

GENOA CHARTER TOWNSHIP BOARD
Regular Meeting and Public Hearing
May 20, 2019
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: May 6, 2019
3. Request for approval of a fireworks display on Lake Chemung on June 29, 2019 as submitted by Chris Bonk.

Approval of Regular Agenda:

4. Request to approve a resolution requesting aid from the Legal Defense Fund of the Michigan Townships Association in the form of an amicus brief filed in the Michigan Tax Tribunal Court as recommended by the Assessor.
5. Request to set the 2019 Genoa Township Millage Rate at .7990 in order to calculate the 2019 Winter Tax Rate at the direction of the Township Assessor. (Roll Call vote required.)
6. Request for acceptance of Dean Tengel's resignation, approval of the reappointment of Planning Commission members Jeff Dhaenens and Eric Rauch with terms expiring June 30, 2022 and the appointment of Zoning Board of Appeals member Michelle Kreutzberg [from alternate member to permanent member] as recommended by Supervisor Bill Rogers.
7. Consideration of a recommendation for approval of an amendment to a previously approved final condominium site plan and environmental impact assessment for a proposed 15-unit, single family site condominium located north of Cunningham Lake Road and west of Sundance Trail, known as Mountain Top Estates. The request is petitioned by Mountain Top Estates, LLC.
 - A. Disposition of amended Environmental Impact Assessment dated April 5, 2019
 - B. Disposition of amended Final Condominium Site Plan dated April 5, 2019
8. Request to introduce and schedule the first reading on proposed ordinance number Z-19-02, a text amendment to the minimum lot area requirement in the UR district within Article 3 and to set the second reading, public hearing and consideration for adoption before the Township Board on Monday, June 3rd, 2019 for the purpose of considering the proposed zoning map amendment.
10. Discussion regarding green burials.

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: May 20, 2019

TOWNSHIP GENERAL EXPENSES: Thru May 20, 2019	\$159,257.95
May 7, 2019 Special Pay Election	\$22,171.01
May 17, 2019 Bi Weekly Payroll	\$96,266.51
OPERATING EXPENSES: Thru May 20, 2019	\$122,505.29
TOTAL:	<u>\$400,200.76</u>
April 19, 2019 Bi Weekly Payroll	\$95,676.06

Check Date	Check	Vendor Name	Amount
Bank FNBCK CHECKING ACCOUNT			
			350.00
04/30/2019	35230	2/42 COMMUNITY CHURCH	1,162.17
04/30/2019	35231	CRYSTAL MOUNTAIN RESORT	45.32
04/30/2019	35232	DTE ENERGY	51.92
04/30/2019	35233	MARY KRENCICKI	250.00
04/30/2019	35234	MICHIGAN ASSESSOR'S ASSOC	250.00
04/30/2019	35235	MICHIGAN ASSESSOR'S ASSOC	149.34
04/30/2019	35236	MICHIGAN OFFICE SOLUTIONS	40.95
04/30/2019	35237	TRI COUNTY SUPPLY, INC.	35.96
05/01/2019	35238	MICHAEL ARCHINAL	200.00
05/01/2019	35239	CHILSON HILLS BAPTIST CHURCH	200.00
05/01/2019	35240	CHURCH OF THE NAZARENE	200.00
05/01/2019	35241	COMMUNITY BIBLE CHURCH	200.00
05/01/2019	35242	HORNUNG ELEMENTARY SCHOOL	200.00
05/01/2019	35243	HOWELL PUBLIC SCHOOLS	382.03
05/01/2019	35244	IMAGE 360	565.00
05/01/2019	35245	PERFECT MAINTENANCE CLEANING	545.00
05/06/2019	35246	JET'S PIZZA	87,646.60
05/09/2019	35247	ADVANCED DISPOSAL SERVICES	128.48
05/09/2019	35248	AMERICAN AQUA	7,109.00
05/09/2019	35249	B S & A SOFTWARE, INC.	122.02
05/09/2019	35250	CONTINENTAL LINEN SERVICE	135.00
05/09/2019	35251	COOPER'S TURF MANAGEMENT LLC	3,531.35
05/09/2019	35252	DELL MARKETING L.P.	127.44
05/09/2019	35253	DTE ENERGY	28.00
05/09/2019	35254	ETHAN MURPHY	354.45
05/09/2019	35255	GORDON FOOD SERVICE	131.00
05/09/2019	35256	LEO'S CUSTOM SPRINKLER SERVICE INC	27.84
05/09/2019	35257	LINDA GALLERANI	351.17
05/09/2019	35258	LIVINGSTON COUNTY TREASURER	28.00
05/09/2019	35259	LOGAN C. JOHNSON	269.86
05/09/2019	35260	MICHIGAN OFFICE SOLUTIONS	55.68
05/09/2019	35261	TERRY CROFT	40.60
05/09/2019	35262	ANGELA WILLIAMS	60.32
05/13/2019	35263	MICHAEL ARCHINAL	38,760.16
05/13/2019	35264	BLUE CROSS & BLUE SHIELD OF MI	219.03
05/13/2019	35265	CONSUMERS ENERGY	1,350.00
05/13/2019	35266	DYKEMA GOSSETT, PLLC	7,360.00
05/13/2019	35267	ETNA SUPPLY COMPANY	60.86
05/13/2019	35268	GENOA TOWNSHIP D.P.W. FUND	205.20
05/13/2019	35269	GENOA TOWNSHIP D.P.W. FUND	31.90
05/13/2019	35270	MARY KRENCICKI	182.35
05/13/2019	35271	MASTER MEDIA SUPPLY	2,750.00
05/13/2019	35272	PFEFFER, HANNIFORD, PALKA	223.62
05/13/2019	35273	PAULETTE SKOLARUS	190.91
05/13/2019	35274	TRI COUNTY SUPPLY, INC.	504.42
05/14/2019	35275	COMCAST	164.00
05/14/2019	35276	WELLNESS IQ	164.00
05/14/2019	35277	WELLNESS IQ	2,117.00
05/14/2019	35278	WELLNESS IQ	

FNBCK TOTALS:

Total of 49 Checks:
 Less 0 Void Checks:
 Total of 49 Disbursements:

159,257.95
 0.00
 159,257.95

05/13/2019 11:10 AM

Check Register Report For Genoa Charter Township
For Check Dates 05/07/2019 to 05/07/2019

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
05/07/2019	FNBCK	12961		280.00	246.68	0.00	Open
05/07/2019	FNBCK	12962		230.00	220.22	0.00	Cleared
05/07/2019	FNBCK	12963		280.00	268.10	0.00	Open
05/07/2019	FNBCK	12964		265.00	253.74	0.00	Open
05/07/2019	FNBCK	12965		265.00	265.00	0.00	Open
05/07/2019	FNBCK	12966		315.00	301.61	0.00	Open
05/07/2019	FNBCK	12967		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12968		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12969		315.00	315.00	0.00	Cleared
05/07/2019	FNBCK	12970		265.00	249.93	0.00	Cleared
05/07/2019	FNBCK	12971		280.00	262.79	0.00	Cleared
05/07/2019	FNBCK	12972		265.00	265.00	0.00	Open
05/07/2019	FNBCK	12973		265.00	253.74	0.00	Open
05/07/2019	FNBCK	12974		315.00	315.00	0.00	Cleared
05/07/2019	FNBCK	12975		315.00	304.48	0.00	Cleared
05/07/2019	FNBCK	12976		315.00	315.00	0.00	Open
05/07/2019	FNBCK	12977		265.00	246.21	0.00	Cleared
05/07/2019	FNBCK	12978		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12979		315.00	315.00	0.00	Cleared
05/07/2019	FNBCK	12980		315.00	315.00	0.00	Open
05/07/2019	FNBCK	12981		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12982		265.00	253.74	0.00	Open
05/07/2019	FNBCK	EFT338	INTERNAL REVENUE SERVICE	403.64	403.64	0.00	Cleared
Totals:				22,953.64	22,171.01	0.00	
Number of Checks: 083							
Total Physical Checks:				82			
Total Check Stubs:				1			

05/13/2019 11:10 AM

Check Register Report For Genoa Charter Township
For Check Dates 05/07/2019 to 05/07/2019

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
05/07/2019	FNBCK	12901		315.00	315.00	0.00	Open
05/07/2019	FNBCK	12902		315.00	315.00	0.00	Cleared
05/07/2019	FNBCK	12903		265.00	265.00	0.00	Open
05/07/2019	FNBCK	12904		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12905		265.00	253.74	0.00	Open
05/07/2019	FNBCK	12906		265.00	233.74	0.00	Cleared
05/07/2019	FNBCK	12907		175.00	167.56	0.00	Cleared
05/07/2019	FNBCK	12908		265.00	253.74	0.00	Open
05/07/2019	FNBCK	12909		265.00	253.74	0.00	Open
05/07/2019	FNBCK	12910		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12911		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12912		265.00	234.44	0.00	Cleared
05/07/2019	FNBCK	12913		265.00	265.00	0.00	Open
05/07/2019	FNBCK	12914		280.00	280.00	0.00	Open
05/07/2019	FNBCK	12915		280.00	246.68	0.00	Open
05/07/2019	FNBCK	12916		265.00	253.74	0.00	Open
05/07/2019	FNBCK	12917		315.00	292.80	0.00	Cleared
05/07/2019	FNBCK	12918		265.00	253.74	0.00	Cleared
05/07/2019	FNBCK	12919		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12920		315.00	315.00	0.00	Cleared
05/07/2019	FNBCK	12921		315.00	315.00	0.00	Open
05/07/2019	FNBCK	12922		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12923		265.00	234.44	0.00	Open
05/07/2019	FNBCK	12924		265.00	253.74	0.00	Cleared
05/07/2019	FNBCK	12925		315.00	301.61	0.00	Open
05/07/2019	FNBCK	12926		265.00	234.44	0.00	Cleared
05/07/2019	FNBCK	12927		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12928		315.00	315.00	0.00	Open
05/07/2019	FNBCK	12929		265.00	253.74	0.00	Open
05/07/2019	FNBCK	12930		265.00	253.74	0.00	Cleared

05/13/2019 11:10 AM

Check Register Report For Genoa Charter Township
For Check Dates 05/07/2019 to 05/07/2019

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
05/07/2019	FNBCK	12931		265.00	265.00	0.00	Open
05/07/2019	FNBCK	12932		265.00	265.00	0.00	Open
05/07/2019	FNBCK	12933		265.00	265.00	0.00	Open
05/07/2019	FNBCK	12934		265.00	260.93	0.00	Open
05/07/2019	FNBCK	12935		265.00	260.93	0.00	Open
05/07/2019	FNBCK	12936		315.00	301.61	0.00	Cleared
05/07/2019	FNBCK	12937		315.00	301.61	0.00	Cleared
05/07/2019	FNBCK	12938		280.00	226.68	0.00	Cleared
05/07/2019	FNBCK	12939		265.00	253.74	0.00	Cleared
05/07/2019	FNBCK	12940		265.00	253.74	0.00	Cleared
05/07/2019	FNBCK	12941		265.00	253.74	0.00	Cleared
05/07/2019	FNBCK	12942		140.00	103.34	0.00	Open
05/07/2019	FNBCK	12943		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12944		315.00	315.00	0.00	Cleared
05/07/2019	FNBCK	12945		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12946		265.00	265.00	0.00	Open
05/07/2019	FNBCK	12947		265.00	262.32	0.00	Cleared
05/07/2019	FNBCK	12948		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12949		265.00	246.21	0.00	Open
05/07/2019	FNBCK	12950		315.00	301.61	0.00	Cleared
05/07/2019	FNBCK	12951		230.00	212.60	0.00	Cleared
05/07/2019	FNBCK	12952		315.00	315.00	0.00	Open
05/07/2019	FNBCK	12953		265.00	253.74	0.00	Cleared
05/07/2019	FNBCK	12954		265.00	265.00	0.00	Cleared
05/07/2019	FNBCK	12955		280.00	216.68	0.00	Open
05/07/2019	FNBCK	12956		265.00	246.21	0.00	Cleared
05/07/2019	FNBCK	12957		265.00	253.74	0.00	Open
05/07/2019	FNBCK	12958		315.00	312.33	0.00	Cleared
05/07/2019	FNBCK	12959		265.00	253.74	0.00	Cleared
05/07/2019	FNBCK	12960					

Check Register Report For Genoa Charter Township
For Check Dates 05/17/2019 to 05/17/2019

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
05/17/2019	FNBCK	12983		35.00	33.51	0.00	Open
05/17/2019	FNBCK	12984		35.00	33.51	0.00	Open
05/17/2019	FNBCK	12985		154.00	142.22	0.00	Open
05/17/2019	FNBCK	12986		90.00	83.11	0.00	Open
05/17/2019	FNBCK	12987		520.00	444.08	0.00	Open
05/17/2019	FNBCK	12988		261.00	241.03	0.00	Open
05/17/2019	FNBCK	EFT339	FLEX SPENDING (TASC)	1,032.12	1,032.12	0.00	Open
05/17/2019	FNBCK	EFT340	INTERNAL REVENUE SERVICE	22,706.99	22,706.99	0.00	Open
05/17/2019	FNBCK	EFT341	PRINCIPAL FINANCIAL	3,286.00	3,286.00	0.00	Open
05/17/2019	FNBCK	EFT342	PRINCIPAL FINANCIAL	2,158.46	2,158.46	0.00	Open
05/17/2019	FNBCK	EFT343	INTERNAL REVENUE SERVICE	39.94	39.94	0.00	Open
Totals:				30,318.51	30,200.97	0.00	
					Dir. Dep.		
Total Physical Checks:				6	66,065.54		
Total Check Stubs:				5			
					<u>\$96,266.51</u>		

Check Date	Check	Vendor Name	Amount
Bank 503FN DPW-UTILITIES #503			
04/30/2019	4633	MWEA	135.00
04/30/2019	4634	SPIRIT OF LIVINGSTON	3,368.72
04/30/2019	4635	ST JOHN PROVIDENCE OCC HEALTH HOWEL	209.00
04/30/2019	4636	ST JOHN PROVIDENCE OCC HEALTH HOWEL	209.00
05/08/2019	4637	TEAMVIEWER GMBH	2,342.70
05/14/2019	4638	ADVANCE AUTO PARTS	39.98
05/14/2019	4639	AUTO-LAB OF LIVINGSTON	57.19
05/14/2019	4640	CHASE CARD SERVICES	1,946.90
05/14/2019	4641	CRUZ-N QUICK LUBE # 0002	61.37
05/14/2019	4642	GIFFELS WEBSTER	2,520.00
05/14/2019	4643	GRAINGER	74.41
05/14/2019	4644	K & J ELECTRIC, INC.	390.00
05/14/2019	4645	LUCITY, INC	11,250.00
05/14/2019	4646	MMRMA	19,313.17
05/14/2019	4647	MWEA	75.00
05/14/2019	4648	NATIONAL PRODUCTS, INC	289.83
05/14/2019	4649	NETWORK SERVICES GROUP, L.L.C.	255.00
05/14/2019	4650	PFEFFER, HANNIFORD, PALKA	1,500.00
05/14/2019	4651	PORT CITY COMMUNICATIONS, INC.	296.00
05/14/2019	4652	SPIRIT OF LIVINGSTON	275.08
05/14/2019	4653	STANDARD ELECTRIC	127.75
05/14/2019	4654	STAPLES CREDIT PLAN	203.98
05/14/2019	4655	TETRA TECH INC	11,025.00
05/14/2019	4656	TRACTOR SUPPLY CO.	276.79
05/14/2019	4657	USA BLUEBOOK	106.38
05/14/2019	4658	WEX BANK	3,632.62
05/14/2019	4659	US POSTAL SERVICE	296.52

503FN TOTALS:

Total of 27 Checks:	60,277.39
Less 0 Void Checks:	0.00
Total of 27 Disbursement\$:	60,277.39

Check Date	Check	Vendor Name	Amount
Bank 593FN LAKE EDGEWOOD OPERATING FUND #593			
04/30/2019	3582	BRIGHTON ANALYTICAL , L.L.C.	134.00
04/30/2019	3583	CONSUMERS ENERGY	72.28
05/08/2019	3584	DTE ENERGY	3,642.56
05/15/2019	3585	BRIGHTON ANALYTICAL , L.L.C.	607.00
05/15/2019	3586	BULLSEYE TELECOM	158.16
05/15/2019	3587	CONSUMERS ENERGY	320.53
05/15/2019	3588	COOPER'S TURF MANAGEMENT LLC	211.00
05/15/2019	3589	GENOA OCEOLA SEWER	21.28
05/15/2019	3590	GENOA TOWNSHIP D.P.W. FUND	11,694.89
05/15/2019	3591	GENOA TOWNSHIP D.P.W. FUND	15.18
05/15/2019	3592	GENOA TOWNSHIP D.P.W. FUND	4.54
05/15/2019	3593	GENOA TOWNSHIP D.P.W. FUND	6.23
05/15/2019	3594	MMRMA	955.00
05/15/2019	3595	PVS NOLWOOD CHEMICALS, INC	959.00
05/15/2019	3596	HOWELL TRUE VALUE HARDWARE	126.28

593FN TOTALS:

Total of 15 Checks:	18,927.93
Less 0 Void Checks:	0.00
Total of 15 Disbursements:	18,927.93

05/15/2019 12:02 PM
User: Angie
DB: Genoa Township

CHECK REGISTER FOR GENOA TOWNSHIP
CHECK NUMBERS 4571 - 4800

Page: 1/1

Check Date	Check	Vendor Name	Amount
Bank 592FN OAK POINTE OPERATING FUND #592			
05/08/2019	4571	AT&T LONG DISTANCE	57.17
05/08/2019	4572	DTE ENERGY	1,871.11
05/08/2019	4573	DTE ENERGY	2,529.85
05/08/2019	4574	MHOG WATER AUTHORITY	38,841.84

592FN TOTALS:

Total of 4 Checks:	43,299.97
Less 0 Void Checks:	0.00
Total of 4 Disbursements:	43,299.97

Pine Creek Checks
No A/P checks issued for this Board Packet

Check Register Report For Genoa Charter Township
For Check Dates 04/19/2019 to 04/19/2019

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
04/19/2019	FNBCK	EFT330	FLEX SPENDING (TASC)	1,032.12	1,032.12	0.00	Open
04/19/2019	FNBCK	EFT331	INTERNAL REVENUE SERVICE	22,307.41	22,307.41	0.00	Open
04/19/2019	FNBCK	EFT332	PRINCIPAL FINANCIAL	3,286.00	3,286.00	0.00	Open
04/19/2019	FNBCK	EFT333	PRINCIPAL FINANCIAL	2,063.65	2,063.65	0.00	Open
Totals:				28,689.18	28,689.18	0.00	
Total Physical Checks:							
Total Check Stubs:							

Number of Checks: 004

28,689.18

28,689.18

0.00

Dir. Dep.

66,986.88

95,676.06

**GENOA CHARTER TOWNSHIP BOARD
Regular Meeting and Public Hearing
May 6, 2019**

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 nine persons in the audience.

A Call to the Public was made with no response.

Approval of Consent Agenda:

Moved by Mortensen and supported by Lowe to move all items listed to the regular agenda for discussion. The motion carried unanimously.

Approval of Regular Agenda:

Moved by Lowe and supported by Hunt to approve for action all items listed under the Regular Agenda as requested. The motion carried unanimously

1. Payment of Bills.

Moved by Mortensen and supported by Croft to approve the payment of bills with the condition that the April 19, 2019 payroll will be added to the next agenda for review. The motion carried unanimously.

2. Request to Approve Minutes: April 15, 2019

Moved by Croft and supported by Hunt to approve the Minutes of April 15, 2019 deleting the name Township Attorney Joe Seward from the minutes as he was not present. The corrected Minutes were voted and carried unanimously.

3. Request for approval of a proposal from Dell for the purchase of five new workstations at a cost not to exceed \$3,531.35.

Moved by Mortensen and supported by Lowe to approve the purchase of 5 computers as requested by VanTassell. The motion carried unanimously.

4. Request for approval of site work and installation of a basketball court at Genoa Park at a cost of \$105,303.60.

Moved by Mortensen and supported by Croft to table the request until a second quote may be obtained for the basketball court. The motion carried as follows: Ayes: Ledford, Croft, Hunt, Lowe, Mortensen and Skolarus. Nay – Rogers.

5. Request for approval of proposals in the amount of \$6,446.00 from Mica Crafters for improvements to the main copy room and the Township kitchen.

Moved by Mortensen and supported by Lowe to approve the contract with Mica Crafters in the amount of \$6,446.00 as requested. The motion carried unanimously.

6. Public hearing for the Edwin Drive Road Maintenance Project (Summer 2019).

A. Call to the Property Owners and to the Public.

A call to property owners and the public was made with no response.

B. Request for approval of Resolution #5 [confirming the special assessment roll] for the Edwin Drive Road Improvement Project Special Assessment District (Summer 2019).

Moved by Ledford and supported by Skolarus to approve Resolution # 5 as requested. The motion carried by roll call vote as follows: Ledford, Croft, Hunt, Lowe, Mortensen, Skolarus and Rogers. Nays – None. Absent – None.

7. Consideration of a recommendation for approval of a rezoning (adoption of Ordinance Z-19-01), PUD Agreement, Impact Assessment and conceptual PUD Plan for a proposed planned industrial development with a new 67,000 sq. ft. indoor climate controlled storage building. The rezoning requested is from GCD to IND with a Planned Industrial District (PID) overlay located at 2528 Harte Drive, Brighton consisting of 10.62 acres on parcel 4711-13-300-009. The request is petitioned by James Pappas of Fusco, Shaffer and Pappas, Inc., also known as the Birkenstock property.

A. Call to the public.

A call to the public was made with no response.

B. Request for approval of the adoption of Ordinance Z-19-01 to rezone parcel 4711-13-300-009 from GCD to IND/PID.

Moved by Lowe and supported by Skolarus to approve and adopt Ordinance No. Z-19-01. This approval is made because the proposed amendment to the Zoning Map and reclassification as a Planned Industrial Park District (PID) with the related development agreement and conceptual plan has been found to comply with the criteria stated in Sections 10.02.04, 10.07.01 and 22.04 of the Township Zoning Ordinance. This finding includes that the rezoning encourages innovative and beneficial land uses, is consistent with the goals, objectives, and land use map of the Master Plan, preserves open space and historical features, promotes efficient provision of public services and utilities, reduces adverse vehicular and pedestrian traffic impacts, and encourages the use and improvement of an existing site. The motion carried by roll call vote as follows: Ledford, Croft, Hunt, Lowe, Mortensen, Skolarus and Rogers. Nays – None. Absent – None.

C. Disposition of PUD Agreement revised on April 16, 2019.

Moved by Hunt and supported by Lowe to approve the PUD Agreement revised on April 16, 2019 with the following conditions:

1. The revisions suggested by the Township Attorney related to Section III, Item A. shall be incorporated and the revised draft shall be reviewed and approved by Township staff and Township Attorney.
2. Page numbering shall be corrected.
3. In regard to permitted uses, the first “whereas...” statement on page 2, Section I. Item B., and Section II, Item A. shall be revised so as not to indicate that all permitted uses are included. A list of uses shall be provided in table format as an Exhibit C and shall depict all permitted and special land uses applicable to the property.
4. Section I, Item F. shall remove the reference to Article 13 and instead state “shall comply with the Zoning Ordinance”.

The motion carried unanimously.

D. Disposition of Environmental Impact Assessment dated January 2019.

Moved by Hunt and supported by Lowe to approve the environmental impact assessment dated January 2019 as submitted. The motion carried unanimously.

E. Disposition of Conceptual PUD Plan dated 2/22/19 with revised sheets A.S.101 and C.102 dated 4/5/19.

Moved by Lowe and supported by Skolarus to approve the Conceptual PUD Plan dated 2/22/19 with revised sheets A.S.101 and C.102 dated 4/5/19 with the following conditions:

1. The petitioner is encouraged to retain and/or relocate to the extent possible any healthy and mature trees in the final PUD site plan submittal.
2. Details of the electronic message sign shall be provided with the Final PUD site plan.
3. As requested by the Township Engineer, documentation of the temporary grading easement shall be provided with the Final PUD Site Plan submittal.

The motion carried unanimously.

8. Consideration of a recommendation for approval of a special use, site plan and environmental impact assessment for an amendment to a previously approved special use permit for a K-12 Livingston Christian School located within the Brighton Church of the Nazarene. The property in question is located at 7669 Brighton Road, Brighton, Michigan, on parcel #4711-25-400-059. The request is petitioned by Livingston Christian Schools.

A. Disposition of Special Use.

Moved by Lowe and supported by Hunt to approve the Special Land Use to increase the maximum number of students from 200 to 280. This approval is granted based upon finding consistency with the standards of section 19.03 of the Zoning Ordinance. The motion carried unanimously.

B. Disposition of Environmental Impact Assessment (3-11-19)

Moved by Hunt and supported by Lowe to approve the environmental impact assessment dated March 11, 2019 as submitted. The motion carried unanimously.

C. Disposition of Site Plan (3-11-19)

Moved by Lowe and supported by Skolarus to approve the site plan dated March 11, 2019 with the condition that the applicant provide information to Township staff that the landscaping and other previously approved requirements have been implemented. The motion carried unanimously.

9. Request to enter into a closed session to discuss pending litigation in the matter of Ikle v. Genoa Charter Township 29855-CZ pursuant to MCL 15.268 (e).

Moved by Skolarus and supported by Croft to adjourn to a closed session to discuss pending litigation in the matter of Ikle v. Genoa Charter Township 29855-CZ pursuant to MCL 15.268 (e) at 7:30 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 Township Board was reopened at 8:00 p.m.

Archinal provided an overview of his meetings with two Home Owners' Associations and their intent on reconstruction of the roads in Pine Creek and Northshore.

Attorney Joe Seward – The Township regularly receives requests from homeowners living in the more rural parts of the Township requesting internet or cable service. If we are going to put pressure on Comcast to provide extended service, the Township needs to begin working on their requests at least three years in advance. There is no density trigger in our Comcast agreement. We have no way to force Comcast to put in cable. Current mapping of Comcast and ATT should be made available to the township.

Moved by Lowe and supported by Croft to adjourn the regular meeting and public hearing of the board at 8:15 p.m.



Paulette A. Skolarus, Clerk
Genoa Charter Township Board

2019 Permit for Fireworks Other than Consumer or Low Impact

Authority: 2011 PA 256	The LEGISLATIVE BODY OF CITY, VILLAGE OR TOWNSHIP BOARD will not discriminate against any individual or group because of race, sex, religion, age, color, marital status, disability, or political beliefs. If you need assistance with reading, writing, hearing, etc., under the Americans with Disabilities Act, you may make your needs known to this Legislative Body of City, Village or Township Board.
------------------------	--

This permit is not transferable. Possession of this permit authorizes the herein named person to possess, transport and display fireworks in the amounts, for the purpose of and at the place listed below only through permit expiration date.

TYPE OF PERMIT(S) (Select all applicable boxes) ☐ Agricultural or Wildlife Fireworks ☐ Articles Pyrotechnic ☒ Display Fireworks ☐ Public Display ☐ Private Display ☐ Special Effects Manufactured for Outdoor Pest Control or Agricultural Purposes		FOR USE BY LEGISLATIVE BODY OF CITY, VILLAGE OR TOWNSHIP BOARD ONLY. PERMIT(S) EXPIRATION DATE (ENTER DATE OF EXPIRATION)	
NAME OF PERSON PERMIT ISSUED TO		AGE (18 YEARS OR OLDER) ☐ YES ☐ NO	
ADDRESS OF PERSON PERMIT ISSUED TO			
NAME OF ORGANIZATION, GROUP, FIRM OR CORPORATION			
ADDRESS			
NUMBER AND TYPES OF FIREWORKS (Please attach additional pages if necessary)			
See Attached - 2 pages			
EXACT LOCATION OF DISPLAY OR USE			
CITY, VILLAGE, TOWNSHIP		DATE	TIME
Lake Chemung - Per map Genoa Charter Township		6/29/19	10 PM
BOND OR INSURANCE FILED ☐ YES ☐ NO		AMOUNT	

Issued by action of the Legislative Body of a ☐ City ☐ Village ☐ Township of _____ on the _____ day of _____	
_____ (Signature and Title of Legislative Body Representative)	

THIS FORM IS VALID UNTIL THE DATE OF EXPIRATION OF PERMIT

Display Product	Case Quantity	Total
31 Shot 2.25" Dream Weaver	1	
300 Shot RWB Crossette	2	
100 Shot Assorted Strobe Willow	2	
Charlie special	2	
132 shot flower pistils	1	
280 Shot Fan Shaped 3-Times Whistle	1	
130 shot Golden Waterfall	1	
250 shot Gold Crossette V cake	1	
25 Shot 3" Pink Heart, Footprint	1	
66 Shot Armageddon (1.75")	1	
200 shot crackling tail to blaster	1	
Sky Angel	1	
31 shot Silver strobing snow	1	
25 Shot 2.5" Mammoth		
Peony/Thunder	2	
36 Shot 2.5" RWB Peanut Salute	2	
24 shot ring shells	1	
1.75 Salute, Tit ball	1	
30 Shot 2" Jubilee	1	
49 Shot Homeland	2	
66 shot stroll blue	1	
90 shot color head	1	
100 shot silver spinner	1	
100 shot assorted variety color	1	
35 Shot Floral Shell	1	
31 shot 2.25" gorgeous start	1	
48 Shot Water Cake, Silver		
Crown	2	
100 Shot Wave Willow	2	

Total cake count: 35

72 quantity	3" shells	72	2	144
36 quantity	4" shells	36	1	36
18 quantity	5" shells	18	2	36
9 quantity	6" shells	9	4	36
	5" LBS Salute	1	5	5
	8" 8" Glittering Silver to Red & Blue	1	3	3

I N A L E	3" RWB Tiger Tail w/Report chain	12	18	216
	3"Finale, Red,White,Blue chain	12	18	216
	3" Tit salute chain	12	12	144
	Total shell count:			836

Wolverine Fireworks Display Inc.

www.wolverinefireworks.com

Phone 989-662-0121

Fax

989-662-0122

REQUIRED DIAGRAM AND FIRING SITE INFORMATION (DRAWING REQUIRED)

*** 1 of 2 ***

Dear Customer:

Our Goal is to provide you with the BEST "BANG" for your budget under the safest conditions. In this regard, we ask that you supply us with a diagram of the display site. * The diagram must show the distances from the discharge site ** to the spectators, parking areas, and any buildings.

Below is a check list for you to follow while you are making the diagram. If an item is not applicable to your site, please insert "N/A".

ALL DISTANCES ARE IN FEET FROM THE DISCHARGE SITE TO THE FOLLOWING AREAS:

- | | | |
|--|-------------|------|
| 1) Closest spectator area | <u>800</u> | FEET |
| 2) Parking areas | <u>350</u> | FEET |
| 3) Occupied Buildings: Residents etc, | <u>1000</u> | FEET |
| 4) Public Buildings: (Schools, Churches, Hospitals
correctional Facilities, Etc. | <u>N/A</u> | FEET |
| 5) Fuel Pumps/ Storage, Explosives/Toxic Material
Gasoline Stations, Refineries, Etc. | <u>N/A</u> | FEET |
| 6) Temporary Event Set-ups: Tents, Carnival Rides,
Concession Stands, Etc. | <u>N/A</u> | FEET |
| 7) Highways, Roads, Streets, Active Railroads | <u>950</u> | FEET |
| 8) Overhead Obstructions: Electrical Lines, Lights,
Trees. | <u>950</u> | FEET |

Maximum Shell size being used in display: 6"

Show Name/Date of event: LAKE CLEMENS - HOWELL, MI - JUNE 29, 2019

Name, Job Position and Address of Person Completing the Above Information:

MARK POPOVICH, OPERATOR + LEAD SHOOTER
901 HIDDEN HARBOR LN
SEVIERVILLE, TN 37876

Signature Mark Popovich

Date: 4/30/2019

* NFPA 1123 defines "display site": The immediate area where a fireworks display is conducted, including the discharge site, the fall out area, and the required separation distance from mortars to spectator viewing areas, but not spectator viewing areas or vehicle parking areas.

** NFPA 1123 defines "discharge site": The area immediately surrounding the fireworks mortars used for an outdoor fireworks display.



ADDITIONAL INSURED – FIREWORKS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

The policy is amended to include as an additional insured:

1. The fair or exhibition association, sponsoring organization or committee for the fireworks event covered under the policy;
2. The owner or lessee of any premises used by the Named Insured for the covered fireworks events;
3. The public authority municipality granting a permit to the Named Insured to operate the covered fireworks event; and
4. Any independent contractor who operates the fireworks display on behalf of the Named Insured;

but only as respects accidents arising out of the negligence of you or your employees while acting in the course and scope of their employment.

All other terms and conditions of the policy remain unchanged.

Wolverine FIREWORKS

205 West Seidlers Rd. • Kawkawlin, MI 48631
Phone: 989.662.0121 • Fax: 989.662.0122

Display, Inc.

Visit us at www.wolverinefireworks.com

Disclaimer of Insurance Deductible

1. "SUPERIOR PYRO"
MARK POPYCH, 901 Haden Harbor Ln, Sevierville, TN 37876 ["Company"] agrees to
(Full name and address of Company) * Please Print*
comply with the most recent edition of the N.F.P.A. 1123 guidelines for Fireworks Display,
including, but not limited to its Table of Distances, in organizing and conducting a fireworks
display on 6/29/2019 for CH215 BONK.
Date (Name of Event or Organization) * Please print *
2. Company fully recognizes, and in consideration of sale of fireworks to Company for use in the display as set forth in paragraph 1 above, agrees to be personally responsible, without off-set or deduction, for the \$5,000.00 deductible provided for in *Wolverine Fireworks Display, Inc.*'s policy of insurance as a result of any claim asserting any injury or property damage as a result of the manner or method in which Company undertakes the fireworks display referenced in paragraph 1 above.
3. Company shall pay to *Wolverine* upon *Wolverine's* demand any deductible amount applied and/or charged to and/or assessed against *Wolverine Fireworks Display, Inc.*
4. Company understands and agrees that *Wolverine Fireworks Display, Inc.* will not be liable for such deductible amount with respect to any claim made as referenced in paragraph 2 above. Company agrees to indemnify and hold harmless *Wolverine Fireworks Display, Inc.* against any and all responsibility or obligation with respect to such deductible.
5. Company further acknowledges and agrees that its responsibility for such deductible is not intended to act as a waiver or limitation of any rights *Wolverine Fireworks Display, Inc.* may otherwise have as to Company's responsibility and/or liability for any claim of injury or property damage associated with the fireworks display referenced in paragraph 1 above.

Company:

By: Mark Popych
Its: OWNER
Date: 4/30/2019

ACKNOWLEDGED BY:

WOLVERINE FIREWORKS
DISPLAY, INC.

BY: John B. Atran
Its: P-O
Date: 4-30-2019



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/10/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER The Partners Group Ltd 11225 SE 6th St., Suite 110 Bellevue WA 98004		CONTACT NAME: Janet Nau PHONE (A/C, No, Ext): 425-455-5640 FAX (A/C, No): 425-455-6727 E-MAIL ADDRESS: jnau@tpgrp.com	
		INSURER(S) AFFORDING COVERAGE	
		INSURER A: Everest Indemnity Insurance Co	
		INSURER B: Maxum Indemnity Company	
		INSURER C:	
		INSURER D:	
		INSURER E:	
		INSURER F:	

INSURED 14347
Wolverine Fireworks Display, Inc.
205 West Seidlers Road
Kawkawlin MI 48631

COVERAGES**CERTIFICATE NUMBER:** 1022006966**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADOL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY ☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR \$2,000 Deductible GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PROJECT ☐ LOC	Y	S18ML01687191	2/1/2019	2/1/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ Excluded PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ ALL OWNED AUTOS ☐ HIRED AUTOS ☐ SCHEDULED AUTOS ☐ NON-OWNED AUTOS					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
B	UMBRELLA LIAB ☒ OCCUR ☒ EXCESS LIAB ☐ CLAIMS-MADE DED ☒ RETENTION \$ 0		EXC603413501	2/1/2019	2/1/2020	EACH OCCURRENCE \$ 9,000,000 AGGREGATE \$ 9,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N ☐	N/A			WC STATUTORY LIMITS OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

The following are Additional Insured on General Liability as their interest may appear as respects to operations performed by or on behalf of the Named Insured, as required by written contract.
Mark Popovich (Co-Sponsor) for a Fireworks Display to be discharged on or near the waters of Lake Chemung in Howell, MI on June 29, 2019 (R.D. June 30, 2019)

CERTIFICATE HOLDER**CANCELLATION**

Mark Popovich
901 Hidden Harbor Ln.
Severville TN 37876

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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**Genoa Charter Township
Board of Trustees**

Resolution 2019-_____

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

**Resolution Requesting Assistance from the Legal Defense Fund
of Michigan Townships Association**

At a regular meeting of the Township Board for the Charter Township of Genoa, Livingston County, Michigan, held in the Township Hall located at 2911 Dorr Road, Brighton, Michigan, on the 20th day of May, 2019,

Present: _____

Absent: _____

The following resolution was offered by _____ and supported by _____ and passed _____.

Whereas, Livingston County Hockey Association ("LCHA"), which owns and operates Grand Oaks Ice Arena, has filed a petition at the Michigan Tax Tribunal ("MTT") under MAHS Docket Nos. 18-00021 and 18-000687 in order to seek a property tax exemption for the arena under MCL 211.7o., and

Whereas, such an exemption would have a negative affect both upon the Township and other taxing entities, and

Whereas, the Township does not believe that the applicable property tax law has changed in such manner as to justify such an exemption, and

Whereas, the Michigan Townships Association ("MTA") previously assisted East Bay Township at the MTT and at the court of Appeals with an amicus curiae brief in MTT Case No. 305734 and the Township believes such support would be helpful in this case.

Whereas, Genoa Charter Township is cooperating with East Bay Township's defense of a case involving similar facts and law in Involved Citizen's Enterprises, Inc. ("ICE") vs East Bay Township, MAHS Docket No. 18-001093 and Genoa Charter Township believes that MTA amicus curiae support would be helpful in that case as well, and

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

Whereas, Genoa Charter Township believes this is a matter of statewide importance and precedent.

Therefore, be *Resolved* by the Board of Trustees of Genoa Charter Township that:

1. The Board of Trustees supports the request of aid from the Legal Defense Fund of Michigan Townships Association.
2. The Board of Trustees understands the aid will be in the form of an amicus brief filed by Michigan Townships Association in the Michigan Tax Tribunal. Upon roll call vote:

YES: _____

NO: _____

ABSTAIN: _____

**THIS GENOA CHARTER TOWNSHIP BOARD OF TRUSTEES
RESOLUTION 2019-_____, APPROVED ON THE 20TH DAY OF MAY,
2019,
IS DECLARED CERTIFIED BY THE CLERK.**

Bill Rogers, Supervisor

Date

I, the undersigned, the Clerk of the Charter Township of Genoa, Livingston County, Michigan, do hereby certify that the foregoing is a true and complete copy of certain proceedings taken by said municipality of Genoa Charter Township at its meeting relative to the adoption of the resolution therein set forth, that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 2067 of 1976, Public Acts of Michigan, and that the minutes of said meeting were kept and will be or have been made available as required by said Act.

Paulette Skolarus

Date

TO: Honorable Board of Trustees

FROM: Debra L. Rojewski, Assessor 

DATE: May 20, 2018

RE: 2019 Millage Rate

Manager's Signature: _____

I have enclosed the 2019 Genoa Township Millage Rate that will be used to calculate the amount of taxes to be collected for each parcel in Genoa Township for the Winter Taxes of 2019. There has been a change in the millage from .8009 to .7990.

Michigan State Law requires the Township to approve the millage rate for each tax year.

I would recommend the following motion:

Moved by _____, supported by

To approve the Assessor's affidavit of the 2019 Millage levies for Genoa Township, establishing the Millage Rate at 0.7990.

2019 Tax Rate Request (This form must be completed and submitted on or before September 30, 2019)

MILLAGE REQUEST REPORT TO COUNTY BOARD OF COMMISSIONERS

Carefully read the instructions on page 2.

This form is issued under authority of MCL Sections 211.24e, 211.34 and 211.34d. Filing is mandatory; Penalty applies.

County(ies) Where the Local Government Unit Levies Taxes LIVINGSTON	2019 Taxable Value of ALL Properties in the Unit as of 5-28-19 1,203,836,080
Local Government Unit Requesting Millage Levy GENOA CHARTER TOWNSHIP	For LOCAL School Districts: 2019 Taxable Value excluding Principal Residence, Qualified Agricultural, Qualified Forest, Industrial Personal and Commercial Personal Properties.

This form must be completed for each unit of government for which a property tax is levied. Penalty for non-filing is provided under MCL Sec 211.119. The following tax rates have been authorized for levy on the 2019 tax roll.

(1) Source	(2) Purpose of Millage	(3) Date of Election	(4) Original Millage Authorized by Election Charter, etc.	(5) ** 2018 Millage Rate Permanently Reduced by MCL 211.34d "Headlee"	(6) 2019 Current Year "Headlee" Millage Reduction Fraction	(7) 2019 Millage Rate Permanently Reduced by MCL 211.34d "Headlee"	(8) Sec. 211.34 Truth in Assessing or Equalization Millage Rollback Fraction	(9) Maximum Allowable Millage Levy *	(10) Millage Requested to be Levied July 1	(11) Millage Requested to be Levied Dec. 1	(12) Expiration Date of Millage Authorized
ALLOC	OPERATING	N/A		.8009	.9977	.7990	1.0000	.7990		.7990	N/A

Prepared by DEBRA ROJEWSKI	Telephone Number 810-227-5225	Title of Preparer ASSESSOR	Date
--------------------------------------	---	--------------------------------------	------

CERTIFICATION: As the representatives for the local government unit named above, we certify that these requested tax levy rates have been reduced, if necessary to comply with the state constitution (Article 9, Section 31), and that the requested levy rates have also been reduced, if necessary, to comply with MCL Sections 211.24e, 211.34 and, for LOCAL school districts which levy a Supplemental (Hold Harmless) Millage, 380.1211(3).

☒ Clerk	Signature	Print Name	Date
☐ Secretary		Paulette Skolarus	
☒ Chairperson	Signature	Print Name	Date
☐ President		Bill Rogers	

* Under Truth in Taxation, MCL Section 211.24e, the governing body may decide to levy a rate which will not exceed the maximum authorized rate allowed in column 9. The requirements of MCL 211.24e must be met prior to levying an operating levy which is larger than the base tax rate but not larger than the rate in column 9.

** **IMPORTANT:** See instructions on page 2 regarding where to find the millage rate used in column (5).

Local School District Use Only. Complete if requesting millage to be levied. See STC Bulletin 3 of 2019 for instructions on completing this section.

Total School District Operating Rates to be Levied (HH/Supp and NH Oper ONLY)	Rate
For Principal Residence, Qualified Ag, Qualified Forest and Industrial Personal	
For Commercial Personal	
For all Other	

2019 MILLAGE REDUCTION FRACTION CALCULATIONS WORKSHEET
INCLUDING MILLAGE REDUCTION FRACTION CALCULATIONS NOT
NOT SPECIFICALLY ASSIGNED TO THE COUNTY EQUALIZATION DIRECTOR BY LAW

County	LIVINGSTON COUNTY	Taxing Jurisdiction	Genoa Twp.	(City, Twp., Village, County, Authority, School District)
--------	-------------------	---------------------	------------	---

2018 Total Taxable Value	1,149,351,505
Losses	5,086,693
Addition	29,375,606
2019 Total Taxable Value Based on SEV	1,203,836,080
2019 Total Taxable Value Based on Assessed Value (A.V.)	1,203,836,080
2019 Total Taxable Value Based on CEV	1,203,836,080
2019 Rate of Inflation (C.P.I.)	1.024

Note: The last two items above are only needed when it is necessary to calculate a Truth in Assessing or Truth in County Equalization Rollback Fraction.

1. Section 211.34d, MCL, "Headlee" (for each unit of local government)

(2018 Total Taxable Value-Losses) x Inflation Rate (C.P.I.)

1,149,351,505	Minus	5,086,693	X	1.024	=	0.9977	2019 Millage Reduction Fraction (Headlee). Round to 4 decimal places in the conventional manner. If number exceeds 1.0000, line through and enter 1.0000
1,203,836,080	Minus	29,375,606					
(2019 Total Taxable Value Based on SEV - Additions)							

See State Tax Commission Bulletin No. 3 of 1995 regarding the calculation of losses and additions. See also the Supplements to STC Bulletin No. 3 of 1995 contained in STC Bulletin No. 3 of 1997.

2a. Section 211.34, MCL, "Truth in Assessing" (for cities and townships if S.E.V. exceeds A.V. for 2009 only)

(2019 Total Taxable Value Based on Assessed Value for all Classes)		2019 Rollback Fraction (Truth in Assessing)
1,203,836,080	=	1.0000
1,203,836,080		Round to 4 decimal places in the conventional manner. (Cannot exceed 1.000)
(2019 Total Taxable Value Based on SEV for all Classes)		

See State Tax Commission Bulletin No. 7 of 2004 for more information regarding this calculation.

2b. Section 211.34, MCL, "Truth in County Equalization" (for villages, counties and authorities if S.E.V. exceeds C.E.V. for 2009 only)

(2019 Total Taxable Value based on CEV for all Classes)		2019 Rollback Fraction (Truth in County Equalization)
1,203,836,080	=	1.0000
1,203,836,080		Round to 4 decimal places in the Conventional manner. (Cannot exceed 1.000)
(2019 Total Taxable Value Based on SEV for all Classes)		

See State Tax Commission Bulletin No. 7 of 2004 for more information regarding this calculation.

3. Section 211.24e, MCL, "Truth in Taxation" (for each taxing jurisdiction that levied more than 1 mill for operating purposes in prior year only).

(2018 Total Taxable Value-Losses)		2019 Base Tax Rate Fraction (Truth in Taxation)
1,149,351,505	minus	5,086,693
1,203,836,080	minus	29,375,606
(2019 Total Taxable Value Based on SEV - Additions)		0.9743
		Round to 4 decimal places in the conventional manner

Use the same amounts for additions and losses as were used for the 211.34d ("Headlee") rollback.

Note: The truth in taxation BTRF is independent from the cumulative millage reductions provided by sections 211.34d and 211.34. The Base Tax Rate equals the BTRF X 2018 Operating Rate levied.

Genoa Township Officials
Amended: May 20, 2019

PLANNING COMMISSION (3-year term)

Chris Grajek	06/30/20
Marianne McCreary	06/30/21
Jill Rickard	06/30/20
Jeff Dhaenens	06/30/22
Jim Mortensen (1-year term)	11/20/19
Doug Brown	06/30/21
Eric Rauch	06/30/22

ZONING BOARD OF APPEALS (3-year term)

Bill Rockwell	06/30/21
Marianne McCreary	06/30/21
Greg Rassel	06/30/22
Michele Kreutzberg	06/30/20
Jean Ledford (1-year term)	11/20/19

BOARD OF REVIEW (2-year term)

Chris Grajek	12/31/20
Ron Matkin	12/31/20
Marianne McCreary	12/31/20
Patricia Petrat (alternate)	12/31/20

SEMCOG

Terry Croft	11/20/20
Paulette A. Skolarus (alternate)	11/20/20

GENOA/OCEOLA SEWER AND WATER AUTHORITY

Robin Hunt	11/20/20
Bill Rogers	11/20/20

HOWELL PARKS AND RECREATION

Diana Lowe	11/20/20
Terry Croft (alternate)	11/20/20

MHOG (Marion, Howell, Oceola and Genoa)

Robin Hunt	11/20/20
Bill Rogers	11/20/20

FOIA COORDINATOR

Michael Archinal	11/20/20
------------------	----------

BRIGHTON FIRE AUTHORITY

Bill Rogers	11/20/20
Jim Mortensen	11/20/20

ELECTION COMMISSION

Diana Lowe	11/20/20
Jean Ledford	11/20/20 (Policy-officials-terms)



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

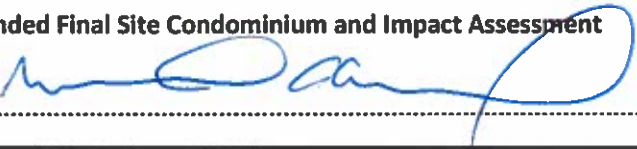
MEMORANDUM

TO: Honorable Board of Trustees

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

DATE: May 15, 2019

RE: Mountain Top Estates
Amended Final Site Condominium and Impact Assessment

MANAGERS REVIEW: 

In consideration of the approval recommendation by the Township Planning Commission on May 13, 2019 please find the attached project case file for amendments to the final approved site plan for Mountain Top Estates. The project site is 21.68 acres on the north side of Cunningham Lake Road, west of Sundance Trail.

The applicant is seeking amendments to the final site condominium approval originally granted in 2006. The property owner has maintained validity of the approved plan over the last 16 years by receiving annual plan approval extensions by both the Planning Commission and Township Staff as authorized in Section 18.09 of the zoning ordinance. The most recent extensions were in 2017 by the Planning Commission and 2018 by Township Staff.

The current plans have eliminated 1 unit from the project (16 were originally approved; 15 are now proposed). Additionally, modifications have been made to the landscape plan, grading plan, the private road and detention/retention ponds. Also of note, tree clearing and site work were initiated beyond the scope of the original plan without approvals from the Township or the Drain Commissioner for a soil erosion permit.

Procedurally, Section 12.07 for the final condominium site plan requires Township Board action following a Planning Commission recommendation. Based on the conditions established within the Planning Commission recommendations, I offer the following for your consideration:

Impact Assessment:

Moved by _____, seconded by _____, to approve the environmental impact assessment dated April, 5, 2019 for an amendment to a previously approved final condominium site plan for Mountain Top Estates.

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lewa

MANAGER

Michael C. Archinal

May 15, 2019

Mountain Top Estates Amended Final Site Condominium

Page 2 of 2

Moved by _____, seconded by _____, to approve the amended final site condominium plan dated April 5, 2019 for Mountain Top Estates subject to the following:

1. The Master Deed, Bylaws, and Exhibit B Drawings are incorporated into this approval by reference subject to the following:
 - a. The amendments to the Master Deed and Bylaws requested by the Township Attorney in the email to Amy Ruthig on 4/30/19 shall be made.
 - b. The revised Master Deed, Bylaws and Exhibit B Drawings shall be approved by the Township Attorney and if necessary the documents shall be revised to add a private road maintenance agreement if the present language is not consistent with the Township Ordinance subject to review of the Township Attorney.
2. Construction plan review will be required for the private road prior to the issuance of the Land Use permit for installation of the road and/or storm water system infrastructure and related improvements.
3. The requirements of the Brighton Area Fire Department in their letter dated May 7, 2019 shall be met with the exception of the underground water storage. This requirement is waived in view of the fact that this is an amendment and it was not a requirement in prior site plan approvals for this site.
4. Additional evergreen trees shall be added around the retention pond in the northwest corner of the site. The additional trees shall be added north of the basin to offset the loss of trees and buffer to the adjacent property owner and shall be reviewed by Township Staff for approval.
5. Each lot shall provide the required 2 street trees per the ordinance plus an additional 3 trees shall be provided elsewhere on said lot. These trees shall be shown on a landscape plan associated with each land use permit for new homes.

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

Sincerely,

Kelly VanMarter
Assistant Township Manager/Community Development Director



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Mountain Top Estates, LLC; PO Box 469, Brighton, MI
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Mountain Top Estates, LLC; PO Box 469, Brighton, MI

SITE ADDRESS: Cunningham Lake Road, Brighton, MI PARCEL #(s): 11-34-400-008

APPLICANT PHONE: (810) 229-2752 OWNER PHONE: (810) 229-2752

OWNER EMAIL: advancecraftbuilders@ameritech.net

LOCATION AND BRIEF DESCRIPTION OF SITE: North side of Cunningham Lake Road,
between Eggert Place Drive and Sundance Trail in Section 34. Parcel is 22.2 acres
in area, is mostly wooded, and has over 90 feet of vertical elevation change.

BRIEF STATEMENT OF PROPOSED USE: A previously approved 15 unit single family
residential site condominium development on a private road.

THE FOLLOWING BUILDINGS ARE PROPOSED: 15 single family residential homesites
will be developed. No buildings are proposed for construction as a part of
this application.

**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: [Signature]

ADDRESS: 7005 Westridge Brighton MI 48116

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

1.) Wayne Perry of Desine Inc. at waynep@desineinc.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: [Signature] DATE: 4-8-19
PRINT NAME: Stephen Davis PHONE: 810 229 252
ADDRESS: 7005 Westridge Brighton MI 48116



March 8, 2019

Ms. Kelly VanMarter, AICP
Assistant Township Manager
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Re: Mountain Top Estates
Section 34, Genoa Township

Dear Ms. VanMarter;

We have prepared an updated site plan and supporting drawings for Mountain Top Estates to address requirements and conditions imposed on the project at the time of site plan approval in May 2006. The site plan has been modified to depict the following conditions of approval:

- Plans have been revised to eliminate the property previously depicted as unit 15 from the project. A new boundary description has been prepared for the development and unit numbers have been revised to reflect the change in the number of units in the development.
- The landscape plan has been updated to depict the change in project area and units. A note has been added to the landscape plan pertaining to the irrigation of entrance area landscaping.

Site plan drawings have been revised to provide the following additional improvements:

- Road alignment has been adjusted to the East, from stations 4+00 and 9+00, to reduce the amount of excavation and earthwork necessary to construct the development.
- South detention basin grading has been modified to provide 1:5 side slopes, eliminating the proposed fence around the basin, providing a basin design conforming to current LCDC standards, and improving the ability to perform future maintenance.
- Addition of berms and storm water collection and drainage systems along the North and West sides of the property to eliminate offsite runoff from developed areas of the property.
- Expansion of the North retention basin, conforming to current LCDC standards, addition of a forebay, and increasing the retention volume to accommodate the increase in tributary area.

Review comments prepared by LSL Planning, Inc., dated March 15, 2006, have been addressed as follows:

- Additional tree protection fencing has been added to the grading plan on units 3 through 8.
- The entry sign will not be illuminated. No street lights or area lighting is proposed for this development.

Review comments prepared by Tetra Tech, Inc., dated March 8, 2006, have been addressed as follows:

- Structures have been labeled and profiles have been depicted.
- Drainage system maintenance agreement to be provided with construction plan submittal.
- Storm drainage system has been revised to accommodate the elimination of unit 15.
- Grading of unit 10 has been revised to drain surface water runoff to the South allowing for the collection of runoff within the storm drainage system.
- The South detention basin has been revised to provide 1:5 side slopes.
- Private Road design details have been corrected as noted.

The Livingston County Road Commission approved plans for construction of the private road entrance to Cunningham Lake Road, and the discharge of storm water to an existing cross-culvert, in their letter dated June 9, 2006. We have reviewed the proposed modifications to the storm water drainage system and detention basin with Kim Hiller, P.E., Utilities and Permits Engineer with LCRC. The proposed improvements will reduce the storm water discharge to the existing Cunningham Lake Road cross-culvert and relocate private storm sewer outside of the public road right-of-way.

Conditions contained in the Livingston County Health Department approval letter dated March 10, 2006 have been incorporated into the site plan. Oversize disposal field areas have been depicted on units 1, 6 & 10. Clearing limits have been expanded to allow for pre-construction and/or grading of disposal areas on units 1, 6, 8, 9 & 10.

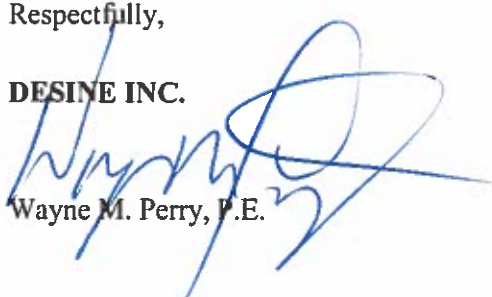
We are preparing construction plans, a revised Master Deed and Exhibit B drawings, conforming to the revised site plan, to address concerns related to the documents as previously submitted. These additional plans and documents will be submitted following a review and acceptance of the updated site plan.

Enclosed are four sets of the updated site plan and supporting plans for your review and consideration. Should you have questions pertaining to the updated plans, or should additional information be required, please contact me at your convenience.

Respectfully,

DESINE INC.

Wayne M. Perry, P.E.



Encl: Site Plan dated March 7, 2019

cc: Stephen Davis, Mountain Top Estates, LLC

\\183568\\Site Plan submittal LTR 03-08-19

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION PUBLIC HEARING
MAY 13, 2019
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, Jeff Dhaenens, Jill Rickard, Marianne McCreary, Jim Mortensen and Eric Rauch. Absent was Chris Grajek. Also present was Kelly VanMarter, Community Development Director/Assistant Township Manager, Brian Borden of SafeBuilt Studio, and Gary Markstrom of Tetra Tech. There were eight audience members present.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

Moved by Commissioner McCreary, seconded by Commissioner Rickard, to approve the agenda as presented.

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

OPEN PUBLIC HEARING # 1... Review of an amendment to a previously approved site plan and environmental impact assessment for a proposed 15-unit, single family site condominium located north of Cunningham Lake Road and west of Sundance Trail, known as Mountain Top Estates. The request is petitioned by Mountain Top Estates, LLC.

Mr. Wayne Perry with Desine and Mr. Steve Davis owner of the property with AdvanceCraft were present. Mr. Perry stated that they are here to seek an amendment to the approved site plan. Mr. Davis purchased the property with the intent to implement the site plan as it existed. Mr. Perry indicated it was approved with 16 units however unit 15 was removed from the project. They attempted to update the site plan to implement the plan as approved and discovered that the removal of unit 15 impacted the storm drainage and the plan could no longer work as proposed. There were multiple other deficiencies with the prior approved site plan. They are now keeping the stormwater on site and have reconfigured the road to eliminate 10,000 yards of excavation. The retention basin in the northwest corner is being increased since the one that was approved didn't meet standards of the Drain Commissioner. They corrected items from the 2006 approval related to lighting, landscaping and grading. The retention basin in the northwest and the detention basin proposed near the entrance have been revised. The detention basin is now designed as a site amenity with appropriate side slopes, eliminated fence, and added landscaping. They have approvals from Health, Drain, and Road Commission and are now seeking Township approval.

In regard to the review letters, Mr. Perry addressed the tree removal issue. He presented the 2006 approved landscape plan and showed areas of trees that were to be saved and trees to be added. Many of the trees labeled to be saved when compared to the grading plan would not have been able to be saved. He shows the succession of the plans and indicates that many of the trees were proposed to be removed and many of those planned to be saved would not have been able to be saved. The plans that were approved by the Township in 2006 show trees preserved in areas where they were not capable of being saved. Mr. Perry now proposes to expand the clearing in some areas but also they are saving trees in additional areas. The primary difference is additional clearing on lots 7 and 8 for septic fields, the berm proposed along units 6 through 8 and the storm water conveyance along the rear of Unit 4 and 5.

Chairman Brown asked when Mr. Davis took control of this property and when were the trees removed. Mr. Davis responded that they acquired the property in November 2018 and the trees were removed in March 2019. Chairman Brown questioned why they didn't get approval before clearing the trees and requests a count of the total trees that were cut should be provided. He believes the trees should be replaced.

Mr. Davis responded that he went ahead with tree clearing because he thought he had approvals since the plans already went to the Planning Commission. They started clearing based on the original plan because he thought he had approval. Mr. Perry added that the problems arise from the change from 16 to 15 units. That change altered the ability to develop the site plan that was approved. Mr. Perry states that the original 2006 plan required tree removal, the Planning Commission approved that plan and this plan also requires tree removal but they are also planning to save many of the trees and it would be unfair to make them restore trees in the short term that would just be cut to facilitate the development as proposed.

Chairman Brown indicated that he believes that once the road and utilities are installed they should plant trees to replace those trees that would have been remaining but which were removed illegally. Mr. Perry questioned if the trees that had to be cut to build the project should be replaced?

Commissioner Mortensen stated that we are dealing with trees that were cut on an expired site plan. Mrs. VanMarter responded that the site plan was not yet expired. Mr. Mortensen asked how the trees proposed for removal on the current plan compare to the clearing of trees that were not foreseen to be removed on the original now deemed non-workable plan. In other words, how does the 2006 tree removal plan compare with what is being proposed. He is headed towards requiring an enhancement of the landscaping to make up for lost trees.

Commissioner Rickard stated that without a tree survey we can't know how much of the trees were removed.

Mr. Perry responded that the answer to that question is erroneous. The plan in 2006 represented areas of trees not individual trees. He can't count the trees that were removed because they have been removed. I can show you areas that are now proposed to be saved and then also areas that were not proposed to be removed. We are taking down more trees than we are

preserving but at the same time we are preserving as much as we can and only clearing those needed for roads, storm water, and some sanitary fields.

Chairman Brown asked if there was a calculation of the number of trees to be removed in the agreement with the tree removal company. Mr. Davis responded that the tree company was based on a per acre rate, not the number of trees.

Commissioner Rickard had some questions on the grading including if the original road was designed to standards at the time also that the grading on the lots looks like additional tree removal will be needed in order to construct homes. She also asked how the property boundaries have changed with the loss of the 16th unit. Mr. Davis responded that the seller of the property wanted to keep the large barn on what was lot 16 and still lives in the existing house on Cunningham Lake Road. The land that was proposed as lot 16 was simply combined with the home property. Mr. Perry stated that the approved plan from 2006 had 24' roads and 10% road grade. They wanted to build exactly what was approved so they have kept that grade and width.

Commissioner McCreary stated that it appears misleading since you aren't showing where the homes will go and the clearing necessary for each home site. Mr. Perry responded that he has been very careful to only indicate trees to be removed during development of the roads and infrastructure. There will be additional tree removal for home sites and septic fields. They have cleared and graded 7, 8 and 10 so as not to impact drainage and or disposal fields as required by the health department. All the other lots will need trees cleared to build homes, driveways, and disposal fields.

Commissioner Dhaenens requested an explanation of the depiction on page 89 of tonight's packet. Mr. Perry responded that the plan shows what has been cleared in blue. The gray area is the additional clearing that is needed to build the project. The 2006 plans required 9.5 acres of clearing for the roads and infrastructure, they are proposing 11.7 acre of clearing.

Commissioner Rauch asked if the trees removed over the course of the last 6 months were within the tree removal plan from 2006. Mr. Perry responded that no, they removed additional trees as shown in the darker tan on the PowerPoint. Mr. Davis stated that his company has been building in this area since 1971. The tree people asked him at the time about removing additional trees. He doesn't know the configuration of the homes and won't remove the trees on each lot until they select a home layout and remove the trees necessary to build the home. They try to maintain all the trees they can. He is not opposed to something in the approval that would require that he have to plant 5 more trees on any lot after the home is built. Mr. Davis then provided a hand out about his company.

Commissioner Rauch stated that the reality of this is that those trees are coming out for the home construction anyway. What is depicted on the drawings showing tree removal is not what will end up being. We are only talking about whether these trees are staying for a few months before someone builds their house and removes them.

Commission Mortensen indicates his concern is the effect of perimeter trees coming down and the impacts on the neighbors.

Mr. Brian Borden reviewed his letter dated May 8, 2019. His primary concern is that if trees have been removed that would have provided a buffer to the adjacent property owners those trees should be replaced. In addition, the changes to the condo docs would be nice to have in red line version so I know what has changed. Mr. Perry responded that he does not know what was in the original condo documents since they didn't start with them. It is a fallacy to start with a bad set of documents so they started clean and are working from there. Mr. Borden indicated the Township Attorney should review the condo docs and there should be an analysis to confirm that the standards of the private road maintenance agreement as required by ordinance are met.

