: 26093C0309D
AREAS LIE WITHIN A NON-PRINTED FLOOD MAP BOUNDARY

811
Know what's **below.**
Call before you dig.

THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.

Bud Design &
Engineering Services, Inc.
Architecture | Engineering | Interior Design

10775 S. Saginaw St., Suite B
Grand Blanc, MI 48439

(PH) 810.695.0793
(FAX) 810.695.0569

Web: www.buddesign.com

HOWELL HOSPITALITY, INC.
GRAND OAKS DRIVE
GENOA TOWNSHIP, LIVINGSTON CO, MI

SECTION 8, T2N, R5E

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ISSUED FOR	DATE
SPA	02.01.17
SPA	02.22.17
SPA	05.01.17
SPA	05.23.17
SPA	06.23.17

DATE :
DRAWN : ACA
CHECKED : JT
SCALE : **NO SCALE**
JOB NO : BD-16-237
SHEET TITLE :
COVER SHEET
SHEET
C1.0

UTILITY NOTE

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OF COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIGG (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

UTILITY CONTACTS

TELEPHONE/CABLE	GAS AND ELECTRIC
TELEPHONE: AT&T (800) 464-7928 CABLE: COMCAST (800) 266-2278	ELECTRIC: DTE ENERGY (800) 477-4747 GAS: CONSUMERS ENERGY (800) 477-5050
ZONING	**WATER/SEWER**
GENOA TOWNSHIP 2911 DORR ROAD BRIGHTON, MICHIGAN 48116 (810) 227-5225	GENOA TOWNSHIP 2911 DORR ROAD BRIGHTON, MICHIGAN 48116 (810) 227-5225

ZONING INFORMATION

ZONED- NRPUD (NON-RESIDENTIAL PLANNED UNIT DEVELOPMENT)
SETBACKS-
FRONT: -
REAR: -
SIDE: -

SCHEDULE "B" EXCEPTIONS

CHICAGO TITLE INSURANCE COMPANY
COMMITMENT NO. 16089864
COMMITMENT DATE: OCTOBER 3, 2016 @ 8:00 AM

N. GAS STORAGE AGREEMENT AND OIL AND GAS LEASE BETWEEN HENRY J. ITSELL AND EFFIE L. ITSELL, HIS WIFE AS LESSOR, AND PANHANDLE EASTERN PIPE LINE COMPANY, AS LESSEE, DATED SEPTEMBER 22, 1961, AND RECORDED OCTOBER 12, 1961 IN LIBER 400, PAGE 278, AND AS AMENDED BY RELEASE OF SURFACE RIGHTS, DATED NOVEMBER 17, 1983 AND RECORDED IN LIBER 1090, PAGE 9, AND AFFIDAVIT OF NOTICE OF INTENTION TO RETAIN MINERAL RIGHTS, DATED SEPTEMBER 26, 1984 AND RECORDED IN LIBER 1106, PAGE 848. BLANKET EASEMENT

O. TERMS, CONDITIONS, AND PROVISIONS WHICH ARE RECITED IN PLANNED UNIT DEVELOPMENT AS RECORDED IN LIBER 2609, PAGE 205, INSTRUMENT NO. 2009R-023916 AND INSTRUMENT NO. 2015R-021742. NOT A SURVEY MATTER

P. EASEMENTS AND THE TERMS, CONDITIONS, AND PROVISIONS THEREOF WHICH ARE RECITED IN DECLARATION OF RESTRICTIONS AND EASEMENTS AS RECORDED IN LIBER 2652, PAGE 82, LIBER 2764, PAGE 262, LIBER 3993, PAGE 419 AND INSTRUMENT NO. 2015R-036623. DOES NOT APPEAR TO CROSS SUBJECT PROPERTY.

Q. TERMS, CONDITIONS, AND PROVISIONS WHICH ARE RECITED IN AGREEMENT FOR ADDING LANDS TO AN EXISTING COUNTY DRAIN AND DRAINAGE DISTRICT AS RECORDED IN INSTRUMENT NO. 2013R-023228. BLANKET EASEMENT

R. TERMS, CONDITIONS, AND PROVISIONS WHICH ARE RECITED IN AGREEMENT REGARDING SHARED ACCESS DRIVE AS RECORDED IN INSTRUMENT NO. 2014R-033945. AS SHOWN

S. TERMS, CONDITIONS, AND PROVISIONS WHICH ARE RECITED IN DECLARATION OF USE RESTRICTIONS AS RECORDED IN INSTRUMENT NO. 2014R-033946. BLANKET EASEMENT

T. UNDERGROUND EASEMENT GRANTED TO DTE ELECTRIC COMPANY AS SET FORTH IN INSTRUMENT RECORDED IN INSTRUMENT NO. 2015R-036189. AS SHOWN

U. EASEMENTS AND THE TERMS, CONDITIONS, AND PROVISIONS THEREOF WHICH ARE RECITED IN DECLARATION OF RESTRICTIONS AND EASEMENTS AS RECORDED IN INSTRUMENT NO. 2016R-016340. DOES NOT APPEAR TO CROSS SUBJECT PROPERTY.

SURVEY COMPLETED BY:

D&M SITE INC.
Surveying. Inspection. Testing. Engineering
401 BALSAM STREET PO BOX 159, CARROLLTON, MICHIGAN 48724
PHONE (989) 752-6500 • FAX (989) 752-6600

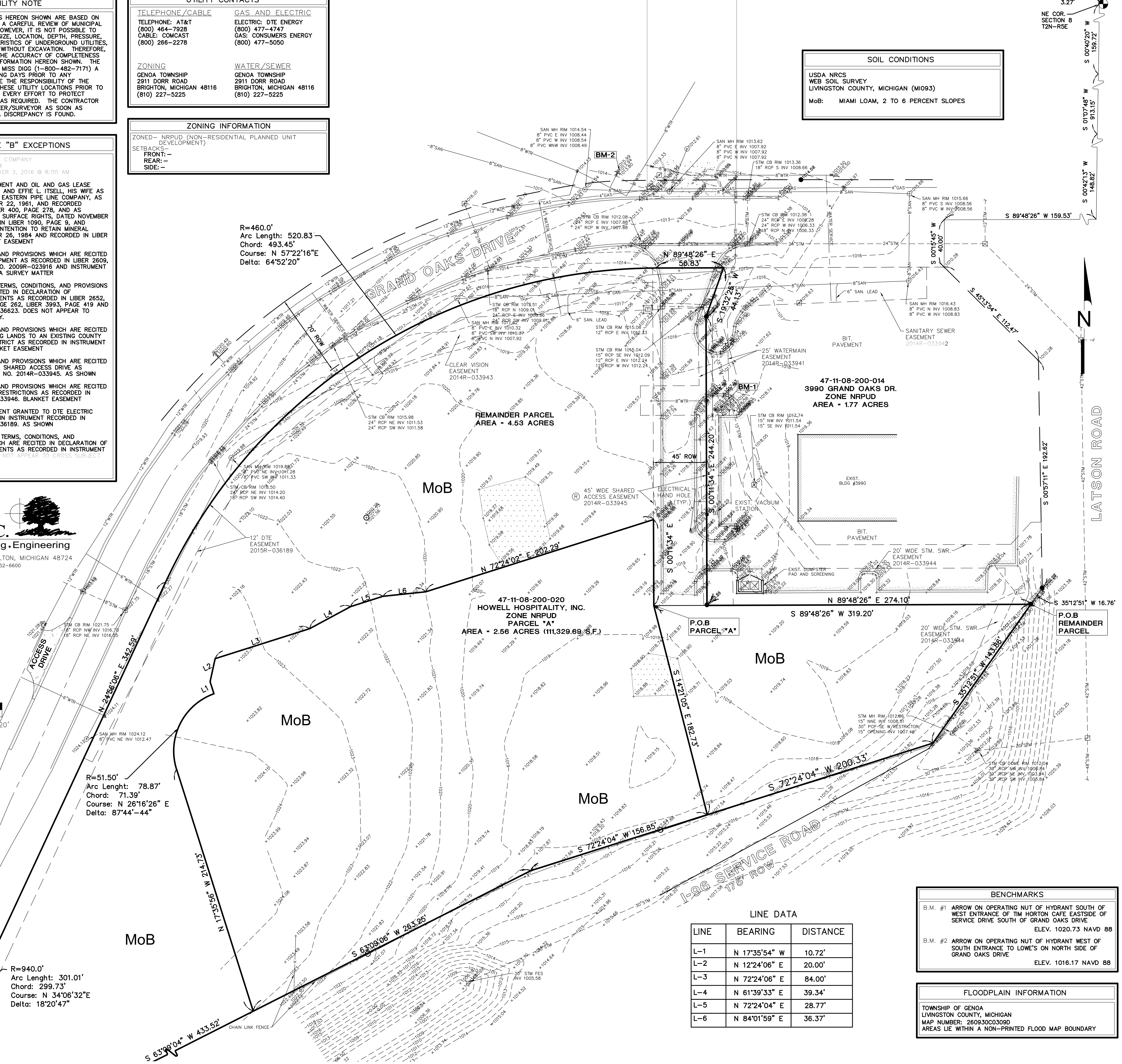
Know what's below. Call before you dig.

0' 40' 80' 120'
SCALE: 1" = 40'

SOIL CONDITIONS

USDA NRCS
WEB SOIL SURVEY
LIVINGSTON COUNTY, MICHIGAN (MI093)

MoB: MIAMI LOAM, 2 TO 6 PERCENT SLOPES



LINE DATA

LINE	BEARING	DISTANCE
L-1	N 17°35'54" W	10.72'
L-2	N 12°24'06" E	20.00'
L-3	N 72°24'06" E	84.00'
L-4	N 61°39'33" E	39.34'
L-5	N 72°24'04" E	28.77'
L-6	N 84°01'59" E	36.37'

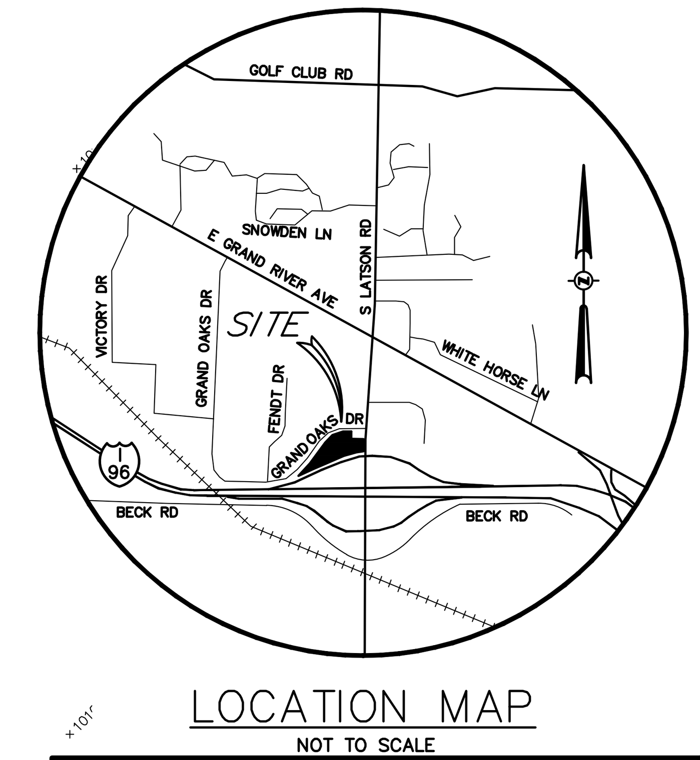
BENCHMARKS

B.M. #1 ARROW ON OPERATING NUT OF HYDRANT SOUTH OF WEST ENTRANCE OF TIM HORTON CAFE EASTSIDE OF SERVICE DRIVE SOUTH OF GRAND OAKS DRIVE
ELEV. 1020.73 NAVD 88

B.M. #2 ARROW ON OPERATING NUT OF HYDRANT WEST OF SOUTH ENTRANCE TO LOWE'S ON NORTH SIDE OF GRAND OAKS DRIVE
ELEV. 1016.17 NAVD 88

FLOODPLAIN INFORMATION

TOWNSHIP OF GENOA
LIVINGSTON COUNTY, MICHIGAN
MAP NUMBER: 260930C0309D
AREAS LIE WITHIN A NON-PRINTED FLOOD MAP BOUNDARY



LOCATION MAP

NOT TO SCALE

LEGEND

◐	MONUMENT / SECTION CORNER
●	FOUND PROPERTY IRON
○	SET PROPERTY IRON
⊠	EXISTING CATCHBASIN
⊘	EXISTING MANHOLE/CATCHBASIN
○	EXISTING MANHOLE
	EXISTING HYDRANT
⋈	EXISTING VALVE
—— SAN ——	EXISTING SANITARY SEWER
— — — —	EXISTING STORM SEWER
—— — ——	EXISTING WATERMAIN
—x——x—	EXISTING FENCE LINE
—— ELEC ——	EXISTING UNDERGROUND ELECTRIC LINE
—— GAS ——	EXISTING UNDERGROUND GAS LINE
—— TELE ——	EXISTING UNDERGROUND TELEPHONE LINE
—— — ——	EXISTING CENTERLINE
—//——//—	EXISTING OVERHEAD ELECTRICAL WIRES
▯	EXISTING MAILBOX / NEWSPAPER BOX
	EXISTING SIGN
	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
∅	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER
G	EXISTING GAS VALVE
T	EXISTING ELECTRIC TRANSFORMER
W	EXISTING WATER SHUTOFF VALVE
	EXISTING LIGHT POLE
▯	EXISTING MAILBOX

LEGAL DESCRIPTION – PARCEL "A"

CHICAGO TITLE INSURANCE COMPANY
COMMETMENT NO. 16089864
COMMTMENT DATE: OCTOBER 3, 2016 @ 8:00 AM

THE LAND REFERRED TO IN THIS COMMITMENT IS DESCRIBED AS FOLLOWS:
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NOTE FOR INFORMATIONAL PURPOSES ONLY: COMMONLY KNOWN AS: VACANT LAND TAX ID NUMBER: 4711-08-200-015

CERTIFICATION

TO: HOWELL HOSPITALITY, INC. AND CHICAGO TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 6(A), 6(B), 7(A), 7(B)(1), 7(C), 8, 9, 10, 11, 13, 14, 16, 17, 18, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 08/22/2016.

DATE OF PLAT OR MAP: 10-06-16

B. D. Ferguson
BRIAN D FERGUSON PS #26454
401 BALSAM ROAD P.O. 159
CARROLLTON, MI 48724
PHONE: (989) 752-6500

STATE OF MICHIGAN ★ BRIAN D FERGUSON LAND SURVEYOR NO. 26454 ★ PROFESSIONAL SURVEYOR

Bud Design & Engineering Services, Inc.
Architecture | Engineering | Interior Design
10775 S. Saginaw St. Suite B
Grand Blanc, MI 48439
(PH) 810.695.0793
(FAX) 810.695.0569
Web: www.buddesign.com

HOWELL HOSPITALITY, INC.
GRAND OAKS DRIVE
GENOA TOWNSHIP, LIVINGSTON CO, MI

SECTION 8, T2N, R5E

WHILE EVERY ATTEMPT HAS BEEN MADE TO PRODUCE ERROR FREE DOCUMENTS, IT IS THE RESPONSIBILITY OF THE BUILDER AND/OR THE CLIENT TO VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, DETAILS, CODE COMPLIANCE, AND SPECIFICATIONS PRECEDING COMMENCEMENT OF WORK. PRIOR TO ACCEPTANCE OF THESE DOCUMENTS, THE ARCHITECT TAKES FULL RESPONSIBILITY FOR CHANGES AND ERRORS AND/OR OMISSIONS, BUT IS RELIEVED OF THESE RESPONSIBILITIES ONCE THESE DOCUMENTS HAVE BEEN ACCEPTED BY WAY OF CLIENT SIGNATURE. THE DESIGN AND ORIGINAL DRAWINGS OF THIS PROJECT REMAIN THE PROPERTY OF BUD DESIGN AND ENGINEERING SERVICES INC. AND NO ADDITIONAL PERSONS OR PARTIES MAY USE THIS DESIGN AND/OR DRAWINGS FOR ANY OTHER PURPOSE WITHOUT THE CONSENT OF BUD DESIGN AND ENGINEERING SERVICES INC., AND GARY M. RAUDEBAUGH

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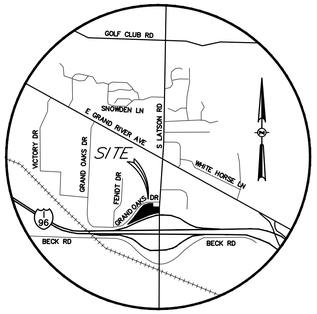
SPA	**02.01.17**
SPA	**02.22.17**
SPA	**05.01.17**
SPA	**05.23.17**
SPA	**06.23.17**

DATE :
DRAWN : ACA
CHECKED : JT
SCALE : **1"=40'**
JOB NO : BD-16-237
SHEET TITLE :
ALTA/ACSM LAND TITLE SURVEY
SHEET

C2.0



LOCATION MAP

NOT TO SCALE

GENERAL NOTES

1. REFER TO ARCHITECTURAL PLANS TO VERIFY BUILDING DIMENSIONS.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL PERMITS AND POST ALL BONDS PRIOR TO CONSTRUCTION, OR ENSURE THAT ALL REQUIRED PERMITS AND BONDS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING MISS-DIG AT 1-800-482-7171 AT LEAST 3 WORKING DAYS PRIOR TO EXCAVATION.
4. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. ALL UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH LIKE MATERIAL. THE EXACT LOCATION OF EXISTING UTILITIES SHALL BE LOCATED BY HAND DIGGING.
5. DIMENSIONS ARE TO FACE OF CURB, OUTSIDE FACE OF BUILDING, EDGE OF PAVEMENT, CENTER OF STRUCTURE OR OTHERWISE INDICATED.
6. ALL PAVING MATERIALS AND OPERATIONS SHALL BE IN CONFORMANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.
7. PARKING STALL SPACES TO BE 4" DOUBLE SOLID WHITE PAINT STRIPES. HANDICAP PARKING TO BE 4" DOUBLE SOLID BLUE PAINT STRIPES W/ BARRIER FREE STRIPPING OF 4" SOLID BLUE @ 2' O.C. ON 45° ANGLE.
8. ALL WORK SHALL CONFORM TO THE GENOA TOWNSHIP STANDARDS AND SPECIFICATIONS.

SITE INFORMATION

ZONING:
NRPUD

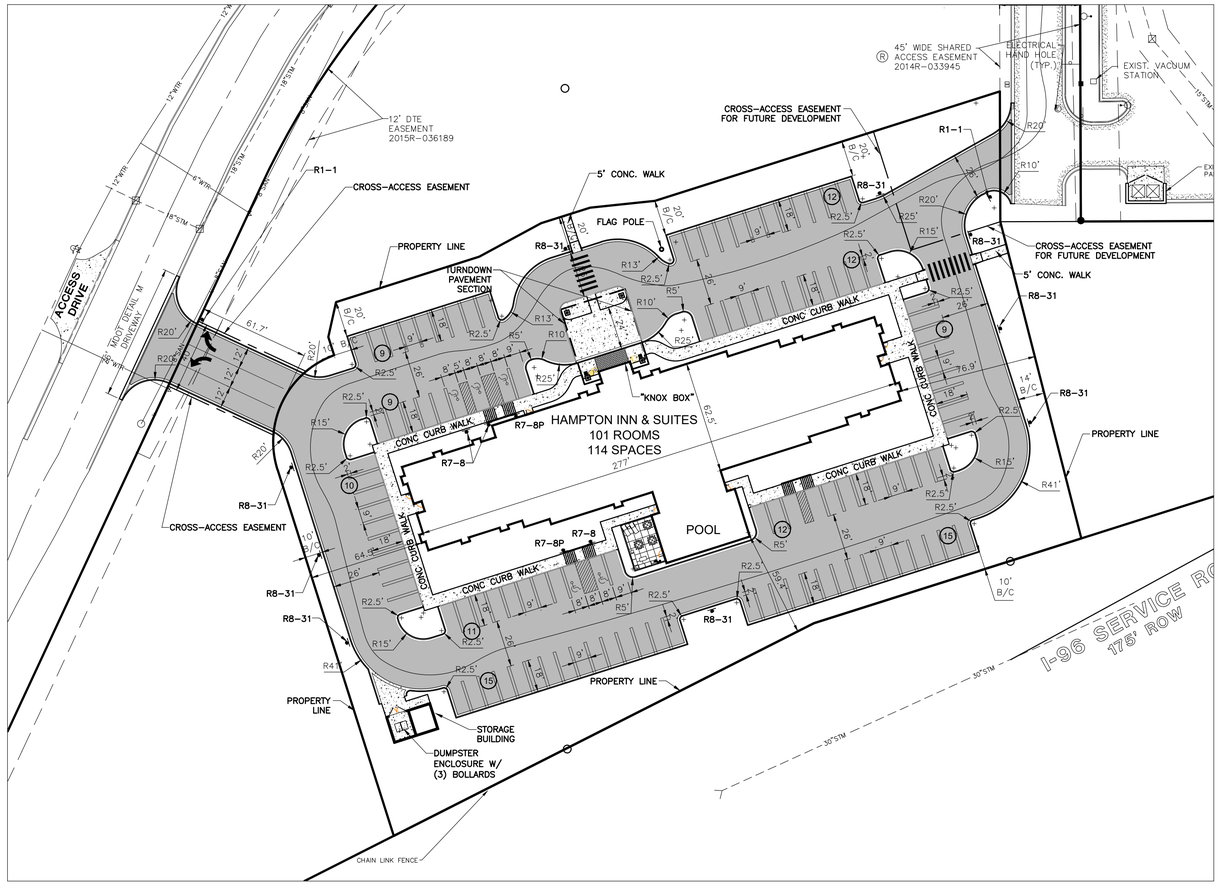
PROPERTY:
47-11-08-200-020
2.560-ACRES

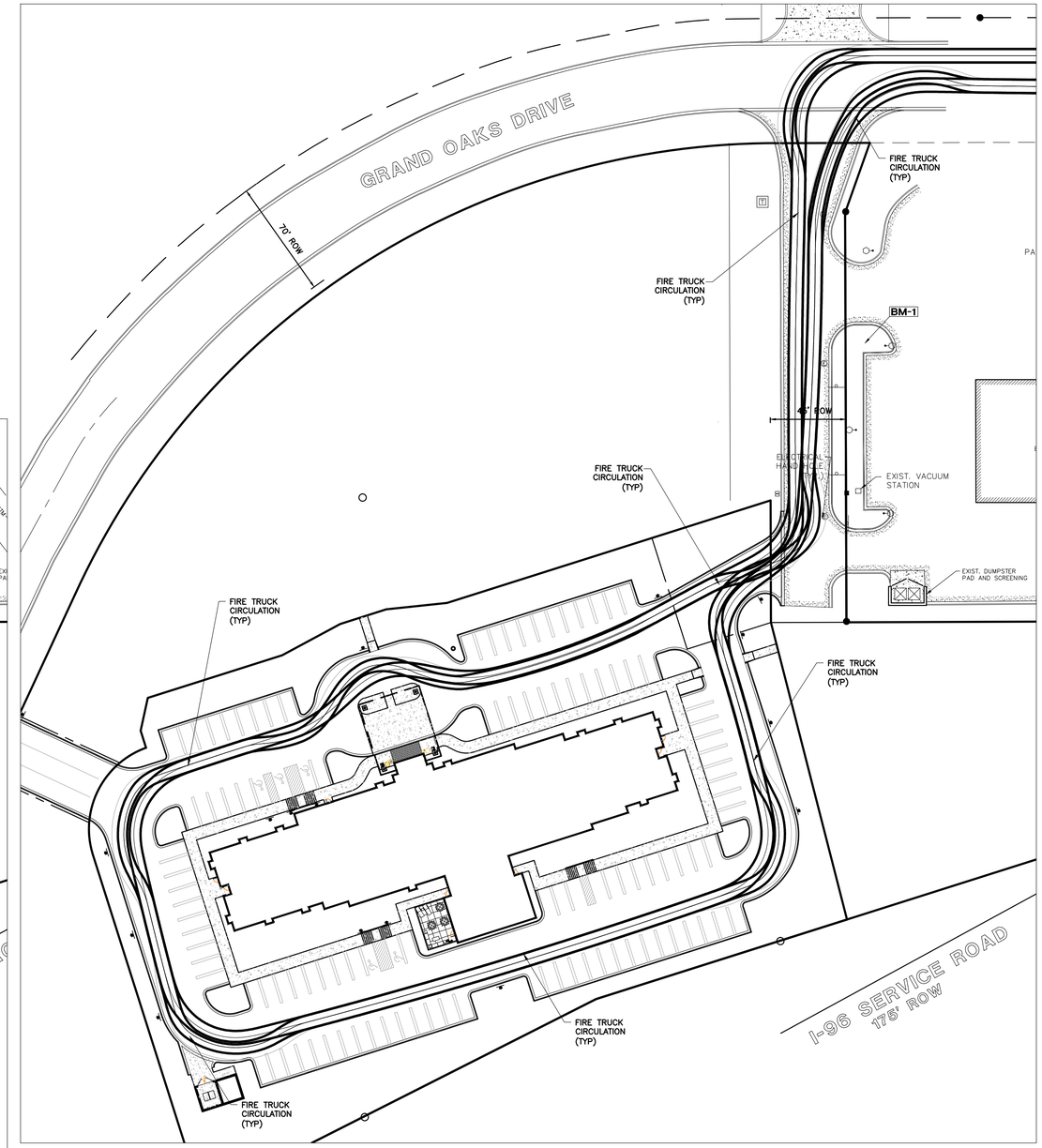
BUILDING INFORMATION:
GROSS FOOTPRINT AREA = 17,934 S.F.
LOT AREA = 2.56-ACRES = 111,513.60 S.F.
BUILDING LOT COVERAGE = 17,934 / 111,513.60 = 16.1%

IMPERVIOUS INFORMATION:
IMPERVIOUS SURFACE (BUILDING & PAVEMENT) = 73,266 S.F.
LOT AREA = 111,513.60 S.F.
IMPERVIOUS COVERAGE = 65.7%

PARKING DATA:
REQUIRED
1 SPACE PER GUEST ROOM
REQUIRED = 101 ROOMS / 1 = 101 SPACES
TOTAL REQUIRED = 101 SPACES
PROVIDED
ACCESSIBLE SPACES (8'x18') = 5
STANDARD SPACES (9'x18') = 109
TOTAL = 114 SPACES

N





FIRE TRUCK CIRCULATION

SCALE: 1" = 40'

811
Know what's **below.**
Call before you dig.

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0' 40' 80' 120'
SCALE: 1" = 40'

PAVEMENT INFORMATION

BITUMINOUS PAVEMENT

CONCRETE PAVEMENT

TRAFFIC CONTROL SIGN TABLE	
DESCRIPTION	MMUTCD
STOP SIGN	R1-1
HANDICAP	R7-8
HANDICAP (VAN)	R7-8P
NO PARKING FIRE LANE	R8-31

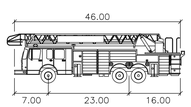
ALL TRAFFIC SIGNAGE SHALL COMPLY WITH THE CURRENT MMUTCD STANDARDS

R8-31 SIGN DETAIL

NO SCALE

BRIGHTON AREA FIRE AUTHORITY NOTES

1. THE BUILDING IS PROVIDED WITH AN AUTOMATIC SPRINKLER SYSTEM COMPLIANT WITH NFPA 13.
2. THE BUILDING SHALL INCLUDE THE BUILDING ADDRESS ON THE BUILDING. THE ADDRESS SHALL BE A MINIMUM OF 6-INCH HIGH LETTERS OF CONTRASTING COLORS AND BE CLEARLY VISIBLE FROM THE STREET. THE LOCATION AND SIZE SHALL BE VERIFIED PRIOR TO INSTALLATION.
3. DURING THE CONSTRUCTION PROCESS THE BUILDING WILL BE EVALUATED FOR APPROVED EMERGENCY RESPONDER RADIO COVERAGE. IF COVERAGE IS FOUND TO BE INADEQUATE, THE CONTRACTOR, BUILDING OWNER WILL BE REQUIRED TO PROVIDE AN APPROVED SYSTEM IN THE BUILDING.
4. ACCESS ROADS TO THE SITE SHALL BE PROVIDED AND MAINTAINED DURING CONSTRUCTION. ACCESS ROADS SHALL BE CONSTRUCTED TO BE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 84,000 POUNDS.



BRIGHTON AREA FIRE AUTHORITY
Width : 8.25
Max Wheel Angle : 45'

FIRE TRUCK

Bud Design & Engineering Services, Inc.
Architecture | Engineering | Interior Design
10775 S. Saginaw St. Suite B
Grand Blanc, MI 48439
(PH) 810.695.0793
(FAX) 810.695.0569
Web: www.buddesign.com

HOWELL HOSPITALITY, INC.
GRAND OAKS DRIVE
GENOA TOWNSHIP, LIVINGSTON CO, MI

SECTION 8, T2N, R5E

WHILE EVERY EFFORT HAS BEEN MADE TO PRODUCE THESE PLANS AND DOCUMENTS, B.E.S. INC. ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS. IT IS THE RESPONSIBILITY OF THE BIDDER AND/OR THE CLIENT TO VERIFY ALL CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION. ALL DIMENSIONS SHOULD BE VERIFIED IN THE FIELD. ANY PROBLEMS, DISCREPANCIES OR MISSING DATA SHOULD BE REPORTED TO THE OWNER AND ARCHITECT IMMEDIATELY. NO REPRODUCTION, CHANGES AND REVISIONS MADE TO THESE PLANS AND DOCUMENTS WITHOUT THE WRITTEN CONSENT OF B.E.S. INC. HAVE BEEN ADOPTED BY AND IN CLEAR CONFLICT, THE DESIGN AND GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED TO REMOVE, DAMAGE, OR REPAIR WORK, MATERIALS AND EQUIPMENT INSTALLED OR PROVIDED THAT DOES NOT COMPLY WITH THE DESIGN INTENT.

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ISSUED FOR	DATE
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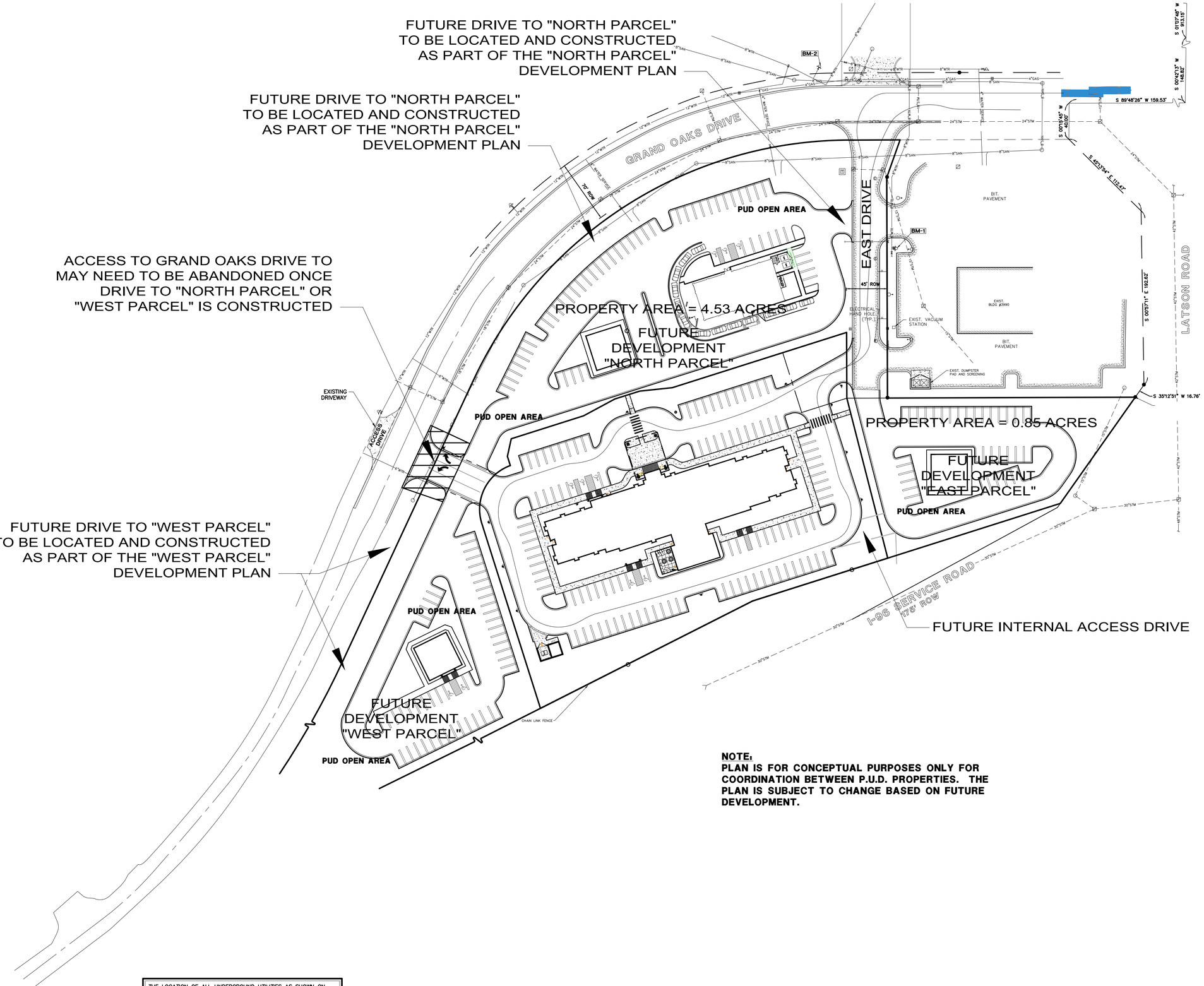
SPA	**05.23.17**
SPA	**06.23.17**

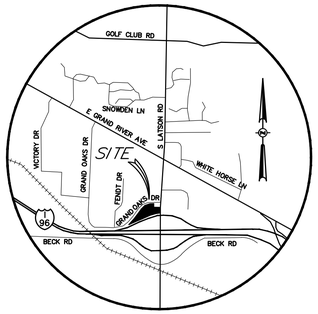
DATE :
DRAWN : ACA
CHECKED : JT
SCALE : **1"=40'**
JOB NO : BD-16-237

SHEET TITLE :
SITE LAYOUT AND PAVING PLAN
SHEET

C3.0



NOTE:
PLAN IS FOR CONCEPTUAL PURPOSES ONLY FOR COORDINATION BETWEEN P.U.D. PROPERTIES. THE PLAN IS SUBJECT TO CHANGE BASED ON FUTURE DEVELOPMENT.



LOCATION MAP
NOT TO SCALE

N

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SECTION 8, T2N, R5E

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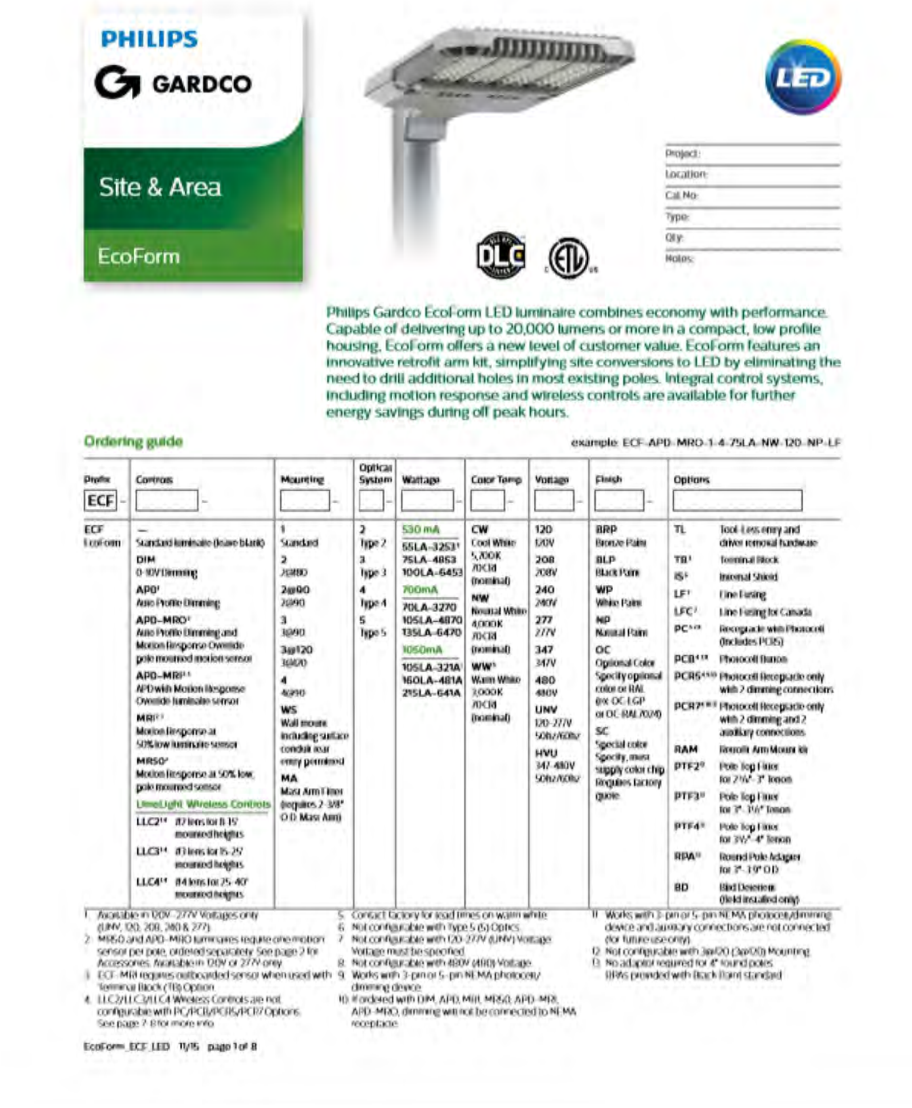
ISSUED FOR	DATE
SPA	05.23.17
CONCEPTUAL	06.09.17
SPA	06.23.17

DATE :
DRAWN : ACA
CHECKED : JT
SCALE : 1"=50'
JOB NO : BD-16-237
SHEET TITLE :
CONCEPTUAL AREA PLAN
SHEET
C3.1



PHILIPS
GARDCO
Site & Area
EcoForm

Project:
Location:
Cat.No:
Type:
Qty:
Notes:

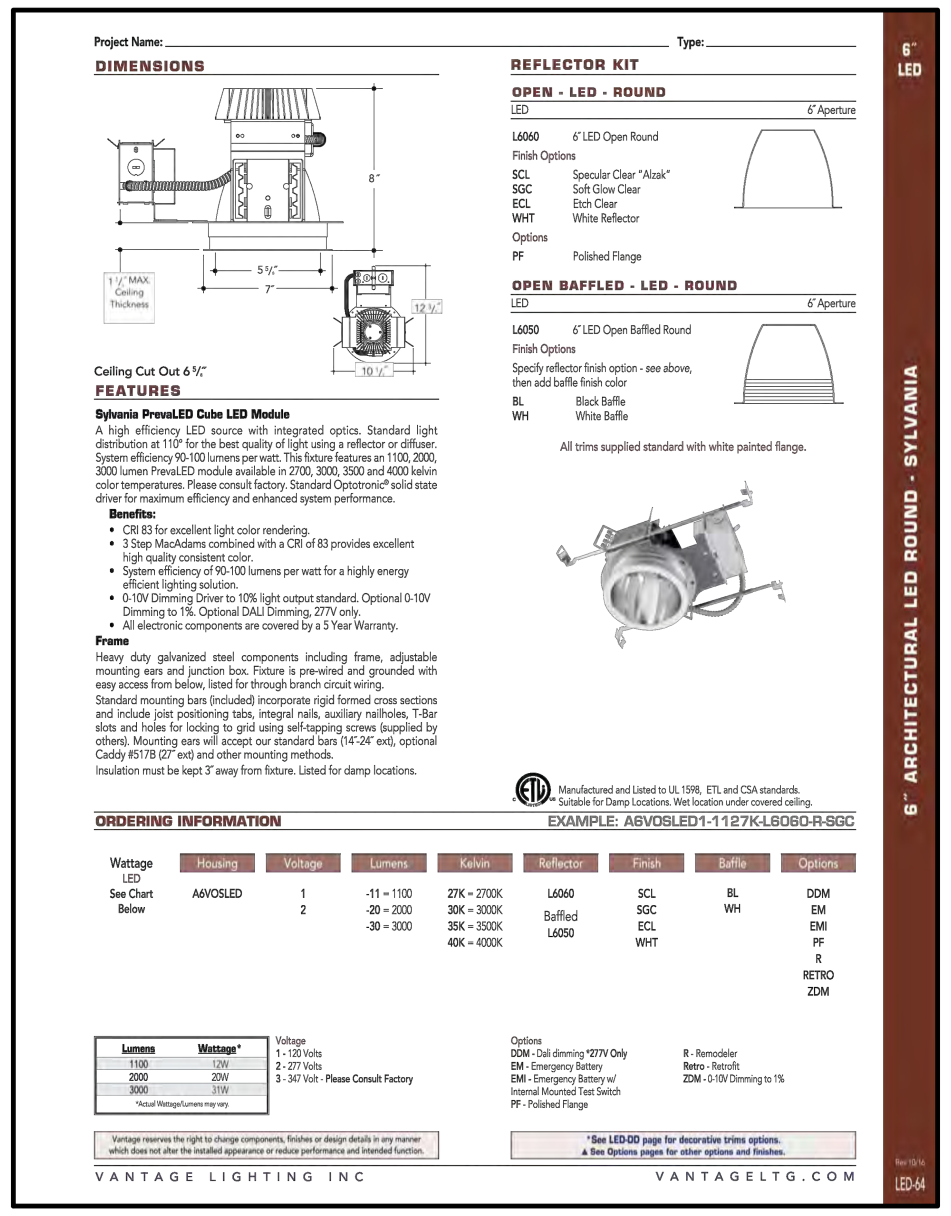
Philips Gardco EcoForm LED luminaire combines economy with performance. Capable of delivering up to 20,000 lumens or more in a compact, low profile housing. EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems, including motion response and wireless controls are available for further energy savings during off peak hours.

Ordering guide

example: ECF-APD-MRO-1-4-75LA-NW-120-NP-LF

Prefix	Controls	Mounting	Optical System	Wattage	Color Temp	Voltage	Finish	Options
ECF EcoForm	— Standard luminaire (leave blank); DIM 0-10V Dimming; APD Auto Profile Dimming; APD-MRO Auto Profile Dimming and Motion Response Override pole mounted motion sensor; APD-MRI APD with Motion Response Override luminaire sensor; MRI Motion Response at 50% low luminaire sensor; MRSO Motion Response at 50% low, pole mounted sensor; LimeLight Wireless Controls: LLC2 8' lens for 8-15' mounted heights; LLC3 8' lens for 15-25' mounted heights; LLC4 8' lens for 25-40' mounted heights	1 Standard; 2 2@180; 2@90; 3 3@90; 3@120; 4 4@90; WS Wall mount including surface conduit rear entry permitted; MA Mast Arm Fitter (requires 2-3/8" O.D. Mast Arm)	2 Type 2; 3 Type 3; 4 Type 4; 5 Type 5	530 mA: 55LA-3253, 75LA-4853, 100LA-6453; 700mA: 70LA-3270, 105LA-4870, 135LA-6470; 1050mA: 105LA-321A, 160LA-481A, 215LA-641A	CW Cool White 5,700K 70CRI (nominal); NW Neutral White 4,000K 70CRI (nominal); WW Warm White 3,000K 70CRI (nominal)	120 120V; 208 208V; 240 240V; 277 277V; 347 347V; 480 480V; UNV 120-277V 50hz/60hz; HVU 347-480V 50hz/60hz	BRP Bronze Paint; BLP Black Paint; WP White Paint; NP Natural Paint; OC Optional Color Specify optional color or RAL (ex: OC-LGP or OC-RAL7024); SC Special color Specify, must supply color chip. Requires factory quote	TL Tool-Less entry and driver removal hardware; TB Terminal Block; IS Internal Shield; LF Line Fusing; LFC Line Fusing for Canada; PC Receptacle with Photocell (includes PCB); PCB Photocell Button; PCR5 Photocell Receptacle only with 2 dimming connections; PCR7 Photocell Receptacle only with 2 dimming and 2 auxiliary connections; RAM Retrofit Arm Mount Kit; PTF2 Pole Top Fitter for 2 3/8"-3" Tenon; PTF3 Pole Top Fitter for 3"-3 1/2" Tenon; PTF4 Pole Top Fitter for 3 1/2"-4" Tenon; RPA Round Pole Adapter for 3"-3.9" OD; BD Bird Deterrent (field installed only)

EcoForm_ECF_LED 11/15 page 1 of 8



Project Name: Type:

DIMENSIONS

8" · 5 5/8" · 7" · 1 1/4" MAX. Ceiling Thickness · 12 1/2" · 10 1/2"

Ceiling Cut Out 6 5/8"

FEATURES

Sylvania PrevaLED Cube LED Module
A high efficiency LED source with integrated optics. Standard light distribution at 110° for the best quality of light using a reflector or diffuser. System efficiency 90-100 lumens per watt. This fixture features an 1100, 2000, 3000 lumen PrevaLED module available in 2700, 3000, 3500 and 4000 kelvin color temperatures. Please consult factory. Standard Optotronic® solid state driver for maximum efficiency and enhanced system performance.

Benefits:
- CRI 83 for excellent light color rendering.
- 3 Step MacAdams combined with a CRI of 83 provides excellent high quality consistent color.
- System efficiency of 90-100 lumens per watt for a highly energy efficient lighting solution.
- 0-10V Dimming Driver to 10% light output standard. Optional 0-10V Dimming to 1%. Optional DALI Dimming, 277V only.
- All electronic components are covered by a 5 Year Warranty.

Frame
Heavy duty galvanized steel components including frame, adjustable mounting ears and junction box. Fixture is pre-wired and grounded with easy access from below, listed for through branch circuit wiring.
Standard mounting bars (included) incorporate rigid formed cross sections and include joist positioning tabs, integral nails, auxiliary nailholes, T-Bar slots and holes for locking to grid using self-tapping screws (supplied by others). Mounting ears will accept our standard bars (14"-24" ext), optional Caddy #517B (27" ext) and other mounting methods.
Insulation must be kept 3" away from fixture. Listed for damp locations.

REFLECTOR KIT

OPEN - LED - ROUND (LED, 6" Aperture)
L6060 6" LED Open Round
Finish Options: SCL Specular Clear "Alzak"; SGC Soft Glow Clear; ECL Etch Clear; WHT White Reflector
Options: PF Polished Flange

OPEN BAFFLED - LED - ROUND (LED, 6" Aperture)
L6050 6" LED Open Baffled Round
Finish Options: Specify reflector finish option - see above, then add baffle finish color
BL Black Baffle; WH White Baffle

All trims supplied standard with white painted flange.

Manufactured and Listed to UL 1598, ETL and CSA standards. Suitable for Damp Locations. Wet location under covered ceiling.

ORDERING INFORMATION — EXAMPLE: A6VOSLED1-1127K-L6060-R-SGC

Wattage	Housing	Voltage	Lumens	Kelvin	Reflector	Finish	Baffle	Options
LED See Chart Below	A6VOSLED	1, 2	-11 = 1100, -20 = 2000, -30 = 3000	27K = 2700K, 30K = 3000K, 35K = 3500K, 40K = 4000K	L6060, Baffled L6050	SCL, SGC, ECL, WHT	BL, WH	DDM, EM, EMI, PF, R, RETRO, ZDM

Lumens	Wattage*
1100	12W
2000	20W
3000	31W

*Actual Wattage/Lumens may vary.

Voltage: 1 - 120 Volts; 2 - 277 Volts; 3 - 347 Volt - Please Consult Factory

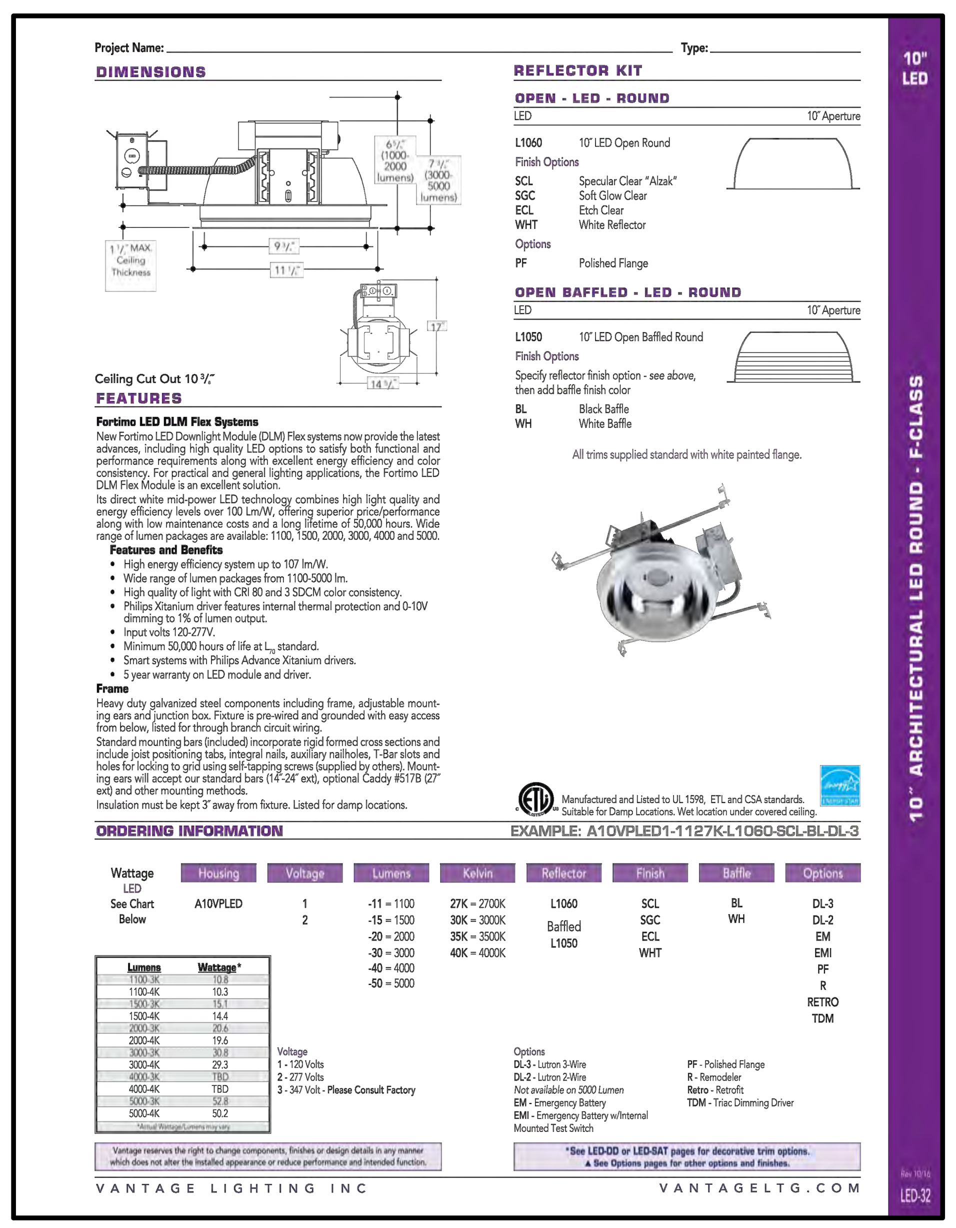
Options: DDM - Dali dimming *277V Only; EM - Emergency Battery; EMI - Emergency Battery w/ Internal Mounted Test Switch; PF - Polished Flange; R - Remodeler; Retro - Retrofit; ZDM - 0-10V Dimming to 1%

Vantage reserves the right to change components, finishes or design details in any manner which does not alter the installed appearance or reduce performance and intended function.

*See LED-DD page for decorative trims options. ▲ See Options pages for other options and finishes.

VANTAGE LIGHTING INC · VANTAGELTG.COM

6" LED · 6" ARCHITECTURAL LED ROUND - SYLVANIA · Rev 10/16 · LED-64



Project Name: Type:

DIMENSIONS

6 1/4" (1000-2000 lumens) · 7 1/4" (3000-5000 lumens) · 1 1/2" MAX. Ceiling Thickness · 9 1/2" · 11 1/2" · 17" · 14 1/2"

Ceiling Cut Out 10 3/4"

FEATURES

Fortimo LED DLM Flex Systems
New Fortimo LED Downlight Module (DLM) Flex systems now provide the latest advances, including high quality LED options to satisfy both functional and performance requirements along with excellent energy efficiency and color consistency. For practical and general lighting applications, the Fortimo LED DLM Flex Module is an excellent solution.
Its direct white mid-power LED technology combines high light quality and energy efficiency levels over 100 Lm/W, offering superior price/performance along with low maintenance costs and a long lifetime of 50,000 hours. Wide range of lumen packages are available: 1100, 1500, 2000, 3000, 4000 and 5000.

Features and Benefits
- High energy efficiency system up to 107 lm/W.
- Wide range of lumen packages from 1100-5000 lm.
- High quality of light with CRI 80 and 3 SDCM color consistency.
- Philips Xitanium driver features internal thermal protection and 0-10V dimming to 1% of lumen output.
- Input volts 120-277V.
- Minimum 50,000 hours of life at L_{70} standard.
- Smart systems with Philips Advance Xitanium drivers.
- 5 year warranty on LED module and driver.

Frame
Heavy duty galvanized steel components including frame, adjustable mounting ears and junction box. Fixture is pre-wired and grounded with easy access from below, listed for through branch circuit wiring.
Standard mounting bars (included) incorporate rigid formed cross sections and include joist positioning tabs, integral nails, auxiliary nailholes, T-Bar slots and holes for locking to grid using self-tapping screws (supplied by others). Mounting ears will accept our standard bars (14"-24" ext), optional Caddy #517B (27" ext) and other mounting methods.
Insulation must be kept 3" away from fixture. Listed for damp locations.

REFLECTOR KIT

OPEN - LED - ROUND (LED, 10" Aperture)
L1060 10" LED Open Round
Finish Options: SCL Specular Clear "Alzak"; SGC Soft Glow Clear; ECL Etch Clear; WHT White Reflector
Options: PF Polished Flange

OPEN BAFFLED - LED - ROUND (LED, 10" Aperture)
L1050 10" LED Open Baffled Round
Finish Options: Specify reflector finish option - see above, then add baffle finish color
BL Black Baffle; WH White Baffle

All trims supplied standard with white painted flange.

Manufactured and Listed to UL 1598, ETL and CSA standards. Suitable for Damp Locations. Wet location under covered ceiling.

ORDERING INFORMATION — EXAMPLE: A10VPLED1-1127K-L1060-SCL-BL-DL-3

Wattage	Housing	Voltage	Lumens	Kelvin	Reflector	Finish	Baffle	Options
LED See Chart Below	A10VPLED	1, 2	-11 = 1100, -15 = 1500, -20 = 2000, -30 = 3000, -40 = 4000, -50 = 5000	27K = 2700K, 30K = 3000K, 35K = 3500K, 40K = 4000K	L1060, Baffled L1050	SCL, SGC, ECL, WHT	BL, WH	DL-3, DL-2, EM, EMI, PF, R, RETRO, TDM

Lumens	Wattage*
1100-3K	10.8
1100-4K	10.3
1500-3K	15.1
1500-4K	14.4
2000-3K	20.6
2000-4K	19.6
3000-3K	30.8
3000-4K	29.3
4000-3K	TBD
4000-4K	TBD
5000-3K	52.8
5000-4K	50.2

*Actual Wattage/Lumens may vary.

Voltage: 1 - 120 Volts; 2 - 277 Volts; 3 - 347 Volt - Please Consult Factory

Options: DL-3 - Lutron 3-Wire; DL-2 - Lutron 2-Wire; Not available on 5000 Lumen; EM - Emergency Battery; EMI - Emergency Battery w/Internal Mounted Test Switch; PF - Polished Flange; R - Remodeler; Retro - Retrofit; TDM - Triac Dimming Driver

Vantage reserves the right to change components, finishes or design details in any manner which does not alter the installed appearance or reduce performance and intended function.

*See LED-DD or LED-SAT pages for decorative trim options. ▲ See Options pages for other options and finishes.

VANTAGE LIGHTING INC · VANTAGELTG.COM

10" LED · 10" ARCHITECTURAL LED ROUND - F-CLASS · Rev 10/16 · LED-32

ILLUMITEX®

VERONA 24™
FEATURES & SPECIFICATIONS

MECHANICAL CONSTRUCTION

Precision CNC machined from 6063-T6 aluminum. Stainless steel hardware and high-temperature silicone gaskets protect against the environment. Clear acrylic lenses are factory sealed. Die-cut, foam gasket provides a water-tight seal between the mounting plate and building surface.

LEDs

50° Aduro VH™ or 15° Artavi™ LEDs or a combination of both. 3000K CCT, 4000K CCT and blue LED options in both LED types. Illumitex's patented Digital Distribution™ delivers up to 90% of the lumens within the beam angle in a highly uniform, square pattern. IP66 ingress protection rated against dust and water entry.

ELECTRICAL

Class 2, integral driver attached to the back of the 6-inch-square machined mounting plate. Driver recesses into a standard 4-inch square junction box. 120-277VAC, 50/60Hz universal input. 18-gauge power and ground wires.

FINISH

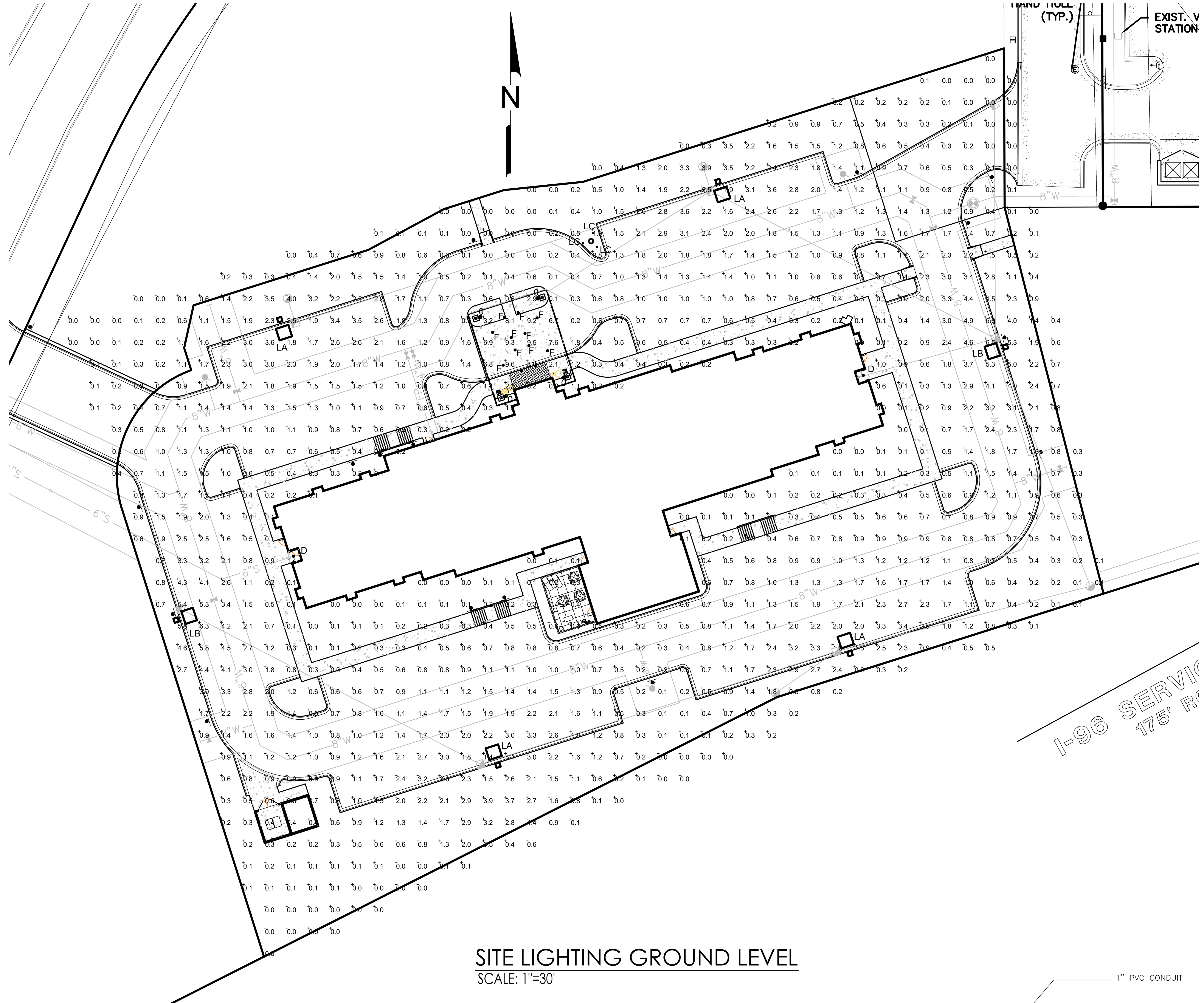
Two-step architectural anodized finish provides superior resistance to weather and fading. Available in black, bronze, champagne and clear. Polished, clear finish is also available for inside use only.

WEIGHT

6.1 lbs.

TESTING AND COMPLIANCE

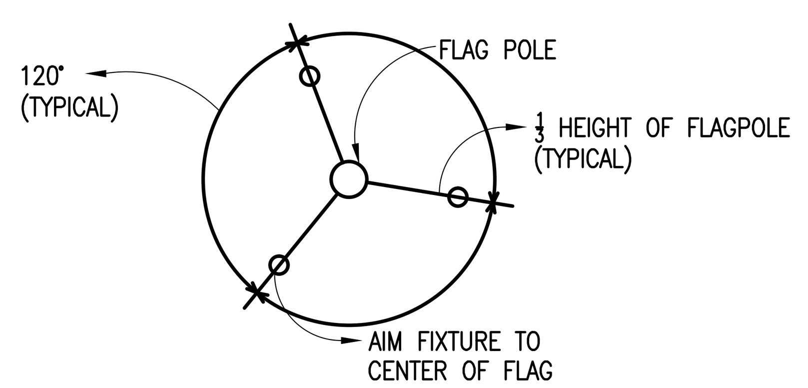
- ETL and cETL listed for wet locations
- -35°C to 40°C operating temperature range
- IP66 ingress protection rating
- L70 at 50,000 hours
- RoHS compliant
- 5-year warranty



SITE LIGHTING GROUND LEVEL

SCALE: 1"=30'

AVERAGE	MAXIMUM	MINIMUM
2.0 FC	9.5 FC	0.0 FC

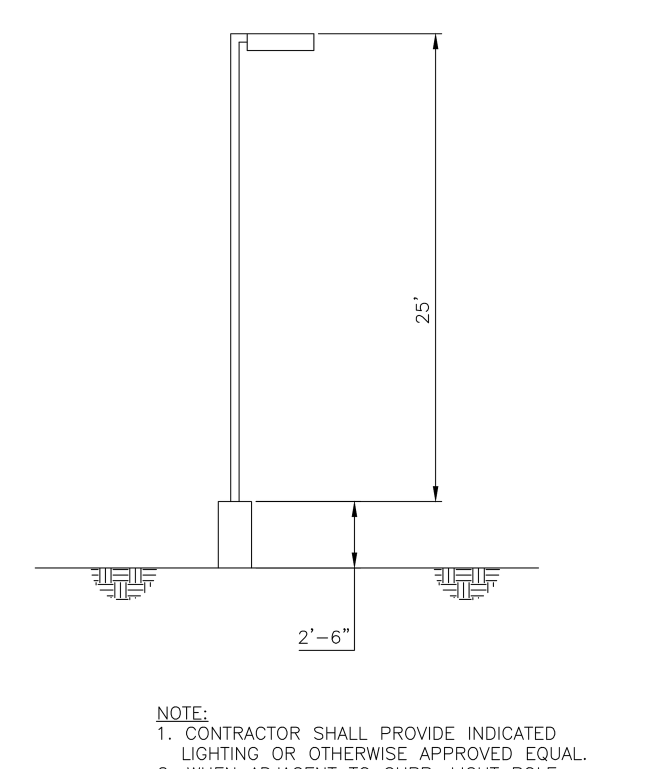


FLAG POLE FIXTURE DETAIL

N.T.S.

LA	LED AREA LIGHT	PHILIPS GARDCO	ECF-3-215LA-641A-NW-UNV-NP WITH 30' SQUARE ALUMINUM POLE, SSS5-25-5-11-D1-NP-MSM	211W
LB	LED AREA LIGHT	PHILIPS GARDCO	EFC-2-215LA-641A-NW-UNV-NP WITH 30' SQUARE ALUMINUM POLE, SSS5-25-5-11-D1-NP-MSM	211W
LC	LED GROUND LIGHT	LSI INDUSTRIES	X1G-B-LED-19-350-CW-UE-SP10-MB-TR-RQB - AROUND FLAG POLE LIGHT BRASS 120 LED 50K	22W
D	BUILDING LIGHT	VANTAGE LIGHTING	A6VOSLED-1-20-40K-L6060-SCL-EM	21W
F	CANOPY LIGHT	VANTAGE LIGHTING	A6VOSLED-1-30-30K-L101-4 -AT-EM	37W
O	UP / DOWN LIGHT	ILLUMITEX	VTR-4-AR-BW-AR-BW-U-BZ	18W 25W

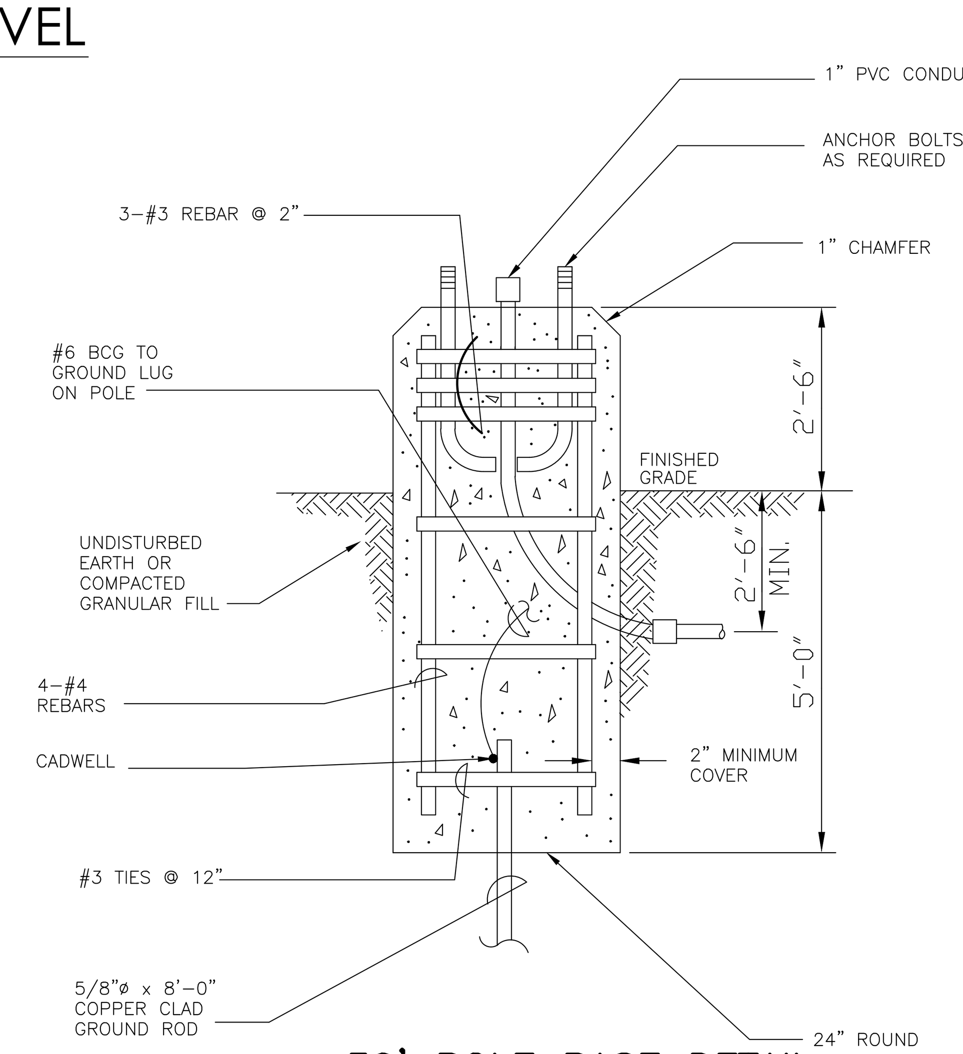
NOTE: CONTRACTOR SHALL PROVIDE INDICATED LIGHTING OR OTHERWISE APPROVED EQUAL.



NOTE:
1. CONTRACTOR SHALL PROVIDE INDICATED LIGHTING OR OTHERWISE APPROVED EQUAL.
2. WHEN ADJACENT TO CURB, LIGHT POLE BASES ARE 3-FEET FROM B/C TO CENTER OF BASE.

LIGHT POLE AND LAMP DETAIL

NO SCALE



30' POLE BASE DETAIL

NO SCALE

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SECTION 8, T2N, R5E

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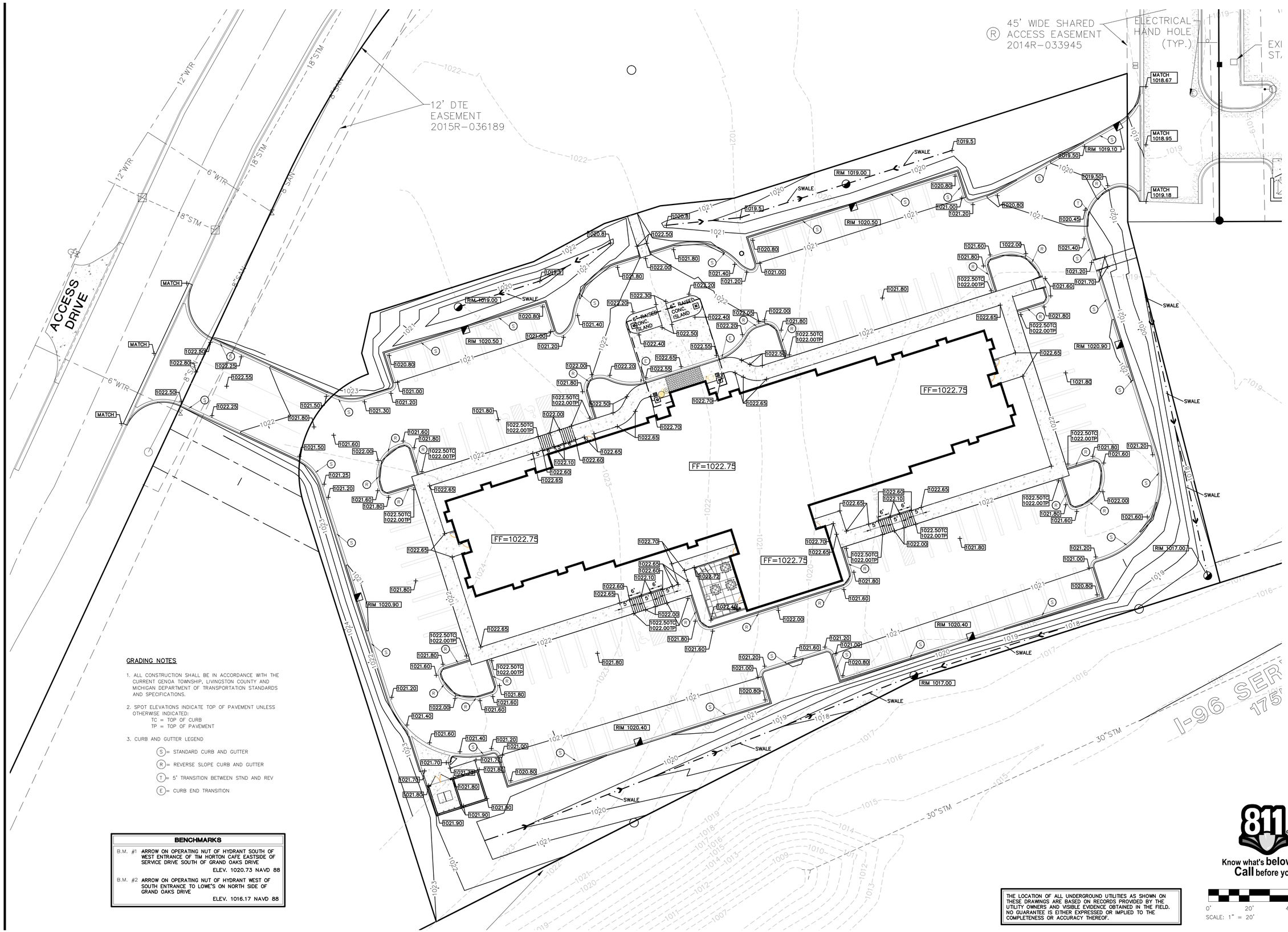
SPA	02.01.17
SPA	02.22.17
SPA	05.01.17
SPA	05.23.17
SPA	06.23.17

DATE :
DRAWN : ACA
CHECKED : JT
SCALE : **SEE PLAN**
JOB NO : BD-16-237
SHEET TITLE : **ELECTRICAL SITE LIGHTING**

SHEET

C3.2



GRADING NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT GENOA TOWNSHIP, LIVINGSTON COUNTY AND MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
2. SPOT ELEVATIONS INDICATE TOP OF PAVEMENT UNLESS OTHERWISE INDICATED:
   TC = TOP OF CURB
   TP = TOP OF PAVEMENT
3. CURB AND GUTTER LEGEND
   (S) = STANDARD CURB AND GUTTER
   (R) = REVERSE SLOPE CURB AND GUTTER
   (T) = 5' TRANSITION BETWEEN STND AND REV
   (E) = CURB END TRANSITION

BENCHMARKS

B.M. #1 ARROW ON OPERATING NUT OF HYDRANT SOUTH OF WEST ENTRANCE OF TIM HORTON CAFE EASTSIDE OF SERVICE DRIVE SOUTH OF GRAND OAKS DRIVE
ELEV. 1020.73 NAVD 88

B.M. #2 ARROW ON OPERATING NUT OF HYDRANT WEST OF SOUTH ENTRANCE TO LOWE'S ON NORTH SIDE OF GRAND OAKS DRIVE
ELEV. 1016.17 NAVD 88

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Know what's **below.**
Call before you dig.

0' 20' 40' 60'
SCALE: 1" = 20'

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GRAND OAKS DRIVE
GENOA TOWNSHIP, LIVINGSTON CO, MI

SECTION 8, T2N, R5E

MISS DIGGER CALL BEFORE YOU DIG! THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN PROPOSED AND EXISTING UTILITIES. THE CONTRACTOR SHALL PROTECT ANY AND ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGED UTILITIES AT THE CONTRACTOR'S EXPENSE.

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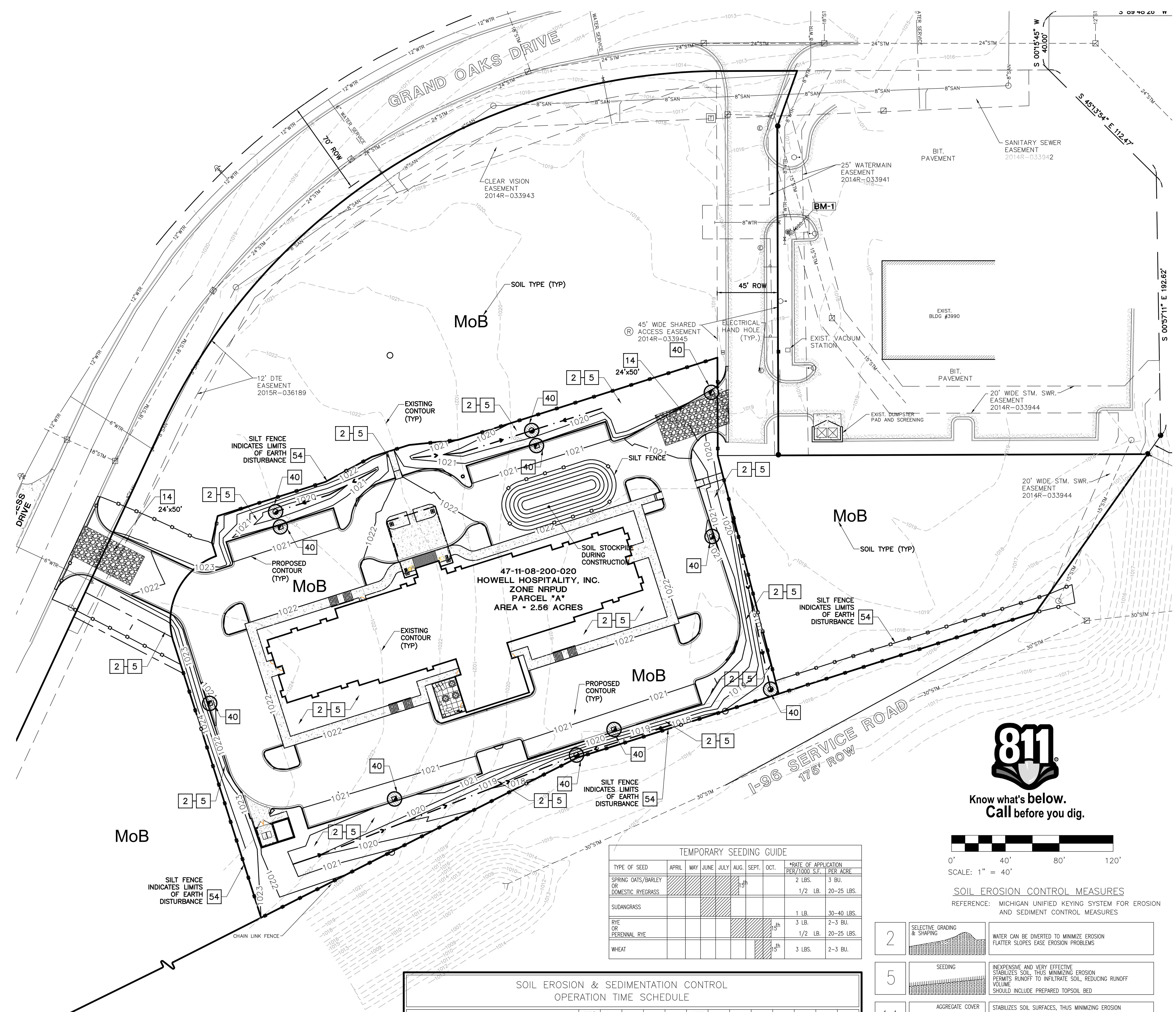
ISSUED FOR	DATE
SPA	**02.01.17**
SPA	**02.22.17**
SPA	**05.01.17**
SPA	**05.23.17**
SPA	**06.23.17**

DATE :
DRAWN : ACA
CHECKED : JT
SCALE : **1"=20'**
JOB NO : BD-16-237
SHEET TITLE :
GRADING PLAN
SHEET
C4.0



TEMPORARY SEEDING GUIDE

TYPE OF SEED	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	*RATE OF APPLICATION PER/1000 S.F.	PER ACRE
SPRING OATS/BARLEY OR DOMESTIC RYEGRASS	X	X	X	X	15th			2 LBS. / 1/2 LB.	3 BU. / 20-25 LBS.
SUDANGRASS			X	X				1 LB.	30-40 LBS.
RYE OR PERENNAL RYE					X	X	15th	3 LB. / 1/2 LB.	2-3 BU. / 20-25 LBS.
WHEAT						X	15th	3 LBS.	2-3 BU.

SOIL EROSION & SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

CONSTRUCTION SEQUENCE	AUG 2017	SEP	OCT	NOV	DEC	JAN 2018	FEB	MAR	APR	MAY	JUN	JUL	AUG
TEMPORARY EROSION CONTROL MEASURES	—												
STRIP & STOCKPILE TOPSOIL / ROUGH GRADE	—	—											
STORM SEWER			—										
FOUNDATION / BLDG. CONSTRUCTION			—	—	—	—	—	—	—	—	—	—	—
SANITARY SEWER & WATER MAIN			—										
INSTALL ALL OTHER UTILITIES			—										
SITE CONSTRUCTION & PAVEMENT					—	—	—						—
PERMANENT EROSION CONTROL MEASURES													—
FINISH GRADING													—
LANDSCAPING													—

DISTURBED AREA = 3.0± ACRES

SEEDING, FERTILIZER AND MULCH BARE GROUND RATIO

THIS INFORMATION SHALL BE DETAILED ON THE CONSTRUCTION PLANS.

TOP-SOIL 3" IN DEPTH

GRASS SEED 217.84LBS PER ACRE

FERTILIZER 150LBS PER ACRE

STRAW MULCH 3" IN DEPTH (ALL MULCHING MUST HAVE A TIE DOWN (ASPHALT TACKIFIER, NET BINDING. ETC.)

HYDRO-SEEDING IS NOT ACCEPTABLE FOR SLOPES EXCEEDING 1%, IN SUCH CASES STABILIZATION SHALL BE DONE WITH SEED AND STRAW MULCH WITH A TACKIFIER.

THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.

PROPERTY OWNER

HOWELL HOSPITALITY, INC.
26100 AMERICAN DRIVE #605
SOUTHFIELD, MI 48034
PH 248-281-4168

811 Know what's below. Call before you dig.

0' 40' 80' 120'
SCALE: 1" = 40'

SOIL EROSION CONTROL MEASURES

REFERENCE: MICHIGAN UNIFIED KEYING SYSTEM FOR EROSION AND SEDIMENT CONTROL MEASURES

Key	Measure	Description
2	SELECTIVE GRADING & SHAPING	WATER CAN BE DIVERTED TO MINIMIZE EROSION. FLATTER SLOPES EASE EROSION PROBLEMS
5	SEEDING	INEXPENSIVE AND VERY EFFECTIVE. STABILIZES SOIL, THUS MINIMIZING EROSION. PERMITS RUNOFF TO INFILTRATE SOIL, REDUCING RUNOFF VOLUME. SHOULD INCLUDE PREPARED TOPSOIL BED
14	AGGREGATE COVER	STABILIZES SOIL SURFACES, THUS MINIMIZING EROSION. PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER. MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS
40	FILTER BAG	SILTSACK (TERRAFIX OR OTHERWISE APPROVED EQUAL) FILTER BAG. FILTERS SEDIMENT FROM RUNOFF
54	SILT FENCE	USES GEOTEXTILE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.

SOIL CONDITIONS

USDA NRCS
WEB SOIL SURVEY
LIVINGSTON COUNTY, MICHIGAN (MI093)

MoB: MIAMI LOAM, 2 TO 6 PERCENT SLOPES

SOIL EROSION & SEDIMENTATION CONTROL NOTES

A. ALL EROSION SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE LIVINGSTON COUNTY DRAIN COMMISSIONER AND THE CITY OF BRIGHTON.

B. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.

C. EROSION AND ANY SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED WITHIN THE WORK AREA AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, PONDS AND WETLANDS.

D. THE CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS DIRECTED ON THESE PLANS AND WHERE OTHERWISE REQUIRED BY THE WORK. THE CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER CHANGES HAVE BEEN ACCOMPLISHED.

E. SOIL EROSION CONTROL PRACTICES WILL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF DIRT OFF THE WORK AREA.

F. THE CONTRACTOR SHALL PRESERVE OFF-SITE NATURAL VEGETATION AS MUCH AS POSSIBLE

G. PROTECT ALL EXISTING TREES, INCLUDING THEIR BRANCHES AND ROOTS, FROM DAMAGE DUE TO THIS WORK UNLESS SPECIFICALLY IDENTIFIED FOR REMOVAL.

H. STABILIZATION OF ALL DISTURBED AREAS SHALL BE ESTABLISHED USING THE APPROPRIATE VEGETATION WITHIN 5 DAYS OF COMPLETION OF FINAL GRADING.

I. THE CONTRACTOR SHALL SWEEP THE EXISTING STREETS SURROUNDING THE PROJECT SITE AS NEEDED.

J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL AND SHALL PROVIDE ALL EQUIPMENT AND MATERIAL TO KEEP DUST IN CHECK AT ALL TIMES. THE CONTRACTOR SHALL RESPOND IMMEDIATELY TO ANY AND ALL COMPLAINTS.

K. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NPDES PERMIT AND ENSURING COMPLIANCE WITH ALL APPLICABLE PERMIT REGULATIONS, INCLUDING BUT NOT LIMITED TO, INSPECTION, RESTORATION AND RECORD KEEPING REQUIREMENTS. REPORTS FROM THE CERTIFIED STORM WATER OPERATOR SHALL BE MADE AVAILABLE TO THE TOWNSHIP.

MAINTENANCE NOTES

1. SOIL STOCKPILES
PERIODIC INSPECTIONS SHOULD BE DONE TO ENSURE EXCESSIVE EROSION HAS NOT OCCURRED. IF RUNOFF OR WIND EROSION HAS OCCURRED, REDUCE THE SIDE SLOPES OF THE SPOIL PILE, OR RE-STABILIZE THE STOCKPILE BY PROVIDING TEMPORARY SEEDING.

WHEN FILTER FENCING IS USED AROUND A SPOIL PILE, PERIODIC CHECKS SHOULD BE MADE TO ENSURE THAT PIPING HAS NOT OCCURRED UNDER THE FENCING, AND TO ENSURE THE FENCE HAS NOT COLLAPSED DUE TO SOIL SLIPPAGE OR ACCESS BY CONSTRUCTION EQUIPMENT. REPAIR ANY DAMAGED FENCING IMMEDIATELY.

BERMS AT THE BASE OF THE SPOIL PILE WHICH BECOME DAMAGED SHOULD BE REPLACED.

2. DUST CONTROL
TO PREVENT DUST FROM BECOMING A PUBLIC NUISANCE AND CAUSING OFF-SITE DAMAGES, DUST CONTROL SHOULD BE ONGOING DURING EARTH CHANGE ACTIVITIES.

3. SILT FENCE
SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SILT FENCES SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND SEVERAL TIMES DURING PROLONGED RAINFALLS.

IF THE FENCE IS SAGGING OR THE SOIL HAS REACHED ONE HALF (1/2) THE HEIGHT OF THE FABRIC, THE SOIL BEHIND THE FABRIC MUST BE REMOVED AND DISPOSED OF IN A STABLE UPLAND SITE. THE SOIL CAN BE ADDED TO THE SOIL STOCKPILE.

IF THE FABRIC IS BEING UNDERCUT (I.E. IF WATER IS SEEPING UNDER THE FENCE), THE FENCE SHOULD BE REMOVED AND REINSTALLED FOLLOWING THE PROCEDURES GIVEN ABOVE.

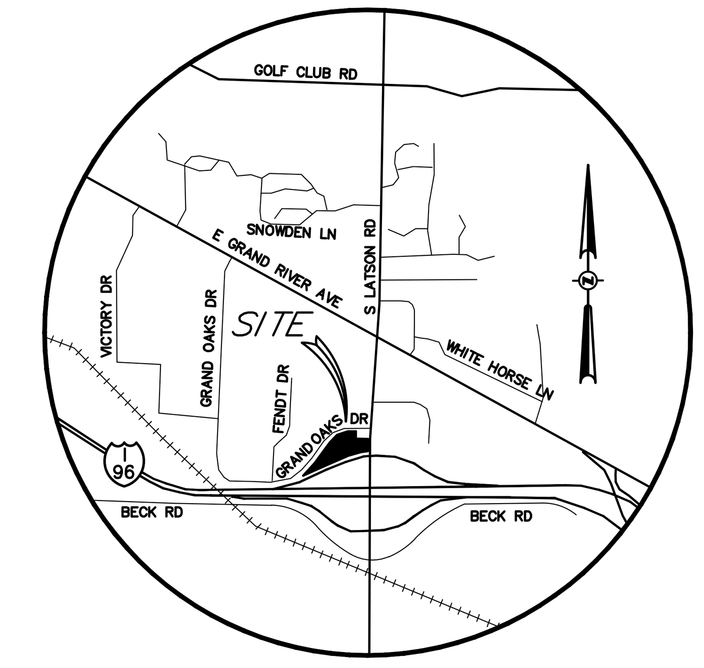
FABRIC WHICH DECOMPOSES OR OTHERWISE BECOMES INEFFECTIVE SHOULD BE REMOVED AND REPLACED WITH NEW FILTER FABRIC IMMEDIATELY.

SILT FENCES SHOULD BE REMOVED ONCE VEGETATION IS WELL ESTABLISHED AND THE UP-SLOPE AREA IS FULLY STABILIZED.

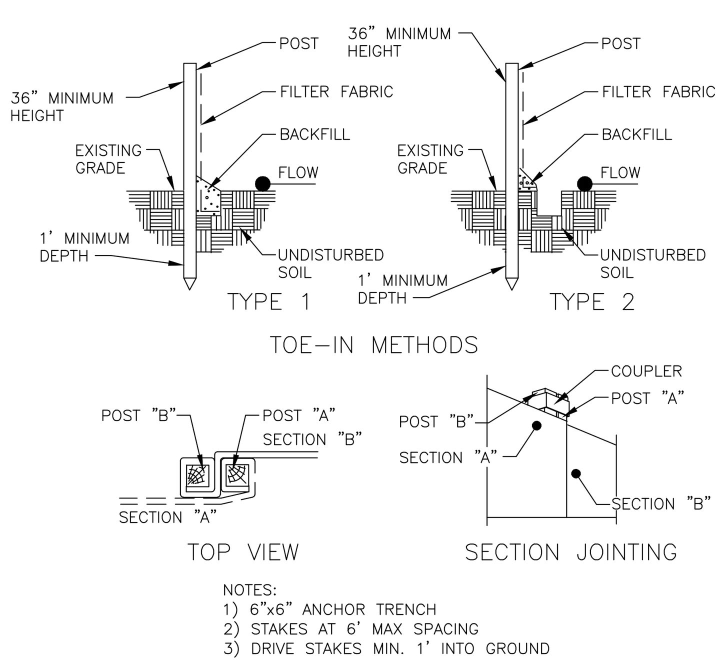
4. SEEDING
NEWLY SEEDED AREAS NEED TO BE INSPECTED FREQUENTLY FOR THE FIRST FEW MONTHS TO ENSURE THE GRASS IS GROWING. IF THE SEEDED AREA IS DAMAGED DUE TO RUNOFF, ADDITIONAL STORMWATER MEASURES MAY BE NEEDED. SPOT SEEDED CAN BE DONE ON SMALL AREAS TO FILL IN BARE SPOTS WHERE GRASS DIDN'T GROW PROPERLY.

5. MULCHING
MULCHED AREAS SHOULD BE CHECKED FOLLOWING EACH RAIN TO ENSURE THE MULCH IS STAYING IN PLACE. ADDITIONAL TACKING MATERIALS OR NETTING MAY NEED TO BE APPLIED TO HOLD THE MULCH IN PLACE.

6. CONSTRUCTION ENTRANCE
PROPER MAINTENANCE MAY INCLUDE ADDING ADDITIONAL LAYERS OF STONE WHEN THE ORIGINAL STONE BECOMES COVERED WITH MUD. AFTER EACH STORM EVENT, INSPECT THE ROAD FOR EROSION AND MAKE ANY NECESSARY REPAIRS. ALL SEDIMENT DROPPED OR ERODED ONTO PUBLIC RIGHT-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY SWEEPING.

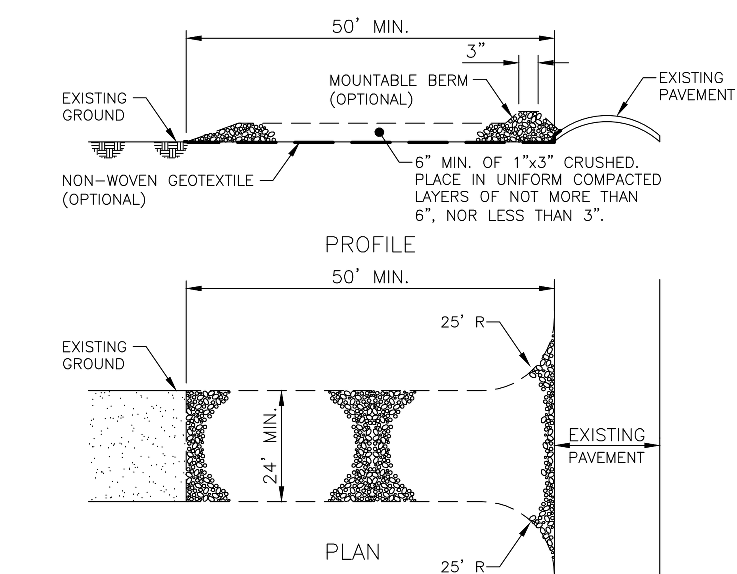


LOCATION MAP
NOT TO SCALE

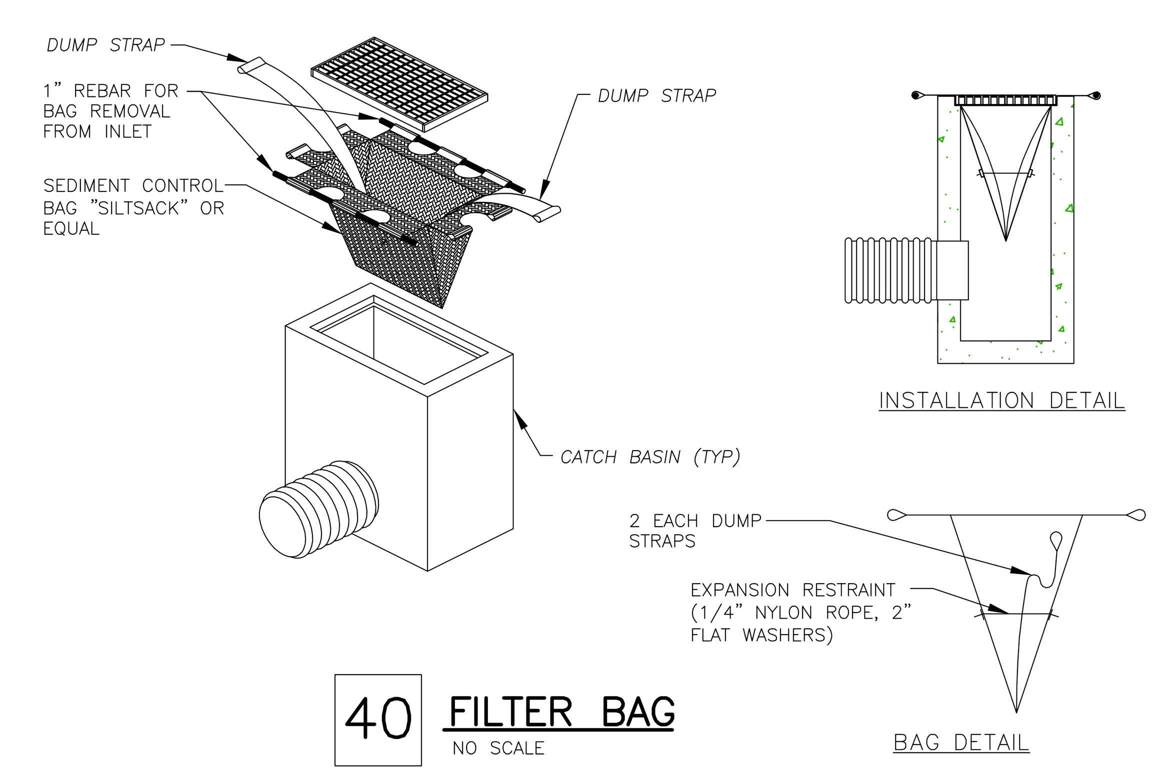


NOTES:
1) 6"x6" ANCHOR TRENCH
2) STAKES AT 6' MAX SPACING
3) DRIVE STAKES MIN. 1' INTO GROUND

54 **SILT FENCE**
NO SCALE



14 **GRAVEL ACCESS DRIVE**
NO SCALE



40 **FILTER BAG**
NO SCALE

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GENOA TOWNSHIP, LIVINGSTON CO, MI

SECTION 8, T2N, R5E

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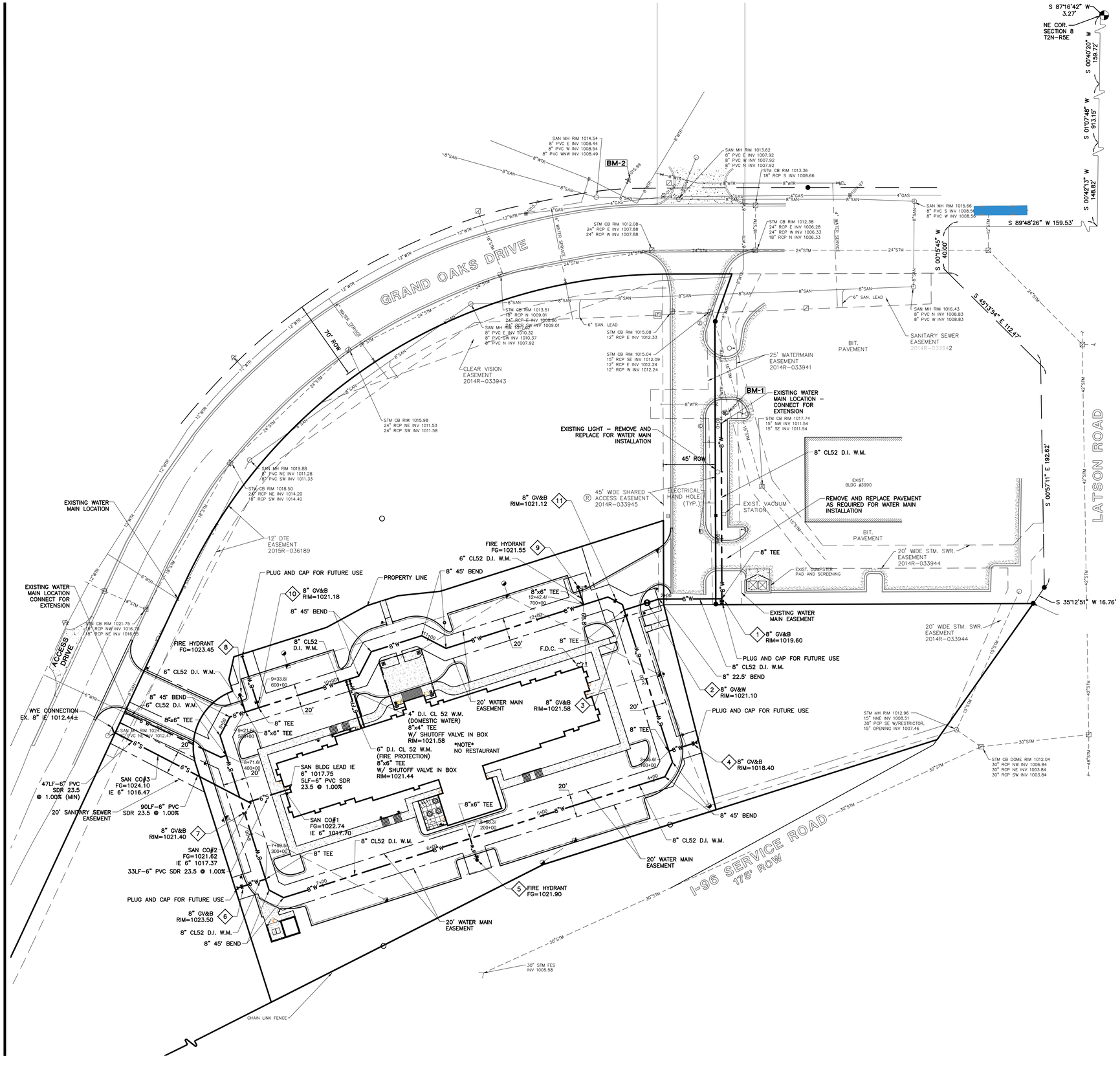
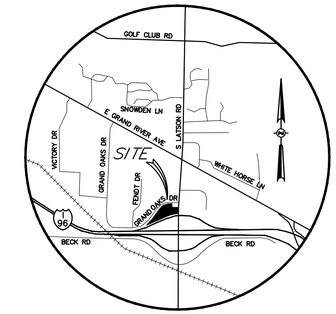
SPA	02.22.17
SPA	05.01.17
SPA	05.23.17
SPA	06.23.17

DATE :
DRAWN : ACA
CHECKED : JT
SCALE : 1"=40'
JOB NO : BD-16-237
SHEET TITLE :
EROSION CONTROL PLAN
SHEET
C4.1





LOCATION MAP
NOT TO SCALE

SANITARY USE CALCULATION

USAGE	AREA		UNIT FACTOR	R.E.U.
Hotel	101	rooms	0.38 units per room	38.38

POPULATION EQUIVALENT = 3.5 Persons per R.E.U.
POPULATION = 134.3 Persons
AVERAGE FLOW RATE = 100 Gallons per capita per day
AVERAGE FLOW = 13,433.00 GPD
PEAK FACTOR = 18 + SQRT(P) / 4 + SQRT (P) = 4.21
PEAK FLOW = 56,502.17 GPD = 0.085 CFS 6"@ 1.00%(cfs) = 0.73

WATER MAIN BASIS OF DESIGN

USAGE	AREA		UNIT FACTOR	R.E.U.
Hotel	101	rooms	0.38 units per room	38.38

POPULATION EQUIVALENT = 3.5 Persons per R.E.U.
POPULATION = 134.3 Persons
AVERAGE FLOW RATE = 100 Gallons per capita per day

INITIAL DESIGN AVERAGE FLOW = 13,433.00 GPD = 0.01343 MGD
PEAK FACTOR = 18 + SQRT(P) / 4 + SQRT (P) = 4.21
TOTAL DESIGN MAXIMUM FLOW = 56,502.17 GPD = 0.0565 MGD

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH GENOA TOWNSHIP AND M.H.O.G. STANDARDS AND SPECIFICATIONS.
2. SHOP DRAWINGS SHALL BE SUBMITTED BY THE UNDERGROUND CONTRACTOR FOR ALL WATER AND SANITARY INSTALLATION.
3. CONTRACTOR SHALL SUBMIT RECORD "AS-BUILT" PLANS AFTER CONSTRUCTION.
4. MAINTAIN A MINIMUM HORIZONTAL SEPARATION BETWEEN WATER SERVICE AND ANY OTHER UTILITY OF 10-FEET. THE MINIMUM VERTICAL CLEARANCE BETWEEN A WATER MAIN AND A SEWER SHALL BE 18-INCHES.
5. NO GROUNDWATER, STORM WATER, CONSTRUCTION WATER, DOWNSPOUT DRAINAGE OR WEEP TILE DRAINAGE SHALL BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION.
6. REFER TO PLUMBING PLANS TO VERIFY BUILDING UTILITY CONNECTION LOCATIONS. SITE UTILITY LOCATIONS TO TERMINATE 5' OUTSIDE OF BUILDING.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL PERMITS AND POST ALL BONDS PRIOR TO CONSTRUCTION, OR ENSURE THAT ALL REQUIRED PERMITS AND BONDS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING MISS-DIG AT 1-800-482-7171 AT LEAST 3 WORKING DAYS PRIOR TO EXCAVATION.
9. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. ALL UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH LIKE MATERIAL. THE EXACT LOCATION OF EXISTING UTILITIES SHALL BE LOCATED BY HAND DIGGING.
10. DIMENSIONS ARE TO FACE OF CURB, OUTSIDE FACE OF BUILDING, EDGE OF PAVEMENT, CENTER OF STRUCTURE OR OTHERWISE INDICATED.
11. CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION AND REPORT ALL FINDINGS TO ENGINEER.
12. WATER MAIN SHALL HAVE A MINIMUM OF 5.5-FOOT COVER FROM THE FINISHED GRADE TO THE TOP OF PIPE, UNLESS OTHERWISE INDICATED. MAXIMUM DEPTH OF BURY SHALL BE 8.5-FEET.

THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.

Know what's **below.**
Call before you dig.

0' 40' 80' 120'
SCALE: 1" = 40'

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SECTION 8, T2N, R5E

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DATE :
DRAWN : ACA
CHECKED : JT
SCALE : **1"=40'**
JOB NO : BD-16-237
SHEET TITLE :
UTILITY PLAN
SHEET
C5.0

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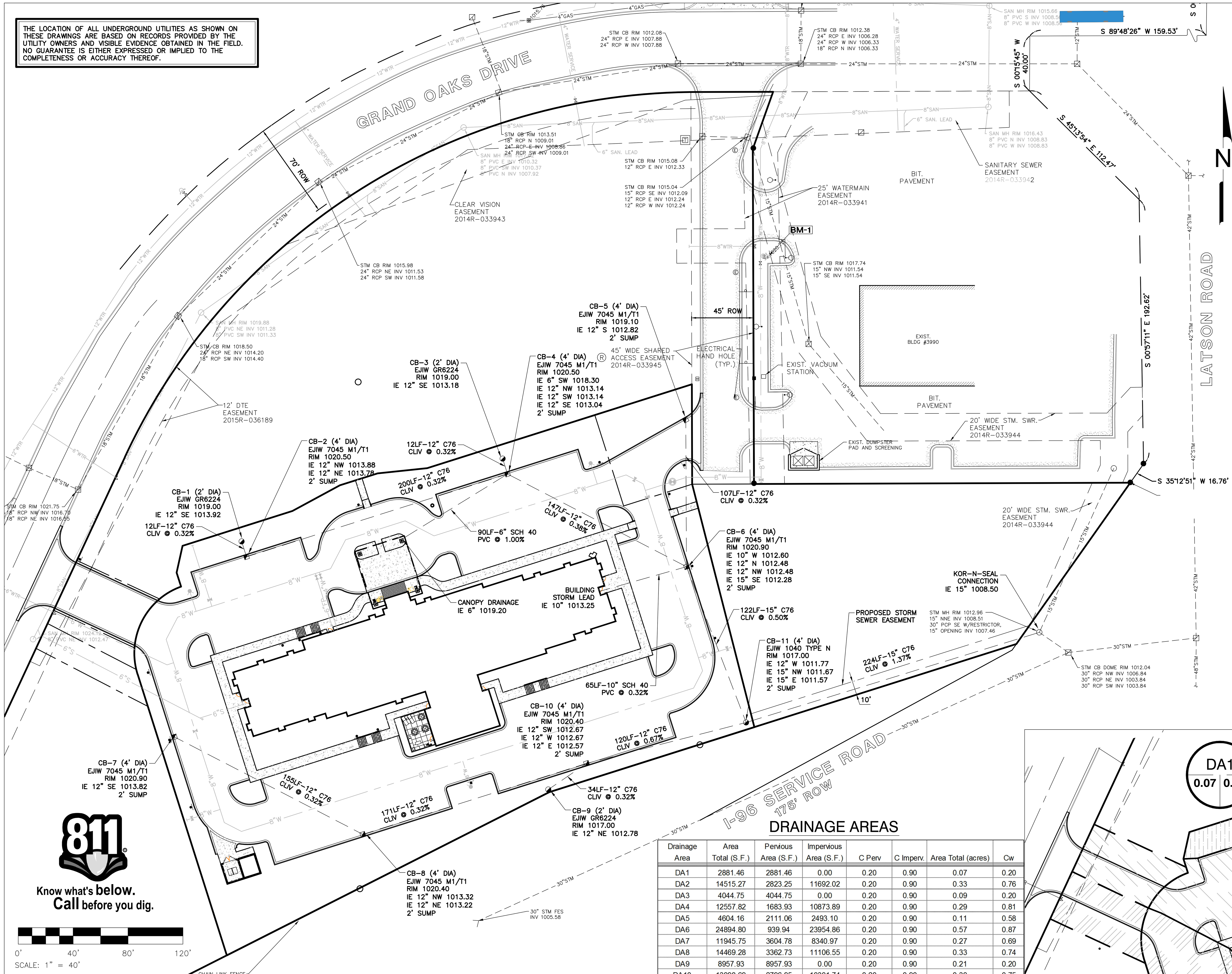

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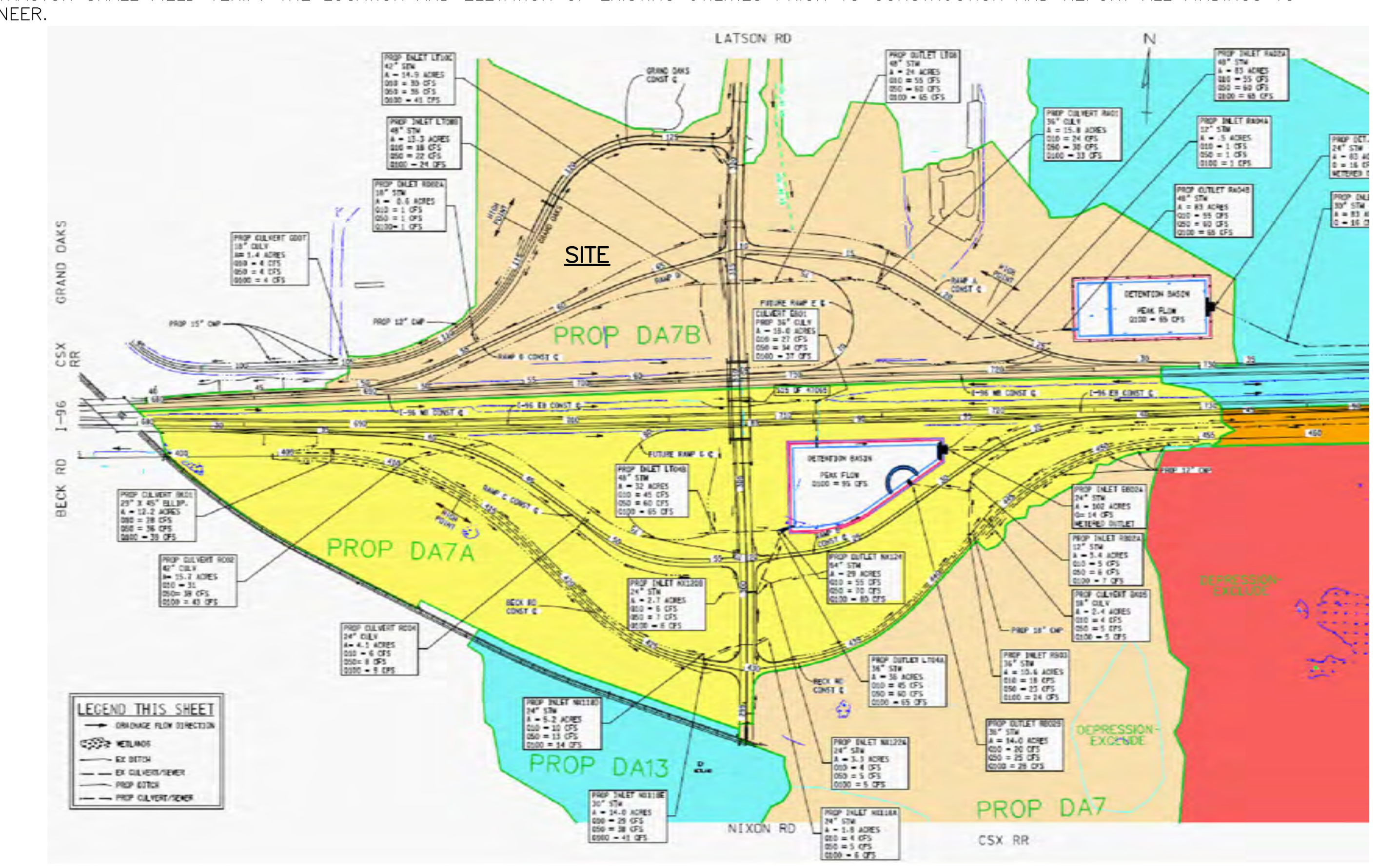
10. DIMENSIONS ARE TO FACE OF CURB, OUTSIDE FACE OF BUILDING, EDGE OF PAVEMENT, CENTER OF STRUCTURE OR OTHERWISE INDICATED.
11. STORM SEWER PIPE SHALL BE REINFORCED CONCRETE C76 CLIV.
12. UNDERDRAINS SHALL BE FLEXIBLE 6" CORRUGATED POLYETHYLENE TUBING.
13. CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION AND REPORT ALL FINDINGS TO ENGINEER.