Mr. Gary Markstrom reviewed his letter dated May 7, 2019. The current length of the road is 1400 feet which exceeds the 1000 feet requirement. This is only 15 lots and if the fire department finds it acceptable, we would support the 1400 feet length. Similarly the road right of way is proposed to be 50 feet wide which is less than the required 66 feet but the ordinance allows this deviation in situations like this. Lastly, the 10% grade on the road is steeper than the standard but this is a very hilly site and to get the desired 6% grade would take more trees removed. The 10% slope is not unsafe and we support it. All these are subject to fire department approval. They will need a construction plan review phase for the private road and a spot inspection process during construction. The areas on the 2006 plans would have drained onto the adjacent owners, they have fixed that to keep all the water on site but it will stop off site drainage from impacting the neighbors. The plans comply with drain commissioner standards.

Chairman Brown asked how many lots are impacted by the 10% slope. Mr. Perry responded that all the lots are impacted because that slope is near the entrance to the neighborhood.

Commissioner McCreary has concern with the hill and sliding into the detention basin or sliding through the stop sign. During icy road conditions the steep slope could be dangerous. She questioned if there was any protection to keep someone from driving into the pond if it's icy. Mr. Perry responded that he pond will be landscaped. Commission Rickard stated that the Homeowner's Association will be responsible for maintaining the road and keeping it safe for vehicles.

Chairman Brown reviewed the Fire Department letter dated May 7, 2019. The fire department is requesting a water supply source, 4" address numbers, 26' wide road width with no parking, and reduction in the 10% slope. Mr. Perry responded that the request for water supply, 4" numbers and the 26' roads were also requested in 2016 but the Planning Commission did not require it. Mrs. VanMarter reviewed the minutes from 2016 and indicated that only the water supply requirement was excluded from the approval.

Commissioner Dhaenens stated that knowing what he knows now, he would be uncomfortable not making this Development meet current standards. We recently had the Moretti project provide a water source.

Mrs. VanMarter stated that recently a policy was discussed with the Fire Department in response to the Moretti project that all future all residential developments over 10 lots would need to provide the required water supply from the Fire Code. Since this project was approved before this

standard was in place and since the applicant is only seeking an amendment to the approved plan, the Planning Commission could determine that this project does not qualify. Commissioner Rauch stated this he believes this requirement for fire flow is completely inappropriate. This development if approved will be similar to 98% of our community. We are not risking public health safety or welfare if we allowed this as proposed.

Commissioner Mortensen stated that Townships are beginning to require this but since this one is an amendment to a pre-existing approved plan he is inclined to allow it.

Mr. Perry indicated that they can address items 2-4 in the fire department letter which includes the 26' wide road provided the water supply issue is not required.

A call to the public was made at 7:53pm with the following response:

Mrs. Bonnie Spicher of 5606 Mountain Road lives behind unit 9. She watched the trees be removed in one day with 2 machines. She doesn't think that anyone in this county ever wants to see clear cutting. She has been here 40 years and has never seen anything like it. The developer should have to do something to undo what he did. To clear cut a whole lot was unnecessary. She walked out and asked them to stop. It looked like a war zone. Some of the trees they removed 18" in diameter.

Mr. Keith Spicher of 5606 Mountain Road suggests that the Commissioners drive through copperleaf to see the impact of the clear cut. If you drive along Eggert they clear cut a few lots and it is a night and day difference. He requested clarification on that what is the tree protection fence is shown on the plan. Mr. Perry responded that it is essentially orange snow fencing. Mr. Spicher states that the original plans indicated they would be 128 feet from my property line with the tree clearing. Now they are going to be 50 feet cleared. This is not the character in the neighborhood.

Mr. John Septer of 5700 Eggert Place is concerned with the pink stakes and flags on his property. There are pink flags everywhere. He wants to know what the flags and stakes on his property mean. Mr. Wayne Perry stated that the corner of his property is where the northwest retention basin is proposed. Mr. Septer is very concerned for the impact all the tree removal will have on his property. He was considering putting his addition on his home and now is unsure if he should proceed. Mr. Perry offered to meet with Mr. Septer on site and to show him what the lines and markers are. Mr. Perry gave Mr. Septer his business card.

Commissioner McCreary indicated that she understands the concerns regarding the complete change in the look since the surrounding area was developed so long ago the trees in the area have already been reestablished and had time to grow.

The call to the public was closed at 8:11pm.

Moved by Commissioner Mortensen to recommend approval of the environmental impact assessment dated 4-5-19 for an amendment to a previously approved site plan and environmental

impact assessment for a proposed 15-unit, single family site condominium located north of Cunningham Lake Road and west of Sundance Trail, known as Mountain Top Estates.
Supported by Commissioner Dhaenens

Motion carried unanimously.

Moved by Commissioner Mortensen to recommend approval of the final condominium site plan dated 4-5-19 for an amendment to a previously approved site plan and environmental impact assessment for a proposed 15-unit, single family site condominium located north of Cunningham Lake Road and west of Sundance Trail, known as Mountain Top Estates subject to:

- 1.) The Master Deed and Bylaws be revised to add a private road maintenance agreement if the present language is not consistent with Township Ordinance subject to review by staff.
- 2.) The requirements in the Township engineer letter of March (May) 7th, 2019 will be met and the Planning Commission supports the recommendations regarding the private road length, the easement width and the grading.
- 3.) The requirements of the Brighton Area Fire Department in their letter dated May 7, 2019 shall be met with the exception of the underground water storage. This requirement is recommended for waiver in view of the fact that this is an amendment and it was not a requirement in prior site plan approvals for this site.

The motion was supported for discussion by Commission Rauch. Commissioner Rauch would like to require a minimum tree requirement for each lot included in the motion. In addition, he requests additional plantings in that area in the northwest corner in response to the comments received from the adjacent property owner this evening.

Commissioner Mortensen then adds to the motion the following:

- 4.) Additional evergreen trees shall be added around the retention pond in the northwest of the site plan and this will be reviewed by Township Staff for approval.
- 5.) Each lot shall provide the required 2 street trees per the ordinance plus an additional 3 trees shall be provided elsewhere on the lot. These trees shall be shown on a landscape plan associated with each land use permit for new homes.

The revised motion was supported by Commissioner Rickard.

Motion carried unanimously

OPEN PUBLIC HEARING #2... Consideration of Zoning Ordinance Text amendments to Article 7 of the Zoning Ordinance, entitled "Commercial and Service Districts" and discussion of supporting amendments to Article 25.

Brian Borden presents the proposed amendments to Article 7. Article 25 amendments are included but were not published so they are not included in the action items. The first changes are modifications to existing uses. The changes include making child care centers a permitted use in RCD and have our ordinance meet the state requirements for outdoor play area, make schools a special land use in the OSD district rather than a permitted right, vocational and technical training made a special land use in the OSD district and churches would be a by right use in NSD and GCD. We allow other types of assembly uses in RCD therefore we have added

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
May 9, 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, Diana Lowe, James Mortensen, Chris Grajek, John McManus, and Eric Rauch. Also present was Kelly VanMarter, Community Development Director/Assistant Township Manager, Brian Borden of LSL Planning, and an audience of six.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA: **Moved** by Commissioner McManus, seconded by Commissioner Grajek, 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.

Mr. Dan Wholihan of PO Box 182, Brighton is concerned about Item #1 on tonight's agenda. He is not sure there is room for 16 units to be developed in this area as most of it is swamp land. Ms. VanMarter showed Mr. Wholihan where the property is located. He is satisfied as he believed it was in a different location.

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

OPEN PUBLIC HEARING #1...Review of a request for an extension to the Mountain Top Estates Site Plan dated 3-17-06 and Impact Assessment dated 4-20-06 for a proposed 16-unit, single-family site condominium located north of Cunningham Lake Road and east of Sundance Trail, known as Mountain Top Estates. The request is petitioned by Robert Moore. This project has been granted extensions by the Planning Commission on 5-14-07, 4-13-09, 4-12-10, and 3-25-13.

Planning Commission disposition of petition:

A. Disposition of Site Plan Extension

Chairman Brown noted that in addition to the extensions stated on the agenda, other administrative extensions have been granted for this project.

Mr. Moore stated he has owned this property for 30 years and it was purchased by Doyle Homes, who was going to develop the proposed site plan. Because the economy went down in 2008, it was not done. Mr. Moore has since purchased the property and taken on the project. Now that the economy has turned around, he would like to once

again sell the property to someone who will develop it. Mr. Moore addressed the concerns of the planner, engineer and the Brighton Area Fire Authority's review letters.

Mr. Borden stated he is recommending approval of the extension; however, he wants the applicant to be aware that if any changes to the ordinance are made in the future, they will need to be addressed and the site plan will need to be amended.

Commissioner Mortensen asked Mr. Moore if he is agreeable of not allowing parking on any street. He stated he is and it will become part of the master deed.

Commissioner Mortensen stated that the item noted in the Brighton Area Fire Authority's letter regarding the on-site water needs and the suggestion of the Township requiring well-filled cisterns should be determined by the developer and property owners and not part of the site plan approval.

The call to the public was made at 6:46 pm with no response.

Moved by Commissioner Mortensen, seconded by Commissioner Figurski, to approve the Site Plan Extension for Mountain Top Estates with the following conditions:

- The master deed will be amended to prohibit on-street parking.
- The letter from Ace Civil Engineering, Inc. shall be reviewed by the Township engineer to ensure it meets their requirements.
- The requirement for on-site water, such as cisterns, will be optional and be considered by the developer and home owners.

The motion carried unanimously

OPEN PUBLIC HEARING #2...Review of an Impact Assessment and Site Plan and for the proposed Misty Meadows Drive private road located on the west side of S. Latson Road, south of Crooked Lake Road. The private road will serve nine lots. The request is petitioned by GFG Investments Properties.

Planning Commission disposition of petition:

- A. Recommendation of Environmental Impact Assessment (3-23-16)
- B. Disposition of Site Plan (4-20-16)

Chairman Brown stated that the Site Plan does not need to be approved by the Planning Commission as it meets the requirements of the Subdivision Act. The private road needs to be approved.

Mr. Brent LaVanway of Boss Engineering and Mr. Guy Genzel, the property owner, were present.

Mr. LaVanway gave a brief history and description of the property and project. He stated the Livingston County Road Commission has approved the location of the road. He addressed the cistern requirement in the Brighton Area Fire Authority's letter. He would like to address this at a later date to determine if the demand is there, and if so, then it can be installed. They will install evergreen trees as a buffer between the road and the property to the south as requested by Mr. Borden. They can submit a plan to staff for their review.

TO REVIEW HISTORICAL INFORMATION ON THE MOUNTAIN TOP ESTATES PROJECT, PLEASE SEE LINK BELOW TO THE MAY 9, 2016 PLANNING COMMISSION PACKET WHICH INCLUDES THE MINUTES AND ORIGINAL PROJECT CASE DETAILS. PLEASE NOTE THAT CLICKING THE LINK WILL AUTOMATICALLY BEGIN A DOWNLOAD OF THE PACKET:

[MAY 9, 2016 PLANNING COMMISSION PACKET](#)

May 8, 2019

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
Subject:	Mountain Top Estates – Amended Condominium Plan Review #1
Location:	North side of Cunningham Lake Road, east of Chilson Road
Zoning:	LDR Low Density Residential District

Dear Commissioners:

At the Township's request, we have reviewed the amended final condominium plan submittal (plans dated 4/5/19) for Mountain Top Estates, a 21.68-acre site on the north side of Cunningham Lake Road.

We have reviewed the request in accordance with the provisions of the Township Zoning Ordinance.

A. SUMMARY

1. The applicant is still awaiting final approval from the Livingston County Road Commission.
2. We request the applicant provide a track changes version of the condominium documents to identify any changes from the previously approved documents.
3. If one was not originally provided, the applicant must provide a Private Road Maintenance Agreement demonstrating the financial and maintenance assurances required by Ordinance.
4. The applicant has already removed trees that were to be protected under the original approval.
5. The current proposal calls for an expanded tree removal area that will impact surrounding properties more than the original approval.
6. We request the applicant provide a clearer depiction/description of the approved tree removal plan in relation to the current proposal, as well an indication of the areas that were disturbed without permission and the number of trees improperly removed.
7. We suggest the Township require planting of replacement trees, especially along the north, east and west boundary lines. Additional information is needed from the applicant to determine the appropriate quantity.
8. The applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority.

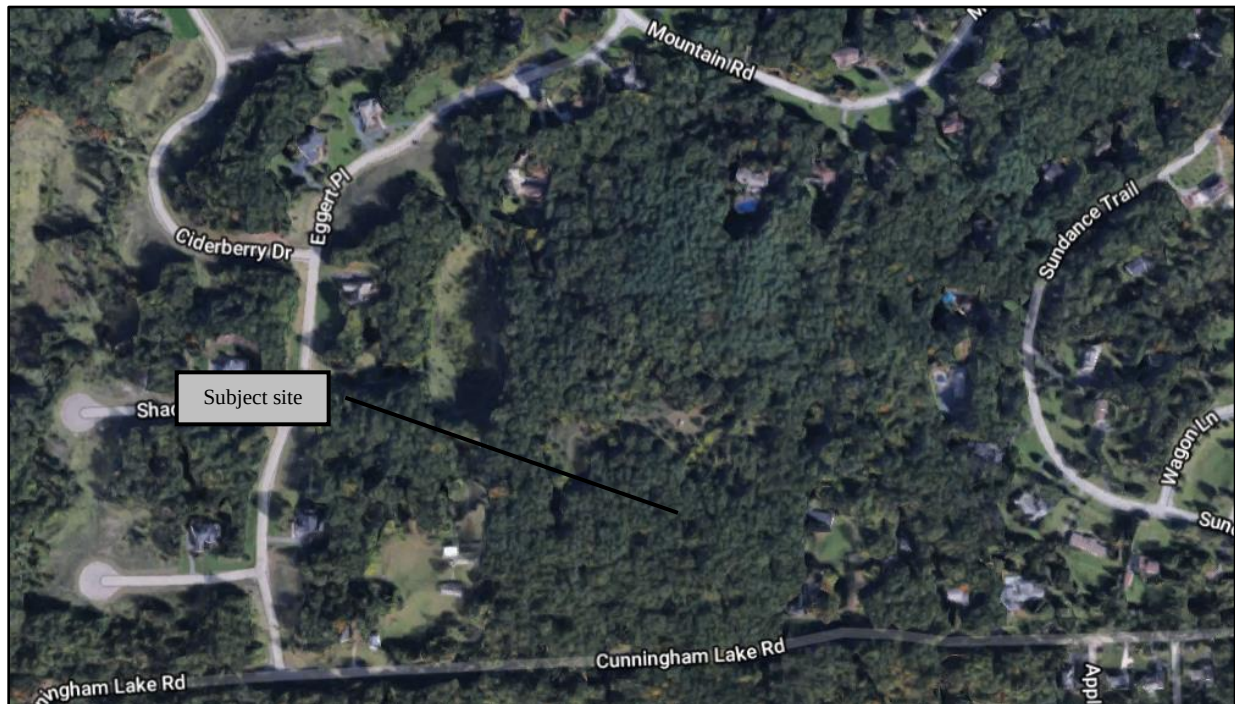
B. PROPOSAL/PROCESS

The applicant proposes amendments to the plan originally approved in 2006. Multiple extensions of this approval were sought and granted by the Township, most recently in 2017.

Section 12.07 requires Township Board approval of final condominium plans, following a recommendation from the Planning Commission.

The current plans have eliminated 1 unit from the project (16 were originally approved; 15 are now proposed). Additionally, modifications have been made to the landscape plan, grading plan, the private road and detention/retention ponds.

It is important to note that tree clearing was initiated beyond the scope of the approved plan without Township approval. The applicant also failed to obtain a soil erosion permit prior to start of work.



Aerial view of site and surroundings (looking north)

C. CONDOMINIUM PLAN REVIEW

1. **Outside Agencies.** The cover letter included with the submittal notes that the plans have been approved by the Livingston County Drain Commissioner and Health Department. While the Road Commission approved the original plans, the revised plans are currently under review.
2. **Condominium Documents.** The condominium documents have been updated to reflect the number of units proposed (15 instead of 16), though additional changes are not clearly identified. We request the applicant provide a track changes version of the condominium documents identifying all changes proposed from the previously approved documents.
3. **Dimensional Requirements.** One unit has been removed from the originally approved plans, reducing the development to 15 single-family home sites. All of the 15 units proposed meet or exceed current LDR dimensional standards for lot area and width; however, it is worth noting that Unit 1 was approved as a flag lot.
4. **Private Road.** We defer to the Township Engineer for any technical comments on the private roadway, though the submittal notes that the road has been realigned to reduce the amount of excavation needed for construction.

If one was not provided with the original approval, the applicant must provide a Private Road Maintenance Agreement demonstrating the necessary financial and maintenance assurances required by Ordinance.

5. **Landscaping.** The revised landscape plan depicts street trees, entry landscaping and detention pond plantings, including a total of 24 canopy trees, 15 evergreen trees, 35 shrubs and a variety of ornamental grasses.

Our primary concern with the current proposal is the expansion of tree removal well beyond what was originally approved (Sheet TR). Of note are large swaths of tree removal along the north, south, east and west boundary lines of the subject site.

These areas are directly along the lot lines, thus impacting adjacent property owners to the north, east and west, as well as the road frontage along Cunningham Lake Road.

Given that tree removal has already started, and a tree survey has not been provided, we cannot accurately identify how many trees were removed that were expected to be protected.

The applicant needs to provide additional information to compare/contrast the originally approved plan, the current proposal and what has already been removed.

Ultimately, we suggest the Township require planting of replacement trees in a quantity to be determined based on an estimate of the number of trees improperly removed. Particular attention needs to be paid to replanting the areas along the north, east and west boundary lines.

6. **Entrance Features.** The landscape plan identifies a proposed sign on the west side of the entrance to the development. The submittal notes that the sign will not be illuminated.

The proposed sign is within the height and area limitations of Article 16, though a permit must be obtained from the Township prior to installation.

7. **Grading, Drainage, and Utilities.** We defer to the Township Engineer for review and comment on the site engineering elements of the proposal.

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 bborden@safebuilt.com.

Respectfully,
SAFEBUILT STUDIO



Brian V. Borden, AICP
Planning Manager



March 7, 2019

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

Re: Mountain Top Estates Site Plan Review No. 1

Dear Ms. Van Marter:

Tetra Tech conducted a site plan review of the Mountain Top Estate plans last dated March 11, 2019. The site plan was previously approved in May of 2006 and the plans submitted on March 11, 2019 are amended from the originally approved plans to address the requested lot removal and revisions to the grading and drainage plan. The plans were prepared by Desine Inc. on behalf of Mountain Top Estates LLC. The development includes 21.68 acres located on the north side of Cunningham Lake Road. The petitioner is proposing to develop 15 lots through the site condominium process with a private road. We offer the following comments:

GENERAL NOTES

1. The petitioner is proposing 5.7 additional acres of tree removals in addition to the 6 acres of trees removed previously. We have reviewed the proposed tree removal locations and believe the tree removals are necessary for the grading that will be required for the road construction along with the backyard drainage improvements.

PRIVATE ROAD

1. The petitioner is proposing a 1,400 LF private road terminating in a cul-de-sac. This exceeds the maximum dead-end length of 1,000 LF, as noted in the Genoa Township Zoning Ordinance. Given the natural features contained on the site it would be difficult to loop the road back to the entrance. The road will also have only 15 lots being served which generates a minimal amount of traffic. Subject to approval by the Township, we would support a relief from the standard length of street.
2. The proposed private road is shown with a 50-foot-wide easement, which does not meet the zoning ordinance requirement of a 66-foot-wide road easement. Given the topography and natural features of the site and the fact that no municipal sanitary sewer or water utilities will be utilized, we believe that 50 feet will be adequate for the proposed paved road. The petitioner is also proposing a 12-foot-wide utility easement on either side of the road right-of-way and this further justifies the use of the 50-foot width. Subject to approval by the Township, we would support the requested reduction for the width of the road easement.
3. The petitioner is proposing 10 percent road grades from STA 2+00 to STA 8+00, which exceeds the maximum 6 percent grade noted in the Genoa Township Engineering Standards. Due to the natural topography of the site it would require a large amount of grading and associated tree removal to reduce the slope of the private road.

Tetra Tech

401 South Washington Square, Suite 100, Lansing, MI 48933
Tel 517.316.3930 Fax 517.484.8140 www.tetrattech.com

As provided in the Engineering Design Standards, we support this deviation subject to the input from the Fire Department.

4. Upon site plan approval the petitioner will need to submit private road construction plans for review and approval.

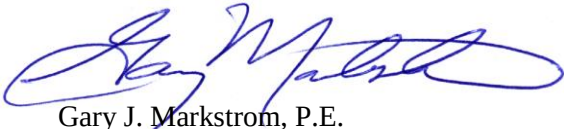
DRAINAGE AND GRADING

1. The amended site plans provide back yard drainage with the use of berms, backyard catch basins, and a retention pond in the northwest corner of the property. This system, coupled with the street storm sewer system and detention pond, appears to be adequate for handling the stormwater runoff from the new development.

The amended site plan shows adequate access to the site and drainage. Upon approval of the above comments by the Township we have no further engineering related objections to the approval of the site plan.

Please call or email if you have any questions.

Sincerely,



Gary J. Markstrom, P.E.
Vice President



Shelby Scherdt
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

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

May 7, 2019

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Mountain Top Estates – Site Condo Extension
Cunningham Lake Rd.
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on April 18, 2019, and the drawings are dated April 9, 2019. The project is for the construction of a new 16-Unit site-condominium development that has requested an extension of their previously approved site plan from 2006. The site plan has been revised to reduce the unit number to 15 and provide additional storm.

The plan review is based on the requirements of the International Fire Code (IFC) 2018 edition.

1. Municipal water does not extend to the site, therefore, an alternative means of fire protection water must be provided. The volume of available water shall be no less than 12,000 gallons of on-site stored within a natural pond, underground tank provided by a well-driven hydrant capable of 250-gallons per minute.
2. The buildings shall be provided with address markings with a **minimum of 4"** high letters of contrasting colors and be clearly visible from the street. The location and size shall be verified prior to installation.

IFC 505.1

3. The access road shall be provided at 26-feet wide from face-of-curb to face-of-curb. At this width there shall be No Parking on the street at any time, association by-laws should identify this as a hazard that may obstruct or impede emergency vehicles. It is recommended that the paved width be increased to 32-feet throughout to accommodate parking on the road and for emergency vehicle access. 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.

IFC D 103.6

IFC D 103.1

IFC D 102.1

IFC D 103.3

4. There are concerns with the slope of the roadway being 10%, as this is the maximum permitted slope for an emergency vehicle. There is a greater concern at the entrance of the development where the elevation dips and rapidly climbs to 10%. The maximum approach angle for BAFA's apparatus is 8%, which appears to be exceeded causing concern for the front bumper to impact on the approach.



May 7, 2019

Page 2

Mountain Top Estates – Site Condo Extension

Cunningham Lake Rd.

Site Plan Review

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

Cordially,

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

Rick Boisvert, CFPS
Fire Marshal

Livingston County Road Commission

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

April 15, 2019

Wayne Perry, P.E.
Desine, Inc.
2183 Pless Drive
Brighton, MI 48114

Re: Mountain Top Drive, Genoa Township, Section 34
LCRC# P-06-07

Dear Mr. Perry:

I have completed the review of the revised plans, dated April 5, 2019, for the above-referenced project and have determined the plans to be in substantial compliance with our specifications.

Before a private road approach permit can be issued, the following items need to be addressed.

1. A contractor will need to be selected and the selected contractor must submit a certificate of insurance to the LCRC with the following language: "The Board of Livingston County Road Commissioners, the Livingston County Road Commission, and their officers, agents, and employees are listed additional insured parties with respects to General Liability."
2. A copy of the written approval for the storm water drainage system from either the township or the Livingston County Drain Commissioners office will need to be submitted.

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

Sincerely,



Kim Hiller, P.E.
Utilities and Permits Engineer

Cc: File

Kelly VanMarter, Genoa Township (via email)
Ken Recker, Livingston County Drain Commissioner (via email)
Gary Markstrom, Tetra Tech (via email)



Livingston County Drain Commissioners Office

Soil Erosion and Sedimentation Control (SESC) Division

Under the Provisions of Part 91 of Act 451 as Amended, and the Livingston County SESC Ordinance

2300 E. Grand River Ave., Suite 105, Howell, MI 48843

Phone: 517-546-0040 www.livgov.com/drain

DATE: 03/04/2019

RE: COMMERCIAL SESC PROJECT INSPECTION REPORT

Permit/Waiver#

Project:

A recent inspection of your project has been conducted. The on-site inspection found the following issues that need to be addressed:

Per the Michigan Department of Environmental Quality, under the Provisions of Part 91 of Act 451 as Amended, earth-disturbing projects are a regulated activity, which is permitted and enforced by LCDRC for Livingston County. In order to comply with Part 91, you are required to obtain a permit from our office and to install and maintain approved soil erosion control measures.

You are hereby notified that these items need to be addressed as soon as possible.

R323.1712 Enforcement

The county or local enforcing agency may issue a cease and desist order to revoke a permit upon its finding that there is a violation of Part 91, these rules or an approved local ordinance, or a finding that there is a violation of a permit or and approved soil erosion and sedimentation control plan.

If you have any questions or need additional clarification regarding these items, please do not hesitate to contact me.

Respectfully,

Rob Quigley
SESC Inspector
Livingston County Drain Commissioner's Office

From: [K Rivet Amico](#)
To: [Kelly VanMarter](#); [Robert Amico](#)
Subject: restoration of trees Mountain Top Estates
Date: Thursday, February 28, 2019 9:38:45 AM

I am writing to convey my great disappointment, and sadness, over the extensive removal of trees bordering our property line at 5598 Mountain Road. The result is the unfortunate near removal of the treed forest line that has been there for over 50 years.

Please keep me posted on plans for restoration.

Rivet

K Rivet Amico, PhD
Associate Professor
Department of Health Behavior and Health Education
School of Public Health
University of Michigan

3830 School of Public Health
1415 Washington Heights
Ann Arbor, Michigan 48109-2029

ramico@umich.edu

pronouns: she/her/hers

From: [Keith Spicher](#)
To: [Kelly VanMarter](#)
Subject: Mountain Top Estates.
Date: Friday, March 01, 2019 3:52:12 PM

We are the Spicher family, we live at 5606 Mountain Rd (lot 106 Mystic 2). We moved here from Pa. and built our house in 1978/79 as one of the last few in Mystic. One of the primary attractions to the area was the layout of the Mystic subs & a few others, with houses set properly on lots & a lot of native vegetation and features left intact rather than clearcut and leveled lots with houses lined up like tenpins. In the intervening years there has been an insane amount of new construction in the area (Pine Creek, the various Oak Points, etc.), with nearly all of it quite nicely done like Mystic, kudos to the planning commission. Unfortunately several of the most recent houses built in Copperleaf (through the woods and over the hill from us but still in the neighborhood) were clearcut before construction, making the area much less attractive. Now the Mountain Top Estates development off Cunningham Lake road has started clearing land that abuts our southern border in a manner I don't think meets the intent of the approved site plan and certainly is not in keeping with the character of the surrounding area. Our lot, the neighbors on both sides, and the almost neighbors on Sundance trail to the east (there is another undeveloped strip about 200' wide from Cunningham Lake to our property between us and several of the Sundance houses) have all left significant portions of the back of their lots untouched, adding to the rural character we think should be maintained. We have already fought several battles with refugees from the city wanting to change the character of the area with sidewalks, street lights, etc. and those plans have all been defeated. We believe the developers of Mountain Top Estates should be required to replace at least a reasonable number of the trees removed from the area abutting Mystic Lake with like size trees of native variety and refrain from additional clearcutting to allow the eventual homeowners to chose their own landscaping like the rest of the area homeowners.

Thank you,

Keith & Bonnie Spicher

Sent from [Mail](#) for Windows 10

MOUNTAIN TOP ESTATES
Single Family Residential Site Condominium
Genoa Township, Michigan
Site Plan Application Amendment

IMPACT ASSESSMENT

Owner:

Mountain Top Estates, LLC
P.O. Box 469
Brighton, Michigan 48116

Prepared by:

DESINE INC.
2183 Pless Drive
Brighton, Michigan 48114

A. INTRODUCTION

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

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

B. SITE LOCATION / DESCRIPTION

Mountain Top Estates is an approved single-family residential site condominium development, located on the North side of Cunningham Lake Road, in Section 34 of Genoa Township. The site plan was originally approved in May of 2006, with an extension of the site plan approval granted on April 12, 2017.

The development site consists of 21.68 acres of property, bordered on the South by Cunningham Lake Road, on the North, East and West by existing low-density, single-family residential development. The property is zoned Low Density Single Family Residential (LDR) district. The property is currently vacant.

The Mountain Top Estates site plan depicts construction of a private road with access from Cunningham Lake Road, a South storm water collection and detention system, a North storm water collection, retention and infiltration system, public utilities, landscaping and related site improvements.

C. IMPACT ON NATURAL FEATURES

(Text for this portion of the impact statement was prepared by Robert R. Doyle, licensed landscape architect, No. 1050, and was provided as a part of the final approved site plan documents in May 2006. Minor corrections to the text have been made by the current preparer.)

The site slopes upwards from all sides to a central hill top. Between the low point near Cunningham Lake Road, to the high point in the center of the property, the property contains an elevation difference of over 90 feet.

Existing soils on the property are primarily Fox-Boyer complex. This soil type is comprised of sand and sandy loams, and are characterized as well drained with good permeability. Previously, 30 test holes were excavated on the site to a depth of eight feet. Reports of the excavations approved by the Livingston County Health Department depict medium to coarse sands were identified.

Vegetative cover on the site can be divided into three types: open field; woodland; and transition areas of young volunteer tree growth. A review of archive aerial photographs indicate that the site was cleared for agricultural purposes (prior to 1940) with a few trees in existence along property boundaries and within the southern third of the site.

Open grassland meadow is found at the top of the hill and along the central ridge of the site. This area likely provided habitat for small mammals and rodents.

The southern and central parts of the site include a mixed age stand of (mostly) deciduous trees, including red oak, white oak, hickory and maple. The woodland also includes a number of mature evergreen trees (primarily spruces). Most trees are approximately 20 to 40 years of age and range from four to eighteen inches in diameter. The southern third of the site has a scattered sampling of larger (24 to 36 inches in diameter) red and white oaks.

The woodland at the north central and northeast portion of the site is dominated by black locust trees from four to fifteen inches in diameter. Other trees growing in this area include poplar, box elder and black cherry. The northwest corner of the site contains a stand of scotch pines approximately six to eighteen inches in diameter.

The woodland portions of the site likely provide shelter and feeding habitat for mammals such as white tailed deer, groundhogs, opossum and fox as well as habitat for raptors and songbirds. While the existing habitats provide localized value for wildlife, these habitats are not unique in southeast Michigan or the area surrounding the site.

To minimize habitat and woodland impacts, the site plan focuses development in the central parts of the site, leaving the steeply sloping wooded perimeter of the site largely intact as habitat and corridor for wildlife. In addition, the applicant is proposing 3:1 side slopes for the proposed road to minimize disturbance of wooded areas.

No wetlands, ponds or streams exist on the site.

(End of text prepared by Robert R. Doyle)

The proposed construction and improvements will require excavation, filling and grading to construct the road and storm water drainage system. The limits of disturbance have been depicted on the grading plan. Grading for this project will maintain the general character of the existing site topography. The proposed elevations and grading of the site mesh with the existing grades at the property lines.

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

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

D. IMPACT ON STORM WATER MANAGEMENT

Excavation and grading will be undertaken to construct the proposed stormwater retention basin, located in the Northwest corner of the property, and the detention basin located adjacent to Cunningham Lake Road. Earthwork will be required to direct storm water flow into the storm water collection system. This system will discharge surface water runoff generated by development of the property to the proposed sedimentation basins associated with both the retention and detention basin. Site grading will mesh with existing grades on adjoining properties. No adverse impact to adjoining properties is anticipated due to the construction and grading of the property.

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

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

E. IMPACT ON SURROUNDING LAND USES

Surrounding land uses to the North, East and West of the site consist of low-density, single family residential subdivision containing lots of one acre or greater, and large lot residential development. The Brighton State Recreation Area is located to the South, across Cunningham Lake Road.

The Genoa Township Future Land Use Plan designates this property for low-density Residential uses. The proposed use is consistent with existing development in the area and is consistent with the long-term planning within the Township.

The proposed use of the property does not create any significant emissions of smoke, airborne solids, odors, gases, vibrations, noise or glare discernable and substantially annoying or injurious to person and/or property beyond the lot lines. No significant change in air pollution is anticipated.

The Contractor shall be responsible for initiating and maintaining adequate dust control

measures during and after construction until the project site is fully stabilized and a vegetative cover established. Dust control measures used during construction may consist of site watering, mulching of completed areas, installation of windbreak fencing, and application of chemical dust control materials. The site will comply with the performance standards contained in Section 13.05 of the Township Zoning Ordinance.

F. IMPACT ON PUBLIC FACILITIES AND SERVICES

The Livingston County Sheriff and Michigan State Police will provide Police protection. The Brighton Area Fire Department as a part of an existing governmental agreement will provide fire protection service. Public safety services required to accommodate the limited number of new homes proposed are anticipated to be minor.

G. IMPACT ON PUBLIC UTILITIES

The proposed residential homes will be served by private, onsite, individual wells and subsurface wastewater disposal systems. No impact to existing public water and wastewater systems will occur.

The site is not currently serviced by electric, gas, phone or cable systems. Utilities are available and can be extended to provide service to the development.

H. STORAGE AND HANDLING OF ANY HAZARDOUS MATERIALS

The proposed uses are residential and are not anticipated to use, store, generate and/or discharge potentially polluting materials. Small quantities of material such as cleaning products and chemicals may be used on each site.

I. TRAFFIC IMPACT STUDY

Access to the site is from Cunningham Lake Road, a public road maintained by the Livingston County Road Commission. A private road entrance to the development has been located to maximize site distance for ingress and egress to Cunningham Lake Road. No new driveways will directly access Cunningham Lake Road from this development.

The limited number of new homes proposed within the development is anticipated to have a minor adverse impact on traffic in the area.

J. HISTORIC AND CULTURAL RESOURCES

No impact to historic and/or cultural resources is anticipated.

K. SPECIAL PROVISIONS

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

From: [Joe Seward](#)
To: [Amy Ruthig](#)
Subject: RE: Master Deed and Bylaws for Mountain Top Estates
Date: Tuesday, April 30, 2019 12:45:15 PM
Attachments: [image001.png](#)
[image002.png](#)
[Mountain top Estates MASTER DEED-TJS.PDF](#)
[MASTER DEED-TJS.PDF](#)

Amy I have reviewed both the Master Deed and the By-Laws. Attached are my comments made on the document. Here is a list of those comments. First the Master Deed, the Michigan statute requires in the Master Deed where the plans and architectural drawing are kept. While that may not be a concern for the Township, the statute does require that. The comments of substance for the Township are at the 11th page, any sign needs to comply with the Township's ordinances and the Master Deed should acknowledge that.

The next comment is on the 13th page and discusses dimensional modifications. Again I think that any changes has to acknowledge compliance with the Township's ordinances. Otherwise the markups I made are typos that I caught.

As to the By-Laws, on the 16th page I suggest the word authority be plural as both the Township and Livingston County may need to approve the construction. Otherwise I just caught some typos.

If you have any questions please don't hesitate to contact me.

Joe

 SEWARD HENDERSON PLLC
T. Joseph Seward
210 East Third Street, Suite 210
Royal Oak, MI 48067
T 248.733.3580
F 248.733.3633
E jseward@SewardHenderson.com

From: Joe Seward
Sent: Tuesday, April 30, 2019 9:11 AM
To: Amy Ruthig <amy@genoa.org>
Subject: RE: Master Deed and Bylaws for Mountain Top Estates

Attached are my comments for the Mountain Top Estates Master Deed. Shortly you will see my comments on the By-Laws

 SEWARD HENDERSON PLLC

Mich. Comp. Laws Ann. § 559.108 requires the Master Deed to specify the identification of the local unit of government with which the detailed architectural plans and specifications for the project have been filed. that is missing



MASTER DEED

MOUNTAIN TOP ESTATES CONDOMINIUM

Preamble

This Master Deed is made an executed on this ____ day of _____, 2019 by Mountain Top Estates, LLC, a Michigan limited liability company, hereinafter referred to as “Developer,” the mailing of which is P.O. Box 469, Brighton, Michigan 48116, represented herein by its sole member who is fully empowered and qualified to act on behalf of the company, in pursuance of the provisions of the Michigan Condominium Act (being Act 59 of the Public Acts of 1978, as amended, herein referred to as the “Act”)

WITNESSETH

WHEREAS, the Developer desires by recording this Master Deed, together with the Bylaws attached hereto as Exhibit “A” and together with the Condominium Subdivision Plan attached hereto as Exhibit “B”, both of which are hereby incorporated herein by reference and made a part hereof, to establish the real property described in Article II below, together with the improvements located and to be located thereon, and the appurtenances thereto, as a residential condominium project under the provisions of the Act.

NOW, THEREFORE, the Developer does, upon the recording hereof, establish Mountain Top Estates Condominium as a Condominium under the Act and does declare that Mountain Top Estates Condominium (hereinafter referred to as the “Condominium”, “Project” or the “Condominium Project”) shall, after such establishment, be held, conveyed, hypothecated, encumbered, leased, rented, occupied, improved, or in any other matter utilized, subject to the provisions of the Act, and to the covenants, conditions, restrictions, uses, limitations and affirmative obligations set forth in this Master Deed and Exhibits “A” and “B” hereto, all of which shall be deemed to run with the land and shall be a burden and a benefit to the Developer, its successors and assigns, and any persons acquiring or owning an interest in the Condominium Premises, their grantees, successors, heirs, personal representatives and assigns. In furtherance of the establishment of the Condominium, it is provided as follows:

ARTICLE I

TITLE AND NATURE

The Condominium shall be known as Mountain Top Estates Condominium, Livingston County Condominium Subdivision Plan No. _____. The architectural plans and specifications for each Unit constructed or to be constructed in the Condominium have been or will be filed with the Charter Township of Genoa, Livingston County, Michigan. The Condominium is established in accordance with the Act. The Units contained in the Condominium, including the number, boundaries, dimensions, and area of each Unit therein, and the designation of Common Elements as General Common Elements or Limited Common Elements are set forth completely in the Condominium Subdivision Plan attached as Exhibit "B" hereto and/or in Article IV of this Master Deed. Each Unit is created for residential purposes and is capable of individual utilization on account of having its own entrance from and exit to a Common Element of the Condominium. Each Co-owner in the Condominium shall have an exclusive right to his Unit and shall have an undivided and inseparable interest with the other Co-owners in the Common Elements of the Condominium and shall share with the other Co-owners the Common Elements of the Condominium as provided in this Master Deed. The provisions of this Master Deed, including, but without limitation, the purposes of the Condominium, shall not be construed to give rise to any warranty or representation, express or implied, as to the composition or physical condition of the Condominium, other than that which is expressly provided herein.

ARTICLE II

LEGAL DESCRIPTION

The land which is submitted to the Condominium established by the Master Deed is particularly described as follows:

A parcel of land located in the Southeast quarter of Section 34, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, said parcel more fully described as:

Commencing at the Southeast corner of Section 34, Town 2 North, Range 5 East; thence S86°53'39"W 610.81 feet (as monumented L.C.R.C., L.S.C. #170M) *(recorded as S87°27'50"W 620.79 feet)* on South line of said Section to the **POINT OF BEGINNING**; thence continuing S86°53'39"W 700.33 feet *(recorded as S87°27'50"W 699.88 feet)* along said South line of Section 34 and the nominal centerline of Cunningham Lake Road (33-foot wide 1/2 Right-of-Way);

thence N02°38'32"W 1163.72 feet (*recorded as N02°41'06"W 1150.07 feet*) along (in-part) the East line of "Copperleaf," according to the Master Deed thereof, as recorded in Liber 3924, Page 7604, Livingston County Records, as amended, if any, and designated as Livingston County Condominium Subdivision Plan No. 274;
thence N87°32'14"E 951.50 feet (*recorded as N87°30'35"E 951.63 feet*) along the South line of "Mystic Lake Hills Subdivision No. 2," according to the plat thereof, as recorded in Liber 18 of Plats, Pages 28 through 32, inclusive, Livingston County Records;
thence S02°32'30"E 680.78 feet (*recorded as S02°33'20"E 681.00 feet*);
thence S87°30'31"W 320.14 feet (*recorded as S87°30'35"W, 320.00 feet*);
thence S02°32'38"E 221.48 feet (*recorded as S02°33'20"E 221.54 feet*);
thence N87°28'54"E (*recorded as N87°27'50"E*) 70.94 feet;
thence S02°32'59"E 253.51 feet (*recorded as S02°32'10"E 247.02 feet*) to the Point of Beginning.

Subject to the rights of the public over that portion thereof occupied by Cunningham Lake Road, subject to and together with all easements and restrictions affecting title to the above described premises.

Commonly known as Vacant Land
Tax ID #: 4711-34-400-008

ARTICLE III

DEFINITIONS

Certain terms are utilized not only in this Master Deed and Exhibits "A" and "B" hereto, but are or may be used in various other instruments such as, by way of example and not limitation, the Articles of Incorporation and rules and regulations of Forest Mountain Top Estates Condominium Association, a Michigan Nonprofit Corporation, and deeds, mortgages, liens, land contracts, easements and other instruments affecting the establishment of, or transfer of, interests in Mountain Top Estates Condominium as a condominium. Wherever used in such documents or any other pertinent instruments, the terms set forth below shall be defined as follows:

Section 1. Act. "Act" means the Michigan Condominium Act, being Act 59 of the Public Acts of 1978, as amended.

Section 2. Arbitration Association. "Arbitration Association" means the American Arbitration Association or its successor.

Section 3. Association. “Association” means Mountain Top Estates Condominium Association, which is the nonprofit corporation organized under Michigan law of which all Co-owners shall be members, which corporation shall administer, operate, manage and maintain the Condominium. Any action required of or permitted to the Association shall be exercisable by its Board of Directors unless specifically reserved to its members by the Condominium Documents or the laws of the State of Michigan.

Section 4. Board of Directors or Board. “Board of Directors” or “Board” means the Board of Directors of Mountain Top Estates Condominium Association, a Michigan nonprofit corporation organized to manage, maintain and administer the Condominium.

Section 5. Bylaws. “Bylaws” means Exhibit “A” hereto, being the Bylaws setting forth the substantive rights and obligations of the Co-owners and required by Section 3(8) of the Act to be recorded as part of the Master Deed. The Bylaws shall also constitute the Corporate Bylaws of the Association as provided for under the Michigan Nonprofit Corporation Act.

Section 6. Common Elements. “Common Elements,” where used without modification, means both the General and Limited Common Elements, if any, described in Article IV hereof.

Section 7. Condominium Documents. “Condominium Documents” wherever used means and includes this Master Deed and Exhibits “A” and “B” hereto, and the Articles of Incorporation, Bylaws and rules and regulations, if any, of the Association as all of the same may be amended from time to time.

Section 8. Condominium Premises. “Condominium Premises” means and includes the land described in Article II above, and the buildings, improvements, and structures thereon, and all easements, rights and appurtenances belonging to Mountain Top Estates Condominium as described above.

Section 9. Condominium Project, Condominium, or Project. “Condominium Project,” “Condominium,” or “Project” means Mountain Top Estates Condominium as a Condominium established in conformity with the provisions of the Act.

Section 10. Condominium Subdivision Plan. “Condominium Subdivision Plan” means Exhibit “B” hereto.

Section 11. Construction and Sales Period. “Construction and Sales Period” means the period commencing with the recording of the Master Deed and continuing as long as the Developer owns any Unit which it offers for sale or for so long as the Developer continues to

construct or proposes to construct additional Units in the Condominium, together with any applicable warranty period in regard to such Units.

Section 12. Co-owner. “Co-owner” means a person, firm, corporation, partnership, limited liability company, limited liability partnership, association, trust or other legal entity or any combination thereof who or which own one or more Units in the Condominium, and shall include a land contract vendee. The term “Owner,” wherever used, shall be synonymous with the term “Co-owner.”

Section 13. Developer. “Developer” means Mountain Top Estates, LLC, a Michigan limited liability company, which has made and executed this Master Deed, and its successors and assigns. Both successors and assigns shall always be deemed to be included within the term “Developer” whenever, however, and wherever such term is used in the Condominium Documents.

Section 14. First Annual Meeting. “First Annual Meeting” means the initial meeting at which non-developer Co-owners are permitted to vote for the election of all directors and upon all other matters which may properly be brought before the meeting. Such meeting is to be held: (a) in the Developer’s sole discretion after fifty (50%) percent of the Units which may be created are sold, or (b) mandatorily after the elapse of fifty-four (54) months from the date of the first Unit conveyance, or (c) mandatorily after seventy-five (75%) percent of all Units which may be created are sold, whichever first occurs.

Section 15. Transitional Control Date. “Transitional Control Date” means the date on which a Board of Directors of the Association takes office pursuant to an election of the votes which may be cast by eligible Co-owners unaffiliated with the Developer exceed the votes which may be cast by the Developer.

Section 16. Unit or Condominium Unit. “Unit” or “Condominium Unit” means a single residential Unit in Mountain Top Estates Condominium as such Unit may be described in Exhibit “B” hereto and in Article V, Section 1 below, and shall have the same meaning as the term “Condominium Unit” as defined in the Act. All structures and improvements now or hereafter located within the boundaries of a Unit shall be owned in their entirety by the Co-owner(s) of the Unit within which they are located and shall not, unless otherwise expressly provided for in the Condominium Documents, constitute Common Elements.

Other terms which may be utilized in the Condominium Documents and which are not defined herein above shall have the meanings as provided in the Act.

Whenever any reference herein is made to one gender, the same shall include a reference to any and all genders where same would be appropriate; similarly, whenever a reference is made herein to the singular, a reference shall also be included to the plural where the same would be appropriate.

ARTICLE IV

COMMON ELEMENTS

The Common Elements of the Condominium, described in Exhibit “B” attached hereto, and the responsibilities for maintenance, decoration, repair or replacement thereof, are as follows:

Section 1. General Common Elements. The General Common Elements are:

- (a) Land. The land described in Article II hereof, including the storm water detention area, and any easement interests of the Condominium in the land provided to it for ingress and egress, if any, and other common areas, when included as part of the Condominium.
- (b) Roadways. All roadways designated on the Condominium Subdivision Plan, subject to the rights of the public, if any, over any portions of rights-of-way.
- (c) Electrical. The electrical transmission system throughout the Project to the extent that it serves all Units up to the point of connection with the Unit as defined in Article III, section 17 and Article V, section 1 herein.
- (d) Telecommunications. The telephone, cable television, and/or telecommunication system throughout the Project to the extent that it serves all Units up to the point of connection with the Unit as defined in Article III, section 17 and Article V, section 1 herein.
- (e) Gas. The gas distribution system throughout the Project to the extent that it serves all Units up to the point of connection with the Unit as defined in Article III, section 17 and Article V, section 1 herein.
- (f) Site Lighting. Any lights designed to provide illumination for the Condominium Premises as a whole.
- (g) Storm Sewer System. The entire storm sewer system (including retention and detention areas and easements) throughout the Project as shown on Exhibit B.
- (h) Easements. All beneficial easements that may exist or may be created in the Master Deed or otherwise for the benefit of all Units.
- (i) Entrance and Landscaped Areas. The entrance areas, including the identifying entrance sign for the Condominium Project, and all other General Common Elements landscaped areas within the Project as designated on the Condominium Subdivision

Plan, the Landscaping Plan, as approved by General Township, and/or as established by the Developer and/or the Association.

- (j) Underground Lawn Irrigation System. The underground lawn irrigation system throughout the Condominium, if any.
- (k) Other. Such other elements of the Condominium not herein designated as General or Limited Common Elements and which are intended for common use or necessary to the existence, upkeep and safety of the Condominium.

Some or all of the utility lines, systems (including mains and service leads) and equipment, the cable television system, and the telecommunications system, if and when constructed, described above may be owned by the local public authority or by the company that is providing the pertinent service. Accordingly, such utility lines, systems and equipment, and the cable television and telecommunications systems, if and when constructed, shall be General Common Elements only to the extent of the Co-owners' interest therein, if any, and Developer makes no warranty whatsoever with respect to the nature or extent of such interest, if any.

Section 2. Limited Common Elements. The Limited Common Elements shall be subject to the exclusive use and enjoyment of the Co-owner or Co-owners of the Unit or Units to which the Limited Common Elements are appurtenant. The Limited Common Elements are as follows:

- (a) Private Well. The private well for residential water usage and all of its appurtenances.
- (b) Septic System. The septic system for residential sewage disposal and all of its appurtenances.
- (c) Appurtenances to be Constructed. Any other appurtenances or areas for individual Units which are constructed pursuant to the Condominium documents shall be limited in use to the Co-owner of the Unit to which it is appurtenant to.
- (d) Driveways. Driveways serving the residence constructed to serve one or more individual Units, to the extent located outside the boundaries of the Condominium Unit.
- (e) Utility Services. The pipes, wiring, lines, conduits and other appurtenances supplying electricity, gas telephone, cable, and/or other utility serve to a Unit, from the point of connection with a General Common Element.

Section 3. Responsibilities. The respective responsibilities for the maintenance, decoration, repair and replacement of the Units and the General and Limited Common Elements are as follows:

- (a) General Common Elements. The costs of maintenance, decoration, repair and replacement of all General Common Elements shall be borne by the Association, subject to any provisions of the Bylaws (Exhibit "A" hereto) expressly to the contrary.
- (b) Public Utilities. Public utilities furnishing services such as electricity and telephone to the Condominium shall be access to the Common Elements and Condominium Units as may be reasonable for the reconstruction, repair or maintenance of such services, shall be borne by the individual Co-owners and/or by the Association, as the case may be, as set forth in the provisions of this Article IV, Section 3.
- (c) Limited Common Elements. The costs of maintenance, decoration, repair and replacement of all Limited Common Elements shall be borne by the Co-owner, in accordance with the provisions of the Bylaws and subject to any provisions of the Bylaws (Exhibit "A" hereto) expressly to the contrary.
- (d) Condominium Units. Subject to the Condominium Documents and the regulations and standards in the Genoa Township Zoning Ordinance, each Co-owner shall be responsible for the decorating, maintaining, repairing or replacing each and every part of the Unit, together with all improvements thereon, along with any portion of the yard of the Co-Owner which is located within the right-of-way of any road, except those portions of any easement or right-of-way situated within the Condominium which exists primarily for the benefit of person other than the Co-Owner.
- (e) Failure of Co-owner to Perform Maintenance Responsibilities. In the event a Co-owner fails to maintain, decorate, repair or replace any items for which he/she is responsible, the Association (and/or the Developer during the Development and Sales Period) shall have the right, but not the obligation, to take whatever action or actions it deems desirable to so maintain, decorate, repair, or replace those items all at the expense of the Co-owner. Such right shall be conditioned upon 10 days advance written notice to the Co-owner of the intention to take such action. Failure of the Association (or the Developer) to take such action shall not be deemed a waiver of the Association's (or the Developer's) right to take any such action at a future time, nor shall the Developer or the Association be liable to any Co-owner or any other person for failure to take such action. The Developer and the Association shall have easements in furtherance of the rights accorded them hereunder as set forth in this Master Deed and no exercise of such rights shall be deemed to be a trespass or other infringement of the rights of any Co-owner, lessee or other person and shall not render the Developer or the Association liable to any person whatsoever on account of such exercise. All costs incurred by the Association or the Developer in performing any responsibilities under this

Article which are required in the first instance to be borne by any Co-owner shall be assessed against such Co-owner and shall be due and payable with his monthly assessment next falling due; further, the lien for non-payment shall attach as in all cases of regular assessments and such assessments may be enforced by the use of all means available to the Association under the Condominium Documents and by law for the collection of regular assessments including, without limitation, legal action, foreclosure of the lien securing payment and imposition of fines. Any costs becoming assessable hereunder shall include not only the direct costs of such maintenance, repair, replacement, or decoration, but shall also include attorney fees and costs and such reasonable indirect costs as are determine, in the discretion of the assessing party, to have been incurred by it in taking such action.

Section 4. Use of Units and Common Elements. No Co-owner shall use his Unit or the Common Elements in any inconsistent with the purposes of the Condominium or in any manner which will interfere with or impair the rights of any other Co-owner in the use and enjoyment of his Unit or the Common Elements.

ARTICLE V

UNIT DESCRIPTION AND PERCENTAGE OF VALUE

Section 1. Description of Units. Each Unit is described in this paragraph with reference to the Condominium Subdivision Plan of the Mountain Top Estates Condominium Project as prepared by Desine Inc. and which plan is attached hereto as Exhibit "B". Each Unit is designed as a separate building site to contain a residential structure and related appurtenances and shall include all of the space located within the horizontal and vertical Unit boundaries, as depicted on Exhibit "B" hereto. There are fifteen (15) Units in the Condominium.

Section 2. Percentages of Value. The total percentage of value is 100%. The percentage of value assigned to each Unit is equally divided between the fifteen (15) Units in the Condominium Project and are determinative of each Co-owner's undivided interest in the Common Elements and proportionate share of each respective Co-owner's vote at meetings of the Association of Co-owners.

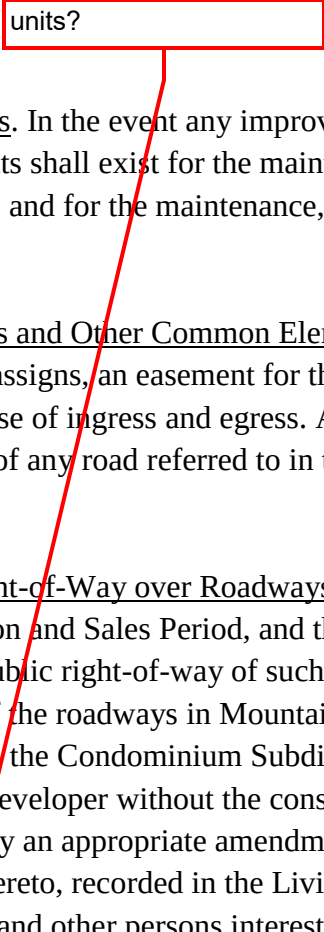
Section 3. Modification of Units and Common Elements by Developer. Subject to the regulations and standards in the Genoa Township Zoning Ordinance, the size, location, nature, design or elevation of Units and/or General or Limited Common Elements appurtenant or geographically proximate to any Units described in Exhibit "B" as same may be revised or

amended from time to time, may be modified, in Developer's sole discretion, by amendment to this Master Deed effected solely by the Developer and its successors without the consent of any person so long as such modifications do not unreasonably impair or diminish the appearance of the Condominium or the privacy or other significant attribute or amenity of any Unit which adjoins or is proximate to the modified Unit or Limited Common Element. All of the Co-owners and mortgages of Units and other persons interested or to become interested in the condominium from time to time shall be deemed to have unanimously consented to such amendment or amendments to this Master Deed or effectuate the foregoing. All such interested persons irrevocably appoint Developer or its successors and assigns as agent and attorney for the purpose of execution of such amendment or amendments to the Master Deed and all other documents necessary to effectuate the foregoing.

ARTICLE VI

EASEMENTS

units?



Section 1. Easement for Maintenance of Encroachments. In the event any improvements located on a Unit encroach upon a Common Element, easements shall exist for the maintenance of such encroachment for so long as such encroachment exists, and for the maintenance, repair and replacement thereof following damage or destruction.

Section 2. Easement Retained by Developer over Roads and Other Common Elements. Developer reserves for the benefit of itself, its successors and assigns, an easement for the unrestricted use of all roads in the Condominium for the purpose of ingress and egress. All expenses of maintenance, repair, replacement and resurfacing of any road referred to in this Article VI, Section 2 shall be shared by the Co-owners.

Section 3. Reservation of Right to Dedicate Public Right-of-Way over Roadways. The Developer reserves the right to any time during the Construction and Sales Period, and the Association shall have the right thereafter, to dedicate to the public right-of-way of such width as may be required by the local public authority over any or all of the roadways in Mountain Top Estates Condominium shown as General Common Elements in the Condominium Subdivision Plan. Any such right-of-way dedication may be made by the Developer without the consent of any Co-owner, mortgagee or other person shall be evidenced by an appropriate amendment to this Master Deed and to the Condominium Subdivision Plan hereto, recorded in the Livingston County Records. All of the Co-owners and mortgagees of units and other persons interested or to become interested in the Condominium from time to time shall be deemed to have irrevocably and unanimously consented to such amendment or amendments of this Master Deed to effectuate the foregoing right-of-way dedication. This right of dedication in no way whatsoever obligates

the Developer to construct or install the roads in a manner suitable for acceptance of such dedication by the local public authority.

Section 4. Easement Retained by Developer to Tap Into Utilities and for Surface Drainage. Developer also hereby reserves for the benefit of itself, its successors and assigns, perpetual easements to utilize, tap, tie into, extend, and enlarge all utility mains located on the Condominium Premises, including, but not limited to, telephone, electric, water, gas, cable television, video text, broad band cable, satellite dish, earth antenna and other telecommunications systems, and storm and sanitary sewer mains. In the event that the Developer, its successors and assigns, utilizes, taps, ties into, extends or enlarges any utilities located on the Condominium Premises, it shall be obligated to pay all of the expenses reasonably necessary to restore the Condominium Premises to their state immediately prior to such utilization, tapping, tying in, extension or enlargement. All expenses of maintenance, upkeep, repair and replacement of the utility mains shall be shared by the Co-owners.

Section 5. Dedication and Reservation of Right to Grant Easement for Storm Sewer System and Utilities. Subject to the regulations and standards in the Genoa Township Zoning Ordinance, the Developer reserves the right at any time during the Construction and Sales Period, and the Association shall have the right thereafter, to dedicate the storm sewer system and/or utilities and to grant easements for the storm sewer system and/or utilities over, under and across the Condominium to appropriate governmental agencies or public utility companies and to transfer title of the storm sewer system and/or utilities to governmental agencies or to utility companies. Any such easement or transfer of title may be conveyed by the Developer without the consent of any Co-owner, mortgagee or other person and shall be evidenced by an appropriate amendment to this Master Deed and to Exhibit "B" hereto, recorded in the Livingston County Register of Deeds. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendments to this Master Deed as may be required to effectuate the foregoing grant of easement or transfer of title.

Section 6. Sign Easement. Developer also hereby reserves for the benefit of itself, its successors and assigns a perpetual easement for a sign [pertaining to the Condominium and provides for maintenance and repair of that easement by the Association.

Section 7. Grant of Easements by Association. The Association, acting through its lawfully constituted Board of Directors (including any Board of Directors acting prior to the First Annual Meeting), shall be empowered and obligated to grant such easements, licenses, rights-of-entry and rights-of-way over, under, and across the Condominium necessary for the benefit of the Condominium; subject, however to the approval of the Developer so long as the Construction and Sales Period has not expired.

Bracket?, add language "and in compliance with Genoa Charter Townships' sign ordinance"

and?

Section 8. Association and Developer Easements for Maintenance, Repair and Replacement. The Developer, the Association, and all public or private utilities shall have such easements over, under, across and through the Condominium Premises, including all Units and Common Elements, as may be necessary to fulfill and responsibilities of maintenance, repair, decoration, replacement or upkeep which they or any of them are required or permitted to perform under the Condominium Documents or by law or to respond to any emergency or common need of the condominium. These easements include, without any implication of limitation, the right of the Association to obtain access during reasonable hours and upon reasonable notice to water meters, sprinkler controls and valves, sump pumps and other Common Elements located within any Unit or its appurtenant Limited Common Elements. Neither the Developer nor the Association shall be liable to the owner of any Unit or any other person, in trespass or in any other form of action, for the exercise of rights pursuant to the provisions of this Section or any other provision of the Condominium Documents which grant such easements, rights of entry or other means of access. Failure of the Association (or the Developer) to take any such action shall not be deemed a waiver of the Association's (or the Developer's) right to take any such action at a future time. All costs incurred by the Association or the Developer in performing any responsibilities which are required, in the first instance to be borne by any Co-owner, shall be assessed against such Co-owner and shall be due and payable with his installment of the annual assessment next falling due; further, the lien for nonpayment shall attach as in all cases of regular assessments and such assessments may be enforced by the use of all means available to the Association under the Condominium Documents and by law for the collection of regular assessments including, without limitation, legal action and foreclosure of the lien securing payment as provided for in Article Ii of the Bylaws (Exhibit "A" hereto) and the Act.

Section 9. Telecommunications Agreement. The Association, acting through its duly constitute Board of Directors and subject to the Developer's approval during the Construction and Sales Period, shall have the power to grant such easements, licenses and other rights of entry, use and access and to enter into any contract or agreement, including wiring agreements, utility agreements, right-of-way agreements, access agreements and multi-Unit agreements and, to the extent allowed by law, contracts for sharing of any installation or periodic subscriber serve fees as may be necessary, convenient or desirable to provide for telecommunications, videotext, broad band cable, satellite dish, antenna, multi-channel multi-point distribution service and similar services (collectively, "Telecommunications") to the Condominium or any Unit therein. Notwithstanding the foregoing, in no event shall the Board of Directors enter into any contract or agreement or grant any easement, license or right of entry or do any other act or thing which will violate any provision of any Federal, State or local law or ordinance and such acts are expressly subject to the regulations and standards in the Genoa Township Zoning Ordinance. Any and all sums paid by any Telecommunications or any other company or entity in connection with such

constituted?

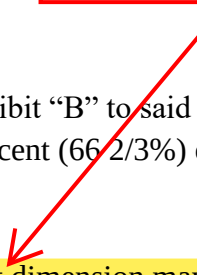
service, including fees, if any, for the privilege of installing same, or sharing periodic subscriber service fees, shall be receipts affecting the administration of the Condominium within the meaning of the Act and shall be paid over to and shall be the property of the Developer during the Construction and Sales Period and, thereafter, the Association.

Section 10. Sharing of Expenses. For purposes of this Article VII, the calculation of any fraction for the sharing of pertinent expenses according to the number of Units in this Condominium and the Units in the Future Development Area, shall include only those Units for which a certificate of occupancy has been issued by the Township.

ARTICLE VII

AMENDMENT

do we want to add any dimension modification must comply with the Township's ordinance as well as the county requirement



This Master Deed and the Condominium Subdivision Plan (Exhibit “B” to said Master Deed) may be amended with the consent of sixty-six and two thirds percent (66 2/3%) of all of the Co-owners in number and in value, except as hereinafter set forth:

Section 1. Modification of Units or Common Elements. **No Unit dimension may be modified** without the consent of the Co-owner or mortgagee of such Unit nor may the nature or extent of Limited Common Elements or the responsibility for maintenance, repair or replacement thereof be modified in any material way without the written consent of the Co-owner or mortgagee of any Unit to which the same are appurtenant.

Section 2. Mortgagee Consent. Whenever a proposed amendment would materially alter or change the rights of mortgagees generally, then such amendment shall require the approval of sixty-six and two thirds (66 2/3%) percent of all mortgagees of record, allowing one (1) vote for each mortgage held.

Section 3. By Developer. Prior to one (1) year after expiration of the Construction and Sales Period described in Article III, Section 12 above, the Developer may, without the consent of any Co-owner or any other person, amend this Master Deed and the Condominium Subdivision Plan attached as Exhibit “B” in order to correct survey or other errors made in such documents and to make such other amendments to such instruments and to the Bylaws attached hereto as Exhibit “A” as do not materially affect any rights of any Co-owners or mortgagees in the Condominium, including but not limited to, amendments for the purpose of facilitating conventional mortgage loan financing for existing or prospective Co-owners and to enable the purchase of such mortgage loans by the Federal Home Loan Mortgage corporation, the Federal

National Mortgage Association, the Government National Mortgage Association and/or any other agency of the Federal Government or of the State of Michigan.