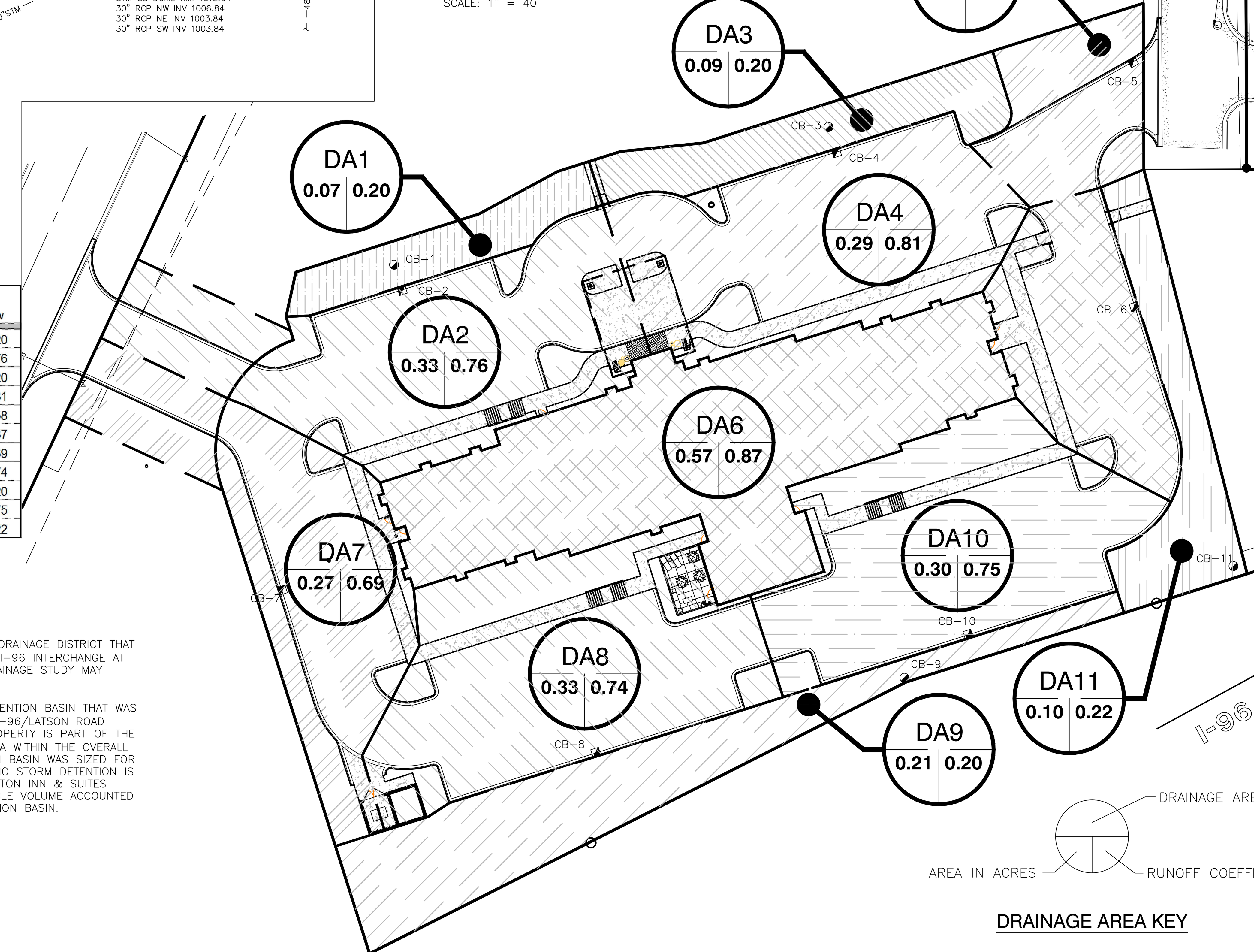


DRAINAGE VICINITY MAP

NOT TO SCALE

DRAINAGE AREA MAP

SCALE: 1" = 40'



DRAINAGE AREA KEY

DRAINAGE AREAS

Drainage Area	Area Total (S.F.)	Pervious Area (S.F.)	Impervious Area (S.F.)	C Perv	C Imperv.	Area Total (acres)	Cw
DA1	2881.46	2881.46	0.00	0.20	0.90	0.07	0.20
DA2	14515.27	2823.25	11692.02	0.20	0.90	0.33	0.76
DA3	4044.75	4044.75	0.00	0.20	0.90	0.09	0.20
DA4	12557.82	1683.93	10873.89	0.20	0.90	0.29	0.81
DA5	4604.16	2111.06	2493.10	0.20	0.90	0.11	0.58
DA6	24894.80	939.94	23954.86	0.20	0.90	0.57	0.87
DA7	11945.75	3604.78	8340.97	0.20	0.90	0.27	0.69
DA8	14469.28	3362.73	11106.55	0.20	0.90	0.33	0.74
DA9	8957.93	8957.93	0.00	0.20	0.90	0.21	0.20
DA10	13098.69	2796.95	10301.74	0.20	0.90	0.30	0.75
DA11	4431.34	4331.93	99.41	0.20	0.90	0.10	0.22

STORM SEWER CALCULATIONS

$Q_R = C * I * A$

$Q_P = A \times 1.486/n \times R^{2/3} \times S^{1/2}$

$I = 175/(t+25)$ for **10 year storm event**

(C imp = 0.90 / Cperv = 0.20)

AREA NO.	FROM MH/CB	TO MH/CB	AREA A (acres)	COEFF. C *	A x C	AREA TOTAL At (acres)	COEFF. Wt Cw	At x Cw	TIME t_C (min.)	INT. I (in/hr)	n	FLOW Q_R Q=CIA (c.f.s.)	PIPE CAP. Q_P (c.f.s.)	PIPE LENGTH (ft)	PIPE DIA. (in.)	PIPE SLOPE (%)	VEL. FULL (ft/sec)	TIME FLOW (min.)	RIM ELEV HIGH (ft)	RIM ELEV LOW (ft)	H.G.L. HIGH END HGL	H.G.L. LOW END HGL	INVERT ELEV. HIGH END INV	INVERT ELEV. LOW END INV
DA1	1	2	0.07	0.20	0.01	0.07	0.20	0.01	15.00	4.38	0.013	0.06	2.02	12	12	0.32%	2.57	0.08	1019.00	1020.50	1015.91	1015.86	1013.92	1013.88
DA2	2	4	0.33	0.76	0.25	0.40	0.67	0.27	15.08	4.37	0.013	1.17	2.02	200	12	0.32%	2.57	1.30	1020.50	1020.50	1015.76	1014.94	1013.78	1013.14
DA3	3	4	0.09	0.20	0.02	0.09	0.20	0.02	15.00	4.38	0.013	0.08	2.02	12	12	0.32%	2.57	0.08	1019.00	1020.50	1014.99	1014.94	1013.18	1013.14
DA4	4	6	0.29	0.81	0.23	0.78	0.66	0.52	16.38	4.23	0.013	2.19	2.20	147	12	0.38%	2.80	0.88	1020.50	1020.90	1014.84	1014.13	1013.04	1012.48
DA5	5	6	0.11	0.58	0.06	0.11	0.58	0.06	15.00	4.38	0.013	0.27	2.02	107	12	0.32%	2.57	0.69	1019.10	1020.90	1014.57	1014.13	1012.82	1012.48
DA6	6	11	0.57	0.87	0.50	1.46	0.74	1.08	17.25	4.14	0.013	4.47	4.57	122	15	0.50%	3.72	0.55	1020.90	1017.00	1013.93	1013.21	1012.28	1011.67
DA7	7	8	0.27	0.69	0.19	0.27	0.69	0.19	15.00	4.38	0.013	0.83	2.02	155	12	0.32%	2.57	1.01	1020.90	1020.40	1015.83	1015.19	1013.82	1013.32
DA8	8	10	0.33	0.74	0.24	0.61	0.72	0.43	16.01	4.27	0.013	1.85	2.02	171	12	0.32%	2.57	1.11	1020.40	1020.40	1015.09	1014.39	1013.22	1012.67
DA9	9	10	0.21	0.20	0.04	0.21	0.20	0.04	15.00	4.38	0.013	0.18	2.02	34	12	0.32%	2.57	0.22	1017.00	1020.40	1014.53	1014.39	1012.78	1012.67
DA10	10	11	0.30	0.75	0.23	1.11	0.63	0.70	17.12	4.16	0.013	2.91	2.92	120	12	0.67%	3.71	0.54	1020.40	1017.00	1014.29	1013.31	1012.57	1011.77
DA11	11	EX MH	0.10	0.22	0.02	2.67	0.67	1.80	17.80	4.09	0.013	7.37	7.56	224	15	1.37%	6.16	0.61	1017.00	1012.96	1013.11	1009.75	1011.57	1008.50

DRAINAGE NARRATIVE

THE PROPERTY IS PART OF THE DRAINAGE DISTRICT THAT WAS INCORPORATED WITHIN THE "I-96 INTERCHANGE AT LATSON ROAD...REVISED FINAL DRAINAGE STUDY MAY 2011".

THE SITE IS TRIBUTARY TO A DETENTION BASIN THAT WAS CONSTRUCTED AS PART OF THE I-96/LATSON ROAD INTERCHANGE PROJECT. THE PROPERTY IS PART OF THE "PROP DA7B" SUB-DRAINAGE AREA WITHIN THE OVERALL TRIBUTARY AREA. THE DETENTION BASIN WAS SIZED FOR THE 100-YEAR STORM EVENT. NO STORM DETENTION IS PROVIDED AS PART OF THE HAMPTON INN & SUITES PROJECT DUE TO THE ATTRIBUTABLE VOLUME ACCOUNTED FOR WITHIN THE EXISTING DETENTION BASIN.

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WHILE EVERY ATTEMPT HAS BEEN MADE TO PRODUCE ERROR FREE DOCUMENTS, IT IS THE RESPONSIBILITY OF THE BUILDER AND/OR THE CLIENT TO VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, DETAILS, CODE COMPLIANCE, AND SPECIFICATIONS PRECEDING COMMENCEMENT OF WORK. PRIOR TO ACCEPTANCE OF THESE DOCUMENTS, THE ARCHITECT TAKES FULL RESPONSIBILITY FOR CHANGES AND ERRORS AND/OR OMISSIONS, BUT IS RELIEVED OF THESE RESPONSIBILITIES ONCE THESE DOCUMENTS HAVE BEEN ACCEPTED BY WAY OF CLIENT SIGNATURE. THE DESIGN AND ORIGINAL DRAWINGS OF THIS PROJECT REMAIN THE PROPERTY OF BUD DESIGN AND ENGINEERING SERVICES INC. AND NO ADDITIONAL PERSONS OR PARTIES MAY USE THIS DESIGN AND/OR DRAWINGS FOR ANY OTHER PURPOSE WITHOUT THE CONSENT OF BUD DESIGN AND ENGINEERING SERVICES INC., AND GARY M. RAUDEBAUGH

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SCALE : 1"=40'

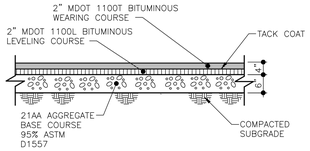
JOB NO : BD-16-237

SHEET TITLE :

STORM MANAGEMENT PLAN

SHEET

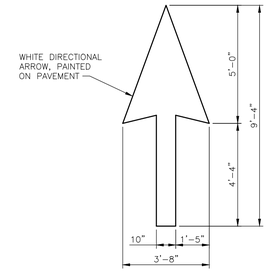
C5.1



NOTE: A GEOTECHNICAL REPORT WITH PAVEMENT DESIGN RECOMMENDATIONS WAS NOT AVAILABLE, THEREFORE THE PAVEMENT SECTION REPRESENTS THE MINIMUM STANDARDS RECOMMENDED.

BITUMINOUS PAVEMENT

NO SCALE



STRAIGHT DIRECTIONAL ARROW

NO SCALE

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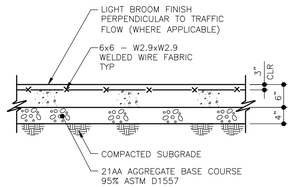
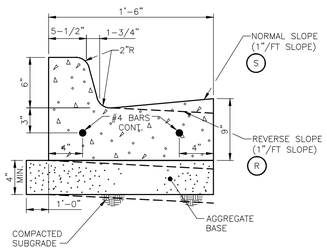


NOTE: A GEOTECHNICAL REPORT WITH PAVEMENT DESIGN RECOMMENDATIONS WAS NOT AVAILABLE, THEREFORE THE PAVEMENT SECTION REPRESENTS THE MINIMUM STANDARDS RECOMMENDED.

CONCRETE SHALL BE 3500 PSI

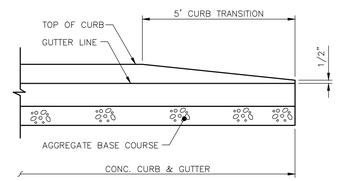
CONCRETE PAVEMENT

NO SCALE



CONC. CURB & GUTTER

NO SCALE



TYPICAL CURB END TRANSITION

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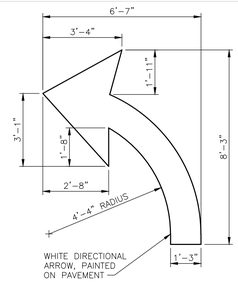

TURN DIRECTIONAL ARROW

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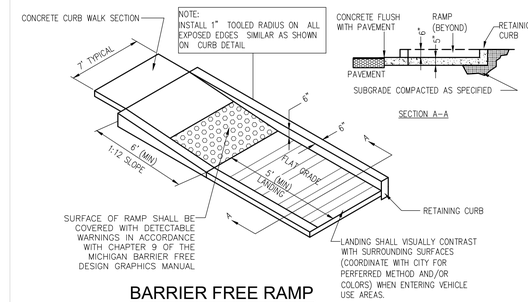

BARRIER FREE RAMP

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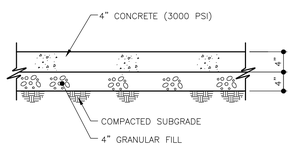
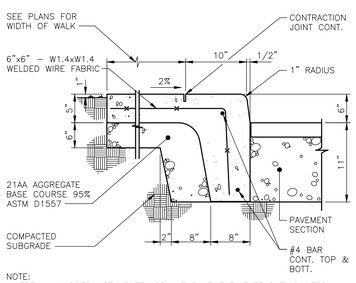


NOTE:
CONTRACTION JOINT SHALL BE 1/4"x2 3/4" DEEP, SPACED AT 5'-0" INTERVALS. EXPANSION JOINTS SHALL BE 1/2" PREMOLDED FILLER, SPACED AT A MAXIMUM 30' APART. EXPANSION JOINTS TO BE PLACED BETWEEN NEW AND EXISTING CONCRETE.

CONCRETE WALK

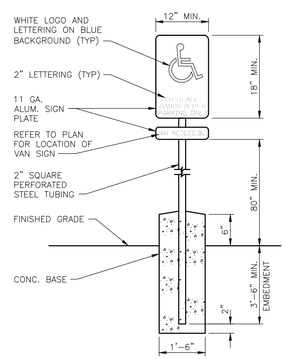
NO SCALE



NOTE:
WHERE WALK DOES NOT ABUTT ASPHALT PAVEMENT, EXTEND THICKNESS FOR REQUIRED WIDTH AND OMIT CURB PORTION. CONTRACTION JOINTS TO BE 2 1/2" DEEP, SPACED AT 5' INTERVALS (TOOLED). EXPANSION JOINTS TO BE 1/2 " PREMOLDED FILLER, SPACED A MAXIMUM OF 30' APART.

CONCRETE CURB WALK

NO SCALE



TYPICAL HANDICAP SIGN

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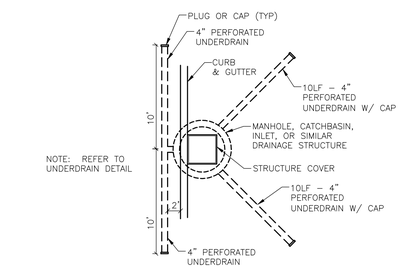
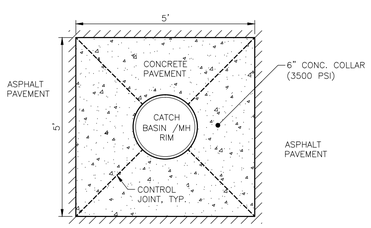


TYP CURB CATCH BASIN UNDERDRAIN

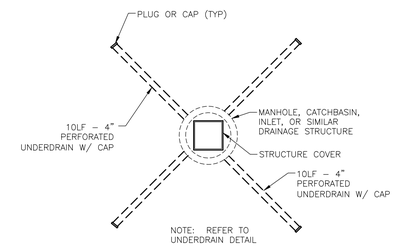
NO SCALE



NOTE: CONCRETE COLLAR AT ALL STRUCTURES IN PAVEMENT

CONCRETE COLLAR

NO SCALE



TYP CURB CATCH BASIN UNDERDRAIN

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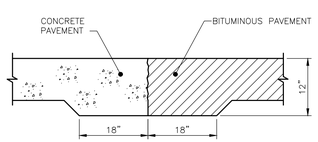
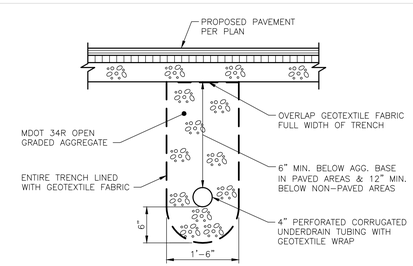


TURNDOWN PAVEMENT SECTION

NO SCALE



UNDERDRAIN

NO SCALE

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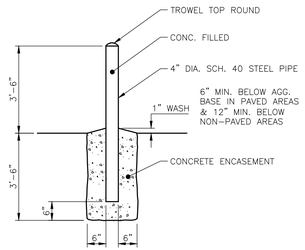
SCALE : **NO SCALE**
JOB NO : BD-16-237

SHEET TITLE :
SITE DETAILS

SHEET
C6.0



BOLLARD
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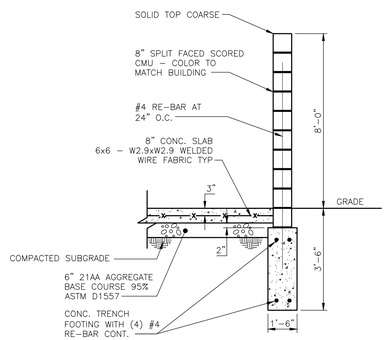

DUMPSTER WALL
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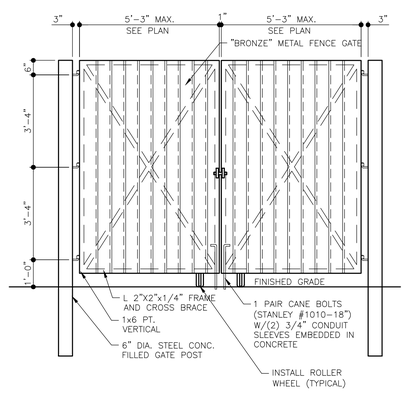

DUMPSTER GATE DETAIL
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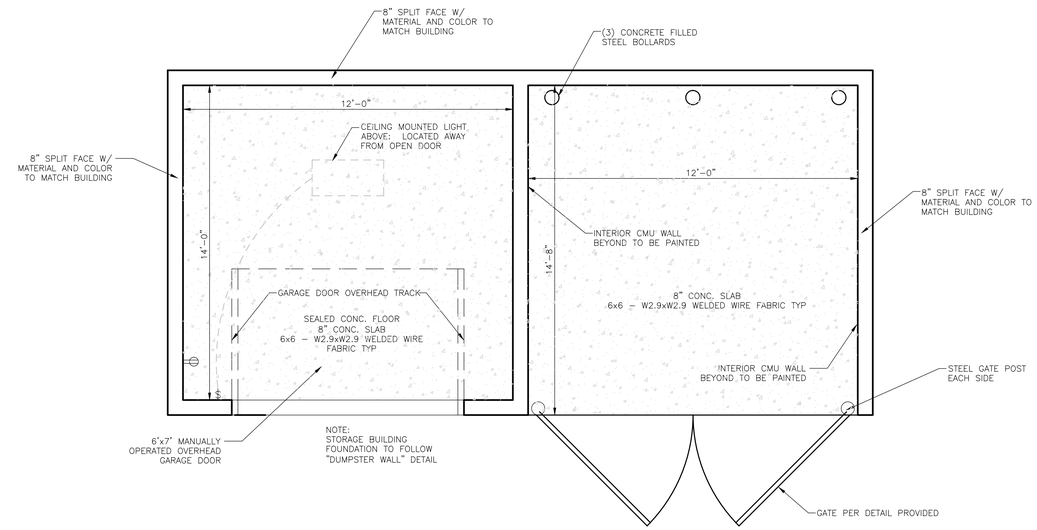

DUMPSTER ENCLOSURE AND STORAGE BUILDING - PLAN VIEW
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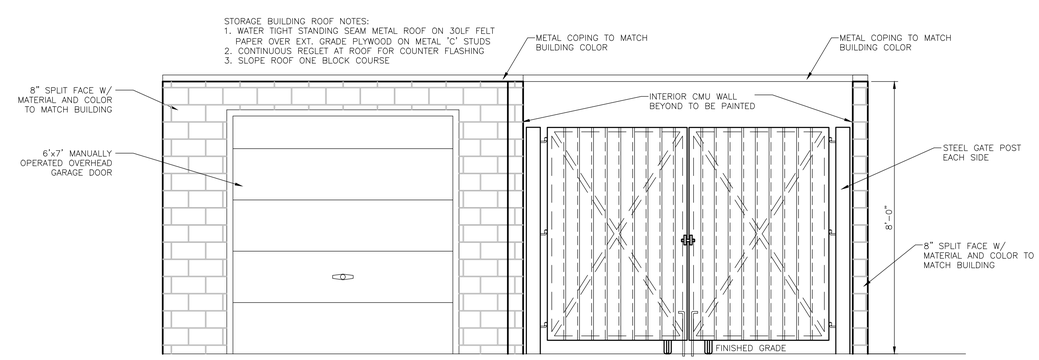

DUMPSTER ENCLOSURE AND STORAGE BUILDING - FRONT ELEVATION
NO SCALE

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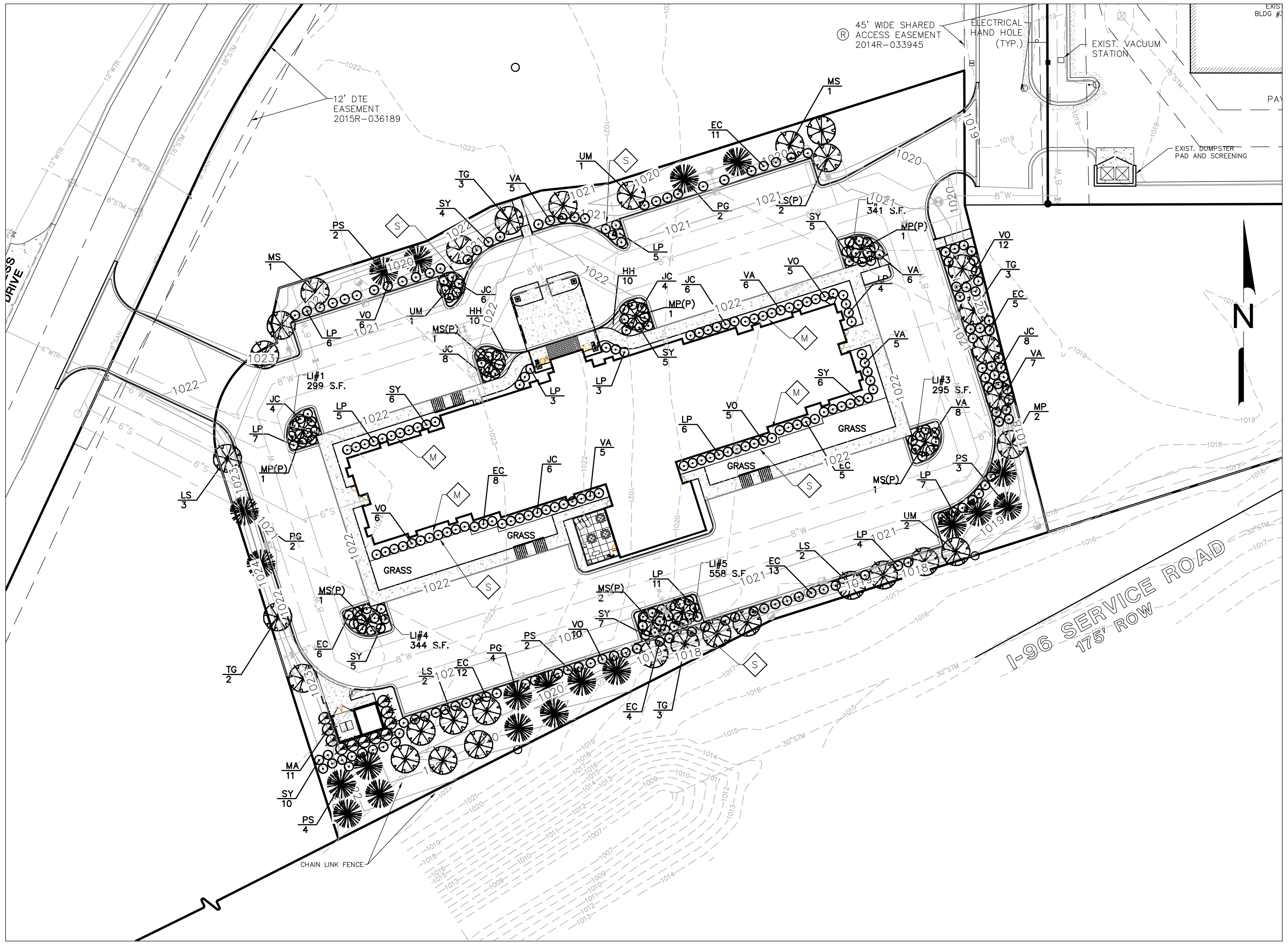


SITE INFORMATION

PARKING AREA LANDSCAPING
TOTAL SPACES = 115
REQUIRED
1 CANOPY TREE AND 100 S.F. LANDSCAPE AREA PER 12 SPACES
115 / 12 = 9.6 = 10
REQUIRED TREES = 10
REQUIRED LANDSCAPE AREA = 10 * 100 = 1,000 S.F.
PROVIDED
TREES = 10
LANDSCAPE AREA = 1,837 S.F.

CARE FOR PLANTS BEFORE PLANTING

PLANTS DESIGNATED "BB" SHALL BE BALLED AND BURLAPPED WITH FIRM NATURAL BALLS OF EARTH. CRACKED, LOOSENED OR BROKEN BALLS SHALL NOT BE PLANTED. THEY SHALL BE MARKED WITH SPRAY PAIN AND IMMEDIATELY REMOVED FROM THE JOB SITE. IMMEDIATELY FOLLOWING DELIVERY AT THE JOB SITE, ALL PLANTS THAT WILL NOT BE PLANTED THAT SAME DAY SHALL BE "HEELED IN" WITH SHREDDED BARK OR MOIST SOIL AND KEPT MOIST UNTIL PLANTED.

THE TRUNKS AND BRANCHES OF ALL TREES SHALL BE PROTECTED FROM INJURY OF ANY KIND DURING ALL OPERATIONS. THE OWNER'S REPRESENTATIVE SHALL REJECT ANY TREES THAT ARE INJURED.

PLANTING

THE CONTRACTOR IS RESPONSIBLE FOR PLANTING MATERIALS PLUMB. SET THE TOP OF THE ROOT BALL AT OR SLIGHTLY HIGHER THAN THE SURROUNDING GRADE. PLANTS SHALL BE FACED TO GIVE THE BEST APPEARANCE OR RELATIONSHIP TO ADJACENT STRUCTURES. NO FILLING WILL BE PERMITTED AROUND TRUNK OR STEMS. WHEN THE PLANT HAS BEEN PROPERLY SET, THE HOLE SHALL BE BACKFILLED TO 1/2 THE DEPTH OF THE BALL WITH PREPARED TOPSOIL MIXTURE, FIRMLY PACKED AND WATERED-IN AT TIME OF PLANTING. LOOSED AND REMOVE BURLAP AND LACING FROM UPPER 1/3 OF THE ROOT BALL. BACKFILL WITH PREPARED TOPSOIL, WHICH AFTER COMPACTION IS FLUSH WITH THE SURROUNDING GROUND.

MULCHING

ALL PLANT MATERIAL SHALL BE ENCIRCLED WITH A 4" MINIMUM COVERING OF NON-DYED SHREDDED BARK MULCH TO 6" OUTSIDE THE PLANTING HOLE, TAPERING MULCH TO 2" AROUND THE TRUNK OF ALL PLANTS. SUBMIT SAMPLE TO THE OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE PLACEMENT. WOOD CHIPS SHALL NOT BE ALLOWED ON THIS JOB.

WRAPPING DECIDUOUS TREES

TREE WRAP SHALL COVER TRUNKS OF ALL DECIDUOUS TREES BEGINNING BELOW THE SOIL LINE JUST ABOVE THE ROOTS. TIE WITH TWINE IN 5 PLACES, INCLUDING THE TOP AND BOTTOM OF WRAPPING. MASKING TAPE OR WIRE WILL NOT BE ALLOWED.

BRACING AND GUYING

GUYING SHALL BE EMPLOYED TO PREVENT LEANING OR LOOSENING OF THE TREE FROM THE BALL. BRACING MATERIAL SHALL BE T-POSTS PAINTED GREEN. GUYING MATERIAL SHALL BE 12 GAUGE WIRE AND GARDEN HOSE 1/2 INCH DIAMETER. GUY WIRE SHALL BE ENCASED IN HOSE TO PREVENT DIRECT CONTACT WITH THE TREE. DECIDUOUS TREES SHALL BE BRACED OR GUYED IMMEDIATELY AFTER THE TREE WRAPPING IS COMPLETE.

STEEL LANDSCAPE EDGING

4" STEEL LANDSCAPE EDGING SHALL BE USED ON THIS PROJECT. ALUMINUM OR PLASTIC EDGING WILL NOT BE ALLOWED.

PRUNING

UPON COMPLETION, ALL PLANT MATERIAL MUST BE PRUNED. THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED BRANCHES AND TO COMPENSATE FOR THE LOSS OF ROOTS FROM TRANSPLANTING. ALL CUTS SHALL BE MADE FLUSH LEAVING NOT STUBS. PRUNING PAIN SHALL NOT BE USED.

FINISHING AND CLEANING UP

IMMEDIATELY UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL CLEAN UP THE AREA OF SURPLUS MATERIALS. THE CONTRACTOR SHALL REPAIR AND RE-ESTABLISH TURF IN RUTTED AREAS.

WARRANTY

THE LANDSCAPE INSTALLATION CONTRACTOR SHALL REPLACE ALL UNHEALTHY VEGETATION AND PLANTINGS WITHIN TWO (2) YEAR OF INITIAL PLANTING OR SUBSEQUENT PLANTING PERIOD.

DESCRIPTION

THIS WORK SHALL CONSIST OF PROVIDING ALL NECESSARY MATERIALS, LABOR, EQUIPMENT, TOOLS AND SUPERVISION REQUIRED FOR THE EXECUTION AND GUARANTEE OF ALL PLANTINGS AND RELATED WORK AS SHOWN ON THE DRAWINGS.

PLANT MATERIALS SHALL CONFORM TO THE SIZES STATED ON THE PLANT LIST AND SHALL BE OF A MINIMUM SIZE OR LARGER. ALL MEASUREMENTS
OF SPREAD, CALIPER, BALL SIZE, TRUNK CROWN RATIO, QUALITY DESIGNATIONS, ETC., SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "ANSI STANDARDS FOR NURSERY STOCK". PLANT MATERIAL SHALL BE NURSERY GROWN AND INSPECTED BY THE OWNER'S REPRESENTATIVE AT THE SITE PRIOR TO PLANTING. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL AT ANY TIME.

NURSERY STOCK SHALL BE PREPARED FOR SHIPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT ANSI SPECIFICATION Z60.1 AND SHALL BE ENCLOSED OR COVERED DURING TRANSPORTATION TO PREVENT DRYING.

SITE PREPARATION

THE CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND PROTECT AND REPAIR UTILITIES ENCOUNTERED DURING CONSTRUCTION WHETHER SHOWN ON THE PLANS OR NOT.

INDIVIDUAL HOLES SHALL BE CENTERED AT STAKED PLANT LOCATIONS. CONTRACTOR IS TO STAKE PRIOR TO PLACEMENT OF PLANT MATERIAL AND
OBTAIN APPROVAL FROM THE OWNER'S REPRESENTATIVE. PLANTING HOLES SHALL BE DUG LARGE ENOUGH TO PERMIT PLACING PREPARED TOPSOIL
18" LATERALLY BEYOND THE ENDS OF THE ROOT BALLS FOR SHADE AND EVERGREEN TREES AND 6" LATERALLY FOR SHRUBS UNLESS OTHERWISE SPECIFIED.

EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE AT THE TIME THE HOLE IS DUG. THE PLANTING HOLE SHALL BE BACKFILLED WITH PREPARED
TOPSOIL THE SAME DAY THEY ARE DUG.

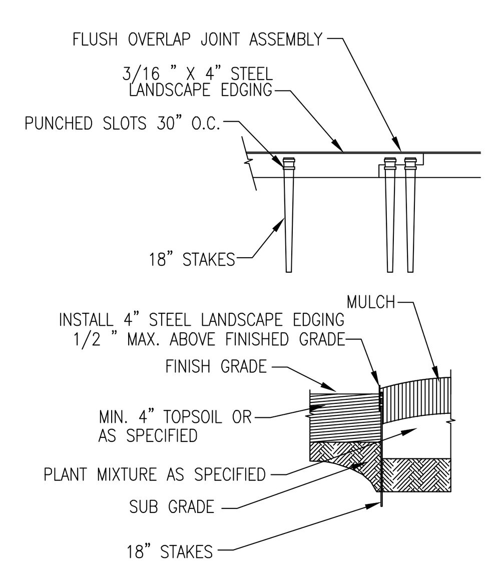
TOPSOIL SHALL AT FERTILE, FRIABLE NATURAL TOPSOIL OF CLAY LOAM CHARACTER CONTAINING AT LEAST 5% BUT NOT MORE THAN 20% BY WEIGHT
OF ORGANIC MATTER WITH A PH RANGE FROM 6.0 TO 7.0. TOPSOIL SHALL BE FREE OF CLAY LUMPS, COURSE SAND, STONES, PLANT ROOTS, STICKS OR
OTHER FOREIGN MATTER.

KEY NOTES

(M) MULCH (SHREDDED BARK) 5" DEPTH

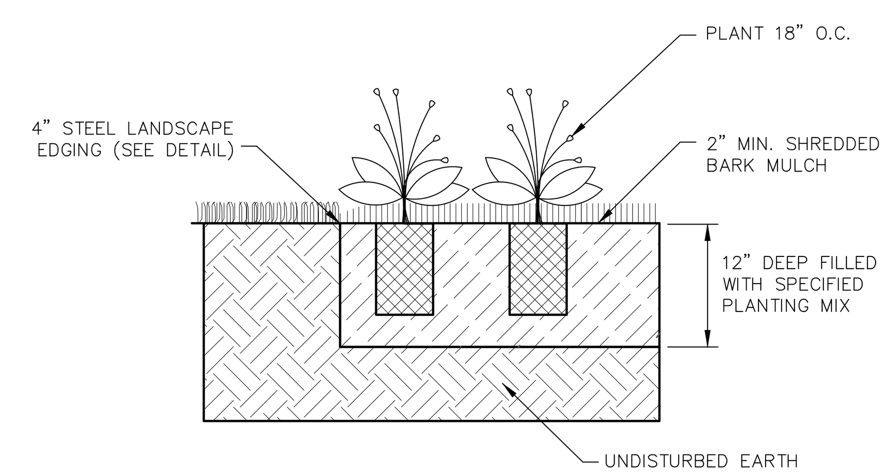
(S) 4" STEEL EDGING

THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.



4" STEEL LANDSCAPE EDGE

SCALE: NONE



PERENNIAL PLANTING BED

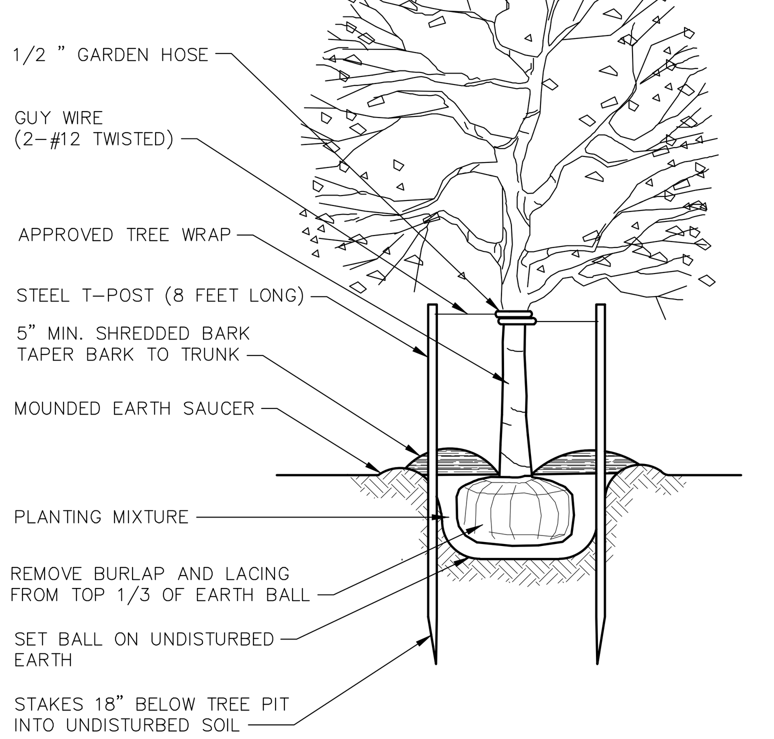
SCALE: NONE

Know what's below. Call before you dig.

0' 40' 80' 120'
SCALE: 1" = 40'

QUANITITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE
49	SY	TAXUS S.M. 'SEBIAN'	SEBIAN YEW	24" HT B&B
61	LP	SPIRAEA JAPONICA 'LITTLE PRINCESS'	LITTLE PRINCESS SPIRAEA	24" HT B&B
44	VO	VIBURNUM OPULUS 'COMPACTUM'	COMPACT EUROPEAN CRANBERRY BUSH	24" HT B&B
60	EC	EUONYMUS ALATUS 'COMPACTUM'	DWARF BURING BUSH	24" HT B&B
36	VA	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	24" HT B&B
42	JC	JUNIPERUS C. 'SEAGREEN'	SEA GREEN JUNIPER	24" HT B&B
5	MP	MALUS 'PRAIRIEFIRE'	PRAIRIEFIRE CRABAPPLE	2" CAL B&B
7	MS	MALUS 'SNOWDRIFT'	SNOWDRIFT CRABAPPLE	2" CAL B&B
15	TG	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2-1/2" CAL B&B
4	UM	ULMUS AMERICANA 'VALLEY FORGE'	VALLEY FORGE AMERICAN ELM	2-1/2" CAL B&B
10	LS	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEETGUM	2-1/2" CAL B&B
12	PS	PINUS STROBUS	EASTERN WHITE PINE	6' HT.
8	PG	PICEA GLAUCA	WHITE SPRUCE	6' HT.
20	HH	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILLY	#1 POT
11	MA	THUJLA OCCIDENTALIS 'TECHNY'	MISSION ARBORVITAE	5' HT. B&B

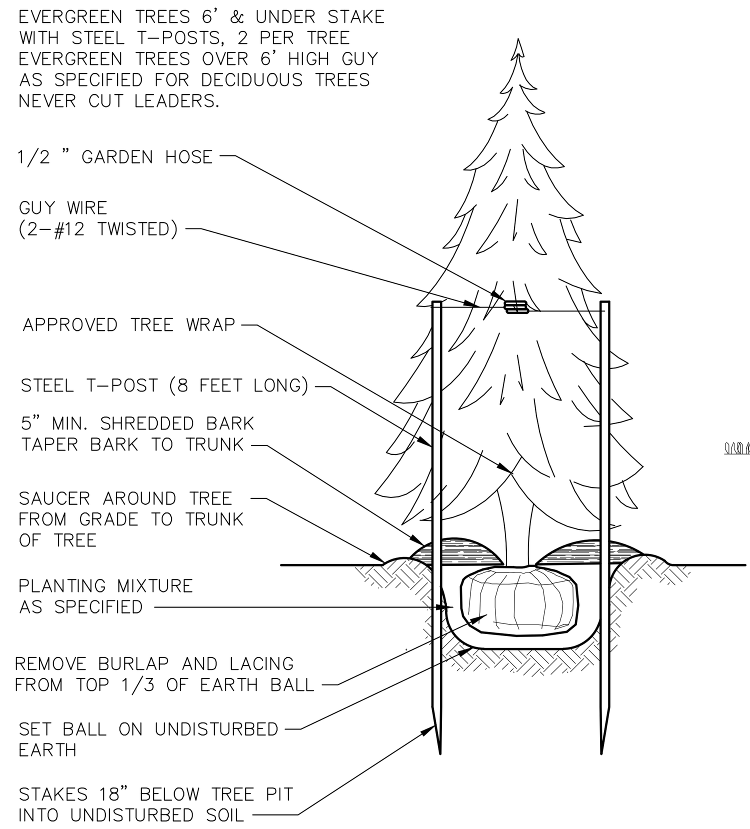
PLANT LIST



DECIDUOUS TREE PLANTING

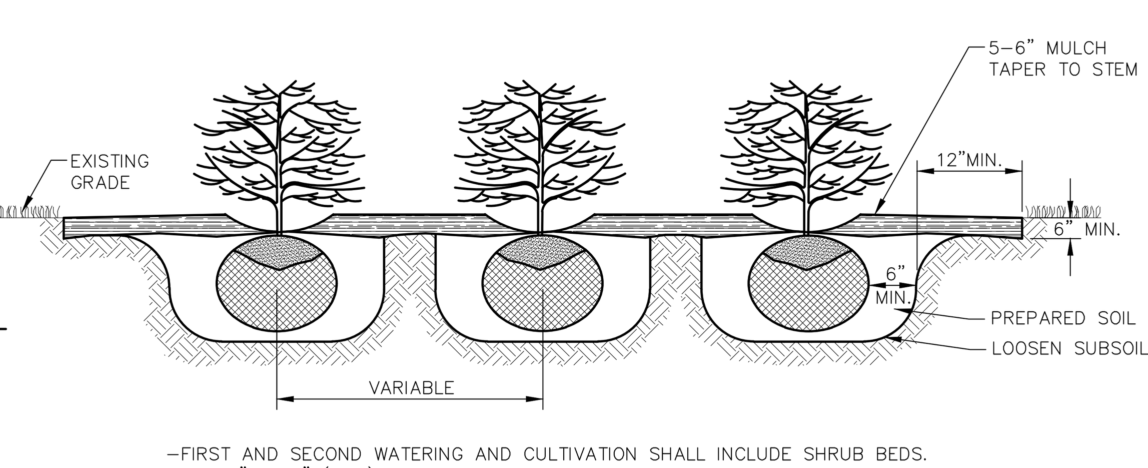
SCALE: NONE

EVERGREEN TREES 6' & UNDER STAKE WITH STEEL T-POSTS, 2 PER TREE EVERGREEN TREES OVER 6' HIGH GUY AS SPECIFIED FOR DECIDUOUS TREES NEVER CUT LEADERS.



EVERGREEN TREE PLANTING

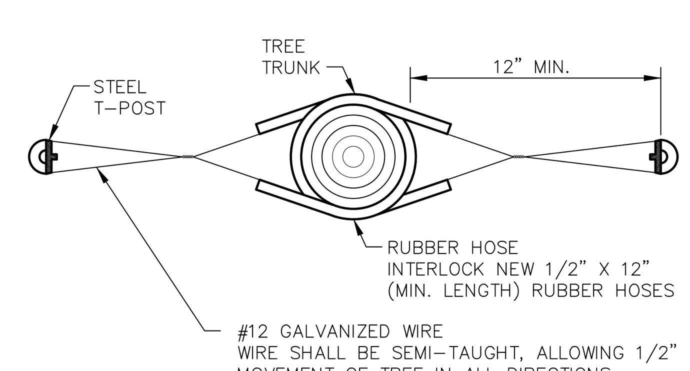
SCALE: NONE



-FIRST AND SECOND WATERING AND CULTIVATION SHALL INCLUDE SHRUB BEDS.
-CUT 6" X 12" (MIN.) EDGING AROUND THE PERIMETER OF ALL SHRUB BEDS SHOWN ON THE PLANS. SPRAY A NON-PERSISTANT GLYPHOSATE HERBICIDE TO ENTIRE SHRUB BEDS PRIOR TO PLANTING AND BARK PLACEMENT.
-SHRUB BEDS ARE TO BE PAID FOR BY THE PAY ITEM 'SITE PREPARATION'.
-ALL PLANTS SHALL BE SET PLUMB AND HAVE THE BEST SIDE OF PLANT FACING THE MAIN VIEWING DIRECTION.

SHRUB BED DETAIL

SCALE: NONE



BRACING DETAIL

SCALE: NONE

GENERAL NOTES

1. CONTRACTOR TO PROVIDE DESIGN AND INSTALLATION OF UNDERGROUND IRRIGATION SYSTEM IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND REGULATORY AGENCY REQUIREMENTS. ALL LANDSCAPING AND GRASS AREAS TO BE IRRIGATED. IRRIGATION CONTROL PANEL SHALL BE LOCATED WITHIN THE BUILDING AT DESIGNATED LOCATION.
2. ALL GREEN SPACES AND PLANTING AREAS SHALL BE IRRIGATED. CONTRACTOR SHALL SUPPLY IRRIGATION DESIGN PLAN TO ENGINEER AS SUBMITTAL PRIOR TO CONSTRUCTION.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL PERMITS AND POST ALL BONDS PRIOR TO CONSTRUCTION.
4. REFER TO PLUMBING PLANS FOR LOCATION OF IRRIGATION METER.
5. ALL GRASS AREAS TO BE HYDRO-SEEDED.
   SEED MIX
   30% PERENNIAL RYEGRASS
   20% PARK KENTUCKY BLUEGRASS
   45% CREEPING RED FESCUE
   5% ANNUAL RYEGRASS

   SEEDING RATE: 4#/1000 S.F.
6. SPACE ALL SHRUBS AT 5-FEET ON CENTER UNLESS OTHERWISE INDICATED ON THE PLANS
7. ALL DISTURBED LAWN AREAS SHALL BE RESTORED TO AT LEAST PREVIOUS CONDITION IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
8. THE LANDSCAPE CONTRACTOR SHALL INCLUDE TOPSOIL IN BASE BID. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE AMOUNT OF TOPSOIL AVAILABLE ON-SITE.

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HOWELL HOSPITALITY, INC.
GRAND OAKS DRIVE
GENOA TOWNSHIP, LIVINGSTON CO, MI

SECTION 8, T2N, R5E

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ISSUED FOR	DATE
SPA	02.01.17
SPA	02.22.17
SPA	05.01.17
SPA	05.23.17
SPA	06.23.17

DATE :
DRAWN : ACA
CHECKED : JT
SCALE : 1"=40'
JOB NO : BD-16-237
SHEET TITLE :
LANDSCAPE PLAN AND DETAILS
SHEET
L1.0

PIPE RESTRAINT SCHEDULE

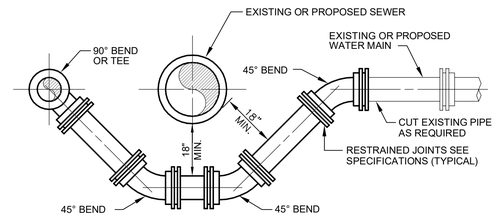
GROUND BURIED PRESSURE PIPE - POLYETHYLENE ENCASED DUCTILE IRON PIPE

PIPE DIAMETER	TEES, 90° BENDS	45° BENDS	22-1/2° BENDS	11-1/4° BENDS	DEAD ENDS	REDUCERS (ONE SIZE REDUCTION)*	REDUCERS (TWO SIZE REDUCTIION)*
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	168

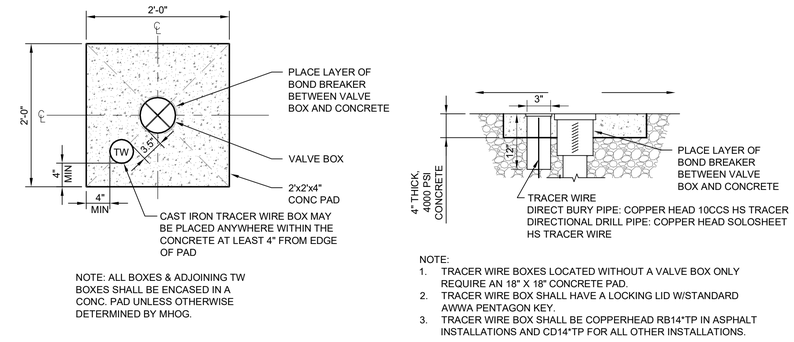
1. LENGTHS OF PIPE RESTRAINT ARE GIVEN IN FEET.
2. IF REQUIRED PIPE DIAMETER IS NOT LISTED IN THIS TABLE, THE NEXT LARGEST PIPE DIAMETER SHALL BE USED.
3. THIS TABLE IS BASED ON A TEST PRESSURE OF 180 PSI (OPERATING PRESSURE PLUS WATER HAMMER. FOR OTHER TEST PRESSURES, ALL VALUES TO BE INCREASED OR DECREASED PROPORTIONALLY.
4. 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.
5. IF TIE 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 UTILITY OFFSET



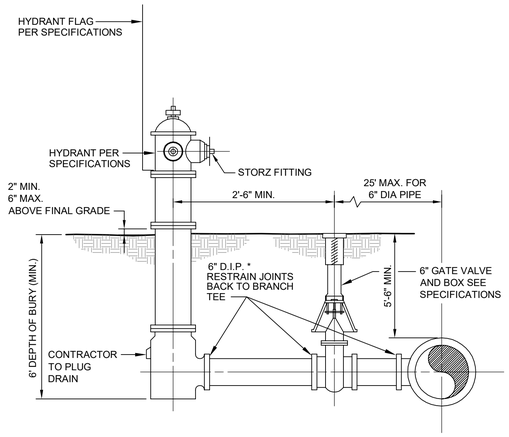
NOTE: ALL BOXES & ADJOINING TW BOXES SHALL BE ENCASED IN A CONC. PAD UNLESS OTHERWISE DETERMINED BY MHOG.

NOTE:
1. TRACER WIRE BOXES LOCATED WITHOUT A VALVE BOX ONLY REQUIRE AN 18" X 18" CONCRETE PAD.
2. TRACER WIRE BOX SHALL HAVE A LOCKING LID W/STANDARD AWWA PENTAGON KEY.
3. TRACER WIRE BOX SHALL BE COPPERHEAD RB14"TP IN ASPHALT INSTALLATIONS AND CD14"TP FOR ALL OTHER INSTALLATIONS.

PLAN SECTION

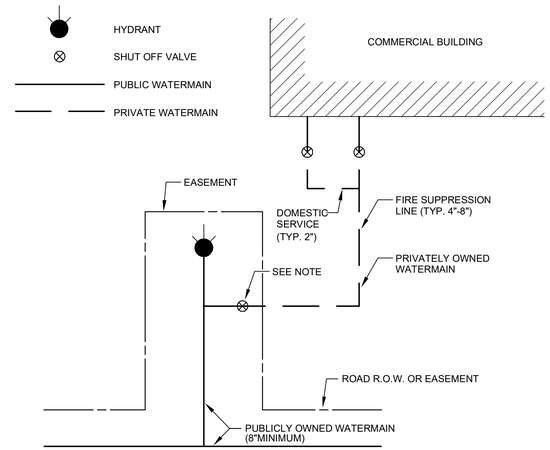
VALVE/TRACER WIRE BOX IN CONCRETE DETAIL

NO SCALE



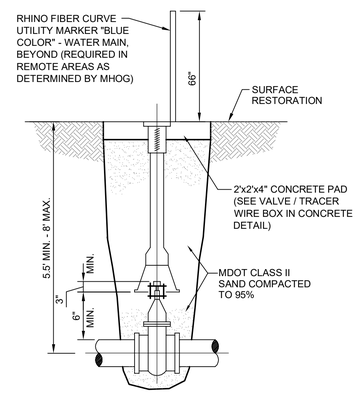
* THE LENGTH OF 6" PIPE FROM THE MAIN TO THE HYDRANT ASSEMBLY CANNOT EXCEED 25'. ANY PIPE OVER 25 FEET SHALL BE 8" DIAMETER MINIMUM AND DESIGNED PER MHOG SPECIFICATIONS.

FIRE HYDRANT ASSEMBLY



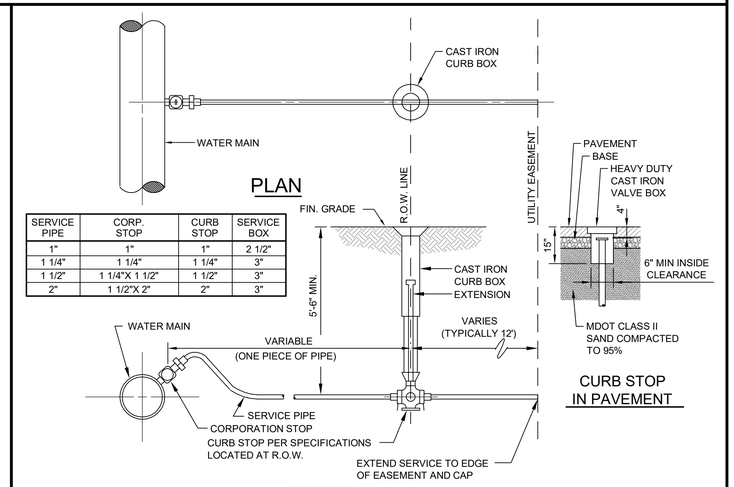
NOTE: PUBLICLY OWNED SHUT OFF VALVE TO BE LOCATED IN EASEMENT.

COMMERCIAL BUILDING WATER SERVICE LAYOUT



NOTES:
1. VALVE BOX SHALL NOT REST ON VALVE OR MAIN LINE PIPE.
2. A VALVE STEM EXTENSION WITH CENTERING RING IS REQUIRED FOR VALVES BURIED DEEPER THAN 6'.

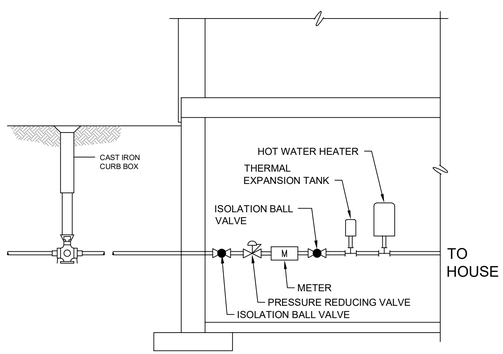
GATE VALVE AND BOX



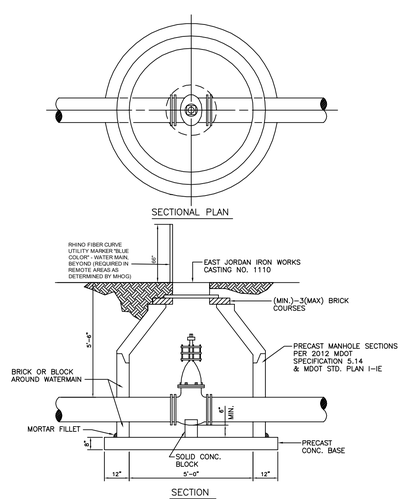
SERVICE PIPE	CORP. STOP	CURB STOP	SERVICE BOX
1"	1"	1"	2 1/2"
1 1/4"	1 1/4"	1 1/4"	3"
1 1/2"	1 1/4"X 1 1/2"	1 1/2"	3"
2"	1 1/2"X 2"	2"	3"

SECTION
WATER SERVICE LATERAL

..\MHOGLogo.jpg

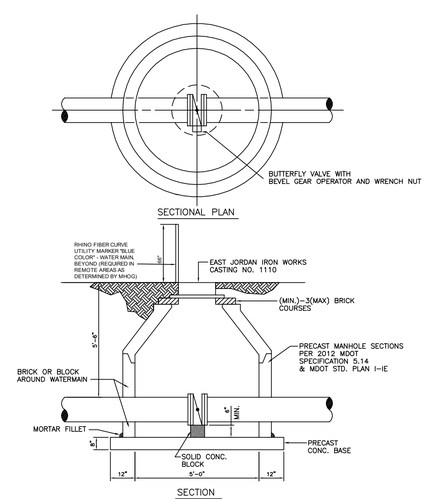


PRIVATE RESIDENCE PRESSURE REDUCING VALVE (PRV)



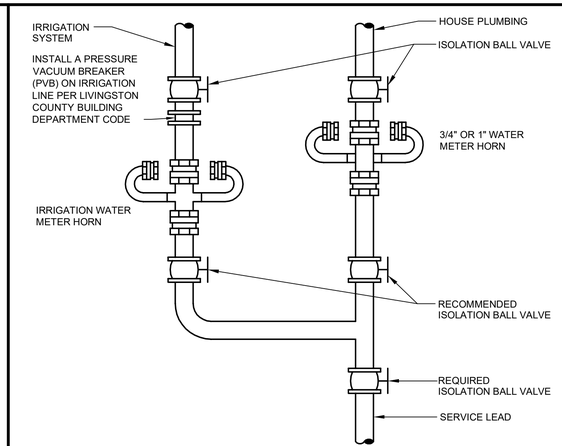
NOTES:
1. ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.
2. BLOCK MANHOLES TO BE USED ONLY WITH ENGINEERS PERMISSION.
3. NO STEPS PERMITTED.

GATE VALVE AND WELL



NOTES:
1. ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.
2. BLOCK MANHOLES TO BE USED ONLY WITH ENGINEERS PERMISSION.
3. NO STEPS PERMITTED.

BUTTERFLY VALVE AND WELL



NOTES:
1. 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).
2. PROPERTIES DESIGNATED "HIGH HAZARD" PER THE MHOG CROSS CONNECTION RULES MANUAL WILL REQUIRE THE INSTALLATION OF A REDUCED PRESSURE ZONE (RPZ) BACK FLOW PREVENTION DEVICE.