Section 4. Change in Percentage of Value. The value of the vote of any Co-owner and corresponding proportion of common expenses assessed against such Co-owner shall not be modified without the written consent of such Co-owner and his mortgagee nor shall the percentage of value assigned to any Unit be modified without like consent, except as provided in Article V, Section 7(c) of the Bylaws and except as provided in Article V and Article VI hereof.

Section 5. Termination, Vacation, Revocation and Abandonment. The Condominium may not be terminated, vacated, revoked or abandoned without the written consent of the Developer during the Construction and Sales Period) together with eighty percent (80%) of the non-developer Co-owners, in number and in value, and as otherwise allowed by law.

Section 6. Developer Approval. During the Construction and Sales Period, Article V, Article VI, and Article VII shall not be amended nor shall the provisions thereof be modified by any other amendment to this Master Deed without the written consent of the Developer. During the time period referenced in the preceding sentence, no other portion of the Condominium Documents or the attached Exhibit "B" may be amended in any manner so as to materially affect and/or impair the rights of the Developer, unless said amendment has received the prior written consent to the Developer. No easements, if any, created under the Condominium Documents may be modified or obligations with respect thereto varied without the consent of each owner benefited thereby.

Section 7. Township Approval. The Master Deed and Bylaws may not be amended to modify or eliminate any terms and/or conditions required by the Charter Township of Genoa without the consent of the Township.

ARTICLE III

ASSIGNMENT

Any or all the rights and powers granted or reserved to the Developer in the condominium documents or by law, including the power to approve or disapprove any act, use or proposed action or any other matter or thing, may be assigned by the Developer to any other entity or to the Association. Any such assignment or transfer shall be made by appropriate instrument in writing duly recorded in the Office of the Livingston County Register of Deeds.

(Signatures on following page.)

MOUNTAIN TOP ESTATES, LLC
a Michigan limited liability company

By: Stephen M. Davis
Its: Sole and Authorized Member

STATE OF MICHIGAN)
)ss
COUNTY OF LIVINGSTON)

On this _____ day of _____, 2019, the foregoing Master Deed was acknowledged before me by Stephen M. Davis, the Sole and Authorized member of Mountain Top Estates, LLC, a Michigan limited liability company.

Kristin D. Lee, Notary Public
Livingston County, Michigan
My commission expires: 02/26/2022

Drafted by and when recorded return to:

Douglas D. Cameron (P26818)
MANCUSO & CAMERON PC
722 E. Grand River Avenue
Brighton, MI 48116
(810) 225-3300

EXHIBIT “A”

BYLAWS

ARTICLE I

ASSOCIATION OF CO-OWNERS

Mountain Top Estates Condominium, a residential Condominium located in the Township of Genoa, County of Livingston, State of Michigan, shall be administered by an Association of Co-owners which shall be a nonprofit corporation, hereinafter called the “Association,” organized under the applicable laws of the State of Michigan, and responsible for the management, maintenance, operation and administration of Common Elements, easements and affairs of the Condominium in accordance with the Master Deed, these Bylaws, the Articles of Incorporation, and duly adopted rules and regulations of the Association, and the laws of the State of Michigan. These Bylaws shall constitute both the Bylaws referred to in the Master Deed and required by Section 3(8) of the Act and the Bylaws provided for under the Michigan Nonprofit Corporation Act. Each Co-owner, including the Developer, shall be a member of the Association and no other person or entity shall be entitled to membership. The share of a Co-owner in the funds and assets of the Association cannot be assigned, pledged or transferred in any manner except as an appurtenance to his Unit in the Condominium. A Co-owner selling a Unit shall not be entitled to any refund whatsoever from the Association with respect to any reserve or other asset of the Association. The Association shall keep current copies of the Master Deed, all amendments to the Master Deed and other Condominium Documents for the Condominium available at reasonable hours to Co-owners, prospective purchasers and prospective mortgagees of Units in the Condominium. All Co-owners in the Condominium and all persons using or entering upon or acquiring any interest in any Unit therein or the Common Elements thereof shall be subject to the provisions and terms set forth in the aforesaid Condominium Documents.

ARTICLE II

ASSESSMENTS

All expenses arising from the management, administration and operation of the Association in pursuance of its authority and responsibilities as set forth in the Condominium Documents and the Act shall be levied by the Association against the Units and the Co-owners thereof in accordance with the following provisions:

Section 1. Assessments for Common Elements. All costs incurred by the Association in satisfaction of any liability arising within, caused by, or connected with the Common Elements or the administration of the Condominium shall constitute expenditures affecting the administration of the Condominium, and all sums received as the proceeds of, or pursuant to, a policy of insurance securing the interest of the Co-owners against liabilities or losses arising within, caused by, or connected with the Common Elements or the administration of the Condominium shall constitute receipts affecting the administration of the condominium within the meaning of Section 54(4) of the Act.

Section 2. Determination of Assessments. Assessments shall be determined in accordance with the following provisions:

- (a) Budget. The Board of Directors of the Association shall establish an annual budget in advance for each fiscal year and such budget shall project all expenses for the forthcoming year which may be required for the propose operation, management and maintenance of the Condominium, including a reasonable allowance for contingencies and reserves. Failure or delay of the Board of Directors to prepare or adopt a budget for any fiscal year shall not constitute a waiver or release in and manner of a Unit Co-owner's obligation to pay the allocable share of the common expenses as herein provided whenever the same shall be determined and, in the absence of any annual budget or adjusted budget, each Unit Co-owner shall continue to pay each monthly or other periodic installment at the monthly or periodic rate established for the previous fiscal year until notified of the monthly or periodic payment which is due more than ten (10) days after such new annual or adjusted budget is adopted. An adequate reserve fund for maintenance, repair and replacement of those Common Elements that must be replaced on a periodic basis shall be established in the budget and must be funded by regular monthly payments as set forth in Section 3 below rather than by additional or special assessments. At a minimum, the reserve fund shall be equal to ten (10%) percent of the Association's current annual budget on a noncumulative basis. Since the minimum standard required by this Section may prove to be inadequate for this particular Condominium, the Association of Co-owners should carefully analyze the Condominium to determine if a great amount should be set aside, or if additional reserve funds should be established for other purposes from time to time. The funds contained in such reserve fund shall be used for major repairs and replacements of Common elements. The Board of Directors may establish such other reserve funds as it may deem appropriate from time to time. Upon adoption of an annual budget by the Board of Directors, copies of said budget shall be delivered to each Co-owner and the assessment for said year shall be established based upon said budget, although the delivery of a copy of the budget to each Co-owner shall not affect the liability of any Co-owner for any existing or future assessments. Should the Board of Directors at any time determine, in the sole discretion of the Board of Directors: (1) that the assessments levied are or may prove to be insufficient to pay the costs of operation, management, maintenance and capital repair of the Condominium, (2) to provide replacements of existing Common Elements, (3) to provide additions to the Common Elements not exceeding Ten Thousand (\$10,000.00) Dollars, in the aggregate, annually, or (4) in the event of emergencies, the Board of Directors shall have the authority to increase the general assessment without the Co-owner approval as it shall deem to be necessary. The Board of Directors shall also have the authority, without Co-owner consent, to levy assessments pursuant to the provisions of Article V, Section 5 hereof. The discretionary authority of the Board of Directors to levy general, additional or special assessments pursuant to this subsection shall rest solely with the Board of Directors for the benefit of the Association and the members thereof, and shall not be enforceable by any creditors of the Association or the members thereof.

- (b) Special Assessments. Special assessments, other than those referenced in subsection (a) of this Section 2, may be made by the Board of Directors from time to time and approved by the Co-owners as hereinafter provided to meet other needs or requirements of the Association, including, but not limited to: (1) assessments for additions to the Common Elements of and aggregate cost exceeding \$5,000.00 per year, (2) assessments to purchase a Unit upon foreclosure of the lien for assessments described in Section 5 hereof, or (3) assessments for any other appropriate purpose not elsewhere herein described. Special assessments referred to in this subsection (b) (but not including those assessments referred to in subsection 2(a) above which may be levied in the sole discretion of the Board of Directors) shall not be levied without prior approval of more than sixty (60%) percent of all Co-owners, in number and in value. The authority to levy assessments pursuant to this subsection is solely for the benefit of the Association and the members thereof and shall not be enforceable by any creditors of the Association or the members thereof.

Section 3. Appointment of Assessments; Default in Payment. Unless otherwise provided herein, all assessments levied against the Co-owners to cover expenses of administration shall be apportioned among and paid by the Co-owners in accordance with the percentage of value allocated to each Unit in Article V of the Master Deed, without increase or decrease for the existence of any rights to the use of Limited Common Elements appurtenant to a Unit. Any unusual expenses of administration which benefit less than all of the Condominium Units in the Condominium may be specially assessed against the Condominium Unit or Condominium Units in the proportion which the percentage of value of the benefited Condominium Unit bears to the total percentages of value of all Condominium Units so specially benefited. Annual assessments as determined in accordance with Article II, Section 2(a) above shall be payable by the Co-owners in twelve (12) equal monthly installments, commencing with acceptance of a Deed to, or a land contract purchaser's interest in, a Unit, or with the acquisition of fee simple titles to a Unit by any other means. The payment of an assessment shall be in default if such assessment, or any part thereof, is not paid to the Association in full on or before the due date for such payment. A late charge in the amount of \$10.00 per month or such other amount as may be determined by the Board of Directors, effective upon fifteen (15) days' notice to members of the Association, shall be assessed automatically by the Association upon any assessment in default until paid in full. Such late charges shall not be deemed to be a penalty or interest upon the funds due to the Association but is intended to constitute a reasonable estimate of the administrative costs and other damages incurred by the Association in connection with the late payment of assessments. Assessments in default shall bear interest at the rate of seven (7%) percent per annum or installments of assessments in default shall be applied first, to any late charges on such installments; second, to costs of collection and enforcement of payment, including reasonable attorney's fees as the Association shall determine in its sole discretion and finally to installments in default in order of their due dates, earliest to latest.

Each Co-owner (whether one or more persons) shall be, and remain, personally liable for the payment of all assessments (including late charges and costs of collection and enforcement of payment) pertinent to his Unit which may be levied while such Co-owner is the owner thereof. In addition to a Co-owner who is also a land contract seller, the land contract purchaser shall be personally liable for the payment of all assessments (including late charges and costs of collection

and enforcement of payment) pertinent to the subject Condominium Unit which are levied up to and including the date upon which the land contract seller actually takes possession of the Unit following extinguishments of all rights of the land contract purchaser in the Unit.

Section 4. Waiver of Use or Abandonment of Unit; Uncompleted Repair Work. No Co-owner may exempt himself from liability for his contribution toward the expenses of administration by waiver of the use or enjoyment of any of the Common Elements, or by the abandonment of his Unit, or because of uncompleted repair work, or the failure of the Association to provide service to the Condominium.

Section 5. Enforcement. The Association may enforce collection of delinquent assessments by a suit at law for a money judgment or by foreclosure of the statutory lien that secures payment of assessments, or both in accordance with the Act. Pursuant to Section 139 of the Act, no Co-owner may assert in answer or set-off to a complaint brought by the Association for non-payment of assessments the fact that the Association or its agents have not provided the services or management to the Co-owner. Each Co-owner, and every person who from time to time has any interest in the Condominium, shall be deemed to have granted to the Association the unqualified right to elect to foreclosure such lien either by judicial action or by advertisement. The provisions of Michigan law pertaining to foreclosure or mortgages by judicial action and by advertisement, as the same may be amended from time to time, are incorporated herein by reference for the purposes of establishing the alternative procedures to be followed in lien foreclosure actions and the rights and obligations of the parties to such actions. Further, each Co-owner and every person who from time to time has any interest in the Condominium, shall be deemed to have authorized and empowered the Association to sell or to cause to be sold the Unit with respect to which the assessment(s) is or are delinquent and to receive, hold and distribute the proceeds of such sale in accordance with the priorities established by applicable law. The Association, acting on behalf of all Co-owners, may bid at the foreclosure sale, and acquire, hold, lease, mortgage or convey the Condominium Unit. Each Co-owner of a Unit in the Condominium acknowledged that at the time of acquiring title to such Unit, he was notified of the provisions of this Section and that he voluntarily, intelligently and knowingly waived notice of any proceedings brought by the Association to foreclose by advertisement the lien for nonpayment of assessments and a hearing on the same prior to the sale of the subject Unit. Notwithstanding the foregoing, neither a judicial foreclosure action nor a suit at law for money judgment shall be commenced, nor shall any notice of foreclosure by advertisement be published, until the expiration of ten (10) days after mailing, by first class mail, postage prepaid, addressed to the delinquent Co-owner(s) at his or her last known address of a written notice that one or more installments of the annual assessment and/or a portion or all of a special or additional assessment levied against the pertinent Unit is or are delinquent and that the Association may invoke any of its remedies hereunder if the default is not cured within ten (10) days after the date of mailing. Such written notice shall be accompanied by a written Notice of Lien signed by an authorized representative of the Association that sets forth (i) the authorized representative's capacity to sign the Notice of Lien, (ii) the statutory and other authority for the lien, (iii) the amount outstanding (exclusive of interest, costs, attorney fees and future assessments), (iv) the legal description of the subject Unit(s), and (v) the name(s) of the Co-owner(s) of record, Such Affidavit shall be recorded in the office of the Register of Deeds in the County in which the Condominium is located prior to commencement of any foreclosure proceeding; but it need not have been recorded as of the date of mailing as aforesaid. If the

delinquency is not cured within the ten (10) day period, the Association may take such remedial action as may be available to it hereunder or under Michigan law. In the event the Association elects to foreclose the lien by advertisement, the Association shall so notify the Co-owner and shall inform the Co-owner that he may request a judicial hearing by bringing suit against the association. The expenses incurred in collecting unpaid assessments, including interest, costs, actual attorney's fees (not limited to statutory fees) and advances for taxes of other liens paid by the Association to protect its lien, shall be chargeable to the Co-owner in default and shall be secured by the lien on his Unit. In the event of default by any Co-owner in the payment of any installment of the annual assessment levied against his Unit, or any other obligation of a Co-owner which, according to these Bylaws, may be assessed and collected from the responsible Co-owner in the manner provided in Article II hereof, the Association shall have the right to declare all unpaid installments of the annual assessment, if applicable, immediately due and payable. The Association also may discontinue the furnishing of any utility or other services to a Co-owner in default upon seven (7) days written notice to such Co-owner of its intention to do so. A Co-owner in default shall not be entitled to utilize any of the General Common Elements of the Condominium, shall not be entitled to vote at any meeting of the Association, or sign any petition for any purpose prescribed by the Condominium Documents or by law, and shall not be entitled to run for election or serve as a director or be appointed or serve as an officer of the Association so long as such default continues; provided, however, this provision shall not operate to deprive any Co-owner of ingress or egress to and from his Unit. In a judicial foreclosure action, a receiver may be appointed to collect a reasonable rental for the Unit from the Co-owner thereof or any persons claiming under him as provided by the Act.

Section 6. Liability of Mortgagee. Notwithstanding any other provisions of the Condominium Documents, the holder of any first mortgage covering any Unit in the Condominium which comes into possession of the Unit pursuant to the remedies provided in the mortgage or by deed (or assignment) in lieu of foreclosure, or any purchaser at a foreclosure sale, shall take the property free of any claims for unpaid assessments or charges against the Unit which accrue prior to the time such holder comes into possession of the Unit (except for claims for a pro rata share of such assessments or charges resulting from a pro rata reallocation of such assessments or charges to all Units including the mortgaged Unit).

Section 7. Developer's Responsibility for Assessments. The Developer of the Condominium, although a member of the Association, shall not be responsible at any time for payment of the Association assessments, except with respect to occupied Units that it owns. An occupied Unit is one which is occupied as a residence. The Developer shall independently pay all direct costs of maintaining completed Units for which it is not required to pay Association assessments and shall not be responsible for any payments whatsoever to the Association connection with such Units. A completed Unit is one with respect to which a Certificate of Occupancy has been issued by the Livingston County Building Department. Certificates of Occupancy may be obtained by the Developer at such times prior to actual occupancy as the Developer, in its discretion, may determine. For instance, the only expense presently contemplated that the Developer might be expected to pay is a pro rata share of snow removal and other maintenance from time to time as well as a pro rata share of any administrative costs which the Association might incur from time to time. Any assessments levied by the Association against the Developer for other purposes shall be void without Developer's consent. The Developer shall not

be responsible at any time for payment of Condominium assessments or payment of any expenses whatsoever with respect to unbuilt Units notwithstanding the fact that such unbuilt Units may have been included in the Master Deed. Notwithstanding the foregoing, the Developer shall be responsible to fund any deficit or shortage of the Association arising prior to the date of the First Annual Meeting resulting from the Developer's responsibility for assessments, as provided in the Section. The Developer shall, in no event, be liable for any assessment levied in whole or in part to purchase any Unit or to finance any litigation or other claims against the Developer, its directors, officers, agents principals, assigns, affiliates and/or the first Board of Directors of the Association or any directors of the Association appointed by the Developer, or any cost of investigating and preparing such litigation or claim or any similar or related costs.

Section 8. Property Taxes and Special Assessments. All property taxes and special assessments levied by any public taxing authority shall be assessed in accordance with Section 131 of the Act.

Section 9. Personal Property Tax Assessment of Association Property. The Association shall be assessed as the person or entity in possession of any tangible personal property of the Condominium owned or possessed in common by the Co-owners, and personal property taxes based thereon shall be treated as expenses of administration.

Section 10. Construction Lien. A construction lien otherwise arising under Act No. 497 of the Michigan Public Acts of 1980, as amended, shall be subject to Section 132 of the Act.

Section 11. Statement as to Unpaid Assessments. Pursuant to the provisions of the Act, the purchaser of any Condominium Unit may request a statement of the association as to the outstanding amount of any unpaid Association assessments thereon, whether annual, additional or special, and related collection or other costs. Upon written request to the Association, accompanied by the copy of the executed purchase agreement pursuant to which the purchaser holds the right to acquire the Unit, the Association shall provide a written statement of such unpaid assessments and related collection costs as may exist or a statement that none exist, which statement shall be binding upon the Association for the period stated therein. Upon the payment of that sum within the period states, the Association's lien for assessments as to such Unit shall be deemed satisfied; provided, however, that the failure of the purchaser to request such statement at least five (5) days prior to the closing of the purchase of such Unit shall render any unpaid assessments together with interest, cost, and attorney's fees incurred in the collection thereof, and the lien securing same fully enforceable against such purchaser and the Unit itself, to the extend provided by the Act. Under the Act, unpaid assessments constitute a lien upon the Unit and the proceeds of sale thereof prior to all claims, except real property taxes and first mortgages of record having priority. The Association may charge such reasonable amounts for preparation of such statement as the Association shall, in its discretion, determine.

ARTICLE III

ARBITRATION

Section 1. Scope and Election. Disputes, claims or grievances arising out of or relating to the interpretation or the application of the Condominium Documents, or any disputes, claims or grievances arising among or between Co-owners, or between a Co-owner or Co-owners and the Association shall, upon the election and written consent of the parties to any such disputes, claims or grievances, and written notice to the Association, if applicable, be submitted to arbitration. The arbitrator's decision shall be final and binding; provided that no question affecting the claim of title of any person to any fee or life estate in real estate involved. The Commercial Arbitration Rules of the American Arbitration Association as amended and in effect from time to time hereafter shall be applicable to any such arbitration. Any agreement to arbitrate pursuant to the provisions of Article III, Section 1 shall include an agreement between the parties that the judgment of any Circuit Court of the State of Michigan may be rendered upon any award rendered pursuant to such arbitration.

Section 2. Judicial Relief. In the absence of the election and written consent of the parties pursuant to Section 1 above, no Co-owner or the Association shall be precluded from petitioning the Courts to resolve any such disputes, claims or grievances.

Section 3. Election of Remedies. Election by the parties to any such dispute, claims or grievances to submit such disputes, claims or grievances to arbitration shall preclude such parties from litigating such disputes, claims or grievances in the Courts.

Section 4. Co-owner Approval for Civil Actions against Developer and First Board of Directors. Any civil action proposed by the Board of Directors on behalf of the Association to be initiated against the Developer, its agents or assigns, and/or the First Board of Directors of the Association or other Developer-appointed Directors, for any reason, shall be subject to the limitations in the Articles of Incorporation and approval by a vote of sixty-six and two-thirds percent (66 2/3%) of all Co-owners, in number and value, and notice of such proposed action must be given in writing to all Co-owners in accordance with Article VII herein below. Such vote may only be taken at a meeting of the Co-owners and no proxies or absentee ballots shall be permitted to be used, notwithstanding the provisions of Article VII herein below.

ARTICLE IV

INSURANCE

Section 1. Extent of Coverage. The Association shall carry a standard "all risk" insurance policy, which includes, among other things, fire and extended coverage, vandalism and malicious mischief and liability insurance, and worker's compensation insurance, if applicable, pertinent to the ownership, use and maintenance of the Common Elements of the Condominium, and such insurance, other than title insurance, shall be carried and administered in accordance with the following provisions:

- (a) Responsibilities of Association and of Co-owners. All such insurance shall be purchased by the Association for the benefit of the Association, and the Co-owners and their mortgagees, as their interests may appear, and provision shall be made for the issuance of certificates of mortgagee endorsements to the mortgagee of Co-owners.

Each Co-owner shall obtain insurance coverage at his own expense upon his Unit and appurtenant Limited Common Elements. It shall be Co-owner's responsibility to determine by personal investigation or from his own insurance advisor the nature and extent of insurance coverage adequate to recompense him for his foreseeable losses and thereafter to obtain insurance coverage for his personal property and any additional fixtures, equipment and trim (as referred to in subsection (b) below) located within his Unit or elsewhere on the Condominium and for his personal liability for occurrences within his Unit or upon Limited Common Elements appurtenant to his Unit and also for alternative living expense in the event of fire, and the Association shall have absolutely no responsibility for obtaining such coverages. Each Co-owner shall file a copy of such insurance policy, or policies, including all endorsements thereon, or, in the Association's discretion, certificates of insurance or other satisfactory evidence of insurance, with the Association in order that the Association may be assured that such insurance coverage is in effect. The Association, as to all policies which it obtains, and all Co-owners, as to all policies which they obtain, shall use their best efforts to see that all property and liability insurance carried by the Association or any Co-owner shall contain appropriate provisions whereby the insurer waives its right of subrogation as to any claims against any Co-owner or the Association. The liability insurance carried by the Association and the Co-owners shall, where appropriate, contain cross-liability endorsements to cover liability of the Co-owners as a group to another Co-owner.

- (b) Insurance of Common Elements. All common Elements of the Condominium shall be insured against fire and other perils covered by a standard extended coverage endorsement, in an amount equal to the current insurable replacement value, excluding foundation and excavation costs, as determined annually by the Board of Directors of the Association in consultation with the Association's insurance carrier and/or its representatives in light of commonly employed methods for the reasonable determination of replacement costs. Such coverage shall be effected upon an agreed amount basis for the entire Condominium with appropriate inflation riders in order that no co-insurance provisions shall be invoked by the insurance carrier in a manner that will cause loss payments to be reduced below the actual amount of any loss (except in the unlikely event of total Project destruction if the insurance proceeds failed for some reason, to be equal to the total cost of replacement). All information in the Association's records regarding insurance coverage shall be made available to all Co-owners upon request and reasonable notice during normal business hours so that Co-owners shall be enabled to judge the adequacy of coverage and, upon the taking of due Association procedures, to direct the Board at a properly constituted meeting, to change the nature and extent of any applicable coverages, if so determined. Upon such annual re-evaluation and effectuation of coverage, the Association shall notify all Co-owners of the nature and extent of all changes in coverages. It shall be each Co-owner's responsibility to obtain insurance coverage for all fixtures, equipment, pipes, conduit, duct trim, and other items or attachments within the Unit or any Limited Common Elements appurtenant thereto whether installed originally by the Developer or subsequently by the Co-owner, and the Association shall have no responsibility whatsoever for obtaining such coverage unless agreed specifically and separately between the Association and the Co-owner in writing; provided, however, that any such agreement between the Association and the Co-owner shall provide that any additional

premium cost to the Association attributable thereto shall be assessed to and borne solely by said Co-owner and collected as part of the assessments against said Co-owner under Article II hereof. This provision shall not preclude the Association from obtaining such coverage on its own initiative.

- (c) Premium Expenses. All premiums on insurance purchased by the Association pursuant to these Bylaws shall be expenses of administration.
- (d) Proceeds of Insurance Policies. Proceeds of all insurance policies owned by the Association shall be received by the Association, held in a separate account and distributed to the Association, that the Co-owners and their mortgagees as their interests may appear; provided, however, whenever repair or reconstruction of the Condominium shall be required as provided in Article V of these Bylaws, the proceeds of any insurance received by the Association as a result of any loss requiring the repair or reconstruction shall be applied for such repair or reconstruction and in no event shall hazard insurance proceeds be used for any purpose other than repair, replacement or reconstruction of the Condominium unless all of the institutional holders of first mortgages on Units in the Condominium have given their prior written approval.
- (e) Determination of Primary Carrier. It is understood that there will be overlapping coverage between the Co-owners' policies and those of the Association, as required to be carried pursuant to this Article. In situations where both coverages/policies are applicable to a given loss, the provisions of this subsection shall control in determining the primary carrier. In cases of property damage to the Unit and its contents or a Limited Common Element for which the Co-owner is assigned responsibility for maintenance, repair and replacement pursuant to the provisions of the Master Deed (including improvements and betterments), the Co-owner's policy/carrier shall be deemed to be the primary carrier. In cases of property damage to the General Common Elements or a Limited Common Element for which the Association is assigned responsibility for maintenance, repair and replacement pursuant to the provisions of the Master Deed, the Association's policy/carrier shall be deemed to be the primary carrier. In cases of liability for personal injury or otherwise, for occurrences in/on the Unit or in/upon a Limited Common Element for which the Co-owner is assigned responsibility for maintenance, repair and replacement pursuant to the provisions of the Master Deed (including improvements and betterments), the Co-owner's policy/carrier shall be deemed to be the primary carrier. In cases of liability for personal injury or otherwise, for occurrences in/on the General Common Elements or in/upon a Limited Common Element for which the Association is assigned responsibility for maintenance, repair and replacement pursuant to the provisions of the Master Deed (including improvements and betterments), the Association's policy/carrier shall be deemed to be the primary carrier. In all cases where the Association's policy/carrier is not deemed the primary policy/carrier, if the Association's policy/carrier contributes to payment of the loss, the Association's liability to the Co-owner shall be limited to the amount of the insurance proceeds, and shall not in any event require or result in the Association paying or being responsible for any deductible amount under its policies. In cases where the Co-owner's policy is deemed primary for the purpose of covering losses where the damage is incidental or caused by a General Common Element or the repair or replacement thereof, the insurance carrier of the Co-owner shall have no right of subrogation against the Association or its carrier.

Section 2. Authority of Association to Settle Insurance Claims. Each Co-owner, by ownership of a Unit in the Condominium, shall be deemed to appoint the Association as his true and lawful attorney-in-fact to act in connection with all matters concerning maintenance of fire and extended coverage, vandalism and malicious mischief, liability insurance and workers' compensation insurance, if applicable, pertinent to the Condominium, his Unit and the Common Elements appurtenant thereto with such insurer as may, from time to time, provide such insurance for the Condominium. Without limitation on the generality of the foregoing, the Association as said attorney shall have full power and authority to purchase and maintain such insurance, to collect and remit premiums therefore, to collect proceeds and to distribute same to the Association, the Co-owner and respective mortgagees, as their interests may appear (subject always to the Condominium Documents), to execute releases of liability and to execute all documents and to do all things on behalf of such Co-owners and the Condominium as shall be necessary or convenient to the accomplishment of the foregoing.

ARTICLE V

RECONSTRUCTION OR REPAIR

Section 1. Responsibility for Reconstruction or Repair. In the event any part of the Condominium property shall be damaged, the determination of whether or not it shall be reconstructed or repaired shall be made in the following manner:

- (a) Partial Damage. In the event the damaged property is a Common Element or a Unit, the property shall be rebuilt or repaired if any Unit in the Condominium is tenantable, unless it is determined by unanimous vote of all the Co-owners in the Condominium that the Condominium shall be terminated and each institutional holder of a first mortgage lien on any Unit in the Condominium has given its prior written approval for such termination.
- (b) Total Destruction. In the event the Condominium is so damaged that no Unit is tenantable, the damaged property shall not be rebuilt and the Condominium shall be terminated, unless eighty (80%) percent or more of all of the Co-owners, in number and in value, agree to reconstruction by vote or in writing within ninety (90) days after the destruction and such termination shall also have received the approval of at least fifty one (51%) percent of those holders of first mortgages on Condominium Units who have requested the Association to notify them of any proposed action that requires the consent of a specified percentage of first mortgagees.

Section 2. Repair in Accordance with Master Deed, Etc. Any such reconstruction or repair shall be substantially in accordance with the Master Deed and the plans and specifications for the Condominium to a condition as comparable as possible to the condition existing prior to damage unless the Co-owners shall unanimously decide otherwise and shall also be subject to the regulations and standards in the Genoa Township Zoning Ordinance.

Section 3. Co-owner and Association Responsibilities. In the event the damage is only to a part of a Unit which is the responsibility of a Co-owner to maintain and repair, it shall be the responsibility of the Co-owner to repair such damage in accordance with Section 4 hereof. In all other cases, the responsibility for reconstruction and repair shall be that of the Association in accordance with Section 5 of this Article V.

Section 4. Co-owner Responsibility for Repair. Regardless of the cause or nature of any damage or deterioration, including but not limited to incidents where the damage is incidental or caused by a General Common Element or the repair or replacement thereof, each Co-owner shall be responsible for the reconstruction, repair and maintenance of his Unit, including, but not limited to, windows and doors, floor coverings, wall coverings, window shades, draperies, interior walls, interior trim, furniture, light fixtures and all appliances, whether free standing or built-in. In the event of substantial damage to or destruction of any Unit or any part of the Common Elements, the Association promptly shall so notify each institutional holder of a first mortgage lien on any of the Units in the Condominium.

Section 5. Association Responsibility for Repair. Except as provided in Section 4 hereof, the Association shall be responsible for the maintenance, repair and reconstruction of the Common Elements (except as specifically otherwise provided in the Master Deed), however, in no event shall the Association be responsible for any damage to the contents of a Condominium Unit and/or any personal property of the Co-owner. Immediately after causality causing damage to property for which the Association has the responsibility of maintenance, repair and reconstruction, the Association shall obtain reliable and detailed estimates of the cost to place the damaged property in as good as that existing before the damage. If the proceeds of insurance are not sufficient to defray the estimated costs of reconstruction or repair required to be performed by the Association, or if at any time during such reconstruction or repair, or upon completion of such reconstruction or repair, the funds for the payment of the costs thereof are insufficient, assessments shall be made against all Co-owners for the cost of reconstruction or repair of the damaged property in sufficient amounts to provide funds to pay the estimated or actual cost of repair.

Section 6. Timely Reconstruction and Repair. If damage to Common Elements or a Unit adversely affect the appearance of the Condominium, subject to the regulations and standards in the Genoa Township Zoning Ordinance, the Association or Co-owner responsible for the reconstruction, repair and maintenance thereof shall proceed with replacement of the damaged property without delay, and shall complete such replacement within six (6) months after the date of the occurrence which caused damage to the property.

Section 7. Eminent Domain. In the event of any taking of an entire Unit by eminent domain, the award for such taking shall be paid to the owner of such Unit and the mortgagee thereof, as their interests may appear. After acceptance of such award by the owner and his mortgagee, they shall be divested of all interest in the Condominium. In the event that any condemnation award shall become payable to any Co-owner whose Unit is not wholly taken by eminent domain, then such award shall be paid by the condemning authority to the Co-owner and his mortgagee, as their interests may appear.

- (a) Taking of Entire Unit. In the event of any taking of an entire Unit by eminent domain, the award for such taking shall be paid to the owner of such Unit and the mortgagee thereof, as their interests may appear. After acceptance of such award by the owner and his mortgagee, they shall be divested of all interest in the Condominium, In the event that any condemnation award shall become payable to any Co-owner whose Unit is not wholly taken by eminent domain, then such award shall be paid by the condemning authority to the Co-owner and his mortgagee, as their interests may appear.
- (b) Taking of Common Elements. If there is any taking of any portion of the Condominium other than any Unit, the condemnation proceeds relative to such taking shall be paid to the Co-owners and their mortgagees in proportion to their respective interests in the Common Elements and the affirmative vote of more than fifty (50%) percent of all of the Co-owners, in number and in value, shall determine whether to rebuild, repair or replace the portion so taken or to take such other action as they deem appropriate.
- (c) Continuation of Condominium after Taking. In the event the Condominium continues after taking by eminent domain, then the remaining portion of the Condominium shall be resurveyed and the Master Deed amended accordingly, and, if any Unit shall have been taken, then Article V of the Master Deed shall also be amended to reflect such taking and to proportionally readjust the percentages of value of the remaining Co-owners based upon the continuing value of the Condominium of one hundred (100%) percent. Such amendment may be effected by an officer of the Association duly authorized by the Board of Directors without the necessity of execution or specific approval thereof by any Co-owner.
- (d) Notification of Mortgagees. In the event any Unit in the Condominium, or any portion thereof, or the Common Elements or any portion thereof, is made the subject matter of any condemnation or eminent domain proceeding or is otherwise sought to be acquired by a condemning authority, the Association promptly shall so notify each institutional holder of a first mortgage lien on any of the Units in the Condominium.

Section 8. Mortgages Held by FHLMC; Other Institutional Holders. In the event any mortgage in the Condominium is held by the Federal Home Loan Mortgage Corporation (“FHLMC”) then, upon request thereof by FHLMC, the Association shall give it written notice at such address as it may, from time to time, direct of any loss to or taking of Common Elements of the Condominium if the loss or taking exceeds \$10,000.00 in amount or if damage to a Condominium Unit covered by a mortgage purchased in whole or in part by FHLMC exceeds \$1,000.00. The Association shall provide such other reasonable notice as may be required, from time to time, by other institutional holders of mortgages upon Units.

Section 9. Priority of Mortgagee Interests. Nothing contained in the Condominium Documents shall be construed to give a Condominium Unit owner, or any other party, priority over any rights or first mortgages of Condominium Units pursuant to their mortgages in the case of a distribution to Condominium Unit owners of insurance proceeds of condemnation awards for losses to or a taking of Condominium Units and/or Common Elements.

ARTICLE VI

RESTRICTIONS

Section 1. Residential Use. No unit in the Condominium shall be used for other than residential purposes and the Common Elements shall only be used for purposes consistent with those set forth in this Section. No Unit shall be used for commercial or business offices. The provisions of this Section shall not be construed to prohibit a Co-owner from maintaining a personal professional library, keeping personal, professional or business records or handling personal business or professional telephone calls in that Co-owner's Unit.

Section 2. Leasing and Rental.

- (a) Right to Lease. A Co-owner may lease his Unit for the same purposes set forth in Section 1 of this Article VI; provided that written disclosure of such lease transaction is submitted to the Board of Directors of the Association in the manner specified in subsection (b) below. No Co-owner shall lease less than an entire Unit in the Condominium and no tenant shall be permitted to occupy except under a written lease, the initial term of which is at least twelve (12) months, unless specifically approved in writing by the Association. Such written lease shall (i) require the lessee to comply with the Condominium Documents and rules and regulations of the Association; (ii) provide that failure to comply with the Condominium Documents and rules and regulations constitutes a default under the lease, and (iii) provide that the Board of Directors has the power to terminate the lease or to institute an action to evict the tenant and for money damages after fifteen (15) days prior written notice to the Condominium Unit Co-owner, in the event of a default by the tenant in the performance of the lease. The Board of Directors may suggest or require a standard form lease for use by Unit Co-owners. Each Co-owner of a Condominium Unit shall, promptly following the execution of any lease of a Condominium Unit, forward a conformed copy thereof to the Board of Directors. Under no circumstances shall transient tenants be accommodated. For purposes of this Section 2(a), a "transient tenant" is a non-Co-owner residing in a Condominium Unit for less than sixty (60) days, who has paid consideration therefore. The terms of all leases, occupancy agreements and occupancy arrangements shall incorporate, or be deemed to incorporate, all of the provisions of the Condominium Documents. Tenants and non-Co-owner occupants shall comply with all of the conditions of the Condominium Documents and all leases, rental agreements, and occupancy agreements shall so state. The Developer may lease any number of Units in the Condominium and for such term(s) as it, in its discretion, may elect.
- (b) Leasing Procedures. A Co-owner, including the Developer, desiring to rent or lease a Unit shall disclose that fact in writing to the Association at least ten (10) days before presenting a lease form to a potential lessee of the Unit and, at the same time, shall supply the Association with a copy of the exact lease form for its review for its compliance with the Condominium Documents. Co-owners who do not live in the Unit they own must keep the Association informed of their current correct address and phone

number(s). If the Developer desires to rent Units before the Transitional Control Date, it shall notify either the Advisory Committee or each Co-owner in writing. The Board of Directors may charge such reasonable administrative fees for reviewing, approving, and monitoring lease transactions in accordance with this Article VI, Section 2 as the Board, in its discretion, may establish. Any such administrative fees shall be assessed to and collected from the leasing Co-owner in the same manner as the collection of assessments under Article II hereof. This provision shall also apply to occupancy agreements.

(c) Violation of Condominium Documents by Tenants or Non-Co-owner Occupants. If the Association determine that the tenant or non-Co-owner occupant has failed to comply with the conditions of the Condominium Documents, the Association shall take the following action:

- (1) The Association shall notify the Co-owner by certified mail advising of the alleged violation by the tenant or non-Co-owner occupant.
- (2) The Co-owner shall have fifteen (15) days after receipt of such notice to investigate and correct the alleged breach by the tenant or non-Co-owner occupant or advise the Association that a violation has not occurred.
- (3) If after fifteen (15) days the Association believes that the alleged breach is not cured or may be repeated, it may institute on its own behalf or derivatively by the Co-owners on behalf of the Association, if it is under the control of the Developer, an action for eviction against the tenant or non-Co-owner occupant and simultaneously for money damages in the same action against the Co-owner and tenant or non-Co-owner occupant for breach of the conditions of the Condominium Documents. The relief set forth in this subsection may be summary proceeding. The Association may hold both the tenant or non-Co-owner occupant and the Co-owner liable for any damages caused by the Co-owner or non-Co-owner occupant in connection with the Condominium Unit or the Condominium and for actual legal fees and costs incurred by the Association in connection with legal proceedings hereunder.
- (4) Arrearage in Condominium Assessments. When a Co-owner is in arrearage to the Association for assessments, the Association may give written notice of the arrearage to a tenant or non-Co-owner occupant occupying a Co-owner's Condominium Unit under a lease, rental or occupancy agreement and the tenant or non-Co-owner occupant, after receiving the notice, shall deduct from rental payments due the Co-owner the arrearage and future assessments as they fall due and pay them to the Association. The deductions shall not be a breach of the rental agreement, lease or occupancy agreement by the tenant or non-co-owner occupant. If the tenant, after being notified, fails or refuses to remit rent otherwise due the Co-owner to the Association, then the Association may issue a statutory notice to quit for non-payment of rent to the tenant and shall have the right to enforce that notice by summary proceedings. The Association shall also have the right to initiate those proceedings. The form of lease used by any Co-owner shall explicitly contain the foregoing provisions.

Section 3. Alterations and Modifications of Units and Common Elements. Subject to the regulations and standards in the Genoa Township Zoning Ordinance and the Condominium Documents, no Co-owner shall make alterations in exterior appearance or make structural modifications to his Unit or make changes in any of the Common Elements, Limited or General, without the express written approval of the Board of Directors and of the Developer during the Construction and Sales Period. The Board of Directors, or the Developer, shall have the right to refuse to approve any such plans, which are not suitable or desirable, in its opinion, for aesthetic or other reasons; and, in passing upon such plans and specifications, it shall have the right to take into consideration the suitability of the proposed structure, improvement or modification, the site upon which it is proposed to be constructed and the degree of harmony thereof with the Condominium Project as a whole. Satellite dishes, antennas, and any other multichannel multipoint distribution service shall be prohibited to the extent permitted by law, subject to any written rules and regulations promulgated by the Board of Directors of the Association under Article VI, Section 9 of these Bylaws. The board may only approve such modifications as do not impair the soundness, safety, utility or appearance of the Condominium Project. The Co-owner shall be responsible for the maintenance and repair of any such modification or improvement. In the event that the Co-owner fails to maintain and/or repair said modification or improvement to the satisfaction of the Association, the Association may undertake to maintain and/or repair same and assess the Co-owner the costs thereof and collect same from the Co-owner in the same manner as provided for the collection of assessments in Article II hereof. The Co-owner shall indemnify and hold the Association harmless from and against any and all costs, damages, and liabilities incurred in regard to said modification and/or improvement and shall be obligated to execute a Modification Agreement, if requested by the Association, as a condition for approval of such modification and/or improvement. No Co-owner shall in any way restrict access to any plumbing, water line, water line valves, water meter, sprinkler system valves, sump pump, or any element which affects an Association responsibility in any way. Should access to any facilities of any sort be required, the Association may remove any coverings or attachments of any nature that restrict such access and will have no responsibility for repairing, replacing or reinstalling any materials, whether or not installation thereof has been approved hereunder, that are damaged in the course of gaining such access, nor shall the Association be responsible for monetary damages of any sort arising out of actions taken to gain necessary access.

Section 4. Architectural Control.

- (a) General. The purpose of this Section is to assure the continued maintenance of the Condominium as a beautiful and harmonious residential development, and shall be binding upon both the Association and upon all Co-owners. Developer's rights under this article VI may, in Developer's discretion, be assigned to the Association or other successor to Developer. Developer may construct improvements upon the Condominium Premises that it may, in its sole discretion, elect to make without the necessity of prior consent of the Association or any other person or entity, subject only to the express limitations contained in the Condominium Documents.
- (b) Approval Required. During the Construction and Sales period, no building, structure or other improvement shall be constructed within a Unit or elsewhere within the Project, nor shall any exterior modifications be made to any existing

buildings, structure or improvement, nor shall any hedges, trees, or substantial plantings or landscaping modifications be made, unless plans and specifications therefore, containing such detail as the Developer may reasonably request, have been first approved in writing by the Developer. Construction of any building or other improvements must also receive any necessary approvals from the local building authority. Buildings shall be located within the building envelope. Developer shall have the right to refuse to approve any such plans or specifications, color and/or materials specifications, grading or landscaping plans, or building location plans which are not suitable or desirable in its opinion for aesthetic or other reasons, and in passing upon such plans and specifications it shall have the right to take into consideration the suitability of the proposed structure, improvement or modification, the site upon which it is proposed to be constructed, the proposed location within the Unit and the location of structures within adjoining Units and the degree of harmony thereof with the Condominium as a whole.

- (c) Construction Materials. All residences shall have finished exteriors of at least forty percent (40%) brick, stone or cultured stone. The Developer, in its sole discretion, shall have the right to approve deviations from these requirements and any such approved deviations shall not be deemed to be a waiver of enforcement of other unapproved deviations or designed to set precedent for future deviation requests.
- (d) Sizes of Residences. Each residence hereinafter constructed shall contain as a minimum the following sizes of finished living areas as calculated on exterior dimensions, exclusive of porches, patios, garages and basements:

One Story Home:	1,700 square feet
One and One-Half Story Home:	Minimum 1,200 square feet on the ground floor, with 2,200 square feet total
Two Store Home:	Minimum 1,200 square foot on the ground floor, With 2,300 square feet total.

No used or modular structures shall be placed on any Unit in the Condominium.

- (e) Construction Progress. All construction of any dwelling shall be completed within 12 months after commencement. The construction of any new dwelling or the repair of any residence damaged by fire or otherwise shall be completed as rapidly as possible and should the owner leave such building in an uncompleted condition for a period of more than one year, then the Developer or the Association or their agents or assigns are authorized to either tear down and clear from the Unit the uncompleted portion of such structure or to complete the same, at their option, and in either event, the expense incurred shall be charged against the owner's interest and shall become a lien on the Unit upon which the residence is located; subject to collection or enforcement. All excess

building materials shall be removed from the exterior of a Unit within 10 days after receipt of a final Certificate of Occupancy.

- (f) Temporary Structures. Temporary structures or buildings of any kind are expressly prohibited and temporary residence or occupancy shall not be permitted without a fully completed exterior of the residence being occupied and a Certificate of Occupancy having been issued.

Section 5. Activities. No immoral, improper, unlawful or offensive activity shall be carried on in any Unit or upon the Common Elements, Limited or General, nor shall anything be done which may be or become an annoyance or a nuisance to the Co-owners of the Condominium. No unreasonably noisy activity shall occur in or on the Common Elements or in any Unit at any time and disputes among Co-owner, arising as a result of this provision which cannot be amicably resolved, shall be arbitrated by the Association. No Co-owner shall do or permit anything to be done or keep or permit to be kept in his Unit or on the Common Elements anything that will increase the rate of insurance on the Condominium without the written approval of the Association, and each Co-owner shall pay to the Association the increased cost of insurance premiums resulting from any such activity or the maintenance of any such condition even if approved. Activities which are deemed offensive and are expressly prohibited include, but are not limited to, the following: any activity involving the use of firearms, air rifles, pellet guns, b-b guns, bows and arrows, sling shots or other similar dangerous weapons, projectiles or devices.

Section 6. Aesthetics. The Common Elements, Limited or General shall not be used for storage of supplies, materials, personal property or trash or refuse of any kind, except as provided in duly adopted rules and regulations of the Association. Garage doors shall be kept closed at all times except as may be reasonably necessary to gain access to or from any garage. No unsightly condition shall be maintained on any patio, deck, porch, balcony or other Limited Common Element, and only furniture and equipment consistent with the normal and reasonable use of such areas shall be permitted to remain there during seasons when such areas are reasonably in use and no furniture or equipment of any kind shall be stored thereon during seasons when such areas are not reasonably in use, except as may be provided in rules and regulations of the Association. Trash receptacles shall be maintained in areas designated therefore at all times and shall not be permitted to remain elsewhere on the Common Elements except for such short periods of time as may be reasonably necessary to permit periodic collection of trash. The Common Elements shall not be used in any way for the drying, shaking or airing of clothing or other fabrics. In general, no activity shall be carried on nor condition maintained by the Co-owner either in his Unit or upon the Common Elements, which is detrimental to the appearance of the Condominium.

Section 7. Common Element Maintenance. Roadways shall not be obstructed in any way nor shall they be used for purposes other than for which they are reasonably and obviously intended. No bicycles, vehicles, chairs, or benches may be left unattended on or about the Common Elements, except as may be provided by duly adopted rules and regulations of the Condominium. Use of any amenities in the Condominium may be limited to such times and in such manner as the Association shall determine by duly adopted regulations; provided, however, that use of any amenities in the Condominium shall be limited to the Co-owners who are members in good standing of the Association and to the tenants, land contract purchasers and/or other non-Co-owner occupants of the Condominium Units in which the Co-owner does not reside; provide, further,

however, that the non-resident Co-owner of such Condominium Units are members in good standing of the Association.

Section 8. Vehicles. No house trailers, commercial vehicles, boat trailers, boats, camping vehicles, camping trailers, mobile homes, dune buggies, motor homes, all-terrain vehicles, snowmobiles, snowmobile trailers or vehicles, other than automobiles, motorcycles, vehicles and trucks which are designed and used primarily for general transportation purposes, may be parked or stored upon the premises of the Condominium, unless enclosed in the Co-owner's garage with the door closed or in such other areas as may be specifically approved by the Association or parked in an area specifically designated therefore by the Association. Nothing herein contained shall be construed to require the Association to approve the parking or storage of such vehicles or to designate an area therefore. The Association shall not be responsible for any damages, costs or other liability arising from any failure to approve the parking or storage of such vehicles or to designate an area therefore. A Co-owner may not maintain more than four (4) vehicles upon the premises of the Condominium unless the Board of Directors specifically approves in writing otherwise. Co-owners must park their vehicles in their garage and in the Limited Common Element driveway, only, unless the Board of Directors has specifically approved otherwise in writing and/or as may otherwise be set forth in rules and regulations and promulgates pursuant to Article VI, Section 9 hereof. Garage doors shall be kept closed when not in use. Any non-assigned parking areas shall be reserved for the general use of the members and their guests. Commercial vehicles and trucks (except trucks designed and used primarily for personal transportation as herein provided) shall not be parked in or about the Condominium (except as above provided) unless while making deliveries or pick-ups in the normal course of business. For purposes of this Section, "commercial vehicles" means any vehicle that has any one of the following characteristics: (a) more than two (2) axles; or (b) gross vehicle weight rating in excess of 10,000 pounds. Noncommercial trucks such as Suburbans, Blazers, Bravadas, Jeeps, GMCs/Jimmys pickups, vans, and similar vehicles that are designed and used primarily for personal transportation shall be permissible. Nonoperational vehicles or vehicles with expired license plates shall not be parked or stored on the Condominium Premises without the written permission of the Board of Directors. Nonemergency maintenance or repair of motor vehicles shall not be permitted on the Condominium Premises. In the event that there arises a shortage of parking spaces, the Association, or the Developer, as the case may be, may allocate or assign available General Common Element parking spaces, from time to time, on an equitable basis, in accordance with Article IV, Section 1(a) of the Master Deed. The Association may cause vehicles parked or stored in violation of this Section to be removed from the Condominium Premises and the cost of such removal may be assessed and collected from the Co-owner of the Unit responsible for the presence of the vehicle in the manner provided in Article II hereof without liability to the Association. Co-owners shall, if the Association shall require, register with the Association all vehicles maintained on the Condominium Premises. The Board of Directors may promulgate reasonable rules and regulations governing the parking of vehicles in the Condominium consistent with the provisions hereof.

Section 9. Advertising. No signs or other advertising devices shall be displayed which are visible from the exterior of a Unit or on the Common Elements, excluding "For Sale" signs, without written permission from the Association and, during the Construction and Sale Period, from the Developer.

Section 10. Regulations. Reasonable rules or regulations consistent with the Act, the Master Deed and these Bylaws, concerning the use and operation of the Condominium may be made from time to time by the Board of Directors of the Association, including the First Board of Directors (or its successors appointed by the Developer prior to the First Annual Meeting of the entire Association held as provided in Article X, Section 2 of these Bylaws). Copies of all such rules and/or regulations and amendments thereto shall be furnished to all Co-owner and shall become effective thirty (30) days after mailing or delivery thereof to the designated voting representative of each Co-owner. Any such rule or regulation or amendment may be revoked at any time by the affirmative vote of more than fifty percent (50%) of all Co-owner, in number and in value, except that a Co-owner may not revoke any rule or regulation prior to the First Annual Meeting of the entire Association.

Section 11. Right of Access of Association. The Association or its duly authorized agents shall have access to any Limited Common Element from time to time, during reasonable working hours, upon notice to the Co-owner thereof, as may be necessary for the maintenance, repair or replacement of any of the Common elements. This right of access shall include, without any implication of limitation, the right of the Association to obtain access during reasonable hours and upon reasonable notice to water meters, sprinkler controls and valves, sump pumps and other Common Elements located within Limited Common Elements for monitoring, inspection, maintenance, repair or replacement thereof. The Association or its agent shall also have access to each Unit and any Limited Common Elements appurtenant thereto at all times without notice as may be necessary to make emergency repairs to prevent damage to the Common Elements or to another Unit and/or to protect the safety and/or welfare of the inhabitants of the Condominium.

Section 12. Walls and Fences. Fences may not be installed in the front of any Unit. Fences may be installed in the back of any unit provided that the fence is less than 48 inches tall and is split rail in nature. Further, fences may only be installed if permitted by Genoa Township and approved by the Board of Directors and, during the Construction and Sales Period, by the Developer. Any Co-owner intending to construct any fence, in addition to Township submissions, must submit to the Board of Directors, and the Developer, if applicable, a detailed description and proposed layout showing size, location, materials, shape, landscaping, fencing, screening, and type of construction. The Board of Directors, and the Developer, if applicable, may attach any conditions it deems appropriate. Any approved fence must be maintained by the Co-owner in a safe and clean condition and must also be maintained in appearance consistent with the standards of the Condominium.

Section 13. Pools, Jacuzzis and Hot Tubs. Swimming pools, Jacuzzis, and hot tubs may be installed within a unit if permitted by Genoa Township and approved by the Developer during the Construction and Sales Period and, thereafter, by the Board of Directors. Any Co-owner intending to construct any pool, Jacuzzi, or hot tube, in addition to Township submissions, must submit to the Developer during the Construction and Sales Period and, thereafter, to the Board of Directors, a detailed description and proposed layout showing size, location, materials, shape, landscaping, fencing, screening, and type of construction. The Developer during the Construction and Sales Period and, thereafter, the Board of Directors may attach any conditions it deems appropriate. No above ground pools shall be permitted. Any approved pool, Jacuzzi, or hot tube, must be

maintained by the Co-owner in a safe and clean condition and must also be maintained in appearance consistent with the standards of the Condominium.

Section 14. Pets. Co-owners shall be permitted to maintain domesticated, household pets, provided however, that, unless otherwise permitted by Developer and/or the Association, not more than three (3) dogs and/or cats may be maintained by a Co-owner at any one time. Pets shall be contained at all times and shall not be allowed to roam free throughout the Condominium. Pets shall not cause a nuisance in the Condominium and, in the case of dogs, shall not be allowed to bark incessantly. Co-owners shall keep their pets on a leash when walking them and shall be responsible to clean up after their pets.

Section 15. Tree Removal. Trees measuring greater than eight inches (8”) in diameter may not be removed from any Unit or the Common Elements without approval of the Developer during the Construction and Sales Period or the Association thereafter. Such approval shall not be unreasonably withheld. No Co-owner shall remove any tree outside of a building envelope without approval of the Developer during the Construction and Sales Period or the Association thereafter. Tree removal by a Co-owner within the rear or side yards of a residence is prohibited.

Section 16. Disposition of Interest in Unit by Sale or Lease. No Co-owner may dispose of a Unit in the Condominium, or any interest therein, by a sale or lease without complying with the following terms or conditions:

- (a) Notice to Association; Co-owner to Provide Condominium Documents to Purchaser or Tenant. A Co-owner intending to make a sale or lease of a Unit in the Condominium, or any interest therein, shall give written notice of such intention delivered to the Association at its registered office and shall furnish the name and address of the intended purchaser or lessee and such other information as the Association may reasonably require. Prior to the sale or lease of a Unit, the selling or leasing Co-owner shall provide a copy of the Condominium Master Deed (including Exhibits “A” and “B” thereto) and any amendments to the Master Deed, the Articles of Incorporation, and any amendment thereto, and the rules and regulations, as amended, if any, to the proposed purchaser or lessee. In the event a Co-owner shall fail to notify the Association of the proposed sale or lease or in the event a Co-owner shall fail to provide the prospective purchaser or lessee with a copy of the Master Deed referred to above, such Co-owner shall be liable for all costs and expenses, including attorney fees, that may be incurred by the Association as a result thereof or by reason of any noncompliance of such purchaser or lessee with the terms, provisions and restrictions set forth in the Master Deed; provided, however, that this provision shall not be construed so as to relieve the purchaser or lessee of his obligations to comply with the provisions of the Condominium Documents.
- (b) Developer and Mortgagees not Subject to Section. The Developer shall not be subject to this Section 16 in the sale or, except to the extent provided in Article VI, Section 2(b), the lease of any Unit in the Condominium which it owns, nor shall the holder of any mortgage which comes into possession of a Unit pursuant

to the remedies provided in the mortgage, or foreclosure of the mortgage, or deed in lieu of foreclosure, be subject to the provisions of this Section 16.

Section 17. Co-owner Maintenance. Each Co-owner shall maintain his Unit and any Limited Common Elements appurtenant thereto for which he has maintenance responsibility in a safe, clean and sanitary condition. Each Co-owner shall also use due care to avoid damaging any of the Common Elements including, but not limited to the telephone, water, plumbing, electrical, cable television, or other utility conduits and systems and other elements in any Unit which are appurtenant to or which may affect any other Unit. Each Co-owner shall be responsible for damages or costs to the Association, or to other Co-owners, as the case may be, resulting from negligent damage to or misuse of any of the Common Elements by him, or his family, guests, tenants, land contract purchasers, agents or invitees, unless such damages or costs are covered by insurance carried by the Association in which case there shall be no such responsibility (unless full reimbursement to the Association is excluded by virtue of a deductible provision, in which case the responsible Co-owner shall bear the expense to the extent of the deductible amount). Any costs or damages to the Association or to other Co-owners, as the case may be, may be assessed to and collected from the responsible Co-owner in the manner provided in Article II hereof. Each individual Co-owner shall indemnify the Association and all other Co-owners against such damages and costs, including attorneys' fees, and all such costs or damages to the Association may be assessed to and collected from the responsible Co-owner in the manner provided in the Condominium documents. The Co-owners shall have the responsibility to report to the Association any Common Element which has been damaged or which is otherwise in need of maintenance, repair or replacement.

Section 18. Reserved Rights of Developer. The Developer retains the following rights with respect to the Condominium:

- (a) During the Construction and Sales Period, as same is defined in Article III, Section 12 of the Master Deed, all of the following alterations are subject to Developer approval:
 - (i) The commencement, erection or maintenance of any buildings, fences, decks, wood privacy screens, patios, walls, walks or other structures or improvements.
 - (ii) The addition to, or change or alteration of any structure be made (including in color or design), except interior alterations which do not affect structural elements of any Unit.
 - (iii) The planting of hedges, trees or other substantial plantings or landscaping modifications.

The alterations listed may not be made until plans and specifications, acceptable to the Developer, showing the nature, kind, shape, heights, material, color, scheme, location and approximate cost of such structure or improvement and the grading or landscaping plan of the area to be affected shall have been submitted to and approved in writing by Developer, its successors or assigns, and a copy of said plans and specifications, as finally approved, lodged permanently with Developer.

Developer shall have the right to refuse to approve any such plan or specifications, or grading or landscaping plans which are not suitable or desirable in its opinion for aesthetic or other reasons. In passing upon any such plans, specifications, grading or landscaping, the Developer shall have the right to take into consideration the suitability of the proposed structure, improvement or modification, the site upon which it is proposed to effect the same, and the degree of harmony thereof with the Condominium as a whole, who will be requested to bear the maintenance, repair and/or repair responsibility for same and any adjoining properties under development or proposed to be developed by the Developer. The purpose of this Section is to assure the continued maintenance of the Condominium as a beautiful and harmonious residential development and shall be binding upon both the Association and upon all Co-owners.

Section 19. Developer's Rights to Furtherance of Development and Sale. None of the restrictions contained in this Article VI shall apply to the commercial activities or signs of billboards, if any, of the Developer during the Construction and Sales Period, or of the Association in furtherance of its powers and purposes set forth herein and in its Articles of Incorporation as the same may be amended from time to time. Notwithstanding anything to the contrary elsewhere herein contained, the Developer shall have the right to maintain a sales office, a business office, a construction office, model Units, storage areas and reasonable parking incident to the foregoing and such access to, from and over the Condominium as may be reasonable to enable development and sale of the entire Condominium by Developer and/or the development, sale or lease of other off-site property by Developer or its affiliates, and Developer may continue to do so during the entire Construction and Sales Period and the warranty period applicable to any Unit in the Condominium. The Developer shall restore the area so utilized to habitable status upon termination of use.

Section 20. Enforcement of Bylaws. The Condominium shall at all times be maintained in a manner consistent with the highest standards of a beautiful, serene, private, residential community for the benefit of the Co-owners and all persons interested in the Condominium. If at any time the Association fails or refuses to carry out its obligation to maintain, repair, replace and landscape in a manner consistent with the maintenance of such high standards, then Developer, or any entity to which it may assign this right, at its option, may elect to maintain, repair and/or replace any Common Elements, and/or to do any landscaping required by these Bylaws and to charge the cost thereof to the Association as an expense of administration. The Developer shall have the right to enforce these Bylaws throughout the Construction and Sales Period notwithstanding that it may no longer own a Unit in the Condominium, which right of enforcement may include (without limitation) an action to restrain the Association or any Co-owner from any activity prohibited by these Bylaws. The provisions of this Section 17 shall not be construed to be a warranty or representation of any kind regarding the physical condition of the Condominium.

Section 21. Assessment of Costs of Enforcement. Any and all costs, damages, expenses and/or attorney's fees incurred by the Association in enforcing any of the restrictions set forth in this Article VI and/or rules and regulations promulgated by the Board of Directors of the

Association under Article VI, Section 9 of these Bylaws, and any costs, expenses, and attorneys' fees incurred in collecting said costs, damages, and any expenses incurred as a result of the conduct of less than all those entitled to occupy the Condominium Project, or by their licensees or invitees, may be assessed to and collected from the responsible Co-owner in the manner provided in Article II hereof.

Section 22. Public and Environmental Health. Public water and sanitary waste disposal are not available to the Condominium and, therefore, each Unit is entirely dependent on on-site water and sewage disposal systems. All water and sewage disposal systems shall meet the standards established by the Livingston County Health Department. The following public and environmental health restrictions shall apply:

1. No Unit in the Condominium shall be used for other than a single family dwelling.
2. There shall be no future subdividing of any building which would utilize individual on-site sewage disposal and/or water supply systems.
3. "Mountain Top Estates" Site Condominium Project has been approved for fifteen (15) individual Units as described in Desine Inc. Site Plan, Project #183568, dated April 5, 2019. Subsurface wastewater disposal fields shall be located in the exact areas as depicted on the Site Plan.
4. All wells shall be drilled by a Michigan licensed well driller and be drilled to a depth that will penetrate a minimum of a ten (10) foot impervious clay layer and/or shall maintain a minimum of fifty (50) feet from the static water level to the bottom of the casing or top of the screen.
5. The test wells used to determine on-site water supply adequacy have been drilled on Unit 7 and 5923 Cunningham Lake Road. If these wells are not intended for the use as a potable water supply, then they must be properly abandoned according to Part 127, Act 368, P.A. 1976 of the Groundwater Quality Control Act.
6. The test wells throughout the Project which are not functional must be abandoned according to Part 127, Act 368, P.A. 1976 of the Groundwater Quality Control Act. Written certification as to the abandonment of these wells by a licensed well driller must be submitted to the Livingston County Health Department.
7. Well access for Units 1 through 6, Unit 9 and Units 13 through 15 may be difficult due to steep slopes in the proposed well locations. Therefore, prior to issuance of a permit, a detailed diagram must be submitted to the Livingston County Health Department regarding access to these proposed locations.
8. There shall be no underground utility lines located within the areas designated as active and reserve septic system areas.
9. The reserve septic locations as designated on the site plan on file at the Livingston County Health Department must be maintained vacant and accessible for future sewage disposal uses.
10. Prior to the issuance of permits for Unit 15, individual engineered grading plans showing elevation and design specifications for both proposed active and reserve septic areas along with the house, well, and utility locations shall be

submitted to the Livingston County Health Department for review and approval. Due to the fact that engineered plans shall be required along with written engineer approval after the septic areas have been prepared, the cost of the system may be higher than a typical conventional sewage disposal system.

11. The active and reserve septic areas shall be prepared according to the information submitted by the engineer on Units 9 and 10. Elevation and design specifications shall be submitted to the Livingston County Health Department for review and approval. Engineer certification is required indicating that these Unit areas have been prepared under engineer guidelines with written certification along with an “as-built” drawing depicting the original grades and final constructed grades in the cut or filled areas.
12. The on-site sewage disposal systems for Units 1 through 3, Unit 7, Unit 8, and Units 11 through 13 will require the excavation of slow permeable soils to a more permeable soil ranging between 4 to 7 feet in depth. Due to the fact that unsuitable soils will be excavated in the area and replaced with a clean sharp sand, the cost of the system may be higher than a conventional sewage disposal system.
13. Unit 1, Unit 6 and Unit 10 will require an enlarged system due to the heavy soil structure witnessed on these Units. These Unit owners may refer to the soil conditions on file at the Livingston County Health Department.
14. The engineer must give written certification that any additional grades, filling and/or land balancing that has taken place as part of the construction of the Project has not affected the placement for either the active or reserve sewage disposal systems. This certification must be given stating that there has been no change on any affected Units.
15. Written engineer certification must be given which indicates that all storm drains which are within fifty (50’) feet (greater than 25 feet) to the proposed active or reserve septic system areas have been sealed with a water tight premium joint material. All septic systems shall maintain no less than 50 feet from any detention/retention pond unless approved by the Livingston County Health Department.
16. A 1,400 square foot area has been designated on each Unit for the active and reserve sewage disposal systems to accommodate a typical four bedroom single family home. Proposed homes exceeding four bedrooms must show that sufficient area exists for both active and reserve sewage systems which meet all acceptable isolation distances.
17. There shall be no activity within any regulated wetlands unless permits have been obtained from the Michigan Department of Environmental Quality.
18. All public and environmental health restrictions placed on the “Mountain Top Estates” Site Condominium are not severable and shall not expire under any circumstances unless otherwise amended or approved by the Livingston County Health Department.

ARTICLE VII

JUDICIAL ACTIONS AND CLAIMS

Actions on behalf of and against the Co-owner shall be brought in the name of the Association. Subject to the express limitations on actions in these Bylaws and in the Association's Articles of Incorporation, the Association may assert, defend or settle claims on behalf of all Co-owners in connection with the Common Elements of the Condominium. As provided in the Articles of Incorporation of the Association and these Bylaws, the commencement of any civil action (other than one to enforce these Bylaws or collect delinquent assessments) shall require the approval of a sixty-six and two-thirds percent (66 2/3%) of all Co-owners, in number and in value, and shall be governed by the requirements of this Article II. The requirements of this Article VII will ensure that the Co-owners are fully informed regarding the prospects and likely costs of any civil action the Association proposed to engage in, as well as the ongoing status of any civil actions actually filed by the Association. These requirements are imposed in order to reduce both the cost of litigation and the risk of improvident litigation, and in order to avoid the waste of the Association's assets in litigation where reasonable and prudent alternatives to the litigation exist. Each Co-owner and the Developer shall have standing to sue to enforce the requirements of this Article VII. The following procedures and requirements apply to the Association's commencement of any civil action other than an action to enforce these Bylaws or to collect delinquent assessments.

Section 1. Board of Directors' Recommendation to Co-owners. The Association's Board of Directors shall be responsible in the first instance for recommending to the Co-owners that a civil action be filed, and supervising and directing any civil actions that are filed.

Section 2. Litigation Evaluation Meeting. Before an attorney is engaged for purposes of filing a civil action on behalf of the Association, the Board of Directors shall call a special meeting of the Co-owners ("litigation evaluation meeting") for the express purpose of valuating the merits of the proposed civil action. The written notice to the Co-owners of the date, time and place of the litigation evaluation meeting shall be sent to all Co-owners not less than twenty (20) days before the date of the meeting and shall include the following information copied onto 8-1/2" x 11" paper:

- (a) A certified resolution of the Board of Directors setting forth in detail the concerns of the Board of Directors giving rise to the need to file a civil action and further certifying that:
 - (1) Is in the best interests of the Association to file a lawsuit;
 - (2) That at least one member of the Board of Directors has personally made a good faith effort to negotiate a settlement with the putative defendant(s) on behalf of the Association, without success;
 - (3) Litigation is the only prudent, feasible and reasonable alternative; and
 - (4) The Board of Directors' proposed attorney for the civil action is of the written opinion that litigation is the Association's most reasonable and prudent alternative.
- (b) A written summary of the relevant experience of the attorney ("litigation attorney") the Board of Directors recommends be retained to represent the Association in the proposed civil action, including the following information:
 - (1) The number of years the litigation attorney has practiced law; and

- (2) The name and address of every condominium and homeowner Association for which the attorney has filed a civil action in any court, together with the case number, county and court in which each civil action was filed.
- (c) The litigation attorney's written estimate of the amount of the Association's likely recovery in the proposed lawsuit, net of legal fees, court costs, expert witness fees and all other expenses expected to be incurred in the litigation.
- (d) The litigation attorney's written estimate of the cost of the civil action through a trial on the merits of the case (total estimated cost"). The total estimated cost of the civil action shall include the litigation attorney's expected fees, court costs, expert witness fees, and all other expenses expected to be incurred in the civil action.
- (e) The litigation attorney's proposed written fee agreement.
- (f) The amount to be specially assessed against each Unit in the Condominium to fund the estimated cost of the civil action both in total and on a monthly per Unit basis, as required by Section 6 of this Article VII.

Section 3. Independent Expert Opinion. If the lawsuit relates to the condition of any of the Common Elements of the Condominium, the Board of Directors shall obtain a written independent expert opinion as to reasonable and practical alternative approaches to repairing the problems with the Common Elements, which shall set forth the estimated costs and expected viability of each alternative. In obtaining the independent expert opinion required by the preceding sentence, the Board of Directors shall conduct its own investigation as to the qualifications of any expert and shall not retain any expert recommended by the litigation attorney or any other attorney with whom the Board of Directors consults. The purpose of the independent expert opinion is to avoid any potential confusion regarding the condition of the Common Elements that might be created by a report prepared as an instrument of advocacy for use in a civil action. The independent expert opinion will ensure that the Co-owners have a realistic appraisal of the condition of the Common Elements, the likely cost of repairs to or replacement of the same, and the reasonable and prudent repair and replacement alternatives. The independent expert opinion shall be sent to all Co-owners with the written notice of the litigation evaluation meeting.

Section 4. Fee Agreement with Litigation Attorney. The Association shall have a written fee agreement with the litigation attorney, and any other attorney retained to handle the proposed civil action. The Association shall not enter into any fee agreement that is a combination of the retained attorney's hourly rate and a contingent fee arrangement unless the existence of the agreement is disclosed to the Co-owners in the text of the Association's written notice to the Co-owners of the litigation evaluation meeting.

Section 5. Co-owner Vote Required. At the litigation evaluation meeting, the Co-owners shall vote on whether to authorize the Board of Directors to proceed with the proposed civil action and whether the matter should be handled by the litigation attorney. The commencement of any civil action by the Association) other than a suite to enforce these Bylaws or collect delinquent assessments) and the retention of the litigation attorney shall require the approval of sixty-six and two-thirds (66 2/3%) percent of all Co-owners, in number and in value. In the event the litigation attorney is not approved, the entire litigation attorney evaluation and approval process set forth in Section 2 hereinabove and in this Section 5 shall be conducted prior to the retention of another attorney for this purpose. Any proxies to be voted at the litigation evaluation meeting must be signed at least seven (7) days prior to the litigation evaluation meeting.

Section 6. Attorney's Written Report. During the course of any civil action authorized by the Co-owner's pursuant to this Article VII, the retained attorney shall submit a written report ("attorney's written report") to the Board of Directors every thirty (30) days setting forth:

- (a) The attorney's fees, the fees of any experts retained by the attorney or the Association, and all other costs of the litigation during the thirty (30) day period immediately preceding the date of the attorney's written report ("reporting period").
- (b) All actions taken in the civil action during the reporting period, together with copies of all pleadings, court papers and correspondence filed with the court or sent to opposing counsel during the reporting period.
- (c) A detailed description of all discussions with opposing counsel during the reporting period, written and oral, including, but not limited to, settlement discussions.
- (d) The costs incurred in the civil action through the date of the written report, as compared to the attorney's estimated total cost of the civil action.
- (e) Whether the originally estimated total cost of the civil action remains accurate.

Section 7. Monthly Board Meetings. The Board of Directors shall meet monthly during the course of any civil action to discuss and review:

- (a) The status of the litigation;
- (b) The status of settlement efforts, if any; and
- (c) The attorney's written report.

Section 8. Changes in the Litigation Special Assessment. If, at any time during the course of a civil action, the Board of Directors determines that the originally estimated total cost of the civil action or any revision thereof is inaccurate, the Board of Directors shall immediately prepare a revised estimate of the total cost of the civil action. If the revised estimate exceeds the litigation special assessment previously approved by the Co-owners, the Board of Directors shall call a special meeting of the Co-owners to review the status of the litigation, and to allow the Co-owners to vote on whether to continue the civil action and increase the litigation special assessment. The meeting shall have the same quorum and voting requirements as a litigation evaluation meeting.

Section 9. Disclosure of Litigation Expenses. The attorneys' fees, court costs, expert witness fees and all other expenses of any civil action filed by the Association ("litigation expenses") shall be fully disclosed to Co-owners in the Association's annual budget. The litigation expenses for each civil action filed by the Association shall be listed as a separate line item captioned "litigation expenses" in the Association's annual budget.

ARTICLE VIII

MORTGAGES

Section 1. Notice to Association. Any Co-owner who mortgages his Unit shall notify the Association of the name and address of the mortgagee and the Association shall maintain such information in a book entitled "Mortgages of Units". The Association shall report any unpaid assessments due from the Co-owner of such Unit to the holder of any first mortgage covering such

Unit and Co-owners shall be deemed to specifically authorize said action pursuant to these bylaws. The Association shall give to the holder of any first mortgage covering any Unit in the Condominium written notification of any other default in the performance of the obligations of the Co-owner of such Unit that is not cured within sixty (60) days.

Section 2. Insurance. The Association shall notify each mortgagee appearing in said book of the name of each company insuring the Condominium against fire, perils covered by extended coverage, and vandalism and malicious mischief and the amounts of such coverage.

Section 3. Notification of Meetings. Upon request submitted to the Association, any institutional holder of a first mortgage lien on any Unit in the Condominium shall be entitled to receive written notification of every meeting of the members of the Association and to designate a representative to attend such meeting.

ARTICLE IV

VOTING

Section 1. Vote. Except as limited in these Bylaws, each Co-owner shall be entitled to one (1) vote for each Condominium Unit owned when voting by number and one (1) vote, the value of which shall equal the total of the percentages allocated to the Units owned by such Co-owner as set forth in Article V of the Master Deed, when voting by value. Voting shall be by value except in those instances when voting is specifically required to be both in number and in value.

Section 2. Eligibility to Vote. No Co-owner, other than the Developer, shall be entitled to vote at any meeting of the Association until he has presented a deed or other evidence of ownership of a Unit in the Condominium to the Association. No Co-owner, other than the Developer, shall be entitled to vote prior to the First Annual Meeting of members held in accordance with Article X, Section 2, except as specifically provided in Article X, Section 2. The vote of each Co-owner may be cast only by the individual representative designated by such Co-owner in the notice required in Section 3 of this Article IX below or by a proxy given by such individual representative except as otherwise provided herein in Article III, Section 4 hereinabove. The Developer shall be the only person entitled to vote at a meeting of the Association until the First Annual Meeting of members and shall be entitled to vote during such period notwithstanding the fact that the Developer may own no units at some time or from time to time during such period. At and after the First Annual Meeting, the Developer shall be entitled to vote for each Unit which it owns.

Section 3. Designation of Voting Representative. Each Co-owner shall file a written notice with the Association designating the individual representative who shall vote at meetings of the Association, sign petitions and receive all notices and other communications from the Association on behalf of such Co-owner. Such notice shall state the name, address and telephone number of the individual representative designated, the number or numbers of the Condominium Unit or Units owned by the Co-owner, and the name, address and telephone number of each person, firm, corporation, limited liability partnership, limited liability company, partnership, association, trust, or other entity who is the Co-owner. The individual representative designated may be changed by the Co-owner at any time by filing a new notice in the manner herein provided.

Section 4. Quorum. The presence in person or by proxy of thirty-five (35%) percent in number and in value of the Co-owners qualified to vote shall constitute a quorum for holding a meeting of the members of the Association except for voting on questions specifically provided hereinto require a greater quorum or where voting in person is required by the Bylaws. The written absentee ballot of any person furnished at or prior any duly called meeting at which meeting said person is not otherwise present in person or by proxy shall be counted in determining the presence of a quorum with respect to the question upon which the ballot is case except where prohibited herein.

Section 5. Voting. Votes may be cast in person or by proxy or by a written absentee ballot duly signed by the designated voting representative not present at a given meeting in person or by proxy, except as otherwise provided herein in Article III, Section 4, hereinabove. Proxies and any absentee ballots must be filed with the Secretary of the Association at or before the appointed time of each meeting of the members of the Association. Cumulative voting shall not be permitted.

Section 6. Majority. A majority, except where otherwise provided herein, shall consist of more than fifty (50%) percent in value of those qualified to vote and present in person or by proxy (or absentee ballot, if applicable) at a given meeting of the members of the Association. Whenever provided specifically herein, the requisite affirmative vote may be required to exceed the simple majority hereinabove set forth and may require a designated percentage in both number and value of all Co-owners and may require that votes be cast in person.

ARTICLE X

MEETINGS

Section 1. Place of Meeting. Meetings of the Association shall be held at the principal office of the Association or at such other suitable place convenient to the Co-owners as may be designated by the Board of Directors. Meetings of the Association shall be conducted in accordance with Robert's Rules of Order, or some other generally recognized manual of parliamentary procedure, when not otherwise in conflict with the Condominium Documents (as defined in the Master Deed) or the laws of the State of Michigan.

Section 2. First Annual Meeting. The First Annual Meeting of members of the Association may be convened only by the Developer and may be called at any time after more than fifty (50%) percent in number of the Units that may be created in Mountain Top Estates Condominium have been conveyed and the purchasers thereof qualified as members of the Association. In no event, however, shall such meeting be called later than fifty-four (54) months after the conveyance of legal or equitable title to non-developer Co-owner of a Unit in the Condominium, whichever first occurs. The Developer may call meetings of members for informative or other appropriate purposes prior to the First Annual Meeting of members and no such meeting shall be construed as the First Annual Meeting of members. The date, time and place of such meeting shall be set by the Board of Directors, and at least ten (10) days written notice thereof shall be given to each Co-owner. The phrase "Units that may be created" as used in this paragraph and elsewhere in the Condominium Documents refers to the maximum number of Units which the Developer is permitted under the Condominium Documents to include in the Condominium.

Section 3. Annual Meetings. Annual meetings of members of the Association shall be held in the month of May each succeeding year after the year in which the First Annual Meeting is held, on such date and at such time and place as shall be determined by the Board of Directors; provided, however, that the second annual meeting shall not be held sooner than eight (8) months after the date of the First Annual Meeting. At such meetings there shall be elected by ballot of the Co-owners a Board of Directors in accordance with the requirements of Article XII of these Bylaws. The Co-owner may also transact at annual meetings such other business of the Association as may be properly come before them.

Section 4. Special Meetings. It shall be the duty of the President to call a special meeting of the Co-owners as directed by resolution of the Board of Directors. The President shall also call a special meeting upon a petition signed by one-third (1/3) of the Co-owners in number presented to the Secretary of the Association, but only after the First Annual Meeting has been held or at the request of the Developer. A Co-owner must be eligible to vote at a meeting of members to validly sign a petition. Notice of any special meeting shall state the time and place of such meeting and the purposes thereof. No business shall be transacted at a special meeting except as stated in the notice.

Section 5. Notice of Meetings. It shall be the duty of the Secretary (or other Association officer in the Secretary's absence) to serve a notice of each annual or special meeting, stating the purpose thereof as well as of the time and place where it is to be held, upon each Co-owner of record, at least ten (10) days but not more than sixty (60) days prior to such meeting, except for the Litigation Evaluation Meeting which notice requirements are prescribed in Article VII, Section 2 hereinabove. The mailing, postage prepaid, of a notice of the representative of each Co-owner at the address shown in the notice required to be filed with the Association by Article IX, Section 3 of these Bylaws shall be deemed notice served. Any member may, by written waiver of notice signed by such member, waive such notice, and such waiver, when filed in the records of the Association, shall be deemed due notice.

Section 6. Adjournment. If any meeting of Co-owners cannot be held because a quorum is not in attendance, the Co-owners who are present may adjourn the meeting to a time not less than forty-eight (48) hours from the time the original meeting was called to attempt to obtain a quorum.

Section 7. Order of Business. The order of business at all meetings of the members shall be as follows: (a) roll call to determine the voting power represented at the meeting; (b) proof of notice of meeting or waiver of notice; (c) reading of minutes of preceding meeting; (d) reports of officers; (e) reports of committees; (f) appointment of inspector of elections (at annual meetings or special meetings held for the purpose of election of directors of officers); (g) election of directors (at annual meetings or special meetings held for such a purpose); (h) unfinished business; (i) new business. Meetings of members shall be chaired by the most senior officer of the Association present at such meeting. For purposes of this Section, the order of seniority of officers shall be President, Vice President, Secretary, and Treasurer.

Section 8. Action Without Meeting. Any action which may be taken at a meeting of the members (except for the election or removal of directors) may be taken without a meeting by written ballot of the members, except for litigation referenced in Article III and Article VII above. Ballots shall be solicited in the same manner as provided in Section 5 above for the giving of notice

of meetings of members. Such solicitation shall specify: (a) the number of responses needed to meet the quorum requirements; (b) the percentage of approvals necessary to approve the action; and (c) the time by which ballots must be received in order to be counted. The form of written ballot shall afford an opportunity specify a choice between approval and disapproval of each matter and shall provide that, where the member specifies a choice, the vote shall be case in accordance therewith. Approval by written ballot shall be constituted by receipt within the time period specified in the solicitation of: (i) a number of ballots which equals or exceed the quorum which would be required if the action were taken at a meeting; and (ii) a number of approvals which equals or exceeds the number of votes which would be required for approval if the action were taken at a meeting at which the total number of votes cast was the same as the total number of ballots cast.

Section 9. Consent of Absentees. The transactions of any meeting of members, either annual or special, except the litigation evaluation meeting discussed in Article VII hereinabove, however called and noticed, shall be as valid as through made a t a meeting duly held after regular call and notice, if a quorum be present either in person or by proxy or by absentee ballot; and if, either before or after the meeting, each of the members not present in person or by proxy, or absentee ballot, signs a written waiver of notice, or a consent to the holding of such meeting or an approval of the minutes thereof. All such waivers, consents, or approvals shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 10. Minutes; Presumption of Notice. Minutes or a similar record of the proceedings of meetings of members, when signed by the president or Secretary, shall be presumed truthfully to evidence the matters set forth therein. A recitation in the minutes of any such meeting that notice of the meeting was properly given shall be prima facie evidence that such notice was given.

ARTICLE XI

ADVISORY COMMITTEE

Within one (1) year after conveyance of legal or equitable title to the first Unit in the Condominium to a purchaser or within one hundred twenty (120) days after conveyance to purchasers of one-third (1/3) of the Units that may be created, whichever first occurs, the Developer shall cause to be established an Advisory Committee consisting of at least three (3) non-developer Co-owners. The Committee shall be established and perpetuated in any manner the Developer deems advisable, except that if more than fifty (50%) percent in number of the non-developer Co-owners petition the Board of Directors for an election to select the Advisory Committee, then an election for such purpose shall be held. The purpose of the Advisory Committee shall be to facilitate Communications between the temporary Board of Directors and the other Co-owners and to aid in the transition of control of the Association from the Developer to the Co-owners. A Chairman of the Committee shall be selected by the members. The Advisory Committee shall cease to exit automatically when the non-developer Co-owners have the voting strength to elect a majority of the Board of Directors of the Association. The Developer may remove and replace at its discretion at any time any member of the Advisory Committee who has not been elected thereto by the Co-owners.

ARTICLE XII

BOARD OF DIRECTORS

Section 1. Qualifications of Directors. The affairs of the Association shall be governed by a Board of Directors, all of whom must be members in good standing of the Association or officers, partners, trustees, employees or agents of members of the Association except for the first Board of Directors designated in the Articles of Incorporation of the Association and any successors thereto appointed by the Developer. Directors shall serve without compensation.

Section 2. Election of Directors.

- (a) First Board of Directors. The first Board of Directors shall be comprised of one (1) person and such first Board of Directors, or its successors as selected by the Developer, shall manage the affairs of the Association until the appointment of the first non-developer Co-owners to the Board. Immediately prior to the appointment of the first non-developer Co-owner to the Board, the Board shall be increased in size to three (3) persons. Thereafter, elections for non-developer Co-owner directors shall be held as provided in subsections (b) and (c) below. The directors shall hold office until their successors are elected and hold their first meeting.
- (b) Appointment of Non-developer Co-owners to Board Prior to First Annual Meeting. Not later than one hundred twenty (120) days after the conveyance of legal or equitable title to non-developer Co-owners of twenty-five (25%) percent in number of the Units that may be created, at least one (1) director and not less than one-fourth (1/4) of the Board of Directors shall be elected by non-developer Co-owners. Not later than one hundred twenty (120) days after conveyance of legal or equitable title to non-developer Co-owners of fifty percent (50%) percent in number of the Units that may be created, not less than one-third (1/3) of the Board of Directors shall be elected by non-developer Co-owners. When the required number of conveyances has been reached, the Developer shall notify the non-developer Co-owners and request that they hold a meeting and elect the required director or directors, of the directors so elected, the Developer shall then immediately appoint such director or directors to the Board to serve until the First Annual Meeting of members unless he is removed pursuant to Section 7 of this Article or he resigns or become incapacitated.
- (c) Election of Directors After First Annual Meeting.
 - (i) Not later than one hundred twenty (120) days after conveyance of legal or equitable title to non-developer Co-owners of seventy-five (75%) percent in number of the Units, the non-developer Co-owners shall elect all directors on the Board, except that the Developer shall have the right to designate one (1) director as long as the Developer owns and offers for sale at least ten (10%) percent in number of the Units in the Condominium or as long as ten (10%) percent in number of the Units remain that may be created. Whenever the required conveyance level is achieved, a meeting of Co-owners shall be properly convened to effectuate this provision, even if the First Annual Meeting has already occurred.
 - (ii) Regardless of the percentage of Units which have been conveyed, upon the expiration of fifty-four (54) months after the first conveyance or legal or equitable title to a non-developer Co-owner of a Unit in the Condominium, the

non-developer Co-owners have the right to elect a number of members of the Board of Directors equal to the percentage of Units they own, and the Developer has the right to elect a number of members of the Board of Directors equal to the percentage of Units which are owned by the Developer and for which all assessments are payable by the Developer. This election may increase, but does not reduce, the minimum election and designation rights otherwise established in subsection (i) above. Application of this subsection does not require a change in the size of the Board of Directors.

- (iii) If the calculation of the percentage of members of the Board of Directors that the non-developer Co-owners have the right to elect under subsection (ii), or if the product of the number of the members of the Board of Directors multiplied by the percentage of Units held by the non-developer Co-owners under subsection (b) results in a right of non-developer Co-owners to elect a fractional number of members of the Board of Directors, then a fractional election right of 0.5 or greater shall be rounded up to the nearest whole number, which number shall be the number of members of the Board of Directors that the non-developer Co-owners have the right to elect. After application of this formula, the Developer has the right to elect the remaining members of the Board of Directors. Application of this subsection does not eliminate the right of the Developer to designate one (1) director as provided in subsection (i).
- (iv) At the First Annual Meeting, two (2) directors shall be elected for a term of two (2) years and one (1) director shall be elected for a term of one (1) year. At such meeting, all nominees shall stand for election as one slate and the two (2) persons receiving the highest number of votes shall be elected for a term of two (2) years and the one (1) person receiving the next highest number of votes shall be elected for a term of one (1) year. At each annual meeting held thereafter, either two (2) or one (1) directors shall be elected, depending upon the number of directors whose terms expire. After the First Annual Meeting, the term of office (except for two (2) directors elected at the First Annual Meeting) of each director shall be two (2) years. The directors shall hold office until their successors have been elected and hold their first meeting.
- (v) Once the Co-owners have acquired the right hereunder to elect a majority of the Board of Directors, annual meetings of Co-owners to elect directors and conduct other business shall be held in accordance with the provisions of Article X, Section hereof.

Section 3. Powers and Duties. The Board of Directors shall have the powers and duties necessary for the administration of the affairs of the Association and may do all acts and things as are not prohibited by the Condominium Documents or required thereby to be exercised and done by the Co-owners.

Section 4. Other Duties. In addition to the foregoing duties imposed by these Bylaws or any further duties which may be imposed by resolution of the members of the Association, the Board of Directors shall be responsible specifically for the following:

- (a) To manage and to administer the affairs of, and to maintain, the Condominium and the Common Elements thereof.

- (b) To levy and collect assessments against and from the Co-owner members of the Association and to use the proceeds thereof for the purposes of the Association.
- (c) To carry insurance and to collect and to allocate the proceeds thereof.
- (d) To rebuild improvements after casualty.
- (e) To contract for and employ persons, firms, corporations or other agents to assist in the management, operation, maintenance and administration of the Condominium.
- (f) To acquire, maintain and improve, and to buy, operate, manage, sell, convey, assign, mortgage or lease any real or personal property (including any Unit in the Condominium and easements, rights of way and licenses) on behalf of the Association in furtherance of any of the purposes of the Association.
- (g) To grant easements, rights of entry, rights of way, and licenses to, through, over, and with respect to Association property and/or the Common Elements of the Condominium on behalf of the members of the Association in furtherance of any of the purposes of the Association and to dedicate to the public any portion of the Common Elements of the Condominium; provided, however, that, subject to the provisions of the Master Deed, any such action shall also be approved by affirmative vote of more than sixty (60%) percent in number and in value of all Co-owners. The aforesaid sixty (60%) percent approval requirement shall not apply to sub-paragraph (h) below.
- (h) To grant such easements, licenses and other rights of entry, use and access, and to enter into any contract or agreement, including writing agreements, utility agreements, right of way agreements, access agreements and multi-unit agreements, and to the extent allowed by law, contracts for sharing of any installation or periodic subscriber fees as may be necessary, convenient or desirable to provide for telecommunications, videotext, broad band cable, satellite dish, antenna, multichannel multipoint distribution service and similar services (collectively "Telecommunications") to the Condominium or any Unit therein. Notwithstanding the foregoing, in no event shall the Board of Directors enter into any contract or agreement or grant any easement, license or right of entry or do any other act or thing which would violate any provision of any federal, state or local law or ordinance. Any and all sums paid by any Telecommunications or any other company or entity in connection with such service, including fees, if any, for the privilege of installing same, or sharing periodic subscriber service fees, shall be receipts affecting the administration of the Condominium, within the meaning of the Act, and shall be paid over to and shall be the property of the Association.
- (i) To borrow money and issue evidences of indebtedness in furtherance of any and all of the purposes of the Association and to secure the same by mortgage, pledge, or other lien on property owned by the Association; provided, however, that any such action shall also be approved by affirmative vote of more than sixty (60%) percent of all of Co-owners, unless same is a letter of credit and/or appeal bond for litigation.
- (j) To make and enforce reasonable rules and regulations in accordance with Article VI, Section 10 of these Bylaws and such other applicable provisions and

to make and enforce resolutions and policies in furtherance of any or all of the purposes of the Association or of the Condominium Documents.

- (k) To establish such committees as it deems necessary, convenient or desirable and to appoint persons thereto for the purpose of implementing the administration of the Condominium and to delegate to such committees any functions or responsibilities which are not by law or by the Condominium Documents required to be performed by the Board.
- (l) To make rules and regulations and/or to enter into agreements with institutional lenders the purposes of which are to obtain mortgage financing for Unit Co-owners which is acceptable for purchase by the Federal Home Loan Mortgage Corporation, the Federal National Mortgage Association and/or any other agency of the Federal government or the state of Michigan or to satisfy the requirements of the United States Department of Housing and Urban Development.
- (m) To enforce the provisions of the Condominium Documents.

Section 5. Management Agent. The board of Directors may employ for the Association an professional management agent (which may include the Developer or any person or entity related thereto, but which shall not be a Co-owner or resident or affiliated with a Co-owner or resident) at a reasonable compensation established by the Board to perform such duties and services as the Board shall authorize, including, but not limited to, the duties listed in Sections 3 and 4 of this Article, and the Board may delegate to such management agent any other duties or powers which are not by law or by the Condominium Documents required to be performed by or have the approval of the Board of Directors or the members of the Association. In no event shall the Board be authorized to enter into any contract with a professional management agent, or any other contract providing for services by the Developer, sponsor or builder, in which the maximum term is greater than three (3) years or which is not terminable by the Association upon ninety (90) days written notice thereof to the other party, and no such contract shall violate the provisions of Section 55 of the Act.

Section 6. Vacancies. Vacancies in the Board of Directors which occur after the Transitional Control Date caused by any reason other than the removal of a director by a vote of the members of the Association shall be filled by vote of the majority of the remaining directors, even though they may constitute less than a quorum, except that the Developer shall be solely entitled to fill the vacancy of any director whom it is permitted in the first instance, under these Bylaws to designate. Vacancies among non-developer Co-owners and shall be filled in the manner specified in Section 2(b) of this Article.

Section 7. Removal. Except for directors appointed by the Developer, at any regular or special meeting of the Association duly called with due notice of the removal action proposed to be taken, any one (1) or more of the directors may be removed with or without cause by the affirmative vote of more than fifty (50%) percent in number and in value of all of the Co-owners eligible to vote and a successor may then and there be elected to fill the vacancy thus created. Any director whose removal has been proposed by the Co-owners shall be given an opportunity to be heard at the meeting. The Developer may remove and replace any or all of the directors appointed by it at any time or from time to time in its sole discretion. Any director elected by the non-developer Co-owners to serve before the First Annual Meeting of Members may be removed

before the First Annual Meeting by the non-developer Co-owners in the same manner set forth in this Section 7 above for removal of directors generally.

Section 8. First Meeting. The first meeting of the newly elected Board of Directors shall be held within ten (10) days of election at such place as shall be fixed by the directors at the meeting at which such directors were elected, and no notice shall be necessary to the newly elected directors in order legally to constitute such meeting, providing a majority of the whole Board shall be present.

Section 9. Regular Meetings. Regular meetings of the Board of Directors may be held at such times and places as shall be determined by time-to-time by a majority of the Board of Directors, but at least two (2) such meetings shall be held during each fiscal year. Notice of regular meetings of the Board of Directors shall be called by the President or Secretary in like manner and on like notice on the written request of two (2) directors.

Section 10. Special Meetings. Special meetings of the Board of Directors may be called by the President upon three (3) days' notice to each director, given personally, by mail, telephone or telegraph, which notice shall state the time, place and purpose of the meeting. Special meetings of the Board of Directors shall be called by the President or Secretary in like manner and on like notice on the written request of two (2) directors.

Section 11. Waiver of Notice. Before or at any meeting of the Board of Directors, any director may, in writing, waive notice of such meeting and such waiver shall be deemed equivalent to the giving of such notice. Attendance by a director at any meeting of the Board shall be deemed a waiver of notice by him of the time and place thereof. If all the directors are present at any meeting of the Board, no notice shall be required and any business may be transacted at such meeting.

Section 12. Quorum. At all meetings of the Board of Directors, a majority of the directors shall constitute a quorum for the transaction of business, and the acts of the majority of the directors at a meeting at which a quorum is present shall be the acts of the Board of Directors. If, at any meeting of the Board of Directors, there is less than a quorum present, the majority of those persons may adjourn the meeting to a subsequent time upon twenty-four (24) hours prior written notice delivered to all directors not present. At any such adjourned meeting, any business which might have been transacted at the meeting as originally called may be transacted without further notice. The joinder of a director in the action of a meeting by signing and concurring in the minutes thereof, shall constitute the presence of such director for purposes of determining a quorum.

Section 13. Closing of Board of Directors Meetings to members; Privileged Minutes. The Board of Directors, in its discretion, may close a portion or all of any meeting of the Board of Directors to the members of the Association or may permit members of the Association to attend a portion or all of any meeting of the Board of Directors. Any member of the Association shall have the right to inspect, and make copies of, the minutes of the meetings of the Board of Directors; provided, however, that no member of the Association shall be entitled to review or copy any minutes or meetings of the Board of Directors to the extent that said minutes reference privileged communications between the Board of Directors and counsel for the Association, or any other

matter to which a privilege against disclosure pertains under Michigan Statute, common law, the Michigan Rules of Evidence, or the Michigan Court Rules.

Section 14. Action by Written Consent. Any action permitted to be taken by the Board of Directors at a meeting of the Board shall be valid if consented to in writing by the requisite majority of the Board of Directors.

Section 15. Actions of First Board of Directors Binding. All of the actions (including, without limitation, the adoption of these Bylaws and any rules and regulations, policies or resolutions for the Association, and any undertakings or contracts entered into with others on behalf of the Association) of the First Board of Directors of the Association names in its Articles of Incorporation or any successors thereto appointed by the Developer before the First Annual Meeting of members shall be binding upon the Association in the same manner as though such actions had been authorized by a Board of Directors duly elected by the members of the Association at the First Annual Meeting of members or at any subsequent annual meeting of members, provided that such actions are within the scope of the powers and duties which may be exercised by any Board of Directors as provided in the Condominium Documents.

Section 16. Fidelity Bonds. The Board of Directors shall require that all officers and employees of the Association handling or responsible for Association funds shall furnish adequate fidelity bonds. The premiums on such bonds shall be the expenses of the administration.

ARTICLE XIII

OFFICERS

Section 1. Officers. The principal officers of the Association shall be a President, who shall be a member of the Board of Directors, a Vice-President, Secretary and a Treasurer. The directors may appoint an Assistant Treasurer and an Assistant Secretary and such other officers as in their judgment may be necessary. Any two (2) offices, except that of President and Vice-President may be held by one (1) person. No Officer shall receive any compensation for acting as an Officer.

Section 2. Election. The officers of the Association shall be elected annually by the Board of Directors at the organizational meeting of each new Board and shall hold office at the pleasure of the Board.

Section 3. Removal. Upon affirmative vote of a majority of the members of the Board of Directors, any officer may be removed either with or without cause, and his successor elected at any regular meeting of the Board of Directors, or at any special meeting of the Board called for such purpose. No such removal action may be taken, however, unless the matter shall have been included in the notice of such meeting. The officer who is proposed to be removed shall be given an opportunity to be heard at the meeting.

Section 4. President. The President shall be the chief executive officer of the Association. The President shall preside and may vote at all meetings of the Association and Board of Directors. The President shall have all of the general powers and duties which are usually vested in the office of the President of an association, including, but not limited to, the power to appoint committees

from among the members of the Association from time-to-time as the President may in the President's discretion deem appropriate to assist in the conduct of the affairs of the Association.

Section 5. Vice-President. The Vice-President shall take the place of the President and perform the President's duties whenever the President shall be absent or unable to act. If neither the President nor the Vice-president is able to act, the Board of Directors shall appoint some other member of the Board to do so on an interim basis. The Vice-President shall also perform such other duties as shall from time-to-time be imposed upon the Vice-President by the Board of Directors.

Section 6. Secretary. The Secretary shall keep the minutes of all meetings of the Board of Directors and the minutes of all meetings of the members of the Association; the Secretary shall have charge of the corporate seal, if any, and of such books and papers as the Board of Directors may direct; the Secretary shall, in general, perform all duties incident to the office of the Secretary.

Section 7. Treasurer. The Treasurer shall have the responsibility for the Association funds and securities and shall be responsible for keeping full and accurate accounts of all receipts and disbursements in books belonging to the Association. The Treasurer shall be responsible for the deposit of all monies and other valuable effects in the name and to the credit of the Association, and in such depositories as may, from time-to-time be designated by the Board of Directors.

Section 8. Duties. The officers shall have such other duties, powers and responsibilities as shall, from time-to-time, be authorized by the Board of Directors.

ARTICLE XIV

SEAL

The Association may (but need not) have a seal. If the Board determines that the Association shall have a seal, then it shall have inscribed thereon the name of the Association, the words "corporate seal" and "Michigan".

ARTICLE XV

FINANCE

Section 1. Records. The Association shall keep detailed books of account showing all expenditures and receipts of administration, and which shall specify the maintenance and repair expenses of the Common Elements and any other expenses incurred by or on behalf of the Association and the Co-owners. The non-privileged Association books, records, and contracts concerning the administration and operation of the Condominium shall be open for inspection by the Co-owners and their mortgages during reasonable working hours, subject to such reasonable inspection procedures as may be established by the Board of Directors from time to time. The Association shall prepare and distribute to each Co-owner at least once a year a financial statement, the contents of which shall be identified by the Association. The books of account shall be audited at least annually by qualified independent auditors; provided, however, that such auditors need not

be certified public accountants nor does such audit need to be a certified audit. Any institutional holder of a first mortgage lien on any Unit in that Condominium shall be entitled to receive a copy of such annual audited financial request statement within ninety (90) days following the end of the Association's fiscal year upon request therefore. The cost of any such audit and any accounting expenses shall be expenses of administration.

Section 2. Fiscal Year. The fiscal year of the Association shall be an annual period commencing on such date as may be initially determined by the directors. Absent such determination by the Board of Directors, the fiscal year of the Association shall be the calendar year. The commencement date of the fiscal year shall be subject to change by the directors for accounting reasons or other good cause.

Section 3. Depositories. The funds of the Association shall be initially deposited in such bank or savings association as may be designated by the directors and shall be withdrawn only upon the check or order of such officers, employees or agents as are designated by resolution of the Board of Directors from time-to-time. The funds may be invested from time-to-time in accounts or deposit certificates of such banks or savings associations as are insured by the Federal Deposit Insurance Corporation and may also be invested in interest-bearing obligations of the United States Government or in such other depositories as may be adequately insured in the discretion of the Board of Directors.

ARTICLE XVI

INDEMNIFICATION OF OFFICERS AND DIRECTORS;

DIRECTORS' AND OFFICERS' INSURANCE

Section 1. Indemnification of Directors and Officers. The exception of willful and wanton misconduct and gross negligence, every director and every officer of the Association (including the First Board of Directors and any other director and/or officer of the Association appointed by the Developer) shall be indemnified by the Association against all expenses and liabilities, including actual and reasonable counsel fees and amounts paid in settlement incurred by or imposed upon him in connection with any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, or investigative and whether formal or informal, including actions by or in the right of the Association, to which he may be a party or in which he may become involved by reason of his being or having been a director or officer of the Association, whether or not he is a director or officer at the time such expenses are incurred, except as otherwise prohibited by law; providing that, in the event of any claim of reimbursement or indemnification hereunder based upon a settlement by the director or officer seeking such reimbursement or indemnification, the indemnification herein shall apply only if the Association (with the director seeking reimbursement abstaining) approves such settlement and reimbursement as being in the best interest of the Association. The foregoing right of indemnification shall be in addition to and not exclusive of all other rights to which such director or officer may be entitled. At least ten (10) days prior to payment of any indemnification which it has approved, the Association shall notify all Co-owners thereof.

Section 2. Directors' and Officers' Insurance. The Association shall provide liability insurance for every director and officer of the Association for the same purposes provided above in Section 1 and in such amounts as may reasonably insure against potential liability arising out of the performance of their respective duties. With the prior written consent of the Association, a director or an officer of the Association may waive any liability insurance for such director's or officer's personal benefit or other applicable statutory indemnification. No director or officer shall collect for the same expense or liability under Section 1 above and under this Section 2; however, to the extent that the liability insurance provided herein to a director or officer was not waived by such director or officer and is inadequate to pay any expenses or liabilities otherwise properly indemnifiable under the terms hereof, a director or officer shall be reimbursed or indemnified only for such excess amounts under Section 1 hereof or other applicable statutory indemnification.

ARTICLE XVII

AMENDMENTS

Section 1. Proposal. Amendments to these Bylaws may be proposed by the Board of Directors of the Association acting upon the vote of the majority of the directors or by one-third (1/3) or more of the Co-owners in number by instrument in writing signed by them.

Section 2. Meeting. Upon any such amendment being proposed, a meeting for consideration of the same shall be duly called in accordance with the provisions of these Bylaws.

Section 3. Voting. These Bylaws may be amended by the Co-owners at any regular annual meeting or a special meeting called for such purpose by an affirmative vote of not less than sixty-six and two-thirds (66-2/3%) percent in number and in value of all Co-owners and upon the approval of sixty-six and two-thirds (66-2/3%) percent of the mortgages, with each mortgagee to have one (1) vote for each mortgage held. During the Construction and Sales Period, these Bylaws may not be amended in any manner so as to materially affect and/or impair the rights of the Developer, unless said amendment has received the prior written consent of the Developer. Notwithstanding anything to the contrary, no amendment may be made to Article III, Section 4, and Article VII of these Bylaws at any time without the written consent of the Developer.

Section 4. By Developer. Prior to the Transitional Control Date, these Bylaws may be amended by the Developer without approval from any other person so long as any such amendment does not materially alter or change the rights of a Co-owner or mortgagee, including, but not limited to, amendments for the purpose of facilitating conventional mortgage loan financing for existing or prospective Co-owners and to enable the purchase of such mortgage loans by the Federal Home Loan Mortgage Corporation, the Federal National Mortgage Association and/or any other agency of the Federal government or the State of Michigan.

Section 5. When Effective. Any amendment to these Bylaws shall become effective upon recording of such amendment in the office of the Livingston County Register of Deeds.

Section 6. Binding. A copy of each amendment to these Bylaws shall be furnished to every member of the Association after adoption; provided, however, that any amendment to these Bylaws is adopted in accordance with this Article shall be binding upon all persons who have an

interest in the Condominium irrespective of whether such persons actually receive a copy of the amendment.

ARTICLE XVIII

COMPLIANCE

The Association of Co-owners and all present or future Co-owners, tenants, land contract purchasers, or any other persons acquiring an interest in or using the facilities of the Condominium in any manner are subject to and shall comply with the Act, as amended, and with the Condominium Documents, and the mere acquisition, occupancy or rental of any Unit or an interest therein or the utilization of or entry upon the Condominium Premises shall signify that the Condominium Documents are accepted and ratified. In event any provision of these Bylaws conflicts with any provision of the Master Deed, the Master Deed shall govern.

ARTICLE XIX

DEFINITIONS

All terms used herein shall have the same meaning as set forth in the Master Deed to which these Bylaws are attached as an Exhibit or as set forth in the Act.

ARTICLE XX

REMEDIES FOR DEFAULT

Section 1. Relief Available. Any default by a Co-owner shall entitle the Association or another Co-owner or Co-owners to the following relief:

- (a) Legal Action. Failure to comply with any of the terms and provisions of the Condominium Documents or the Act, including any of the rules and regulations promulgated by the Board of Directors of the Association hereunder, shall be grounds for relief, which may include without intending to limit the same, an action to recover sums due for damages, injunctive relief, foreclosure of lien (if default in payment of assessment) or any combination thereof, and such relief may be sought by the Association or, if appropriate, by an aggrieved Co-owner or Co-owners.
- (b) Recovery of Costs. In the event of a default of the Condominium Documents by a Co-owner, non-Co-owner resident and guest, the Association shall be entitled to recover from the Co-owner, non-Co-owner resident and guest, the pre-litigation costs and attorney fees incurred in obtaining their compliance with the Condominium Documents. In any proceeding arising because of an alleged default by any Co-owner, non-Co-owner and guest, the Association, if successful, shall be entitled to recover the costs of the proceeding and such reasonable attorney's fees, (not limited to statutory fees) as may be determined by the Court, but in no event shall any Co-owner be entitled

to recover such attorney's fees. The Association, if successful, shall also be entitled to recoup the costs and attorney's fees incurred in defending any claim, counterclaim or other matter from the Co-owner asserting the claim, counterclaim or other matter.

- (c) Removal and Abatement. The violation of any of the provisions of the Condominium Documents, including the rules and regulations promulgated by the Board of Directors of the Association hereunder, shall also give the Association, or its duly authorized agents, the right, in addition to the rights set forth above, to enter upon the Common Elements, Limited or General, or into any Unit, where reasonably necessary, and summarily remove and abate, at the expense of the Co-owner in violation, any structure, thing or condition existing or maintained contrary to the provisions of the Condominium Documents; provided, however, that judicial proceedings shall be instituted before items of construction are altered or demolished pursuant to this subsection. The Association shall have no liability to any Co-owner arising out of the exercise of its removal and abatement power authorized herein.
- (d) Assessment of Fines. The violation of any of the provisions of the Condominium Documents, including any of the rules and regulations promulgated by the Board of Directors of the Association hereunder, by any Co-owner, or his tenant or non-Co-owner occupant of his Unit, in addition to the rights set forth above, shall be grounds for assessment by the Association of a monetary fine for such violation. No fine may be assessed unless the rules and regulations establishing such fine have first been duly adopted by the Board of Directors of the Association and notice thereof given to all Co-owners in the same manner as prescribed in Article VI, Section 9 of these Bylaws. Thereafter, fines may be assessed only upon notice to the offending Co-owner and an opportunity for such Co-owner to appear before the Board no less than seven (7) days from the date of the notice and offer evidence in defense of the alleged violation. Upon finding an alleged violation after an opportunity for hearing has been provided, the Board of Directors may levy a fine in such amount as it, in its discretion, deems appropriate. All fines duly assessed may be collected in the same manner as provided in Article II of these Bylaws.

Section 2. Non-waiver of Right. The failure of the Association or of any Co-owner to enforce any right, provision, covenant or condition which may be granted by the Condominium Documents shall not constitute a waiver of the right of the Association or of any such Co-owner to enforce such right, provision, covenant or condition in the future.

Section 3. Cumulative Rights, Remedies, and Privileges. All rights, remedies and privileges granted to the Association or any Co-owner or Co-owners pursuant to any terms, provisions, covenants or conditions of the aforesaid Condominium Documents shall be deemed to be cumulative and the exercise of any one or more shall not be deemed to constitute an election of remedies, nor shall it preclude the party thus exercising the same from exercising such other and additional rights, remedies or privileges as may be available to such party at law or in equity.

Section 4. Enforcement of Provisions of Condominium Documents. A Co-owner may maintain an action against the Association and its officers and directors to compel such persons to enforce the terms and provisions of the Condominium Documents. A Co-owner may maintain an

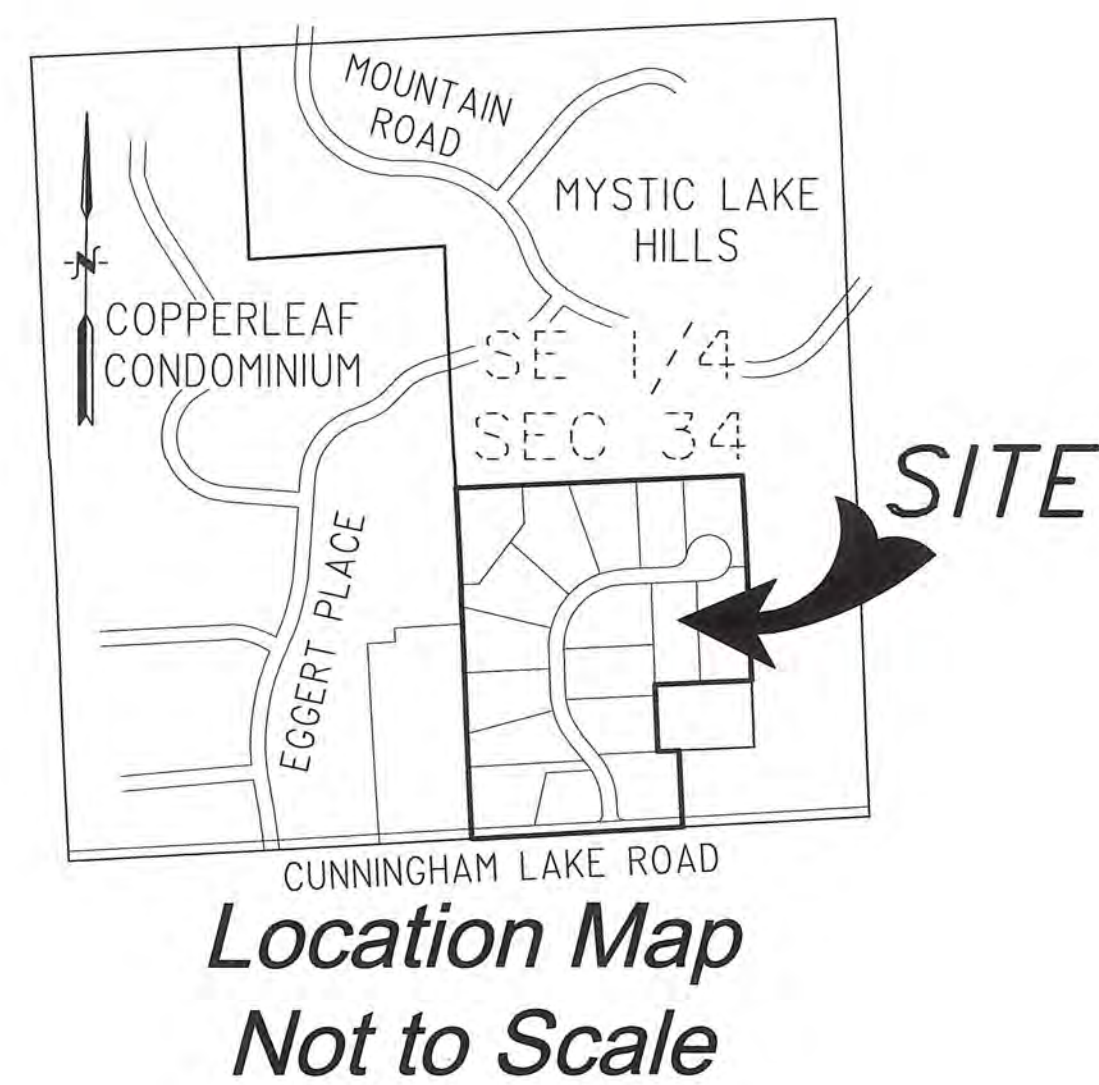
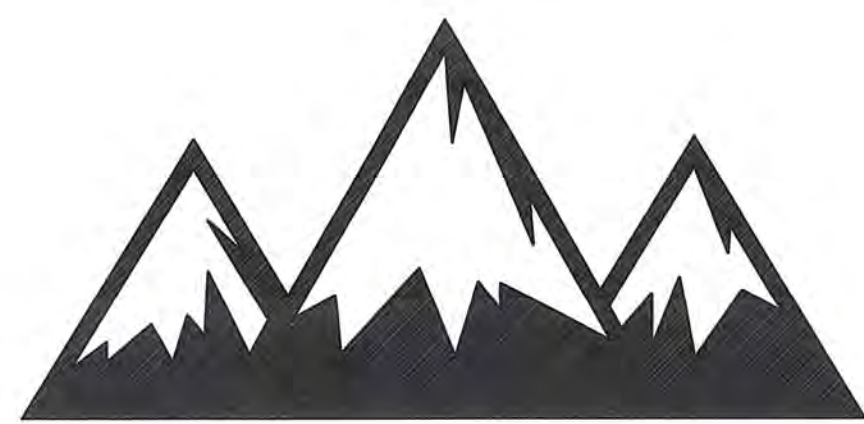
action against any other Co-owner for injunctive relief or for damages or any combination thereof for non-compliance with the terms and provisions of the Condominium Documents or the Act.

Any or all of the rights and powers granted or reserved to the Developer in the Condominium Documents or by law, including the right and power to approve or disapprove any act, use, or proposed action or any other matter or thing, may be assigned by it to any other entity or to the Association. Any such assignment or transfer shall be made by appropriate instrument in writing in which the assignee or transferee shall join for the purpose of evidencing its consent to the acceptance of such powers and rights and such assignee or transferee shall thereupon have the same rights and powers as herein given and reserved to the Developer. Any rights and powers reserved or retained by Developer or its successors shall expire and terminate, if not sooner assigned to the Association, at the conclusion of the Construction and Sales Period, as same is defined in Article III, Section 12 of the Master Deed. The immediately preceding sentence dealing with the expiration and termination of certain rights and powers granted or reserved to the Developer is intended to apply, insofar as the Developer is concerned, only to the Developer's rights to approve and control the administration of the Condominium and shall not, under any circumstances, be construed to apply to or cause the termination and expiration of any real property or contract rights granted or reserved to or for the benefit of the Developer or its successors and assigns in the Master Deed or elsewhere (including, but not limited to, litigation rights, access easements, utility easements and all other easements created and reserved in such documents), which shall not be terminable in any manner hereunder and which shall be governed only in accordance with the terms of their creation or reservation and not hereby.

ARTICLE XXI

SEVERABILITY

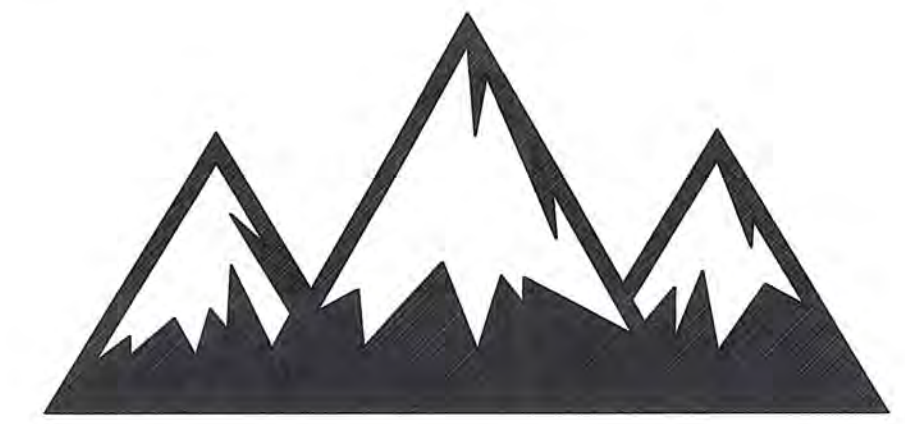
In the event that any of the terms, provisions, or covenants of these Bylaws or the Condominium Documents are held to be partially or wholly invalid or unenforceable for any reason whatsoever, such holding shall not affect, alter, modify or impair in any manner whatsoever any of the other terms, provisions or covenants of such documents or the remaining portions of any terms, provisions or covenants held to be partially invalid or unenforceable.



Mountain Top Estates

A Part of the Southeast 1/4 of Section 34
Town 2 North, Range 5 East
Genoa Township, Livingston County, Michigan

Livingston Condominium Subdivision Plan No. _____



ATTENTION: COUNTY REGISTER OF DEEDS
THE CONDOMINIUM PLAN NUMBER MUST BE ASSIGNED IN CONSECUTIVE SEQUENCE. WHEN A NUMBER HAS BEEN ASSIGNED TO THE PROJECT, IT MUST BE PROPERLY SHOWN IN THE TITLE OF THIS SHEET AND IN THE SURVEYOR'S CERTIFICATE ON SHEET 1.

NOTE:
THIS CONDOMINIUM SUBDIVISION PLAN IS NOT REQUIRED TO CONTAIN DETAILED PROJECT DESIGN PLANS PREPARED BY THE APPROPRIATE LICENSED DESIGN PROFESSIONAL. SUCH PROJECT DESIGN PLANS ARE FILED, AS PART OF THE CONSTRUCTION PERMIT APPLICATION, WITH THE ENFORCING AGENCY FOR THE STATE CONSTRUCTION CODE IN THE RELEVANT GOVERNMENTAL SUBDIVISION. THE ENFORCING AGENCY MAY BE A LOCAL BUILDING DEPARTMENT OR THE STATE DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS.

Mountain Top Estates

A parcel of land located in the Southeast quarter of Section 34, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, said parcel more fully described as:

Commencing at the Southeast corner of Section 34, Town 2 North, Range 5 East; thence S86°53'39"W 610.81 feet (as monumented L.C.R.C., L.S.C. #170M) (recorded as S87°27'50"W 620.79 feet) on South line of said Section to the **POINT OF BEGINNING**;

thence continuing S86°53'39"W 700.33 feet (recorded as S87°27'50"W 699.88 feet) along said South line of Section 34 and the nominal centerline of Cunningham Lake Road (33-foot wide 1/2 Right-of-Way);

thence N02°38'32"W 1163.72 feet (recorded as N02°41'06"W 1150.07 feet) along (in-part) the East line of "Copperleaf," according to the Master Deed thereof, as recorded in Liber 3924, Page 7604, Livingston County Records, as amended, if any, and designated as Livingston County Condominium Subdivision Plan No. 274;

thence N87°32'14"E 951.50 feet (recorded as N87°30'35"E 951.63 feet) along the South line of "Mystic Lake Hills Subdivision No. 2," according to the plat thereof, as recorded in Liber 18 of Plats, Pages 28 through 32, inclusive, Livingston County Records;

thence S02°32'30"E 680.78 feet (recorded as S02°33'20"E 681.00 feet);

thence S87°30'31"W 320.14 feet (recorded as S87°30'35"W, 320.00 feet);

thence S02°32'38"E 221.48 feet (recorded as S02°33'20"E 221.54 feet);

thence N87°28'54"E (recorded as N87°27'50"E) 70.94 feet;

thence S02°32'59"E 253.51 feet (recorded as S02°32'10"E 247.02 feet) to the Point of Beginning.

Subject to the rights of the public over that portion thereof occupied by Cunningham Lake Road, subject to and together with all easements and restrictions affecting title to the above described premises.

Developer

Mountain Top Estates, LLC
P.O. Box 469
Brighton, Mi 48116

Sheet Index

- 1 Cover Sheet
- 2 Survey Plan
- 3 Site & Utility Plan

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



Joseph J. Schripsema
JOSEPH J. SCHRIPSEMA
PROFESSIONAL SURVEYOR No. 55109

APRIL 9, 2019
PROPOSED DATED
JOB No. 1-10-34-183568
MTE-COVER SHEET I

Mountain Top Estates

A Part of the Southeast 1/4 of Section 34
Town 2 North, Range 5 East
Genoa Township, Livingston County, Michigan

Survey Plan



SITE

Location Map
Not to Scale

BENCHMARKS:
DATUM BASED ON RTK-GPS
OBSERVATIONS.
DATE: DECEMBER 7, 2018.
CONVERSION RATE FROM
NAVD 88 DATUM (AS LISTED
BELOW) TO NGVD 29 DATUM
IS +0.41'.

BENCHMARK #203
NAIL IN THE WEST SIDE OF A
15" TRI OAK, LOCATED NORTH
405± FEET OF THE SOUTH
PROPERTY LINE AND EAST
345± OF THE WEST PROPERTY
LINE.
ELEVATION = 974.57 (NAVD 88)

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A
TRI OAK, LOCATED SOUTH 465±
FEET OF THE NORTH
PROPERTY LINE AND EAST
492± OF THE WEST PROPERTY
LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #207
NAIL IN THE WEST SIDE OF A
22" OAK, LOCATED WEST 31±
FEET OF THE EAST PROPERTY
LINE AND SOUTH 408± FEET OF
THE NORTH PROPERTY LINE.
ELEVATION = 985.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE
OF A 24" OAK, LOCATED SOUTH
240± FEET OF THE NORTH
PROPERTY LINE AND EAST
170± FEET OF THE WEST
PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

BENCHMARK #213
SPIKE IN THE SOUTH SIDE OF A
36" TRI OAK, LOCATED NEAR
THE NORTH SIDE OF
CUNNINGHAM LAKE ROAD AND
WEST 116± FEET OF THE
SOUTHEAST PROPERTY
CORNER.
ELEVATION = 939.89 (NAVD 88)

SURVEYOR'S CERTIFICATE

I, Joseph J. Schripsema, registered land surveyor of the state of
Michigan, hereby certify:
That the subdivision plan known as Livingston County
Condominium Subdivision Plan No.

as shown on the accompanying drawings, represent a survey on
the ground made under my direction and that there are no existing
encroachments upon the lands and property herein described.

That the required monuments and iron markers have been
located in the ground as required by rules promulgated under
Section 142 of Act No. 59 of the Public Acts of 1978.

That the accuracy of this survey is within the limits required by the
rules promulgated under Section 142 of Acts of 1978.

That the bearings, as shown, are noted on Survey Plan as
required by the rules promulgated under Section 142 of Act No. 59
of the Public Acts of 1978.



JOSEPH J. SCHRIPEMA
PROFESSIONAL SURVEYOR No. 55109

APRIL 9, 2019

PROPOSED DATED
JOB No. 1-10-34-183568

MTE-SURVEY SHEET 2

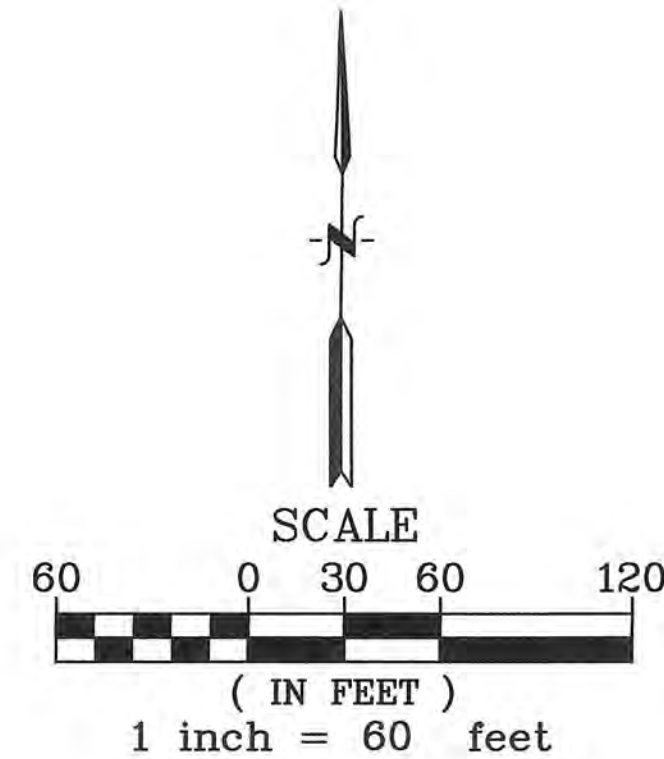
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

SOUTHEAST CORNER
SECTION 34
T. 2 N., R. 5 E.
GENOA TOWNSHIP
LIVINGSTON COUNTY
MICHIGAN
REFERENCE:
L.C.R.C., L.S.C. #170M

CURVE TABLE

No.	LENGTH	RADIUS	DELTA	CHORD:	DISTANCE
				BEARING	
1	31.42'	20.00'	90°00'00"	N48°06'21"W	28.28'
2	160.72'	255.00'	36°06'47"	N21°09'44"W	158.08'
3	143.64'	225.00'	36°34'36"	N20°55'50"W	141.21'
4	322.55'	205.00'	90°09'02"	N42°26'00"E	290.29'
5	338.33'	75.00'	258°27'47"	N41°43'23"W	116.19'
6	68.47'	50.00'	78°27'47"	S48°16'37"W	63.25'
7	401.22'	255.00'	90°09'02"	S42°26'00"W	361.10'
8	175.56'	275.00'	36°34'36"	S20°55'50"E	172.59'
9	129.21'	205.00'	36°06'47"	S21°09'45"E	127.08'
10	31.42'	20.00'	90°00'00"	S41°53'39"W	28.28'

"MYSTIC LAKE HILLS
SUBDIVISION No. 2"
L. 18 OF PLATS, PG. 28-32



Developer

Mountain Top Estates, LLC
P.O. Box 469
Brighton, Mi 48116

NOTES:

- INTERNAL ROAD (MOUNTAIN TOP DRIVE) IS A PRIVATE ROAD RIGHT-OF-WAY.
- PRIVATE EASEMENTS FOR
- INGRESS AND EGRESS (ROAD EASEMENT)
- PUBLIC UTILITIES
- STORM SEWER AND SURFACE DRAINAGE
OVER THE ENTIRE WIDTH OF PRIVATE ROAD RIGHT-OF-WAY.
- PRIVATE EASEMENT FOR STORM SEWER AND SURFACE DRAINAGE OVER THE ENTIRE AREA OF "OPEN SPACE."
- SEE ARTICLE IV OF MASTER DEED FOR DESCRIPTION OF PROPOSED EASEMENT TO AFFECT THIS CONDOMINIUM PROJECT.
- REFERENCE: COMMITMENT FOR TITLE INSURANCE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, FILE No. 824406, DATE OF POLICY: SEPTEMBER 10, 2018.
- DEVELOPER, BY EXECUTING THE MASTER DEED, GRANTS ALL HEREON DEPICTED PROPOSED EASEMENTS.