TYPICAL METER HORN INSTALLATION

MARION HOWELL OCEOLA GENOA
Sewer and Water Authority

STANDARD DETAILS

Scale: NONE
Issued Date JANUARY - 2014
UPDATED: MAY 2015
UPDATED: FEBRUARY 2016

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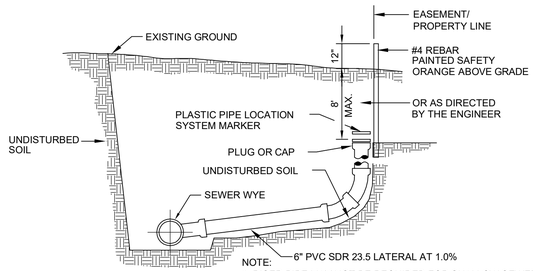
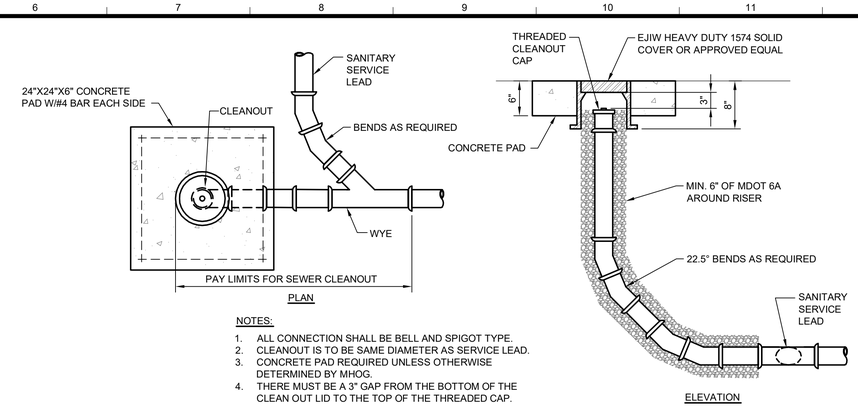


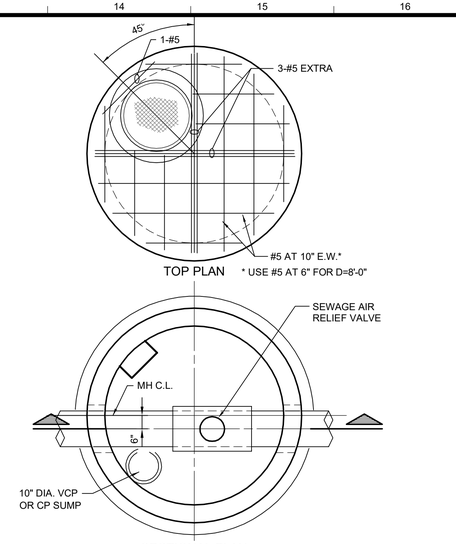
NOTE:
1. RISER PIPE MAY NOT BE REQUIRED FOR SHALLOW SEWERS AS SHOWN.
2. WHEN CONNECTING TO AN EXISTING SEWER THE AUTHORITY MAY REQUIRE CORING OF THE EXISTING PIPE AND INSTALLATION OF A SEWER SADDLE. SADDLE SHALL BE ROMAC "CB" SEWER SADDLE OR APPROVED EQUAL.

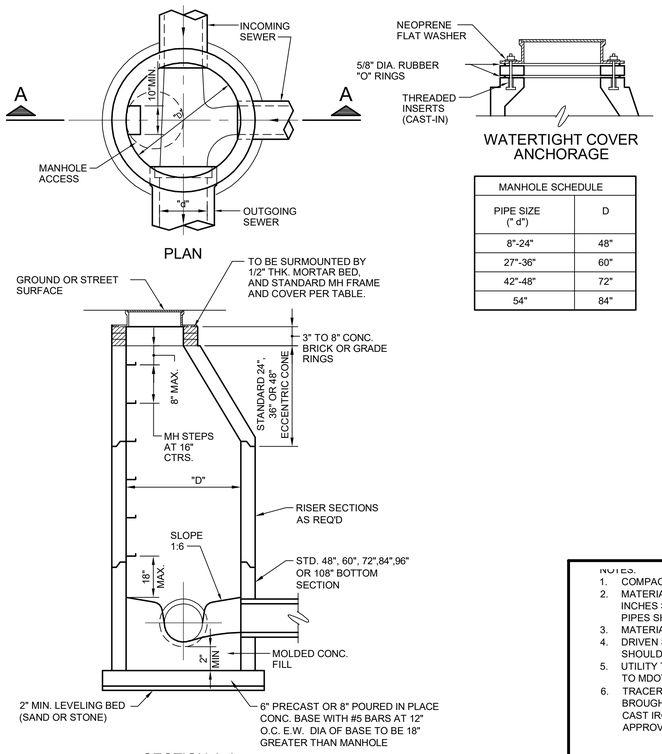
SANITARY SEWER LATERAL



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

SEWER CLEANOUT DETAIL



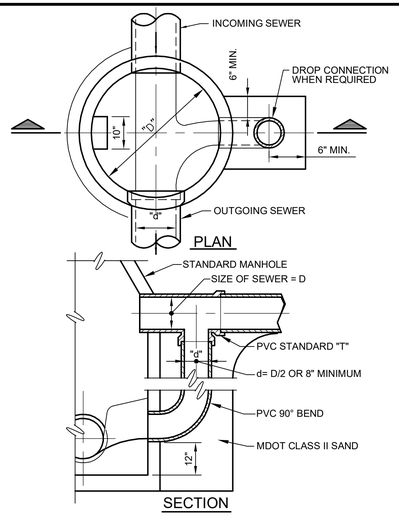


MANHOLE SCHEDULE	
PIPE SIZE (" d")	D
8"-24"	48"
27"-36"	60"
42"-48"	72"
54"	84"

NOTES:
1. ALL SANITARY MANHOLES TO BE PRECAST REINFORCED CONCRETE WITH PREMIUM JOINTS. SEE SPECIFICATIONS FOR BASE SLAB AND PIPE OPENINGS AND CONNECTIONS.
2. MANHOLE CONES SHALL BE THE ECCENTRIC TYPE.
3. PROVIDE 6" OF COMPACTED GRANULAR MATERIAL UNDER ALL PRECAST CONCRETE BASE SLPVC.
4. FORCE MAINS CONNECT DIRECTLY TO A MANHOLE SHALL BE INSTALLED SO THAT THE ELEVATION OF THE PIPE CROWNS MATCH. THE FORCE MAIN SHALL BE DIRECTED DOWNWARD INTO THE FLOW CHANNEL.
5. FOR SANITARY SEWERS ALL PIPES SHALL ENTER MANHOLE THROUGH RUBBER BOOTED CONNECTION.

FRAME & COVER FOR SANITARY SEWER MANHOLES			
		MANUFACTURER OR EQUAL	
TYPE	TYPE OF COVER	EAST JORDAN	NEENAH
MH	SANITARY - SOLID SELF-SEALING	1040.0000	R-1642
MH	SANITARY - SOLID WATERTIGHT	1040-APT	R-1916-F
CO	SOLID	1574A	R-1973-A

STANDARD MANHOLE



REQUIRED WHEN AN INLET PIPE IS 24" OR MORE ABOVE THE OUTLET PIPE IN A MANHOLE

DROP CONNECTION

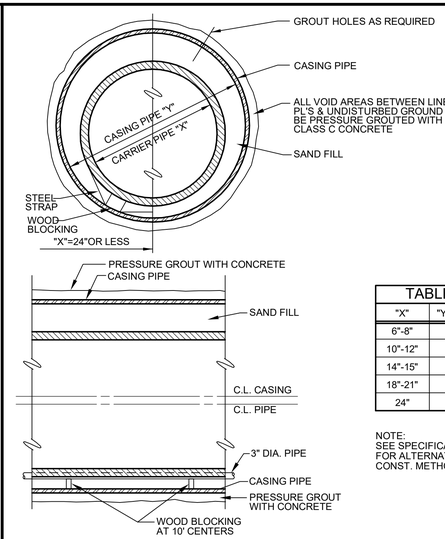
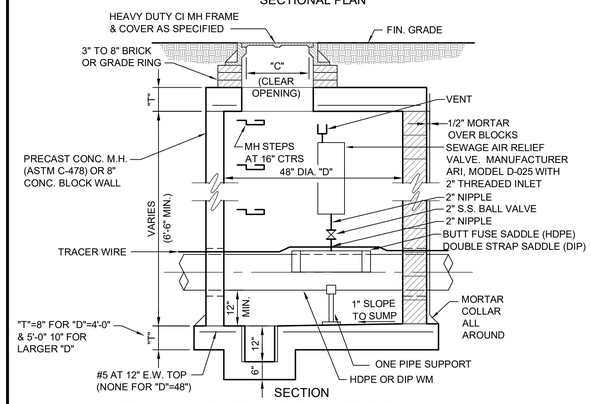


TABLE	
"X"	"Y"(MIN)
6"-8"	20"
10"-12"	24"
14"-15"	30"
18"-21"	36"
24"	42"

NOTE:
SEE SPECIFICATIONS FOR ALTERNATE CONST. METHODS

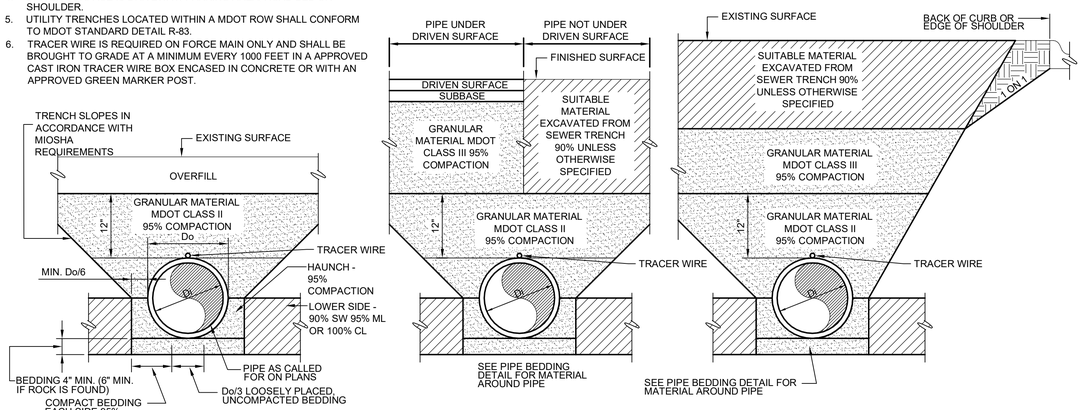
CASING PIPE



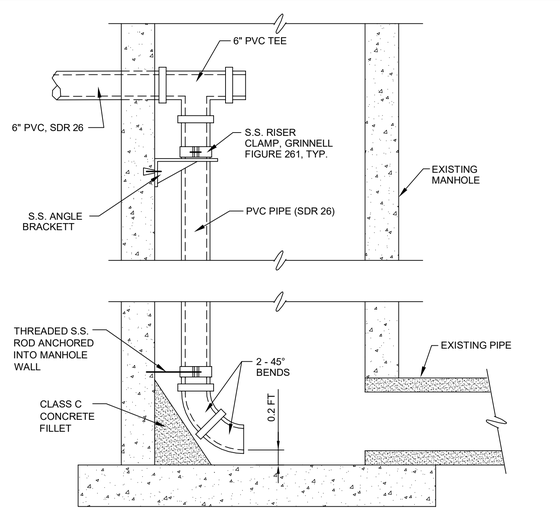
NOTE: ALL PLUMBING MATERIALS TO BE NON-CORROSIVE, ALL FITTINGS SHALL BE STAINLESS STEEL.

AIR RELIEF STRUCTURE

NOTES:
1. COMPACTION PRESENTED AS MINIMUM STANDARD PROCTOR VALUES.
2. MATERIALS AROUND THERMOPLASTIC PIPE WITH DIAMETER < 6 INCHES SHALL PASS 0.5 INCH SIEVE, MATERIALS AROUND OTHER PIPES SHALL PASS 1.5 INCH SIEVE.
3. MATERIALS AROUND HDPE PIPE TO BE MDOT 6A OR 21AA.
4. DRIVEN SURFACE IS DRIVEWAY, PARKING AREA, ROAD BED OR SHOULDER.
5. UTILITY TRENCHES LOCATED WITHIN A MDOT ROW SHALL CONFORM TO MDOT STANDARD DETAIL R-83.
6. TRACER WIRE IS REQUIRED ON FORCE MAIN ONLY AND SHALL BE BROUGHT TO GRADE AT A MINIMUM EVERY 1000 FEET IN A APPROVED CAST IRON TRACER WIRE BOX ENCASED IN CONCRETE OR WITH AN APPROVED GREEN MARKER POST.



TRENCH EXCAVATION & PIPE BEDDING



INTERIOR SEWER LATERAL DROP CONNECTION

MARION HOWELL OCEOLA GENOA
Sewer and Water Authority

STANDARD DETAILS

Scale: NONE
Issued Date JANUARY - 2014
UPDATED MAY 2015

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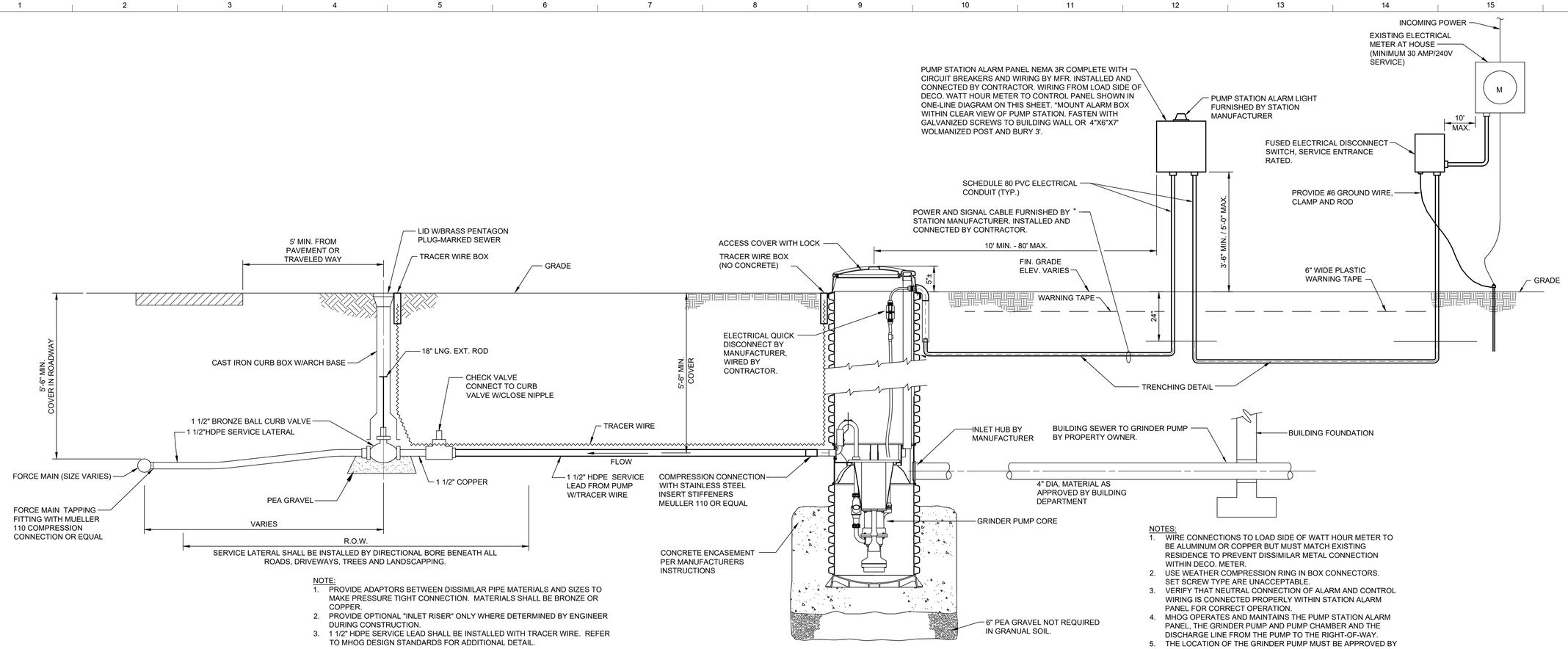
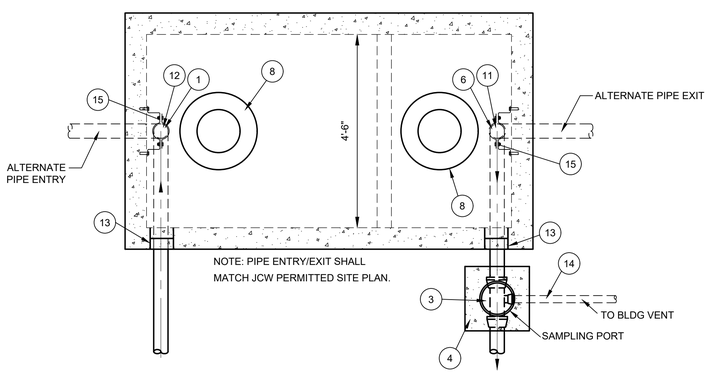


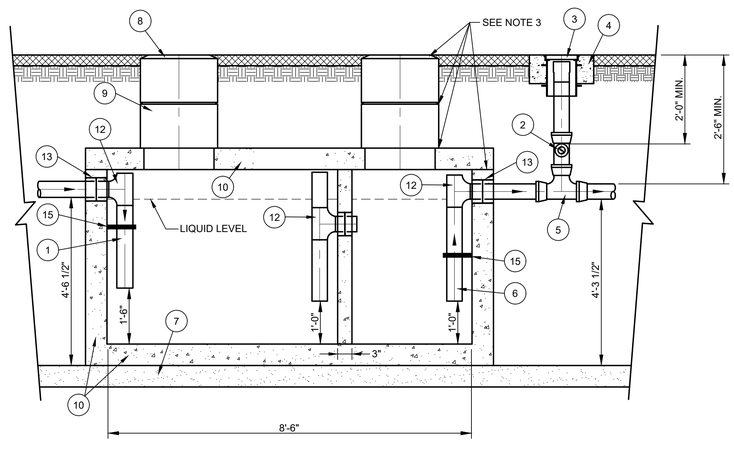
NOTE:
1. PROVIDE ADAPTORS BETWEEN DISSIMILAR PIPE MATERIALS AND SIZES TO MAKE PRESSURE TIGHT CONNECTION. MATERIALS SHALL BE BRONZE OR COPPER.
2. PROVIDE OPTIONAL "INLET RISER" ONLY WHERE DETERMINED BY ENGINEER DURING CONSTRUCTION.
3. 1 1/2" HDPE SERVICE LEAD SHALL BE INSTALLED WITH TRACER WIRE. REFER TO MHOG DESIGN STANDARDS FOR ADDITIONAL DETAIL.

SIMPLEX/DUPLEX GRINDER PUMPING STATION

NO SCALE

NOTES:
1. WIRE CONNECTIONS TO LOAD SIDE OF WATT HOUR METER TO BE ALUMINUM OR COPPER BUT MUST MATCH EXISTING RESIDENCE TO PREVENT DISSIMILAR METAL CONNECTION WITHIN DECO. METER.
2. USE WEATHER COMPRESSION RING IN BOX CONNECTORS. SET SCREW TYPE ARE UNACCEPTABLE.
3. VERIFY THAT NEUTRAL CONNECTION OF ALARM AND CONTROL WIRING IS CONNECTED PROPERLY WITHIN STATION ALARM PANEL FOR CORRECT OPERATION.
4. MHOG OPERATES AND MAINTAINS THE PUMP STATION ALARM PANEL, THE GRINDER PUMP AND PUMP CHAMBER AND THE DISCHARGE LINE FROM THE PUMP TO THE RIGHT-OF-WAY.
5. THE LOCATION OF THE GRINDER PUMP MUST BE APPROVED BY MHOG PRIOR TO INSTALLATION. THE GRINDER PUMP MUST BE SERVICEABLE (ACCESSIBLE BY TRUCK) AND FREE FROM OBSTRUCTION.
6. MHOG MUST BE ONSITE FOR STARTUP OF ALL NEW GRINDER PUMPS.





ITEM	DESCRIPTION
1	4" PVC INLET PIPE*
2	4"x4"x2" TEE WITH 2" PIPE TO BUILDING VENT*
3	THREADED C/O CAP JOSAM 58860 OR APP EQUAL**
4	CONCRETE PAD
5	4"x4"x4" TWO-WAY CLEANOUT TEE*
6	4" PVC OUTLET*
7	4" - 6" GRAVEL BEDDING
8	HEAVY-DUTY CAST IRON FRAME AND COVER ***
9	CONCRETE ADJUSTMENT RINGS
10	REINFORCE AS REQUIRED FOR SERVICE CONDITIONS
11	4" PVC 90° ELBOW*
12	4" PVC TEE*
13	A-LOK OR PRESS SEAL PSX PIPE/WALL CONNECTOR
14	2" VENT PIPE (IDENTIFY PIPE TYPE, CLASS & JOINT AS REQUIRED FOR PROJECT)
15	STAINLESS STEEL PIPE SUPPORT CLAMP ****

* 6" PIPE MAY BE SUBSTITUDED TO MATCH UPSTREAM PIPE DIAMETER.
** REFER TO CLEAN OUT DETAIL(S) ON STANDARD DETAIL SHEET.
*** CLAY & BAILEY 2008 BV OR EQUAL (FROST PROOF COVERS OPTIONAL)
****FM STAINLESS FASTNERS #63 OR EQUAL. 1/2"x2-1/2" SS BRACKET W/ 1/2"x1-1/2" FULLY THREADED SS HEX BOLT WITH 1/2" SS WASHER AND 1/2"X1-3/4" SS ANCHORS. CLAMP TO BE FACTORY INSTALLED.

NOTES:
1. THREE COVERS AND RISERS SHOWN. TWO COVERS AND RISERS CENTERED OVER UPPER TWO BAFFLES ARE OPTIONAL.
2. INTERCEPTOR SIZE - 1000 GAL MINIMUM (REVISE THE SIZE DIMENSIONS, AS NEEDED, FOR LARGER CAPACITY INTERCEPTORS)
3. ALL JOINTS AT THE FRAME & COVER*, CONCRETE ADJUSTMENT RINGS AND THE LID OF THE INTERCEPTOR SHALL BE SEALED WITH A MINIMUM OF TWO (2) ROWS OF 3/4 TO 1 INCH PREFORMED BUTYL JOINT SEALER AND A 6" BUTYL JOINT WRAP AROUND SLEEVE (EZ WRAP). THE ENDS OF THE 6" EZ WRAP SHALL OVERLAP BY 12".
4. PIPING ON THE INTERIOR OF THE INTERCEPTOR SHALL BE PVC WITH SOLVENT-CEMENTED JOINTS.
5. GREASE INTERCEPTOR INCLUDING ADJUSTMENT RINGS AND CASTINGS SHALL BE WATER TESTED FOR WATER TIGHTNESS AFTER THE BACKFILL OPERATIONS HAVE BEEN COMPLETED. WATER TESTING SHALL CONSIST OF THE FOLLOWING: 1. SEAL THE TANK, 2. FILL WITH WATER, 3. LET STAND FOR 24 HOURS, 4. REFILL TANK, 5. TANK IS APPROVED IF WATER LEVEL IS HELD FOR 1 HOUR.
6. ONLY KITCHEN WASTE SHALL BE DIVERTED TO THE GREASE TRAP.

GREASE INTERCEPTOR 1000 GALLON

NO SCALE

C:\\Users\\josh.moore\\Desktop\\mes.png

MARION HOWELL OCEOLA GENOA
Sewer and Water Authority

STANDARD DETAILS

Scale:	NONE
Issued Date	JANUARY - 2014
Updated	APRIL - 2015
Updated	APRIL - 2016
Updated	JUNE - 2016

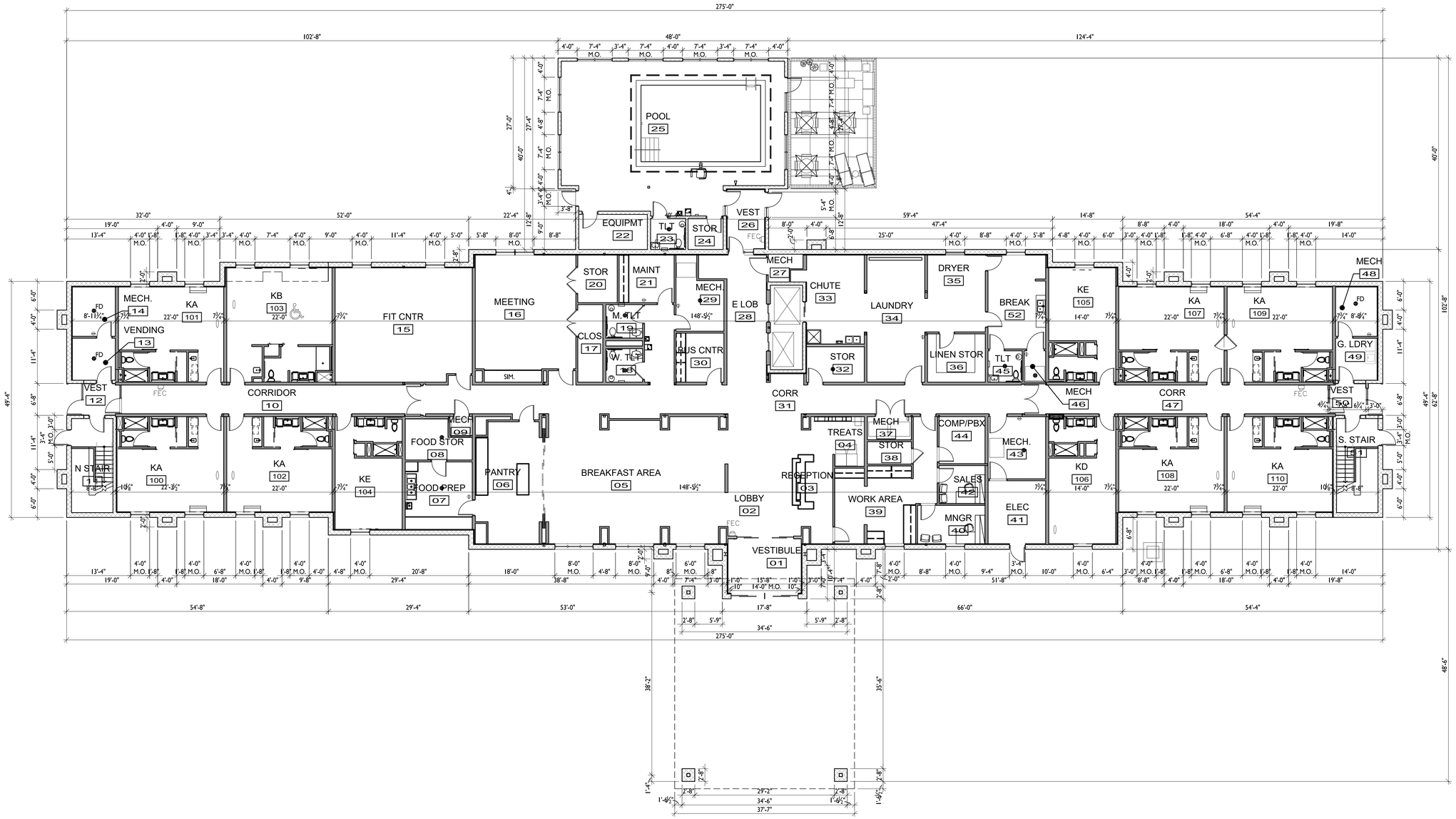
Wednesday, June 29, 2016 9:53:01 AM DRAWING: P:\IER\12719\200-12719-00-000\CAD\SheetFiles\Mhog-std.DWG

EXTERIOR RENDERING

BOWERS+ ASSOCIATES
ARCHITECTURE DESIGN

EXTERIOR RENDERING

BOWERS+ ASSOCIATES
ARCHITECTURE DESIGN



FIRST FLOOR PLAN

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

BOWERS+ASSOCIATES
ARCHITECTURE DESIGN
2400 SOUTH HURON PARKWAY • ANN ARBOR, MI 48104
P: 734.975.2400 • F: 734.975.2410
WWW.BOWERSINCH.COM

CONSULTANT + NAME

Hampton Inn & Suites

PROJECT + INFORMATION

3990 GRAND OAKS DRIVE
GENOA TOWNSHIP, MICHIGAN

PROJECT + NUMBER

17-204

ISSUE + DATE

31 JAN 2017	SITE PLAN
22 FEB 2017	SITE PLAN
12 APR 2017	SITE PLAN
3 MAY 2017	SITE PLAN

SHEET + TITLE

FIRST FLOOR PLAN

17204MASTa.dwg

SHEET + NUMBER

A1.00

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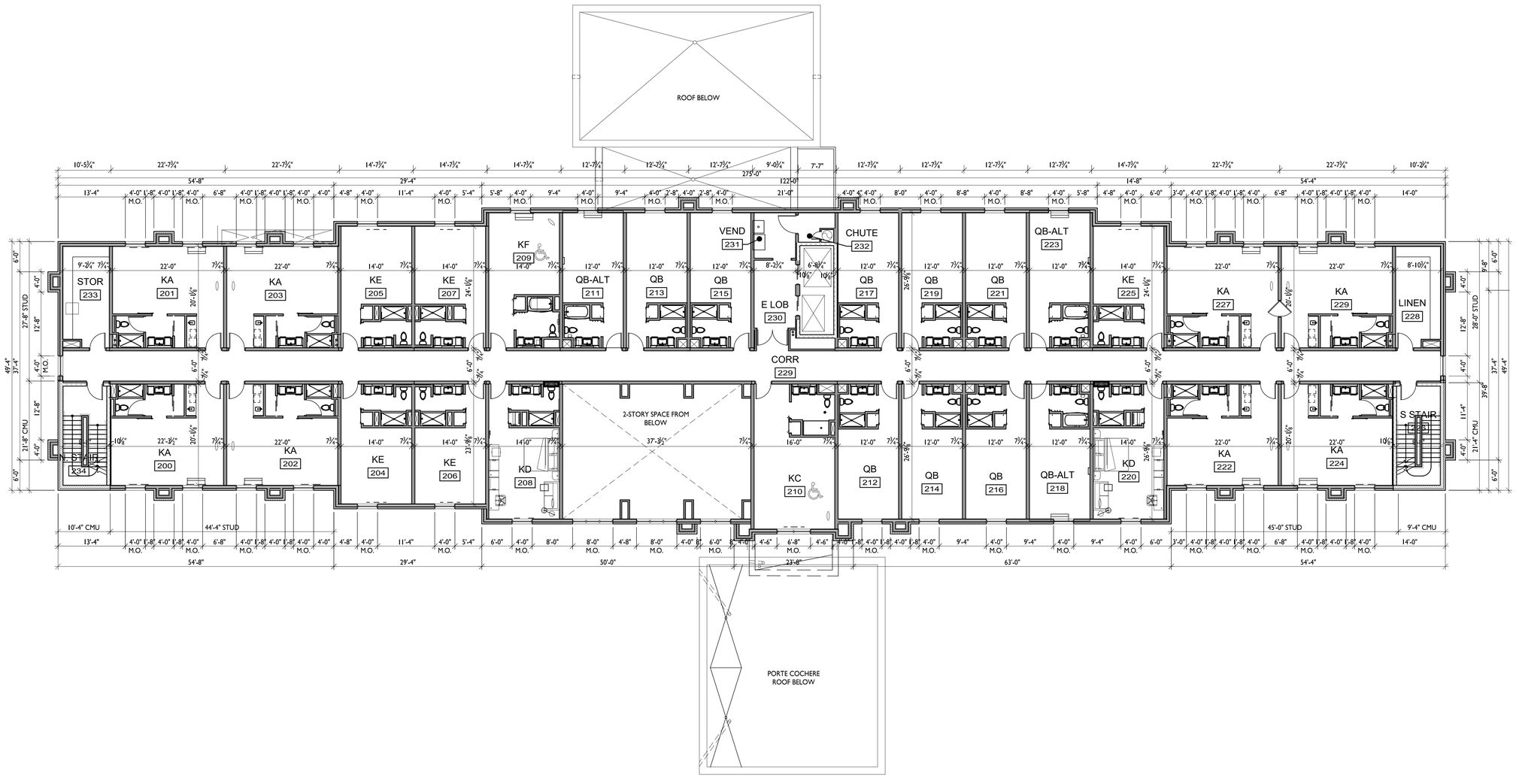

SECOND FLOOR PLAN

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

BOWERS+ASSOCIATES
ARCHITECTURE DESIGN
2400 SOUTH HURON PARKWAY + ANN ARBOR, MI 48104
P: 734.975.2400 + F: 734.975.2410
WWW.BOWERSINCH.COM

CONSULTANT + NAME

Hampton Inn & Suites

PROJECT + INFORMATION

3990 GRAND OAKS DRIVE
GENOA TOWMNSHIP, MICHIGAN

PROJECT + NUMBER

17-204

ISSUE + DATE

31 JAN 2017	SITE PALN
22 FEB 2017	SITE PLAN
12 APR 2017	SITE PALN
3 MAY 2017	SITE PLAN

SHEET + TITLE

SECOND
FLOOR PLAN

17204MASTa.dwg

SHEET + NUMBER

A1.01

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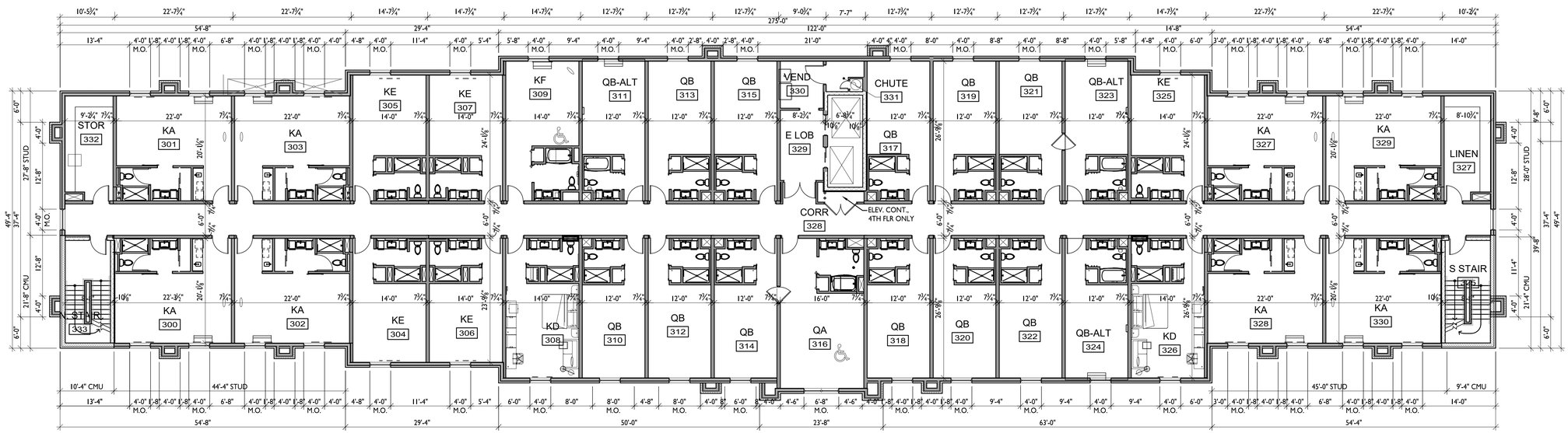

THIRD FLOOR PLAN

SCALE: $\frac{1}{32}$" = 1'-0"

BOWERS+ASSOCIATES
ARCHITECTURE DESIGN
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P: 734.975.2400 • F: 734.975.2410
WWW.BOWERSINCH.COM

CONSULTANT + NAME

Hampton Inn & Suites

PROJECT + INFORMATION

3990 GRAND OAKS DRIVE
GENOA TOWNSHIP, MICHIGAN

PROJECT + NUMBER

17-204

ISSUE + DATE

31 JAN 2017	SITE PLAN
22 FEB 2017	SITE PLAN
12 APR 2017	SITE PLAN
3 MAY 2017	SITE PLAN

SHEET + TITLE

THIRD FLOOR
FLOOR PLAN

17204MASTa.dwg

SHEET + NUMBER

A1.02

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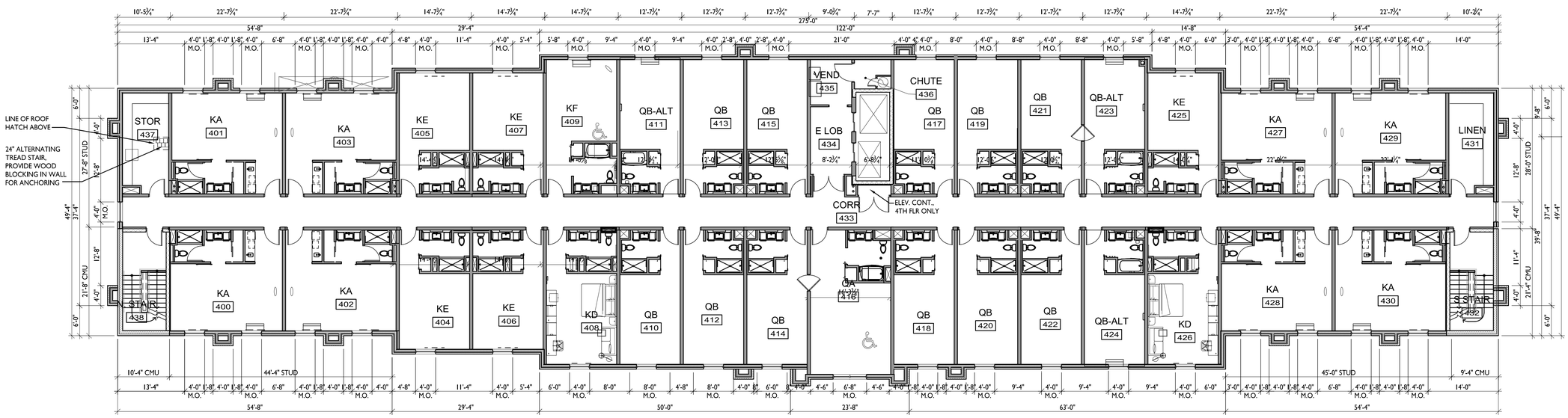

FOURTH FLOOR PLAN

SCALE: $\frac{1}{32}$" = 1'-0"

BOWERS+ASSOCIATES
ARCHITECTURE DESIGN
2400 SOUTH HURON PARKWAY + ANN ARBOR, MI 48104
P: 734.975.2400 + F: 734.975.2410
WWW.BOWERSINCH.COM

CONSULTANT + NAME

Hampton Inn & Suites

PROJECT + INFORMATION

3990 GRAND OAKS DRIVE
GENOA TOWNSHIP, MICHIGAN

PROJECT + NUMBER

17-204

ISSUE + DATE

12 JAN 2017	SITE PLAN
22 FEB 2017	SITE PLAN
12 APR 2017	SITE PLAN
3 MAY 2017	SITE PLAN

SHEET + TITLE

FOURTH FLOOR
FLOOR PLAN

17204MASTa.dwg

SHEET + NUMBER

A1.03

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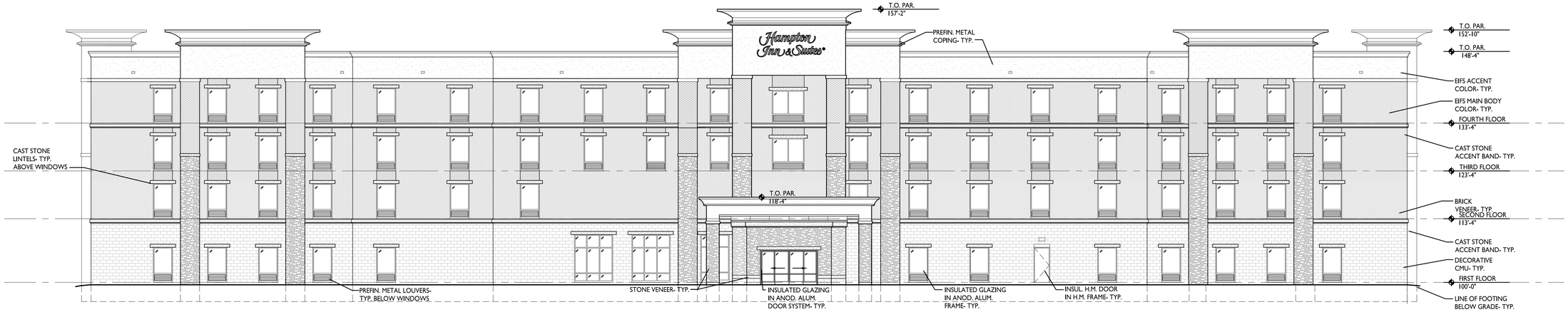
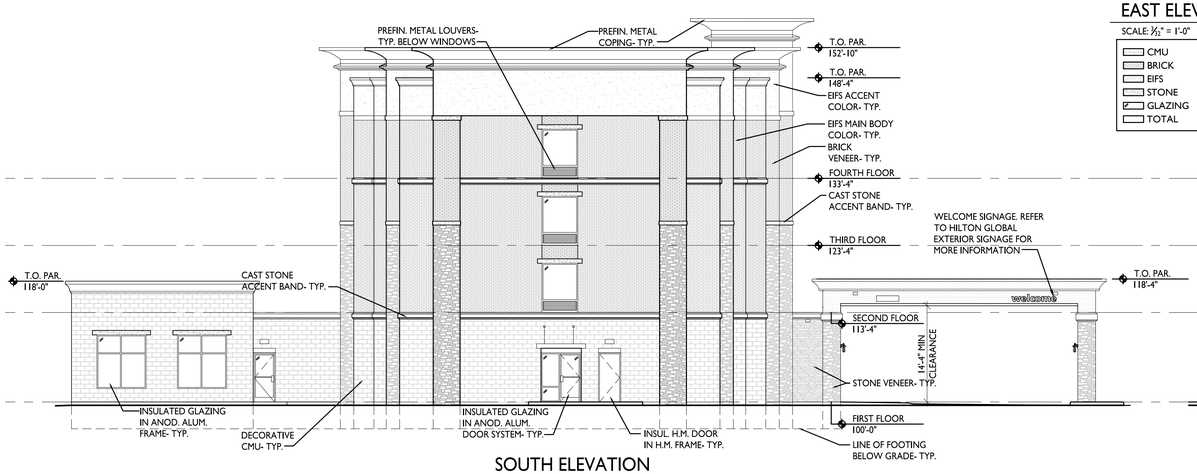


EAST ELEVATION

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

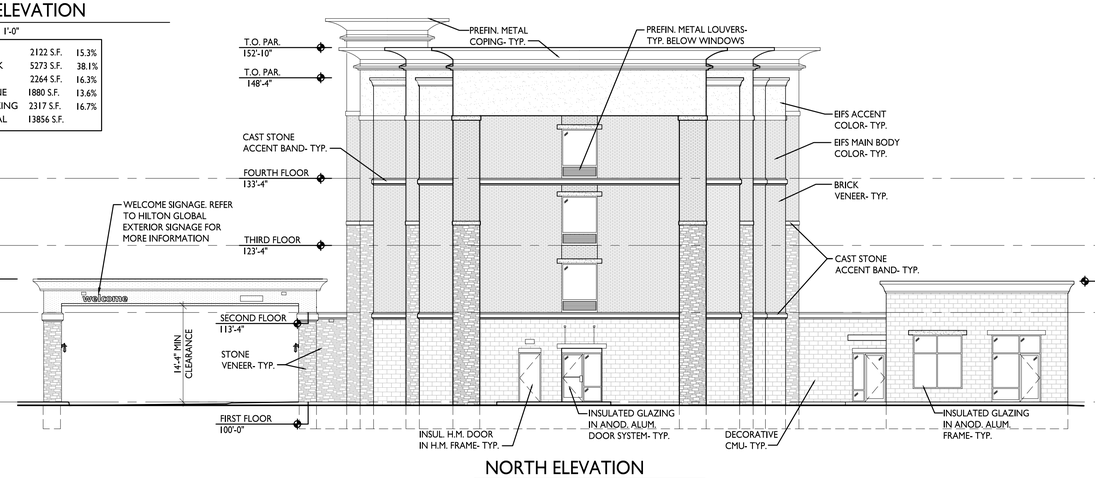
CMU	2122 S.F.	15.3%
BRICK	5273 S.F.	38.1%
EIFS	2264 S.F.	16.3%
STONE	1880 S.F.	13.6%
GLAZING	2317 S.F.	16.7%
TOTAL	13856 S.F.	



SOUTH ELEVATION

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

CMU	995 S.F.	21.6%
BRICK	1528 S.F.	33.1%
EIFS	918 S.F.	19.9%
STONE	838 S.F.	18.2%
GLAZING	336 S.F.	7.3%
TOTAL	4614 S.F.	



NORTH ELEVATION

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

CMU	991 S.F.	21.4%
BRICK	1528 S.F.	33.0%
EIFS	910 S.F.	19.6%
STONE	840 S.F.	18.1%
GLAZING	364 S.F.	7.9%
TOTAL	4632 S.F.	

CMU	2681 S.F.	19.4%
BRICK	5443 S.F.	39.3%
EIFS	2001 S.F.	14.5%
STONE	1469 S.F.	10.6%
GLAZING	2256 S.F.	16.3%
TOTAL	13850 S.F.	

WEST ELEVATION

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

BOWERS+ASSOCIATES
ARCHITECTURE DESIGN
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P: 734.975.2400 + F: 734.975.2410
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CONSULTANT + NAME

PROJECT + INFORMATION
3990 GRAND OAKS DRIVE
GENOA TOWNSHIP, MICHIGAN

PROJECT + NUMBER
17-204

ISSUE + DATE

31 JAN 2017	SITE PLAN
22 FEB 2017	SITE PLAN
12 APR 2017	SITE PLAN

STATE OF MICHIGAN
SCOTT M. BOWERS
ARCHITECT
NO. 42575
LICENSED ARCHITECT

SHEET + TITLE
EXTERIOR ELEVATIONS
17204A500_040717_site.dwg

SHEET + NUMBER
A5.00

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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: July 13, 2017

RE: Genoa Plaza PUD Amendment, Impact Assessment & Site Plan

MANAGER'S REVIEW: _____

Attached please find the case file for the proposed Genoa Plaza multi-tenant commercial center, which includes two buildings – one 2,117 square feet drive-through restaurant and a two tenant building (retail and sit down restaurant) containing 4,038 square feet. The site, which is immediately east of Lowe's, is part of the Livingston Commons PUD and is zoned NR-PUD. The applicant has generously provided an easement area allowing for a Township gateway sign at the intersection of Grand Oaks and Latson which was previously funded by RG Properties in conjunction with the PUD.

Procedurally, the Planning Commission is to make a recommendation to the Township Board on the final PUD site plan, proposed amendments to the PUD Agreement and Environmental Impact Assessment. After two Planning Commission hearings, multiple staff meetings and exhaustive unyielding staff efforts to negotiate with Lowe's for shared access, the Planning Commission recommended approval on June 12, 2017 of the PUD Amendment, Site Plan and Impact Assessment. A revised Site Plan was received from the applicant on June 10, 2017 which incorporated the Planning Commission comments. Based on the action of the Planning Commission and in response to the revised materials I suggest Board consideration of the following action:

Moved by _____, Supported by _____ to approve the second amendment to the PUD Agreement provided the following conditions are met:

1. Item 4 on page 3 shall clarify that the 3' setback is for the drive aisle only.
2. Item 5 on page 3 shall state that the access from Grand Oaks Drive shall be right-in only

SUPERVISOR
Bill Rogers

CLERK
Paulette A. Skolarus

TREASURER
Robin L. Hunt

TRUSTEES
Jean W. Ledford
H. James Mortensen
Terry Croft
Diana Lowe

MANAGER
Michael C. Archinal

Moved by _____, Supported by _____ to approve the Environmental Impact Assessment dated 05-03-17 as submitted.

Moved by _____, Supported by _____ to approve the Site Plan dated 07-05-17 with the following conditions:

1. Minor discrepancies for daylily, spirea and emerald arborvitae on the landscaping plant list shall be corrected.
2. The gap between the landscaped island and raised concrete area located southwest of the north building shall be eliminated or minimized.
3. All site plan application fee exceedances and tap fees shall be paid prior to issuance of the Land Use Permit.
4. Recorded copies of utility easements shall be provided in a format acceptable to the Township prior to a land use permit being issued.
5. The Township Engineer's comments shall be addressed and will be reviewed during Construction plan review as required per the MHOG Connection Manual.
6. A performance guarantee in compliance with Zoning Ordinance Section 21.03 shall be provided for the deferred portion of the sidewalk along Grand Oaks Drive.
7. All requirements of the Brighton Area Fire Authority's letter of May 31, 2017 shall be met.

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

GENOA TOWNSHIP

AUG 2 5 2016

RECEIVED

GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: USA 2 GO, 28265 Beck Road, Suite C-2, wixon, MI 48393

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

OWNER'S NAME & ADDRESS: RG Properties, 10050 Innovation Dr., Suite 100, Dayton, OH 45342

SITE ADDRESS: Interseclion of Latson Rd. and Grand Oaks Dr. PARCEL #(s): 11-08-200-017

APPLICANT PHONE: (248) 773-7992 OWNER PHONE: (937) 434-7218

OWNER EMAIL: tgunlock@rgproperties.com

LOCATION AND BRIEF DESCRIPTION OF SITE: The site is located at the northwest corner of S. Latson Road and Grand Oaks Drive. The property has 380 feet of frontage on Latson Road. The zoning is currently undeveloped, non-residential planned unit development (NRPUD). The total site is approximately 1.43 acres.

BRIEF STATEMENT OF PROPOSED USE: The proposed use for the property is to build a drive-thru coffee shop in the northern building and a second commercial building, with required parking.

THE FOLLOWING BUILDINGS ARE PROPOSED: The northern building is a proposed coffee shop with drive-thru service. The building will be approximately 2,117 s.f. in total area. The second building will be approximately 4,320 s.f. containing two units.

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: Thom Dumond w/Boss Engineering

ADDRESS: 3121 E. Grand River Ave., Howell, MI 48843

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

1.) Thom Dumond of Boss Engineering at thom@bosseng.com

Name | Business Affiliation | E-mail Address

FEE EXCEEDANCE AGREEMENT

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

SIGNATURE: _____ DATE: 8-22-16

PRINT NAME: Thom Dumond PHONE: 517-861-9387

ADDRESS: 3121 E. Grand River Ave., Howell, MI 48843

going to do a complete rewrite to get up to date with the most recent changes to the State planning laws. When the draft is complete, they will send it to Genoa Township for their review and input.

Additionally, they would like to have a representative from each of the Townships at their Planning Meetings, which are held on the third Wednesday of the month at 6:30 p.m.

OPEN PUBLIC HEARING #1… (Tabled 10-11-16) Review of site plan application, PUD amendment, environmental impact assessment and site plan for a proposed multi-tenant commercial center to include a 2,117 sq. ft. restaurant with drive-thru, a 2,819 sq. ft. restaurant space with an attached 1,501 hair salon located at the northwest corner of the Grand Oaks Drive and Latson Road intersection. The property is located within the Livingston Commons Phase 2 PUD on Parcel #11-08-200-017. The request is petitioned by USA 2 GO. (16-20)

<u>Planning Commission disposition of petition:</u>

A. Recommendation of the PUD Amendment
B. Recommendation of Impact Assessment (5-3-17)
C. Recommendation of Site Plan (5-3-17)

Mr. Brent LaVanway of Boss Engineering and Mr. Kevin Banham of USA 2 GO were present. Mr. LaVanway gave a review of the project and noted the changes that were made to address the Planning Commission's concerns regarding the traffic flow on the site.

They have now made the west drive two-way. They have added concrete islands to direct the traffic through the drive-thru area.

They have also reduced the rear-yard setback to three feet, which has prompted an amendment to the PUD Agreement.

He showed colored renderings of both buildings, noting the changes that were made to address additional concerns of the Planning Commission.

Mr. Borden reviewed his letter of June 6, 2017.

- He suggested that the amended PUD note the three-foot rear-yard setback is specifically for the drive aisle and not the site itself. It should also be clarified to state that it will be a right-in or right-out access to Grand Oaks and not both.
- Details must be provided for the wall-mounted light fixtures.
- The applicant must provide a clean landscape plan to ensure consistency between the plan and the plant list.
- Permits will be required prior to installation of any tenant signs.
- The entranceway signage easement must be recorded and dedicated to the Township.

Mr. LeVanway and Mr. Banham will comply with Mr. Borden's requests.

DRAFT

There was a discussion regarding adding additional signage to the entrance off of Grand Oaks to direct traffic to travel counterclockwise through the site.

Mr. Markstrom stated that the applicant has addressed most of his concerns; however, he has three outstanding issues.

- The proposed sanitary sewer connection is shown to make a 90 degree turn. This needs to be amended so that it continues south to the existing sanitary main and a new manhole installed to connect the proposed to the existing sewer just west of the access drive on Grand Oaks Drive.
- The storm water weighted runoff coefficient must be verified.
- The access drive from Grand Oaks should be the minimum radius required per the fire department in order to limit unauthorized access. The applicant can consider removing some parking spaces, if allowed, and adding a right-turn lane into the site to further prevent left turns into and out of the site.

Commissioner Rauch questioned the sidewalk on the south of the building to the north that does not connect to another sidewalk. He suggested that the barrier-free access point across Grand River should line up with the one across Grand River. Mr. LaVanway agrees to make that change.

He suggested a bollard be placed the western “point” of the building to the south. Mr. LaVanway agrees.

He noted that the applicant is suggesting more parking spaces than what is required by the Township. He questioned if all of those spaces are needed. He is concerned about the three spaces on the west side of the site just to the south of the outdoor patio area as well as the walkway in that area. He suggested taking the spaces and the walkway out and perhaps adding some green space.

Mr. LaVanway stated those spaces would be employee parking spaces and the walkway would allow access to them. Commissioner Rauch stated that if they will be marked employee parking then he believes they should stay.

Mr. Banham stated their proposed tenant will require very little parking so removing those three will not be a problem.

Commission Grajek is concerned where vehicles will park when their order at the drive-thru is not ready and they need to park to wait. Mr. LaVanway stated they can designate spaces for these situations.

Ms. VanMarter asked if the Planning Commission would allow each tenant in the southernmost building two signs, one on each side of the building, as they could both be considered corner spaces. The Commissioners agreed to allow this.

Chairman Brown reviewed the letter from the Brighton Area Fire Authority date May 31, 2017.

The Call to the Public was made at 7:19 pm with no response.

Moved by Commissioner McManus to recommend to the Township Board approval of the PUD Agreement for a proposed multi-tenant commercial center to include a 2,117

DRAFT

sq. ft. restaurant with drive-thru, a 2,819 sq. ft. restaurant space with an attached 1,501 hair salon located at the northwest corner of the Grand Oaks Drive and Latson Road intersection with the following conditions:

- The PUD Agreement should specifically state that the three-foot setback is specifically for the drive through aisle.
- The access drive from Grand Oaks shall be a right-in only to force traffic to go counterclockwise on the site.

Commissioner Grajek still has concerns with the circulation and there is only one way out of this site. He feels that 57 parking spaces is too many. He appreciates all of the work that has been done by the applicant; however, he feels much more needs to be done. There is far too much being tried to be put on this site than there should be.

Commissioner Rickard agrees. She does not feel comfortable voting for this.

Mr. LaVanway stated that the two proposed tenants on this site will have very different peak hours. The coffee shop will be visited mostly in the morning. He showed how they anticipate the traffic to flow. He explained why the Livingston County Road Commission was concerned with an egress from the drive on the south side of the site. Grajek understands why the LCRC did not want traffic to be able to exist from this drive.

Commissioner McManus feels this is a good site plan for this piece of property. He likes the architecture.

Commissioner Rauch feels that the signage discussed this evening will help with the traffic flow on the site. Also, the two proposed tenants have different peak hours of operation.

The motion was seconded by Commissioner Grajek and carried unanimously.

Moved by Commissioner Figurski, seconded by Commissioner McManus, to recommend to the Township Board approval of the revised Impact Assessment dated May 3, 2017 for a proposed multi-tenant commercial center to include a 2,117 sq. ft. restaurant with drive-thru, a 2,819 sq. ft. restaurant space with an attached 1,501 hair salon located at the northwest corner of the Grand Oaks Drive and Latson Road intersection. **The motion carried unanimously.**

Moved by Commissioner McManus, seconded by Commissioner Grajek, to recommend to the Township Board approval of the Site Plan dated May 3, 2017 for a proposed multi-tenant commercial center to include a 2,117 sq. ft. restaurant with drive-thru, a 2,819 sq. ft. restaurant space with an attached 1,501 hair salon located at the northwest corner of the Grand Oaks Drive and Latson Road intersection with the following conditions:

- Details must be provided for the wall-mounted lights.
- A clean landscape plan shall be provided to ensure consistency between the plan and the plant list.
- All signage shall comply with the Township Ordinance.