LEGEND

ALL DIMENSIONS ARE IN FEET.
ALL CURVILINEAR DIMENSIONS ARE SHOWN ALONG THE ARC.
THE SYMBOL "o" INDICATES A SET 1/2" IRON ROD ENCASED IN 4" x 36" CONCRETE MONUMENT. RULE 559.407(a)

ALL UNIT AND OPEN SPACE CORNERS ARE MONUMENTED WITH A 1/2" DIA., 18" LONG IRON ROD AND CAP (JJS 55109).

BEARINGS ARE RELATED TO GRID NORTH, MICHIGAN COORDINATE SYSTEM OF 1983, SOUTH ZONE (AS DEFINED IN MCL 54.235A(C) AND HAVE BEEN OBTAINED BY GPS RTK OBSERVATIONS OF SITE CONTROL POINTS. THE NOAA/NGS PUBLISHED POINT (DESIGNATED AS AJ5553 (BRIGHTON CORN ARP) HAS BEEN USED FOR LOCATIONS DETERMINATION.

— = BOUNDARY LINE

⊙ = CURVE IDENTIFIER

SOUTH 1/4 CORNER
SECTION 34
T. 2 N., R. 5 E

CUNNINGHAM LAKE ROAD
33' WD 1/2 R.O.W.

Mountain Top Estates

A Part of the Southeast 1/4 of Section 34
Town 2 North, Range 5 East
Genoa Township, Livingston County, Michigan



Site & Utility
Plan

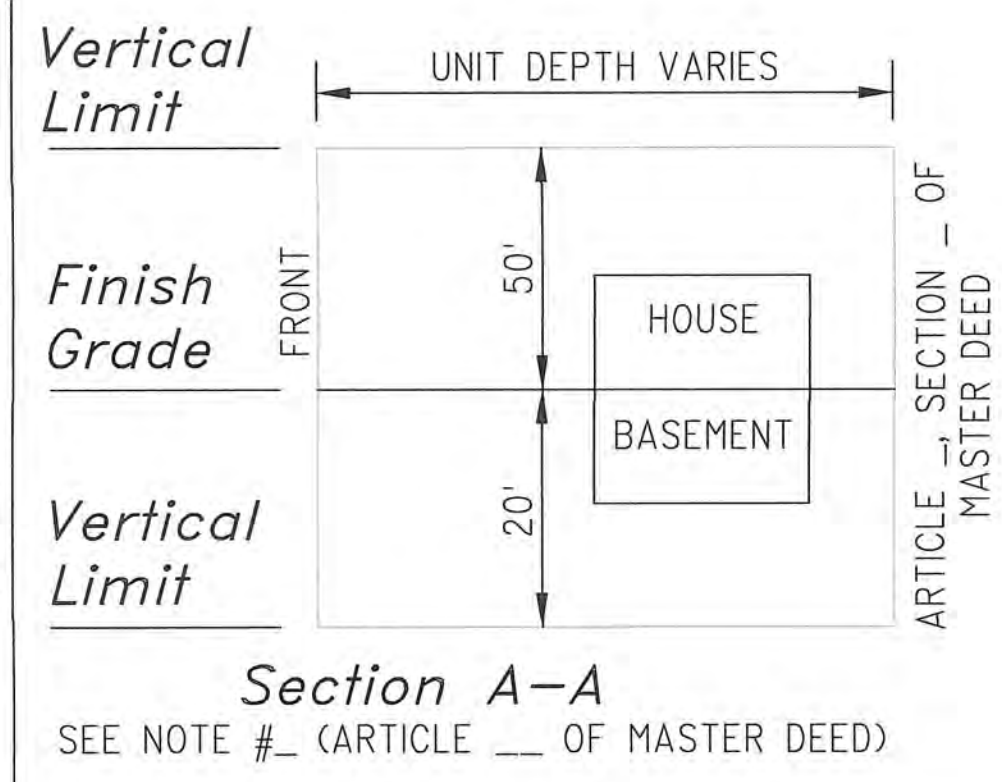


Location Map
Not to Scale

COORDINATE TABLE		
No.	NORTHING	EASTING
1	369820.05'	13267053.18'
2	369782.11'	13266353.88'
3	369815.08'	13266352.35'
4	370019.86'	13266342.90'
5	370130.34'	13266337.81'
6	370331.99'	13266328.50'
7	370552.09'	13266318.34'
8	370625.36'	13266314.96'
9	370944.59'	13266300.23'
10	370954.03'	13266519.82'
11	370960.52'	13266670.64'
12	370970.31'	13266898.18'
13	370976.97'	13267053.03'
14	370985.48'	13267250.85'
15	370683.87'	13267264.24'
16	370638.48'	13267141.19'
17	370305.37'	13267281.04'
18	370297.97'	13267111.06'
19	370291.45'	13266961.20'
20	370256.49'	13266962.75'

COORDINATE TABLE		
No.	NORTHING	EASTING
21	370070.20'	13266971.03'
22	370073.31'	13267041.90'
23	369853.02'	13267051.71'
24	369842.58'	13266859.21'
25	369861.46'	13266838.15'
26	369908.40'	13266835.61'
27	370055.81'	13266778.54'
28	370061.52'	13266773.88'
29	370134.75'	13266714.11'
30	370242.80'	13266666.04'
31	370266.65'	13266663.67'
32	370411.67'	13266656.97'
33	370425.44'	13266955.37'
34	370625.93'	13266852.84'
35	370630.00'	13266946.47'
36	370636.52'	13267096.33'
37	370681.32'	13267205.72'
38	370725.20'	13267063.86'
39	370683.11'	13267016.66'
40	370678.50'	13266910.73'

COORDINATE TABLE		
No.	NORTHING	EASTING
41	370675.88'	13266850.67'
42	370661.48'	13266776.59'
43	370591.82'	13266672.31'
44	370825.93'	13266525.33'
45	370765.60'	13266479.44'
46	370628.13'	13266374.90'
47	370480.87'	13266613.85'
48	370409.37'	13266607.03'
49	370344.98'	13266610.00'
50	370264.34'	13266613.72'
51	370206.23'	13266622.69'
52	370103.14'	13266675.37'
53	370040.67'	13266726.36'
54	370024.20'	13266739.80'
55	370008.96'	13266751.10'
56	370000.90'	13266602.45'
57	369826.51'	13266563.08'
58	369905.69'	13266785.68'
59	369858.76'	13266788.23'
60	369837.70'	13266769.34'



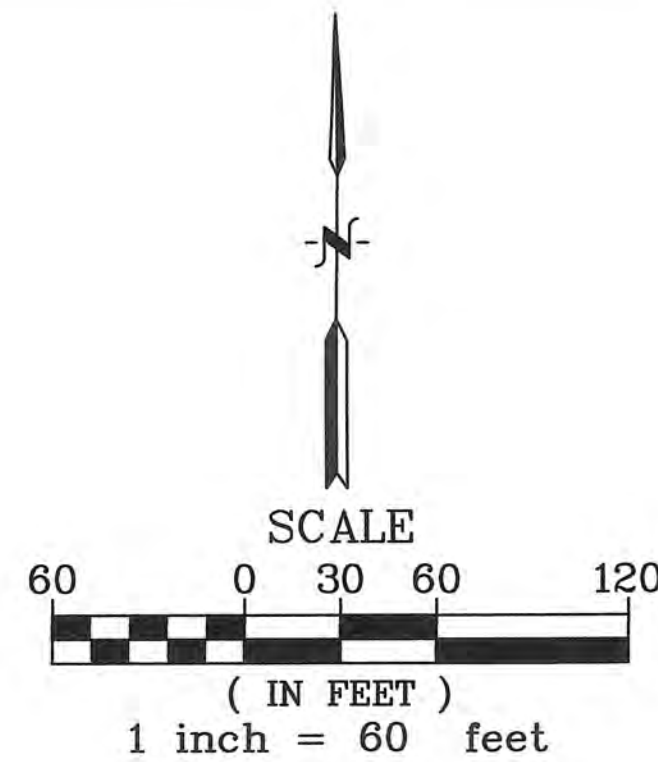
Section A-A
SEE NOTE # - (ARTICLE - OF MASTER DEED)



JOSEPH J. SCHRIPEMA
PROFESSIONAL SURVEYOR No. 55109

APRIL 9, 2019
PROPOSED DATED
JOB No. 1-10-34-183568
MTE-SITE/UTIL
SHEET 3

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



Developer

Mountain Top Estates, LLC
P.O. Box 469
Brighton, Mi 48116

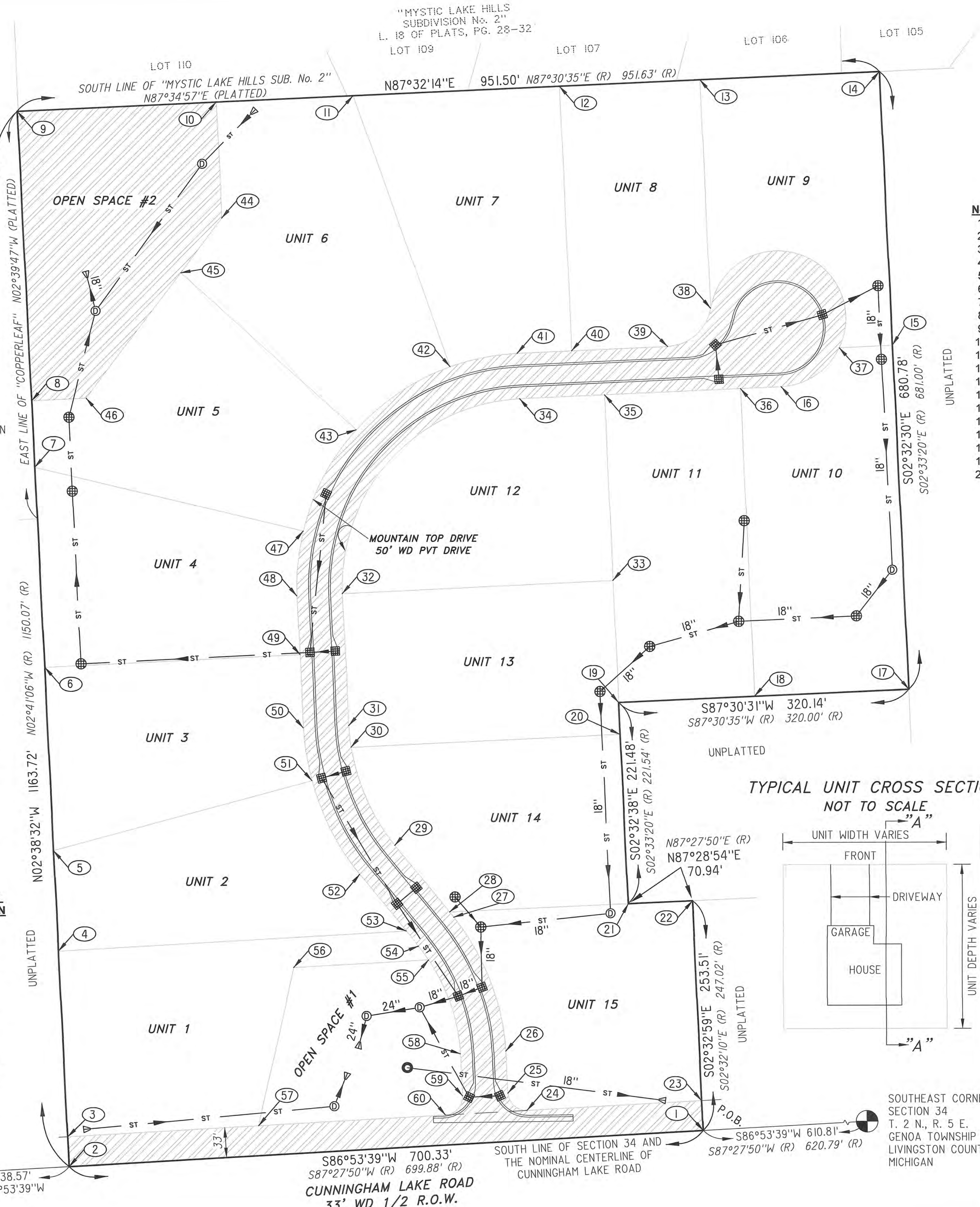
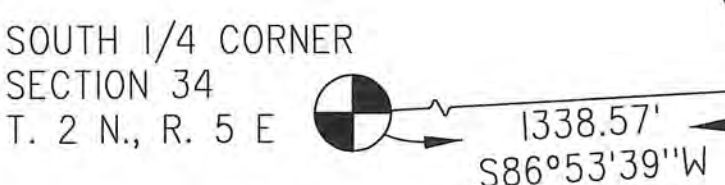
LEGEND

- ST = FLARED END SECTION
- ST = STORM DRAIN PIPE W/FLOW DIRECTION (12" DIAMETER PIPE UNLESS OTHERWISE STATED)
- ⊙ = STORM MANHOLE
- ⊞ = CATCH BASIN
- ⊙ = YARD BASIN
- ⊙ = CONTROL STRUCTURE
- = CONCRETE ROAD CURB
- = CONDOMINIUM BOUNDARY LINE
- ⊙ = COORDINATE POINT
- = LIMITS OF OWNERSHIP
- = GENERAL COMMON ELEMENT

- NOTES:
- ALL ROADS AND STORM SEWERS MUST BE BUILT.
 - ROADS AND STORM SEWERS PLANS AS PREPARED BY DESINE INC., ON FILE WITH GENOA TOWNSHIP.
 - LOCATION OF ELECTRIC, TELEPHONE, CABLE T.V. AND NATURAL GAS UTILITY LINES ON FILE WITH APPROPRIATE UTILITY COMPANIES. THE ACTUAL LOCATION OF THESE LINES WILL BE SHOWN ON AS-BUILT PLANS.
 - LIMITED AND COMMON ELEMENTS SEE ARTICLE IV OF MASTER DEED FOR DETAIL AND DESCRIPTION OF COMMON ELEMENTS.

UNIT AREA		FINISH FLOOR	
No.	SQUARE FEET	No.	ELEVATION
1	53,440	1	968
2	47,291	2	980
3	48,372	3	1004
4	50,813	4	1006
5	54,695	5	1010
6	65,011	6	1012
7	53,740	7	1012
8	44,774	8	1004
9	45,930	9	998
10	60,712	10	996
11	50,831	11	1008
12	52,261	12	1020
13	50,470	13	1005
14	48,125	14	988
15	49,948	15	970

OPEN SPACE #1
OPEN SPACE #2



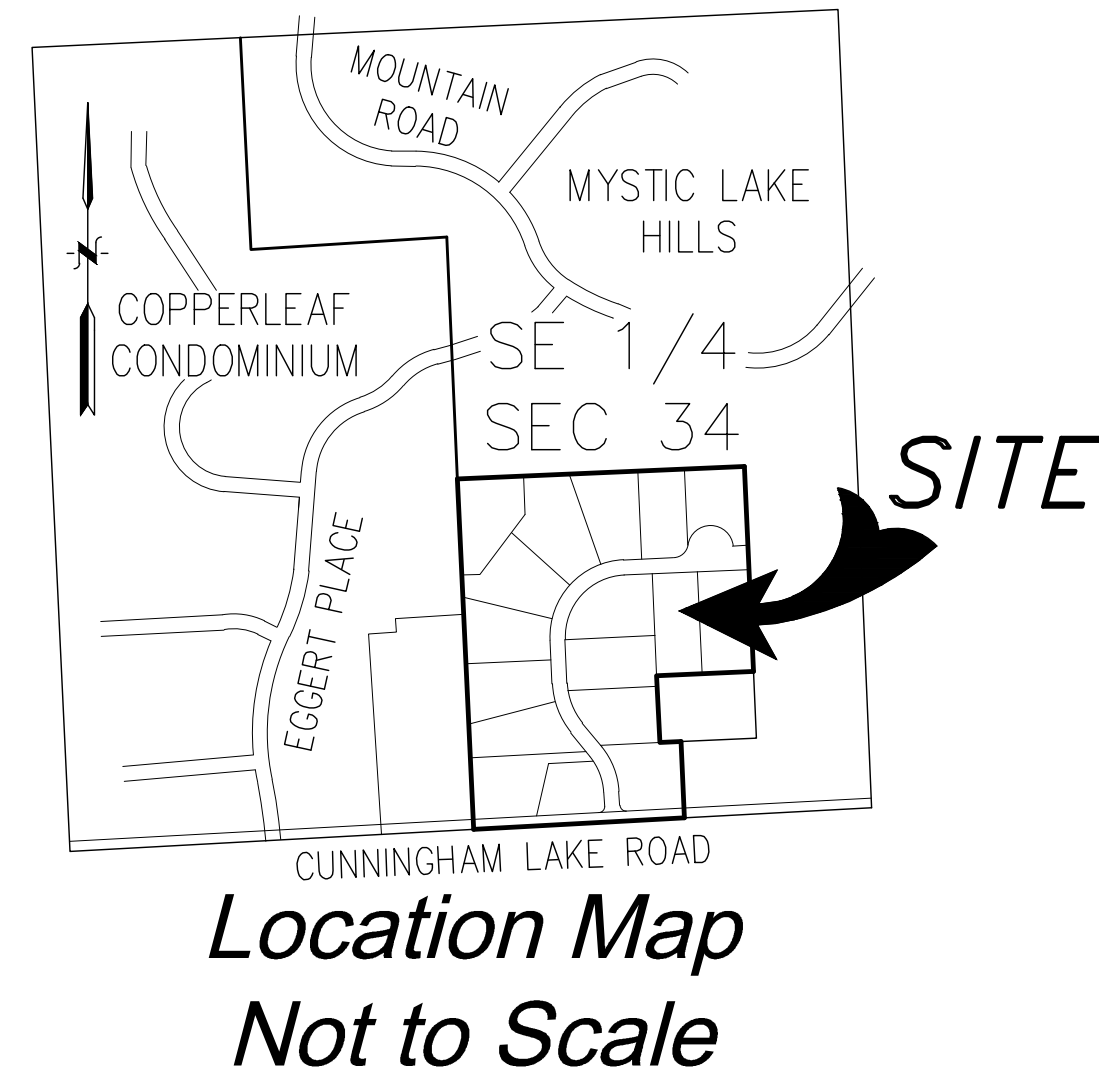
S86°53'39\"/>

SOUTH LINE OF SECTION 34 AND THE NOMINAL CENTERLINE OF CUNNINGHAM LAKE ROAD

SOUTHEAST CORNER SECTION 34
T. 2 N., R. 5 E.
GENOA TOWNSHIP
LIVINGSTON COUNTY
MICHIGAN

CONSTRUCTION PLANS
FOR
Mountain Top Estates

A SITE CONDOMINIUM DEVELOPMENT
A PART OF THE SOUTHEAST 1/4, OF SECTION 34
T2N, R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



LEGAL DESCRIPTION OF RECORD
Tax ID No.: 11-34-400-008

A parcel of land located in the Southeast quarter of Section 34, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, said parcel more fully described as: Commencing at the Southeast corner of Section 34, Town 2 North, Range 5 East; thence South 87 degrees 27 minutes 50 seconds West (rec. as: South 87 degrees 34 minutes 57 seconds West), 620.79 feet on South line of said section to the **POINT OF BEGINNING**; thence continuing South 87 degrees 27 minutes 50 seconds West (rec. as: South 87 degrees 34 minutes 57 seconds West), 699.88 feet; thence North 02 degrees 41 minutes 06 seconds West, 1150.07 feet in part on the East line of "Copperleaf" (Liber 3924, page 7604) a site condominium; thence North 87 degrees 30 minutes 35 seconds East, 951.63 feet on the South line of "Mystic Lake Hills Subdivision", as recorded in Liber 18 of Plats, pages 28 through 32, Livingston County Records; thence South 02 degrees 33 minutes 20 seconds East, 681.00 feet (rec. as: South 02 degrees 31 minutes 12 seconds East); thence South 87 degrees 30 minutes 35 seconds West, 320.00 feet; thence South 02 degrees 33 minutes 20 seconds East, 221.54 feet; thence North 87 degrees 27 minutes 50 seconds East, 70.94 feet; thence South 02 degrees 32 minutes 10 seconds East, 247.02 feet to the Point of Beginning. Subject to the rights of the public over that portion thereof occupied by Cunningham Lake Road, subject to and together with all easements and restrictions affecting title to the above described premises.

Also described as related to the Grid North of State Plane Coordinated System as defined in Michigan Coordinate System Act 9 of 1964, Section 5a(c) as follows:

A parcel of land located in the Southeast quarter of Section 34, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, said parcel more fully described as: Commencing at the Southeast corner of Section 34, Town 2 North, Range 5 East; thence S86°53'39"W (SPCS) 620.82 feet (*recorded as S87°27'50"W 620.79 feet*) on South line of said Section to the **POINT OF BEGINNING**; thence continuing S86°53'39"W (SPCS) 700.33 feet (*recorded as S87°27'50"W 699.88 feet*) along said South line of Section 34 and the nominal centerline of Cunningham Lake Road (33-foot wide 1/2 Right-of-Way); thence N02°38'38"32"W (SPCS) 1163.72 feet (*recorded as N02°41'06"W 1150.07 feet*) along (in-part) the East line of "Copperleaf," according to the Master Deed thereof, as recorded in Liber 3924, Page 7604, Livingston County Records, as amended, if any, and designated as Livingston County Condominium Subdivision Plan No. 274; thence N87°32'14"E (SPCS) 951.50 feet (*recorded as N87°30'35"E 951.63 feet*) along the South line of "Mystic Lake Hills Subdivision No. 2," according to the plat thereof, as recorded in Liber 18 of Plats, Pages 28 through 32, inclusive, Livingston County Records; thence S02°32'30"E (SPCS) 680.78 feet (*recorded as S02°33'20"E 681.00 feet*); thence S87°30'31"W (SPCS) 320.14 feet (*recorded as S87°30'35"W, 320.00 feet*); thence S02°32'38"E (SPCS) 221.48 feet (*recorded as S02°33'20"E 221.54 feet*); thence N87°28'54"E (SPCS) (*recorded as N87°27'50"E*) 70.94 feet; thence S02°32'59"E (SPCS) 253.51 feet (*recorded as S02°32'10"E 247.02 feet*) to the Point of Beginning. Subject to the rights of the public over that portion thereof occupied by Cunningham Lake Road, subject to and together with all easements and restrictions affecting title to the above described premises.



AERIAL PHOTOGRAPHY BY:
Google maps

Aerial photographic underlay is an unrectified image and is oriented to the engineering line work within reasonable accuracy and precision, and may not accurately depict current site conditions.

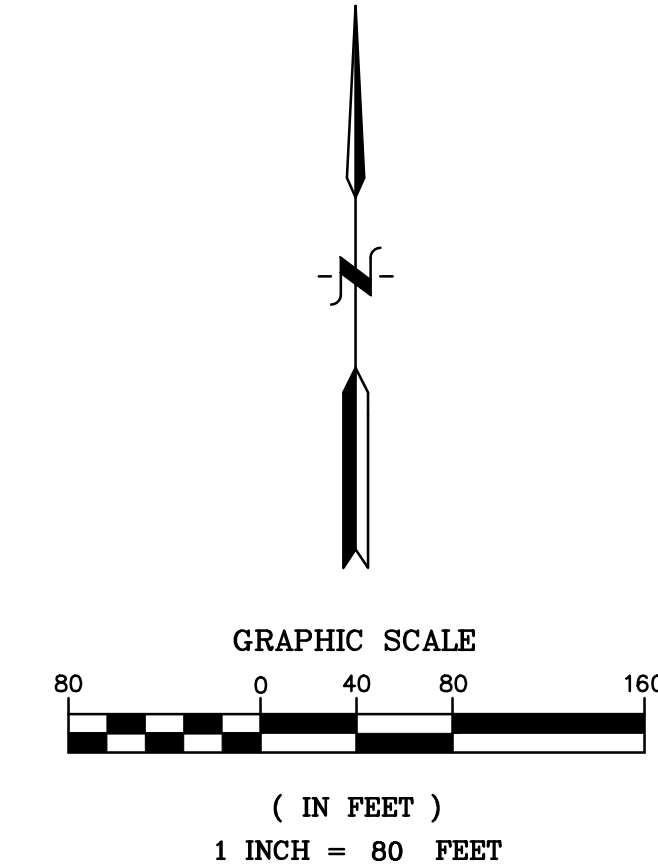
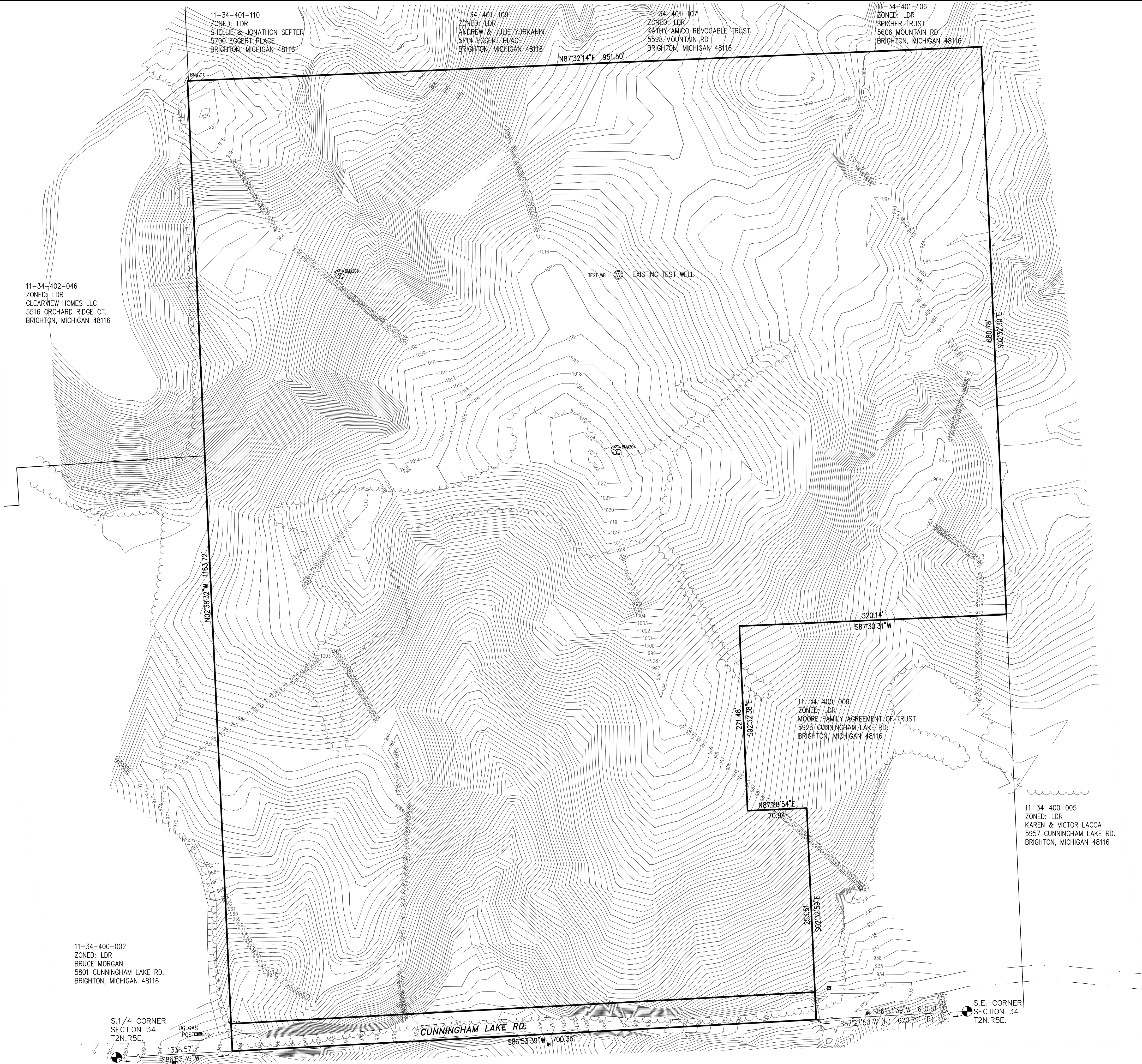
OWNER/DEVELOPER
MOUNTAIN TOP ESTATES LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
PHONE: (810) 229-2752

ENGINEER/SURVEYOR
DESINE INC.
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114
PHONE: (810) 227-9533

SHEET INDEX	
EX	EXISTING CONDITIONS PLAN
TR	TREE REMOVAL PLAN
SP	SITE PLAN
UT	UTILITY PLAN
GR1	GRADING PLAN
GR2	DETENTION BASIN GRADING DETAIL
GR3	RETENTION BASIN GRADING DETAIL
RD1	MOUNTAIN TOP DRIVE PLAN & PROFILE, STA. 0+50 - 6+50
RD2	MOUNTAIN TOP DRIVE PLAN & PROFILE, STA. 6+50 - 15+34
AP	CUNNINGHAM LAKE ROAD APPROACH
ST1	STORM SEWER PROFILES
ST2	STORM SEWER PROFILES
SE1	SOIL EROSION CONTROL PLAN
SE2	SOIL EROSION CONTROL NOTES & DETAILS
LS	LANDSCAPE PLAN
RW1	UNIT 14 RETAINING WALL, PLAN, PROFILE, DETAILS
RW2	UNIT 14 RETAINING WALL, SECTIONS, NOTES, DETAILS
RW3	NORTH RETENTION BASIN RETAINING WALL, PLAN, PROFILE, SECTIONS
RW4	NORTH RETENTION BASIN RETAINING WALL, NOTES AND DETAILS
WS1	WATER SHED PLAN
WS2	CUNNINGHAM LAKE ROAD EXISTING DRAINAGE AREAS
DT1	GENERAL NOTES & DETAILS
DT2	STORM SEWER NOTES & DETAILS

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

REVISED	SCALE: NONE
MAR. 7, 2019	PROJECT No.: 183568
	DWG NAME: 3568 COV
	PRINT: April 5, 2019



- LEGEND**
- MSC. STRUCTURE (AS LABELED)
 - WELL / MONITOR WELL
 - SIGN
 - UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, SATV BOX, MAIL BOX, UTIL. BOX)
 - UTILITY POLE W/GUY WIRE
 - OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - EDGE OF WOODS / TREE DRIP LINE
 - FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
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 - STORM WATER MANHOLE W/IDENTIFIER
 - CATCH BASIN W/IDENTIFIER
 - CONTROL STRUCTURE
 - FLARED END SECTION
 - STORM WATER DRAINAGE PIPE
 - GAS MANHOLE / GASOLINE COVER
 - GAS SHUT OFF
 - U/G GAS
 - EX. 1' CONTOUR
 - EX. 5' CONTOUR

BENCHMARK
DATUM BASED ON RTK-GPS OBSERVATIONS,
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465± FEET OF THE NORTH
PROPERTY LINE AND EAST 492± OF THE WEST
PROPERTY LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE OF A 24" OAK,
LOCATED SOUTH 240± FEET OF THE NORTH
PROPERTY LINE AND EAST 170± FEET OF THE
WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)

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

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

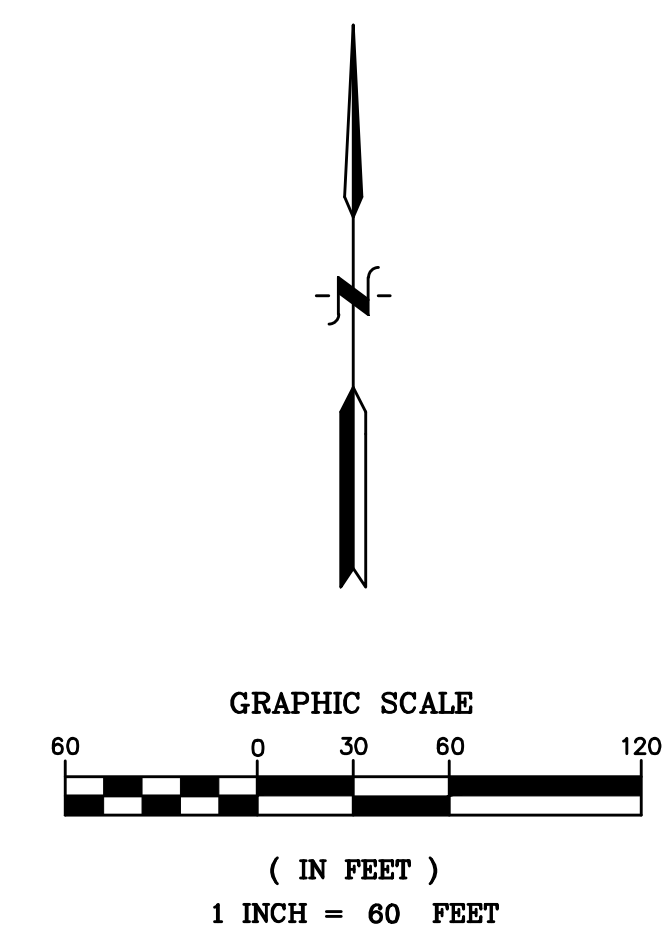
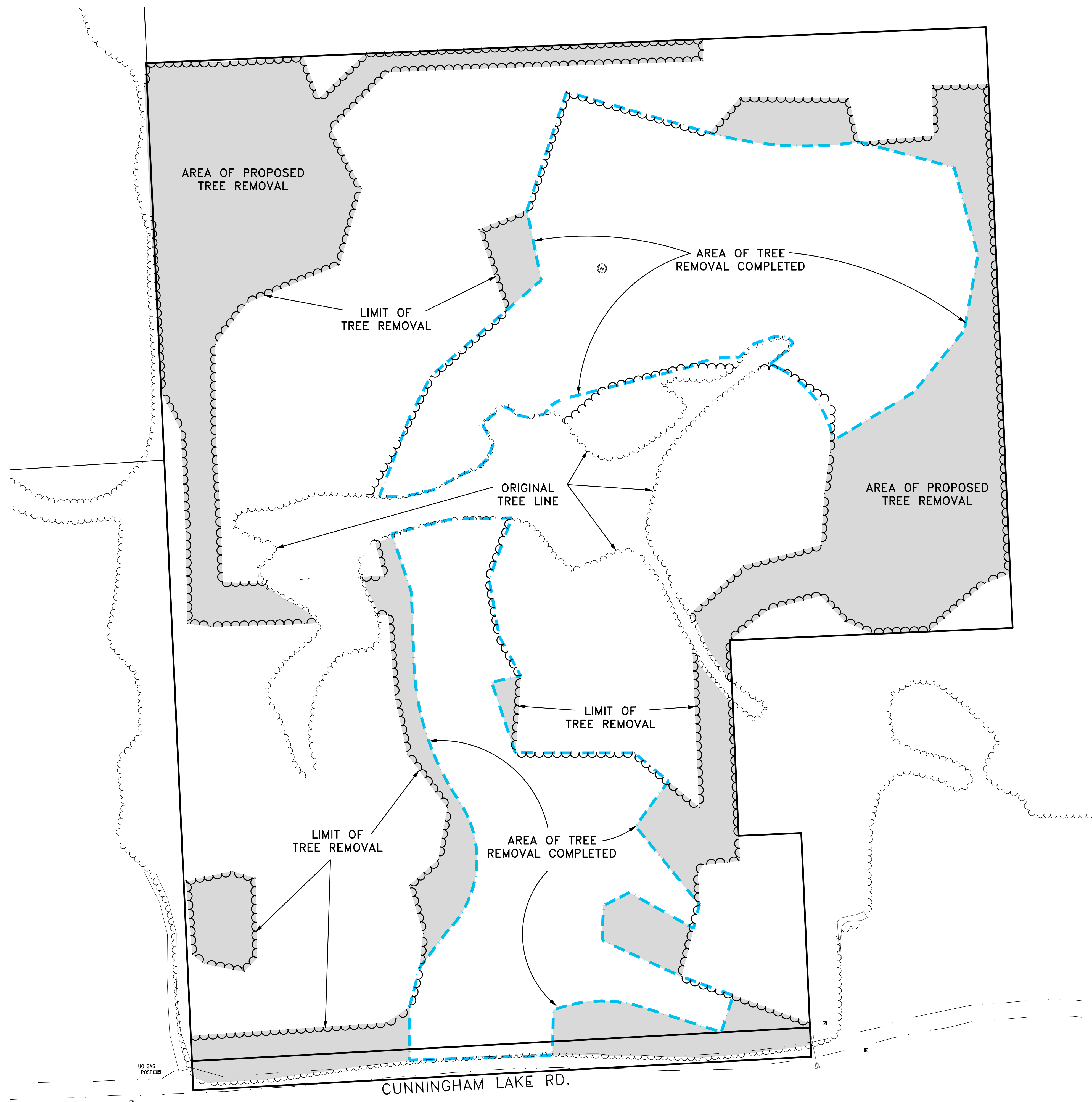
MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

EXISTING CONDITIONS PLAN

CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
271-229-2752

SCALE: 1in. = 60ft.
PROJECT No.: 183568
DWG NAME: 3568 EX
ISSUED: APRIL 5, 2019

EX



LEGEND	
	PARCEL BOUNDARY
	ORIGINAL TREE LINE
	PROPOSED TREE REMOVAL LINE
	COMPLETED TREE REMOVAL LINE
	AREA PROPOSED TREE REMOVAL

TOTAL WOODED AREA = 20.7 ACRES	
AREA OF TREE REMOVAL COMPLETED =	6.0 ACRES
AREA OF PROPOSED TREE REMOVAL =	5.7 ACRES
TOTAL PROPOSED TREE REMOVAL AREA = 11.7 ACRES	
AREA OF TREE REMOVAL DEPICTED =	9.5 ACRES
ON APPROVED SITE PLAN	



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

MOUNTAIN TOP
ESTATES

TREE REMOVAL PLAN

CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

SCALE: 1in. = 60ft.
PROJECT No.: 183568
DWG NAME: 3568 TREE R
ISSUED: APRIL 5, 2019

TR



SITE DATA	
TAX ID	11-34-400-008
ZONED	LDR
TOTAL AREA	22.21 AC.
NET AREA	21.68 AC.
NUMBER OF UNITS	15
DENSITY	0.69 UNITS PER ACRE

BENCHMARK
DATUM BASED ON RTK-GPS OBSERVATIONS.
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465± FEET OF THE NORTH
PROPERTY LINE AND EAST 492± FEET OF THE WEST
PROPERTY LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE OF A 24" OAK,
LOCATED SOUTH 240± FEET OF THE NORTH
PROPERTY LINE AND EAST 170± FEET OF THE
WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)

NOTE:
UNITS 1 & 15 SHALL NOT HAVE
DIRECT ACCESS FROM CUNNINGHAM
LAKE ROAD.

11-34-400-005
ZONED: LDR
KAREN & VICTOR LACCA
5957 CUNNINGHAM LAKE RD.
BRIGHTON, MICHIGAN 48116

11-34-400-002
ZONED: LDR
BRUCE MORGAN
5801 CUNNINGHAM LAKE RD.
BRIGHTON, MICHIGAN 48116

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

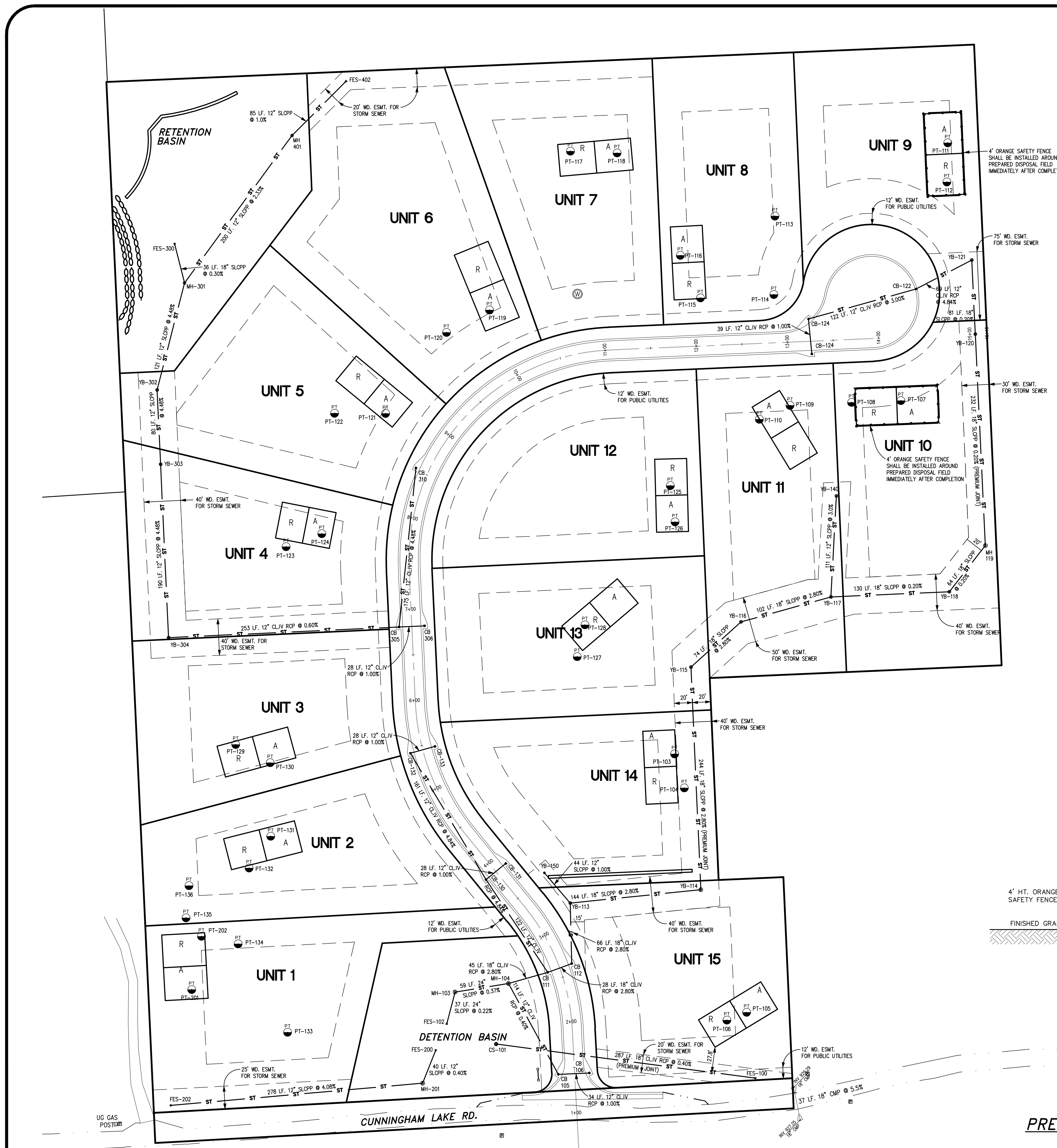
MOUNTAIN TOP ESTATES SITE CONDOMINIUM

SITE PLAN

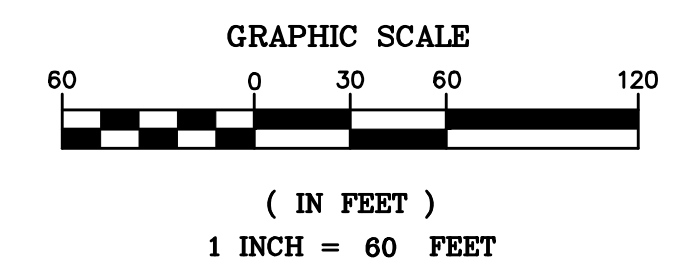
CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

SCALE: 1in. = 60ft.
PROJECT No.: 183568
DWG NAME: 3568 SP
ISSUED: **APRIL 5, 2019**

SP



- LEGEND**
- = MISC. STRUCTURE (AS LABELED)
 - = WELL / MONITOR WELL
 - = SIGN
 - = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTILITY BOX)
 - = UTILITY POLE W/ GUY WIRE
 - = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - = EDGE OF WOODS / TREE DRIP LINE
 - = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 - = EDGE OF GRAVEL
 - ⊙ = STORM WATER MANHOLE W/ IDENTIFIER
 - ⊙ = CATCH BASIN W/ IDENTIFIER
 - ⊙ = CONTROL STRUCTURE
 - = FLARED END SECTION
 - = STORM WATER DRAINAGE PIPE
 - ⊙ = GAS MANHOLE / GASOLINE COVER
 - = GAS SHUT OFF
 - = U/G GAS
 - = EX. 1' CONTOUR
 - = EX. 5' CONTOUR
 - = PROP. CONCRETE CURB & GUTTER
 - = PROP. EDGE OF GRAVEL
 - = PROP. STORM SEWER

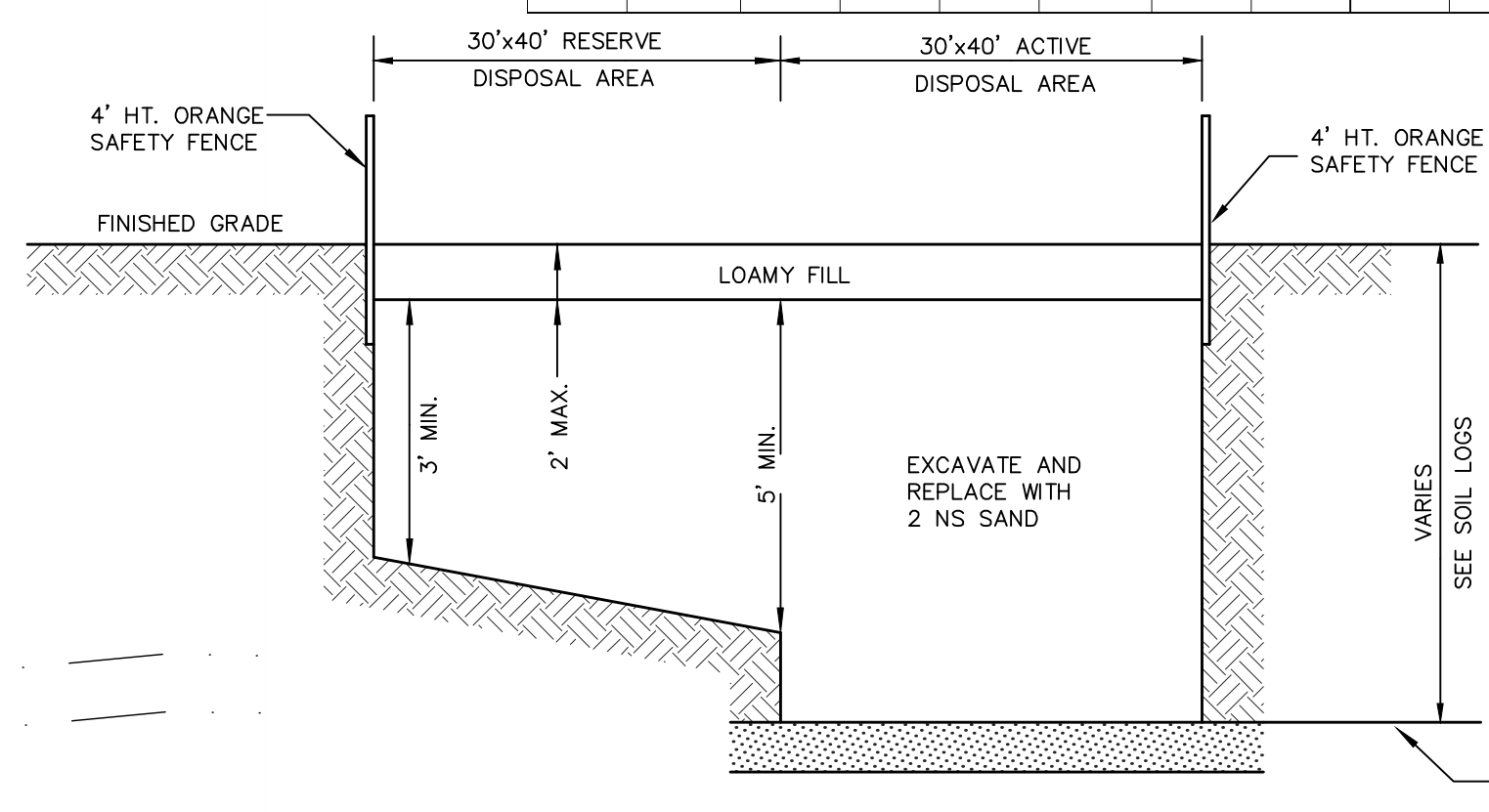


Design Criteria: 10 year event (I = 175h + 25) RCP n= 0.013 HDPE n= 0.013

From MH#	To MH#	Inc. Acres	Eqv. Area 100% CA	Total Area 100% CA	T Time Min.	I Inch Per Hour	Q (CIA) c.f.s.	Qa (Additional flow) c.f.s.	Qt (Total flow) c.f.s.	Dia. of pipe inch	Slope pipe %	Slope H.G. %	Length of line ft.	Vel. Flow full ft./sec.	Time of flow min.	Cap of pipe c.f.s.	H.G. Elev. upper end	Ground Elev. Upper end	Ground Elev. Lower end	Invert Elev. Upper end	Invert Elev. Lower end
402	401	2.29	0.23	0.52	15.0	4.38	2.28	2.28	2.28	12	1.00	0.41	85	4.54	0.3	3.58	949.00	948.50	948.00	947.85	947.65
401	301	0.00	0.00	0.00	0.52	15.3	4.34	2.26	2.26	12	2.33	0.40	200	6.92	0.5	5.44	944.69	960.00	949.00	944.87	940.21
306	305	0.59	0.33	0.20	15.0	4.38	0.85	0.85	0.85	12	1.00	0.06	28	4.54	0.1	3.56	984.15	988.17	988.17	983.41	983.13
310	305	0.40	0.48	0.19	0.19	15.0	4.38	0.84	0.84	12	4.48	0.08	175	9.60	0.3	7.54	984.23	1003.09	988.17	990.97	983.13
305	304	0.53	0.38	0.20	0.59	15.3	4.34	2.57	2.57	12	0.60	0.52	253	3.51	1.2	2.78	983.83	988.17	997.00	983.03	981.51
304	303	0.20	0.20	0.04	0.63	16.5	4.22	2.68	2.68	12	4.48	0.56	190	9.60	0.3	7.54	972.36	997.00	975.00	978.81	970.30
303	302	0.40	0.20	0.08	0.71	16.8	4.18	2.97	2.97	12	4.48	0.70	82	9.60	0.1	7.54	951.70	975.00	955.00	953.80	950.13
302	301	0.37	0.20	0.07	0.79	17.0	4.17	3.27	3.27	12	4.48	0.84	121	9.60	0.2	7.54	946.23	955.00	949.00	949.63	944.21
301	300	0.00	0.00	0.00	1.31	17.2	4.15	5.42	5.42	18	0.30	0.27	36	3.26	0.2	5.75	943.88	949.00	940.00	940.11	940.00
																		943.78	Downstream HWL		

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

From MH#	To MH#	Inc. Acres	Eqv. Area 100% CA	Total Area 100% CA	T Time Min.	I Inch Per Hour	Q (CIA) c.f.s.	Qa (Additional flow) c.f.s.	Qt (Total flow) c.f.s.	Dia. of pipe inch	Slope pipe %	Slope H.G. %	Length of line ft.	Vel. Flow full ft./sec.	Time of flow min.	Cap of pipe c.f.s.	H.G. Elev. upper end	Ground Elev. Upper end	Ground Elev. Lower end	Invert Elev. Upper end	Invert Elev. Lower end
202	201	1.88	0.22	0.42	15.0	4.38	1.83	1.83	1.83	12	4.08	0.26	278	9.16	0.5	7.20	945.00	945.00	938.50	945.00	933.66
201	200	0.00	0.00	0.00	0.42	15.5	4.32	1.81	1.81	12	0.40	0.26	40	2.87	0.2	2.25	937.23	938.50	932.00	932.16	932.00
133	132	0.53	0.36	0.19	0.19	15.0	4.38	0.83	0.83	12	1.00	0.05	28	4.54	0.1	3.56	970.17	974.36	974.36	969.44	969.16
132	130	0.23	0.38	0.09	0.28	15.1	4.36	1.21	1.21	12	4.84	0.12	161	9.98	0.3	7.84	961.16	974.36	958.65	961.16	953.36
131	130	0.58	0.34	0.20	0.20	15.0	4.38	0.88	0.88	12	1.00	0.06	28	4.54	0.1	3.56	954.38	958.65	958.65	953.64	953.36
130	111	0.16	0.46	0.07	0.55	15.4	4.33	2.39	2.39	12	4.84	0.45	122	9.98	0.2	7.84	946.86	958.65	945.90	946.86	940.96
124	123	0.38	0.44	0.17	0.17	15.0	4.38	0.73	0.73	12	1.00	0.04	39	4.54	0.1	3.56	991.11	995.39	995.39	990.49	990.10
123	122	0.65	0.36	0.24	0.40	15.1	4.36	1.75	1.75	12	3.00	0.24	122	7.88	0.3	6.17	990.00	995.39	991.80	990.00	986.54
122	121	0.58	0.65	0.38	0.78	15.4	4.33	3.37	3.37	12	4.84	0.89	69	9.98	0.1	7.84	979.94	991.80	982.00	979.94	976.60
121	120	0.67	0.22	0.20	0.97	15.5	4.32	4.20	4.20	18	0.20	0.16	81	2.66	0.5	4.70	977.07	982.00	980.75	975.60	975.44
120	119	0.09	0.20	0.02	0.99	16.0	4.27	4.22	4.22	18	0.20	0.16	232	2.66	1.5	4.70	976.75	980.75	981.00	975.34	974.87
119	118	0.00	0.00	0.00	0.99	17.5	4.12	4.08	4.08	18	0.15	0.14	64	2.66	0.4	4.70	976.24	981.00	984.00	974.77	974.64
118	117	0.50	0.24	0.12	1.11	17.9	4.08	4.53	4.53	18	0.20	0.19	130	2.66	0.8	4.70	976.03	984.00	984.00	974.54	974.28
140	117	0.89	0.35	0.24	0.24	15.0	4.38	1.06	1.06	12	3.00	0.09	111	7.86	0.2	6.17	982.51	988.00	984.00	982.51	979.18
117	116	0.70	0.23	0.16	1.52	18.7	4.00	6.07	6.07	18	2.80	0.33	102	9.95	0.2	17.58	974.18	984.00	995.00	974.18	971.33
116	115	0.39	0.20	0.08	1.59	18.9	3.99	6.36	6.36	18	2.80	0.37	74	9.95	0.1	17.58	971.23	995.00	995.00	971.23	969.16
115	114	0.39	0.20	0.08	1.67	19.0	3.98	6.65	6.65	18	2.80	0.40	244	9.95	0.4	17.58	969.06	995.00	979.00	969.06	962.22
114	113	0.00	0.00	0.00	1.67	19.4	3.94	6.59	6.59	18	2.80	0.39	144	9.95	0.2	17.58	953.42	979.00	955.00	953.42	949.39
150	113	0.21	0.20	0.04	0.04	15.0	4.38	0.18	0.18	12	4.84	0.00	44	9.98	0.1	7.84	951.52	956.50	955.00	951.52	949.39
113	112	0.21	0.33	0.07	1.78	19.6	3.92	6.99	6.99	18	2.80	0.44	66	9.95	0.1	17.58	942.39	955.00	945.90	942.39	940.54
112	111	0.39	0.34	0.13	1.92	19.8	3.91	7.50	7.50	18	2.80	0.51	28	9.95	0.0	17.58	941.30	945.90	945.90	940.44	939.66
111	104	0.03	0.90	0.03	2.50	19.8	3.91	9.75	9.75	18	2.80	0.86	45	9.95	0.1	17.58	937.72	945.90	940.20	936.16	934.90
106	105	0.39	0.40	0.16	0.16	15.0	4.38	0.68	0.68	12	1.00	0.04	34	4.54	0.1	3.56	937.41	939.00	939.00	934.10	933.76
105	104	0.09	0.51	0.05	0.20	15.1	4.36	0.88	0.88	12	0.40	0.06	114	2.87	0.7	2.25	937.40	940.20	933.00	933.66	933.20
104	103	0.00	0.00	0.00	2.70	19.9	3.90	10.52	10.52	24	0.37	0.22	59	4.38	0.2	13.76	937.33	940.20	938.20	932.40	932.18
103	102	0.00	0.00	0.00	2.70	20.1	3.88	10.47	10.47	24	0.22	0.21	37	3.38	0.2	10.61	937.20	938.20	932.00	932.08	932.00
																		937.13	Downstream HWL		



- NOTE:
- HOME OWNER SHALL INSTALL DRAINFIELD PER LCHD CODE & PERMIT CONCURRENT WITH HOUSE CONSTRUCTION.
 - CONTACTOR MAY SUBSTITUTE WASHED MDOT CLASS II SAND, CERTIFIED BY AGG. MANUF., WHEN APPROVED BY ENGINEER IN ADVANCE.
 - CONTACTOR SHALL COORDINATE INSPECTION OF EXCAVATION AND CERTIFICATION OF BACKFILL WITH LCHD AND PROJECT ENGINEER.
 - CONTACTOR SHALL INSTALL 4' HT. ORANGE SAFETY FENCE AROUND PREPARED DISPOSAL FIELDS IMMEDIATELY AFTER FIELD IS COMPLETED.

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PREPARED DISPOSAL FIELD DETAIL FOR UNITS 9 & 10

NO SCALE

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

MOUNTAIN TOP ESTATES SITE CONDOMINIUM

UTILITY PLAN

CLIENT: MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

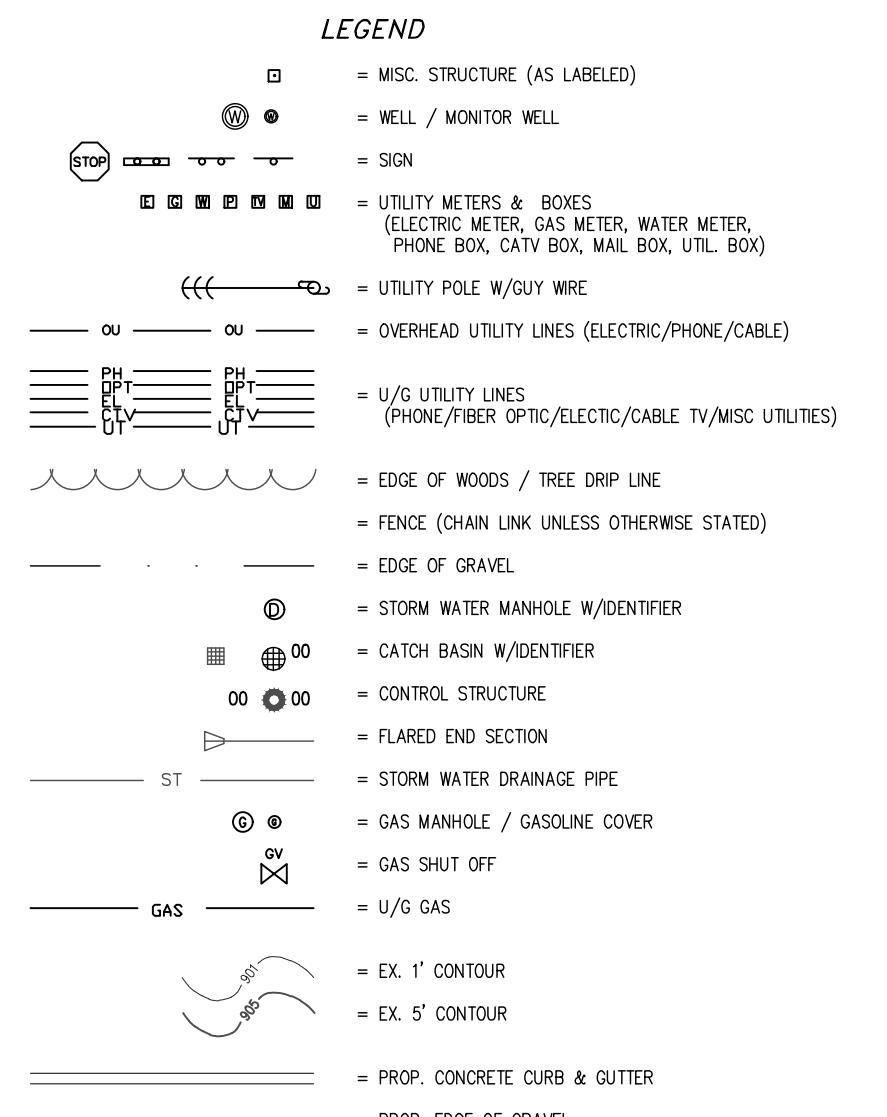
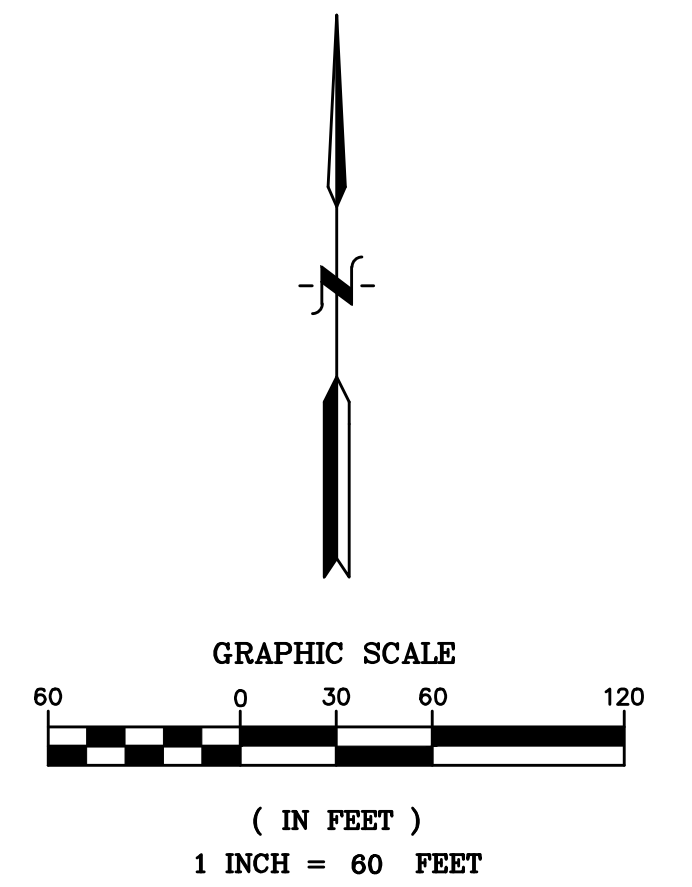
SCALE: 1in. = 60ft.

PROJECT No.: 183568
DWG NAME: 3568 UT
ISSUED: APRIL 5, 2019

UT



NOTE:
SEE PREPARED DISPOSAL FIELD DETAIL
ON SHEET UT FOR UNITS 9 AND 10



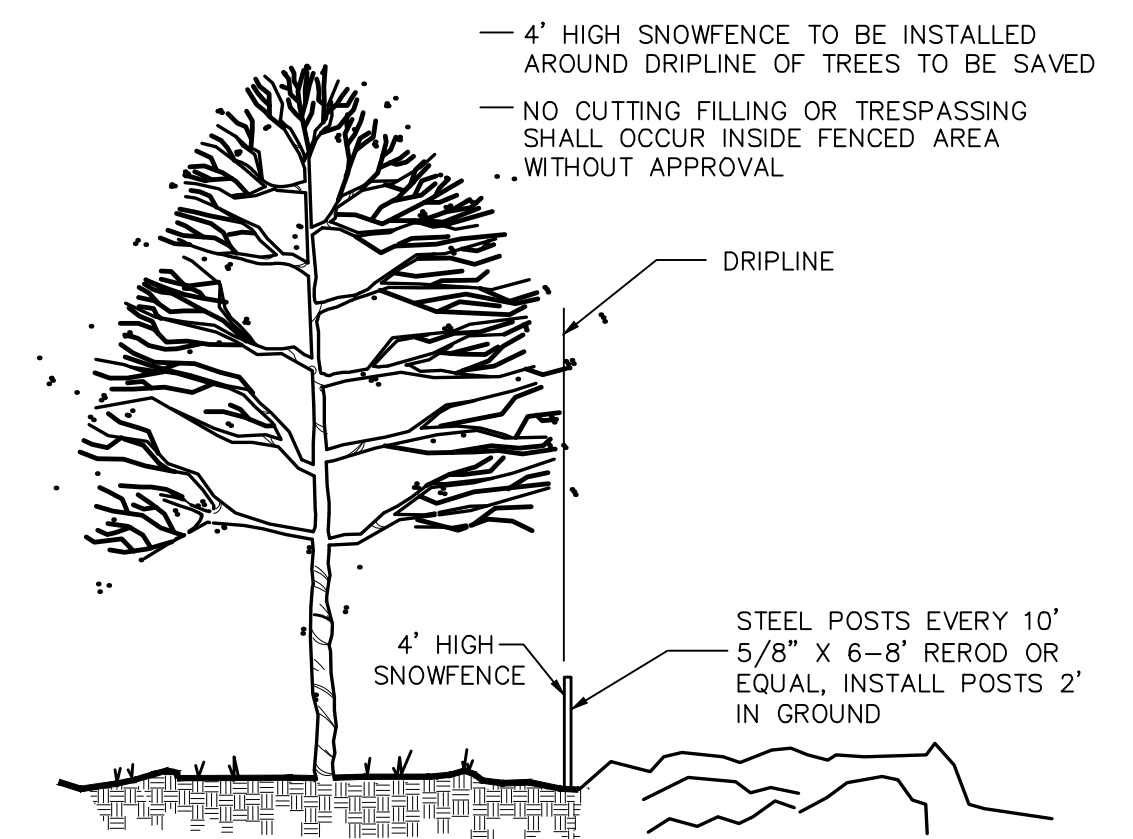
Finished Floor Elevation Table	
Unit	Elevation
1	968
2	980
3	1004
4	1006
5	1010
6	1012
7	1012
8	1004
9	998
10	996
11	1008
12	1020
13	1005
14	988
15	970

BENCHMARK
DATUM BASED ON RTK-GPS OBSERVATIONS,
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465± FEET OF THE NORTH
PROPERTY LINE AND EAST 492± OF THE WEST
PROPERTY LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE OF A 24" OAK,
LOCATED SOUTH 240± FEET OF THE NORTH
PROPERTY LINE AND EAST 170± FEET OF THE
WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)



TREE PROTECTION DETAIL
NOT TO SCALE

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2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION	MOUNTAIN TOP ESTATES SITE CONDOMINIUM	GRADING PLAN	CLIENT: MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	SCALE: 1in. = 60ft. PROJECT No.: 183568 DWG NAME: 3568 GR ISSUED: APRIL 5, 2019	GR1
DRAFT: JHG											
CHECK: WMP											

DETENTION BASIN VOLUME CALCULATIONS

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	931.00	1,102	0	0
1.0	932.00	2,304	1,666	1,666
2.0	933.00	3,891	3,063	4,730
3.0	934.00	5,595	4,717	9,447
4.0	935.00	7,193	6,377	15,824
5.0	936.00	8,975	8,068	23,892
6.0	937.00	10,890	9,917	33,809
7.0	938.00	12,972	11,916	45,725

Detention Storage Elevation Calculation:

	ELEV.	VOLUME	VOLUME REQ.	ELEVATION
LOWER	936.00	23,892	35,050	937.13
HIGHER	937.00	33,809		

Bankfull Storage Elevation Calculation:

	ELEV.	VOLUME	VOLUME REQ.	ELEVATION
LOWER	936.00	23,892	30,086	936.62
HIGHER	937.00	33,809		

First Flush Storage Elevation Calculation:

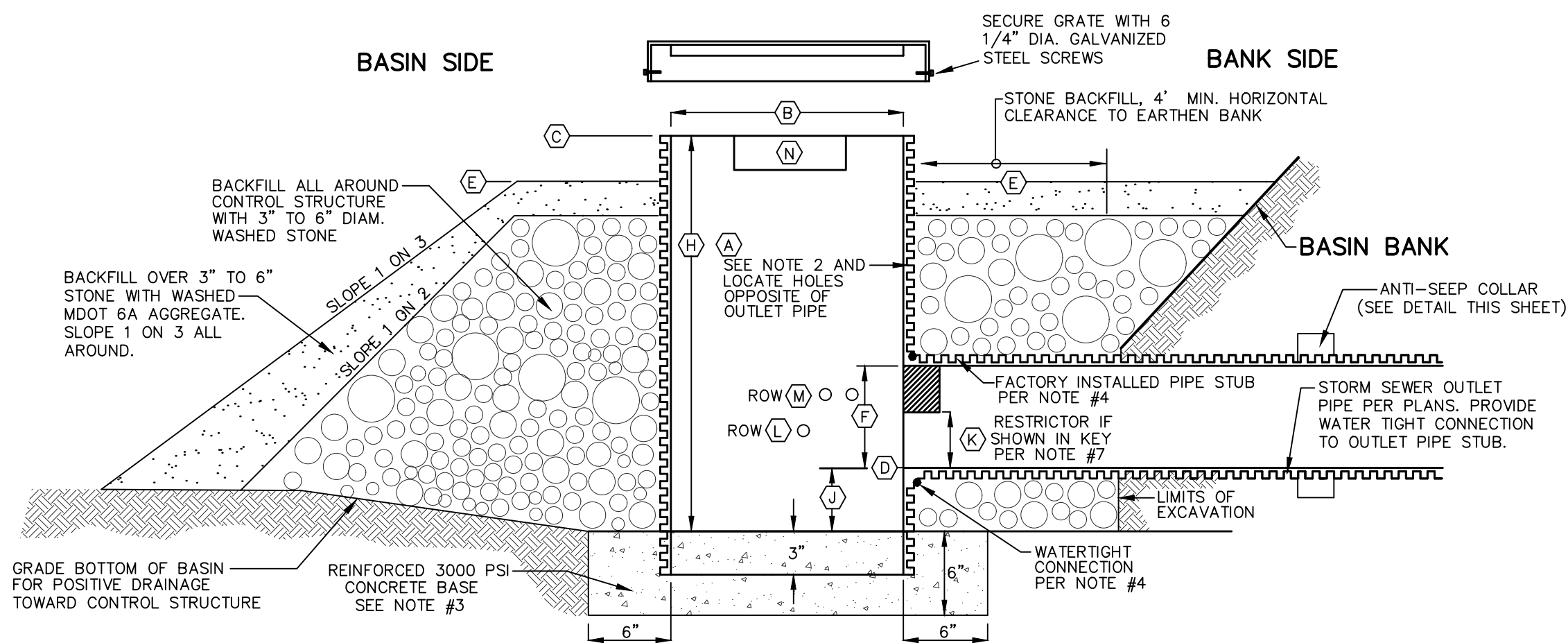
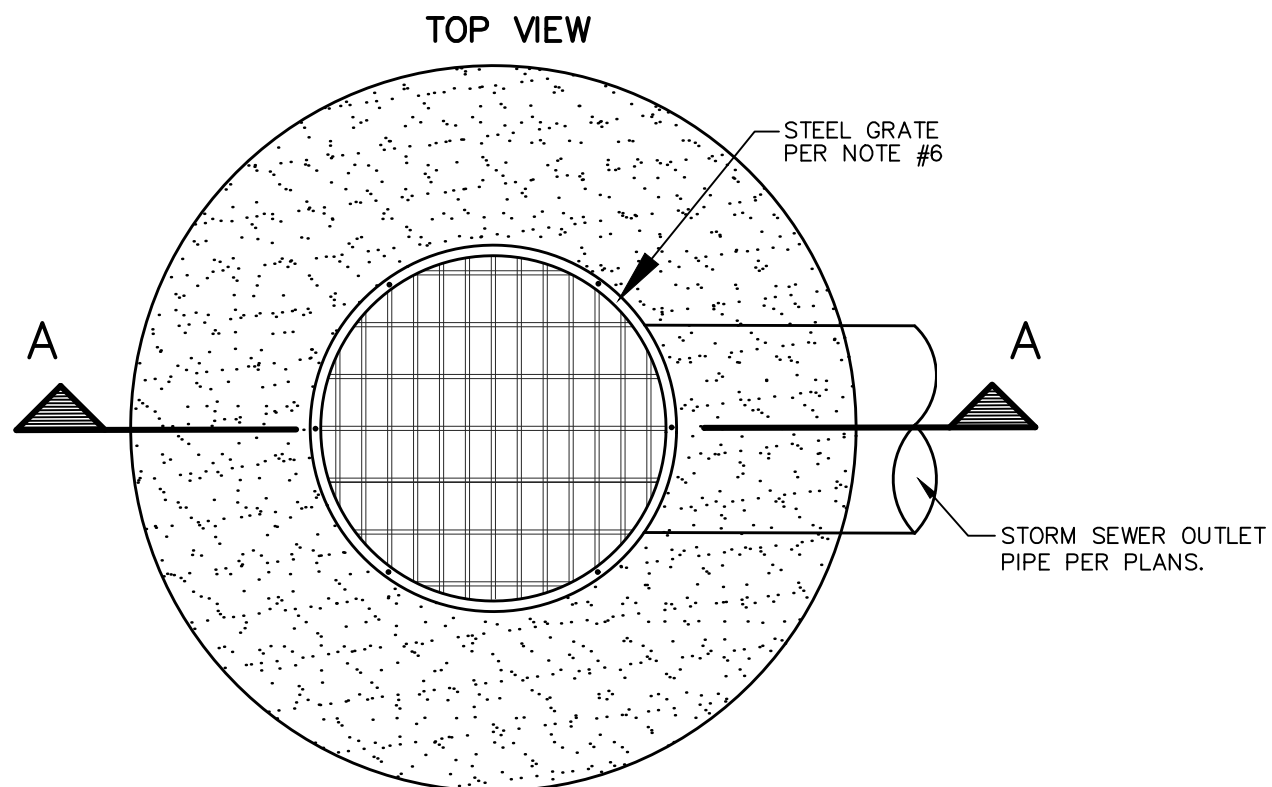
	ELEV.	VOLUME	VOLUME REQ.	ELEVATION
LOWER	933.00	4,730	6,692	933.42
HIGHER	934.00	9,447		

Forebay Storage Calculation:

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	931.00	451	0	0
1.0	932.00	1,028	720	720
2.0	933.00	1,794	1,393	2,113

	ELEV.	VOLUME	VOLUME REQ.	ELEVATION
LOWER	932.00	720	2,103	932.99
HIGHER	933.00	2,113		

KEY		
A	CONTROL STRUCTURE DESIGNATION	CS-101
B	MATERIAL TYPE, SEE NOTE 2	CMP
C	STRUCTURE INSIDE DIAMETER	4'
D	RIM ELEVATION WITHOUT GRATE	937.16
E	INVERT ELEVATION OUTLET PIPE	930.85
F	TOP OF STONE ELEVATION	936.50
G	OUTLET PIPE DIAMETER	18"
H	OUTLET PIPE MATERIAL	RCP
I	STRUCTURE HEIGHT WITHOUT GRATE	9.6'
J	SUMP HEIGHT	2'
K	RESTRICTOR OPENING DIA. IN OUTLET PIPE	N/A
L	FIRST ROW OF HOLES CENTERLINE ELEVATION HOLE DIAMETER NUMBER OF HOLES IN ROW	931.00 1.5" 1
M	SECOND ROW OF HOLES CENTERLINE ELEVATION HOLE DIAMETER NUMBER OF HOLES IN ROW	933.42 2" 2
N	WIER OPENING WIER HEIGHT WIER WIDTH	6" 19.25"



CROSS-SECTION A-A
BASIN CONTROL STRUCTURE DETAIL (CS)
NOT TO SCALE

CONTROL STRUCTURE (CS-101) CALCULATIONS

Tributary Area : A = 11.63 Acres
Compound Runoff Coefficient : C = 0.32
Orifice Flow Coefficient : c = 0.60
Allowable Outflow Rate : Qa = 2.33 CFS

100 Year Flood Volume : V100 = 35,050 CF
Bankfull Flood Volume : Vbf = 30,086 CF
First Flush Volume : Vff = 6,692 CF

Low Water Level : LWL = 931.00
First Flush Elevation : Xff = 933.42
Bankfull Flood Elevation : Xbf = 936.62
100 Year Flood Elevation : X100 = 937.13
(Use available high water elevation for X100)

FIRST FLUSH:
Qff = Vff * (1 / 24 hrs) * (1 / 3600 sec) = 0.077 CFS
Hff = (2 / 3) * (Xff - LWL) = 1.61 FT
Aff = Qff / (c * SQRT(2 * 32.2 * Hff)) = 0.0127 SF
Nff = Aff / 0.01227 = 1.0 1.5" Holes

Use Nff = 1 1.5" Holes at Elevation = 931.00

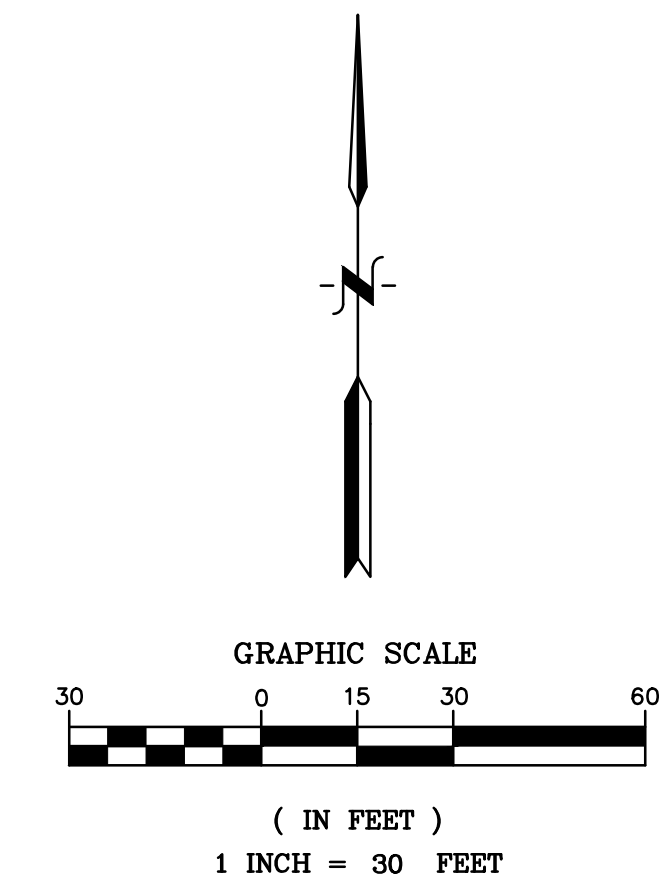
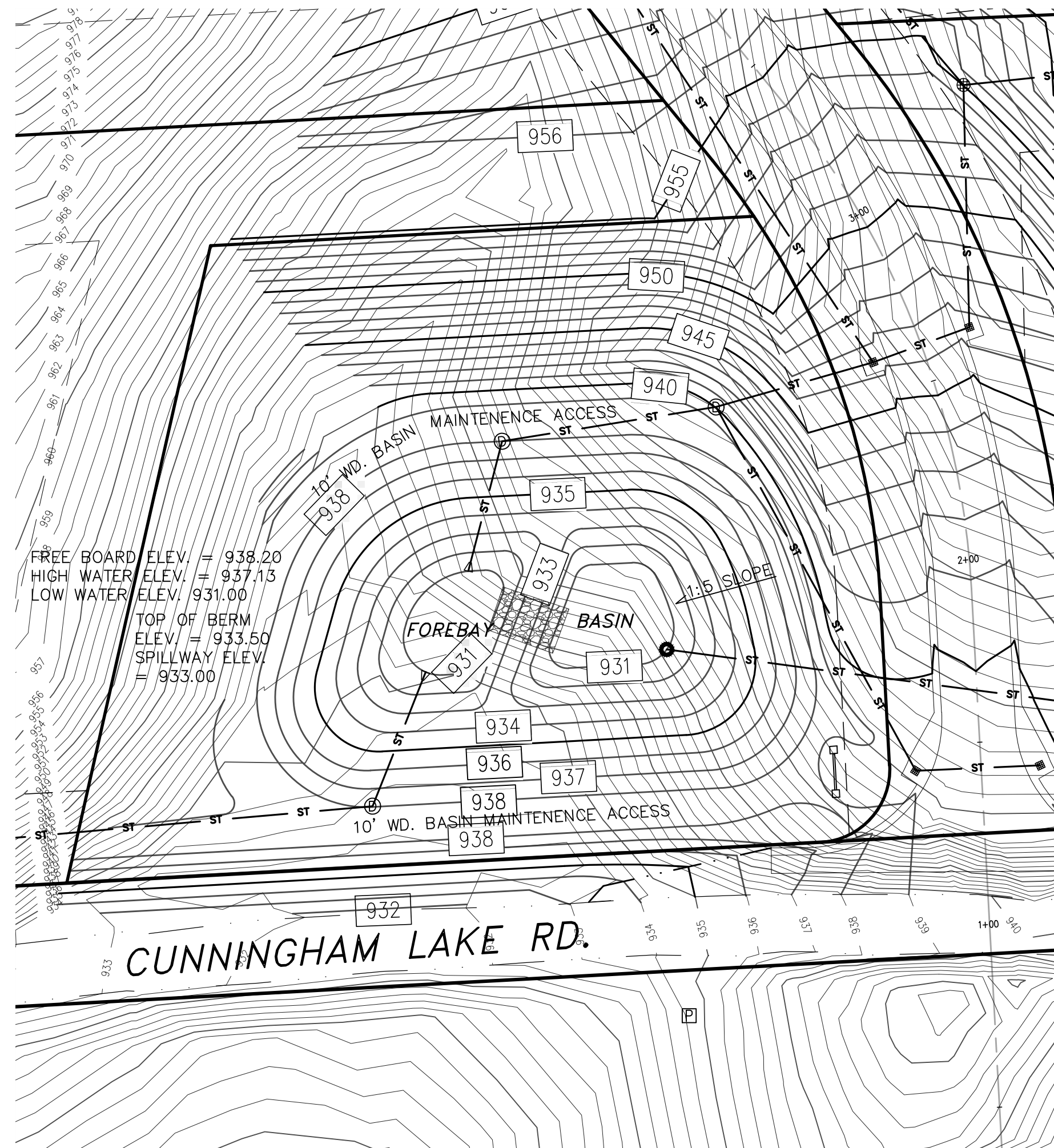
BANKFULL FLOOD:
H = (2 / 3) * (Xbf - LWL) = 3.750 FT
Qlwl = c * Nff * 0.01227 * SQRT(2 * 32.2 * h) = 0.1144 CFS
Vprovided = Qlwl * 24 hrs * (3600 sec / 1 hr) = 9,884 CF
Vneeded = Vbf - Vprovided = 20,201 CF

Qbf = Vneeded * (1 / 16 hrs) * (1 / 3600 sec) = 0.3507 CFS
Hbf = (2 / 3) * (Xbf - Xff) = 2.14 FT
Abf = Qbf / (c * SQRT(2 * 32.2 * Hbf)) = 0.0498 SF
Nbf = Abf / 0.02182 = 2.3 2.0" Holes

Use Nbf = 2 2.0" Holes at Elevation = 933.42

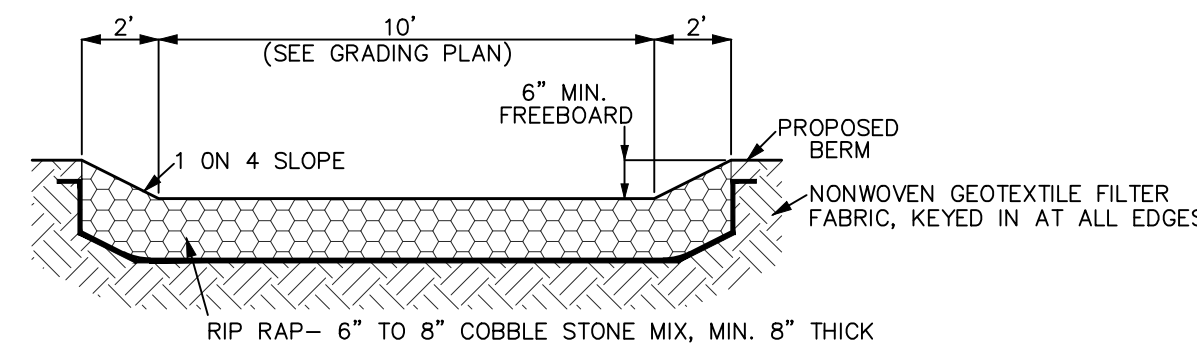
100 YEAR FLOOD:
Qff + Qbf = [c * Nff * 0.01227 * SQRT(2 * 32.2 * (X100 - LWL))] + [c * Nbf * 0.02182 * SQRT(2 * 32.2 * (X100 - Xff))] = 0.551 CFS
Q100 = Qa - (Qff + Qbf) = 1.7751 CFS

Use a rectangular weir -
Depth (X100 - Xbf) = 0.50 FT
Width = 19.25 Inches
Weir Flow Calculation:
Q = 3.33 (L-0.2H) H^{1.5} = 1.774 CFS

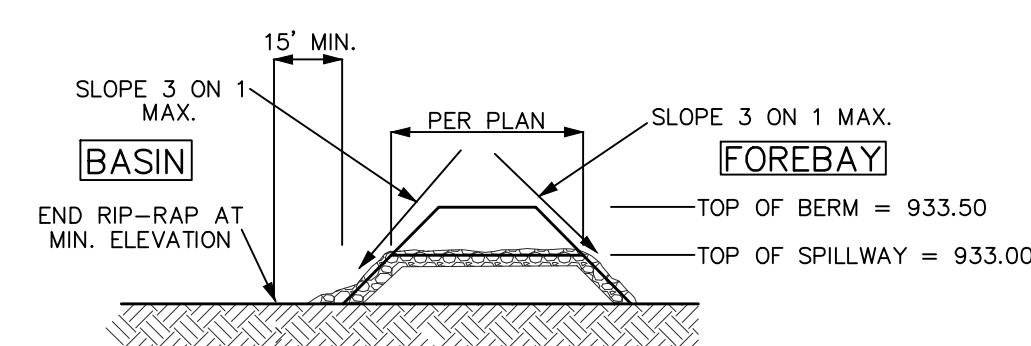


- LEGEND
- MISC. STRUCTURE (AS LABELED)
 - WELL / MONITOR WELL
 - SIGN
 - UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 - UTILITY POLE W/GUY WIRE
 - OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - EDGE OF WOODS / TREE DRIP LINE
 - FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 - EDGE OF GRAVEL
 - STORM WATER MANHOLE W/IDENTIFIER
 - CATCH BASIN W/IDENTIFIER
 - CONTROL STRUCTURE
 - FLARED END SECTION
 - STORM WATER DRAINAGE PIPE
 - GAS MANHOLE / GASOLINE COVER
 - GAS SHUT OFF
 - U/G GAS
 - EX. 1" CONTOUR
 - EX. 5' CONTOUR
 - PROP. CONCRETE CURB & GUTTER

Detention Basin Forebay Calculation	
Design Flow:	10-Year Event to = 20.3 min. Q = (0.32) (11.63) (3.863) = 14.38 CFS
Width =	14 Feet
Flow Depth Calculation:	Q = 3.33 (L-0.2H) H ^{1.5} Depth = 5.5 Inches
Average Velocity V = Q/A	1.0 FPS



FOREBAY SPILLWAY ELEVATION
NOT TO SCALE



FOREBAY SPILLWAY CROSS SECTION
NOT TO SCALE

100 YEAR STORM DETENTION						
Tributary Area (A) =	11.63	Acres				
Compound Runoff Coefficient (C) =	0.32					
Design Constant (K1) = A * C =	3.69					
Allowable Outflow Rate (Qo)* =	2.33	cfs				
1	2	3	4	5	6	7
Duration (Minutes)	Duration (Seconds)	Intensity (100-yr Storm) (in / hr)	Col. 2 * Col. 3 (Inches)	Inflow Volume = Col. 4 * K1 (Cubic Feet)	Outflow Volume = Col. 2 * Qo (Cubic Feet)	Storage Volume = Col. 5 - Col. 6 (Cubic Feet)
5	300	9.17	2750	10139	698	9441
10	600	7.86	4714	17382	1396	15986
15	900	6.88	6188	22813	2093	20720
20	1200	6.11	7333	27038	2791	24247
30	1800	5.00	9000	33183	4187	28996
60	3600	3.24	11647	42943	8374	34569
90	5400	2.39	12913	47610	12560	35050
120	7200	1.90	13655	50347	16747	33599
180	10800	1.34	14488	53417	25121	28296

Note: Figures in Columns (3) and (4) are computed by the formula I = 275 / (t + 25) (i.e. 100-yr Curve);

* Allowable outflow rate Qo is computed by one of the following cases:

Case 1: Qo = capacity of existing discharge conduit or channel.
Case 2: Qo = q * A where q = Permissible discharge rate per acre of tributary area = 0.20 cfs / Acre

Bankfull Volume: (8180)(A)(C) = 30086 cf
First Flush Volume: (1815)(A)(C) = 6692 cf
Forebay Volume (5% of 100 year Volume): = 1680 cf

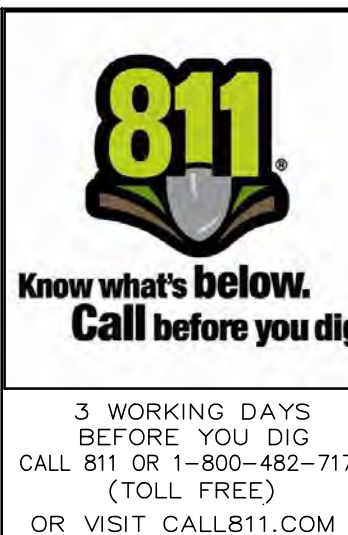
BENCHMARK

DATUM BASED ON RTK-GPS OBSERVATIONS,
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465± FEET OF THE NORTH
PROPERTY LINE AND EAST 492± OF THE WEST
PROPERTY LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE OF A 24" OAK,
LOCATED SOUTH 240± FEET OF THE NORTH
PROPERTY LINE AND EAST 170± FEET OF THE
WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)



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

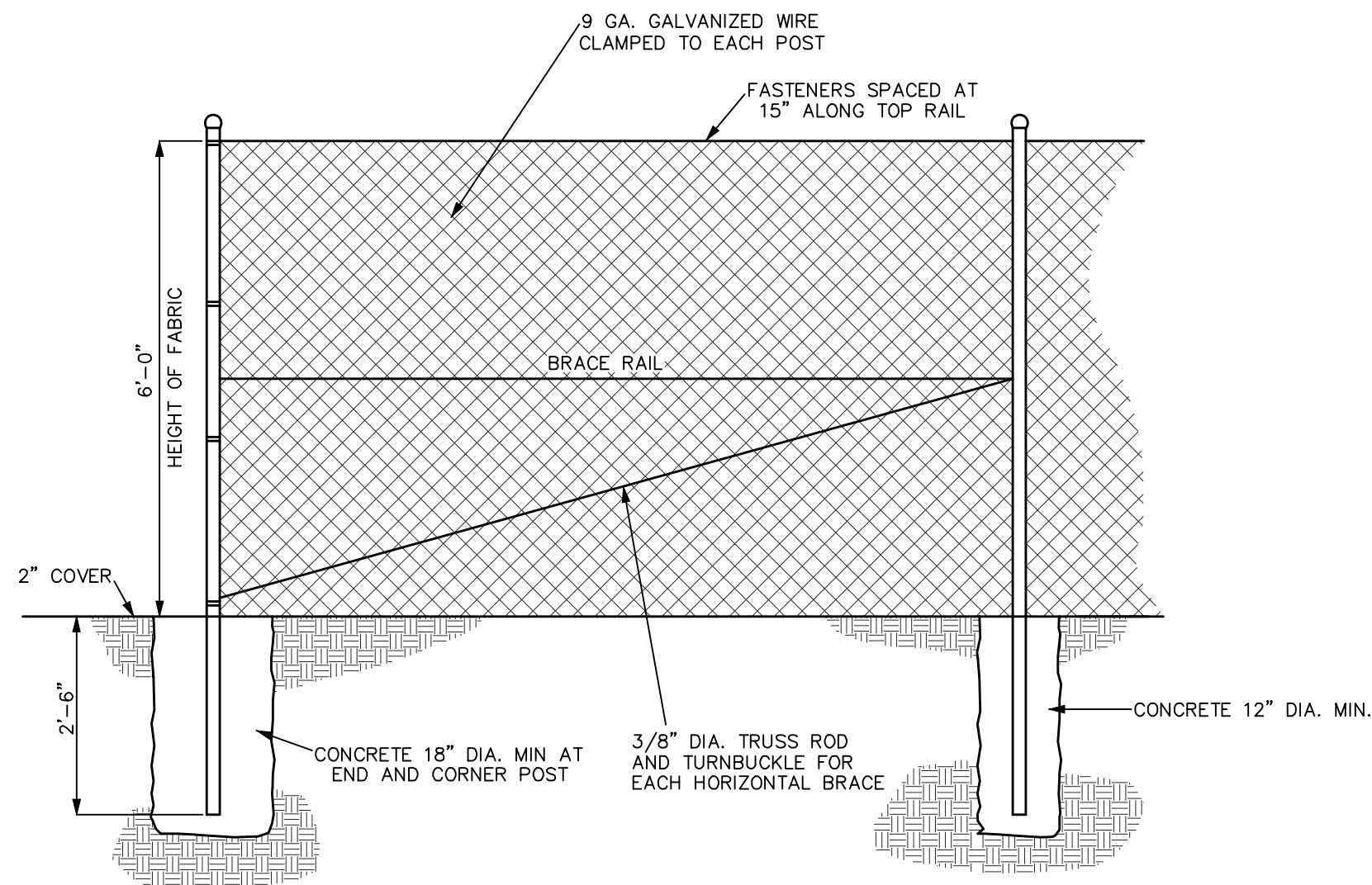
MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

GRADING DETAIL
DETENTION BASIN

CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

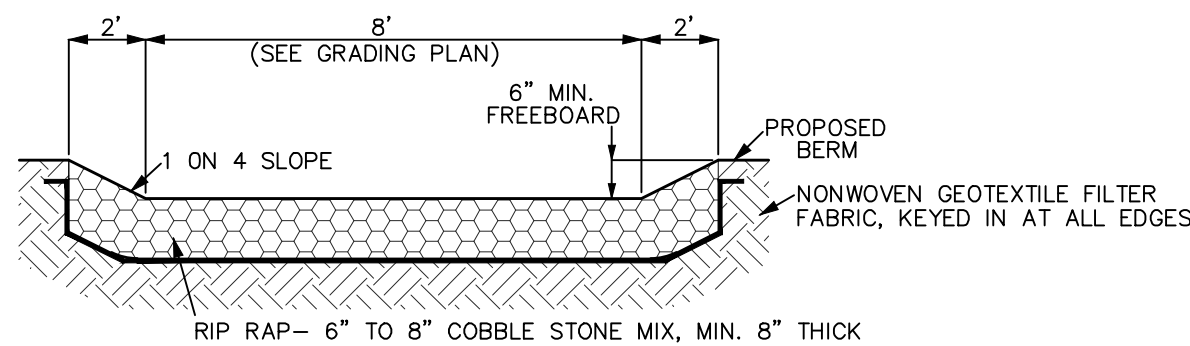
SCALE: 1in. = 30ft.
PROJECT No.: 183568
DWG NAME: 3568 GR2-3
ISSUED: APRIL 5, 2019

GR2

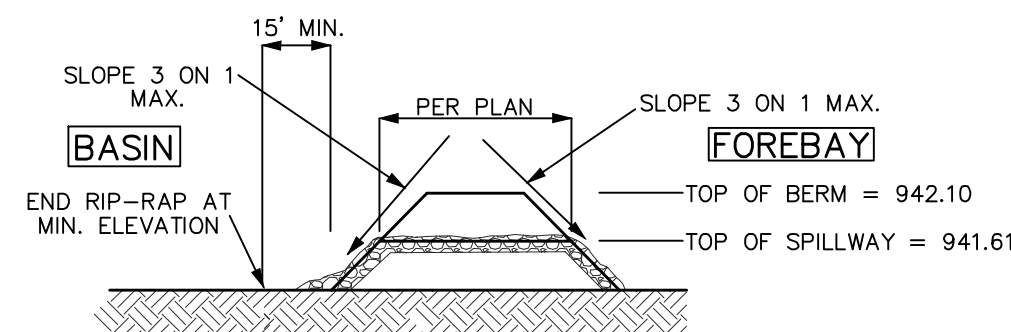


CHAIN LINK FENCE DETAIL
NOT TO SCALE

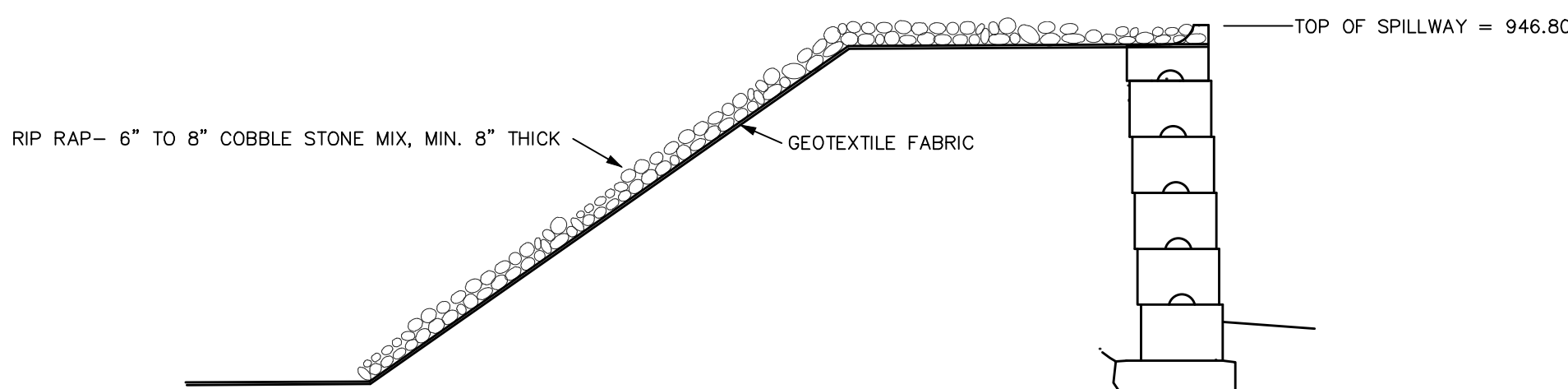
NOTE:
ALL FENCING AND HARDWARE SHALL BE GALVANIZED STEEL.



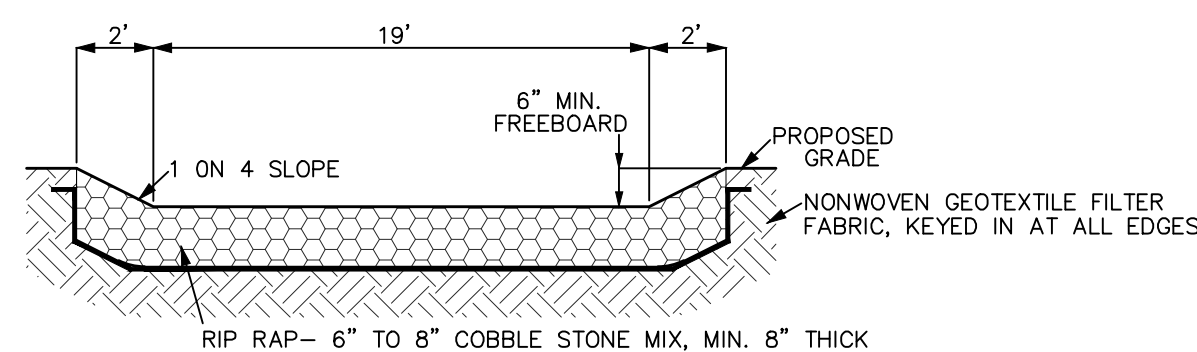
FOREBAY SPILLWAY ELEVATION
NOT TO SCALE



FOREBAY SPILLWAY CROSS SECTION
NOT TO SCALE



BASIN SPILLWAY CROSS SECTION
NOT TO SCALE



BASIN SPILLWAY ELEVATION
NOT TO SCALE

PROPOSED RETENTION BASIN CALCULATIONS			
	WATERSHED AREA =	6.87	Acres
Volume = (Watershed Area) x (43,560 sq.ft./ac) x (2 inches)/(12 ft./inch)			
	Retention Volume Required =	49,876	cubic feet

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	939.00	7.770	0	0
1.0	940.00	8.773	8,266	8,266
2.0	941.00	9.895	9,328	17,595
3.0	942.00	11.140	10,511	28,106
4.0	943.00	12.317	11,724	39,830
5.0	944.00	13.336	12,823	52,653
6.0	945.00	14.383	13,856	66,509
7.0	946.00	15.414	14,896	81,405
8.0	947.00	16.465	15,937	97,341

Retention Storage Elevation Calculation:

	ELEV	VOLUME	VOLUME REQ	ELEVATION
LOWER	943.00	39,830	49,876	943.78
HIGHER	944.00	52,653		

Forebay Storage Calculation:

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	939.00	575	0	0
1.0	940.00	960	759	759
2.0	941.00	1,435	1,190	1,949
3.0	942.00	2,004	1,712	3,660

	ELEV	VOLUME	VOLUME REQ	ELEVATION
LOWER	941.00	1,949	2,993	941.61
HIGHER	942.00	3,660		

Retention Basin Spillway Calculation

PEAK INFLOW:	100-Year Event	
t_c	= 17.4 min.	
Q	= (0.27) (6.87) (6.486) =	12.03 CFS
Width =	19 Feet	
Flow Depth Calculation:	$Q = 3.33 (L-0.2H) H^{1.5}$	Depth = 4.0 Inches
Average Velocity $V = Q/A$		1.2 FPS

Retention Basin Forebay Calculation

Design Flow:	10-Year Event	
t_c	= 17.4 min.	
Q	= (0.27) (6.87) (4.127) =	7.66 CFS
Width =	12 Feet	
Flow Depth Calculation:	$Q = 3.33 (L-0.2H) H^{1.5}$	Depth = 4.0 Inches
Average Velocity $V = Q/A$		0.8 FPS

ROCK SIZE DESIGNATION

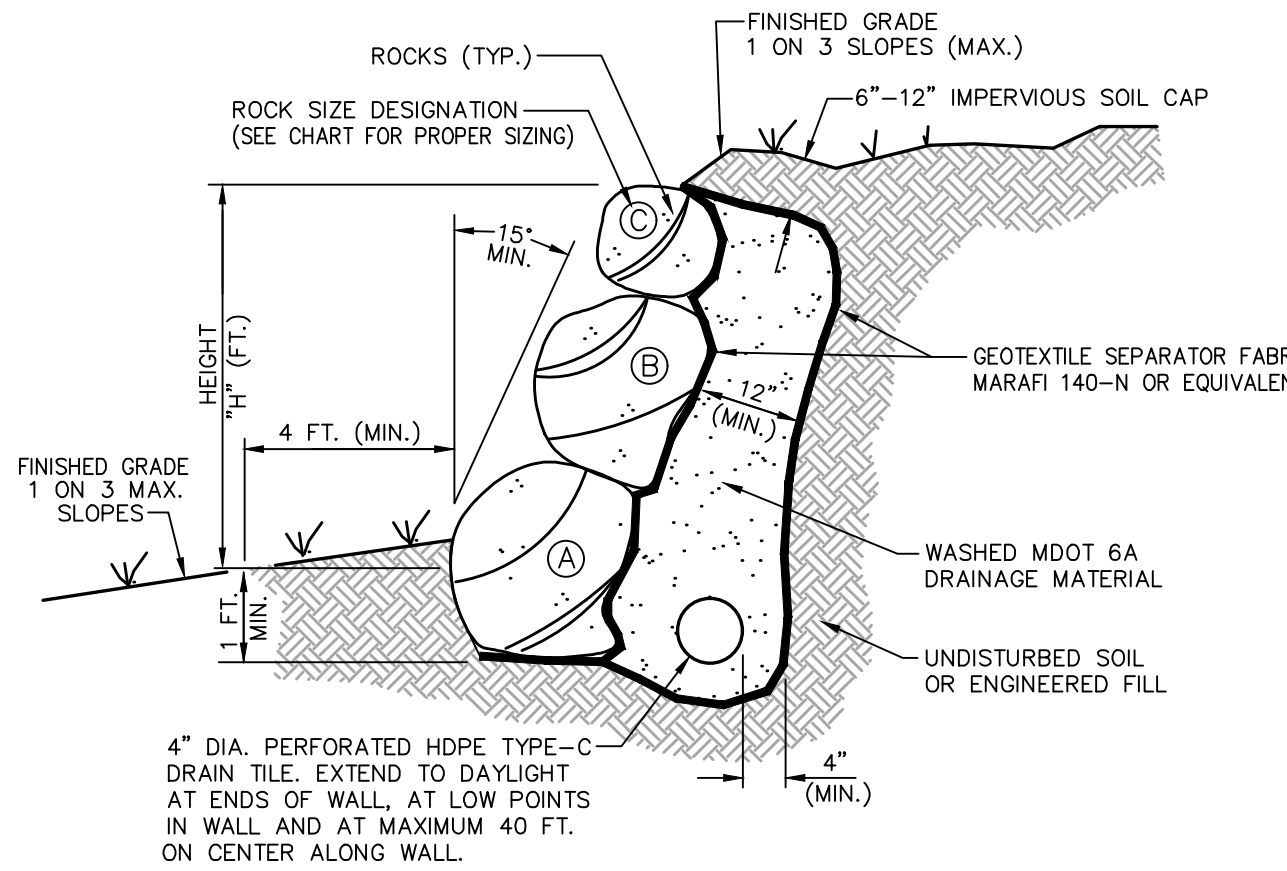
WALL HEIGHT "H" (FEET)	MINIMUM ROCK SIZE (MAN)		
	POSITION A	POSITION B	POSITION C
1	2	1	-
2	3	1	-

ROCK SIZE DESCRIPTION

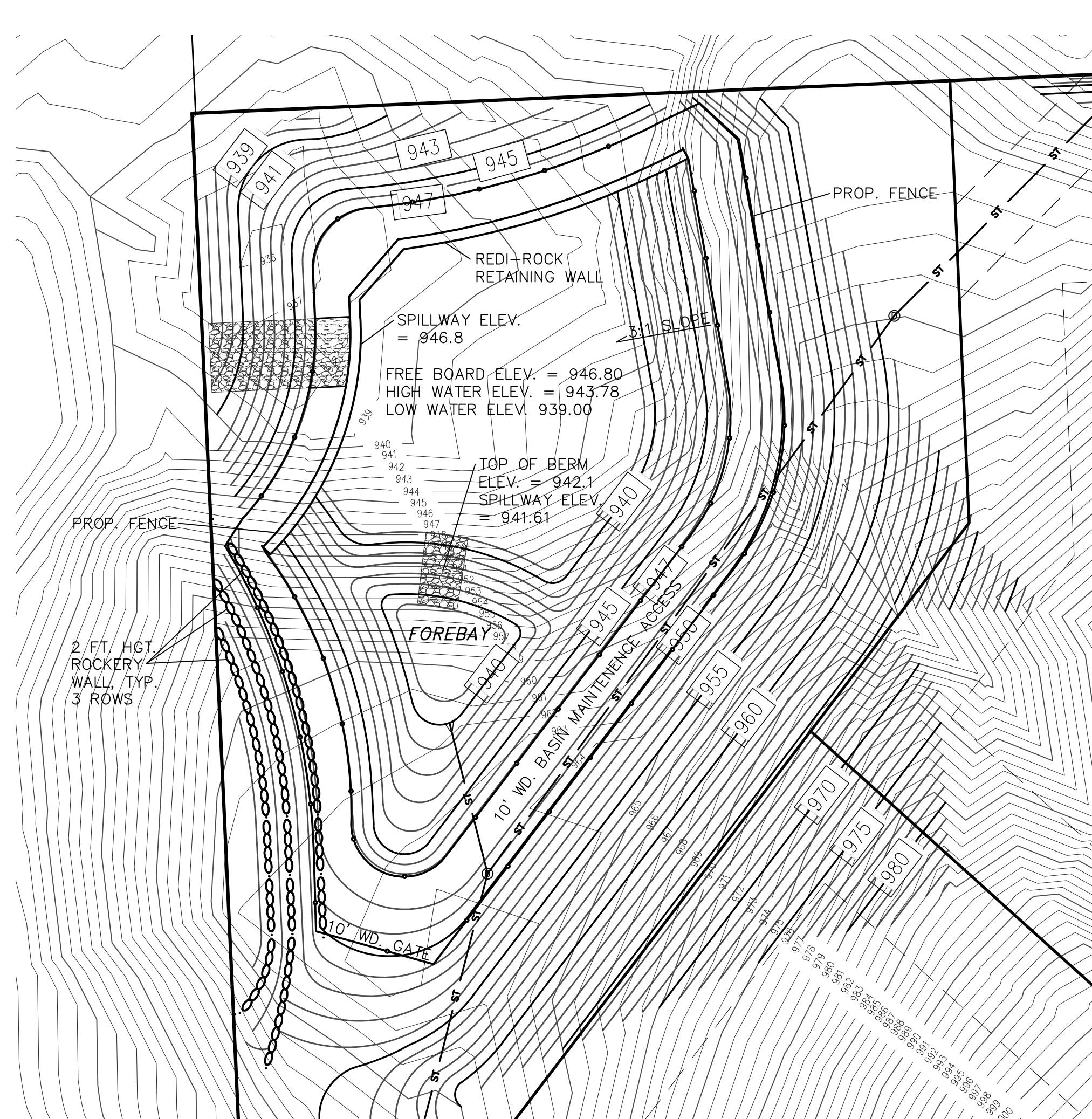
ROCK SIZE	ROCK WEIGHT	AVERAGE DIMENSION
1-MAN	50-200 lbs.	12"-18"
2-MAN	200-700 lbs.	18"-28"
3-MAN	700-2,000 lbs.	28"-36"

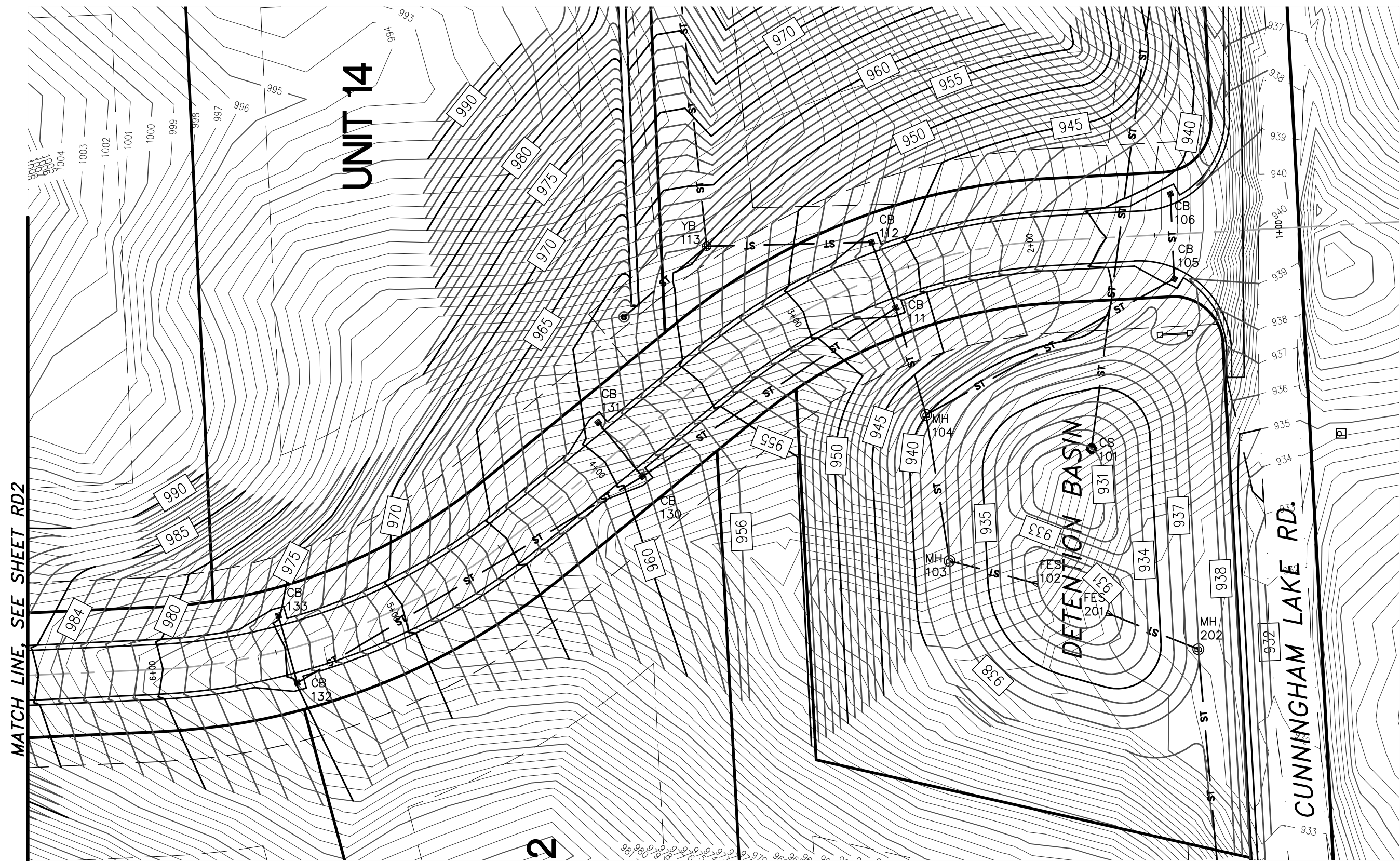
ROCKERY WALL NOTES:

- Non-reinforced gravity rockery walls shall not exceed 6 feet in height.
- The face of the rockery wall shall have a minimum batter of 15 degrees from vertical.
- Rockery walls shall be constructed on stable suitable soils or engineered fill. Unsuitable soils found within the 1 on 1 influence zone of the base of the wall, such as muck, peat, topsoil, mud, silt or other unstable materials shall be excavated and replaced up to the proposed subgrade elevation with MDOT Class III granular material compacted to 95% maximum unit weight, modified proctor.
- Rocks shall be installed with the largest rocks at the base of the wall and then progressively smaller rocks as the height of the wall increases. Rocks utilized in construction of the rockery wall shall meet or exceed the minimum rock size requirements based on the wall height as specified in the Rock Size Description and Rock Size Designation Charts. Rocks shall be of sufficient quality and strength and shall be free of cracks, seams and foliation.
- The base course of rocks shall be embedded a minimum of 12" into the acceptable subgrade soils as measured at a point 4 feet in front of the face of wall. The long dimensions of the rock shall extend into the slope behind the rockery wall for maximum stability. Subsequent courses of rocks shall be placed to lock into the rocks in the lower course or tier.
- Proper drainage shall be provided behind the wall including a minimum of 12" of free draining aggregate the entire height of the wall and a 4" minimum diameter drain tile behind the base of wall. The drain tile shall be extended beyond the face of wall to daylight at the ends of the wall, low points and at a maximum of 40 feet on center. Finish grade at the face of wall shall be graded to direct drainage away from the wall and shall not exceed a 1 on 3 slope.

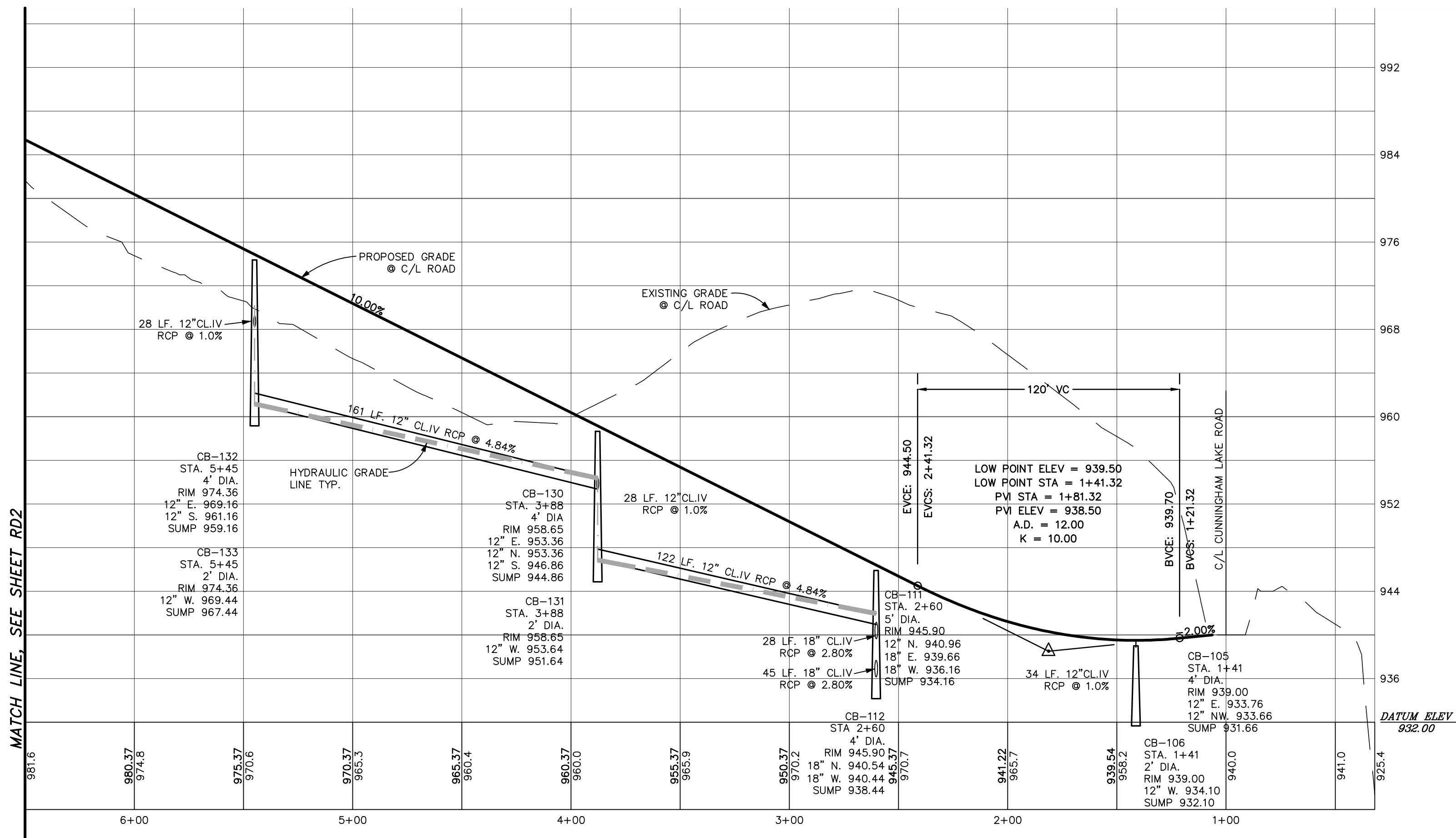
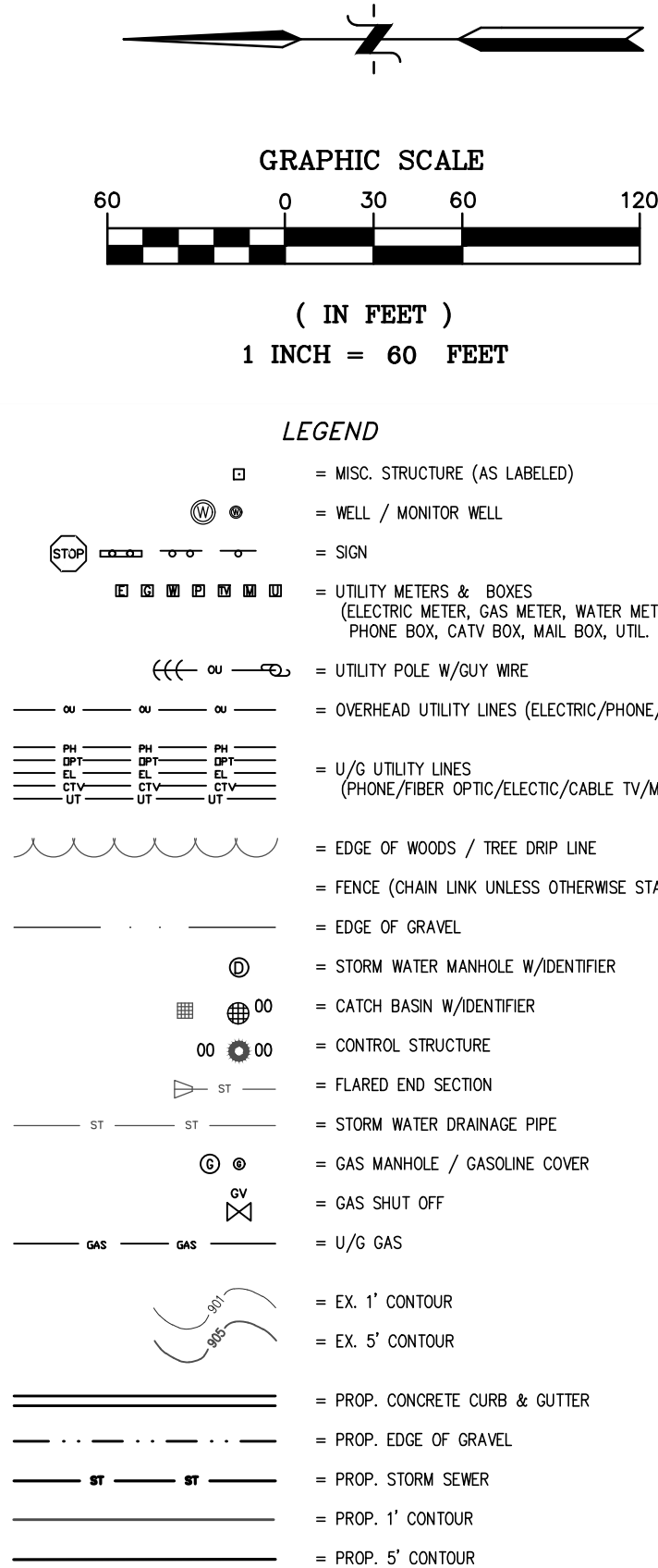


ROCKERY WALL CROSS-SECTION
NOT TO SCALE





PLAN
SCALE: 1in. = 40ft.



PROFILE
SCALE: HORIZ. 1in. = 40ft.
VERT. 1in. = 8ft.