DRAFT

- The building to the south will allow for three wall signs for one tenant and if there are two tenants, they will be allowed two signs each.
- The recommendation by the Township Engineer in their letter dated June 6, 2017 regarding the sanitary sewer routing and connection shall be met.
- The PUD Agreement shall specify right-in only access off of Grand Oak Drive.
- There shall be "Keep Right" signs on both the south Grand Oaks entrance and the north entrance off of the Lowes Service Drive to keep traffic flowing in a counterclockwise direction.
- The sidewalk at the south of the site along Grand Oaks shall be stopped at the access point into the project; however, the sidewalk shall be installed when deemed appropriate by the Township, and the funds for its construction shall be kept in escrow by the Township.
- The handicap access across Latson Road shall line up with the access on the other side.
- The three parking spaces on the west side of the concrete area shall be labeled "Employee Parking Only".
- The applicant shall comply with all requirements of the Brighton Area Fire Department's letter dated May 31, 2017.
- The colored renderings for the buildings are acceptable to the Planning Commission.
- A bollard shall be placed at the southwest corner of the southernmost building.
- Drive thru waiting spaces shall be designated across from the drive thru exit
- The walkway and curbcut located southwest of the proposed north restaurant will be eliminated.

The motion carried (Rauch – yes; McManus – yes; Brown – yes; Figurski – yes; Rickard – no; Grajek – yes).

OPEN PUBLIC HEARING #2… (Tabled 3-13-17) Review of site plan application, environmental impact assessment and site plan for a proposed 101-room, 4-story "Hampton Inn and Suites" hotel located southwest of the Grand Oaks Drive and Latson Road intersection. The property is located within the Livingston Commons Phase 2 PUD on Parcel #11-08-300-020. The request is petitioned by Howell Hospitality, Inc. (17-01)

<u>Planning Commission disposition of petition:</u>

A. Recommendation of Impact Assessment (5-1-17)
B. Recommendation of Site Plan (5-24-17)

Mr. Andy Andre of Bud Design & Engineering and Bo Gunlock, of RG Properties were present.

Mr. Gunlock gave a review of the PUD agreement. This was developed in two phases. Phase I has already been approved and Phase II is being developed since the new

DRAFT

GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
OCTOBER 11, 2016
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, Eric Rauch, Chris Grajek, and Diana Lowe. Absent was John McManus. Also present was Kelly VanMarter, Community Development Director/Assistant Township Manager, Gary Markstrom of Tetra Tech, Brian Borden of LSL Planning and an audience of 0.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA: **Moved** by Commissioner Figurski, seconded by Commissioner Lowe, to approve the agenda as presented. **The motion carried unanimously.**

CALL TO THE PUBLIC: The call to the public was made at 6:32 pm with no response.

OPEN PUBLIC HEARING #1…Review of Environmental Impact Assessment and Site Plan for a proposed multi-tenant commercial center to include a 2,117 sq. ft. restaurant with drive-thru, a 2,819 sq. ft. restaurant space with an attached 1,501 sq. ft. hair salon, located at the northwest corner of Grand Oaks Drive and Latson Road. The request is petitioned by USA 2 GO.

A. Recommendation of Impact Assessment (9-21-16)
B. Recommendation of Site Plant (9-21-16)

Thom Dumond of Boss Engineering gave a description of the proposed project. The building to the north will have a coffee shop with a drive thru. The building to the south will be a commercial building with a restaurant and a hair salon. He showed colored renderings.

Commissioner Mortensen questioned if the proposed entranceway sign meets the requirements in the agreement. Ms. VanMarter stated she prefers to have the sign in this location than where it was originally proposed.

Mr. Borden reviewed his letter of October 4, 2016. He noted that because this is part of a PUD, the Planning Commission will be making a recommendation to the Township Board.

One side of each of the buildings falls slightly short of the required 80 percent natural features requirement. Commissioner Rauch would like to see more of the materials that are being used on the front of the building brought onto the drive through side of the

building to the north. Commissioner Mortensen feels this should be done on the two sides that are currently bare. Mr. Dumond advised he will make these changes.

Mr. Borden stated there are some small landscaping discrepancies that need to be addressed, permits must be obtained for all signage, channel lettering is required, and the easement that the owner has granted to the Township for the entrance sign needs to be 7' x 25'.

Mr. Markstrom stated he has two outstanding issues regarding water and sanitary sewer leads. The applicant is working with him to meet the guidelines.

There was a discussion regarding the traffic flow on the site as well as the ingress and egress points as they relate to the stacking of the drive thru traffic.

The Commissioners and the applicant discussed changes that need to be made to the Environmental Impact Assessment.

Moved by Mortensen, seconded by Figurski, to table the request from USA 2 GO until the November 14, 2016 Planning Commission meeting. **The motion carried unanimously.**

Administrative Business:

- Staff Report

Ms. VanMarter stated that the Governor has recently signed a new law pertaining to marijuana dispensaries. The Township is currently under a moratorium with regard to them, but she will be bringing this issue to the Planning Commission at a future meeting to address.

- Approval of the September 12, 2016 Planning Commission meeting minutes

Moved by Commissioner Figurski, seconded by Commissioner Mortensen, to approve the minutes of the September 12, 2016 Planning Commission Meeting as presented. **The motion carried unanimously.**

- Member Discussion

The Michigan Association of Planners conference is being held October 26th through the 29th.

The Commissioners asked Ms. VanMarter to have the petitioner from tonight bring the sample building materials to the November meeting.

- Adjournment

Moved by Commissioner Figurski, seconded by Commissioner Mortensen, to adjourn the meeting at 8:09 pm. **The motion carried unanimously.**

June 6, 2017

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
Subject:	Genoa Plaza – Site Plan Review #3
Location:	Grand Oaks Drive – vacant parcel at the northwest corner of Grand Oaks and Latson Road
Zoning:	NR-PUD Non-Residential Planned Unit Development District

Dear Commissioners:

At the Township's request, we have reviewed the revised site plan (dated 5/3/17) proposing a new multi-tenant commercial center for the vacant 2.31-acre site at the northwest corner of Grand Oaks and Latson Road.

The site, which is immediately east of Lowe's, is part of the Livingston Commons PUD and is zoned NR-PUD. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance, as well as the PUD Agreement for the subject site.

A. Summary

1. We suggest the proposed amendments to the PUD Agreement be clarified with respect to the 3-foot rear yard setback and the restricted right-in/right-out access to Grand Oaks.
2. The proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission. Details must be provided for the wall-mounted light fixtures.
3. The applicant must provide the Township with a clean landscape plan to ensure consistency between the plan and plant list.
4. Permits will be required prior to installation of any tenant signage.
5. The entranceway signage easement must be recorded and dedicated to the Township.

B. Proposal/Process

The applicant requests site plan review and approval of a multi-tenant commercial center, which includes two buildings – one drive-through restaurant containing 2,117 square feet of floor area and a two tenant building (retail and sit down restaurant) containing 4,038 square feet of floor area.

Based on the PUD Agreement, the uses are all permitted by right, although the drive through restaurant must comply with the specific use conditions outlined in Paragraph D below.

The revised submittal also includes proposed changes to the PUD Agreement, which are described in Paragraph C below.

Procedurally, the Planning Commission is to make a recommendation to the Township Board on the final PUD site plan, proposed amendments to the PUD Agreement and Environmental Impact Assessment.

Aerial view of site and surroundings (looking north)

C. PUD Agreement

The revised submittal includes proposed amendments to the PUD Agreement specific to the subject site. aside from the tying the Plan to the Agreement, the primary changes are an allowance for a 3-foot rear yard setback (point 4) and the ability to construct a restricted access drive from Grand Oaks while allowing the existing Lowe's drive to remain (point 5).

With respect to the former, we suggest the language be amended such that it clearly ties the 3-foot rear yard setback to the drive aisle (and not buildings). As for the latter, the language should be clarified to note a restricted right-in or right-out access to Grand Oaks (and not both).

D. Use Conditions (Drive through Restaurant)

Section 7.02.02(j) provides the following use conditions for drive-through restaurants:

1. **Principal and accessory buildings shall be setback fifty (50) feet from any adjacent public right of way line or property line.**

The proposed building containing the drive-through restaurant provides a minimum setback of 50 feet to the westerly lot line. This standard is met.

2. **The establishment of a new drive-through restaurant shall require the lot be separated a minimum of five hundred (500) feet from any other lot containing a drive-through restaurant.**

The PUD Agreement specifically waives this standard.

3. **Only one (1) access shall be provided onto any street.**

There is a one-way entrance to the site from Grand Oaks and a connection to an internal service drive from Latson Road; however, there is no direct access to/from Latson. This standard is met.

4. **Such restaurants constructed adjacent to other commercial developments shall have a direct vehicular access connection where possible.**

As noted above, the site has a connection to an internal drive that provides access throughout the development. This standard is met.

E. Site Plan Review

1. **Dimensional Requirements.** As described in the table below, the project complies with the dimensional standards for this PUD:

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
NR-PUD	1	120	10	5	10	10 front 5 side/rear	75' / 5 stories	50% building 90% impervious
Proposal	2.31	874	62 (Latson) 75 (Grand Oaks)	112 (N)	31	10 front 30 side/rear	21.7' / 1 story	10% building 25% impervious

2. **Building Materials and Design.** The proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission.

   Primary materials include brick and cement board siding, with decorative awnings, brick soldier course and a stone block base as accents. The flat roof buildings include parapets to screen mechanical equipment. The elevation drawings include a note stating that all rooftop units will be fully screened by the parapet walls.

   The PUD agreement requires that out parcel buildings provide at least 80% natural materials for all wall surfaces. The revised material calculations demonstrate a compliant amount of cement board siding on each building face.

3. **Parking.** Based on the specific uses proposed, the development requires a total of 54 spaces, while 57 are provided. This includes the 3 required barrier free spaces. Typical parking details also show the use of looped (double striped) spaces, as required.

   Additionally, Section 14.04 requires 10 stacking spaces, 3 short-term waiting spaces and 2 RV/semi-truck spaces. The revised plan provides 10 stacking spaces and 3 parking spaces just past the drive through window that may act as waiting spaces.

   Given the full scope of the Livingston Commons development, the Township has previously allowed the use of other areas within the PUD for the RV/semi-truck parking.

4. **Pedestrian Circulation.** There is an existing concrete sidewalk in the Latson right-of-way. The plan proposes two connections to this sidewalk, as well as a separate sidewalk along the site's Grand Oaks frontage. Internal connections, crosswalk striping and ramps at driveways are also provided.

5. **Vehicular Circulation.** Primary vehicular access is via the east/west drive connecting Lowe's to Latson Road. There is also a one-way entrance (right turn in only) from Grand Oaks.

   The revised plan provides for two-way circulation around the site with a curbed island preventing cut-through traffic into the drive through lane (as was previously discussed).

   As described in Paragraph C above, the project includes a proposed amendment to the PUD Agreement that would allow for a restricted right turn drive from Grand Oaks in addition to the existing Lowe's drive immediately west of the subject site.

6. **Loading.** Previous versions of the plan called for loading zones on the west side of the single tenant building and included an indication that deliveries will be scheduled for off-peak time to minimize any disruption to traffic circulation.

7. **Landscaping**. We have reviewed the landscape plan based on the conventional standards of Section 12.02 with adjustments made per the terms of the PUD Agreement.

Location	Requirements	Proposed	Comments
Front yard greenbelts	Extensive landscaping 10' width	13 trees 2.5' hedgerow 10' width	Requirements met
Parking lot	19 trees	20 trees	Requirement met

Additionally, the project includes outdoor tables/chairs, benches and bike rack in accordance with the PUD Agreement requirement for "pedestrian gathering and seating plazas."

Lastly, many of the plant labels on the plan have been cut off and we are unable to accurately reconcile the landscape plan with the plant list. The applicant must provide the Township with a clean version of the landscape plan to ensure consistency.

8. **Waste Receptacle and Enclosure.** The project includes a new waste receptacle and enclosure along the southwest side of the two-tenant building. Details include the required concrete base pad and enclosure matching the materials used on the building. Placement and design details also comply with Ordinance requirements.

9. **Exterior Lighting.** Sheet C7 includes a detailed lighting plan proposing the use of 8 parking lot light poles, 12 wall-mounted fixtures and 11 ornamental street lights.

   Details are included for the pole-mounted fixtures and the ornamental lighting; however, the applicant must include details of the proposed wall-mounted fixtures.

10. **Signs.** Sheet C3 shows a proposed monument sign near the driveway to Latson Road and Sheet C10 includes a detail. The proposed setback, materials, height and area are consistent with current standards.

    When tenants are known, the applicant must apply for a sign permit for the monument sign panels and wall signage. As was previously mentioned, this PUD requires the use of channel or individual lettering and not panels for wall signage.

11. **Impact Assessment.** The submittal includes a revised Impact Assessment (dated 5/3/17). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

12. **Township Entranceway.** Section 6.4B of the PUD Agreement requires a Township entranceway landmark with a depiction included as Exhibit D.

    As noted in our previous review letters and discussed at the prior meeting, this feature was envisioned closer to the expressway ramp; however, we believe the southeast corner of the site could be an appropriate location with better visibility.

    The current submittal provides an area for the entranceway signage along with additional ornamental landscaping to enhance this site as a gateway to the Township. The revised plans identify a 7' x 25' easement area for the entranceway signage and landscaping, as was previously discussed.

    This easement must be recorded and dedicated to the Township.

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.

Respectfully,
LSL PLANNING, A SAFEBUILT COMPANY

Brian V. Borden, AICP
Planning Manager

June 1, 2017

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

Re: Genoa Plaza
Site Plan Review #3

Dear Ms. Van Marter:

We have reviewed the updated site plan documents from Boss Engineering, Inc. dated May 3, 2017. The applicant is proposing a mixed-use development including a 2,117 sft restaurant with drive-thru service, a 2,819 sft restaurant space, and an attached 1,501 sft hair salon on the northwest corner of Grand Oaks Drive and Latson Road in an outlot east of Lowe's. Tetra Tech has reviewed the updated documents and site plan and offers the following comments:

Summary

1. Revisions to the on-site sanitary route and connection.
2. Verify storm water weighted runoff coefficient.
3. One way access from Grand Oaks.

Site Plan

1. The proposed sanitary connection to the existing SAN01 manhole creates a flow restriction. The proposed alignment between manholes SAN2P and SAN1P should be continued south to the existing sanitary main and a new manhole installed to connect the proposed to the existing sewer just west of the access drive on Grand Oaks Drive.
2. The weighted runoff coefficient for the site should be added to the drainage area table on sheet C4 so compliance to the site detention waiver conditions, as set forth by Genoa Township on August 22, 2011, can be confirmed.
3. The submitted PUD amendment requesting an access to the site from Grand Oaks Drive must be addressed prior to action on the proposed site plan. Additionally, the drive should be the minimum radius required per the fire department in an effort to limit unauthorized access from the general public. Consider, if space allows per fire department, adding a right-turn lane into the site to further prevent left turns into and out of the site.

The petitioner should review the above comments, revise the site plan drawings, and resubmit the documents for review. The petitioner will also be required to submit construction plans for public utilities

to MHOG for plan review, permitting, and construction inspection requirements. At that time the easements should also be executed and submitted to MHOG for acceptance.

Please call if you have any questions.

Sincerely,

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

Marguerite K. Davenport
Project Engineer

Copy: Thom Dumond P.E., Boss Engineering, Inc.

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

May 31, 2017

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Genoa Plaza
Latson & Grand Oaks Dr.
Genoa Twp., MI

Dear Kelly,
The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on May 17, 2017 and the drawings are dated August 22, 2016 with latest revisions dated May 3, 2017. The project is for a proposed new multi-tenant retail plaza consisting of one 4,038 square foot mixed-use structure and one 2,117 square foot single tenant structure.

1. Based upon building size, proposed occupancy use and potential occupant load; Structure R2 may be required to be provided with an automatic sprinkler system in accordance with NFPA 13, *Standard for the Installation of Automatic Sprinkler Systems.* Architectural drawings and detail are required to make this determination for both structures. **(Noted that suppression is not required based upon submitted design)**

   IFC 903

   A. If automatic sprinklers are required, the FDC shall be located on the front of the building (Latson rd.).

   B. If required; the location, size, gate valve and connection of the fire protection lead(s) shall be indicated on the utility site plan.

2. The buildings shall include the address numbers on the building. The address shall be a **minimum of 6"** high letters of contrasting colors and be clearly visible from the street (Latson Rd.). The location and size shall be verified prior to installation. **(Noted to be provided on Architectural Drawings once Issued)**

   IFC 505.1

3. The one way access road along the rear of the structure along with the one-way entrance onto the site from Grand Oaks Dr. shall be a minimum of 20' wide and be maintained the entire length of the rear of the property. The two-way access drive extending along the east side of the property from the south to the north shall be a minimum of 26' wide. There is no dimension identifying this width on the site plan. With a width of 26' wide, the building side of the drive shall be marked as a fire lane. With a width of 20' both sides of the rear drive 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 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. **(All items were revised or noted on previous submittals. Dimensions of the drives are no longer shown on the drawings).**

   IFC D 102.1

May 31, 2017
Page 2
Genoa Plaza
Latson & Grand Oaks Dr.
Site Plan Review

IFC D 103.1
IFC D 103.6
IFC D 103.6.1
IFC D 103.6.2

4. An additional fire hydrant must be installed on the front (Latson Rd.) side of the structure at the drive-thru lane exit between the two buildings, near reference P09. The existing hydrants provided on the Utility plan are located at the rear area not on the property and are not conducive for fire department operations. **(Provided on Utility Plan in appropriate location, however, the layer appears to be off and is disrupting the layout of the water main)**

   IFC C 103

5. Access onto the site and around building shall provide emergency vehicles with a turning radius of 50' outside and 30' inside up to 55' wall to wall and a minimum vertical clearance of 13½ feet. **(Vehicle Circulation was Provided and Radii were previously noted, but are no longer shown on the drawing)**

   IFC 503.2.1
   IFC D 103.3

6. The location of a key box (Knox Box) shall be indicated on future submittals. The Knox box shall be located adjacent to the front door of each occupant space of both structures. **(Noted to be Provided at Time of Construction, note is no longer shown on submittal)**

   IFC 506.1

7. Provide names, addresses, phone numbers, emails of owner or owner's agent, contractor, architect, on-site project supervisor. **(Noted on Drawing, Contractor TBD)**

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

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

Cordially,

Capt. Rick Boisvert, CFPS
Fire Inspector

IMPACT ASSESSMENT
FOR
SITE PLAN PETITION
"GENOA PLAZA"
GENOA TOWNSHIP, LIVINGSTON COUNTY
MICHIGAN

Prepared for:

USA 2 GO
28265 BECK ROAD, SUITE C-2
WIXOM, MI 48393
(248) 773-7992

Prepared by:

BOSS ENGINEERING COMPANY
3121 E. GRAND RIVER
HOWELL, MI 48843
(517) 546-4836

August 22, 2016
Revised: 05/03/2017

16-243 EIA

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 For:
USA 2 GO
28265 Beck Road, suite c-2
Wixom, MI 48393
(248) 773-7992

Prepared By:
BOSS ENGINEERING COMPANY
Civil Engineers, Land Surveyors, Landscape Architects and Planners
3121 E. Grand River
Howell, MI 48843
(517) 546-4836

Boss Engineering has been successfully providing engineering, surveying, planning and landscape architecture services on land development projects since 1969. Since its beginning, Boss Engineering has strived to provide unparalleled professional services with integrity and respect to every client. Today, Boss provides a complete lineup of consulting services for each project, ranging from conceptual design through final construction. The company currently employs a variety of professions including civil engineers, surveyors, landscape architects and sanitarians.

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 west side of South Latson Rd, approximately 1500 feet south of the Grand River Ave intersection. The property has 380 feet of frontage along South Latson Rd, the entire width of the site. To the east on the opposite side of South Latson Road is non-residential planned unit development use, planned to have a drive-in bank be built on it. To the north and west is a Lowe's Home Improvement. Further north is a Comerica Bank. South of the property is a Tim Hortons. The subject property is currently undeveloped, non-residential planned unit development (NRPUD).

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 2.31 acres. No right away exists on the property, making the total buildable acreage 2.31. There are no wetlands on the property. The site is relatively flat, but with a gradual slope in the southwest corner with an increasing slope at approximately 1.18%. The trees and shrubs/brush on site are minimal and located along the west property line on top of the minor ridge, while the remainder of the

site is open area. The USDA Soil Conservation Service soil classification for the site is Miami-Loam 2-6% slopes.

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, inlet protection devices, and seed and mulch.

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.

To the north is an existing driveway that connects to both the parking lot for Lowes, and the Comerica Bank. It will connect to the north end of the proposed Genoa Plaza. The proposed drive-in bank construction will take place at the property to the east, on the other side of Latson Rd.

With the proposed use being a coffee shop, sit down restaurant, and hair salon, most of the activity on the property would be weekdays 7 AM to 6 PM. Unlike a commercial use, there would be limited evening or weekend traffic with hours of operation being limited.

The increase in light, noise or air pollution would be far less than what is typically associated with a commercial development. Developing two smaller buildings 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 anticipated occupancy of 18 employees plus the customers, will have very little negative impact to nearby properties, but may even help the neighboring businesses with additional subsidiary patronage.

There is no expected impact on Howell 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 is to be served by both public water and sanitary sewer. The public water is provided by MHOG Sewer and Water Authority, where the sanitary sewer collection is provided by the G-O Sewer Authority.

The development will tap into an 8" existing water main NORTH of the site along the access drive to provide water service. For sanitary, gravity sewer will be used from an existing manhole south of the site, located at the back of curb for Grand Oaks Drive.

The following is the estimated water usage of the proposed development:

- 2,117 SF Coffee Shop – 2.6 REU per premise
- 2,000 SF Sit-Down Restaurant (assume no liquor license) – 2.4 REU per 1,000 SF = 4.8 REU
- 1,960 SF Hair Salon – 0.38 REU per booth, 0.30 REU per mani/pedi/spa station (need more information)

The pre-development sanitary flow from this site is zero. Post-development flows will be calculated during the engineering review of the project.

With regards to storm water management, the project will 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. Most storm water runoff will be directed to the surrounding existing storm sewer systems, located all around the site.

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, such as gas cans, striping paint, etc.

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 1146 trips per day (39.92 trips per unit per 1,000sf) during the week days, or 5732 trips per 5-day work week. This is based on a shopping center.

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 site is under 10 acres. 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 at this time.

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

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

MEMORANDUM

TO: Thom Dumond, Boss Engineering

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

DATE: October 6, 2016

RE: **ESTIMATED** Genoa Plaza Sewer and Water Tap Fees

This memo will describe the connection fees required for a new 2,117 sq. ft. Coffee Shop, a 2,819 sq. ft. Restaurant (without liquor license), and a 1,501 sq. ft. Hair Salon located on part of parcel 11-08-200-017 at the northwest corner of Grand Oaks Drive and Latson Road. For the purposes of estimating the potential fees I assume 6 booths for the Hair Salon. *The figures below are subject to change once we have actual tenant data.*

2,117 sq. ft. Coffee Shop @ 2.6 REU per premise =	**2.6 REU**
2,819 sq. ft. Sit-down Restaurant (no alcohol) @ 2.4 REU per 1,000 sq. ft. =	**6.8 REU**
1,501 sq. ft. Hair Salon @ 0.38 REU per Booth, assume 6 booths =	**2.3 REU**
TOTAL REU NEW BUILDINGS =	**11.7 REU**

OPTION 1 – PAYMENT: If the owner is not transferring REU credits to the development the following fees would be applicable:

11.7 REU x $7,200 per Sewer REU =	$ 84,240.00
11.7 REU x $7,900 per Water REU =	$ 92,430.00
TOTAL DUE =	**$176,670.00**

OPTION 2 – CREDIT TRANSFER: There is an existing balance of 7 REU's associated with this property. The owner can dedicate the credits for use by the development if so desired. This would have the following effect:

	Water REU	Sewer REU
Credits	7	7
Estimate for 3 uses from above:	11.7	11.7
REMAINING BALANCE	**4.7**	**4.7**
Per REU Fee:	**x $7,900**	**x $7,200**
TOTAL DUE EACH:	**$37,130.00**	**$33,840.00**
COMBINED TOTAL AMOUNT DUE:	**$70,970.00**	

<u>Connection Fees must be paid at time of land use permit issuance.</u>

A meter package may also need to be purchased including the appropriate sized meter and a MIU (meter interface unit). Should you have any questions please feel free to contact me at 810-227-5225.

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

COVER SHEET FOR

SECOND AMENDMENT TO PLANNED UNIT DEVELOPMENT AGREEMENT

FOR PHASE I AND PHASE II LAND

BETWEEN

RLG HOWELL LLCAND GCG HOWELL LLC

AND

GENOA PLAZA, LLC

AND

TOWNSHIP OF GENOA

DATED_____, 2017

Prepared By and After recording
Return to:
Karyn M. Klemptner, Esq.
31000 Northwestern Highway, Suite 100
Farmington Hills, Michigan 48334

STATE OF MICHIGAN
COUNTY OF LIVINGSTON
GENOA CHARTER TOWNSHIP

SECOND AMENDMENT TO PLANNED UNIT DEVELOPMENT AGREEMENT

This Second Amendment to Planned Unit Development Agreement ("Agreement") is made and entered into this ____ day of April, 2017, by and between **RLG HOWELL LLC**, a Michigan limited liability company, **GCG HOWELL LLC**, a Michigan limited liability company, with offices at 10050 Innovation Drive, Suite 100, Dayton, Ohio 45342 (collectively, the "Owner"); **GENOA PLAZA, LLC**, a Michigan limited liability company, whose address is 28265 Beck Road, Suite C-2, Wixom, Michigan 48393 ("GP"), and **GENOA CHARTER TOWNSHIP**, a Michigan municipal corporation, whose address is 2911 Dorr Road, Brighton, Michigan 48116 ("Township").

RECITATIONS

WHEREAS, Owner was the owner of certain real property situated in the Genoa Charter Township, Livingston County, and State of Michigan, more particularly described in that certain Planned Unit Development Agreement dated April 6, 1999, and recorded at Liber 2609, Page 0205 of the records of Livingston County, Michigan (the "Phase I PUD").

WHEREAS, Owner is the owner of certain adjacent real property situated in the Genoa Charter Township, Livingston County, and State of Michigan, more particularly described in that certain Planned Unit Development Agreement For Phase II Land dated August 17, 2009, and recorded at 2009R-023916 of the records of Livingston County, Michigan (the "Phase II PUD").

WHEREAS, the Phase I PUD and the Phase II PUD where amended by a certain Amendment to Planned Unit Development Agreement dated June 18, 2015, and recorded at 2015R-021742 with the records of Livingston County, Michigan ("First Amendment").

WHEREAS, Owner has since sold to GP a portion of the real property located within Phase II PUD (referred to as Lot A and Lot A1 of the Phase II PUD) collectively the "GP Parcel", as more particularly described in Exhibit A attached hereto.

WHEREAS, Owner, GP, and Township have agreed to amend Phase II PUD and First Amendment, subject to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreement set forth herein, Owner, GP, and the Township hereby agree as follows:

1. Article I, General Terms of Agreement, subsection 1.3 of the Phase II PUD, shall be amended to add thefollowing language:

"Notwithstanding anything to the contrary contained in the Phase II PUD, the land uses which will be permitted and which may be developed on Lot A under the Phase II PUD shall hereby amended to include any of permitted land uses identified for Lot A in the Phase II PUD as well as any of the land uses depicted on Exhibit B attached hereto."

2. Article I, General Terms of Agreement, subsection 1.5 of the Phase II PUD, shall be amended to add the following additional subparagraph D:

D. Notwithstanding anything to the contrary contained in the Phase II PUD, the configuration of Lot A under the Phase II PUD shall be as depicted on Exhibit B attached hereto. Township hereby approves the setbacks and the configuration of the improvements on Lot A as depicted on Exhibit B attached hereto.

3. Article I, General Terms of Agreementof the Phase II PUD, shall be amended to add the following additional subsection 1.9:

1.9 The GP Parcel shall be subject to the terms and conditions of the Phase II PUD, subject to the provisions of this Agreement.

4. Article II, Land Use Authorization, subsection 2.8 of the Phase II PUD, shall be amended to provide that Lot A may have a minimum Rear Yard of 3 Feet.

5. Article III, Curb Cuts and Off-Site Transportation Improvements, subparagraph M of subsection 3.2 shall hereby be deleted in its entirety, and the following language shall be substituted in its stead:

M. Lot A shall have a restricted right-in/right out access to Grand Oaks as depicted on Exhibit B attached hereto. Moreover, Lowes shall be permitted to retain direct access to Grand Oaks as depicted on Exhibit B attached hereto.

6. In the event of a conflict in terms, the terms of this Amendment shall have priority over the term of the Phase I PUD agreement, the Phase II PUD agreement, and First Amendment.

[SIGNATURES TO FOLLOW ON NEXT PAGE]

APPROVED by Owner and GP on this _____ day of _____, 2017.

WITNESSES:

_____

_____

RLG HOWELL LLC,
a Michigan limited liability company

By: Randall L. Gunlock, Trustee under the Amended Revocable Trust Agreement Dated May 30, 2013, Randall L. Gunlock, Grantor, Managing Member

_____

By: Randall L. Gunlock
Its: Trustee

_____

_____

GCG HOWELL LLC,
a Michigan limited liability company

_____

By: Glenn C. Gunlock
Its: Managing Member

_____

_____

GENOA PLAZA,LLC,
a Michigan limited liability company

_____

By: Karam Bahnam
Its: Member

STATE OF OHIO)
) SS:
COUNTY OF MONTGOMERY)

The foregoing instrument was acknowledged before me this ____ day of _____, 2017, by Randall L. Gunlock, the Trustee under the Amended Revocable Trust Agreement Dated May 30, 2013, Randall L. Gunlock, Grantor, Managing Member of RLG Howell LLC, a Michigan limited liability company, on behalf of the company.

_____
Notary Public,_____
_____, County, OH
Acting in _____ County, OH
My Commission Expires:_____

STATE OF OHIO)
) SS:
COUNTY OF MONTGOMERY)

The foregoing instrument was acknowledged before me this ____ day of _____, 2017, by Glenn C. Gunlock, the Managing Member of GCG Howell LLC, a Michigan limited liability company, on behalf of the company.

_____
Notary Public,_____
_____, County, OH
Acting in _____ County, OH
My Commission Expires:_____

STATE OF MICHIGAN)
) SS:
COUNTY OF_____)

The foregoing instrument was acknowledged before me the ____ day of _____, 2017, by Karam Bahnam, as Member of Genoa Plaza, LLC, a Michigan limited liability company, on behalf of the company.

_____
Notary Public,_____
_____, County, MI
Acting in _____ County, MI
My Commission Expires:_____

APPROVED by the Township Board for the Township of Genoa on the _____ day of _____, 2017.

WITNESSES:

_____

_____

_____

_____

TOWNSHIP OF GENOA

_____
By:
Its:

_____
By:
Its:

STATE OF MICHIGAN)
) SS:
COUNTY OF LIVINGSTON)

The foregoing instrument was acknowledged before me the ____ day of _____, 2017, by _____, who was duly authorized by Genoa Township Board to sign this Second Amendment on behalf of Genoa Township and who acknowledged the same to be his/her free act and deed.

_____
Notary Public,_____
_____, County, MI
Acting in _____ County, MI
My Commission Expires:_____

STATE OF MICHIGAN)
) SS:
COUNTY OF LIVINGSTON)

The foregoing instrument was acknowledged before me the ____ day of _____, 2017, by _____, who was duly authorized by Genoa Township Board to sign this Second Amendment on behalf of Genoa Township and who acknowledged the same to be his/her free act and deed.

_____
Notary Public,_____
_____, County, MI
Acting in _____ County, MI
My Commission Expires:_____

EXHIBITS

Exhibit A	Legal Description for GP Parcel
Exhibit B	Depiction of Lot A

EXHIBIT A

LEGAL DESCRIPTION OF GP PARCEL

Part of the Northeast 1/4 of Section 8, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northeast Corner of Section 8; thence along the North line of Section 8, S87°16'42"W, 3.27 feet, to the construction centerline of Latson Road; thence along the construction centerline of Latson Road, the following three (3) courses: 1) southerly along an arc right, having a length of 159.72 feet, a radius of 10000.00 feet, a central angle of 00°54'55", and a long chord which bears S00°40'20"W, 159.72 feet; 2) S01°07'48"W, 913.15 feet; 3) southerly along an arc left, having a length of 148.82 feet, a radius of 10000.00 feet, a central angle of 00°51'10", and a long chord which bears S00°42'13"W, 148.82 feet, to the Point of Intersection of the construction centerline of Latson Road and the construction centerline of Relocated Grand Oaks Drive; thence along the construction centerline of Relocated Grand Oaks Drive, S89°48'26"W, 159.53 feet; thence N00°15'45"E, 40.00 feet, to the POINT OF BEGINNING of the Parcel to be described; thence along the northerly Right of Way line of Relocated Grand Oaks Drive, S89°48'26"W, 105.82 feet; thence N10°21'54"E, 317.42 feet; thence N12°59'10"E, 332.05 feet; thence S79°09'02"E, 22.66 feet; thence N11°14'53"E, 360.22 feet; thence along the Westerly Right of Way line of Latson Road, the following two (2) courses: 1) S01°07'48"W, 874.11 feet; 2) southerly along an arc left, having a length of 10.59 feet, a radius of 10060.00 feet, a central angle of 00°03'37", and a long chord which bears S01°05'59"W, 10.59 feet; thence along a limited access right of way line, S45°17'49"W, 142.07 feet, to the POINT OF BEGINNING, containing 2.31 acres, more or less, and including the use of Latson Road and Grand Oaks Drive. Also subject to any other easements or restrictions of record.

Parcel Identification No.: 11-08-200-018

EXHIBIT B

DEPICTION OF LOT A

SITE PLAN FOR GENOA PLAZA

PART OF NE QUARTER, OF SECTION 8
GENOA TOWNSHIP, LIVINGSTON COUNTY, MI

PROPERTY DESCRIPTION:

PROPERTY DESCRIPTION AS SUPPLIED:

PARCEL 1:

PART OF THE NORTHEAST 1/4 OF SECTION 8, T2N-R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SECTION 8; THENCE ALONG THE NORTH LINE OF SECTION 8, S 87°16'42" W, 3.27 FEET, TO THE CONSTRUCTION CENTERLINE OF LATSON ROAD; THENCE ALONG THE CONSTRUCTION CENTERLINE OF LATSON ROAD, THE FOLLOWING THREE (3) COURSES: 1) SOUTHERLY ALONG AN ARC RIGHT, HAVING A LENGTH OF 159.72 FEET, A RADIUS OF 10000.00 FEET, A CENTRAL ANGLE OF 00°54'55", AND A LONG CHORD WHICH BEARS S 00°40'20" W, 159.72 FEET; 2) S 01°07'48" W, 913.15 FEET; 3) SOUTHERLY ALONG AN ARC LEFT, HAVING A LENGTH OF 148.82 FEET, A RADIUS OF 10000.00 FEET, A CENTRAL ANGLE OF 00°51'10", AND A LONG CHORD WHICH BEARS S 00°42'13" W, 148.82 FEET, TO THE POINT OF INTERSECTION OF THE CONSTRUCTION CENTERLINE OF LATSON ROAD AND THE CONSTRUCTION CENTERLINE OF RELOCATED GRAND OAKS DRIVE; THENCE ALONG THE CONSTRUCTION CENTERLINE OF RELOCATED GRAND OAKS DRIVE, S 89°48'26" W, 159.53 FEET; THENCE N 00°15'45" E, 40.00 FEET, TO THE POINT OF BEGINNING OF THE PARCEL TO BE DESCRIBED; THENCE ALONG THE NORTHERLY RIGHT OF WAY LINE OF RELOCATED GRAND OAKS DRIVE, S 89°48'26" W, 105.82 FEET; THENCE N 10°21'54" E, 317.42 FEET; THENCE N 12°59'10" E, 332.05 FEET; THENCE S 79°09'02" E, 22.68 FEET; THENCE N 11°14'53" E, 360.22 FEET; THENCE ALONG THE WESTERLY RIGHT OF WAY LINE OF LATSON ROAD, THE FOLLOWING TWO (2) COURSES: 1) S 01°07'48" W, 874.11 FEET; 2) SOUTHERLY ALONG AN ARC LEFT, HAVING A LENGTH OF 10.59 FEET, A RADIUS OF 10060.00 FEET, A CENTRAL ANGLE OF 00°03'37", AND A LONG CHORD WHICH BEARS S 01°05'59" W, 10.59 FEET; THENCE ALONG A LIMITED ACCESS RIGHT OF WAY LINE, S 45°17'49" W, 142.07 FEET, TO THE POINT OF BEGINNING. CONTAINING 2.31 ACRES, MORE OR LESS, AND INCLUDING THE USE OF LATSON ROAD AND GRAND OAKS DRIVE. ALSO SUBJECT TO ANY OTHER EASEMENTS OR RESTRICTIONS OF RECORD.

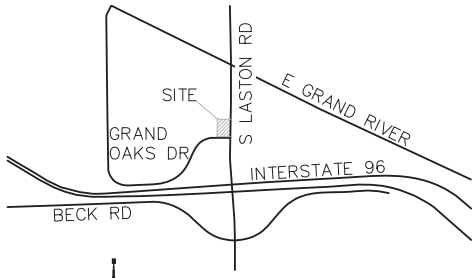
CONSTRUCTION NOTES

THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

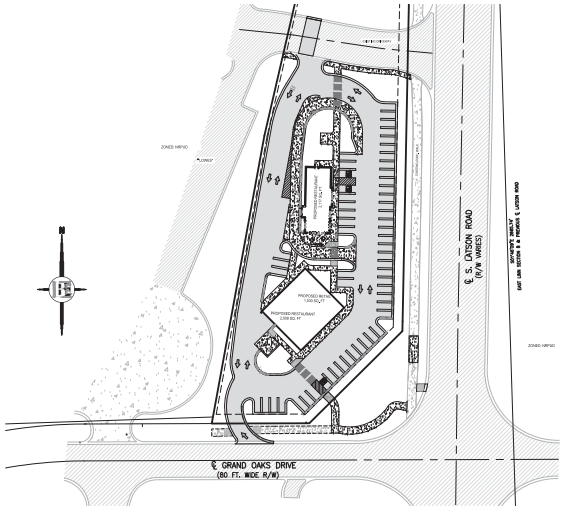
1. THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.
2. DO NOT SCALE THESE DRAWINGS AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
3. A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
4. IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
5. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
7. PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
8. ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS.
9. 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.
10. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
11. 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.
12. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
13. 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.
14. THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
15. THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
16. ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOT CLASS II).
17. 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.
18. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
19. 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.
20. DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
21. 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.
22. NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
23. 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.
24. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
25. 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.
26. 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.
27. 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.
28. AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
29. 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.
30. NO SEEDING SHALL BE DONE AFTER OCTOBER 15 WITHOUT APPROVAL OF THE ENGINEER.
31. ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
32. SOIL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
33. 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.
34. ACCESS ROADS TO THE SITE SHALL BE MAINTAINED DURING CONSTRUCTION AND SHALL BE CONSTRUCTED TO BE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 75,000 POUNDS.

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.



LOCATION MAP
NO SCALE



OVERALL SITE MAP
NO SCALE

SHEET INDEX

SHEET NO.	DESCRIPTION
C1	COVER SHEET
C2	EXISTING CONDITIONS/DEMOLITION PLAN
C3	SITE PLAN
C4	GRADING & DRAINAGE PLAN
C5	UTILITY PLAN
C6	LANDSCAPE PLAN
C7	LIGHTING PLAN
C8	SOIL EROSION CONTROL PLAN
C9	CONSTRUCTION DETAILS
	DRAWINGS PREPARED BY ARCHITECT
A2-01	BUILDING 'A' – FLOOR PLAN
LP-02	BUILDING 'B' – FLOOR PLAN
EL-01	BUILDING 'A' – EXTERIOR ELEVATIONS
EL-02	BUILDING 'B' – EXTERIOR ELEVATIONS

GENOA PLAZA

PREPARED FOR:

USA 2 GO
28265 BECK ROAD, SUITE C-2
WIXOM, MI 48393
CONTACT: KEVIN BAHNAM
248.773.7992

ARCHITECT:

NORR
150 W. JEFFERSON AVE., SUITE 1300
DETROIT, MI 48226
CONTACT: BRIAN COLBURN
PHONE: 313.324.3140
EMAIL: BRIAN.COLBURN@NORR.COM

PREPARED BY:

BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.6735 FAX 517.548.1670
CONTACT: SCOTT TOUSIGNANT

NO	BY	CK	REVISION	DATE
3	ST		PER PLANNING COMMISSION	7-5-17
2	CH		PER PLANNING COMMISSION	5-3-17
1	CD		TOWNSHIP REVIEW	9-21-16

C1

ISSUE DATE: 8/22/16
JOB NO. 16-243

STORM STRUCTURE INVENTORY

CB 01
RIM 1019.81
E 12" INV. = 1014.45
SW 12" INV. = 1014.35

CB 02
RIM 1019.75
W 12" INV. = 1015.15

CB 03
RIM 1015.95
W 24" INV. = 1003.20
SE 24" INV. = 1003.30
N 12" INV. = 1009.55

CB 04
RIM 1016.16
S 12" INV. = 1011.66
N 12" INV. = 1011.96

CB 05
RIM 1016.24
S 12" INV. = 1012.79

CB 06
RIM 1012.31
E 24" INV. = 1006.16
W 24" INV. = 1006.26
N 12" INV. = 1006.36
S 8" INV. = 1009.56

CB 07
RIM 1011.89
W 24" INV. = 1007.69
E 24" INV. = 1007.79

CB 08
RIM 1013.02
NW 24" INV. = 1007.72
NE 24" INV. = 1008.42
N 15" INV. = 1008.82

CB 09
RIM 1013.28
S 12" INV. = 1008.68

CB 10
RIM 1011.41
N 15" INV. = 1008.81

CB 11
RIM 1016.73
N 36" INV. = 995.78
E 12" INV. = 1010.47

CB 12
RIM 1016.61
W 12" INV. = 1011.88

CB 13
RIM 1012.10
S 24" INV. = 1008.50
N 15" INV. = 1008.70
S 15" INV. = 1008.70

CB 14
RIM 1012.19
S 15" INV. = 1008.59
N 15" INV. = 1008.79
W 8" INV. = 1009.19

MH 15
RIM 1015.75
N 36" INV. = 999.30
S 36" INV. = 999.20
NE 12" INV. = 1009.37
E 12" INV. = 1009.37

CB 16
RIM 1015.08
SW 12" INV. = 1011.15

CB 17
RIM 1014.22
N 36" INV. = 999.22
S 36" INV. = 999.22
NE 12" INV. = 1008.66

CB 18
RIM 1012.75
S 15" INV. = 1008.75
NW 15" INV. = 1008.85
W 8" INV. = 1009.75

CB 19
RIM 1012.75
SE 15" INV. = 1009.05

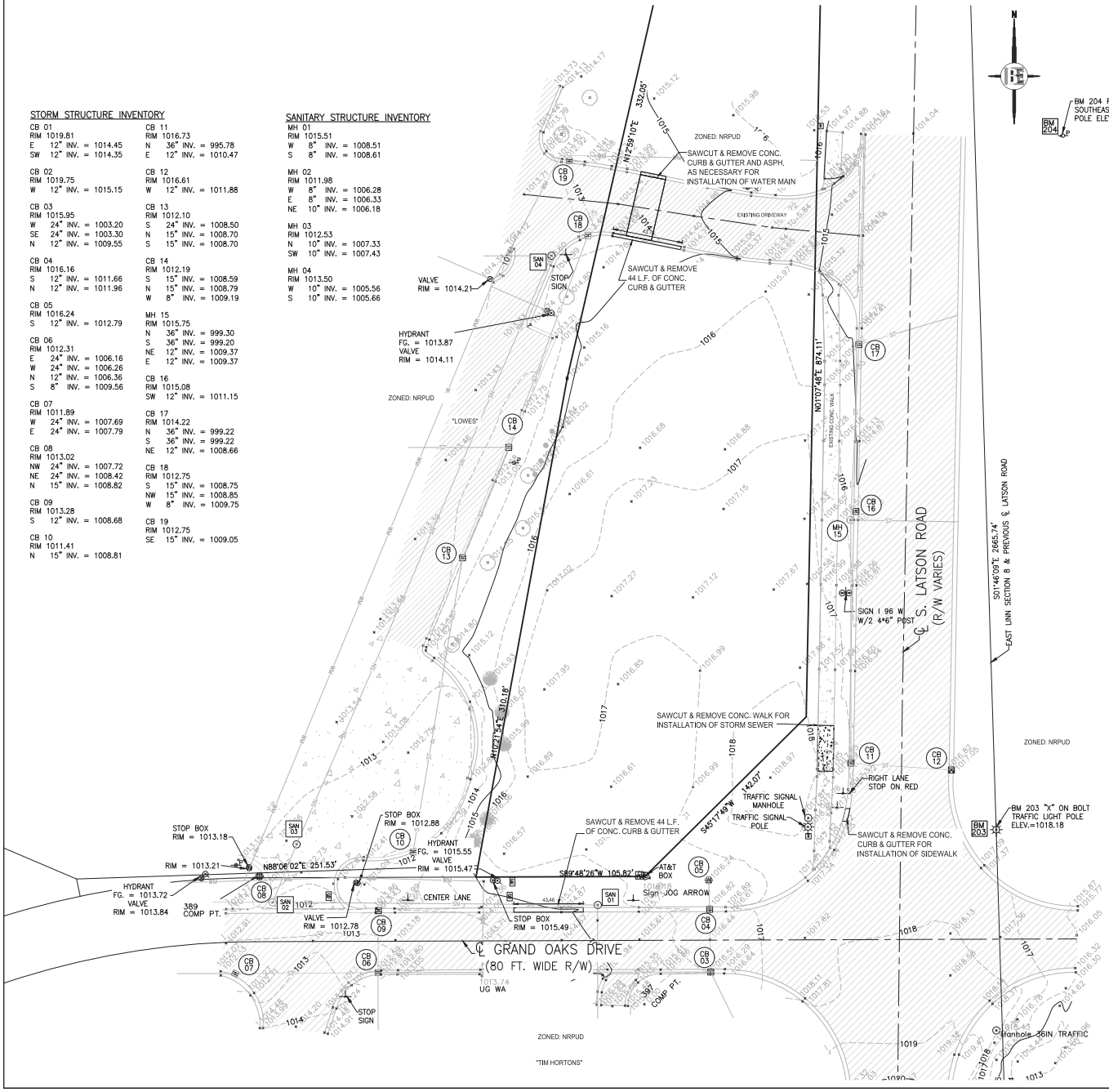
SANITARY STRUCTURE INVENTORY

MH 01
RIM 1015.51
W 8" INV. = 1008.51
S 8" INV. = 1008.61

MH 02
RIM 1011.98
W 8" INV. = 1006.28
E 8" INV. = 1006.33
NE 10" INV. = 1006.18

MH 03
RIM 1012.53
N 10" INV. = 1007.33
SW 10" INV. = 1007.43

MH 04
RIM 1013.50
W 10" INV. = 1005.56
S 10" INV. = 1005.66



SURROUNDING SITE INFO
NO SCALE

LEGEND

- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- STORM DRAINAGE FLOW
- POWER POLE
- GUY WIRE
- HYDRANT
- GATE VALVE
- WATER MANHOLE
- MANHOLE
- STORM CATCH BASIN (BEEHIVE)
- STORM CATCH BASIN (SQUARE)
- STORM INVERT
- WELL
- TRANSFORMER PAD
- TELEPHONE RISER
- U.G. TELEPHONE MARKER
- GAS METER
- GAS RISER
- U.G. GAS MARKER
- ELECTRICAL RISER
- U.G. ELECTRIC MARKER
- CABLE TV RISER
- U.G. CABLE TV MARKER
- MAILBOX
- AIR CONDITIONING UNIT
- LIGHT POLE
- ORNAMENTAL LIGHT
- SIGN
- DECIDUOUS TREE
- CONIFEROUS TREE
- SOIL BORING
- STEEL ROD SET
- STEEL ROD/PIPE FOUND
- MONUMENT
- SECTION CORNER
- MARSH SYMBOL
- SANITARY SEWER
- WATER MAIN
- STORM SEWER
- GAS MAIN
- ELECTRIC
- TELEPHONE
- OVERHEAD WIRES
- FENCE
- GAS PUMP
- ANTENNA
- SATELLITE DISH
- NEWSPAPER BOX
- PARKING METER
- PHONE BOOTH

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN WERE OBTAINED FROM AVAILABLE RECORDS AND ARE EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD DETERMINE THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. IF DIFFERENCES ARE FOUND TO EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND TO EXIST. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND TO EXIST BETWEEN THE PROPOSED IMPROVEMENTS AND THE PLANS.

Call 2 working days BEFORE YOU DIG CALL MISS DIG 1-800-482-7171

BEBOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.6735 FAX 517.548.1670

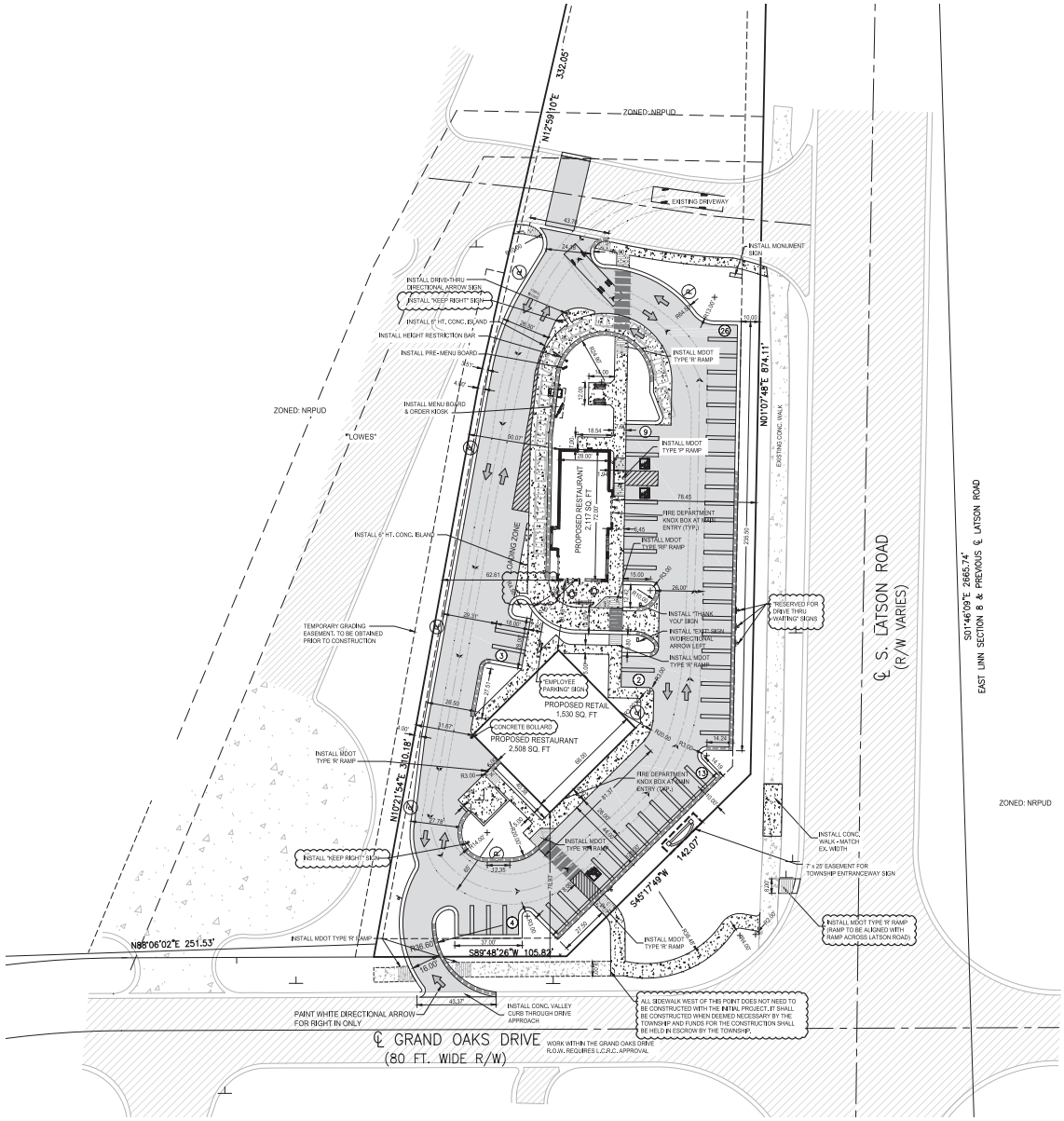
PROJECT: GENOA PLAZA

PREPARED FOR: USA 2 GO
28265 BECK ROAD, SUITE C-2
WIXOM, MI 48393
248.773.7992

TITLE: EXISTING CONDITIONS/DEMOLITION PLAN

NO	BY	REVISION PER	DATE
3	ST	PER PLANNING COMM.	7-5-17
2	CH	PER PLANNING COMM.	5-3-17
1	CG	TOWNSHIP REVIEW	9-21-16

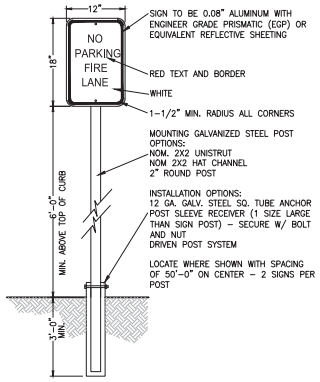
DESIGNED BY: ST
DRAWN BY: ST
CHECKED BY:
SCALE 1" = 30'
JOB NO. 16-243
DATE 08/22/16
SHEET NO. C2



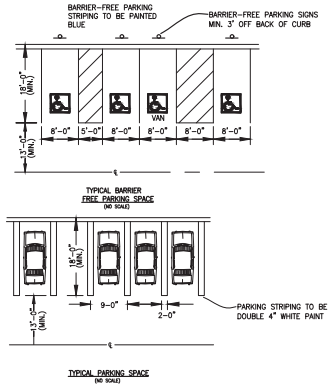
SCALE: 1 INCH = 30 FEET

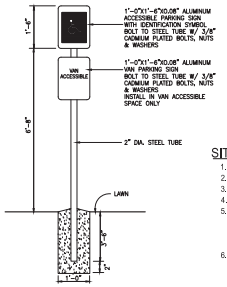
LEGEND

PROPOSED (PR)	EXISTING (EX)	
		MANHOLE
		INLET / CATCHBASIN
		FLARED END-SECTION
		GATE VALVE
		HYDRANT
		UTILITY POLE
		FENCE
		SIGN
		LIMITS OF GRADING/CLEARING
		CONCRETE
		ASPHALT
		MODIFIED CURB
		NO PARKING – FIRE LANE SIGNS



'NO PARKING' SIGN DETAIL
(NOT TO SCALE)





HANDICAP PARKING SIGN DETAIL
(NO SCALE)

SITE DATA

1. NON-RESIDENTIAL PLANNED UNIT DEVELOPMENT (NRPUD), ZONE 1
2. SITE AREA - 100,606 SQ. FT. (2.31 AC) *(AREA SOUTH OF ENTRY DRIVE IS 1.43 AC WHERE BUILDINGS ARE PLACED)
3. MAX. BLDG. HT. ALLOWED - 75 FT. 5 STORIES PROVIDED 21'-8" FT.
4. MAX LOT COVERAGE - 50% BUILDING, PROVIDED 10% BUILDING, 25% PERVIOUS
5. SETBACKS PROVIDED
   FRONT - 10 FT. 63.68 FT.
   SIDE - 10 FT. 113.00 FT.
   REAR - 5 FT. 31.67 FT.
6. PARKING:
   COFFEE HOUSE - 1 SPACE PER 70 SQ. FT. GROSS LEASABLE FLOOR AREA.
   SPACE REQUIRED = 1,583 SQ. FT. ÷ 23 SPACES
   STANDARD SIT-DOWN RESTAURANTS WITHOUT LIQUOR LICENSE - 1 SPACE FOR EACH 100 SQUARE FEET OF GROSS FLOOR AREA OR ONE FOR EACH TWO SEATS, WHICHEVER IS GREATER.
   SPACE REQUIRED = 2,508 SQ. FT. / 100 = 25 SPACES
   RETAIL - 1 SPACES PER 250 GFA
   SPACES REQUIRED = 1,530 S.F. / 250 = 6 SPACES
   TOTAL SPACES REQUIRED = 54 SPACES
   TOTAL SPACE PROVIDED = 57 SPACES (INCLUDES 3 BARRIER-FREE SPACES)
7. ALL SIGNAGE SHALL COMPLY WITH THE GENOA TOWNSHIP ZONING ORDINANCE. THE SOUTH BUILDING SHALL BE ALLOWED THREE WALL SIGNS IF ONE TENANT, THE SOUTH BUILDING WILL BE ALLOWED FOUR WALL SIGNS IF TWO TENANTS (TWO SIGNS EACH).
8. THE PUD AGREEMENT SHALL SPECIFY RIGHT-IN ONLY ACCESS FROM GRAND OAKS DRIVE.

EMERGENCY ACCESS ROUTE NOTE:
THE EMERGENCY ACCESS ROUTE AROUND THE PROPOSED DEVELOPMENT HAS BEEN DESIGNED TO MAINTAIN A MINIMUM TURNING RADIUS OF 30' INSIDE AND 50' OUTSIDE AND SHALL ALLOW A MINIMUM VERTICAL CLEARANCE OF 13.5 FT.

BUILDING ADDRESS NOTE:
THE BUILDING IS TO HAVE THE ADDRESS NUMBERS ON THE BUILDING. THE NUMBERS ARE TO BE A MINIMUM OF 6" HIGH AND OF CONTRASTING COLORS AND BE CLEARLY VISIBLE FROM THE STREET (LATSON ROAD). THE LOCATION AND SIZE SHALL BE VERIFIED PRIOR TO INSTALLATION.

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN HEREON WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. EITHER EXPRESSED OR IMPLIED, AS TO THE COMPLETENESS OR ACCURACY THEREOF, AND IN SOME INSTANCES THEY HAVE NOT BEEN PHYSICALLY DETERMINED. THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES SHOULD BE DETERMINED BY THE APPROPRIATE UTILITY COMPANY. PRIOR TO STARTING WORK, THE CONTRACTOR SHALL NOTIFY THE OWNERS OF ANY CONFLICTS AND SHALL PROVIDE IF NECESSARY, NOTICE OF DEPTH DIFFERS SUBSTANTIALLY FROM THE PLANS.

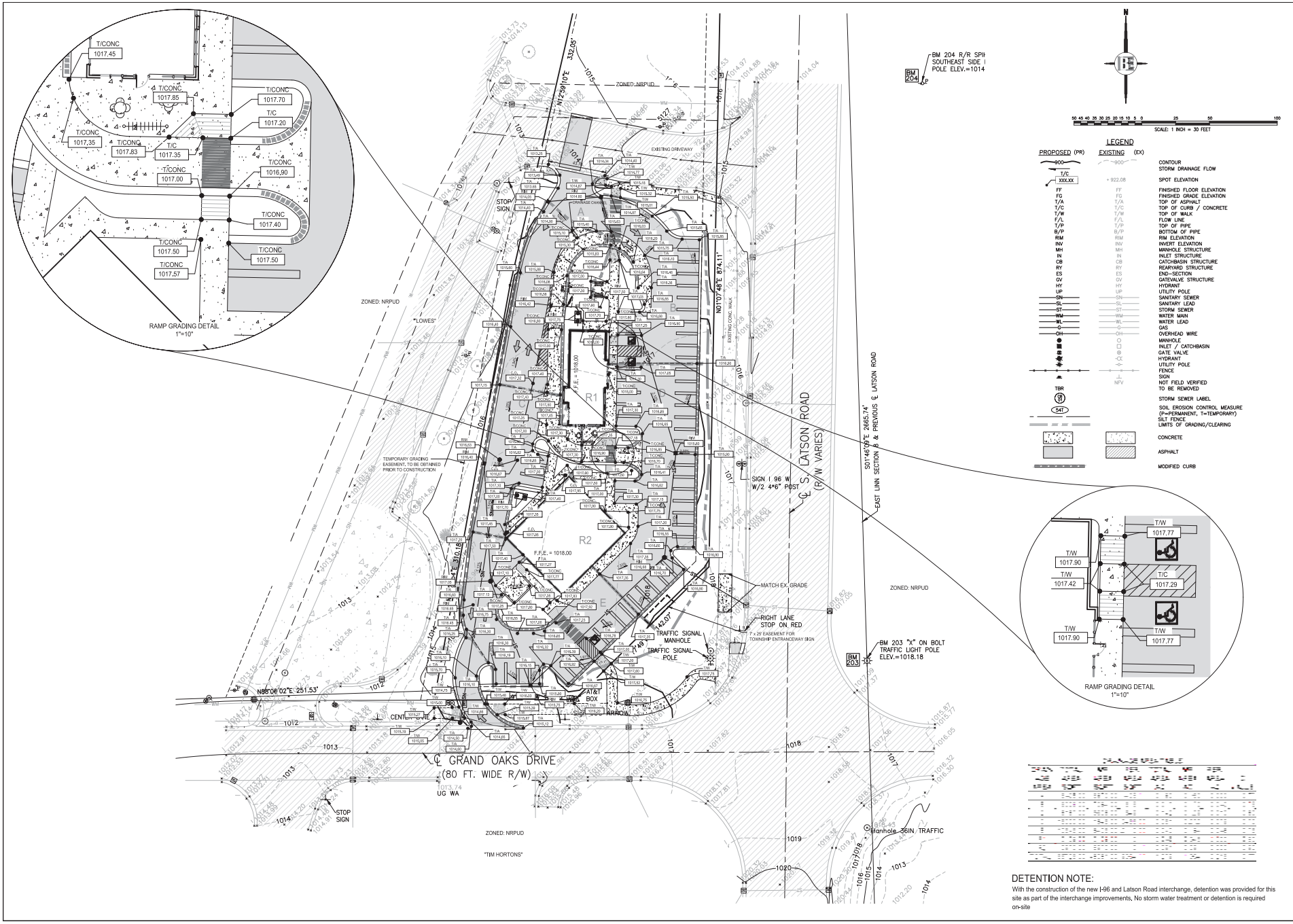
BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 www.missdig.org

BE BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.6735 FAX 517.548.1670

PROJECT: GENOA PLAZA
PREPARED FOR: USA 2 GO, 28265 BECK ROAD, SUITE C-2, WIXOM, MI 48393, 248.773.7992
TITLE: SITE PLAN

NO	BY	REVISION PER	DATE
1	CG	TOWNSHIP REVIEW	9-21-16
2	CH	PER PLANNING COMM.	5-3-17
3	ST	PER PLANNING COMM.	7-5-17

DESIGNED BY: ST
DRAWN BY: ST
CHECKED BY:
SCALE 1" = 30'
JOB NO. 16-243
DATE 08/22/16
SHEET NO. C3



DETENTION NOTE:

With the construction of the new I-96 and Latson Road interchange, detention was provided for this site as part of the interchange improvements, No storm water treatment or detention is required on-site

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN WERE OBTAINED FROM RECORDS AVAILABLE TO US. EITHER EXPRESSED OR IMPLIED, AS TO THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION. IF THE LOCATION OF EXISTING UTILITIES PROVIDED BY THE OWNER DIFFER FROM THOSE SHOWN ON THE PLAN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE ENCOUNTERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY UTILITIES DAMAGED BY HIS OPERATIONS.

BEFORE YOU DIG CALL MISS DIG 1-800-482-7171

BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.8735 FAX 517.548.1670

PROJECT: GENOA PLAZA

PREPARED FOR: USA 2 GO
28265 BECK ROAD, SUITE C-2
WIXOM, MI 48393
248.773.7992

TITLE: GRADING AND DRAINAGE PLAN

NO	BY	REVISION PER	DATE
3	ST	PER PLANNING COMM.	7-5-17
2	CH	PER PLANNING COMM.	5-3-17
1	CG	TOWNSHIP REVIEW	9-21-16

DESIGNED BY: ST
DRAWN BY: ST
CHECKED BY:
SCALE 1" = 30'
JOB NO. 16-243
DATE 08/22/16
SHEET NO. C4

STORM STRUCTURE INVENTORY

CB 01
RIM 1019.81
E 12" INV. = 1014.45
SW 12" INV. = 1014.35

CB 02
RIM 1019.75
W 12" INV. = 1015.15

CB 03
RIM 1015.95
W 24" INV. = 1003.20
SE 24" INV. = 1003.30
N 12" INV. = 1009.55

CB 04
RIM 1016.16
S 12" INV. = 1011.66
N 12" INV. = 1011.96

CB 05
RIM 1016.24
S 12" INV. = 1012.79

CB 06
RIM 1012.31
E 24" INV. = 1006.16
W 24" INV. = 1006.26
N 12" INV. = 1006.36
S 8" INV. = 1009.56

CB 07
RIM 1011.89
W 24" INV. = 1007.69
E 24" INV. = 1007.79

CB 08
RIM 1013.02
NW 24" INV. = 1007.72
NE 24" INV. = 1008.42
N 15" INV. = 1008.82

CB 09
RIM 1013.28
S 12" INV. = 1008.68

CB 10
RIM 1011.41
N 15" INV. = 1008.81

CB 11
RIM 1016.73
N 36" INV. = 995.78
E 12" INV. = 1010.47

CB 12
RIM 1016.61
W 12" INV. = 1011.88

CB 13
RIM 1012.10
S 24" INV. = 1008.50
N 15" INV. = 1008.70
S 15" INV. = 1008.70

CB 14
RIM 1012.19
S 15" INV. = 1008.59
N 15" INV. = 1008.79
W 8" INV. = 1009.19

MH 15
RIM 1015.75
N 36" INV. = 999.30
S 36" INV. = 999.20
NE 12" INV. = 1009.37
E 12" INV. = 1009.37

CB 16
RIM 1015.08
SW 12" INV. = 1011.15

CB 17
RIM 1014.22
N 36" INV. = 999.22
S 36" INV. = 999.22
NE 12" INV. = 1008.66

CB 18
RIM 1012.75
S 15" INV. = 1008.75
NW 15" INV. = 1008.85
W 8" INV. = 1009.75

CB 19
RIM 1012.75
SE 15" INV. = 1009.05

SANITARY STRUCTURE INVENTORY

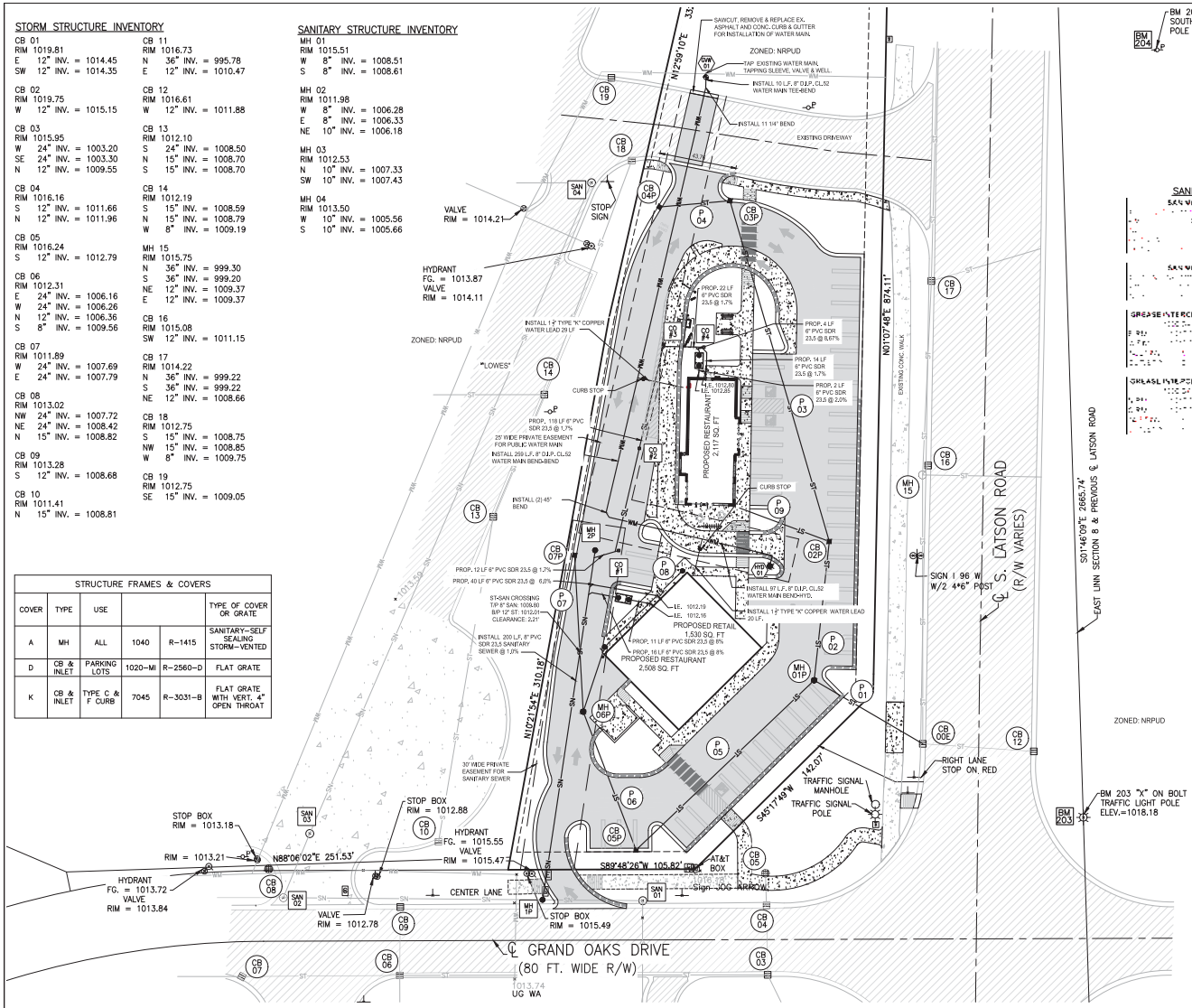
MH 01
RIM 1015.51
W 8" INV. = 1008.51
S 8" INV. = 1008.61

MH 02
RIM 1011.98
W 8" INV. = 1006.28
E 8" INV. = 1006.33
NE 10" INV. = 1006.18

MH 03
RIM 1012.53
N 10" INV. = 1007.33
SW 10" INV. = 1007.43

MH 04
RIM 1013.50
W 10" INV. = 1005.56
S 10" INV. = 1005.66

STRUCTURE FRAMES & COVERS					
COVER	TYPE	USE			TYPE OF COVER OR GRATE
A	MH	ALL	1040	R-1415	SANITARY-SELF SEALING STORM-VENTED
D	CB & INLET	PARKING LOTS	1020-MI	R-2560-D	FLAT GRATE
K	CB & INLET	TYPE C & F CURB	7045	R-3031-B	FLAT GRATE WITH VERT. 4" OPEN THROAT



STORM SEWER DESIGN COMPUTATIONS

TO	DRAIN AREA	ACRES A	AREA IMPERV 0.9	AREA PERV 0.15	RUNOFF COEFF C	EQUIV. AREA A * C	INTEN-SITY I	TIME OF CONC. T_C	ADD'L RUNOFF Q	RUNOFF (CFS) Q	PIPE LENGTH (LF)	PIPE DIA. (IN)	VELOCITY FLOWING FULL (FPS)	HYDRAULIC GRADIENT SLOPE %	ACTUAL SLOPE USED	MANNING FLOW CAPACITY	MANNING'S VELOCITY (FT/SEC)	TIME (MIN)	HG ELEV UPPER END	HG ELEV LOWER END	RIM ELEV UPPER END	INVERT UPPER END	INVERT LOWER END	DROP DISTANCE (FT)	RIM-INV	RIM-HG >1	PIPE COVER >2.667
CB03P	A	0.193	0.160	0.033	0.77	0.1489	4.38	15.00		0.65	40	12	0.83	0.32%	0.32%	2.02	2.57	0.26	1011.20	1011.07	1014.05	1010.40	1010.27		3.65	2.85	2.65
CB02P	B	0.211	0.170	0.042	0.75	0.159	4.35	15.26		1.34	201	12	1.71	0.32%	0.32%	2.02	2.57	1.30	1011.07	1010.42	1014.80	1010.27	1009.62		4.53	3.73	3.53
MH01P	D	0.351	0.272	0.079	0.00	0	4.21	16.56		1.34	79	12	1.71	0.32%	0.32%	2.02	2.57	0.51	1010.42	1010.16	1015.60	1009.62	1009.36		5.98	5.18	4.98
CB00E						0	4.16	17.07	0.88	2.22	71	12	2.83	0.39%	0.50%	2.53	3.22	0.37	1010.16	1009.80	1016.68	1009.36	1009.00		7.32	6.52	6.32
MH06P	C	0.142	0.129	0.013	0.83	0.1184	4.38	15.00		0.52	89	12	0.66	0.32%	0.32%	2.02	2.57	0.57	1013.17	1012.88	1016.40	1012.37	1012.08		4.03	3.23	3.03
CB05P						0	4.31	15.57	0.36	0.88	84	12	1.12	0.32%	0.32%	2.02	2.57	0.54	1012.88	1012.61	1017.05	1012.08	1011.81		4.97	4.17	3.97
MH01P	E	0.242	0.194	0.048	0.00	0	4.26	16.12		0.88	139	12	1.12	0.32%	0.32%	2.02	2.57	0.90	1012.61	1012.16	1015.75	1011.81	1011.36	2.00	3.94	3.14	2.94
CB02P	R1	0.048	0.048	0.000	0.90	0.0436	4.38	15.00		0.19	54	6	0.97	1.00%	1.00%	0.56	2.87	0.32	1013.97	1013.42	1017.32	1013.57	1013.02	3.00	3.75	3.35	3.25
MH06P	R2	0.091	0.091	0.000	0.90	0.082	4.38	15.00		0.36	100	6	1.83	1.00%	1.00%	0.56	2.87	0.58	1014.39	1013.38	1017.95	1013.99	1012.98	0.50	3.96	3.56	3.46

SANITARY STRUCTURE SCHEDULE

SANITARY MH 1	CO #1
SANITARY MH 2	CO #2
GREASE INTERCEPTOR SOUTH	CO #4
GREASE INTERCEPTOR NORTH	CO #3

STORM STRUCTURE SCHEDULE

CB06L EXISTING CATCH BASIN	CB04P 4' DIA CATCHBASIN COVER
MH01P 4' DIA MANHOLE COVER	CB03P 4' DIA CATCHBASIN COVER
CB02P 4' DIA CATCH BASIN COVER	MH06P 4' DIA MANHOLE COVER
CB05P 4' DIA CATCHBASIN COVER	CB07P 4' DIA CATCHBASIN COVER

STORM PIPE SCHEDULE

FROM	TO	SIZE	TYPE	SLOPE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DETENTION NOTE:

With the construction of the new I-96 and Latson Road interchange, detention was provided for this site as part of the interchange improvements. No storm water treatment or detention is required on-site

SCALE: 1 INCH = 30 FEET

LEGEND

PROPOSED (PR)	EXISTING (EX)	
900	900	CONTOUR
		STORM DRAINAGE FLOW
T/C XXX.XX	+ 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
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
G	G	GAS
OH	OH	OVERHEAD WIRE
		MANHOLE
		INLET / CATCHBASIN
		GATE VALVE
		HYDRANT
		UTILITY POLE
		CLEANOUT
		FENCE
		SIGN
		STORM SEWER LABEL
		WATER MAIN LABEL
		DRAINAGE AREA
		CONCRETE
		ASPHALT
		MODIFIED CURB

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLAN WERE OBTAINED FROM AVAILABLE RECORDS AND ARE EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD DETERMINE THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. IF THE UTILITIES SHOWN ON THE PLAN ARE FOUND TO BE IN CONFLICT WITH PROPOSED SITE IMPROVEMENTS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE. IF ANY CONFLICTS ARE FOUND TO EXIST, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY IF THE LOCATION OR DEPTH OFFERS SIGNIFICANT RISK TO THE PLANS.

BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 WWW.MISSDIG.NET

BE BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.6735 FAX 517.548.1670

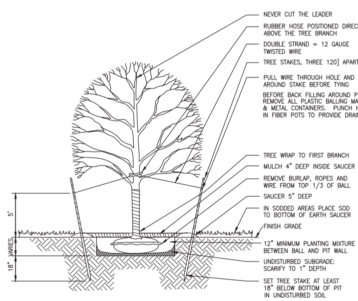
PROJECT: GENOA PLAZA

PREPARED FOR: USA 2 GO, 28265 BECK ROAD, SUITE C-2, WIXOM, MI 48393, 248.773.7992

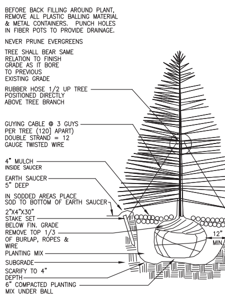
TITLE: UTILITY PLAN

NO	BY	REVISION PER	DATE
3	ST	PER PLANNING COMM.	7-5-17
2	CH	PER PLANNING COMM.	5-3-17
1	CG	TOWNSHIP REVIEW	9-21-16

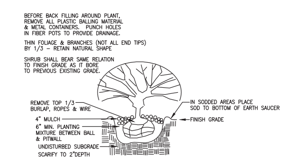
DESIGNED BY: ST
DRAWN BY: ST
CHECKED BY:
SCALE 1" = 30'
JOB NO. 16-243
DATE 08/22/16
SHEET NO. C5



DECIDUOUS TREE PLANTING DETAIL
(NO SCALE)



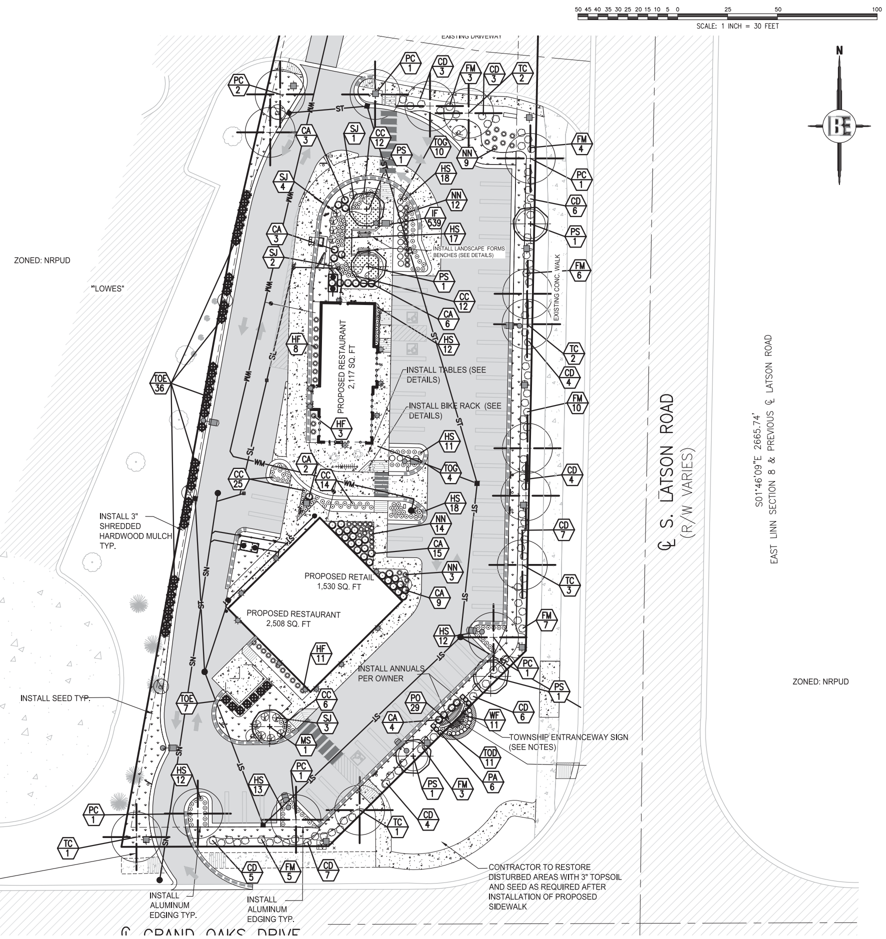
EVERGREEN TREE PLANTING DETAIL
(NO SCALE)



SHRUB PLANTING DETAIL
(NO SCALE)

NOTES:

1. 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.
2. ALL LANDSCAPE AREAS ARE TO BE WATERED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.



GENERAL LANDSCAPE NOTES:

1. 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 ANSI Z60 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.
2. 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.
3. 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).
4. 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.
5. ALL PLANT BEDS AND INDIVIDUAL PLANTS SHALL BE MULCHED WITH A 3 INCH LAYER OF SHREDDED BARK MULCH.
6. ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
7. 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.
8. ALL LANDSCAPE BEDS SHALL BE EDGED WITH BLACK ALUMINUM EDGING, 1/8" X 4". INSTALL PER MANUFACTURER'S INSTRUCTIONS. ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
9. 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.
10. 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 10-0-10 ANALYSIS:
    10% NITROGEN: A MINIMUM OF 25% FROM A UREAFORMALDEHYDE 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 SEEDED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
11. ALL PLANT MATERIALS SHALL BE FREE OF WEEDS, INSECTS AND DISEASE.

LEGEND

PROPOSED (PR) | EXISTING (EX)

PROPOSED	EXISTING	DESCRIPTION
900	900	CONTOUR
		STORM DRAINAGE FLOW
T/C XXX.XX	+ 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
G	G	GAS
T	T	TELEPHONE
		MANHOLE
		INLET / CATCHBASIN
		FLARED END-SECTION
		GATE VALVE
		HYDRANT
		UTILITY POLE
		FENCE
		SIGN
SAN #1		SANITARY SEWER LABEL
CB 01		STORM SEWER LABEL
GV 12		WATER MAIN LABEL
54T		SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
		SILT FENCE
		LIMITS OF GRADING/CLEARING
		SEED
		GROUNDCOVER

PLANT LIST

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
TREES					
MS	1	Magnolia x soulangeana	Saucer Magnolia	2" cal.	B-B
PS	5	Prunus serrulata 'Kwanzan'	Kwanzan Cherry	2" cal.	B-B
PC	7	Pyrus calleryana 'Cleveland Select'	Cleveland Select Pear	2.5" cal.	B-B
TC	9	Tilia cordata	Littleleaf Linden	3" cal.	B-B
SHRUBS					
CD	49	Callicarpa dichotoma	Purple Beautyberry	30" ht.	B-B
FM	38	Fothergilla 'Mount Airy'	Mount Airy Fothergilla	30" ht.	B-B
SJ	10	Spirea japonica 'Little Princess'	Little Princess Spirea	5 gal.	Cont.
TOE	43	Thuja occidentalis 'Emerald'	Emerald Green Arborvitae	6' ht.	B-B
TOG	14	Thuja occidentalis 'Golden Globe'	Golden Globe Arborvitae	24" ht.	B-B
PERENNIALS					
CA	38	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Grass	2 gal.	Cont.
CC	69	Coreopsis 'Cosmic Eye'	Big Bang Coreopsis	1 gal.	Cont.
HF	22	Hosta 'Francee'	Francee Hosta	3 gal.	Cont,
HS	113	Hemerocallis 'Stella D'Oro'	Stella D'Oro Daylily	1 gal.	Cont.
IF	539	Isotoma fluviatilis	Blue Star Creeper	plugs	36 cell/flats
NN	38	Nipponanthemum nipponicum	Montauk Daisy	2 gal.	Cont.

(NRPUD) NON-RESIDENTIAL PLANNED UNIT DEVELOPMENT LANDSCAPE REQUIREMENTS

- ONE PARKING LOT TREE SHALL BE PROVIDED FOR EACH 2000 SQFT OF PAVED PARKING, INCLUDING AISLES, SERVICE AREAS, DRIVEWAYS, AND DRIVES.
  -- TREES REQUIRED: 37,000 SQFT OF PAVED SURFACE / 2000 SQFT = 19 TREES
  -- TREES PROVIDED: 20 TREES
- AN EXTENSIVELY LANDSCAPED GREENBELT SHALL BE PROVIDED ALONG EXISTING PUBLIC STREETS. SAID GREEN BELT SHALL INCLUDE CLOSELY SPACED STREET TREES AND HEDGE ROWS TO SCREEN THE PARKING LOT.
- PEDESTRIAN GATHERING AND SEATING PLAZAS, GREENWAYS, AND TREE LINED DRIVES SHALL BE WITHIN PARKING LOTS AND THROUGHOUT THE SITE TO PROVIDE AN INVITING PEDESTRIAN ENVIRONMENT, PROTECTION OF OF THE PEDESTRIAN FROM VEHICULAR CIRCULATION, FOR IMPROVED TRAFFIC OPERATION, AND VIEWS.

NOTES

- TOWNSHIP ENTRANCEWAY SIGN SHALL BE LOCATED WITHIN PROPERTY LINES OF THE SITE. PLANTINGS MAY EXTEND INTO ROAD COMMISSION RIGHT OF WAY AS SHOWN AS LONG AS LINE OF SIGHT IS MAINTAINED AND PLANTS DO NOT EXCEED 2 FT. IN HEIGHT.
- TOWNSHIP TO INSTALL AND MAINTAIN ENTRANCEWAY SIGN.
- DUE TO UNKNOWN SIZE OF TOWNSHIP ENTRANCEWAY SIGN DIMENSIONS HAVE BEEN ASSUMED AT THE SIZE SHOWN. PLANTING ARRANGEMENTS ARE ALSO BASED UPON ASSUMED SIZE SO,ONCE SIGN IS DIMENSIONED THE PLANTING ARRANGEMENT MAY NEED TO BE ALTERED.
- ALL LANDSCAPING SHALL BE WATERED BY AN UNDERGROUND IRRIGATION SYSTEM.
- WEED BARRIER FABRIC SHALL BE PLACED IN ALL PLANTING BED AREAS.

PLANT LIST– TOWNSHIP ENTRANCEWAY SIGN

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
SHRUBS					
TOD	11	Thuja occidentalis 'Danica'	Danica Arborvitae	24" ht.	B-B
WF	11	Weigelia florida 'My Monet'	My Monet Weigelia	24" ht.	B-B
PERENNIALS					
CA	4	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Grass	2 gal.	Cont.
PA	6	Pennisetum alopecuroides 'Hameln'	Dwarf Hameln Grass	2 gal.	Cont.
PO	29	Papaver orientale 'Helen Elizabeth'	Helen Elizabeth Poppy	1 gal.	Cont.

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 (TOLL FREE) FOR THE LOCATION OF UNDERGROUND FACILITIES

BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.6735 FAX 517.548.1670

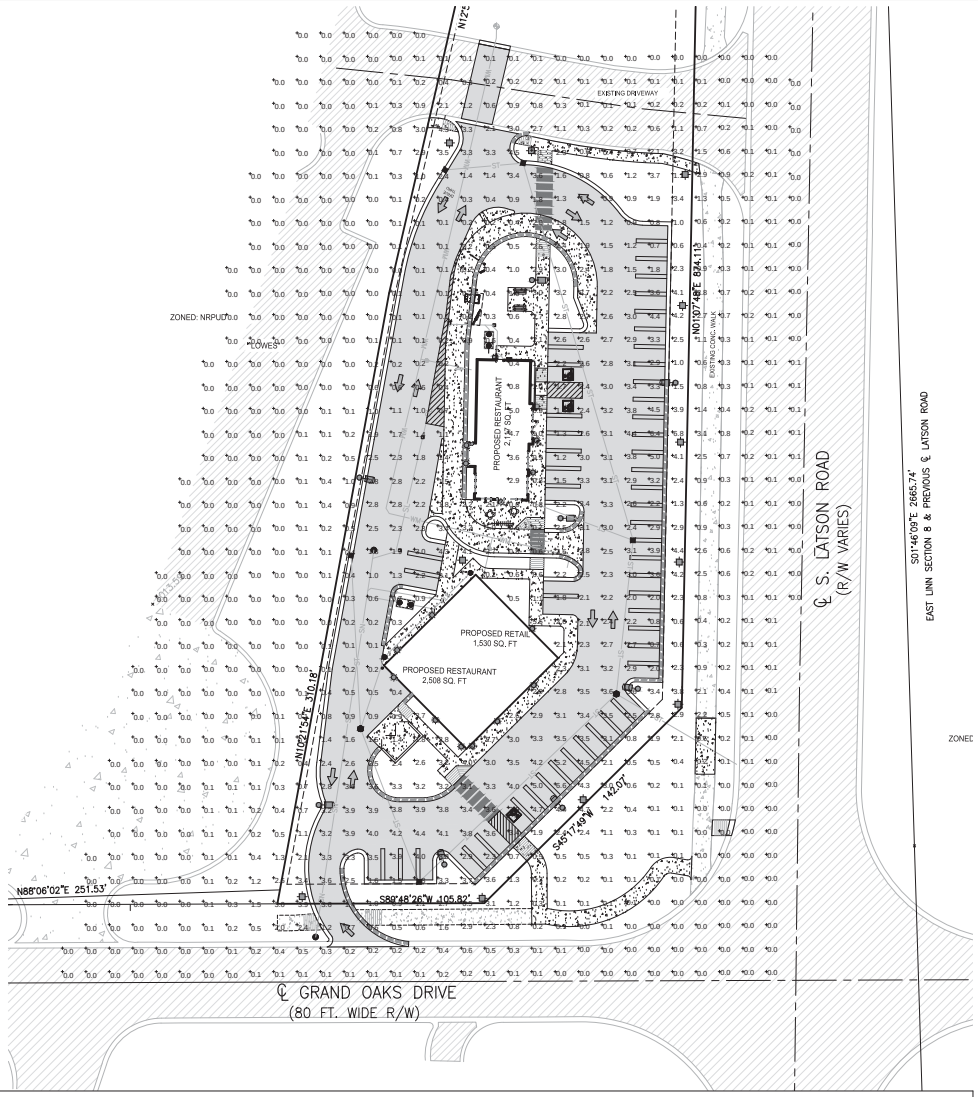
PROJECT: GENOA PLAZA

PREPARED FOR: USA 2 GO
28265 BECK ROAD, SUITE C-2
WIXOM, MI 48393
248.773.7992

TITLE: LANDSCAPE PLAN

NO	BY	REVISION PER	DATE
3	ST	PER PLANNING COMM.	7-5-17
2	CH	PER PLANNING COMM.	5-3-17
1	CD	TOWNSHIP REVIEW	9-21-16

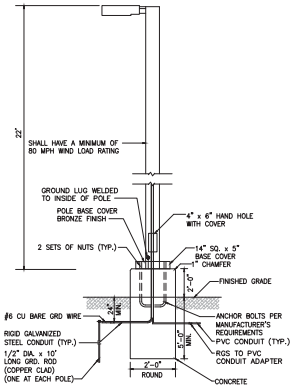
DESIGNED BY: ST
DRAWN BY: ST
CHECKED BY:
SCALE 1" = 30'
JOB NO. 16-243
DATE 08/22/16
SHEET NO. C6



SCALE: 1 INCH = 30 FEET

LEGEND

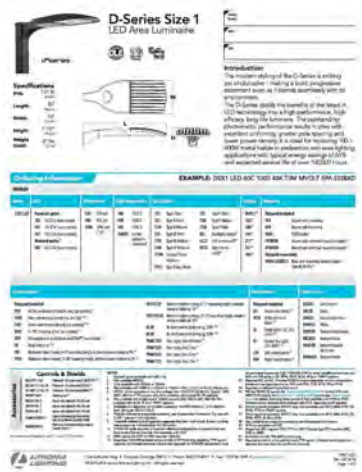
PROPOSED (PR)	EXISTING (EX)	
		DOUBLE FIXTURE LIGHT POLE
		SINGLE FIXTURE LIGHT FIXTURE
		WALL MOUNTED LIGHT FIXTURE
		GROUND LIGHT FIXTURE
0.1		FOOT CANDLES ON SITE



AREA LIGHT FIXTURE DETAIL

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	LUMENS	LLF	POLE HEIGHT	BASE HEIGHT	TOTAL HEIGHT
	LA	11	LSI GREENLEE LED LEXINGTON DECORATIVE FIXTURE	XLXM3-PT-5-LED-63-450-CW-UE-MSV-PCI120	LED	ABSOLUTE	.95	8'	0'	8'
	LB	8	DSX1 LED WITH (2) 30 LED LIGHT ENGINES, TYPE T5M OPTIC, 4000K, @ 1050mA WITH HOUSE SIDE SHIELD	DSX1 LED 60C 1000 40K T5M MVOLT HS	LED	ABSOLUTE	.95	22'	2'	24'
	LC	1	GENERAL PURPOSE LED CAST FLUSH MOUNT	OLCFM 15D	LED	ABSOLUTE	.95	12'		12'
	LD	11	SENTRY ELECTRIC SMAL-LED MEMPHIS LUMINAIRE	SMAL-50LEDV29-1.4A-840-SFR5-BPC120V-BK	LED	ABSOLUTE	.95	12'		12'

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLAN WERE OBTAINED FROM AVAILABLE RECORDS AND EITHER IMPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES DETERMINES THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE OWNERS IF ANY CONFLICTS ARE FOUND TO EXIST. THE CONTRACTOR SHALL ALSO NOTIFY THE OWNERS IF ANY CONFLICTS ARE DISCOVERED BY A PRELIMINARY DIG CALL MISS DIG SERVICE OR DEPTH OFFSETS SUBSEQUENT TO THE PLANS.

BEFORE YOU DIG CALL MISS DIG 800-482-7171 www.missdig.org

BEBOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.6735 FAX 517.548.1670

PROJECT: GENOA PLAZA

PREPARED FOR: USA 2 GO, 28265 BECK ROAD, SUITE C-2, WIXOM, MI 48393, 248.773.7992

TITLE: LIGHTING PLAN

NO	BY	REVISION PER	DATE
3	ST	PER PLANNING COMM.	7-5-17
2	CH	PER PLANNING COMM.	5-3-17
1	CG	TOWNSHIP REVIEW	9-21-16

DESIGNED BY: ST
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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. 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.
4. ALL TEMPORARY EROSION CONTROL DEVICES AS NOTED ON PLANS SHALL BE INSTALLED PRIOR TO THE START OF MASSIVE EARTH DISTRIBUTION.
5. 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. SLOPES
6. 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.

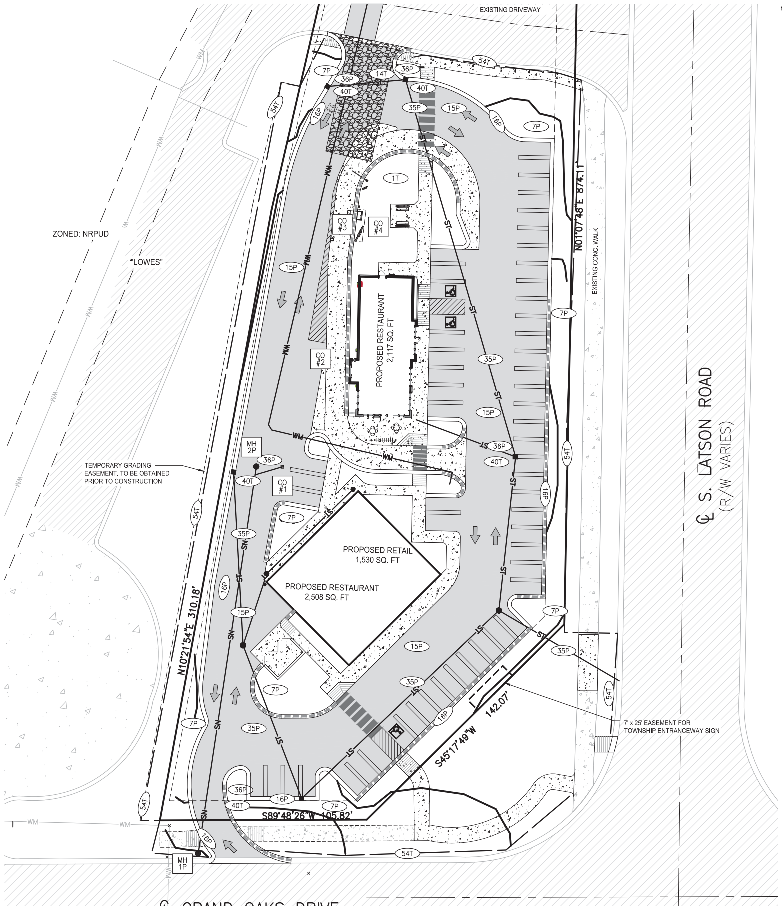
STORM DRAINS

7. 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.
8. 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.
9. BURLAP AND PEA STONE FILTERS WILL NEED TO BE CHANGED AFTER EACH RAINFALL.
10. 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" DIAMETER CODE SIZE.
11. ALL STORM DRAINAGE PIPE 30" IN DIAMETER OR LARGER SHALL BE POINTED, AT THE JOINTS ON THE INSIDE WITH MORTAR, AFTER BACKFILLING.
12. 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

13. 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.
14. IN THE NON-GROWING SEASON, TEMPORARY STABILIZATION OF MASSIVELY EXPOSED AREAS FOR WINTER STABILIZATION SHALL BE DONE WITH STRAW MATTING.
15. 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.
16. 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.
17. 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.
18. 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.
19. PER THE LIVINGSTON COUNTY DRAIN COMMISSIONER THE SEEDING, FERTILIZER AND MULCH MINIMUM QUANTITIES SHALL BE AS FOLLOWS:

TOP-SOIL	3" IN DEPTH
GRASS SEED	210 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.



SCALE: 1 INCH = 30 FEET

LEGEND

PROPOSED (PR)	EXISTING (EX)	
900	900	CONTOUR
		STORM DRAINAGE FLOW
T/C XXX.XX	+ 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
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
G	G	GAS
OH	OH	OVERHEAD WIRE
		MANHOLE
		INLET / CATCHBASIN
		GATE VALVE
		HYDRANT
		UTILITY POLE
		FENCE
		SIGN
	NFV	NOT FIELD VERIFIED
TBR		TO BE REMOVED
CB 01		STORM SEWER LABEL
54T		SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
		SILT FENCE
		LIMITS OF GRADING/CLEARING
		CONCRETE
		ASPHALT
		MODIFIED CURB

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 DAY	1.	INSTALL SILT FENCE AND STORM DRAINAGE PROTECTION.
5 DAYS	2.	SITE DEMOLITION
10 DAYS	3.	INSTALL STORM SEWER, & INLET PROTECTION
120 DAYS	4.	BEGIN BUILDING CONSTRUCTION
5 DAYS	5.	ROUGH GRADE
10 DAYS	6.	INSTALL PAVEMENT AND WALKS
3 DAY	7.	FINE GRADE, SPREAD TOPSOIL AND SEED.
1 DAY	8.	REMOVE ALL EROSION CONTROL STRUCTURES.
1 DAY	9.	REMOVE ACCUMULATED SILT FROM ALL EXISTING DRAINAGE.

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

CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE

ACTIVITY	DAILY	WEEKLY	MONTHLY	AS REQUIRED
MAINTAIN LANDSCAPING, REPLACE MULCH		X	X	X
CLEAN INLETS		X	X	X
COLLECT LITTER		X		X
SWEEP PAVED AREAS		X	X	X
SCRAPE PAVED AREAS	X			X

NOTE:
THE TIMING IN THE CONSTRUCTION SEQUENCE IS AN APPROXIMATION OF THE AMOUNT OF TIME NEEDED FOR EACH STEP/PROCESS. SOME STEPS WILL BE GOING ON CONCURRENTLY WITH OTHERS (IE. THE BUILDING WILL BE AMIDST CONSTRUCTION WHILE CURB AND GUTTER WILL BE INSTALLED) BUT THE OVERALL ORDER OF EVENTS WILL BE AS LISTED TO ENSURE PROPER SITE CONSTRUCTION ACTIVITY MAINTENANCE.

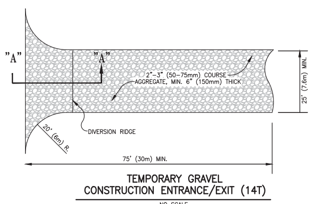
NOTE:
1. STRUCTURAL SEDIMENT CONTROLS NEED TO BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AS WELL AS WITHIN 24 HOURS AFTER A STORM EVENT.
2. CONTRACTOR TO INSTALLED MULCH BLANKETS FOR ALL AREAS TO BE SEEDED WITH SLOPES EXCEEDING 1:4.
3. CONTRACTOR TO INSTALL INLET SEDIMENT FILTERS ON ALL CATCH BASINS AND INLETS UNLESS OTHERWISE NOTED.

SOILS INFORMATION:
- MIAMI LOAM 2–6% SLOPES

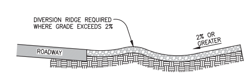
SOIL EROSION CONTROL MEASURES

NO.	MEASURE	DESCRIPTION
1	STRIPPING & STOCKPILING TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION STOCKPILE SHOULD BE TEMPORARILY SEEDED
7	HYDRO SEEDING	EFFECTIVE ON LARGE AREAS MULCH TACKING AGENT USED TO PROVIDE IMMEDIATE PROTECTION UNTIL GRASS IS ROOTED SHOULD INCLUDE PREPARED TOPSOIL BED
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, THUS MINIMIZING 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 DRAINAGEWAY
35	STORM SEWER	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 CATCH BASINS TO COLLECT SEDIMENT
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER CLOTH OVER INLET
40	INLET SEDIMENT FILTER	EASY TO SHAPE COLLECTS SEDIMENT MAY BE CLEANED AND EXPANDED AS NEEDED
54		USES GEOTEXTILE FABRIC AND POST OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE DETAIL THIS SHEET)

T= TEMPORARY, P = PERMANENT
TOTAL AREA TO BE DISTURBED = 57,287 S.F. (1.25 AC.)



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT (14T)
NO SCALE



SECTION "A"–"A"

SOIL EROSION CONTROL

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED BETWEEN THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, CREEKS, LAKES, PONDS AND OTHER WATERCOURSES; WETLANDS; OR ROADWAYS ON OR NEAR THE SITE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BERMS MAY BE USED AS TEMPORARY STORMWATER DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BERMS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

THE PERMANENT SOIL EROSION CONTROLS WILL BE MAINTAINED BY USA 2 GO.

SOIL EROSION CONTROL - SEQUENCE OF OPERATION (NEW CONSTRUCTION)

INSTALL CRUSHED CONCRETE ACCESS DRIVE AND TEMPORARY CULVERTS AT THE SITE ENTRANCE AS INDICATED ON THE PLANS. (ONE DAY)

INSTALL SILT FENCE OR SIMILAR APPROVED SILT BARRIER ALONG PROPERTY LINES AND AROUND SENSITIVE NATURAL FEATURES AS INDICATED ON THE PLANS. (ONE DAY)

IF INDICATED ON CONSTRUCTION PLANS, SEDIMENTATION BASINS, DETENTION POND, ETC., SHALL BE CONSTRUCTED PRIOR TO THE INSTALLATION OF ANY OTHER WORK.

STRIP EXISTING TOPSOIL, VEGETATION AND ORGANIC MATTER FROM BUILDING PAD AND PARKING AREAS. COMMENCE LAND BALANCE AND MASS GRADING OPERATIONS. MAINTAIN A MINIMUM BUFFER OF 15' OF EXISTING VEGETATION WHEREVER POSSIBLE AROUND SITE PERIMETER. STOCK PILES SHOULD BE LOCATED AWAY FROM EXISTING DRAINAGE FACILITIES. (TWO DAYS)

EXCAVATE AND INSTALL UNDERGROUND UTILITIES. INSTALL PEASTONE INLET FILTERS AROUND ALL NEW STORM SEWER FACILITIES AS INDICATED ON THE PLANS. EXISTING AND PROPOSED STORM SEWER FACILITIES SHALL BE PROTECTED FROM EROSION AND SEDIMENT INFILTRATION AT ALL TIMES. (FOUR DAYS)

COMMENCE FINAL GRADING AND TRIMMING OPERATIONS. PREPARE SUBGRADE FOR INSTALLATION OF PROPOSED PAVEMENT. (TWO DAYS)

SEED AND MULCH ALL DISTURBED SITE AREAS AND INSTALLED SITE LANDSCAPING. (ONE DAY)

REMOVE CONSTRUCTION DEBRIS AND JET VAC NEWLY INSTALLED STORM SEWER SYSTEM AS REQUIRED BY THE MUNICIPALITY. (TWO DAYS)

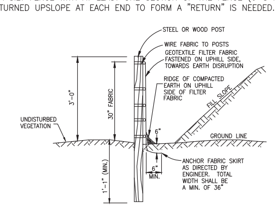
REMOVE ALL REMAINING TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ONCE PERMANENT MEASURES ARE ESTABLISHED. (ONE DAY)

WHENEVER POSSIBLE, THE SITE SHALL BE GRADED TO WITHIN SIX INCHES (6") OF THE PROPOSED FINISH GRADE PRIOR TO INSTALLATION OF UNDERGROUND FACILITIES.

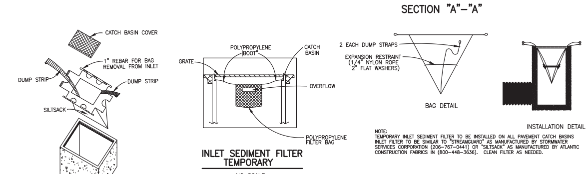
STAGING OF PROPOSED WORK SHALL BE COMPLETED BY THE CONTRACTOR AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED AREAS.

THE TEMPORARY SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY RSP CONSTRUCTION AT PHONE NUMBER (248) 747-3773.

NOTE:
A SILT FENCE WITH AT LEAST ONE SECTION OF THE FENCE (6–8 FT) TURNED UPSLOPE AT EACH END TO FORM A "RETURN" IS NEEDED.



SILT FENCE DETAIL
NO SCALE



INLET SEDIMENT FILTER TEMPORARY
NO SCALE

NOTE:
TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVEMENT CATCH BASINS INLET FILTER TO BE SIMILAR TO "STREAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (206-767-0441) OR "SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS IN (800-448-3636). CLEAN FILTER AS NEEDED.

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 (TOLL FREE) FOR THE LOCATION OF UNDERGROUND FACILITIES

BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.6735 FAX 517.548.1670

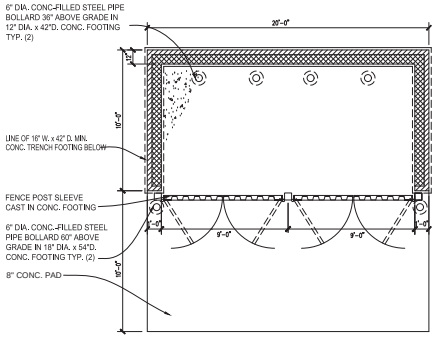
PROJECT: GENOA PLAZA

PREPARED FOR: USA 2 GO, 28265 BECK ROAD, SUITE C-2, WIXOM, MI 48393, 248.773.7992

TITLE: SOIL EROSION CONTROL PLAN

NO	BY	REVISION PER	DATE
3	ST	PER PLANNING COMM.	7-5-17
2	CH	PER PLANNING COMM.	5-3-17
1	CD	TOWNSHIP REVIEW	9-21-16

DESIGNED BY:	ST
DRAWN BY:	ST
CHECKED BY:	
SCALE	1" = 30'
JOB NO.	16-243
DATE	08/22/16
SHEET NO.	C8



REFUSE ENCLOSURE PLAN
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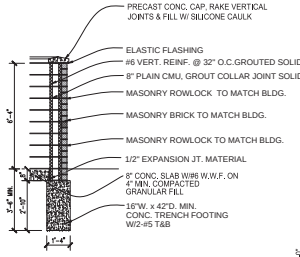

REFUSE ENCLOSURE WALL SECTION
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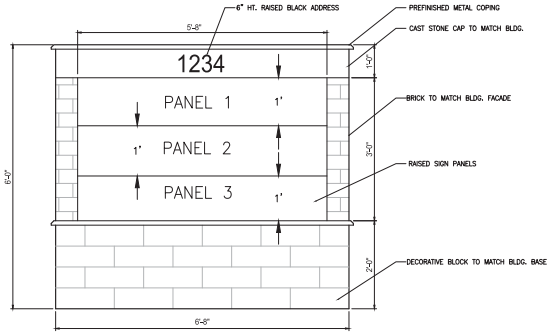


MONUMENT SIGN DETAIL
(NO SCALE)

4 CADMIUM 5/8" THREADED STUDS CAST IN PLACE W/ 3/4" X 2" X 1/8" FLAT WASHERS & NUTS (TYP.)

8" MDOT P1 MODIFIED – 4,000 PSI
8" COMPACTED MDOT 21AA CRUSHED LIMESTONE
COMPACTED SUBBASE 95% DENSITY

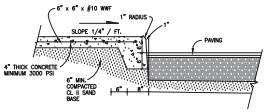
CONCRETE APPROACH CROSS SECTION
(NO SCALE)

2" MDOT 36A
2" MDOT 13A
8" COMPACTED MDOT 21AA CRUSHED LIMESTONE
COMPACTED SUBBASE 95% DENSITY

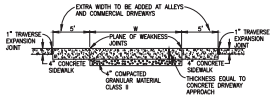
ASPHALT SECTION
(NO SCALE)

1.5" MDOT 5E3 HMA
2" MDOT 4E3 HMA
2.5" MDOT 3E3-1 HMA
8" OF MDOT AGGREGATE BASE
12" OF MDOT CLASS II SAND
COMPACTED SUBBASE 95% DENSITY

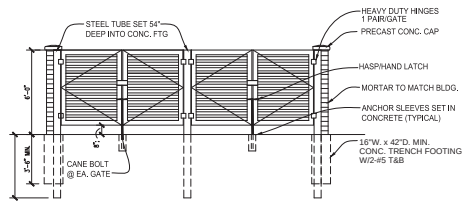
GRAND OAKS R.O.W. ASPHALT SECTION
(NO SCALE)



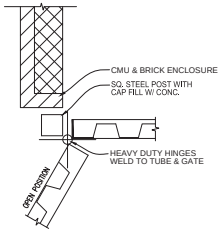
INTEGRAL CONCRETE WALK / CURB DETAIL
(NO SCALE)



THICKENED CONCRETE SIDEWALK
(NO SCALE)



REFUSE ENCLOSURE FRONT ELEVATION
NO SCALE



GATE POST DETAIL
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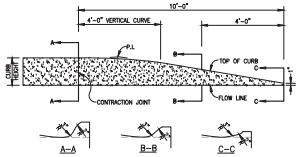
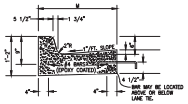


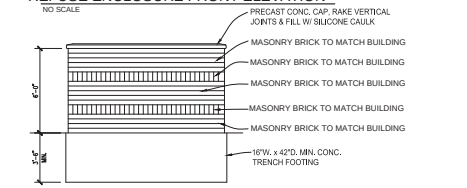
CONCRETE CURB AND GUTTER ENDINGS
(NO SCALE)

4" CONCRETE SIDEWALK
(NO SCALE)



DETAIL	DIMENSIONS	LINE WEIGHT	CONCRETE QUANTITY
F1	1'-0", 1 1/4"	1/2" DIA. SHOWN	0.0484
F2	1'-0", 1 1/4"	DWTED	0.0484
F3	1'-0", 1 1/4"	3/4" DIA. SHOWN	0.0610
F4	1'-0", 1 1/4"	DWTED	0.0610
F5	1'-0", 1 1/4"	7/8" DIA. SHOWN	0.0737
F6	1'-0", 1 1/4"	DWTED	0.0737

CONCRETE CURB & GUTTER TYPE F
(NO SCALE)



REFUSE ENCLOSURE REAR ELEVATION
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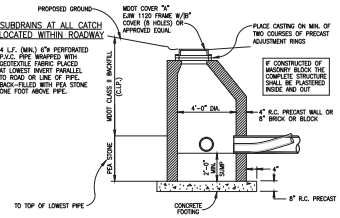
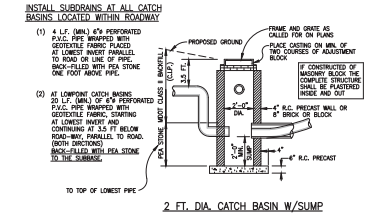
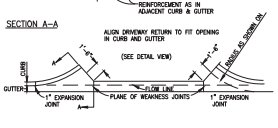


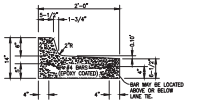
4 FT. DIA. STORM MANHOLE W/SUMP
NO SCALE



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

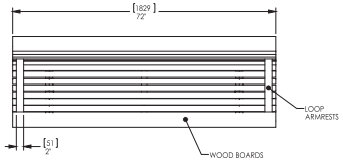


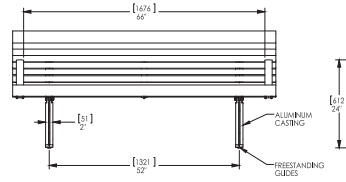
CONCRETE DRIVEWAY OPENING – MDOT STANDARD II–42, DETAIL "M"
(NO SCALE)

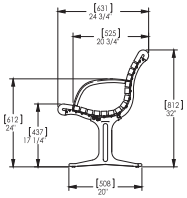


MODIFIED CONC. CURB & GUTTER
(NO SCALE)

Gretchen™ Backed Bench 72in, Freestanding / Surface Mount, Wood, with Loop Armrest
Product Drawing
Date: 6/29/2011
www.landscapeforms.com Ph: 800.521.2546







landscapeforms Drawing: GR133-02
Dimensions are in inches [mm]

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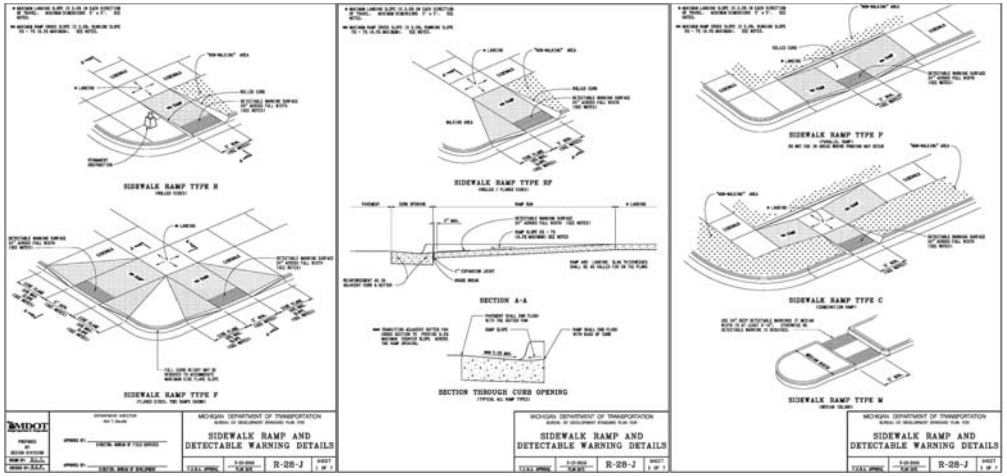


THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLAN ARE BASED ON RECORDS OF THE APPROPRIATE UTILITY COMPANIES OR MUNICIPALITIES TO THE COMPUTERIZED DATA AS ACCURATE AS THE DATA IS BELIEVED TO BE, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNERS IF ANY CONFLICTS ARE DISCOVERED. IF ANY CONFLICTS OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 www.missdig.org

BEBOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
800.246.8735 FAX 517.548.1670

PROJECT: GENOA PLAZA
PREPARED FOR: USA 2 GO
28265 BECK ROAD, SUITE C-2
WIXOM, MI 48393
248.773.7992

TITLE: CONSTRUCTION DETAILS

NO	BY	REVISION PER	DATE
1	CG	TOWNSHIP REVIEW	9-21-16
2	CH	PER PLANNING COMM.	5-3-17
3	ST	PER PLANNING COMM.	7-5-17

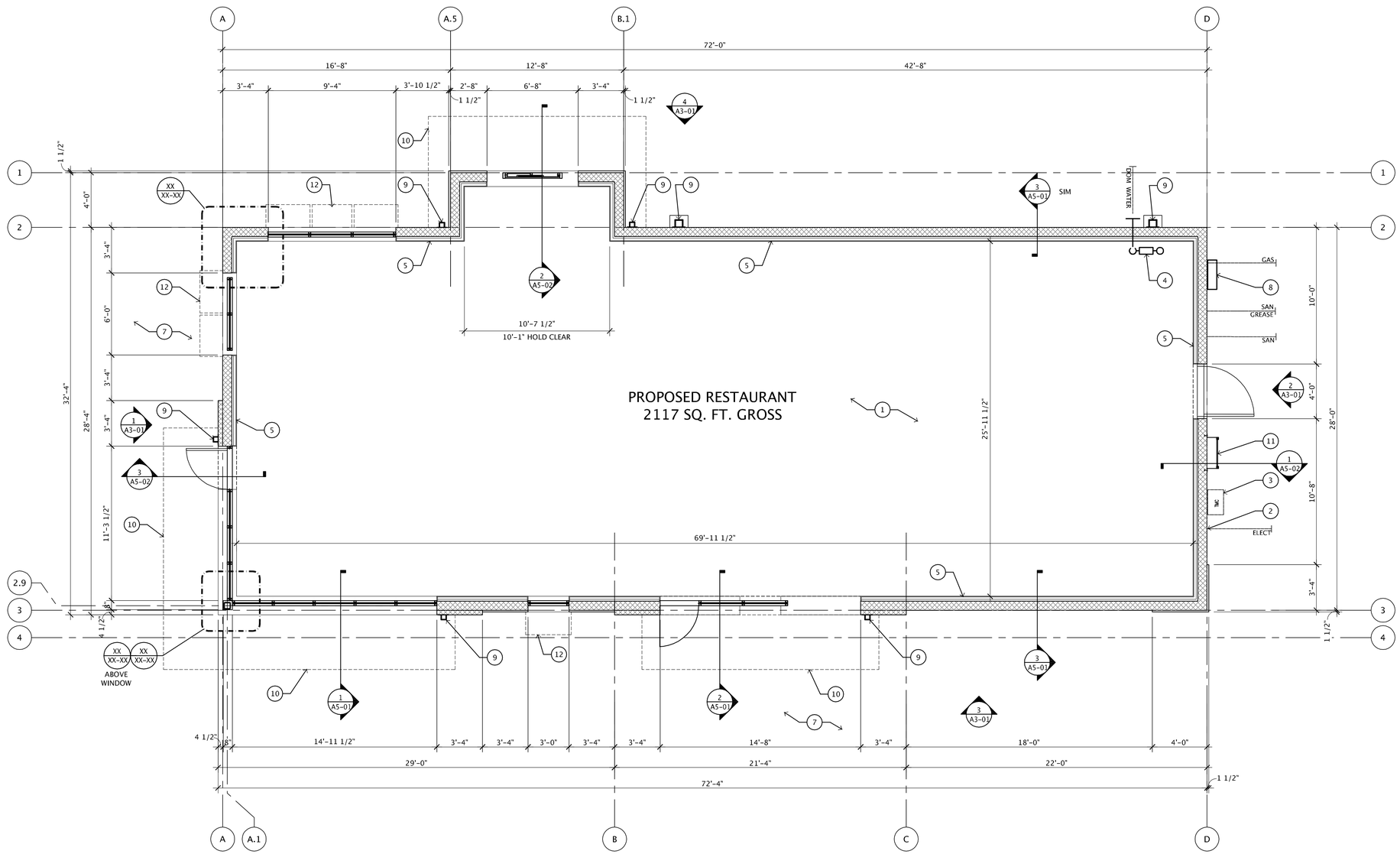
DESIGNED BY: ST
DRAWN BY: ST
CHECKED BY:
SCALE NO SCALE
JOB NO. 16-243
DATE 08/22/16
SHEET NO. C9

Floor Plan Key Notes

1. CONCRETE FLOOR SLAB (REF FOUNDATION PLAN)
2. TENANT ELECTRICAL SERVICE METERS / SWITCH GEAR (REF ELECT SHEET E1-01)
3. TELEPHONE SERVICE CAB (REF ELECT SHEET E1-01)
4. TENANT DOMESTIC WATER MAIN AND METER (REF SHEET M1-01)
5. INTERIOR GYP BOARD SHEATHING TO U/S OF STRUCTURE
6. LINE OF FUTURE TENANT PARTITION (BY OTHERS)
7. CONCRETE WALK - SLOPE AWAY FROM BUILDING AT 1/4" PER LF (MAX) AND 1/8" PER LF (MIN) - REF CIVIL
8. GAS METER BANK (REF SHEET M1-01)
9. CONNECT DOWNSPOUT TO STORM - COORDINATE STORM WITH CIVIL PLANS (REF SHEET M1-01)
10. EXTERIOR METAL CHANNEL CANOPY (REF EXTERIOR ELEVATIONS AND SHT A5-11)
11. ROOF ACCESS LADDER (REF EXTERIOR ELEVATIONS AND 1/A5-03)
12. PRE-FINISHED BAHAMA SHUTTER (REF EXTERIOR ELEVATIONS AND SHT A5-11)

OCCUPANT LOAD & EGRESS REQUIREMENTS

THIS SUBMITTAL IS INTENDED FOR BUILDING SHELL ONLY. AS PLANS FOR INDIVIDUAL TENANT SPACES ARE DEVELOPED, ADDITIONAL DOORS SHALL BE LOCATED AS NECESSARY TO CONFORM WITH THE EXIT REQUIREMENTS OF CHAPTER 10.