BENCHMARK

DATUM BASED ON RTK-GPS OBSERVATIONS,
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465± FEET OF THE NORTH
PROPERTY LINE AND EAST 492± OF THE WEST
PROPERTY LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE OF A 24" OAK,
LOCATED SOUTH 240± FEET OF THE NORTH
PROPERTY LINE AND EAST 170± FEET OF THE
WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)



3 WORKING DAYS
BEFORE YOU DIG
CALL 811 OR 1-800-482-7171
(TOLL FREE)
OR VISIT CALL811.COM



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

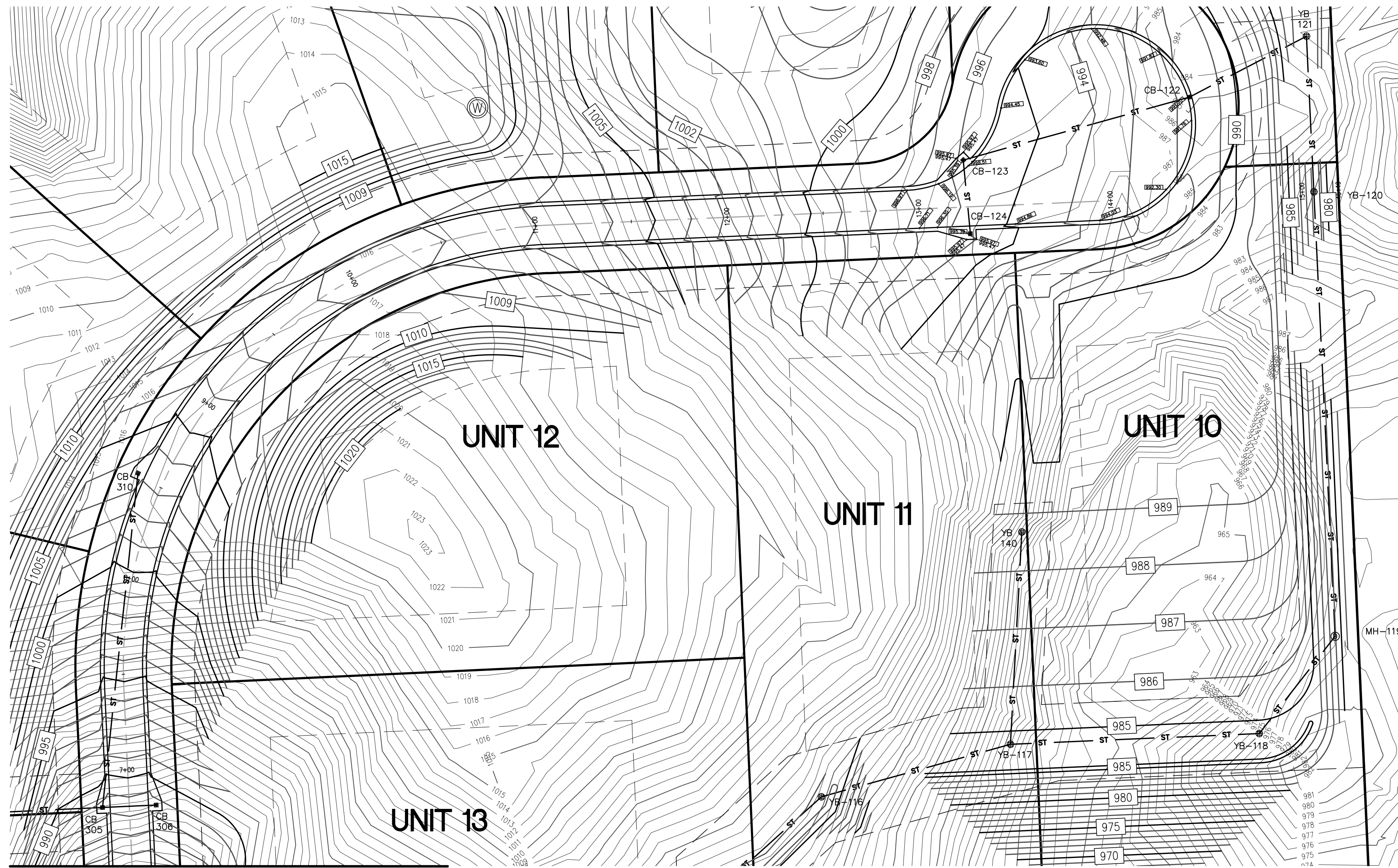
MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

MOUNTAIN TOP DR.
STA. 0+50 - 6+50
PLAN & PROFILE

CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

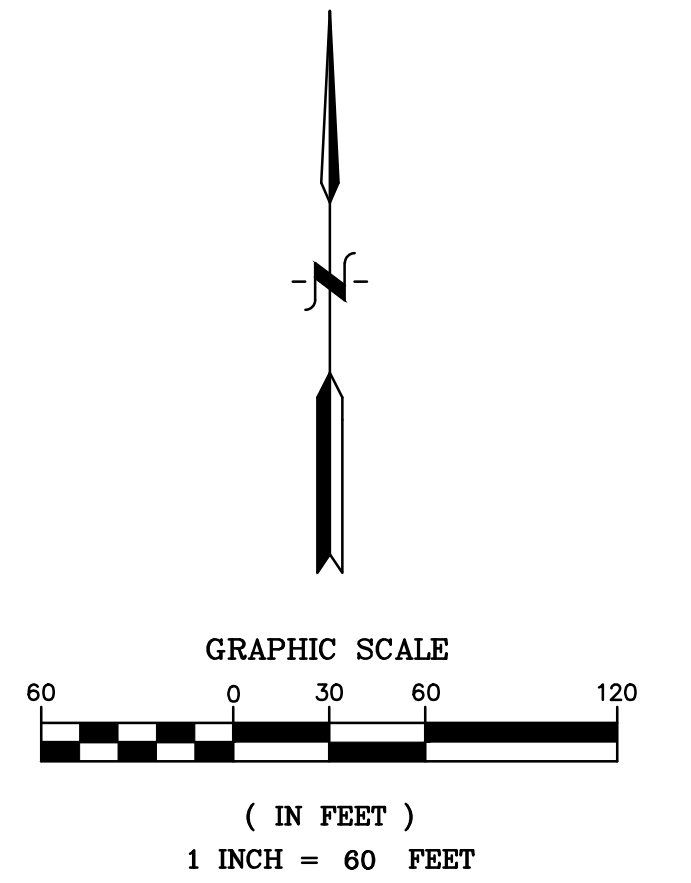
SCALE: 1in. = 40ft.
PROJECT No.: 183568
DWG NAME: 3568 RD
ISSUED: APRIL 5, 2019

RD1



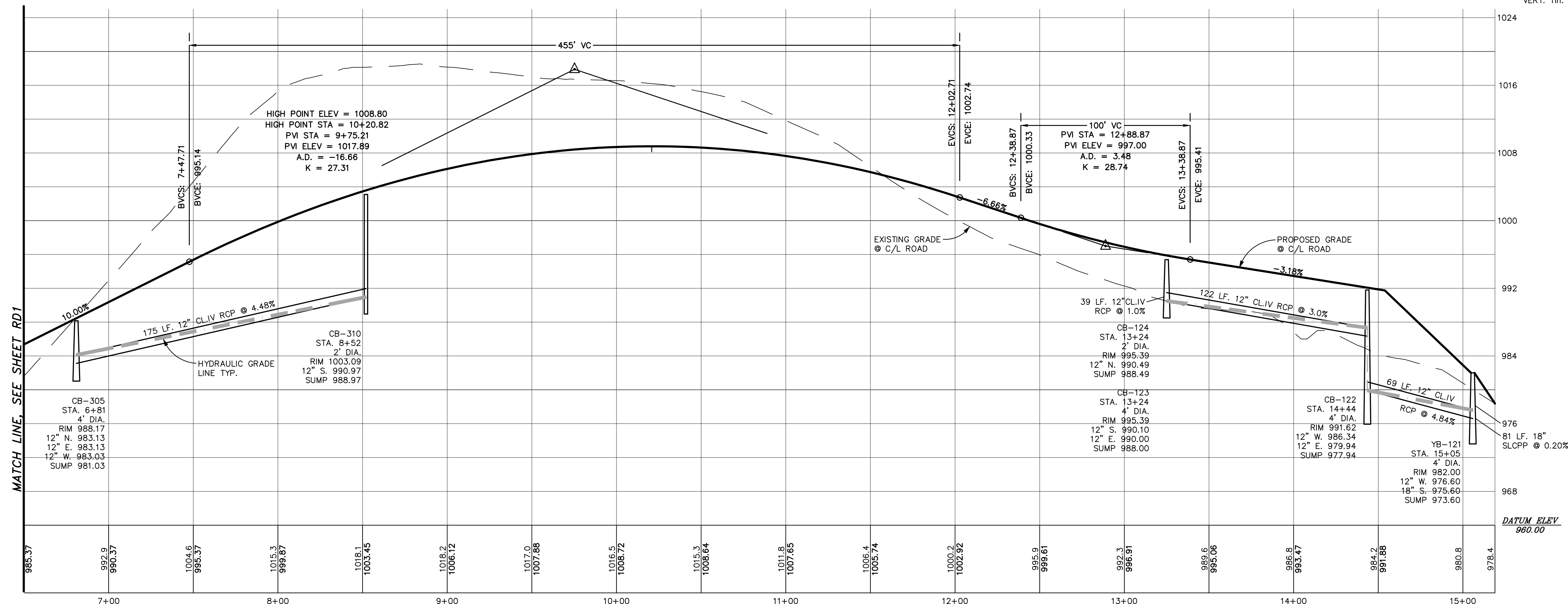
MATCH LINE, SEE SHEET RD1

PLAN
SCALE: 1in. = 40ft.



- LEGEND**
- MISC. STRUCTURE (AS LABELED)
 - WELL / MONITOR WELL
 - SIGN
 - UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 - UTILITY POLE W/GUY WIRE
 - OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - EDGE OF WOODS / TREE DRIP LINE
 - FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 - EDGE OF GRAVEL
 - STORM WATER MANHOLE W/IDENTIFIER
 - CATCH BASIN W/IDENTIFIER
 - CONTROL STRUCTURE
 - FLARED END SECTION
 - STORM WATER DRAINAGE PIPE
 - GAS MANHOLE / GASOLINE COVER
 - GAS SHUT OFF
 - U/G GAS
 - EX. 1' CONTOUR
 - EX. 5' CONTOUR
 - PROP. CONCRETE CURB & GUTTER
 - PROP. EDGE OF GRAVEL
 - PROP. STORM SEWER
 - PROP. 1' CONTOUR
 - PROP. 5' CONTOUR

PROFILE
SCALE: HORIZ. 1in. = 40ft.
VERT. 1in. = 8ft.



BENCHMARK

DATUM BASED ON RTK-GPS OBSERVATIONS,
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465± FEET OF THE NORTH
PROPERTY LINE AND EAST 492± OF THE WEST
PROPERTY LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE OF A 24" OAK,
LOCATED SOUTH 240± FEET OF THE NORTH
PROPERTY LINE AND EAST 170± FEET OF THE
WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

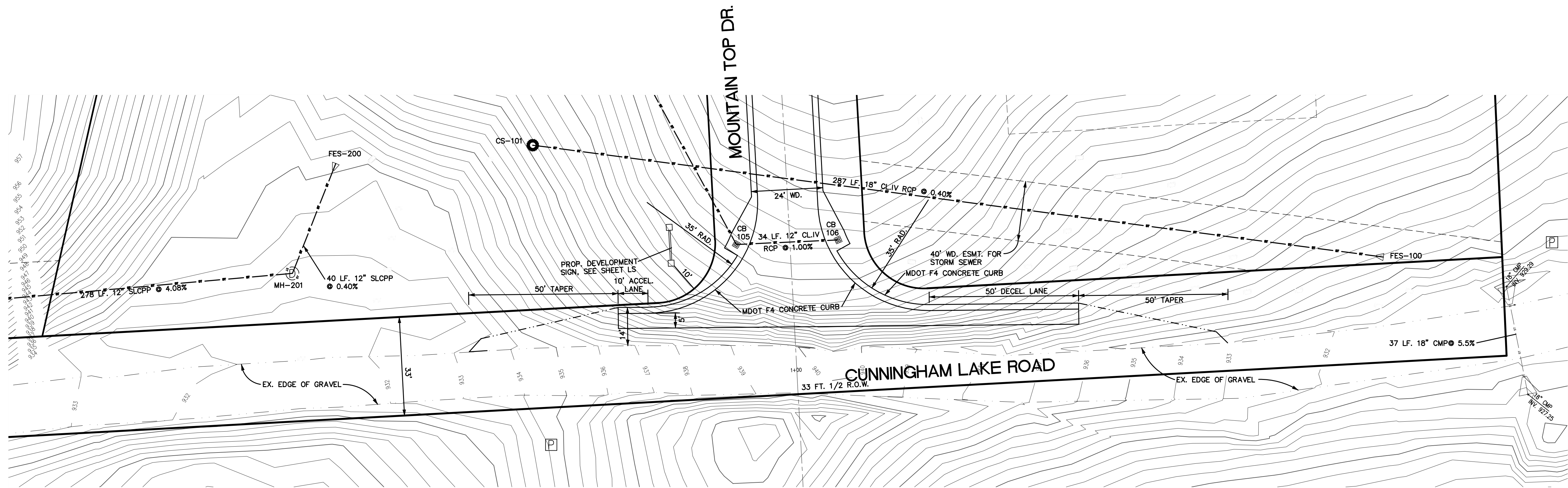
BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)

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

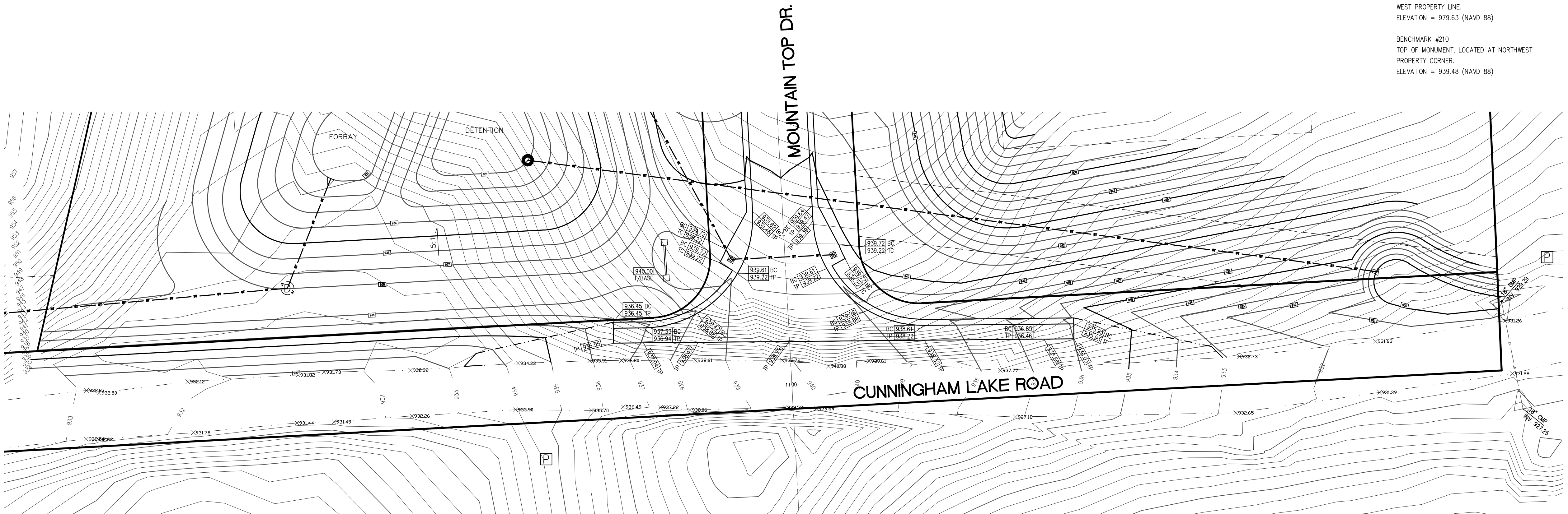
3 WORKING DAYS
BEFORE YOU DIG
CALL 811 OR 1-800-482-7171
(TOLL FREE)
OR VISIT CALL811.COM

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

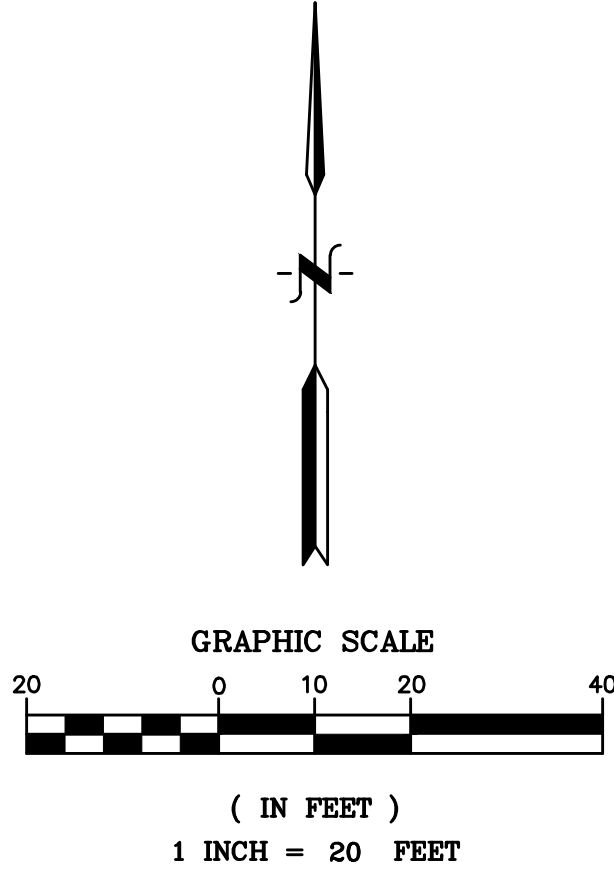
DESIGN:WMP DRAFT: JHG CHECK: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION	MOUNTAIN TOP ESTATES SITE CONDOMINIUM	MOUNTAIN TOP DR. STA. 6+50 - 15+19 PLAN & PROFILE	CLIENT: MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	SCALE: 1in. = 40ft. PROJECT No.: 183568 DWG NAME: 3568 RD ISSUED: APRIL 5, 2019	RD2



APPROACH DIMENSION DETAIL



APPROACH GRADING DETAIL



- LEGEND**
- MISC. STRUCTURE (AS LABELED)
 - WELL / MONITOR WELL
 - SIGN
 - UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 - UTILITY POLE W/GUY WIRE
 - OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTIC/CABLE TV/MISC UTILITIES)
 - EDGE OF WOODS / TREE DRIP LINE
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 - STORM WATER MANHOLE W/IDENTIFIER
 - CATCH BASIN W/IDENTIFIER
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 - GAS SHUT OFF
 - U/G GAS
 - EX. 1' CONTOUR
 - EX. 5' CONTOUR
 - PROP. CONCRETE CURB & GUTTER
 - PROP. EDGE OF GRAVEL
 - PROP. STORM SEWER
 - PROP. 1' CONTOUR
 - PROP. 5' CONTOUR
 - PROP. SPOT GRADE
 - TP = TOP OF PAVEMENT
 - BC = BACK OF CURB
 - TC = TOP OF CONCRETE

BENCHMARK

DATUM BASED ON RTK-GPS OBSERVATIONS,
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465± FEET OF THE NORTH
PROPERTY LINE AND EAST 492± FEET OF THE WEST
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WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

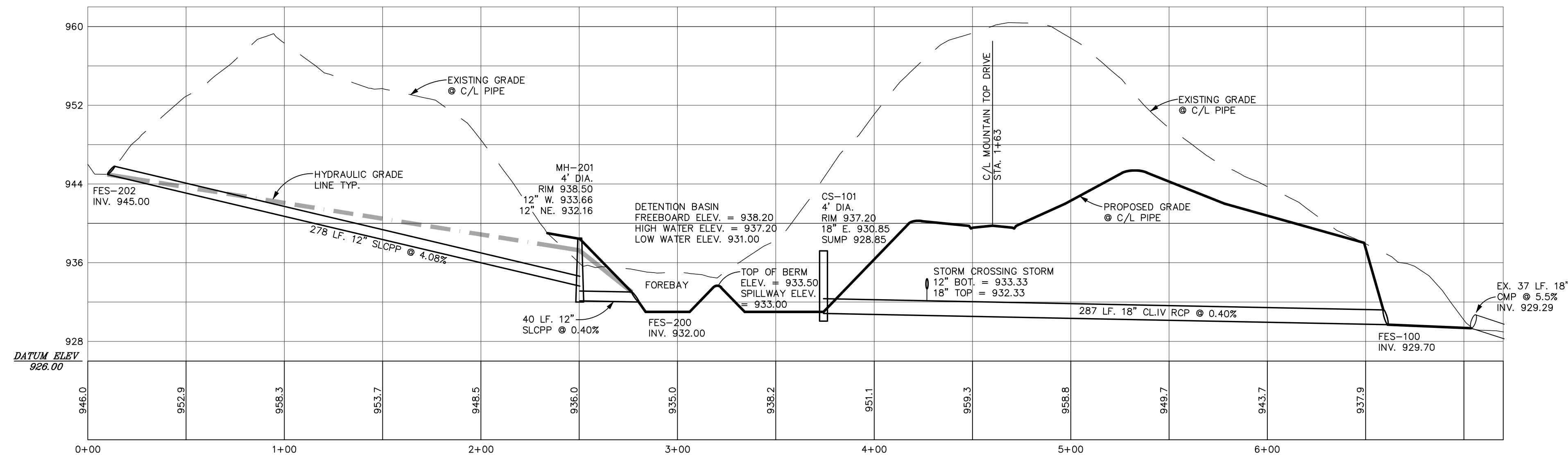
BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)



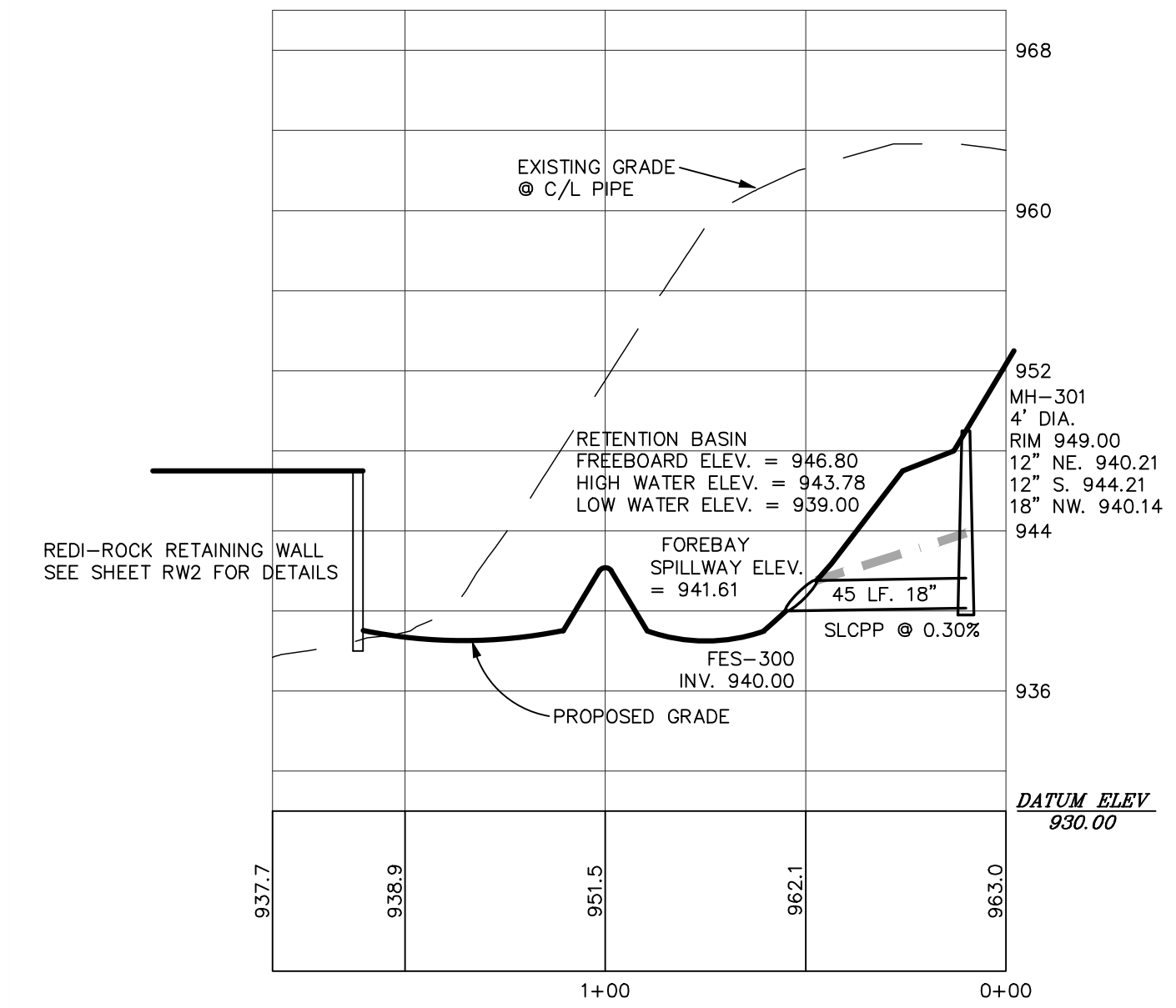
3 WORKING DAYS
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OR VISIT CALL811.COM



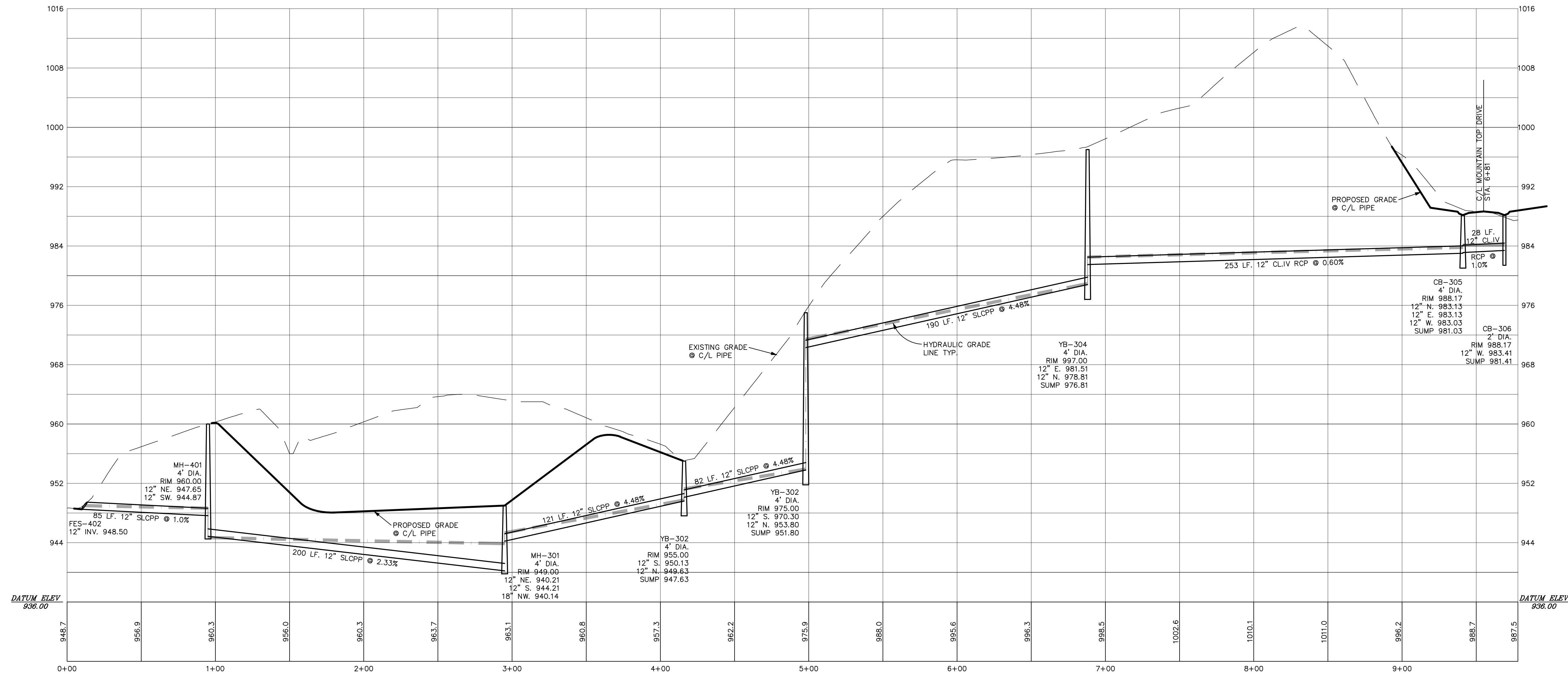
DESIGN: WMP DRAFT: JHG CHECK: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION	MOUNTAIN TOP ESTATES	CUNNINGHAM LAKE RD. APPROACH PLAN	CLIENT: MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	SCALE: 1" = 20ft. PROJECT No.: 183568 DWG NAME: 3568 APP ISSUED: APRIL 5, 2019	AP
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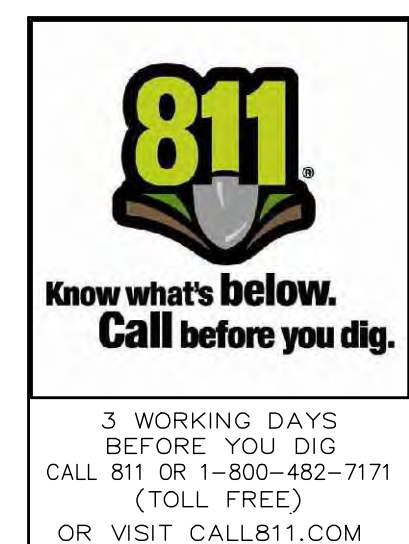
PROFILE: FES-203 TO FES-100
SCALE: HORIZ. 1in. = 40ft.
VERT. 1in. = 8ft.



PROFILE: FES-300 TO MH-301
SCALE: HORIZ. 1in. = 40ft.
VERT. 1in. = 8ft.



PROFILE: FES-402 TO CB-306
SCALE: HORIZ. 1in. = 40ft.
VERT. 1in. = 8ft.



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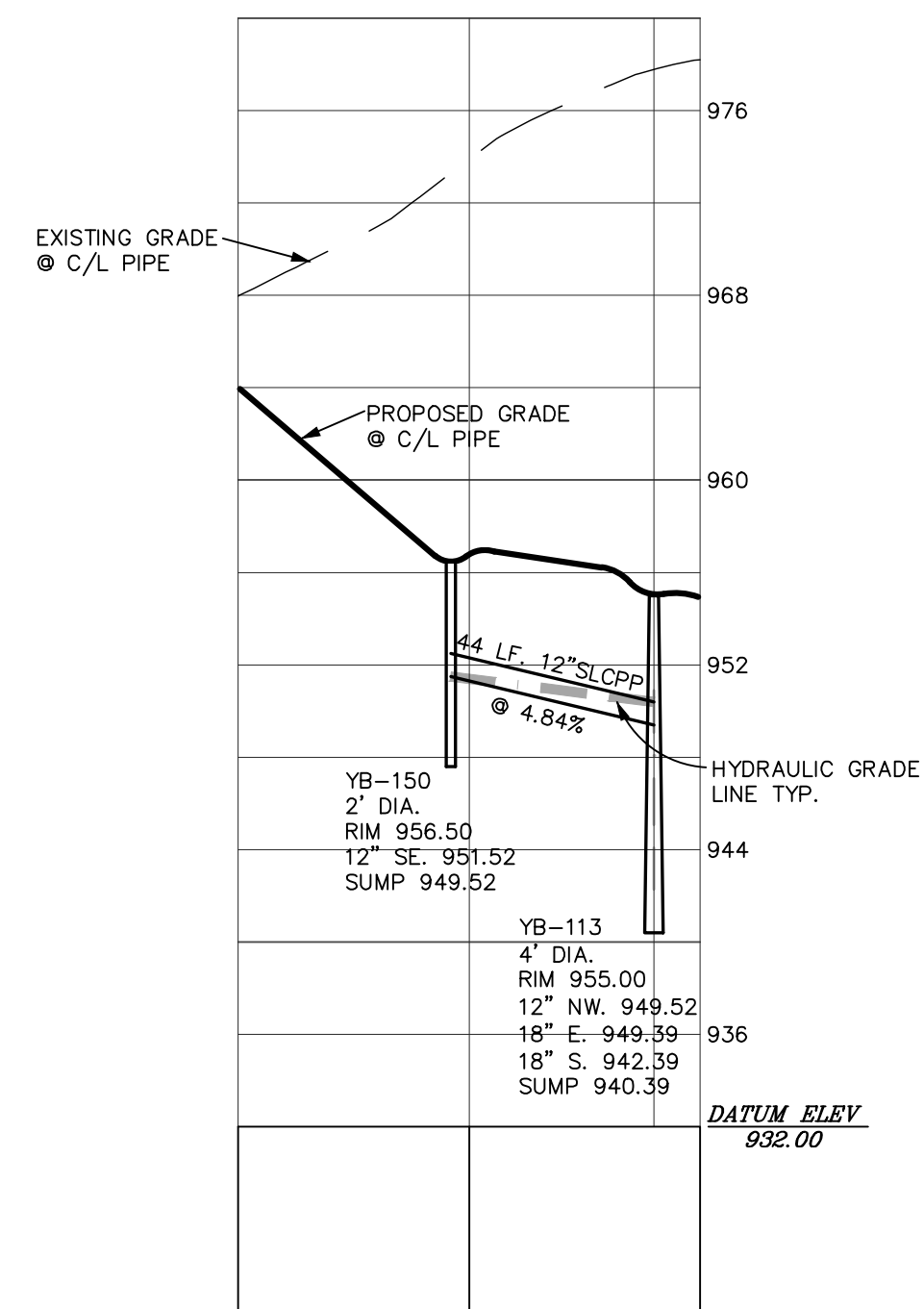
MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

STORM SEWER PROFILES

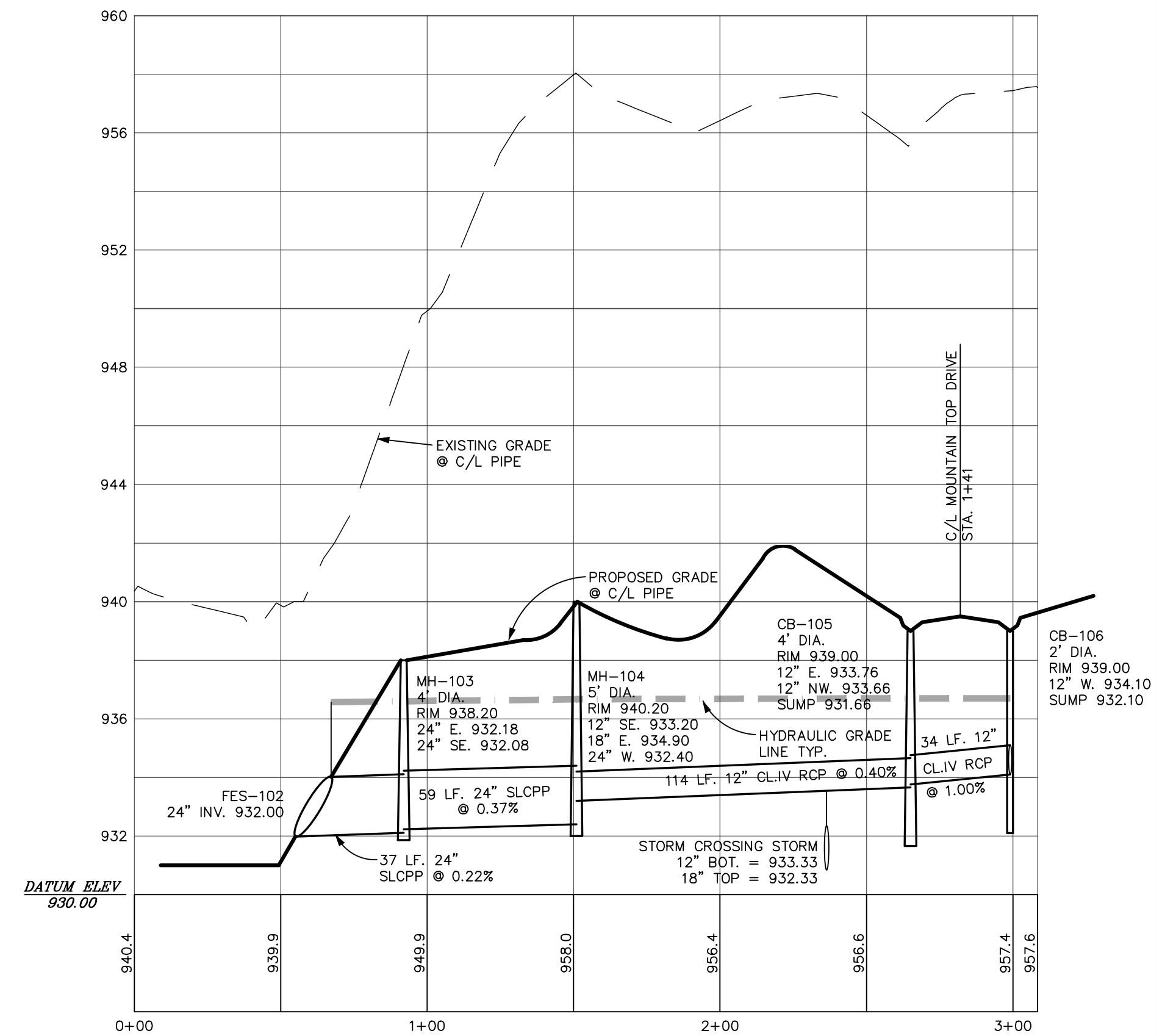
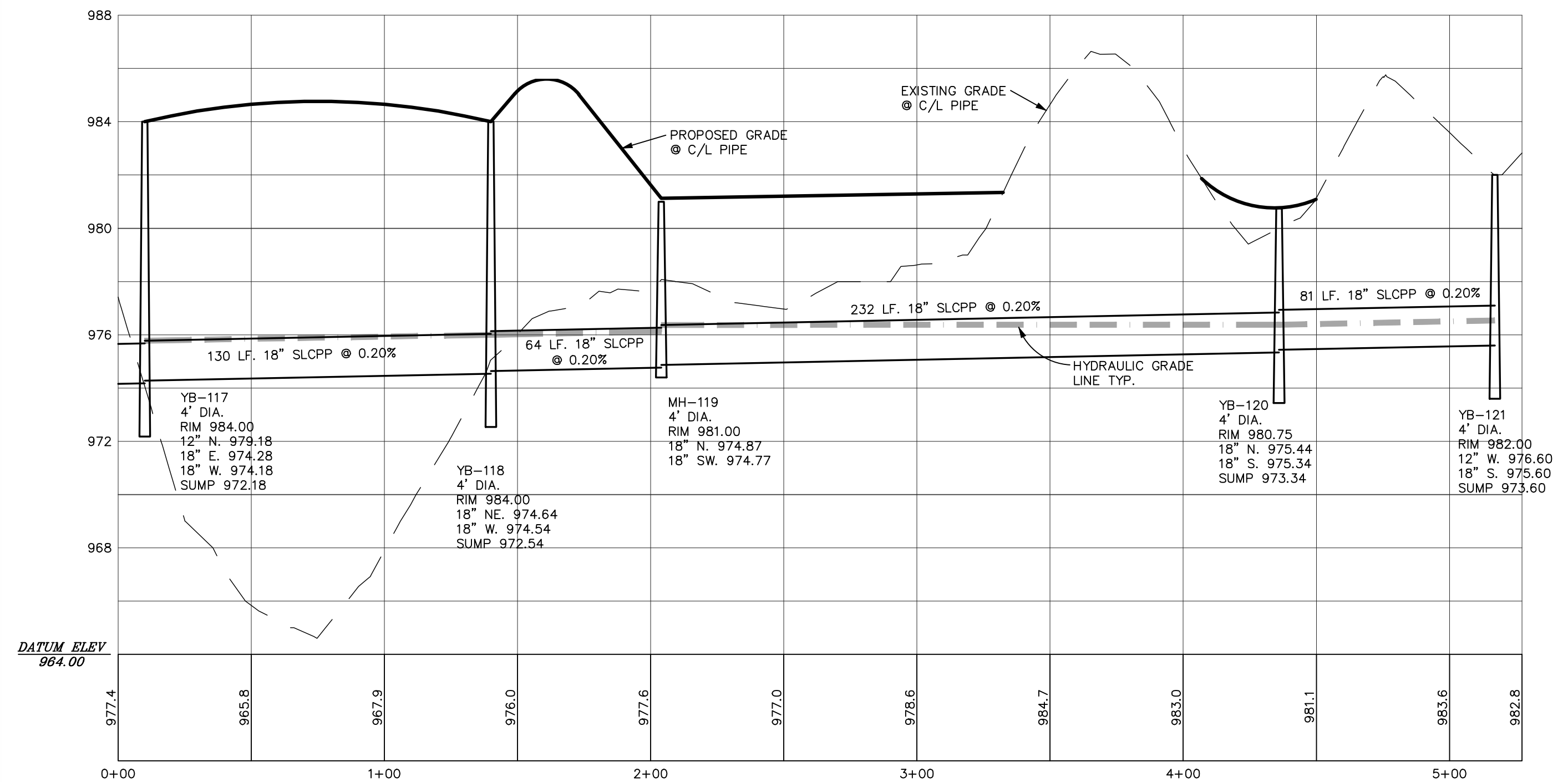
CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

SCALE: 1in. = 40ft.
PROJECT No.: 183568
DWG NAME: 3568 RD
ISSUED: APRIL 5, 2019

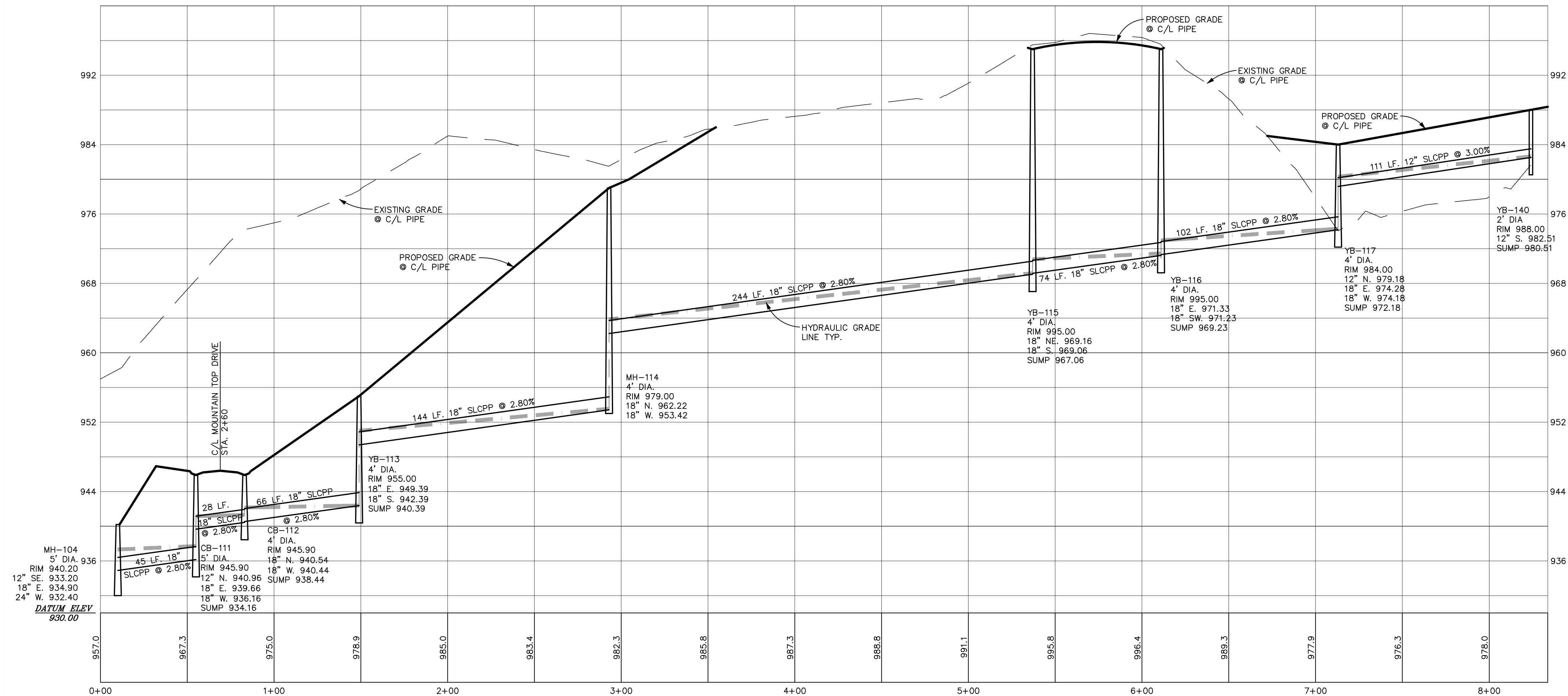
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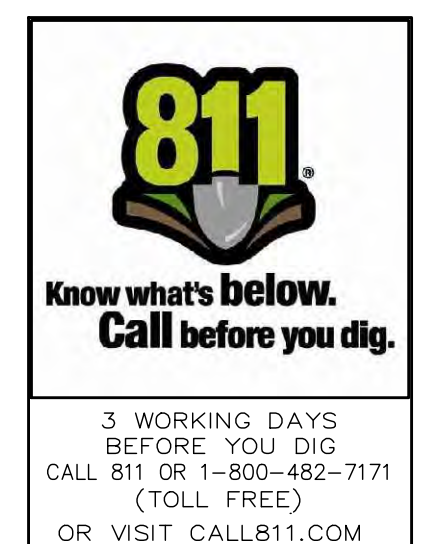
PROFILE: YB-113 TO YB-150
SCALE: HORIZ. 1in. = 40ft.
VERT. 1in. = 4ft.



PROFILE: FES-102 TO CB-106
SCALE: HORIZ. 1in. = 40ft.
VERT. 1in. = 4ft.



PROFILE: MH-104 TO YB-140
SCALE: HORIZ. 1in. = 40ft.
VERT. 1in. = 8ft.



DESIGN: WMP DRAFT: JHG CHECK: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION	MOUNTAIN TOP ESTATES SITE CONDOMINIUM	STORM SEWER PROFILES	CLIENT: MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	SCALE: 1in. = 40ft. PROJECT No.: 183568 DWG NAME: 3568 RD ISSUED: APRIL 5, 2019	ST2
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SOILS MAP

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in ACI	Percent of ACI
BA	Bayou-Oulthood sandy slands, 0 to 2 percent slopes	0.4	0.7%
FBI	Fox-Boyer complex, 2 to 6 percent slopes	3.9	6.7%
FIC	Fox-Boyer complex, 6 to 12 percent slopes	9.1	15.6%
FID	Fox-Boyer complex, 12 to 18 percent slopes	6.5	11.1%
FIE	Fox-Boyer complex, 18 to 25 percent slopes	13.7	23.4%
FIF	Fox-Boyer complex, 25 to 40 percent slopes	24.8	42.4%
Totals for Area of Interest		58.5	100.0%

LEGAL DESCRIPTION

Reference: Commitment for Title Insurance Issued by
First American Title Insurance Company,
File No. 824406, Date of Policy: September 10, 2018

The Land referred to in this Policy is described as: situated in the County of Livingston, Township of Genoa, State of Michigan;

a parcel of land located in the Southeast quarter of Section 34, Town 2 North, Range 5 East, Genoa Township, Lincoln County, Michigan, said parcel more fully described as: Commencing at the Southeast corner of Section 34, Town 2 North, Range 5 East; thence North 87 degrees 27 minutes 50 seconds West (rec. as: South 87 degrees 27 minutes 57 seconds West), 620.79 feet on South line of said section to the POINT OF BEGINNING;

thence continuing South 87 degrees 27 minutes 50 seconds West (rec. as: South 87 degrees 34 minutes 57 seconds West), 698.86 feet;

thence North 02 degrees 41 minutes 30 seconds West, 1150.07 feet in part on the East line of "Copper Lake Farm 3924, page 7004" a six acre condensation;

thence North 02 degrees 41 minutes 30 seconds West, 951.63 feet on the South line of "Mystic Lake Hills Subdivision", as recorded in 18 E of Plats, page 28 through 32, Lincoln County Records;

thence South 02 degrees 33 minutes 20 seconds East, 681.00 feet (rec. as: South 02 degrees 31 minutes 12 seconds East);

thence North 87 degrees 30 minutes 30 seconds West, 320.00 feet;

thence North 02 degrees 33 minutes 20 seconds East, 120.24 feet;

thence North 87 degrees 27 minutes 50 seconds West, 70.94 feet;

thence North 02 degrees 32 minutes 10 seconds East, 247.02 feet to the Point of Beginning.

Subject to the rights of the public over that portion thereof occupied by Cunningham Farm, said parcel together with all easements and restrictions appearing of title to the above described premises.

Tax ID No.: 11-34-400-008
Also known as: Vacant, Cunningham Lake Road, Brighton, MI 48116

Also described as related to the Grid North of State Plane Coordinated System as defined in Michigan Coordinate System Act 9 of 1964, Section 5a(c) as follows:

A parcel of land located in the Southeast quarter of Section 34, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, said parcel more fully described as: Commencing at the Southeast corner of said Section 34, Town 2 North, Range 5 East, thence S87°50'W 620.83 feet (recorded as SB8750W620.83) to the intersection of the South line of said Section to the POINT OF BEGINNING, thence continuing S86°53'30" (SPCS) 700.33 feet (recorded as SB87°50'W 699.88 feet) along said South line of Section 34 and the northern perimeter of Cunningham Lake Road (33-foot wide 1/2 Right-of-Way) thence N02°38'32" (SPCS) 116.32 feet (recorded as N02°41'06" 115.01 feet) along (or in-pur) the East line of "Copperpet", according to the State of Michigan, as designated in Liber 3854, Page 3604, Michigan County Records, as amended, if any, and designated in Livingston County Condominium Subdivision Plan No. 274;

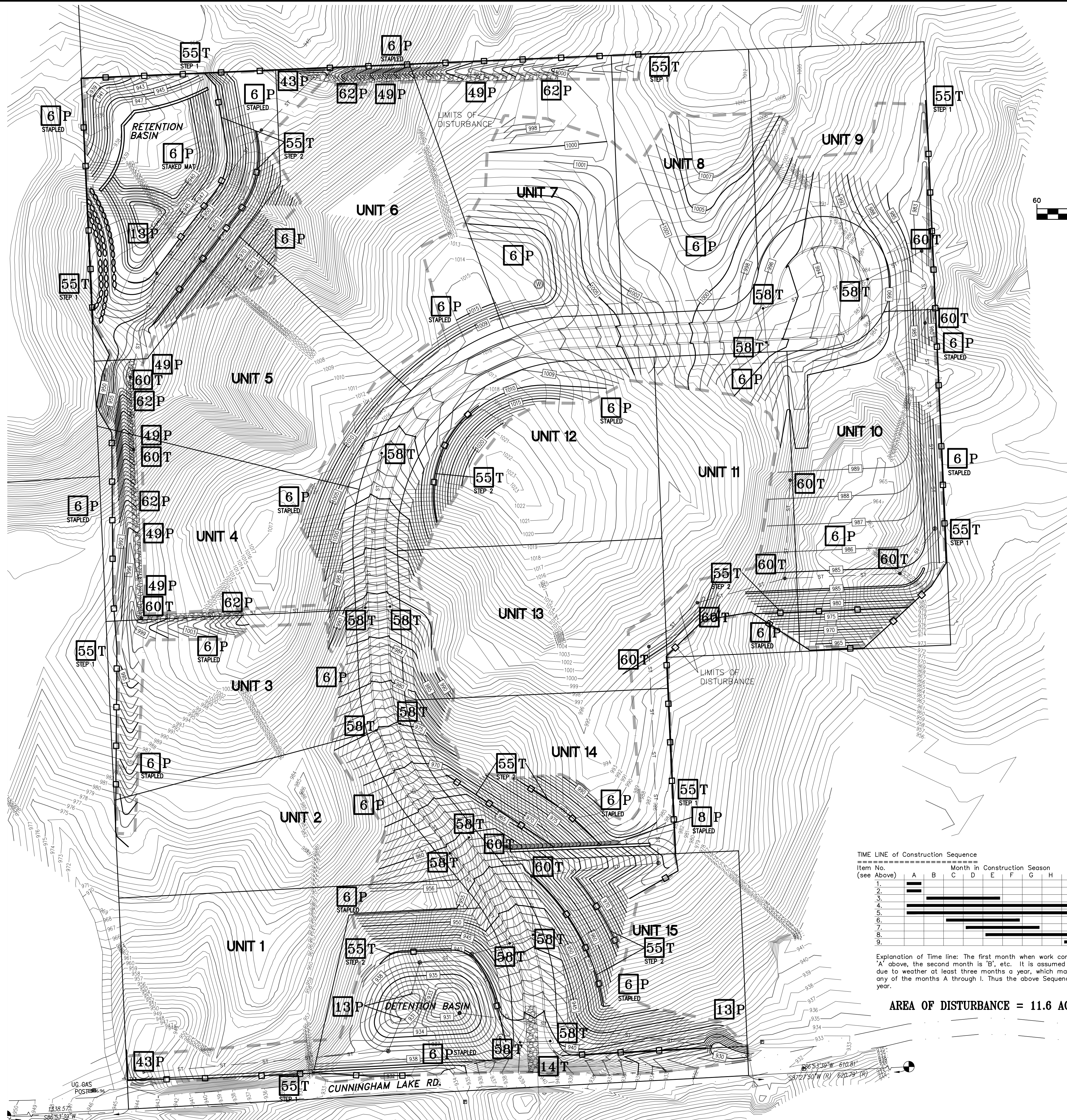
thence N8732°14'E (SPCS) 951.50 feet (recorded as N8730°35'E 951.63 feet) along the South line of "Mytic Lake Hills Subdivision No. 2," according to the plat thereof, as recorded in Liber 18 of Plats, Pages 28 through 32, inclusive, Livingston County Records; thence S0232°30'E (SPCS) 680.78 feet (recorded as S0232°30'E 680.00 feet); thence S8730°31'W (SPCS) 320.14 feet (recorded as S8730°35'W 320.00 feet); thence S0232°38'E (SPCS) 221.48 feet (recorded as S0232°30'E 221.54 feet); thence N8728°54'E (SPCS) (recorded as N8727°50'E) 70.94 feet; thence S0232°59'E (SPCS) 253.51 feet (recorded as N8723°10'E 247.02 feet) to the Point of Beginning.

Containing 22.21 acres of land, more or less.

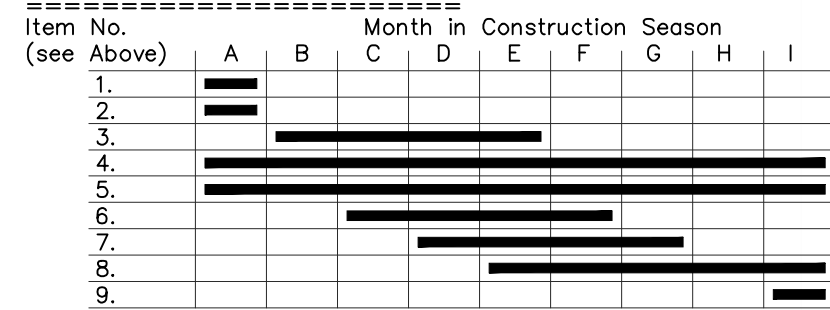
Said parcel description covers the same land as that which is described in the descriptions of record and the tax description.

NOTES:
-(SPCS) denotes line bearing value related to the Grid North of State Plane Coordinates System as defined in Michigan Coordinate System Act 9 of 1964, Section 5a(c).

-Refer to the current policy for title insurance for proof of ownership and all encumbrances affecting title to the described above parcel.



TIME LINE of Construction Sequence



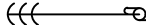
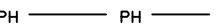
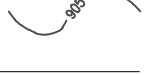
Explanation of Time line: The first month when work commences is designated 'A' above, the second month is 'B', etc. It is assumed that work will halt due to weather at least three months a year, which may occur in between any of the months A through I. Thus the above Sequence represents an entire year.

AREA OF DISTURBANCE = 11.6 AC



Location Map
Not to Scale

LEGEND

-  = MISC. STRUCTURE (AS LABELED)
 = WELL / MONITOR WELL
 = SIGN
 = UTILITY MARKERS & BOXES
 (ELECTRIC, WATER, GAS, WATER, METER, PHONE, BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 = UTILITY POLE W/GUY WIRE
 = OVERHEAD UTILITY LINES (ELECTRIC/CABLE TV/MISC UTILITIES)
 = EDGE OF WOODS / TREE DROP LINE
 = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 = EDGE OF GRAVEL
 = STORM WATER MANHOLE W/IDENTIFIER
 = CATCH BASIN W/IDENTIFIER
 = CONTROL STRUCTURE
 = FLARED END SECTION
 = STORM WATER DRAINAGE PIPE
 = GAS MANHOLE / GASOLINE COVER
 = GAS SHUT OFF
 = GAS
 = EX. 1" CONTOUR
 = EX. 5' CONTOUR
 = PROP. CONCRETE CURB & GUTTER
 = PROP. EDGE OF GRAVEL
 = PROP. STORM SEWER
 = PROP. 1" CONTOUR
 = PROP. 5' CONTOUR

6	SEEDING WITH MULCH AND/OR MATING	FAVORABLE ESTABLISHMENT OF VEGETATIVE COVER NECESSARY FOR DRAINAGEWAYS WITH LOW VELOCITY HEAVY PLACED IN SMALL QUANTITIES OF UNEXPERIENCED PERSONNEL. COULD INCLUDE PREPARED SOIL BED
8	SOILING	PROVIDES IMMEDIATE PROTECTION IF SOIL CAN BE ON STEEP SLOPES WHERE SEED MAY BE DIFFICULT TO ESTABLISH EASY TO PLACE, MAY BE REPAIRED IF DAMAGED COULD INCLUDE PREPARED SOIL BED
13	HYPER, RUBBER, CLAYONS	SEED WHEN VEGETATION IS NOT GROWING EFFECTIVE FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS PROMOTES RUNOFF TO INFLUENTIATE SOIL RESISTS EROSION FROM ALL SYSTEM OUTLETS
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
49	CHECK DAMS	REDUCES FLOW VELOCITY CATCHES SEDIMENT CAN BE CONSTRUCTED OF LOGS, STEIN, WYD, ROCK, LIMBER, MASONRY, OF SANDBAGS
55	GEOTEXTILE Silt FENCE	USES GEOTEXTILE AND POSTS OR POLES MAY BE CONSTRUCTED OR PREPARED EASY TO CONSTRUCT AND LOCATE AS NECESSARY
58	INLET SEDIMENT FILTER	USES PREPARED GEOTEXTILE SACKS FILTERS SEDIMENT FROM RUNOFF AT CATCH BASIN INLET EASY TO INSTALL AND MAINTAIN
60	INLET FABRIC CASE	PREVENTS SEDIMENT FROM ENTERING STORM SYSTEM AT STRUCTURES USES GEOTEXTILE FABRIC, PREFABRICATED, REUSABLE METAL CASE SILT FENCE CAN BE USED
62	ARMORED SLOPE	STABILIZES SOILS BOTTOM AND SIDE SLOPES USES CELLULAR CONFINEMENT FILLED WITH CRUSHED STONE

T = TEMPORARY, P = PERMANENT
STEP 1 SILT FENCE TO BE INSTALLED PRIOR TO MASS BALANCE EARTHWORK.

STEP 2 SILT FENCE TO BE INSTALLED IMMEDIATELY AFTER FINISHED GRADING



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SCALE: 1 in. = 60 ft.

PROJECT No. 183568

10. *Journal of the American Medical Association*, 2000; 283: 2686-2692.