1 FLOOR PLAN - BULDING 'A'

Scale: 1/4" = 1'-0"

NORR

CONSULTANT:

SEAL:

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

DATE	ISSUED FOR	REV
9/21/2016	TOWNSHIP REIVIEW	
4/12/2017	OWNER REVIEW	
4/28/2017	TOWNSHIP REVIEW	
05/05/2017	TOWNSHIP REVIEW	

Project Manager B.COLBURN	Drawn
Project Leader B.COLBURN	Checked
Date 08/01/2016	Dept Mgr Approval

Client

Project

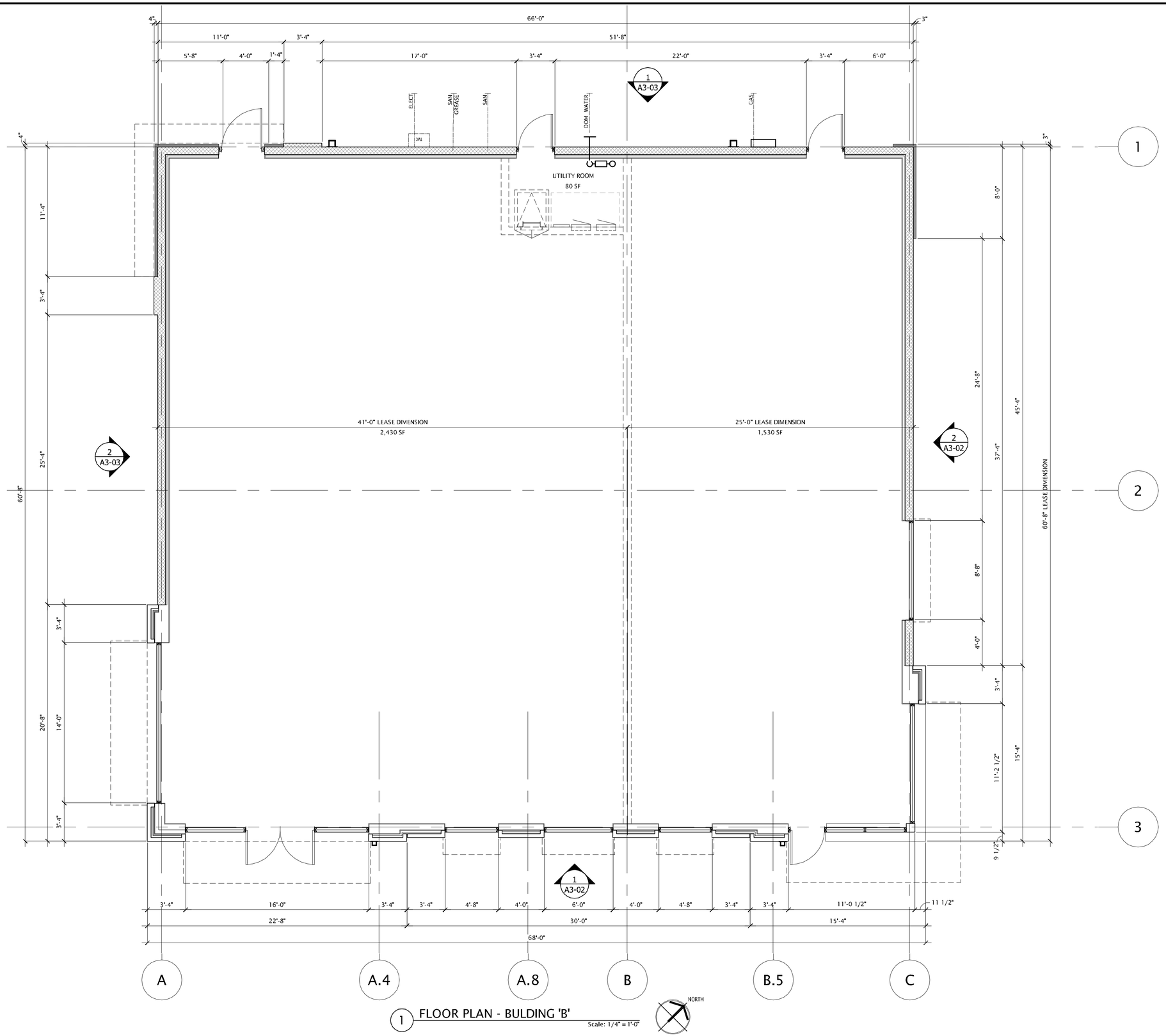
Two Landlord Shell Building Development
Genoa Township, Michigan

Drawing Title

BUILDING 'A'
FLOOR PLAN

DO NOT SCALE DRAWING

Project No.	Drawing No.
JCDT.16.0195	A2-01



1 FLOOR PLAN - BULDING 'B'

Scale: 1/4" = 1'-0"

GROSS BUILDING LEASE AREA = 4,040 SF

NORR

CONSULTANT:

SEAL:

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

DATE	ISSUED FOR	REV
9/21/2016	TOWNSHIP REIVIEW	
4/12/2017	OWNER REVIEW	
4/28/2017	TOWNSHIP REVIEW	
05/05/2017	TOWNSHIP REVIEW	

Project Manager B.COLBURN	Drawn
Project Leader B.COLBURN	Checked
Date 08/01/2016	Dept Mgr Approval
Client	

Project

Two Landlord Shell Building Development
Genoa Township, Michigan

Drawing Title

BUILDING 'B'
FLOOR PLAN

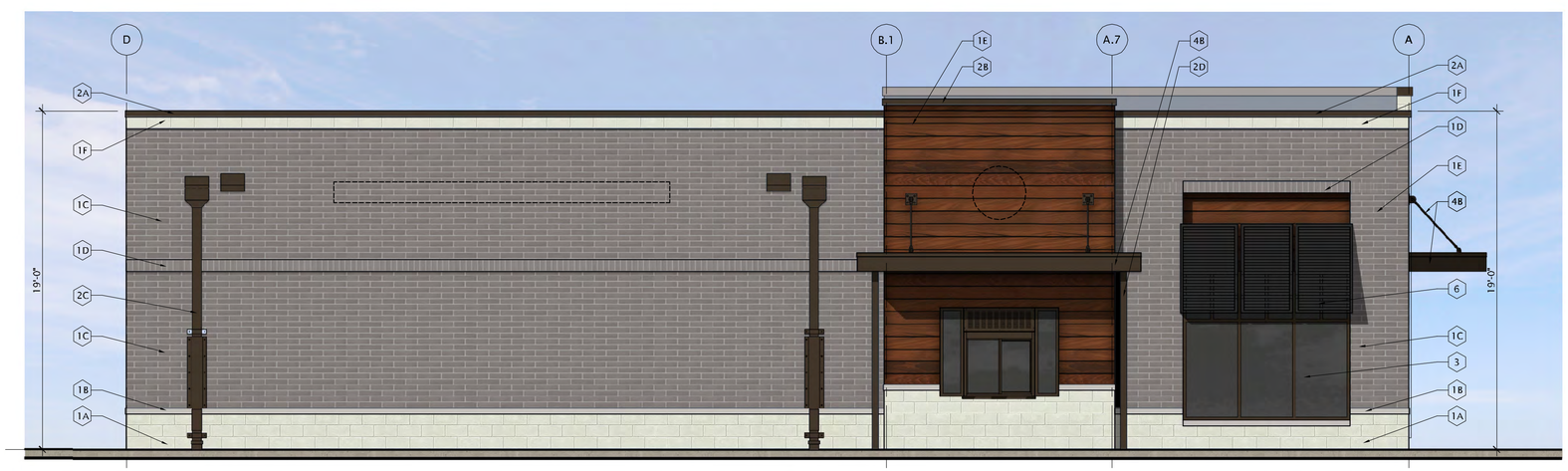
DO NOT SCALE DRAWING

Project No.	Drawing No.
JCDT.16.0195	LP-02

1 SOUTH ELEVATION
Scale: 1/4" = 1'-0"

2 NORTH ELEVATION
Scale: 1/4" = 1'-0"

3 EAST ELEVATION
Scale: 1/4" = 1'-0"



4 WEST ELEVATION
Scale: 1/4" = 1'-0"

GENERAL NOTES:

1. ALL RTU TO BE FULLY SCREENED BY PARAPET
2. PROVIDE 3/4" FRT PLY'WD BEHIND SIGN AREAS ONLY

FABRIC AWNING

ALL FABRIC AWNINGS SHALL BE UNDER SEPARATE PERMIT. ATTACHMENTS, MATERIALS, AND STRUCTURAL FRAMES, AND FLAME SPREAD RATINGS SHALL BE DESIGNED IN ACCORDIANCE WITH THE 2012 MBC. AWNINGS ARE SHOWN FOR COORDINATION OF TENANT LAYOUT AND FINAL BUILDING DESIGN INTENT ONLY.

OCCUPANT LOAD & EGRESS REQUIREMENTS

THIS SUBMITTAL IS INTENDED FOR BUILDING SHELL ONLY. AS PLANS FOR INDIVIDUAL TENANT SPACES ARE DEVELOPED, ADDITIONAL DOORS SHALL BE LOCATED AS NECESSARY TO CONFORM WITH THE EXIT REQUIREMENTS OF CHAPTER 10.

(T) NOTE:
DENOTES CLEAR TEMPERED GLASS IN ANODIZED ALUM FRAME
(REF DOOR AND STOREFRONT NOTES SHEET A8-01)

EXTERIOR FINISH AREAS - BLDG #1

EXTERIOR WALL	GROSS WALL AREA	GENOA TOWNSHIP EXTERIOR WALL NATURAL MATERIAL MATRIX: FIBER CEMENT SIDING PROVIDED	NATURAL MATERIAL PROVIDED (MIN 80% REQUIRED)
SOUTH WALL	674 SF	130 SF = 19 %	545 SF = 81 %
NORTH WALL	642 SF	105 SF = 16 %	537 SF = 84 %
EAST WALL	1425 SF	287 SF = 20 %	1138 SF = 80 %
WEST WALL	1377 SF	243 SF = 18 %	1134 SF = 82 %

TOTAL WALL AREA = 4,118 SF
TOTAL FIBER CEMENT SIDING PROVIDED = 765 SF
% OF FIBER CEMENT SIDING OF TOTAL WALL AREA =19%

Exterior Material Finishes

	MATERIAL	MFGR.	COLOR / STYLE	REMARKS/ NOTES
1A	CONCRETE BASE BLOCK	-	8x8x16 / STONE LOOK BLOCK / NATURAL MORTAR	FINAL SELECTION TO BE APPROVED BY ARCHITECT
1B	BLOCK SILL	-	8x4x16 / TO MATCH CONCRETE BASE BLOCK W/ 1/2" PULL	FINAL SELECTION TO BE APPROVED BY ARCHITECT
1C	STRUCTURAL BRICK	-	8x4x16	FINAL SELECTION TO BE APPROVED BY ARCHITECT
1D	SCORED FACE BLOCK (SOLDIER)	-	8x8x16 / SCORED FACE / MATCH STRUCTURAL BRICK	FINAL SELECTION TO BE APPROVED BY ARCHITECT
1E	CEMENT BOARD RAINSCREEN	JAMES HARDIE	LAP SIDING / WOOD LOOK	FINAL SELECTION TO BE APPROVED BY ARCHITECT
1F	8" DECORATIVE CMU - GROUND FACE	-	8x8x16 / STONE LOOK BLOCK / NATURAL MORTAR	FINAL SELECTION TO BE APPROVED BY ARCHITECT
2A	PRE-FIN MTL COPING	UNICLAD or APPROVED EQUAL	COLOR TO MATCH 1C	
2B	PRE-FIN MTL COPING	UNICLAD or APPROVED EQUAL	COLOR TO MATCH 1E	
2C	PRE-FIN MTL DOWNSPOUTS	UNICLAD or APPROVED EQUAL	-	GUTTER & DOWNSPOUTS
2D	PRE-FIN MTL DOWNSPOUTS	UNICLAD or APPROVED EQUAL	-	GUTTER & DOWNSPOUTS FOR ENTRANCE CANOPIES
3	STOREFRONT SYSTEM	KAWNEER or APPROVED EQUAL	DARK BRONZE ALUM FRAME W/ 1" INSULATED CLEAR GLASS	LOW-E / U=0.37 / SHGC=0.55
4A	PAINT	BENJAMIN MOORE or EQUAL	MATCH STRUCTURAL BRICK	
4B	PAINT	BENJAMIN MOORE or EQUAL		FOR ENTRANCE CANOPIES
5	DECORATIVE WALL SCONCE	VISTA LIGHTING or EQUAL	COLOR AS SCHEDULED	REF ELECTRICAL DRAWINGS FOR INFOMATION
6	PRE-FINISHED METAL BAHAMA SHUTTER	-	COLOR TO MATCH "DARK BRONZE"	FINAL SELECTION TO BE APPROVED BY ARCHITECT

NORR

CONSULTANT:

SEAL:

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

DATE	ISSUED FOR	REV
9/21/2016	TOWNSHIP REIVIEW	
4/12/2017	OWNER REVIEW	
4/28/2017	TOWNSHIP REVIEW	
05/05/2017	TOWNSHIP REVIEW	

Project Manager B.COLBURN	Drawn -
Project Leader B.COLBURN	Checked -
Date 08/01/2016	Dept Mgr Approval

Client

Project

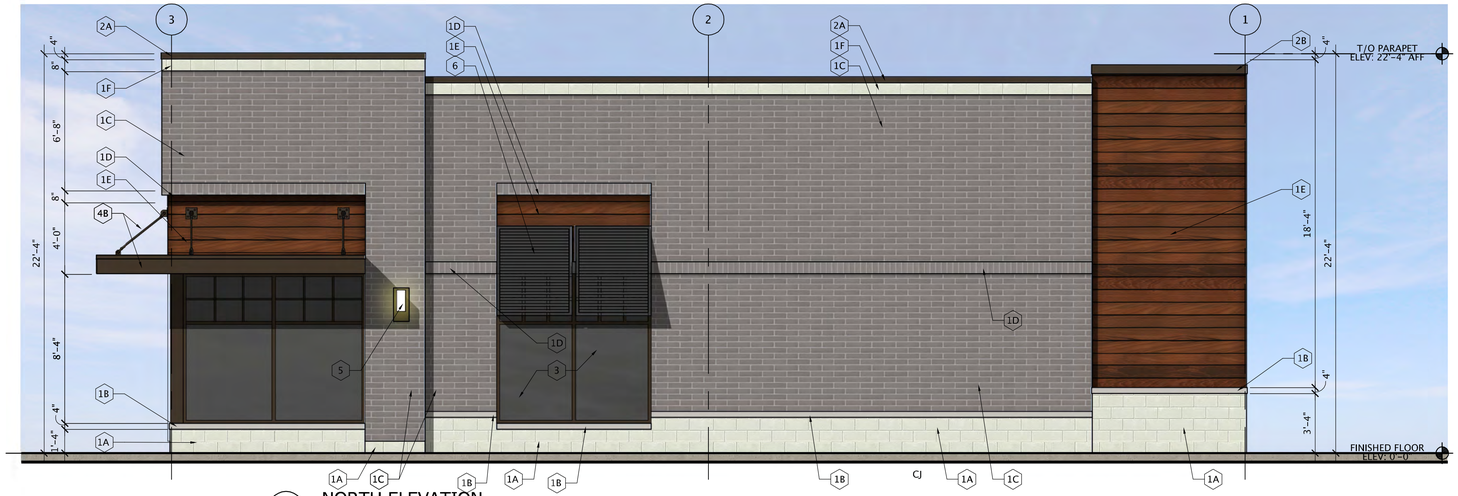
Two Landlord Shell Building Development
Genoa Township, Michigan

Drawing Title

BUILDING 'A'
EXTERIOR ELEVATIONS

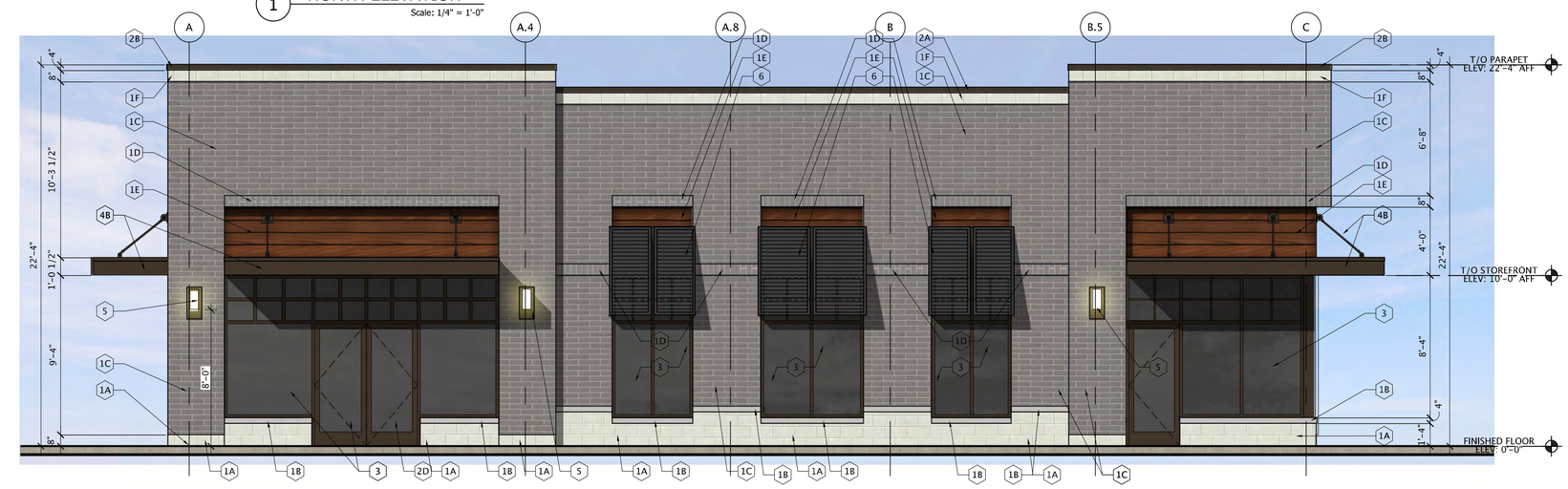
DO NOT SCALE DRAWING

Project No.	Drawing No.
JCDT.16.0195	EL-01

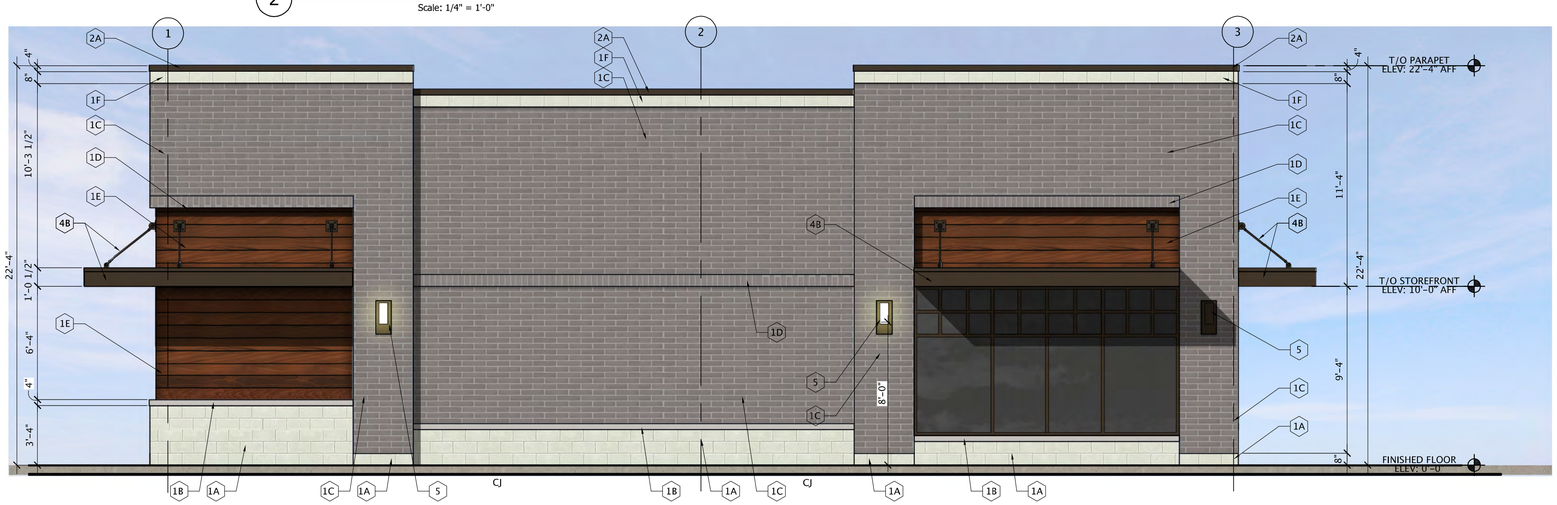


1 NORTH ELEVATION
Scale: 1/4" = 1'-0"

4 WEST ELEVATION
Scale: 1/8" = 1'-0"



2 EAST ELEVATION
Scale: 1/4" = 1'-0"



3 SOUTH ELEVATION
Scale: 1/4" = 1'-0"

EXTERIOR FINISH AREAS - BLDG # 2

EXTERIOR WALL	GROSS WALL AREA	GENOA TOWNSHIP EXTERIOR WALL NATURAL MATERIAL MATRIX: FIBER CEMENT SIDING PROVIDED	NATURAL MATERIAL PROVIDED (MIN 80% REQUIRED
NORTH WALL	1291 SF	220 SF = 17%	1071 SF = 83%
EAST WALL	1562 SF	163 SF = 10%	1399 SF = 90%
WEST WALL	1321 SF	168 SF = 13%	1153 SF = 87%
SOUTH WALL	1542 SF	106 SF = 7%	1436 SF = 93%

TOTAL WALL AREA = 5,716 SF
TOTAL FIBER CEMENT SIDING PROVIDED = 657 SF
% OF FIBER CEMENT SIDING OF TOTAL WALL AREA = 11%

GENERAL NOTES:

1. ALL RTU TO BE FULLY SCREENED BY PARAPET
2. PROVIDE 3/4" FRT PLY'WD BEHIND SIGN AREAS ONLY

FABRIC AWNING
ALL FABRIC AWNINGS SHALL BE UNDER SEPARATE PERMIT. ATTACHMENTS, MATERIALS, AND STRUCTURAL FRAMES, AND FLAME SPREAD RATINGS SHALL BE DESIGNED IN ACCORDANCE WITH THE 2012 MBC. AWNINGS ARE SHOWN FOR COORDINATION OF TENANT LAYOUT AND FINAL BUILDING DESIGN INTENT ONLY.

OCCUPANT LOAD & EGRESS REQUIREMENTS
THIS SUBMITTAL IS INTENDED FOR BUILDING SHELL ONLY. AS PLANS FOR INDIVIDUAL TENANT SPACES ARE DEVELOPED, ADDITIONAL DOORS SHALL BE LOCATED AS NECESSARY TO CONFORM WITH THE EXIT REQUIREMENTS OF CHAPTER 10.

(T) NOTE:
DENOTES CLEAR TEMPERED GLASS IN ANODIZED ALUM FRAME
(REF DOOR AND STOREFRONT NOTES SHEET A8-01)

Exterior Material Finishes

	MATERIAL	MFGR.	COLOR / STYLE	REMARKS/ NOTES
1A	CONCRETE BASE BLOCK	-	8x8x16 / STONE LOOK BLOCK / NATURAL MORTAR	FINAL SELECTION TO BE APPROVED BY ARCHITECT
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1C	STRUCTURAL BRICK	-	8x4x16	FINAL SELECTION TO BE APPROVED BY ARCHITECT
1D	SCORED FACE BLOCK (SOLDIER)	-	8x8x16 / SCORED FACE / MATCH STRUCTURAL BRICK	FINAL SELECTION TO BE APPROVED BY ARCHITECT
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2D	PRE-FIN MTL DOWNSPOUTS	UNICLAD or APPROVED EQUAL	-	GUTTER & DOWNSPOUTS FOR ENTRANCE CANOPIES
3	STOREFRONT SYSTEM	KAWNEER or APPROVED EQUAL	DARK BRONZE ALUM FRAME W/ 1" INSULATED CLEAR GLASS	LOW-E / U=0.37 / SHGC=0.55
4A	PAINT	BENJAMIN MOORE or EQUAL	MATCH STRUCTURAL BRICK	
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5	DECORATIVE WALL SCONCE	VISTA LIGHTING or EQUAL	COLOR AS SCHEDULED	REF ELECTRICAL DRAWINGS FOR INFOMATION
6	PRE-FINISHED METAL BAHAMA SHUTTER	-	COLOR TO MATCH "DARK BRONZE"	FINAL SELECTION TO BE APPROVED BY ARCHITECT

NORR

CONSULTANT:

SEAL:

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DATE	ISSUED FOR	REV
9/21/2016	TOWNSHIP REIVIEW	
4/12/2017	OWNER REVIEW	
4/28/2017	TOWNSHIP REVIEW	
05/05/2017	TOWNSHIP REVIEW	

Project Manager B.COLBURN	Drawn –
Project Leader B.COLBURN	Checked –
Date 08/01/2016	Dept Mgr Approval

Client

Project
Two Landlord Shell Building Development
Genoa Township, Michigan

Drawing Title
BUILDING 'B'
EXTERIOR ELEVATIONS

DO NOT SCALE DRAWING

Project No.	Drawing No.
JCDT.16.0195	EL-02

COOPER RIESTERER PLC

Catherine A. Riesterer Abby H. Cooper Brian Silander Jamie F. Stewart Jennifer L. Gray

June 2, 2017

Via regular mail and email to sharon@genoa.org

Sharon Stone
Genoa Township
2911 Dorr Road
Brighton, MI 48116

Re: 5679 Richardson Road, Howell, MI 48843
Tax ID # 4711-32-400-018

Dear Ms. Stone:

As you are aware, my client Joseph Yaros recently submitted the enclosed request for a permit for a 10 x 14 deck affixed to his residence. The deck was constructed by Mr. Yaros' son without knowledge that a permit was required while Mr. Yaros was in the hospital. My client appeared before the Township Board on May 15, 2017 and was advised that due to a previously entered Consent Judgment, my client's requested deck was not permitted because it would amount to an expansion of the residence which is not permitted in the Consent Judgment. It was suggested that my client could obtain an attorney and go to court to renegotiate the Consent Judgment.

While we recognize that the Genoa Township Board is only trying to keep with the spirit of the court's order, we have a difference of opinion on what constitutes an expansion of the residence, or more importantly, what does not. It is our opinion that the language in the Consent Judgment limiting the expansion of the residence limits only those expansions that would increase the physical foot print of the building or increase the total floor area. Obviously a deck has no impact on either of those things. Because our office handled the matter on behalf of Mr. Snyder when the Consent Judgment was entered, it is our belief that our interpretation is in keeping with that order. Furthermore, we believe this interpretation is consistent with Genoa Township ordinances. Specifically, Article 11, Section 11.04.02 addresses decks and indicates that "covered or enclosed decks and porches with a roof or walls shall be considered to be part of the principal building for purposes of determining setbacks." The deck on my client's property is not covered or enclosed in any way and should not, therefore, be treated as a part of the principal building. Furthermore, when a non-conforming residential structure is damaged by fire, Article 24, Section 24.04.05 allows the structure to be reconstructed on the same foundation provided the first floor footprint and the total floor area do not exceed the size of the previous residence. It certainly seems clear that Genoa Township's intention is to limit the footprint or total floor area of non-conforming structures but not limit the ability of those property owners to enjoy their property. Mr. Yaros has health issues that require him to be on oxygen 80% of the time. Having immediate and close access to fresh air through this deck is incredibly important to his enjoyment of his property.

COOPER RIESTERER PLC

Can you please advise whether we can have another opportunity to present our interpretation of the Consent Judgment to the Board? If the Board would consider revising the Consent Judgment to allow this deck, we would be happy to take the lead on drafting the necessary documents.

I look forward to hearing from you.

Thank you,

Jamie K. Stewart

tmr
Enclosures
cc: Client

Sharon Stone-Francis

From: Jamie Stewart <jamie@crlaw.biz>
Sent: Monday, July 10, 2017 12:31 PM
To: Sharon Stone-Francis
Cc: Tracy Rush
Subject: RE: 5679 Richardson Road, Howell

Hi Sharon,

Please allow my June 2, 2017 letter to serve as my cover letter to the Board. It contains the basis of my request. The photographs were only provided because they were specifically requested. I am not aware of any interior work that is being done but I will follow-up with my client.

In the meantime, if you need anything further, please let me know.

Thanks,
Jamie

Jamie K. Stewart
COOPER & RIESTERER PLC
810-227-3103 ext. 116
jamie@crlaw.biz

From: Sharon Stone-Francis [mailto:Sharon@genoa.org]
Sent: Friday, July 07, 2017 4:59 PM
To: Tracy Rush <tracy@crlaw.biz>
Subject: RE: 5679 Richardson Road, Howell

Good Afternoon
Just a few quick items. We will still require a cover letter from Jamie for the board detailing her request. I also wanted to make sure that the pictures you sent me are all the presentation materials that Jamie wants added to the board packet. Finally it appears that interior work is being done please be advised that permits need to be pulled for interior work.
If you have any other questions or concerns please feel free to call or email.
Thank You

Sharon Stone
Zoning Officer

Genoa Charter Township
2911 Dorr Road, Brighton, Michigan 48116
Phone: (810) 227-5225, Fax: (810) 227-3420
E-mail: Sharon@genoa.org, Url: www.genoa.org

From: Tracy Rush [mailto:tracy@crlaw.biz]
Sent: Friday, July 07, 2017 4:16 PM
To: Sharon Stone-Francis
Cc: Jamie Stewart
Subject: RE: 5679 Richardson Road, Howell

Ms. Stone,

Please see the attached correspondence and photos.

If you have any questions or need anything additional, please let me know.

Tracy M. Rush
COOPER & RIESTERER PLC
810-227-3103 ext. 113
tracy@crlaw.biz

From: Sharon Stone-Francis [mailto:Sharon@genoa.org]
Sent: Wednesday, June 14, 2017 9:23 AM
To: Tracy Rush <tracy@crlaw.biz>
Subject: RE: 5679 Richardson Road, Howell

Good Morning, Tracey
Yes, your client can file for the July 17th Board meeting. Your packet for the board needs to be in by July 10th. If in the event the board is not sympathetic with your client, the Yaros will need to have the deck removed by July 31st or enforcement proceedings will begin.
If you have any other questions or concerns please feel free to call or email.
Thank You
Sharon Stone
Zoning Officer

Genoa Charter Township
2911 Dorr Road, Brighton, Michigan 48116
Phone: (810) 227-5225, Fax: (810) 227-3420
E-mail: Sharon@genoa.org, Url: www.genoa.org

From: Tracy Rush [mailto:tracy@crlaw.biz]
Sent: Tuesday, June 13, 2017 3:27 PM
To: Sharon Stone-Francis
Cc: Jamie Stewart
Subject: RE: 5679 Richardson Road, Howell

Sharon,

Our client is still gathering the information and pictures for us. Are we able to be put on next board agenda after this one?

COOPER RIESTERER PLC

Catherine A. Riesterer cathy@crlaw.biz | Abby H. Cooper abby@crlaw.biz | Briar Siljander briar@crlaw.biz | Jamie K. Stewart jamie@crlaw.biz | Jennifer L. Gross jennifer@crlaw.biz

July 7, 2017

Via email to sharon@genoa.org

Sharon Stone
Genoa Township
2911 Dorr Road
Brighton, MI 48116

Re: 5679 Richardson Road, Howell, MI 48843
Tax ID # 4711-32-400-018

Dear Ms. Stone,

This letter is a follow-up to my June 2, 2017 letter and your request that we provide some photographs of the interior and exterior of the accessory home. To that end, enclosed herewith are photographs of the residence. Thank you for putting us on the agenda for the July 17, 2017 Township Board Meeting.

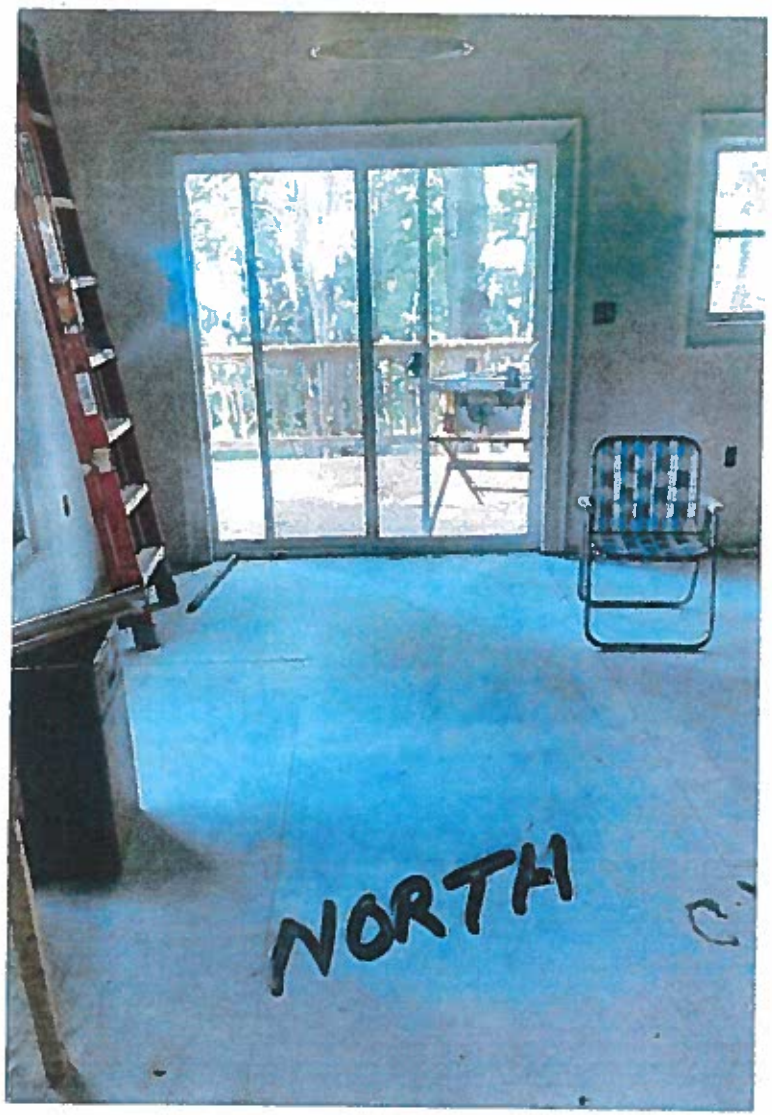
If the Board or Township desire any additional information in consideration of our request, please let me know.

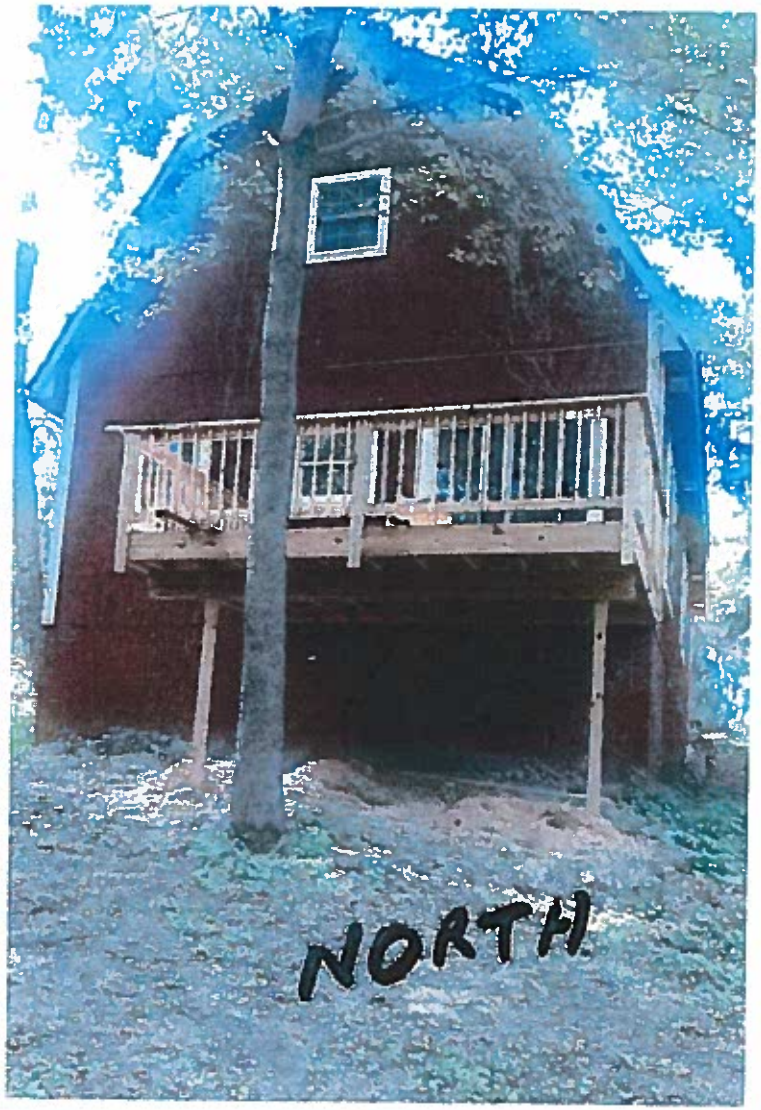
Best regards,

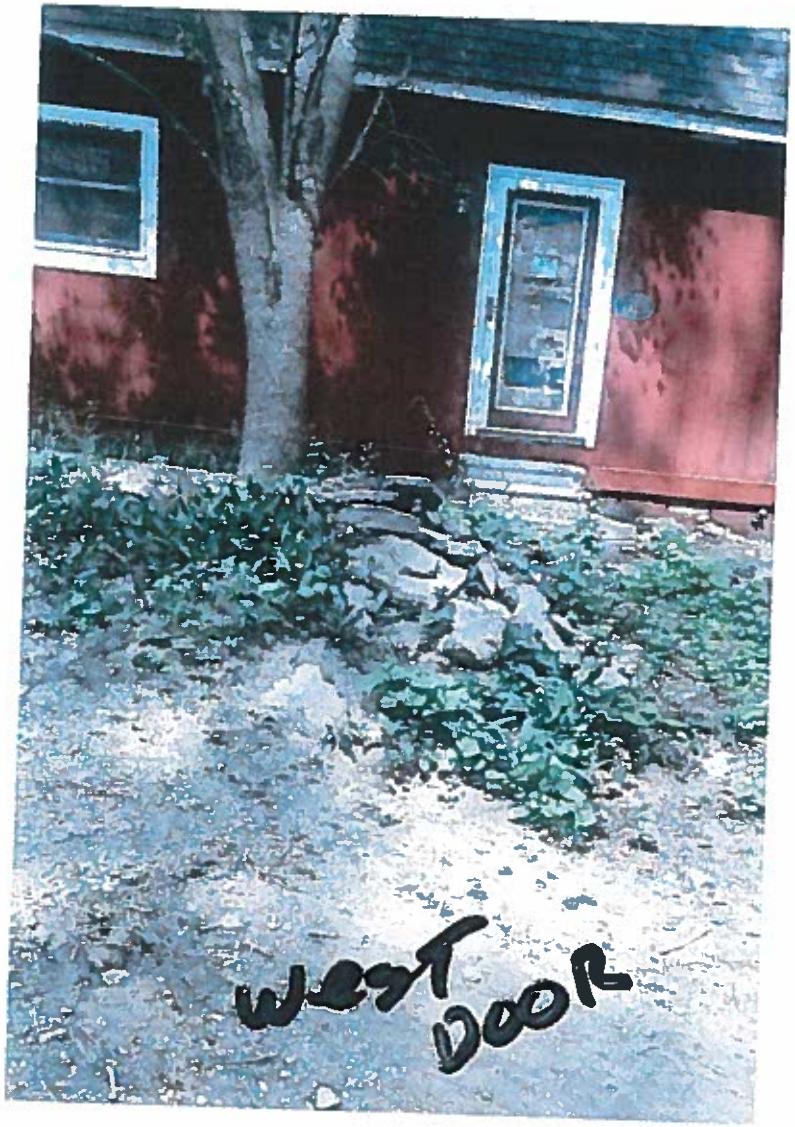
Jamie K. Stewart

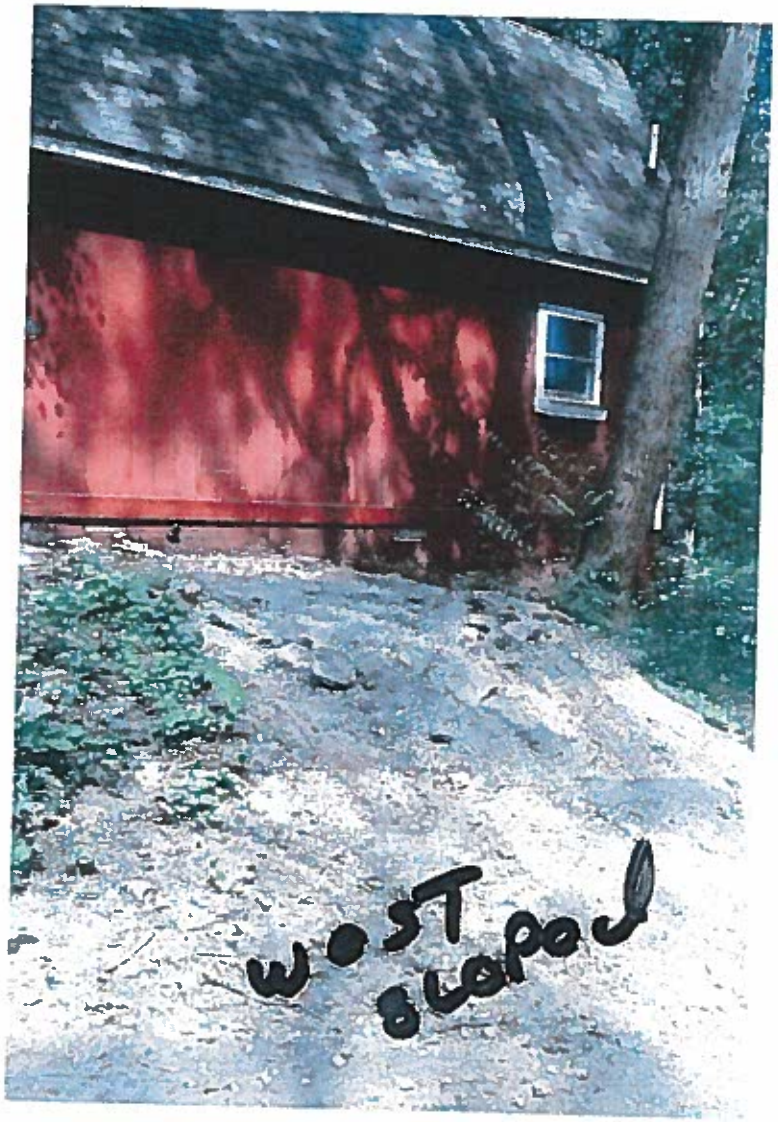
/tmr
Enclosures
cc: Client

7900 Grand River Road • Brighton, Michigan 48114
Telephone (810) 227-3103 • Facsimile (810) 220-5968 • Website: www.crlaw.biz


NORTH


NORTH


WEST DOOR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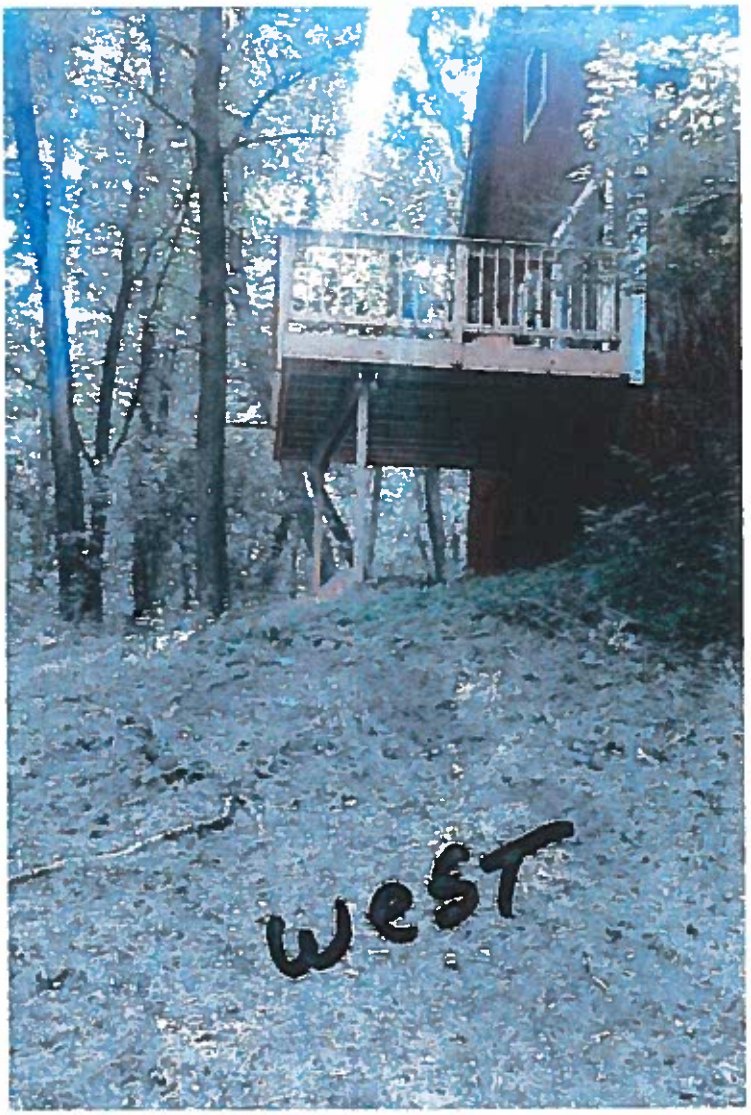
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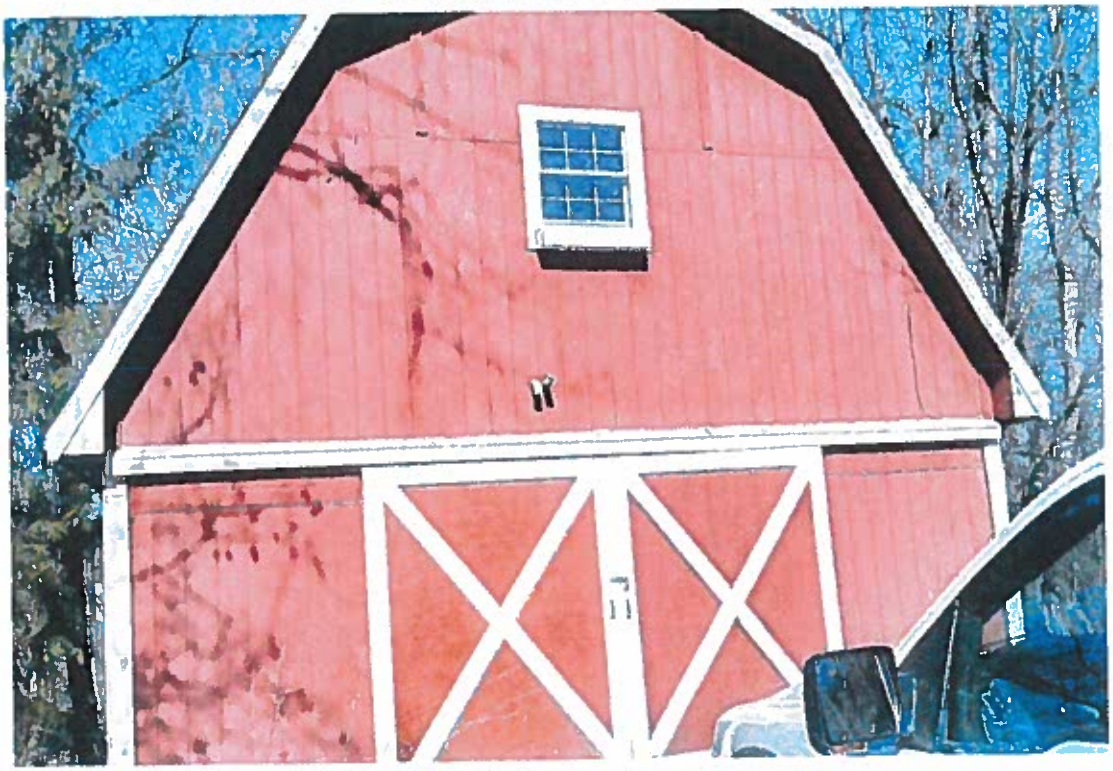
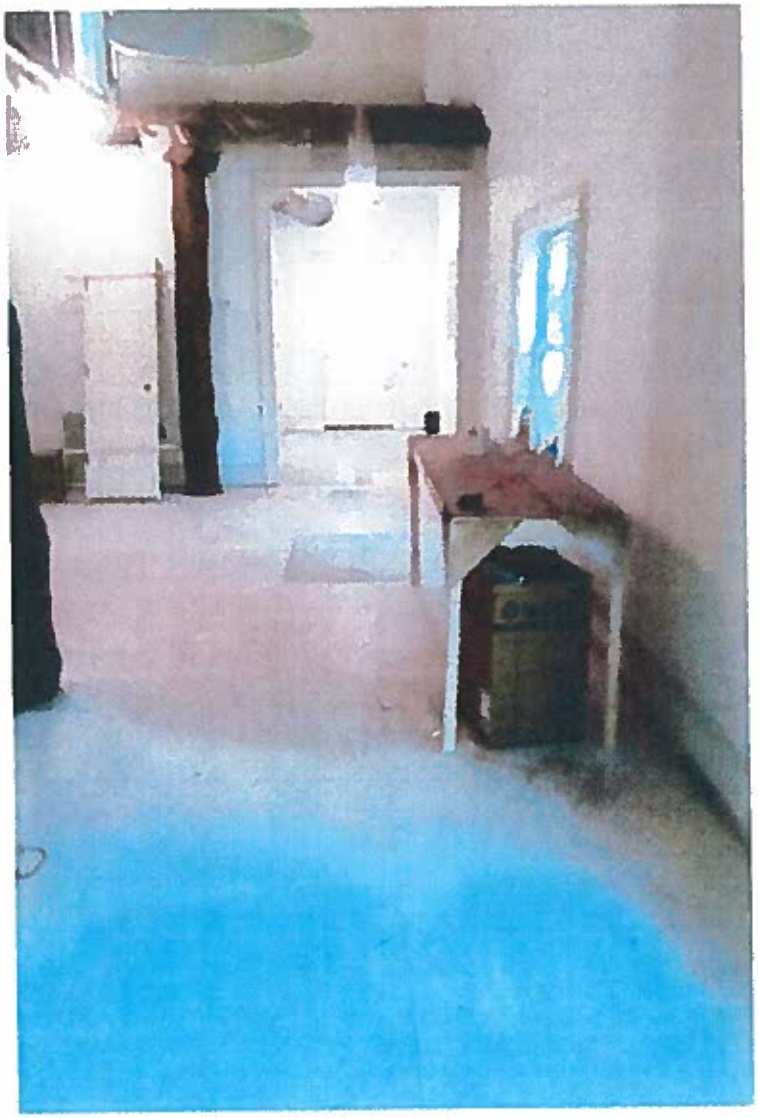
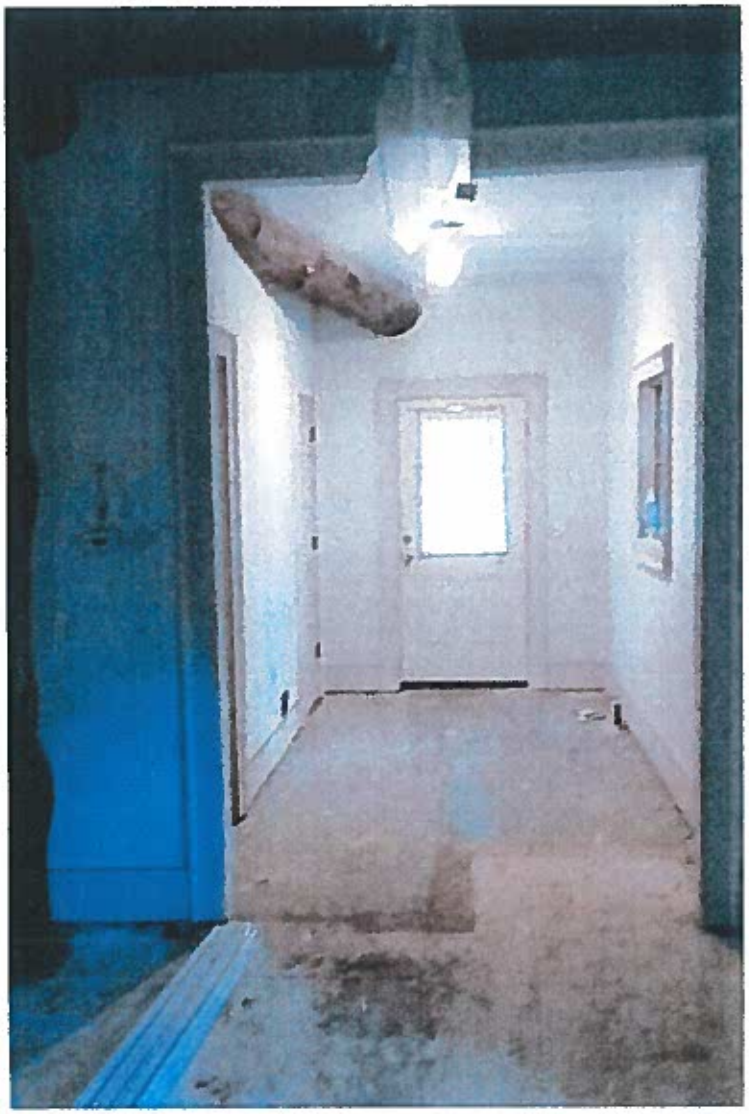






MEMORANDUM

To: Mike Archinal

From: T. Joseph Seward

Re: 5679 Richardson Road

Date: May 11, 2017

Mr. Archinal:

You requested an opinion regarding the recent construction at 5679 Richardson Road. Succinctly, my opinion is that the deck violates the consent judgment.

Underlying Facts

In 2006 Mark Snyder, the then owner of the property at 5679 Richardson Road brought suit against the Township requesting the ability to maintain two residences on the property at 5679 Richardson Road. On August 8, 2006 the parties reached an agreement that resulted in a consent judgment that provides:

> "... that the use of two residences on the property is a non-conforming use, however, the consent order is granted in lieu of a special use permit allowing the non-conforming use to continue."

The consent judgment went on the say that the second residence:

> "... shall not be expanded in any way."

Subsequently Joseph Yaros became owner of the secondary premises and built a deck from the property without obtaining a permit. The Township was alerted to this construction and contacted Mr. Yaros who on April 10, 2017 submitted an application for a permit.

Zoning Ordinance

Other than some specific exceptions not applicable here, the Township's zoning ordinance 11.02.01 limits any lot to just one principal building. The Yaros house is a non-conforming use. Section 11.04.01 sets forth what accessory buildings are allowed. 11.04.01(a) limits any accessory buildings only if they are in connection with or incidental to a principal building. This zoning ordinance precludes this deck as being considered an accessory structure because it is not in connection with or incidental to the principal

building. Thus this ordinance does not provide any relief for the application of a land use permit by Mr. Yaros.

Additionally the structure does not fall within the scope of a deck as regulated by Section 11.04.02. 11.04.02(a) permits decks but only if they are within 25 feet of the rear building line of the principal building. The application by Mr. Yaros shows that this deck is much further than 25 feet from the rear building line of the principal building.

Non-Conforming Use - Article 24

Article 24 of the Township's zoning ordinance regulates non-conforming uses. Section 24.05.01 provides that a non-conforming use cannot be expanded to occupy any land outside such building. Here, the non-conforming use is the second residential house. The deck occupies land outside the building and therefore violates the ordinance. Section 24.05.01 precludes the deck constructed by Mr. Yaros.

Consent Judgment

The language of the August 8, 2006 consent judgment recognizes that the Yaros property is a non-conforming use and that it shall not be expanded. The Township's zoning ordinances do not allow for the construction of the deck. Case law makes clear that a violation of a zoning ordinance constitutes a nuisance per se. The Michigan Court of Appeals most recently reaffirmed this concept in *Gutwein v. Kahle*, a decision of the Michigan Court of Appeals dated January 26, 2017. The court's statement reads:

> "A structure constructed in violation of a zoning ordinance is a nuisance per se. "

Furthermore, the courts enforce M.C.L. 125.3407, the Zoning Enabling Act, by having the structure that is in violation of the ordinance abated which in this case would be the removal of the deck. See *City of Brighton vs. Bonner*, a 2014 decision of the Michigan Court of Appeals.

Moreover, the public policy of our state is for the gradual elimination of a non-conforming use. The Michigan Court of Appeals stated in *Township of Blair v. Grand Lamaroci North Corporation*, a 2011 decision:

> "A zoning ordinance permitting the continuation of a non-conforming use is meant to avoid the imposition of a hardship upon the property owner. However, the limitation on non-conforming uses contemplates the gradual elimination of the non-conforming use. ... The construction of a new non-conforming building or additions to existing non-conforming uses is not permitted." [p. 2 of the Opinion]

Conclusion

The construction of the deck is not permitted by the Township's zoning ordinance. Thus it constitutes a non-conforming use on an already non-conforming use. Michigan statute and case law sets for the public policy that a non-conforming use cannot be expanded and that additional non-conforming use is not permitted and should be abated. That is consistent with the language of the consent judgment which specifically says the non-confirming use shall not be expanded. Therefore it is my opinion that the deck that was constructed constitutes a non-conforming use and is therefore a nuisance per se. Furthermore, it expands the non-conforming use which is not allowed by law. Should the Township decide to take action to have the deck removed, such action would be upheld by the court system.

Should the Board be requested to allow the deck to exist and should the Board decide to allow the continued existence of the deck, the parties would have to go to court and obtain a modification of the consent judgment. The procedure would be to file a motion seeking to amend the consent judgment. Although the parties may agree to change the terms of the consent judgment, the court is not obligated to amend the consent judgment.

/gg

COVER LETTER

Date: April 19, 2017

To: Zoning Department

From: Joseph Yaros, 5679 Richardson Rd., Howell, MI, Parcel No. 4711-32-400-018

Re: Residential Land Use Permit, Unattached Uncovered Deck

Enclosed please find the corrected request for a Residential Land Use Permit for an "unattached uncovered deck".

On April 10, 2017 I mistakenly submitted a request for a "Detached Accessory Structure" at the suggestion one of the zoning inspectors; after review, the permit was verbally denied due to:

1. (Sec. 11.04.01(f)(f1) Required Setback for a Detached Accessory building and Structure; also

2. *MARK SNYDER vs GENOA CHARTER TOWNSHIP*, Consent Judgment dated August 8, 2006; May continue to maintain two residences on the property; the second residence could not be expanded in any way.

Therefor it was the opinion of the Zoning Department and legal that, I would need an Amendment to the Consent Judgment "to expand in any way" to build a Detached Accessory Structure which did not meet the required setback regulations. (11.04.01(f)(f1).

FACT FINDING

Each request is unique and with keeping with the rules and making sure my intent is only to be compliant with the Zoning Ordinance to the best of my ability.

I familiarized myself with the Township Ordinance Articles 11 and Articles 24, and the Consent Judgment. Whereas, resubmitting a Residential Land Use Permit with the correct TYPE OF IMPROVEMENT.

"UNATTACHED UNCOVERED DECK"

(Sec. 11.04) ACCESSORY BUILDING AND STRUCTURES

(Sec. 11.04.02) **DECKS**

a) Attached or *Unattached uncovered decks* and porches without a roof, walls or other form of enclosure shall be permitted to extend a *maximum* of twenty five feet from the rear building line of the principal building, *(*refer to tax accessor* RESIDENTIAL) provided they shall be at least four feet from any side lot line and ten feet from any rear lot line "Covered or enclosed decks and porches with a roof or wall shall be <u>considered to be **part of** the principal building</u> for purposed of determining setbacks.

I could not find ANY MININUM measurement regulating an "unattached uncovered deck" from the rear of the nonconforming residential building or principal building; the "unattached uncovered deck" is permitted per the reference in the above regulation and cited in (Sec. 11.04.01) as an ...exception regarding Unenclosed decks as noted in Section 11.04.02 et al

According to (Sec 11.04.02 (a): Only if the "unattached deck" was covered or enclosed would it be considered **part of** (*expanded in any way)* the principal building et al.

Because there is a hardship and practical difficulty of the terrain slope of the land and the placement of the existing nonconforming residential building,
the proposed unattached uncovered deck would serve as a fire escape in the rear of the residence as well as it enhances the nonconforming residential building, yet does not expand the non-conforming use to the building.

As an "unattached uncovered deck" I would be complying with the Consent Judgment "not to expand" and or according to (Sec 11.04.02 (a) **not part of** the building.

This project on five acres, zoned Country Estates is not a detriment to my neighbors either, but only a continued improvement to this previously foreclosed blighted parcel.

2. The Consent Judgment Ordered, that the parties recognize the use of two residences on the Property is non-conforming use and allowed the non-conforming use to continue.
   The Court also further ordered that the second, accessory residence on the property shall not be expanded in any way;

The Court selectively was inferring to and citing only portions of (Sec. 24.04.08) Expansion of a Nonconforming Residential Building, and the Court prohibited portions of that regulation only. There were no other Ordinances prohibited, excluded or cited in this Consent Judgment which is relevant to addressing the matter or issue at hand.

To comply with the Consent Judgment, "the unattached uncovered deck" has no bearing on the existing footprint or is it "part of" the nonconforming residential building.

Upon purchasing this foreclosed property in March 2016, it was my due diligence that brought the Consent Judgment dated August 8, 2006 to the attention of the Tax Accessor. This Consent Judgment was in a file at the township for ten years.

WHEREAS,

Previously the Building information 1152 sq ft Barn, General Purpose (Agricultural) estimated TCV was $29,470.

*Today, per the Tax Accessor, the Building information 1152 sq ft (Residential) Estimated TCV $88,810. 7

IN CLOSING,

Due to your Department's expertise in these matters, if I need a variance, please advise.

In the event the Zoning Department refuses my corrected request for a permit for an "unattached uncovered deck" for the same "verbalized" reason, as the mistaken "Detached Accessory Structure permit request;
"I need an Amendment to this Consent Judgment due to: "not be expanded in any way".

This legal opinion and summary of facts should be presented in writing. The opinion as an Exhibit (discovery) would be entered with the Motion for an Amendment for an "unattached uncovered deck" to prevent a frivolous Motion with the Court.

Your anticipated cooperation is appreciated.

Joseph Yaros

GENOA Township

Residential Land Use Permit
Genoa Charter Township • 2911 Dorr Rd. • Brighton, MI 48116
Phone (810) 227-5225 • Fax (810) 227-3420 • www.genoa.org

PERMIT NO._____

revised 10/09/14

1. PROJECT INFORMATION

Site Address: 5679 RICHARDSON HOWELL MI 48843 | Acreage: 5.5

2. OWNER/CONTRACTOR INFORMATION

Owner Name: JOSEPH YAROS | Phone No.: 313-540-1643 ☐

Owner Address: 5679 RICHARDSON | City: HOWELL | State: MI | Zip: 48843

Contractor name: - SAME - | Phone No.: ☐

Contractor Address: | City: | State: | Zip:

3. TYPE OF IMPROVEMENT

A. Principal Structure
☐ New Single Family ☐ New Multiple Family ☐ Addition to Existing Building ☐ Grading/Site Work

☐ Other: NONCONFORMING Residential Second Building

B. Accessory Structure
☐ Fence ☒ Deck Detached Accessory (garage, shed, pole barn) ☐ Pool/Hot Tub

☒ Other: unattached uncovered DECK

4. PROPOSED SETBACK AND DIMENSIONAL INFORMATION

A. Proposed Principal Structure Setbacks (in feet)

Front: (measured from front property line, right-of-way line or private road easement, whichever is less)

Rear: | Least Side: | Side: | Water/Wetland:

B. Proposed Accessory Structure Setbacks (in feet) NONCONFORMING Residential BUILDING

Front: 340 | Least Side: 40 | Side: 259.26 | Rear: 316.26 | Water/Wetland: NO | Distance from Principle Structure: 175 FT

C. Proposed Building/Improvement Dimensions

Size of Building/Improvement: _____ square feet | Height: _____ feet

6. SIGNATURE OF APPLICANT

I hereby certify that all information attached to this application is true and accurate to the best of my knowledge. I certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as the authorized agent. The owner and applicant agree to conform to all applicable ordinances of Genoa Township. Any modification to location, size or dimensions must be approved by Genoa Township. A Land Use Permit is valid for a period of 12 months from the date of issue. In signing of this application, I am permitting an official representative of Genoa Charter Township to do on-site inspections. I acknowledge that private covenants and restrictions are potentially enforceable by private parties.

Applicant is: ☒ Owner ☐ Contractor ☐ Lessee/Renter ☐ Architect/Engineer ☐ Other:

Signature of Applicant: [signature] | Printed Applicant name: JOSEPH YAROS | Date: 4/19/2017

▽ FOR OFFICE USE ONLY ▽

FLOODPLAIN

Floodplain: | Panel #: | Zone #:

ASSESSING APPROVAL

☐ Approved ☐ Disapproved | Approved by: | Date:

ZONING APPROVAL | Parcel I.D. No.: | Zoning:

☐ Approved ☐ Disapproved | Approved by: | Date:

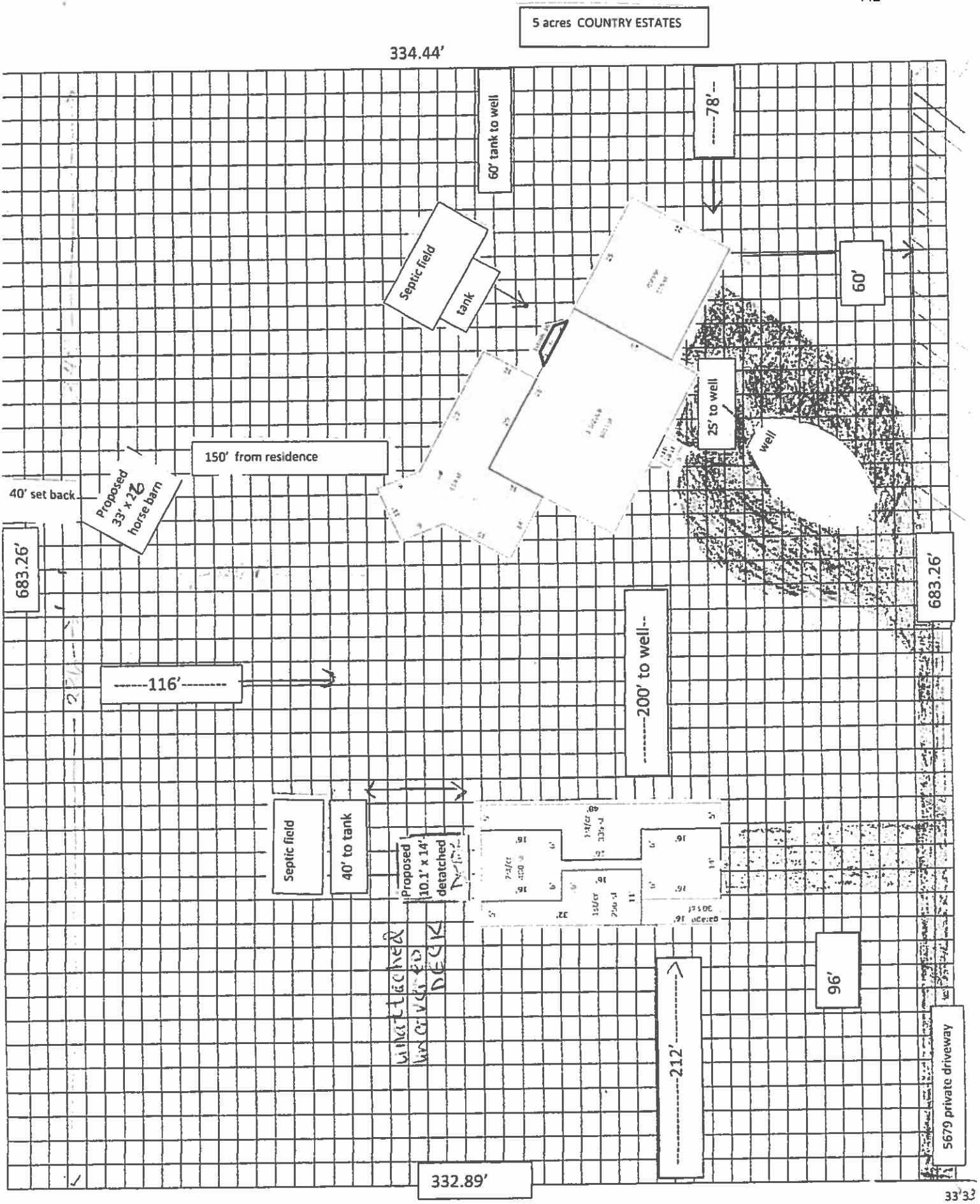
Comments/Conditions:

Date picked up:

ZBA | Case #/Approval date: | Conditions:

3. FEES

Land Use: $ | Water/Sewer: $ | Meter: $



PARCEL 4711-32-400-018

5679 RICHARDSON RD., HOWELL, MI

Easement for

Parcel 06

5679 RICHARDSON RD
PARCEL 4711-32-400-036

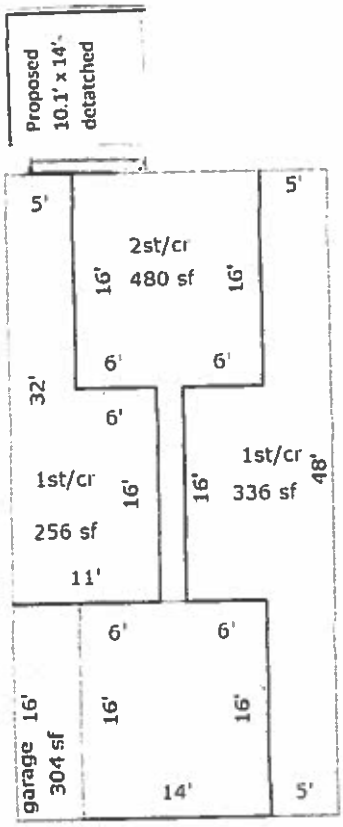
COUNTRY ESTATES

N
S

UNATTACHED
UNCOVERED
deck

SLIDING
DOOR WALL

2'



LIVINGSTON COUNTY MICHIGAN

Department of Public Health
2300 E. Grand River Ave., Suite 102
Howell MI 48843-7578
Phone: 517.546.9850 Fax: 517.543.6995
Environmental Health
Phone: 517.546.9858 Fax: 517.546.9853

Environmental Health

Search | Back | Home

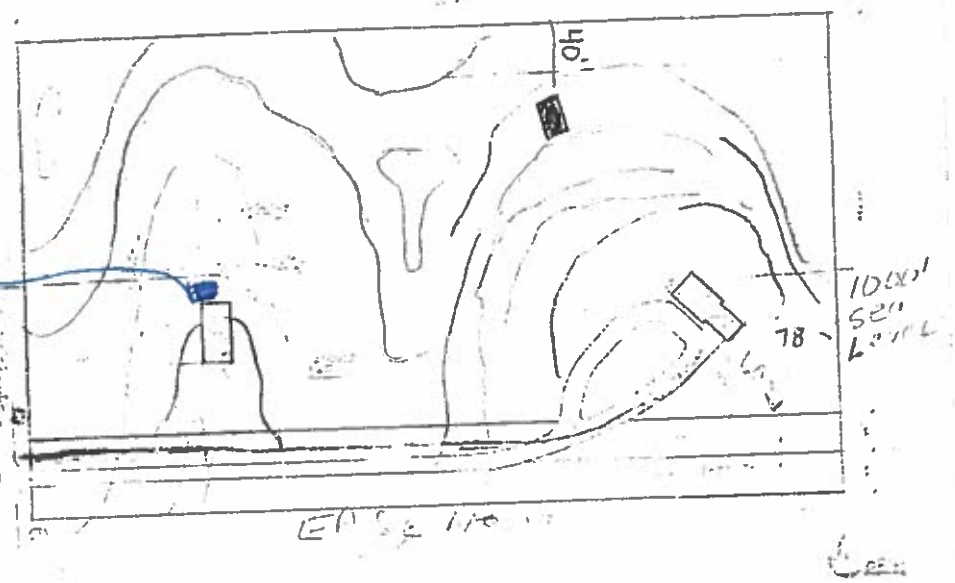
1 2 Go

Last Modified
2/1/2012 8:39:37 PM
Creation Date
5/8/2006 12:56:18 PM

Template: EH

TM ADDRESS
5679 RICHARDSON RD
TM PARCEL ID
11-32-400-018
TM OWNER NAME
BP

unattached uncovered deck

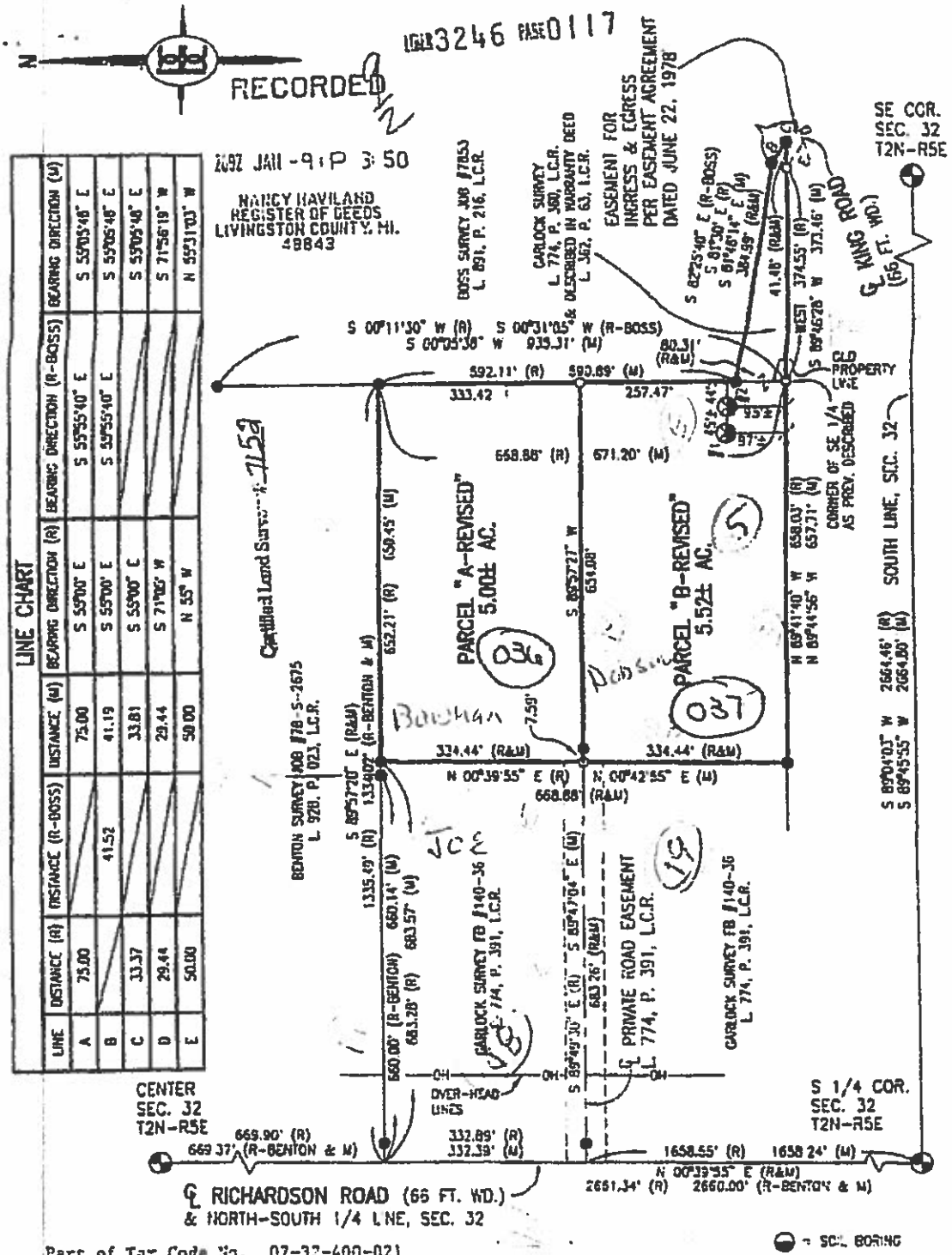


LIBER 3246 PAGE 0117

RECORDED

2002 JAN -9 P 3:50

NANCY HAVILAND
REGISTER OF DEEDS
LIVINGSTON COUNTY, MI.
48843



LINE CHART

LINE	DISTANCE (R)	DISTANCE (R-BOSS)	DISTANCE (M)	BEARING (R)	BEARING DIRECTION (R-BOSS)	BEARING DIRECTION (M)
A	75.00		75.00	S 55°00' E	S 55°55'40" E	S 55°05'40" E
B		41.52	41.19	S 55°00' E	S 55°55'40" E	S 55°05'40" E
C	33.37		33.81	S 55°00' E	S 55°55'40" E	S 55°05'40" E
D	29.44		29.44	S 71°05' W	S 71°56'19" W	S 71°56'19" W
E	50.00		50.00	N 55° W	N 55°31'03" W	N 55°31'03" W

Part of Tax Code No. 07-32-400-021.

I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT THE RATIO OF CLOSURE ON THE UNADJUSTED FIELD OBSERVATIONS OF SUCH SURVEY WAS 1/71,946 AND THAT SAID SURVEY FULLY COMPLIES WITH THE REQUIREMENTS OF PUBLIC ACT NUMBER 132-10.

DESCRIPTION:

PART OF THE SE 1/4, SECTION 32, T2N-R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

BOSS ENGINEERING
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS

HOWELL OFFICE: 3111 E. GRAND RIVER AVE., HOWELL, MI 48843 (517)546-4836 FAX (517)546-1473
WEST BLOOMFIELD OFFICE: 7125 ORCHARD LAKE RD., SUITE 100, WEST BLOOMFIELD, MI 48323 (248)626-5033 FAX (248)626-5485
E-MAIL: mail@boss-eng.com

CLIENT: PAW RIETSCH

SCALE: 1 INCH = 200 FEET (100 0 100 200)

LEGEND
○ = IRON SET
● = IRON FOUND
⊙ = MONUMENT FOUND
= FENCE
(R) = RECORDED
(M) = MEASURED

JOB NO.	01429-1	DATE	10/19/01		
SHEET	1 OF 2				
G:\01429\DWG\01429-1		FB 386	CREW GD/AS	DR. BEK	CHKD

STATE OF MICHIGAN — WILLIAM R. HUGGINS — PROFESSIONAL SURVEYOR No. 47969 — LICENSED PROFESSIONAL SURVEYOR

G:\01429\dwg\01429-1.dwg 10/19/2001 01:53:52 PM EDT

KING Road

10 acre SPLIT 2001

Richardson Rd

2006R-015429
2006R-015429
RECORDED ON
08/10/2006 11:22:45AM
SALLY REYNOLDS
REGISTER OF DEEDS
LIVINGSTON COUNTY, MI 48843
RECORDING: 15.00
REMON: 4.00
PAGES: 3

3

HE

STATE OF MICHIGAN
IN THE CIRCUIT COURT FOR THE COUNTY OF LIVINGSTON

MARK SNYDER,
Plaintiffs,

-vs-

Case No. 06-22178-CH
Hon. David J. Reader

GENOA CHARTER TOWNSHIP
Defendants.

Dale E. Cooper [P12200]
Julie E. Kretzschmer [P68624]
COOPER & RIESTERER, PLC
Attorneys for Plaintiffs
7960 Grand River Road, Suite 270
Brighton, MI 48114-7332
810.227.3103

Richard A. Heikkinen (P14835)
Attorney for Defendant
110 N. Michigan Ave.
Howell, MI 48843
(517) 546-1434

CONSENT JUDGMENT

At a session of said Court, held in the Courthouse,
In the City of Howell, County of Livingston,
State of Michigan, on 8/8/06

PRESENT: DAVID J. READER P-27877
HONORABLE DAVID J. READER

This matter having come before the Court as a consent Judgment to reconcile a property matter, and the Court being advised in the premises:

IT IS HEREBY ORDERED that the Plaintiff, Mark Snyder and his successors and assigns may continue to maintain two residences on the property commonly known as 5679 Richardson Road, located in Genoa Township, Livingston County, Michigan (the "Property").

IT IS FURTHER ORDERED that the parties recognize that the use of two residences on the Property is a non-conforming use, however, this Consent Order is granted in lieu of a special use permit allowing the non-conforming use to continue.

IT IS FURTHER ORDERED that the second, accessory residence on the property shall not be expanded in any way.

IT IS FURTHER ORDERED that there shall be no costs or attorney fees awarded to either party.

THE ENTRY OF THIS JUDGMENT RESOLVES THE LAST PENDING CLAIM AND CLOSES THIS CASE.

HONORABLE DAVID J. READER

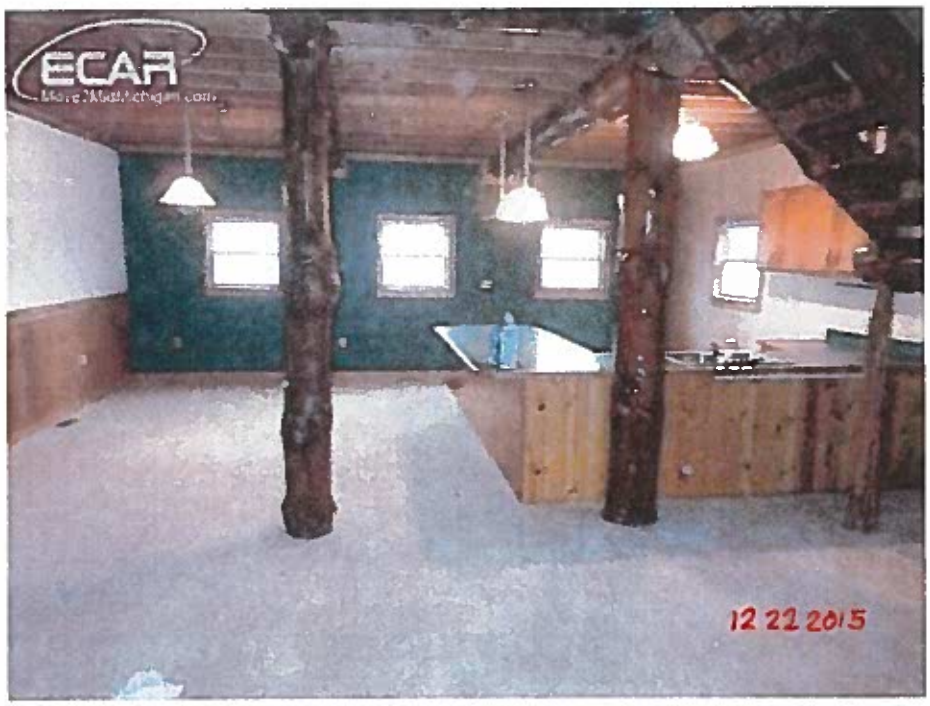
Approved as to form and content:

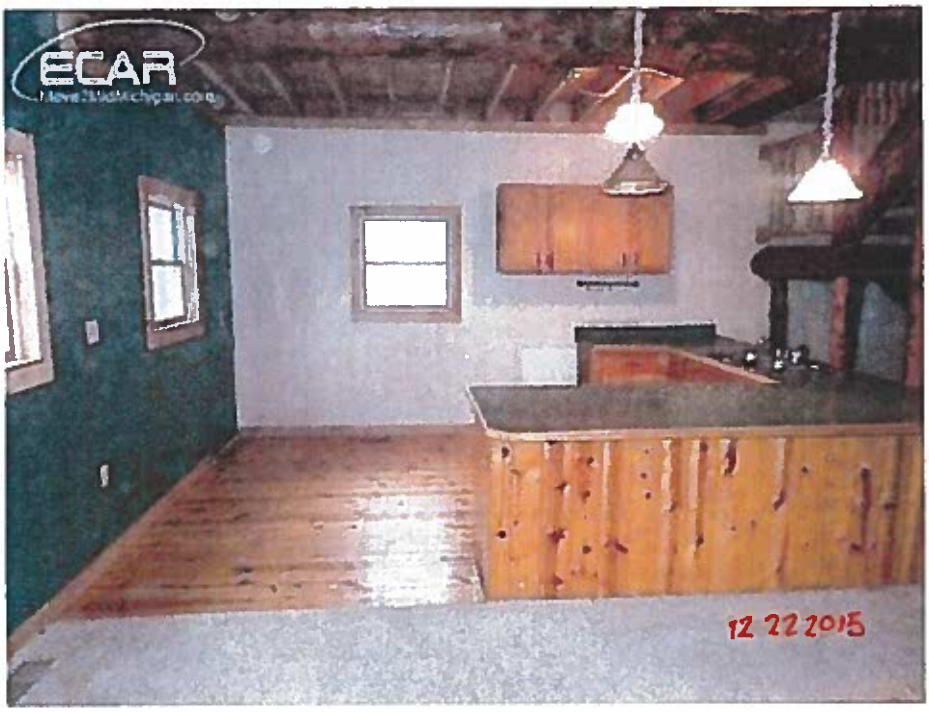
Dale Cooper per TX approval by RAH 8/8/06
DALE E. COOPER (P12200)
Attorney for Plaintiff

Richard A. Heikkinen
RICHARD A. HEIKKINEN (P14835)
Attorney for Defendant
8/7/06

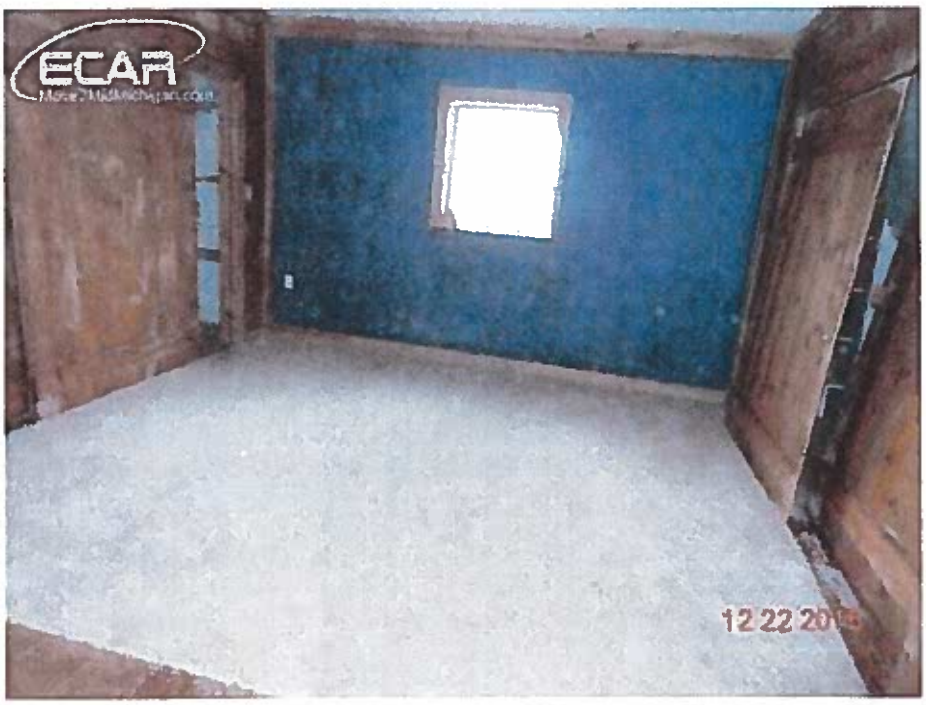
CLERK'S CERTIFICATE 3 pages (PB)
STATE OF MICHIGAN County of Livingston
I, Margaret M. Dunleavy, Clerk of said County and Clerk of the 44th Circuit Court, do hereby certify this copy as a correct and true record of the original document remaining on file in my office.
Dated and sealed: 8-10, 2006
Margaret M. Dunleavy, County Clerk
Deputy

Pictures from December 2015 Listing

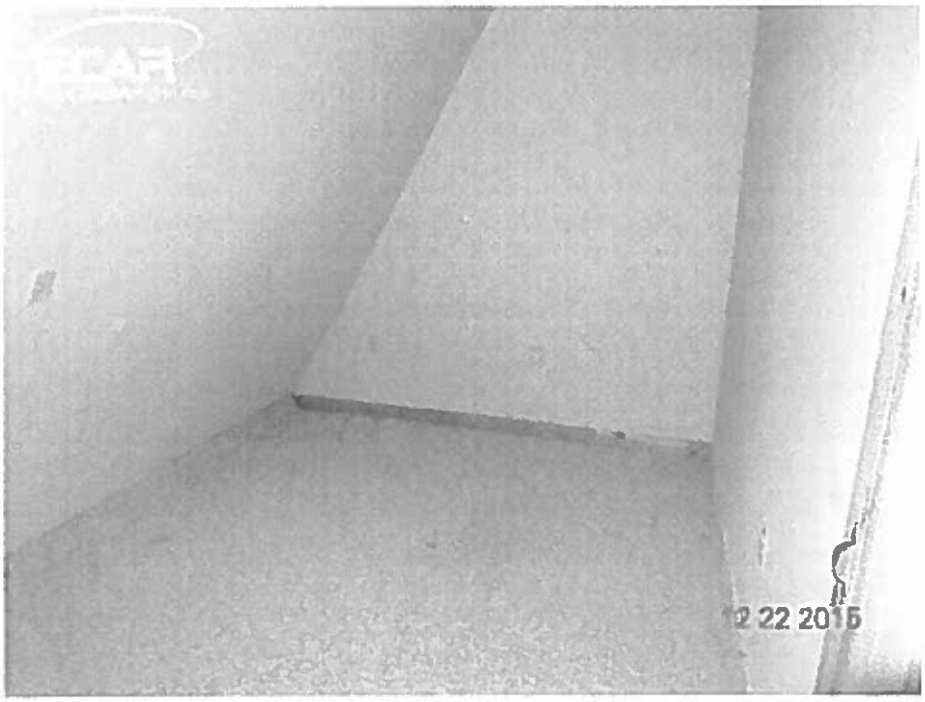




Pictures from December 2015 Listing



Pictures from December 2015 Listing



BOARD CORRESPONDENCE

Polly

From: ranger425@aol.com
Sent: Monday, July 10, 2017 4:09 PM
To: Polly
Subject: Professional fireworks in resicential area

I live at 3710 Westphal, Genoa Twp, and this letter is to bring a complaint against Mr. Jeremy Clarke my next door neighbor. On the night of July 8th, 2017 at appox 1000pm Mr. Clarke staged a party at his residence with 100's of guests and a professionally conducted, electronically detonated fireworks display.

I believe this fireworks display was conducted in a dangerous and haphazard manner that could have resulted in personal and property damage.

The fireworks were launched from the front lawn of Mr. Clarke, appox 10 yards from a line of 60ft high oak trees in close proximity to other residence and out buildings. The homes on Westphal are mostly situated on 5 acre parcels, all abutting. There is no vacant land over which to detonate this ordinance.

The ordinance were launched so as to explode directly over my horse pastures. I expressed concern before this event, and asked Ms Clarke to insure that the ordinance would not be pointed over my property and would not ignite over my property....both of these requests were ignored.

I had to calm our three animals during the course of this display and while I was in the barn I could hear the firework residue hitting the metal roof. Firework residue also landed on the roof of my house, and in my pastures. I collected 2 buckets full of expended fireworks components from my pastures before I could turn out the animals for grazing.

For the most part people have moved here for the pastoral quality and the ability to keep their animals on their property. This over-the-top display has many of the neighbors on edge regarding the activities of Mr Clarke. Mr. Clarke also allows his underage children to drive their quads up and down Westphal unsupervised which is yet another source of irritation.

Please feel free to contact me if you need any follow on information or clarification.

Robert Lagana
3710 Westphal 517-5523098

Hello Neighbors of Westphal and Beatie Rd,

We would like to let you all know that on Saturday July 8th we will be having a graduation/4th of July party. After sunset we will have a large professional fireworks show. The show will last about 45 minutes

. It is truly a spectacular show!

We would firstly like to invite you all to the party anytime to swim, play yard games, have some BBQ or enjoy the show.

Secondly we are aware that there are many horses in the neighborhood and we do not want to upset any of you, or your animals. We are asking in advance that if you are going to have a problem with this fireworks show to let us know now rather than later.

We think it is very important to have good standing relationships with our neighbors. We truly hope that everyone will be understanding and allow the show to go on and we'd love to see you come by!

Questions or concerns: Give us a call at (517) 225-5157 or text (734) 812-4199

Where: 3742 Westphal Rd.

When: Saturday July 8th 2017, 2:00 pm - ?????

Sincerely,

Jeremy and Kanse Clarke

Google Earth

feet 500
meters 100

Polly

From: Kris Makowski <skisinsc@yahoo.com>
Sent: Monday, July 10, 2017 6:15 PM
To: Polly
Subject: Fireworks display Westphal Road

Polly

As a follow up to our earlier discussion, our next door neighbors at 3742 Westphal Road put on a professional fireworks display Saturday night June 7, 2017. I asked if they had pulled a permit for it. They claimed to have called the fire department who evidently informed them no permit was required. However I don't know if they called the township to confirm since, as you mentioned, professional grade fireworks do require a permit. These were professional grade fireworks. I do not know if a company was hired to launch them or not. I did not see anyone with shirt logos to confirm either. The proximity of our house, barn and property to the fireworks was a concern for us. Most of us are on about five acre parcels with no real open area for them to be launched. Much of the side and back property area is heavily wooded. They were launched near the property line and debris was scattered on our yard, home, barn, trailers and cars parked in the drive. The neighbors attempted to clean some of the debris up, but we still have spent about two hours since cleaning up our property. Additionally, there were cars parked and people standing to watch on the private easement (we have deeded ingress/egress) going back to our home, which made getting to our house or out quite difficult. Without proper permits obtained and the proximity of our private property to the fireworks is quite concerning to us. They surrounded our front yard with caution tape ahead of time, so they must have known that much of the debris was going to fall on our property. Many of the adjacent neighbors also have similar concerns about future displays and safety of their property and the many horses in our area zoned, I believe, as country estates. I have multiple videos and pictures of the display. Per your request, I will send a couple of them to you in a separate email. In sum, there was no history of a permit obtained, no insurance verified and uncertain if any one certified to launch them was present. There was not enough open space to launch, debris was over others private property. The display continued until close to midnight on and off. We called them to shut it down. They had people lined up on private property to watch display and a mess to clean up for adjacent properties. I appreciate the board's attention and ask for safety purposes, no future displays be allowed here.

Regards,

Kris Makowski
3744 Westphal
Howell
616-970-4742

Sent from my iPhone

Polly

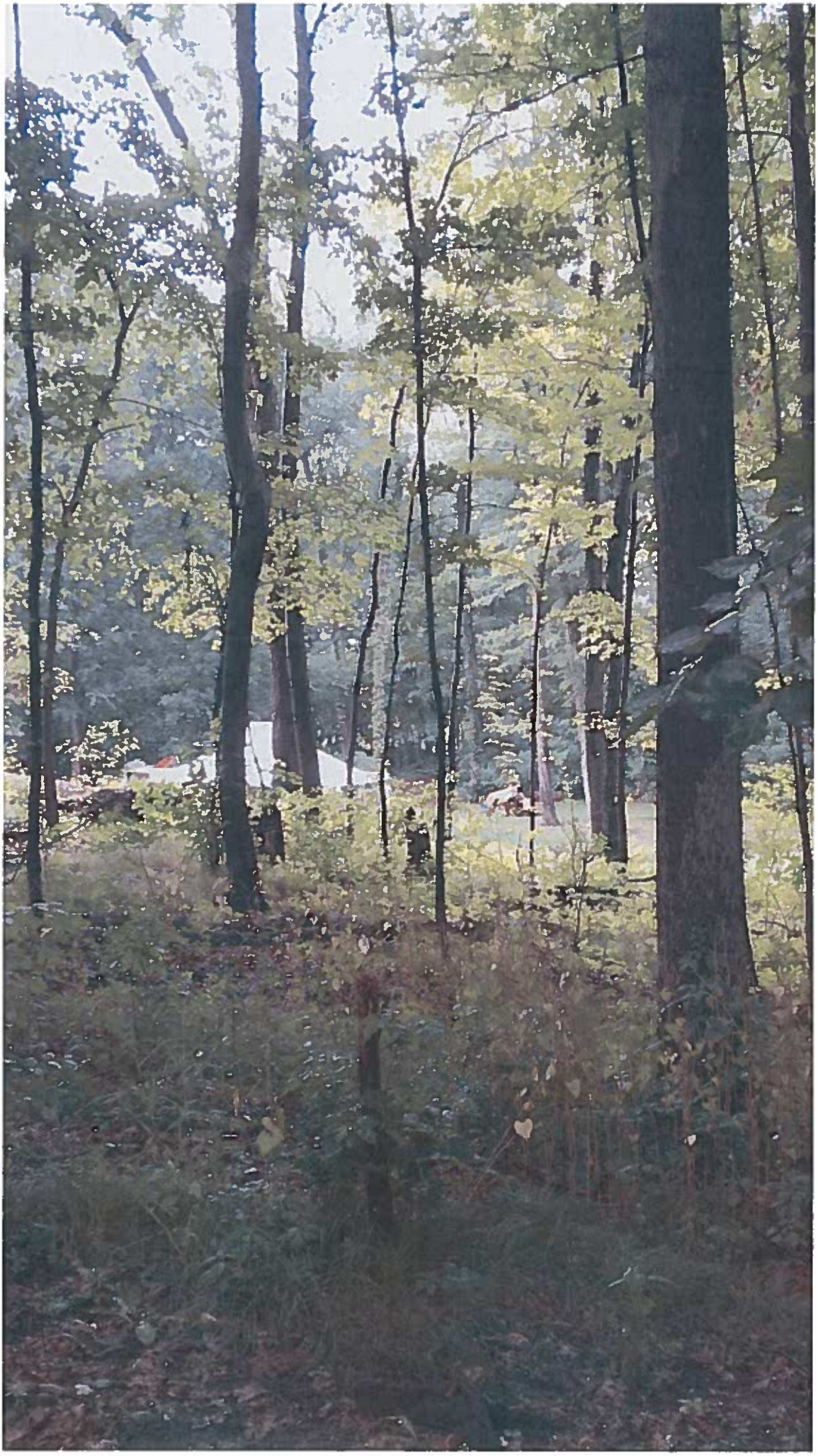
From: Kris Makowski <skisinsc@yahoo.com>
Sent: Monday, July 10, 2017 6:29 PM
To: Polly
Subject: Pictures fireworks Westphal
Attachments: IMG_9028.PNG; ATT00001.txt; IMG_9027.PNG; ATT00002.txt; IMG_9026.PNG; ATT00003.txt; IMG_9025.PNG; ATT00004.txt; IMG_9024.PNG; ATT00005.txt; IMG_9023.PNG; ATT00006.txt; IMG_9022.PNG; ATT00007.txt; IMG_9021.PNG; ATT00008.txt

Polly. I've attempted to send some pictures to you a couple times but my email is not confirming receipt. I am trying to send over again. They show stake with property line and proximity of our barn to launch and the heavily wooded back area Kris Makowski

Done 17 of 34

●●○○○ Verizon LTE 6:17 PM 21%

Done 23 of 34



Done 21 of 34

Done 18 of 34

Polly

From: DAWN Williams <imsuperstgrsgirl@comcast.net>
Sent: Wednesday, July 12, 2017 12:29 PM
To: Polly
Subject: Fireworks display

Hi. Im writing you in regards to a fireworks display that happened on july 8th on westphal road in genoa township.
The persons setting of the display sent out a notice a few weeks prior to the display noteing that they knew there were horses close by and if anyone had a problem with this to let them know. Even after being asked not to do the display they opted to do them anyway.
Now, I live a few houses down but I do board my horse right next to the house setting off the fireworks. I had to leave the campground that I was spending the weekend at to come to the barn and sit with my horse to try to keep him calm. He became very distraught as the fireworks were being set off pretty much right over his head. As we sat in the barn we could hear the debris from the fireworks landing on the barn roof. Barn roofs have open vents and we prayed none of the hot pieces came
through the vents and landed in the hay loft.
The display that was to start at 9:45pm and last 45 minutes ended up starting at 10pm lasting more than an hour. Then started back up at midnight which in turn leaving my neighbors, who own the barn in which I board at, to go back out to the barn to sit with the animals.
In the morning the fields were littered with fireworks debris and had to be cleaned before the animals could go out. Not to mention the cans and trash that had to be cleaned from the front yard from their guests.
This fireworks display was way over the top and to close to neighboring homes and livestock.
Im writing this in hopes that this will never be allowed to happen again.
If you have any questions please feel free to contact me.

Dawn Williams
3654 Westphal
Howell mi 48843
810-599-8436
Imsuperstgrsgirl@comcast.net

Sent from Xfinity Connect Mobile App

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
LANSING

RICK SNYDER
GOVERNOR

SHELLY EDGERTON
DIRECTOR

July 12, 2017

Brightlodge, Inc
Attorney Randal Toma
(rtoma@tomalaw.com)

RID #903694

Reference/Transaction: Transfer Ownership 2017 B Hotel licensed business with Sunday Sales Permit (PM), Outdoor Service (1 area), Specific Purpose Permit (food), 2 bars and 90 rooms from Genoa Lodging, L.L.C. to be located at 7798 Conference Center Dr, Brighton, Genoa Twp, Livingston County.

Please let this letter serve as notice the Michigan Liquor Control Commission has referred your application to our Enforcement Division for investigation of your request.

Applicant/Licensee: Brightlodge, Inc

Business address and phone number: 7799 Conference Center Dr, Brighton, Genoa Twp, Livingston County

Home address and phone number of partner(s)/subordinates:
Robert Nofar, 50558 Drakes Bay, Novi, MI 48374
William Nofar, 50102 Drakes Bay Dr, Novi, MI 48374

As part of the licensing process, an investigation is required by the Michigan Liquor Control Commission Enforcement Division. The Enforcement investigation will be conducted from the following designated District Office:

Southfield District Office (313) 456-1170

You may contact your designated District Office regarding any appointments or questions on documentation requested by the Investigator. **Failure to provide requested information or to keep scheduled appointments will cause the application to be returned to the Lansing office for cancellation.**

Since this request is a transfer under MCL 436.1529(1), approval of the local unit of government is not required. However, a copy of this notice is also being provided to **Local Governmental Unit** should they wish to submit an opinion on the application or advise of any local non-compliance issues.

Under administrative rule R 436.1105, the Commission shall consider the opinions of the local residents, local legislative body, or local law enforcement agency with regard to the proposed business when determining whether an applicant may be issued a license or permit.

Under administrative rule R 436.1003, the licensee shall comply with all state and local building, plumbing, zoning, sanitation, and health laws, rules, and ordinances as determined by the state and local law enforcements officials who have jurisdiction over the licensee. The licensee must obtain all other required state and local licenses, permits, and approvals before using this license for the sale of alcoholic liquor. Approval of this license by the Michigan Liquor Control Commission does not waive any of these requirements.

MICHIGAN LIQUOR CONTROL COMMISSION
Retail Licensing Division
(866) 813-0011

cc: Genoa Township (polly@genoa.org)

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

June 28, 2017

Paul M. Ganz
Regional Manager
DTE Energy
425 South Main, LL 114
Ann Arbor, Michigan 48104

Re: Flint Substation Ornamental Lights
4159 E. Grand River, Howell, MI 48843

Dear Mr. Ganz,

In 2003, Detroit Edison installed the Figurski Drive/White Horse Connector and associated ornamental light fixtures as required per the approved site plan for the Flint Substation. See the image below for general location.

In 2009, DTE deeded the Figurski/Whitehorse Roadway including the lights to Genoa Township in preparation for the dedication to the Livingston County Road Commission. During road construction for the Latson Road interchange, a number of vehicles began using the road as a cut-through to avoid the roadwork. During this time, Township staff received calls with concerns that the ornamental lights along the road were not turned on. In response, Township staff began researching the status and options available in regard to the lights. I will spare you all the details but you may recall it has taken years and considerable staff resources from both the Township and DTE to determine that the lights were not properly installed by DTE and no transformer is available to power them.

SUPERVISOR
Bill Rogers
CLERK
Paulette A. Skolarus
TREASURER
Robin L. Hunt
TRUSTEES
Jean W. Ledford
H. James Mortensen
Terry Croft
Diana Lowe
MANAGER
Michael C. Archinal

We have analyzed multiple options including turning the lights on and/or utilizing the DTE Community Street Light program. The option to turn the lights on has a cost of $12,000 to $15,000 which doesn't include usage bills, liability or responsibility for long term maintenance which is why we don't view this as a viable option. The costs for the Community Street Light program were also not feasible at over $78,000 due to the fact that the existing lights could not be utilized. The final option is therefore removal of the poles. We have met with the County Road Commission (who now owns the road) and they support removal.

At the April 17, 2017 Board meeting, the Genoa Township Board of Trustee's voted to remove the poles at a cost to our taxpayers of $4,800. For the benefit of your remaining property, we have left the conduit and footings in the event a future user would be interested in lighting the area. The Road Commission has furnished conduit caps to install over the footings for protection. As part of the Board's consideration they directed staff to write this letter respectfully requesting DTE participation in the costs associated with removal of the lights we inherited from DTE. The purpose of this letter is to formally convey the Board's request and to encourage your consideration of a contribution to the project.

Thank you in advance for your consideration of this issue. We greatly value our relationship with DTE and we look forward to continued cooperation and community spirit. Please don't hesitate to contact me if you have any questions or concerns in this regard.

Sincerely,

Kelly VanMarter
Assistant Township Manager/Community Development Director

Cc: Mike Archinal, Township Manager
Genoa Township Board of Trustees

Mike Archinal

From: Jean Ledford
Sent: Tuesday, June 20, 2017 4:21 PM
To: Mike Archinal
Subject: Fwd: Ann Arbor Sparks

Mike, please include this letter for discussion as part of the presentation packet you will be putting together for SPARK at the next Board meeting on July 17. Thanks.

Sent from my iPad

Begin forwarded message:

> **From:** Joseph Rapai <jarapai@sbcglobal.net>
> **Date:** June 20, 2017 at 11:13:05 AM EDT
> **To:** <jean@genoa.org>
> **Subject: Ann Arbor Sparks**
>
> Hello Jean,
>
> How has your summer going?
>
> It appears that the past decision on the addition of another school on Brighton Road was a good one!
>
> Genoa Township should consider abandonment of their participation with Ann Arbor Sparks. Ann Arbor's vision of the future of Genoa Township and Livingston County is at odds with the county's political philosophy. We can do much better ourselves without their self-interest motivation. We are not Ann Arbor.
>
> Regards,
>
> J A Rapai, DDS