DWG NAME: 3366 GR

ISSUED: **APRIL 5, 2019**



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

BE1

DESIGN:WMP
DRAFT: JHG
CHECK: WMP

REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION

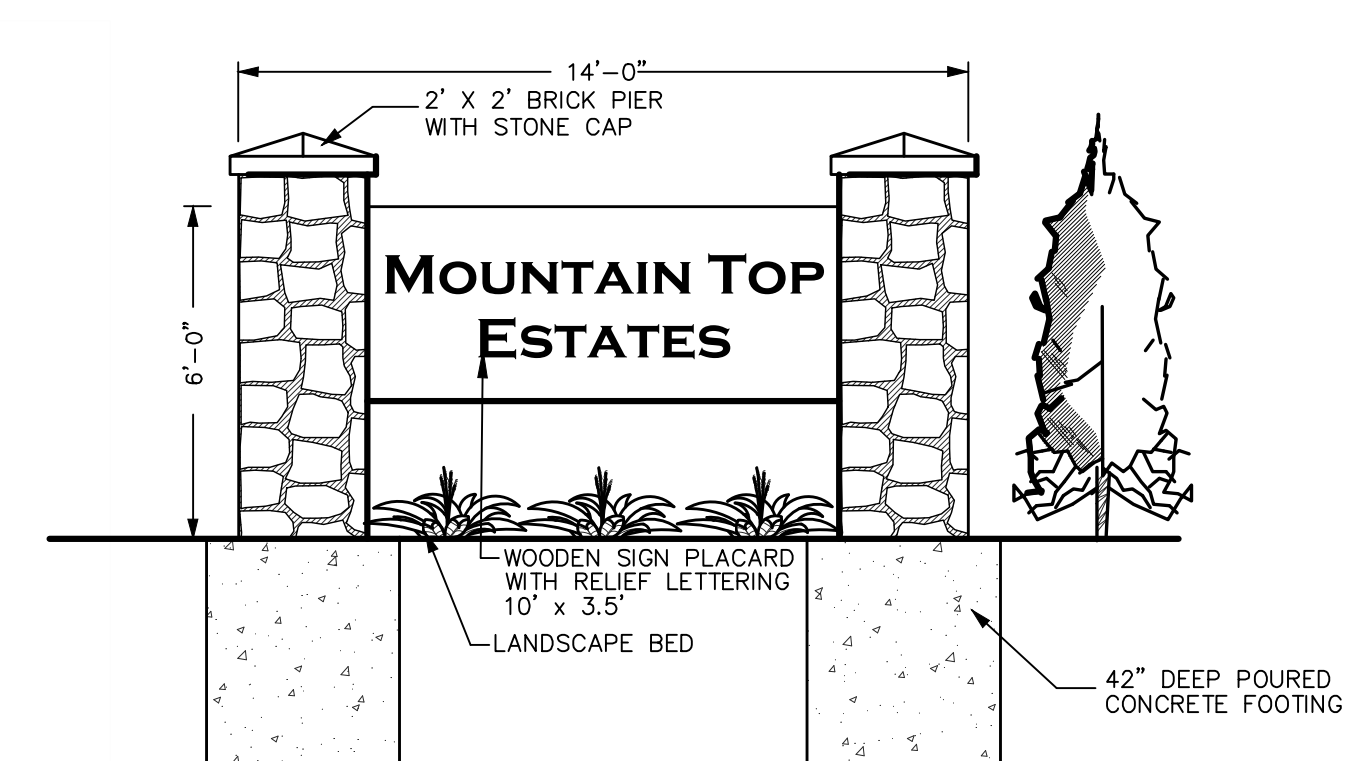
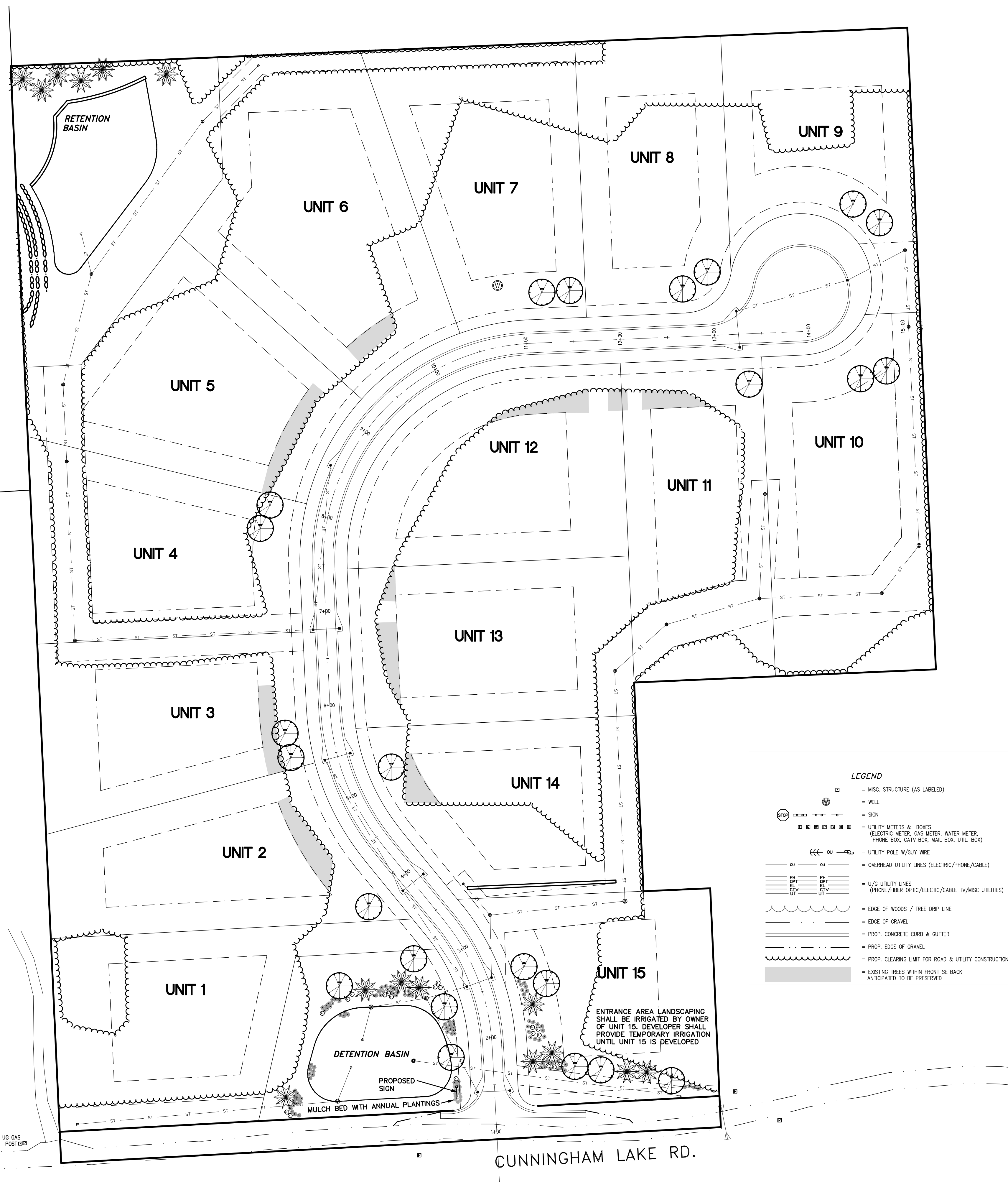
MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

SOIL EROSION CONTROL PLAN

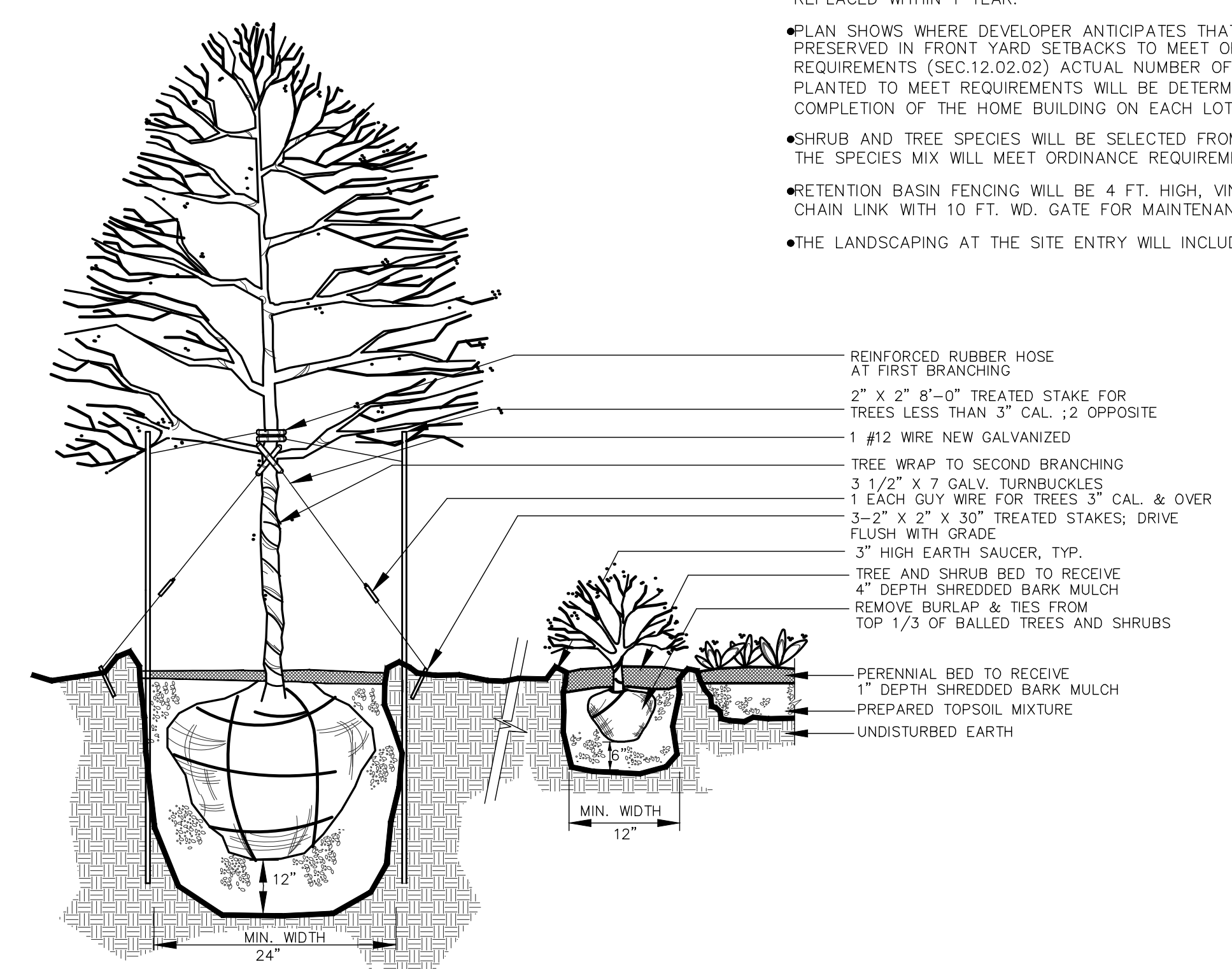
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MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

SCALE: 1in. = 60ft.
PROJECT No.: 183568
DWG NAME: 3568 GR
ISSUED: **APRIL 5, 2019**

BE1

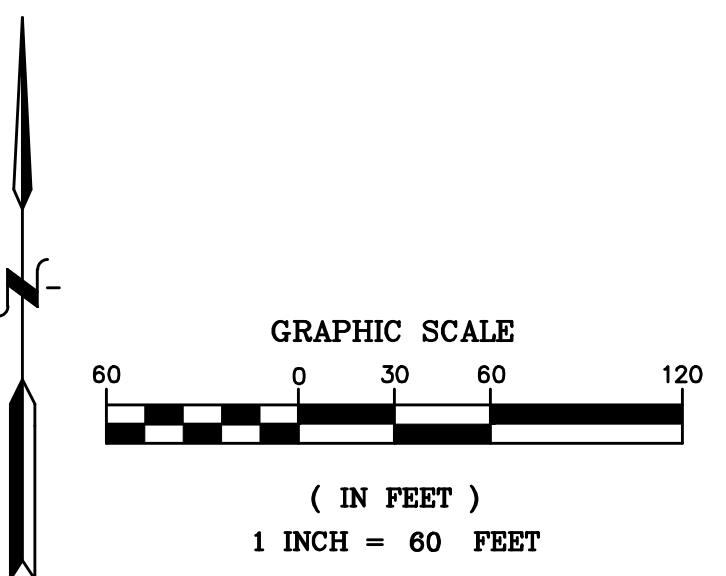


ENTRANCE SIGN DETAIL
SCALE: NONE



TYPICAL TREE/SHRUB/PERENNIAL PLANTING
NOT TO SCALE

SYMBOL	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	SPACING	ROOT	QUANTITY FOR POND AREA	QUANTITY FOR OTHER LANDSCAPE
	<i>Picea glauca</i>	White Spruce	6' HT./2.5' Spread	as shown	B & B	10 TOTAL	5 TOTAL
	<i>Pinus sylvestris</i>	Scotch Pine	6' HT./2.5' Spread	as shown	B & B		
	<i>Tsuga canadensis</i>	Canadian Hemlock	6' HT./2.5' Spread	as shown	B & B		
	<i>Acer saccharum</i>	Sugar Maple	2.5" Caliper	as shown	B & B	4 TOTAL	20 TOTAL
	<i>Quercus rubrum</i>	Red Oak	2.5" Caliper	as shown	B & B		
	<i>Tilia americana</i>	Basswood	2.5" Caliper	as shown	B & B		
	<i>Amelanchier arborea</i>	Serviceberry	2' HT.	as shown	CONTAINER	12 TOTAL	7 TOTAL
	<i>Viburnum plicatum</i>	Doublefile Viburnum	2' HT.	as shown	CONTAINER		
	<i>Taxus cuspidata</i>	Spreading Yew	2' HT./SPREAD	as shown	CONTAINER		
	<i>Juniperus pfitzeriana</i>	Pfitzer Juniper	2' HT./SPREAD	as shown	CONTAINER	26 TOTAL	9 TOTAL
	<i>Prunus virginiana</i>	Black Chokeberry	2' HT./SPREAD	as shown	CONTAINER		
	<i>Ornamental Grasses</i>						
	<i>Calamagrostis acutiflora</i>	Feather Reed Grass	2' HT./SPREAD	as shown	CONTAINER	42 TOTAL	24 TOTAL
	<i>Sporobolus heterolepis</i>	Prairie Dropseed	2' HT./SPREAD	as shown	CONTAINER		
	<i>Panicum</i>	Switch Grass	2' HT./SPREAD	as shown	CONTAINER		



- GENERAL NOTES:**
- ALL PLANTING SIZES SHOWN SHALL BE AT TIME OF PLANTING.
 - ALL PLANT MATERIAL SHALL BE FREE OF DISEASE AND INSECTS AND SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
 - ALL LANDSCAPING SHALL BE MAINTAINED A HEALTHY CONDITION, ANY DEAD OR DISEASED PLANTINGS SHALL BE REMOVED AND REPLACED WITHIN 1 YEAR.
 - PLAN SHOWS WHERE DEVELOPER ANTICIPATES THAT TREES CAN BE PRESERVED IN FRONT YARD SETBACKS TO MEET ORDINANCE REQUIREMENTS (SEC.12.02.02) ACTUAL NUMBER OF TREES TO BE PLANTED TO MEET REQUIREMENTS WILL BE DETERMINED AT COMPLETION OF THE HOME BUILDING ON EACH LOT.
 - SHRUB AND TREE SPECIES WILL BE SELECTED FROM PLANT LIST AND THE SPECIES MIX WILL MEET ORDINANCE REQUIREMENTS (SEC.12.02.09)
 - RETENTION BASIN FENCING WILL BE 4 FT. HIGH, VINYL COATED CHAIN LINK WITH 10 FT. WD. GATE FOR MAINTENANCE ACCESS.
 - THE LANDSCAPING AT THE SITE ENTRY WILL INCLUDE IRRIGATION

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

MOUNTAIN TOP
ESTATES

LANDSCAPE PLAN

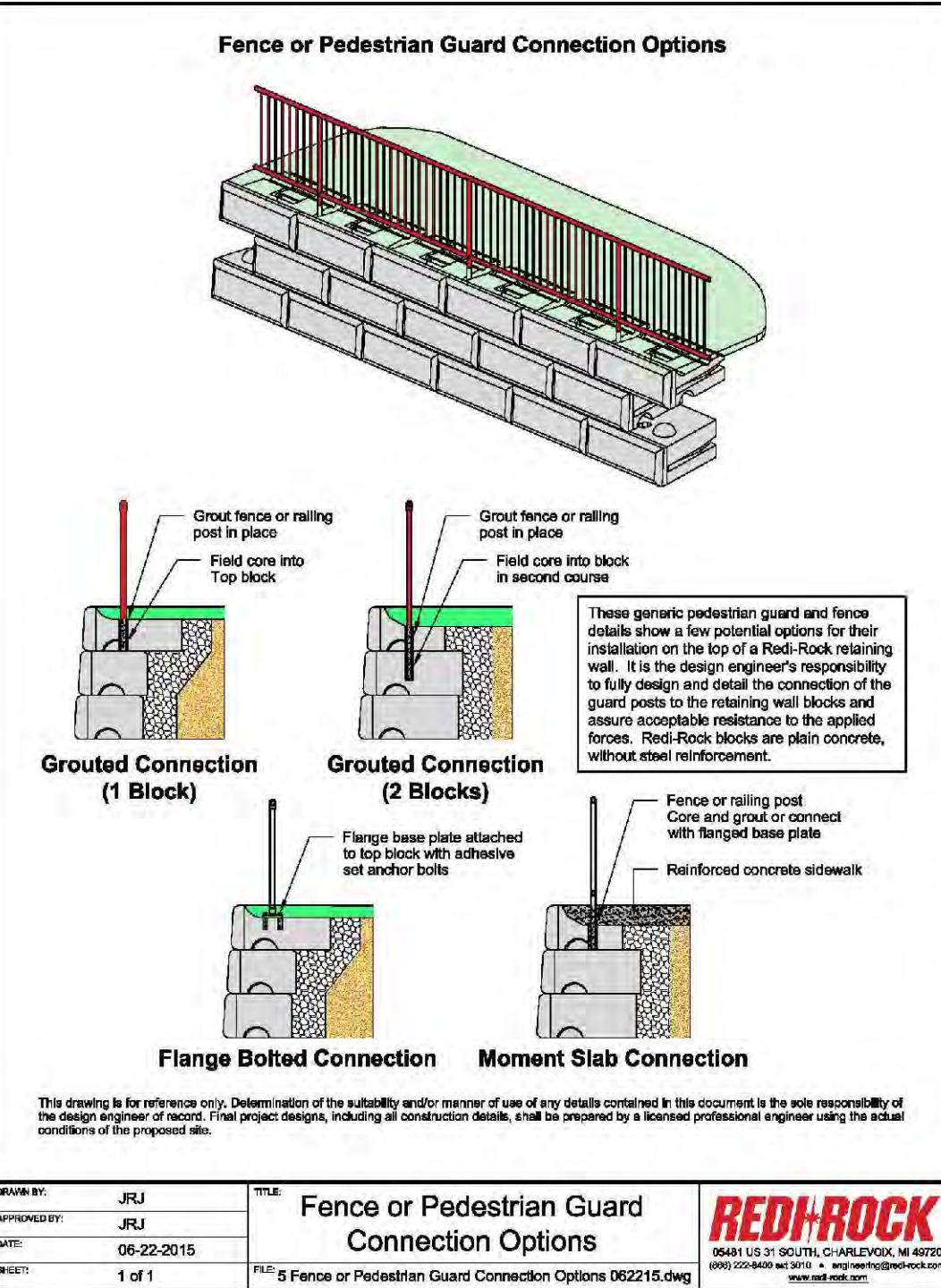
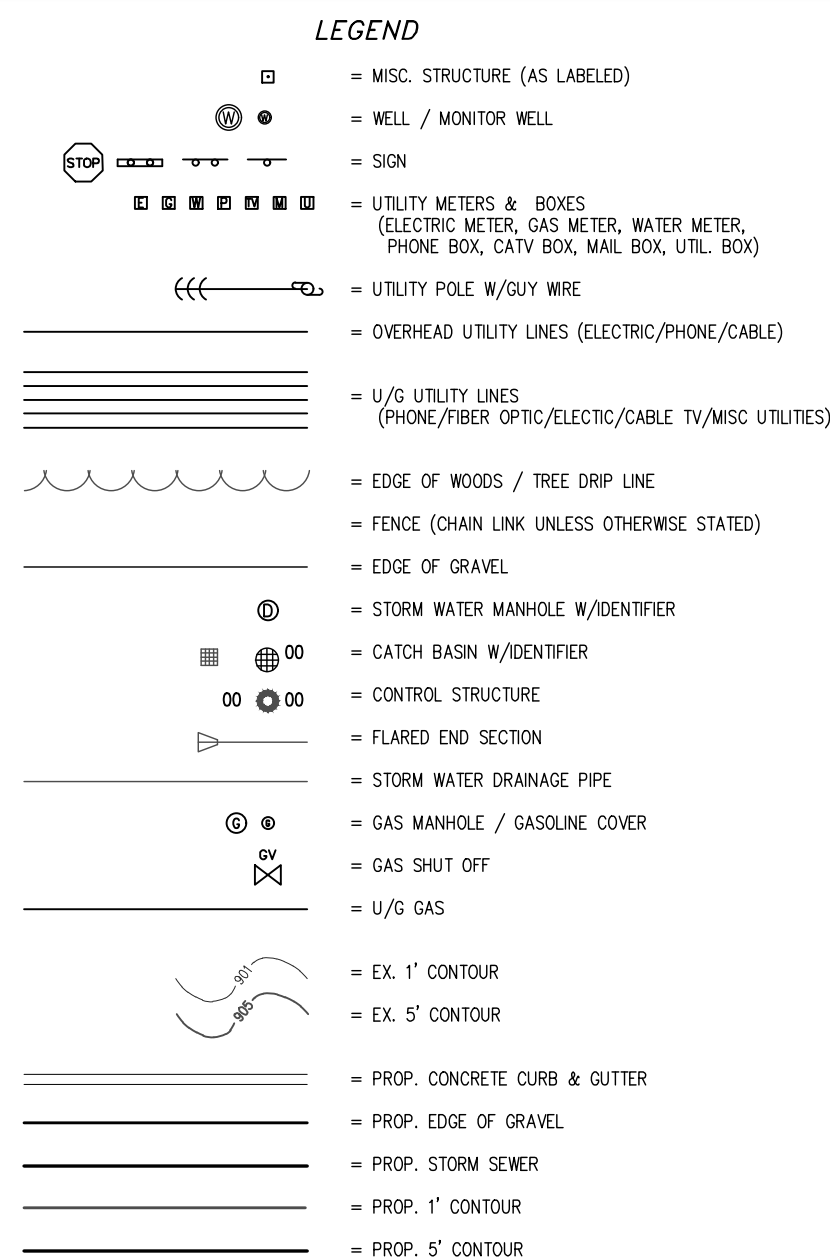
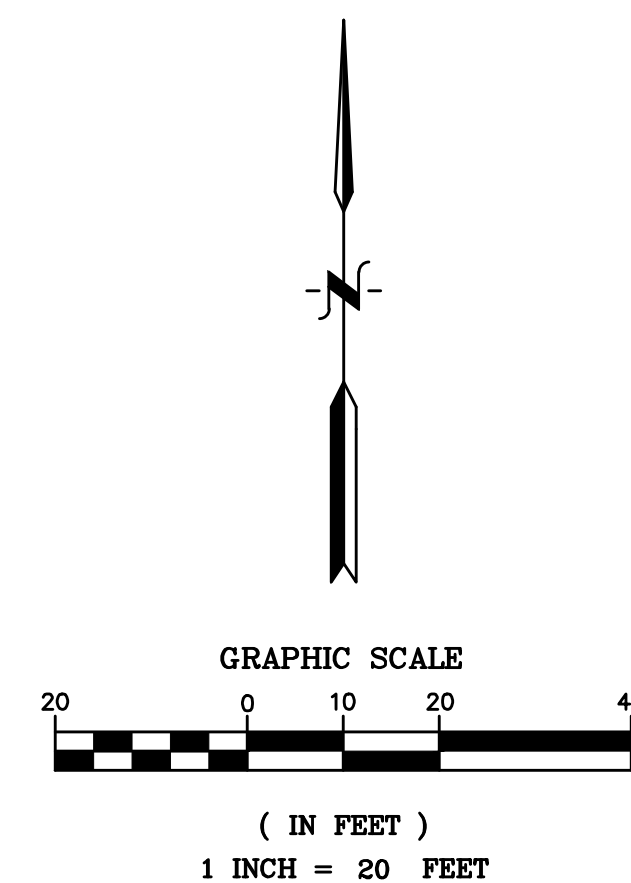
CLIENT:	SCALE: 1in. = 60ft.
MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	PROJECT No.: 183568 DWG NAME: 3568 LS ISSUED: APRIL 5, 2019

LS

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BRIGHTON, MICHIGAN 48114



BENCHMARK
DATUM BASED ON RTK-GPS OBSERVATIONS,
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465± FEET OF THE NORTH
PROPERTY LINE AND EAST 492± OF THE WEST
PROPERTY LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE OF A 24" OAK,
LOCATED SOUTH 240± FEET OF THE NORTH
PROPERTY LINE AND EAST 170± FEET OF THE
WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)



NOTE:
MATERIAL SHALL BE ALUMINUM WITH BLACK FINISH.



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

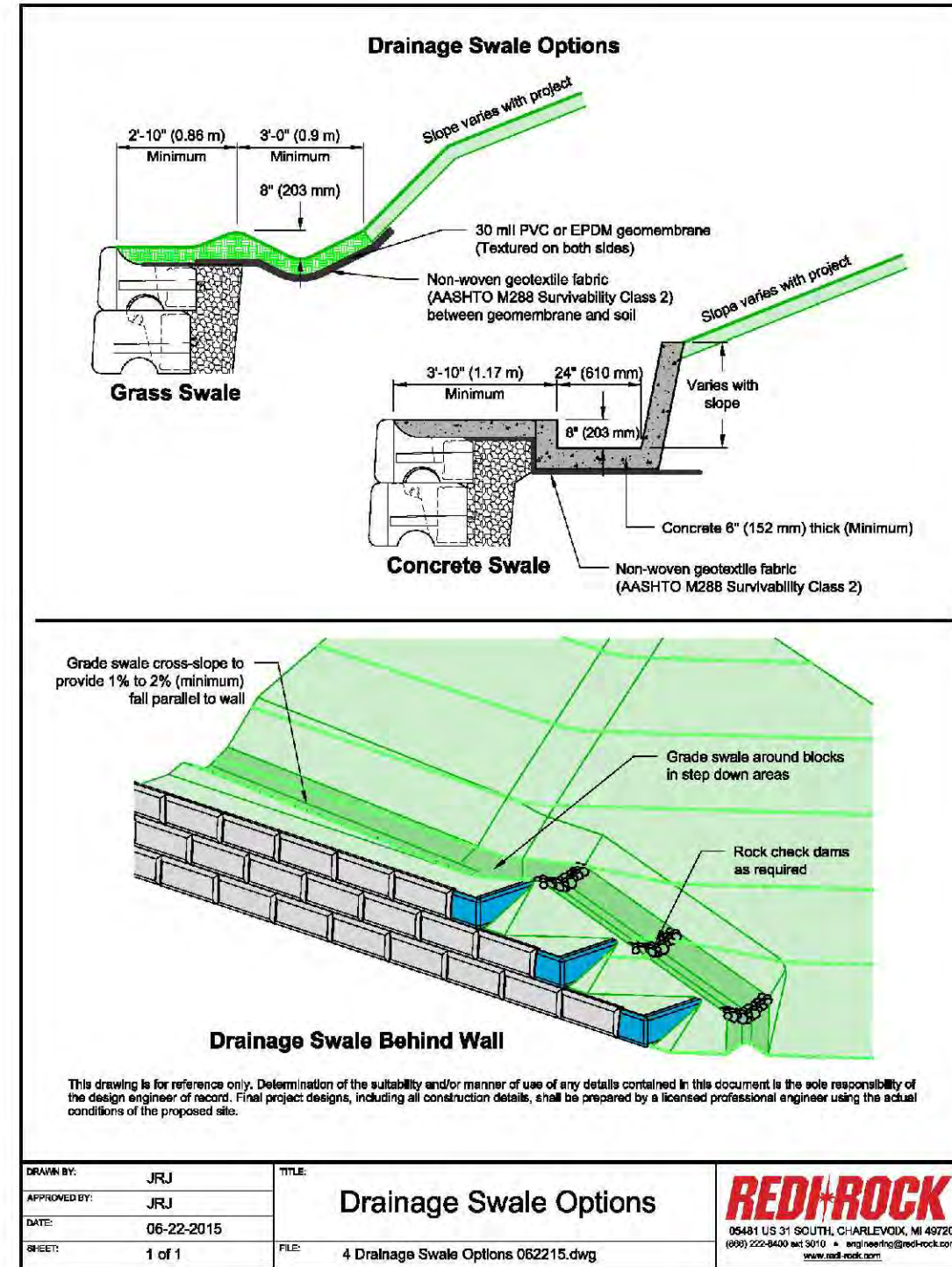
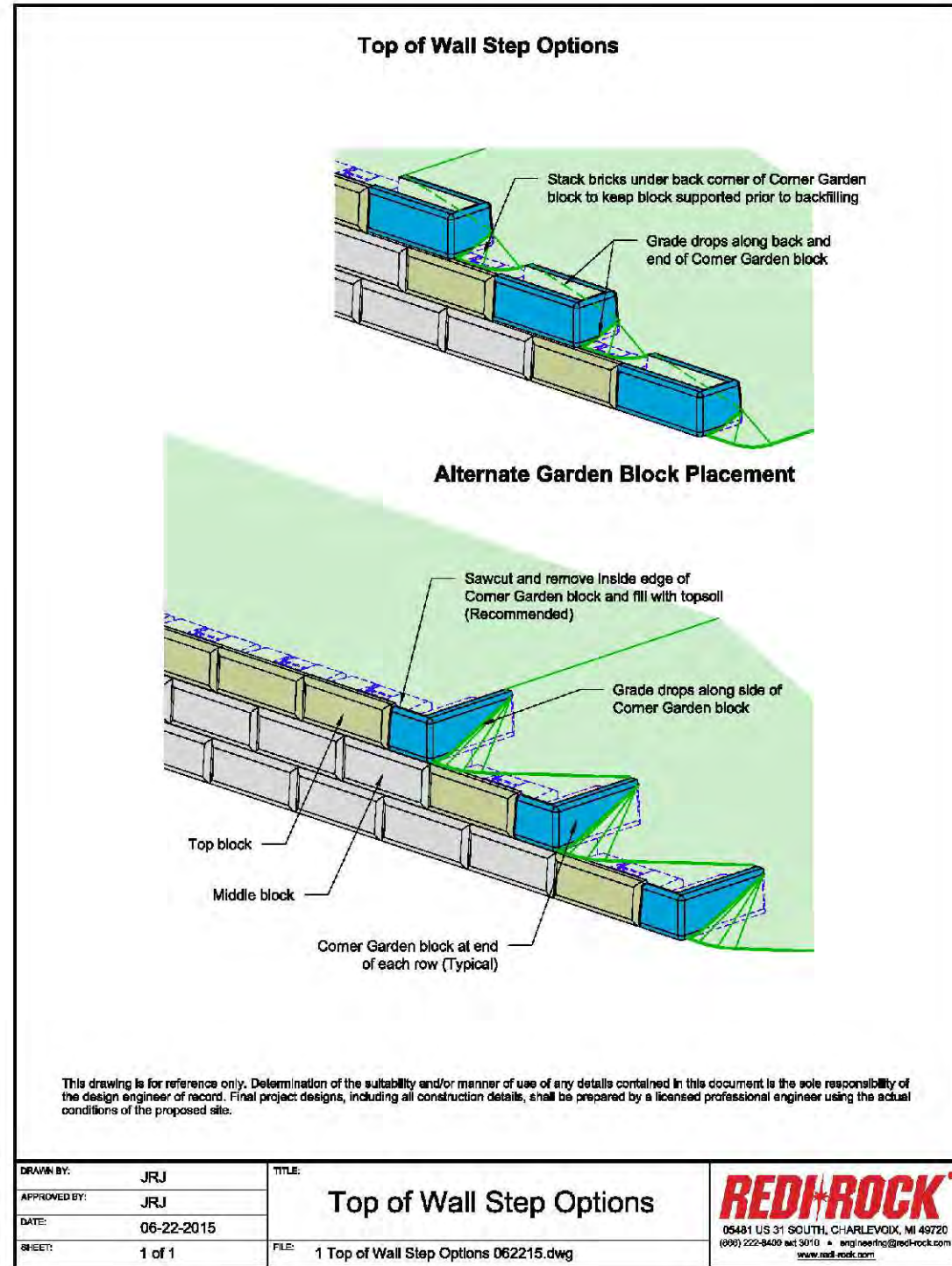
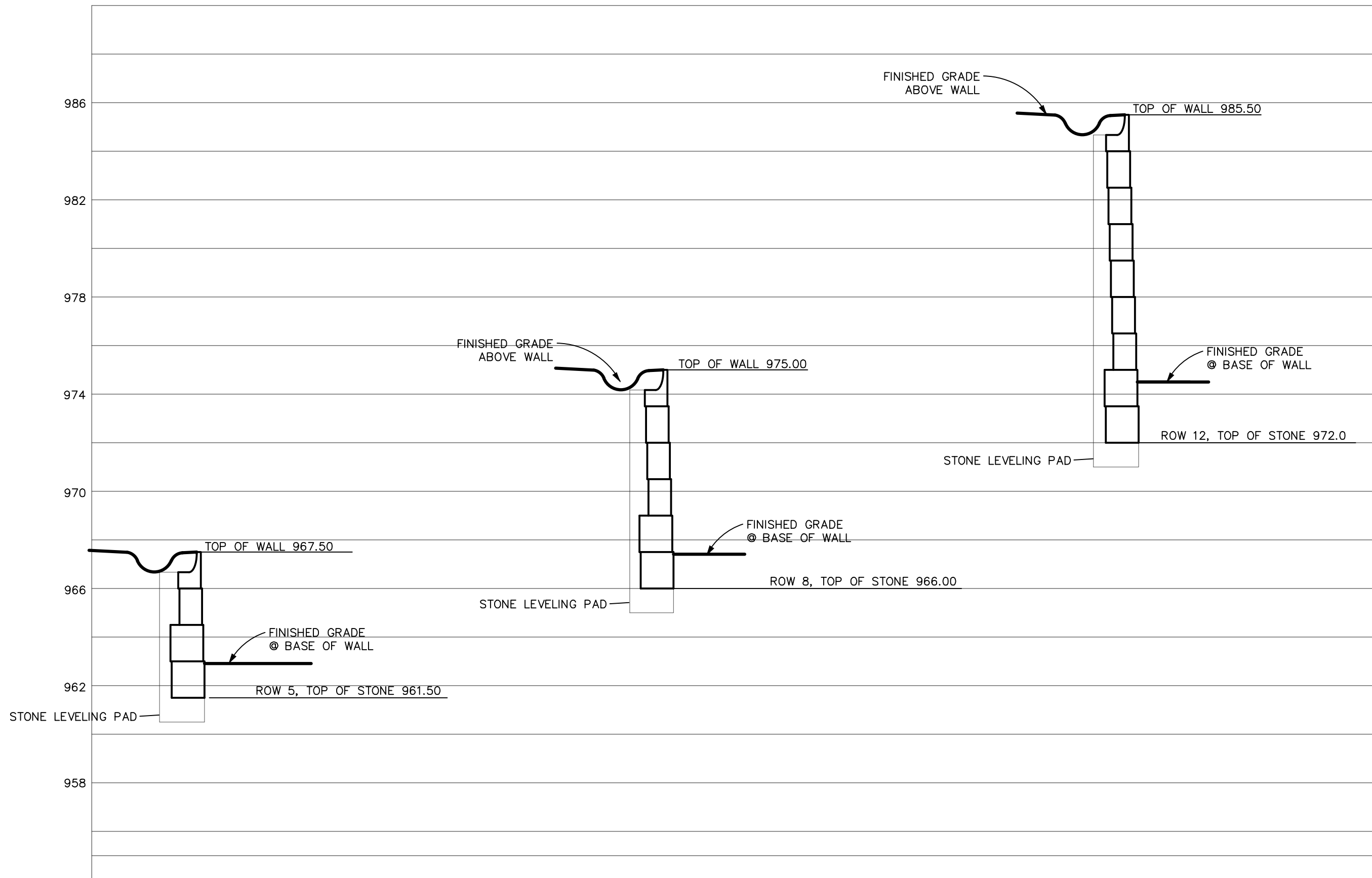
MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

UNIT 14 RETAINING WALL
PLAN, PROFILE, SECTIONS

CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

SCALE: AS NOTED
PROJECT No.: 183568
DWG NAME: 3568 GR2-3
ISSUED: APRIL 5, 2019

RW1



SEGMENTAL RETAINING WALL NOTES

- Wall Units
 - Wall units shall be Redi-Rock® as produced by a licensed manufacturer.
 - Wall units shall meet or exceed Redi-Rock® minimum specifications. All material used in the wall units, steps, and pavers must meet applicable ASTM and local requirements for exterior concrete. (ASTM Standard Specifications for Segmental Retaining Wall Units, concrete specifications ASTM C-94 & ACI 301-99 latest additions apply)
 - Exterior block dimensions shall be uniform and consistent. Maximum dimensional deviations shall be 0.50 inch or 2%, whichever is less, not including textured face.
 - Exposed face shall be finished as specified. Other surfaces to be smooth form type. Dime-size bug holes on the block face may be patched and/or shake-on color stain can be used to blend into the remainder of the block face.
- Delivery, Storage and Handling
 - Contractor shall check the materials upon delivery to assure proper material has been received.
 - Contractor shall prevent excessive mud, wet cement and like materials from coming in contact with the SRW units.
 - Contractor shall protect the materials from damage. Damaged material shall not be incorporated in the project.
- Leveling Pad and Free Draining Backfill
 - Leveling Pad shall be washed stone or compacted gravel. See construction drawings for specifications.
 - Free Draining Backfill material shall be granular, well draining sand or stone and shall be placed to a minimum of 1-foot of depth behind the back of the wall and shall extend vertically from the Leveling Pad to an elevation 4-inches below the top of the wall. See construction drawings for specifications.
 - Backfill material shall be in accordance with the construction drawings. Site excavated spoils may be used if approved unless otherwise specified on the construction drawings. Unsuitable soils with a PI > 8, organic soils and frost susceptible soils shall not be used within ± 1 to 1 influence area.
 - Non-woven geotextile cloth shall be placed between the Free Draining Backfill and retained soil when noted on the construction drawings.
 - Where additional fill is needed, Contractor shall submit sample and specifications to the Engineer for approval.
- Drainage
 - Internal and external drainage shall be provided in accordance with the construction drawings.
- Geogrid
 - Geogrid connection bar to be epoxy coated rebar, ½-inch in diameter cut 3-foot 4-inches long.
 - Geogrid fabric to be Mirafi Miragrid or equivalent. See construction drawings for specifications.
 - Geogrid fabric shall be installed in accordance with the construction drawings and the SRW unit manufacturer's specifications.
- Excavation
 - Contractor shall excavate to the lines and grades shown on the construction drawings.
- Foundation Soil Preparation
 - Native foundation soil shall be compacted to 95% of standard proctor or 90% of modified proctor prior to placement of the Leveling Pad material.
 - In-situ foundation soil shall be examined by the Testing Engineer to ensure that the actual foundation soil strength meets or exceeds assumed design strength. Soil not meeting required strength shall be removed and replaced as directed by the Testing Engineer.
- Leveling Pad Placement
 - Leveling Pad shall be placed as shown on the construction drawings.
 - Leveling Pad shall be placed on undisturbed native soils or suitable replacement fill material as acceptable to the Engineer.
 - Leveling Pad shall be compacted to 95% of standard proctor or 90% of modified proctor to ensure a level, hard surface on which to place the first course of blocks. Pad shall be constructed to the proper elevation to ensure the final elevation shown on the plans. Well-graded sand may be used to smooth the top ½-inch on the Leveling Pad (when using gravel pad only).
 - Leveling Pad shall have a 6-inch minimum depth for walls under 8-feet in height and a 12-inch minimum depth for walls over 8-feet. See construction drawings for additional specifications. Pad dimensions shall extend beyond the blocks in all directions to a distance at least equal to the depth of the pad unless otherwise specified on the construction drawings.
 - For steps and pavers, a minimum of 1-inch to 1 ½-inches of free draining sand shall be screeded smooth to act as a placement bed for the steps or pavers.
- Unit Installation
 - The first course of wall units shall be placed on the prepared Leveling Pad with aesthetic surface facing out and the front edged tight together. All units shall be checked for level and alignment as they are placed.
 - Ensure that units are in full contact with Leveling Pad. Proper care shall be taken to develop straight lines and smooth curves on base course as per wall layout.
 - The backfill in front and back of entire base row shall be placed and compacted to firmly lock them in place. Check all units again for level and alignment. All excess material shall be swept from top of units.
 - Install next course of wall units on top of base row. Position blocks to be offset from seams of blocks below. Blocks shall be placed fully forward so knob and groove are engaged. Check each block for proper alignment and level. Backfill to 12-inch depth behind block with Free Draining Backfill Spread backfill in uniform lifts not exceeding 8-inches. Employ methods using lightweight compaction equipment that will not disrupt the stability or batter of the wall. Hand-operated plate compaction equipment shall be used around the block and within 3-feet of the wall to achieve consolidation. Compact backfill to 95% of standard proctor (ASTM D 698, AASHTO T-99) density within 2% of its optimum moisture content.
 - Install each subsequent course in like manner. Repeat procedure to the extent of wall height.
 - Allowable construction tolerance is 2-degrees vertically and 1-inch in 10-feet horizontally.
 - All walls shall be installed in accordance with local building codes and requirements.

For local dealer contact:
Redi-Rock® International
05481 South US-31
Charlevoix, MI 49720
1-866-222-8400 www.redi-rock.com <<http://www.redi-rock.com>>
info@redi-rock.com

Analysis of Redi Rock wall

Input data

Project: MOUNTAIN TOP ESTATES
Task: Unit 14 Retaining Wall
Description: Section C
Customer: Mountain Top Estates, LLC
Date: 4/22/2015
Project ID: 183568
Project number: 183568

Settings

USA - Safety factor

Wall analysis

Active earth pressure calculation: Coulomb
Passive earth pressure calculation: Macdonald (Rankine)
Earthquake analysis: Monrovia-Okabe
Shape of earth wedge: Calculate as skew
Allowable eccentricity: 0.333
Internal stability: Standard - straight slip surface
Reduction coeff. of contact first block - base: 1.00
Verification methodology: Safety factors (ASD)

Safety factors			
Permanent design situation			
Safety factor for overturning	SF _{ov} =	1.50 [-]	
Safety factor for sliding resistance	SF _s =	1.50 [-]	
Safety factor for bearing capacity	SF _{bc} =	2.00 [-]	
Safety factor for sliding along geo-reinforcement	SF _{sr} =	1.50 [-]	
Safety factor for geo-reinforcement strength	SF _{gr} =	1.50 [-]	
Safety factor for pull out resistance of geo-reinf.	SF _{po} =	1.50 [-]	
Safety factor for connection strength	SF _{con} =	1.50 [-]	

No. 1

Forces acting on construction

Name	F _{hor} [lb/ft]	App.Pt. z [ft]	F _{vert} [lb/ft]	App.Pt. x [ft]	Design coefficient
Weight - wall	0.0	-5.89	4055.6	2.87	1.000
FF resistance	-148.2	-0.84	0.2	0.50	1.000
Weight - earth wedge	0.0	-1.39	35.1	4.58	1.000
Weight - earth wedge	0.0	-2.97	60.8	3.91	1.000
Weight - earth wedge	0.0	-12.79	71.5	3.26	1.000
Active pressure	1782.2	-2.92	1811.1	4.34	1.000

Verification of complete wall

Check for overturning stability

Resisting moment: M_{res} = 19266.9 lb/ft

Overturning moment: M_{ov} = 4980.7 lb/ft

Verification of foundation soil

Stress in the footing bottom: rectangular

Eccentricity verification

Max. eccentricity of normal force: e = 0.026

Maximum allowable eccentricity: e_{allow} = 0.333

Eccentricity of the normal force is SATISFACTORY

Verification of bearing capacity

Max. stress at footing bottom: σ = 1272.6 psf

Bearing capacity of foundation soil: R_d = 2600.0 psf

Safety factor = 2.04 > 2.00

Bearing capacity of foundation soil is SATISFACTORY

Overall verification - bearing capacity of found. soil is SATISFACTORY

Slope stability analysis

Results (Stage of construction 1)

Analysis 1

Circular slip surface

Slip surface parameters			
Center:	x = -5.90 [ft]	Angles:	α ₁ = -54.82 [°]
	y = 3.36 [ft]		α ₂ = 82.08 [°]
Radius:	R = 17.28 [ft]		
Analysis of the slip surface without optimization.			
Slope stability verification (all methods)			
Bishop:	FS = 0.38 > 1.50	ACCEPTABLE	
Fellenius / Paterson:	FS = 0.23 > 1.50	ACCEPTABLE	
Spencer:	FS = 0.38 > 1.50	ACCEPTABLE	
Jirba:	FS = 0.37 > 1.50	ACCEPTABLE	
Morgenstern-Price:	FS = 0.38 > 1.50	ACCEPTABLE	

Verification of foundation soil

Stress in the footing bottom: rectangular

Eccentricity verification

Max. eccentricity of normal force: e = 0.026

Maximum allowable eccentricity: e_{allow} = 0.333

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Check for overturning stability

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Bearing capacity of foundation soil is SATISFACTORY

Slope stability analysis

Results (Stage of construction 1)

Analysis 1

Circular slip surface

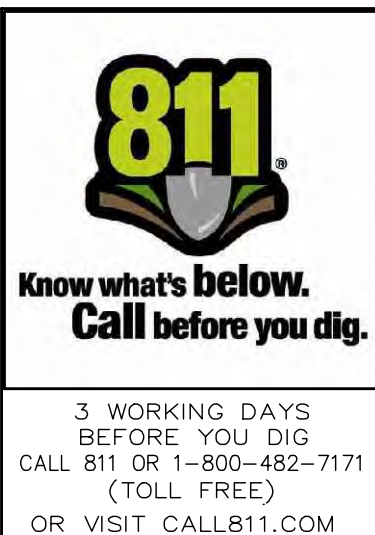
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Radius:	R = 17.28 [ft]		
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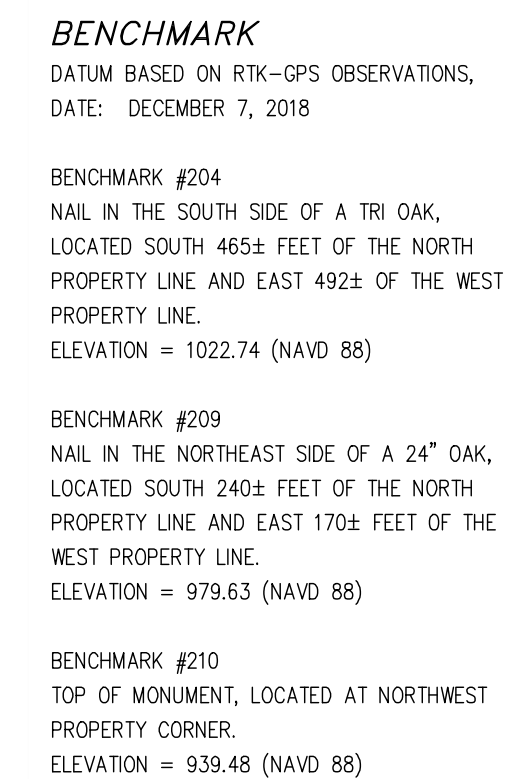
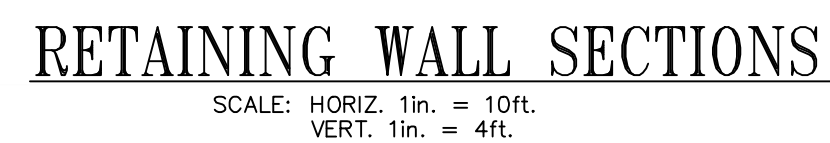
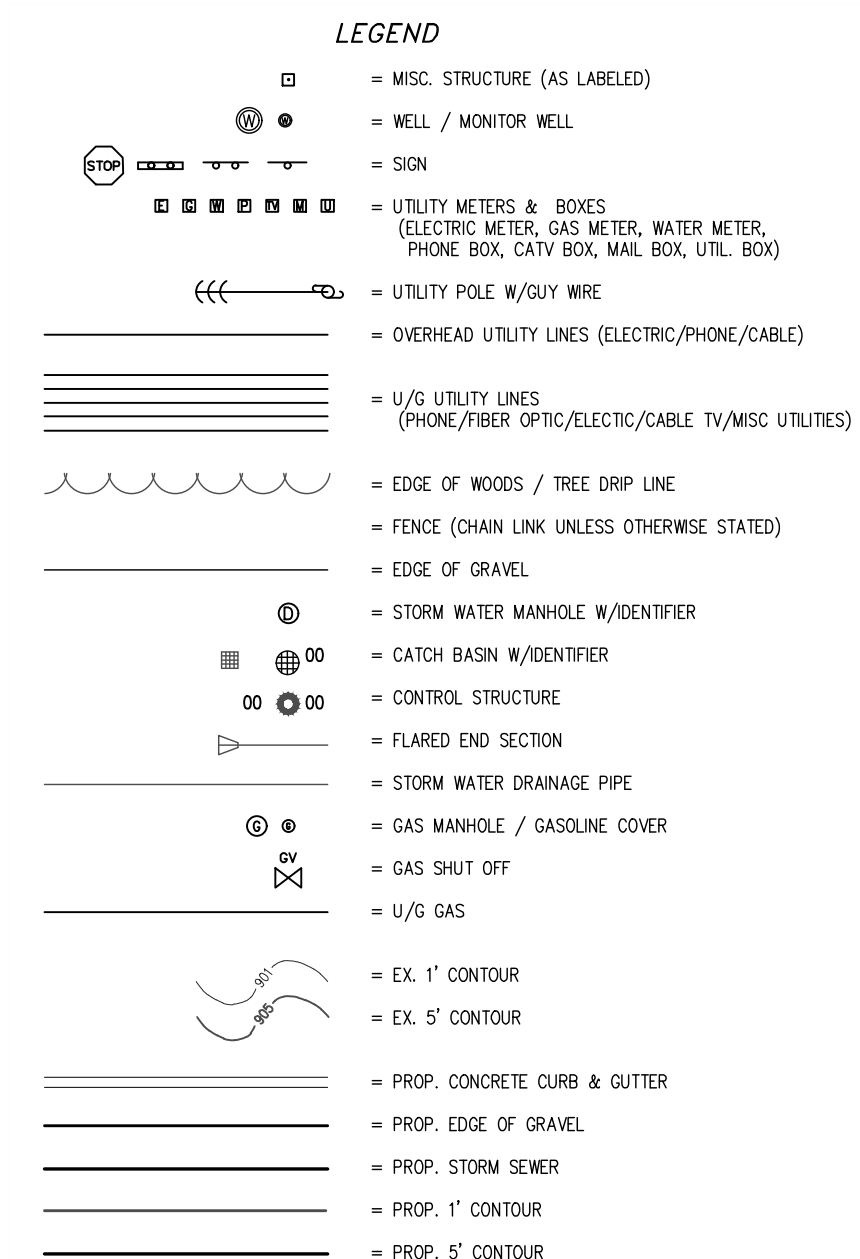
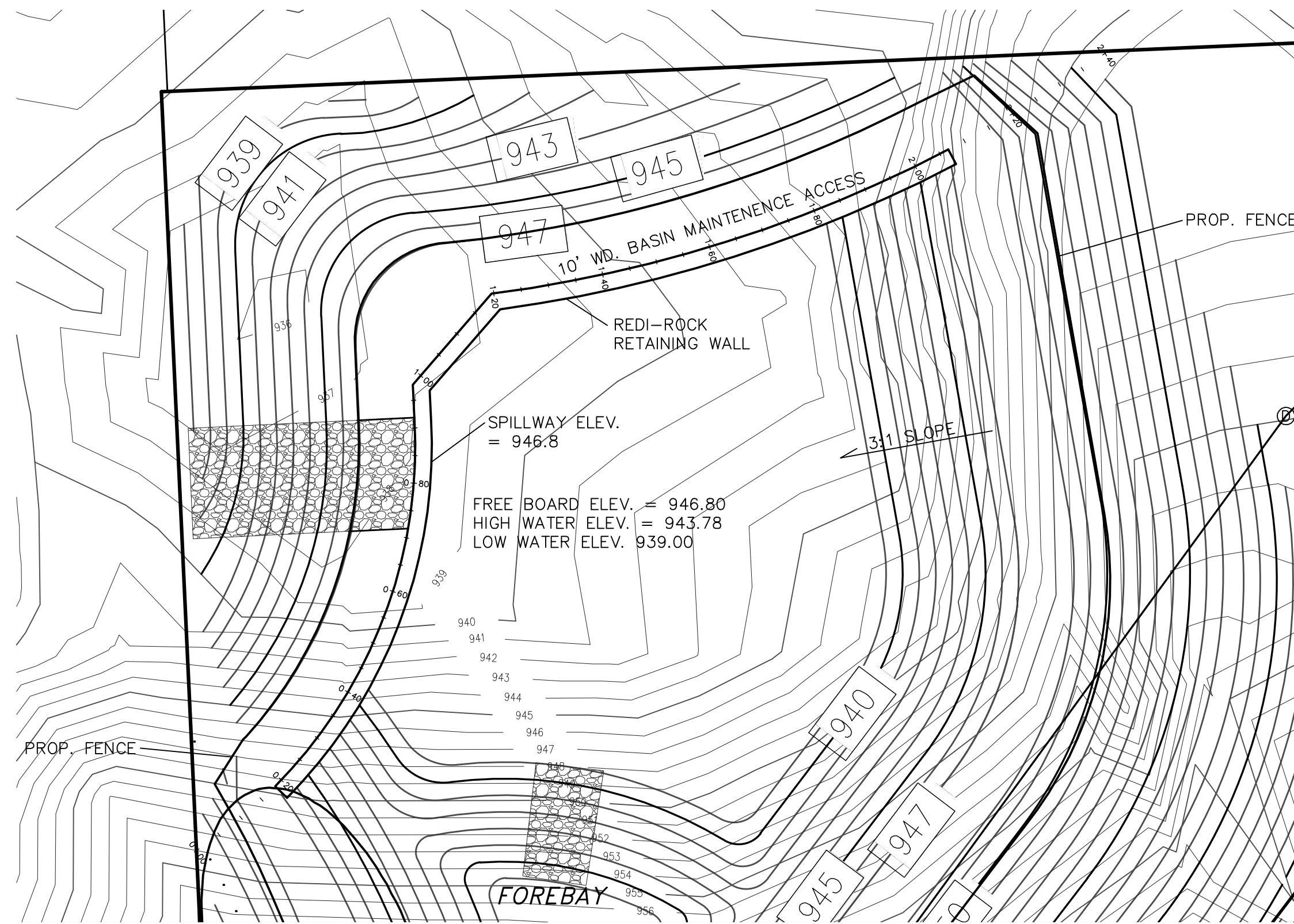
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DRAFT: JHG						
CHECK: WMP						

MOUNTAIN TOP ESTATES SITE CONDOMINIUM

UNIT 14 RETAINING WALL SECTIONS NOTES & CALCULATIONS

CLIENT: MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	SCALE: AS NOTED PROJECT No.: 183568 DWG NAME: 3568 RW ISSUED: APRIL 5, 2019	RW2
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 BRIGHTON, MICHIGAN 48114

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

MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

NORTH RETENTION BASIN
RETAINING WALL
PLAN, PROFILE, SECTIONS

CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

SCALE: AS NOTED
PROJECT No.: 183568
DWG NAME: 3568 RW
ISSUED: APRIL 5, 2019

RW3

SEGMENTAL RETAINING WALL NOTES

1. Wall Units

- a. Wall units shall be Redi-Rock™ as produced by a licensed manufacturer.
- b. Wall units shall meet or exceed Redi-Rock™ minimum specifications. All material used in the wall units, steps, and pavers must meet applicable ASTM and local requirements for exterior concrete. (ASTM Standard Specifications for Segmental Retaining Wall Units, concrete specifications ASTM C-94 & ACI 301-99 latest additions apply)
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3. Leveling Pad and Free Draining Backfill

- a. Leveling Pad shall be washed stone or compacted gravel. See construction drawings for specifications.
- b. Free Draining Backfill material shall be granular, well draining sand or stone and shall be placed to a minimum of 1-foot of depth behind the back of the wall and shall extend vertically from the Leveling Pad to an elevation 4-inches below the top of the wall. See construction drawings for specifications.
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- d. Non-woven geotextile cloth shall be placed between the Free Draining Backfill and retained soil when noted on the construction drawings.
- e. Where additional fill is needed, Contractor shall submit sample and specifications to the Engineer for approval.

4. Drainage

- a. Internal and external drainage shall be provided in accordance with the construction drawings.

5. Geogrid

- a. Geogrid connection bar to be epoxy coated rebar, ½-inch in diameter cut 3-foot 4-inches long.
- b. Geogrid fabric to be Mirafi Miragrid or equivalent. See construction drawings for specifications.
- c. Geogrid fabric shall be installed in accordance with the construction drawings and the SRW unit manufacturer's specifications.

6. Excavation

- a. Contractor shall excavate to the lines and grades shown on the construction drawings.

7. Foundation Soil Preparation

- a. Native foundation soil shall be compacted to 95% of standard proctor or 90% of modified proctor prior to placement of the Leveling Pad material.
- b. In-situ foundation soil shall be examined by the Testing Engineer to ensure that the actual foundation soil strength meets or exceeds assumed design strength. Soil not meeting required strength shall be removed and replaced as directed by the Testing Engineer.

8. Leveling Pad Placement

- a. Leveling Pad shall be placed as shown on the construction drawings.
- b. Leveling Pad shall be placed on undisturbed native soils or suitable replacement fill material as acceptable to the Engineer.
- c. Leveling Pad shall be compacted to 95% of standard proctor or 90% of modified proctor to ensure a level, hard surface on which to place the first course of blocks. Pad shall be constructed to the proper elevation to ensure the final elevation shown on the plans. Well-graded sand may be used to smooth the top ½-inch on the Leveling Pad (when using gravel pad only).
- d. Leveling Pad shall have a 6-inch minimum depth for walls under 8-feet in height and a 12-inch minimum depth for walls over 8-feet. See construction drawings for additional specifications. Pad dimensions shall extend beyond the blocks in all directions to a distance at least equal to the depth of the pad unless otherwise specified on the construction drawings.
- e. For steps and pavers, a minimum of 1-inch to 1 ½-inches of free draining sand shall be screeded smooth to act as a placement bed for the steps or pavers.

9. Unit Installation

- a. The first course of wall units shall be placed on the prepared Leveling Pad with aesthetic surface facing out and the front edged tight together. All units shall be checked for level and alignment as they are placed.
- b. Ensure that units are in full contact with Leveling Pad. Proper care shall be taken to develop straight lines and smooth curves on base course as per wall layout.
- c. The backfill in front and back of entire base row shall be placed and compacted to firmly lock them in place. Check all units again for level and alignment. All excess material shall be swept from top of units.
- d. Install next course of wall units on top of base row. Position blocks to be offset from seams of blocks below. Blocks shall be placed fully forward so knob and groove are engaged. Check each block for proper alignment and level. Backfill to 12-inch depth behind block with Free Draining Backfill Spread backfill in uniform lifts not exceeding 8-inches. Employ methods using lightweight compaction equipment that will not disrupt the stability or batter of the wall. Hand-operated plate compaction equipment shall be used around the block and within 3-feet of the wall to achieve consolidation. Compact backfill to 95% of standard proctor (ASTM D 698, AASHTO T-99) density within 2% of its optimum moisture content.
- e. Install each subsequent course in like manner. Repeat procedure to the extent of wall height.
- f. Allowable construction tolerance is 2-degrees vertically and 1-inch in 10-feet horizontally.
- g. All walls shall be installed in accordance with local building codes and requirements.

For local dealer contact:

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Charlevoix, MI 49720
1-866-222-8400 www.redi-rock.com <<http://www.redi-rock.com>>
info@redi-rock.com

MOUNTAIN TOP ESTATES North Retention Basin Retaining Wall									
Analysis of Redi Rock wall									
Input data									
Project	MOUNTAIN TOP ESTATES								
Task	North Retention Basin Retaining Wall								
Description	Section A								
Customer	Mountain Top Estates, LLC								
Date	4/2/2019								
Project ID	183568								
Project number	183568								
Settings									
USA - Safety factor									
Wall analysis									
Active earth pressure calculation :	Coulomb								
Passive earth pressure calculation :	Mazdirian (Rankine)								
Earthquake analysis :	Mononobe-Okabe								
Shape of earth wedge :	Calculate as skew								
Allowable eccentricity :	0.333								
Internal stability :	Standard - straight slip surface								
Reduction coeff. of contact frict. base :	1.00								
Verification methodology :	Safety factors (ASD)								
Safety factors									
Permanent design situation									
Safety factor for overturning :	SF _{ov} =	1.50	[-]						
Safety factor for sliding resistance :	SF _s =	1.50	[-]						
Safety factor for bearing capacity :	SF _b =	2.00	[-]						
Safety factor for sliding along geo-reinforcement :	SF _u =	1.50	[-]						
Safety factor for geo-reinforcement strength :	SF _u =	1.50	[-]						
Safety factor for pull out resistance of geo-reinf. :	SF _{po} =	1.50	[-]						
Safety factor for connection strength :	SF _{con} =	1.50	[-]						
Input concentrated surcharges									
No.	Surcharge	Action	Magnitude	Ord.x	Length	Width	Depth		
	how	change	[lb]	x [ft]	l [ft]	b [ft]	z [ft]		
1	Yes	variable	400.00	2.00	0.30	0.30	on terrain		
No.	Name								
1	Maintenance equipment								
No. 1									
Forces acting on construction									
Name	F _{hor}	App.Pt.	F _{vert}	App.Pt.	Design				
	[lb/ft]	z [ft]	[lb/ft]	x [ft]	coefficient				
Weight - wall	0.0	4.24	3215.8	2.57	1.000				
HF resistance	95.4	0.67	0.1	0.30	1.000				
Weight - earth wedge	0.0	-1.36	32.3	4.58	1.000				
Weight - earth wedge	0.0	-2.95	58.7	3.81	1.000				
Weight - earth wedge	0.0	-8.79	71.5	2.99	1.000				
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MOUNTAIN TOP ESTATES North Retention Basin Retaining Wall									
Analysis of Redi Rock wall									
Input data									
Name	F _{hor}	App.Pt.	F _{vert}	App.Pt.	Design				
	[lb/ft]	z [ft]	[lb/ft]	x [ft]	coefficient				
Active pressure	907.2	2.41	1017.3	4.36	1.000				
Maintenance equipment	380.9	-8.40	210.3	4.00	1.000				
Verification of complete wall									
Check for overturning stability									
Resisting moment :	M _{res} =	14136.3	lb/ft-ft						
Overturning moment :	M _{ov} =	5421.5	lb/ft-ft						
Safety factor = 2.61 > 1.50									
Wall for overturning is SATISFACTORY									
Check for slip									
Resisting horizontal force :	H _{res} =	2600.24	lb/ft						
Active horizontal force :	H _{act} =	1162.67	lb/ft						
Safety factor = 2.49 > 1.50									
Wall for slip is SATISFACTORY									
Overall check - WALL is SATISFACTORY									
No. 1									
Forces acting on construction									
Name	F _{hor}	App.Pt.	F _{vert}	App.Pt.	Design				
	[lb/ft]	z [ft]	[lb/ft]	x [ft]	coefficient				
Weight - wall	0.0	-4.10	2615.8	1.59	1.000				
Weight - earth wedge	0.0	-1.95	58.7	2.81	1.000				
Weight - earth wedge	0.0	-8.79	71.5	1.99	1.000				
Active pressure	647.7	-2.07	696.0	3.04	1.000				
Maintenance equipment	380.9	-8.40	210.3	3.00	1.000				
Verification of block No. 1									
Check for overturning stability									
Resisting moment :	M _{res} =	6574.6	lb/ft-ft						
Overturning moment :	M _{ov} =	4236.3	lb/ft-ft						
Safety factor = 1.60 > 1.50									
Joint for overturning stability is SATISFACTORY									
Check for slip									
Resisting horizontal force :	H _{res} =	2673.46	lb/ft						
Active horizontal force :	H _{act} =	998.33	lb/ft						
Safety factor = 2.58 > 1.50									
Joint for verification is SATISFACTORY									
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MOUNTAIN TOP ESTATES North Retention Basin Retaining Wall									
Bearing capacity of foundation soil									
Design load acting at the center of footing bottom									
No.	Moment	Norm. force	Shear Force	Eccentricity	Stress				
	[lb/ft-ft]	[lb/ft]	[lb/ft]	[-]	[psf]				
1	2799.9	4805.84	1162.67	0.122	1217.1				
Service load acting at the center of footing bottom									
No.	Moment	Norm. force	Shear Force						
	[lb/ft-ft]	[lb/ft]	[lb/ft]						
1	2799.9	4805.84	1162.67						
Verification of foundation soil									
Stress in the footing bottom : rectangle									
Eccentricity verification									
Max. eccentricity of normal force e = 0.122									
Maximum allowable eccentricity e _{max} = 0.333									
Eccentricity of the normal force is SATISFACTORY									
Verification of bearing capacity									
Max. stress at footing bottom σ = 1217.1 psf									
Bearing capacity of foundation soil R _u = 2500.0 psf									
Safety factor = 2.05 > 2.00									
Bearing capacity of foundation soil is SATISFACTORY									
Overall verification - bearing capacity of found. soil is SATISFACTORY									
Slope stability analysis									
Results (Stage of construction 1)									
Analysis 1									
Circular slip surface									
Slip surface parameters									
Center :	x =	-3.16	[ft]	Angles :	α ₁ =	-40.28	[°]		
	z =	0.01	[ft]		α ₂ =	89.95	[°]		
Radius :	R =	10.50	[ft]						
Analysis of the slip surface without optimization									
Slope stability verification (all methods)									
Bishop : FS = 1.95 > 1.50 ACCEPTABLE									
Fellenius / Peterson : FS = 1.73 > 1.50 ACCEPTABLE									
Spencer : FS = 1.98 > 1.50 ACCEPTABLE									
Sariou : FS = 1.97 > 1.50 ACCEPTABLE									
Morgenstern-Price : FS = 1.97 > 1.50 ACCEPTABLE									
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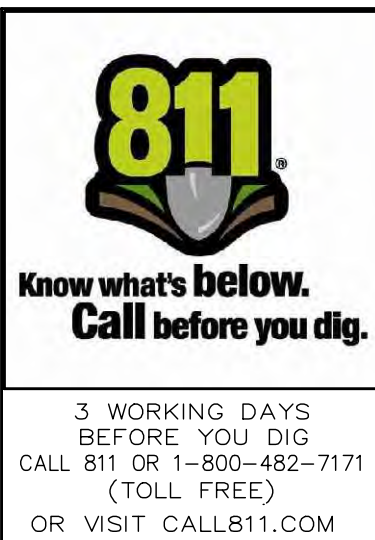
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MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

NORTH RETENTION BASIN
RETAINING WALL
NOTES & CALCULATIONS

CLIENT:	SCALE: AS NOTED
MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	PROJECT No.: 183568 DWG NAME: 3568 RW ISSUED: APRIL 5, 2019

RW4



PROPOSED STORM WATER RUN-OFF						
"Area"	0.90	0.90	0.20	1.00	(ACRES)	"C" Factor
Pavement	Building	Lawn	Water			
FES-402	0.00	0.09	2.20	0.00	2.29	0.23
CB-310	0.10	0.06	0.24	0.00	0.40	0.48
CB-306	0.11	0.00	0.48	0.00	0.59	0.33
CB-305	0.08	0.06	0.39	0.00	0.53	0.38
CB-304	0.00	0.00	0.20	0.00	0.20	0.20
CB-303	0.00	0.00	0.40	0.00	0.40	0.20
CB-302	0.00	0.00	0.37	0.00	0.37	0.20
Retention Area	0.00	0.03	1.93	0.13	2.09	0.26
TOTAL AREA =					6.87	ACRES
RUN-OFF COEFFICIENT =					0.27	
NOTE: Building and pavement areas above depict the developed condition.						

PROPOSED DRAINAGE AREAS						
"Area"	0.90	0.90	0.20	1.00	(ACRES)	"C" Factor
Pavement	Building	Lawn	Water			
FES-202	0.00	0.06	1.82	0.00	1.88	0.22
YB-150	0.00	0.00	0.21	0.00	0.21	0.20
YB-140	0.06	0.09	0.54	0.00	0.69	0.35
CB-133	0.06	0.06	0.41	0.00	0.53	0.36
CB-132	0.06	0.00	0.17	0.00	0.23	0.38
CB-131	0.09	0.03	0.46	0.00	0.58	0.34
CB-130	0.06	0.00	0.10	0.00	0.16	0.46
CB-124	0.10	0.03	0.25	0.00	0.38	0.44
CB-123	0.12	0.03	0.50	0.00	0.65	0.36
CB-122	0.31	0.06	0.21	0.00	0.58	0.65
YB-121	0.00	0.03	0.84	0.00	0.87	0.22
YB-120	0.00	0.00	0.09	0.00	0.09	0.20
YB-118	0.00	0.03	0.47	0.00	0.50	0.24
YB-117	0.00	0.03	0.67	0.00	0.70	0.23
YB-116	0.00	0.00	0.39	0.00	0.39	0.20
YB-115	0.00	0.00	0.39	0.00	0.39	0.20
YB-113	0.04	0.00	0.17	0.00	0.21	0.33
CB-112	0.05	0.03	0.31	0.00	0.39	0.34
CB-111	0.03	0.00	0.00	0.00	0.03	0.90
CB-106	0.05	0.06	0.28	0.00	0.39	0.40
CB-105	0.04	0.00	0.05	0.00	0.09	0.51
Detention Area	0.10	0.12	1.37	0.10	1.69	0.34
TOTAL AREA =					11.63	ACRES
RUN-OFF COEFFICIENT =					0.32	
NOTE: Building and pavement areas above depict the developed condition.						



BENCHMARK
DATUM BASED ON RTK-GPS OBSERVATIONS,
DATE: DECEMBER 7, 2018

BENCHMARK #204
NAIL IN THE SOUTH SIDE OF A TRI OAK,
LOCATED SOUTH 465+ FEET OF THE NORTH
PROPERTY LINE AND EAST 492+ OF THE WEST
PROPERTY LINE.
ELEVATION = 1022.74 (NAVD 88)

BENCHMARK #209
NAIL IN THE NORTHEAST SIDE OF A 24" OAK,
LOCATED SOUTH 240+ FEET OF THE NORTH
PROPERTY LINE AND EAST 170+ FEET OF THE
WEST PROPERTY LINE.
ELEVATION = 979.63 (NAVD 88)

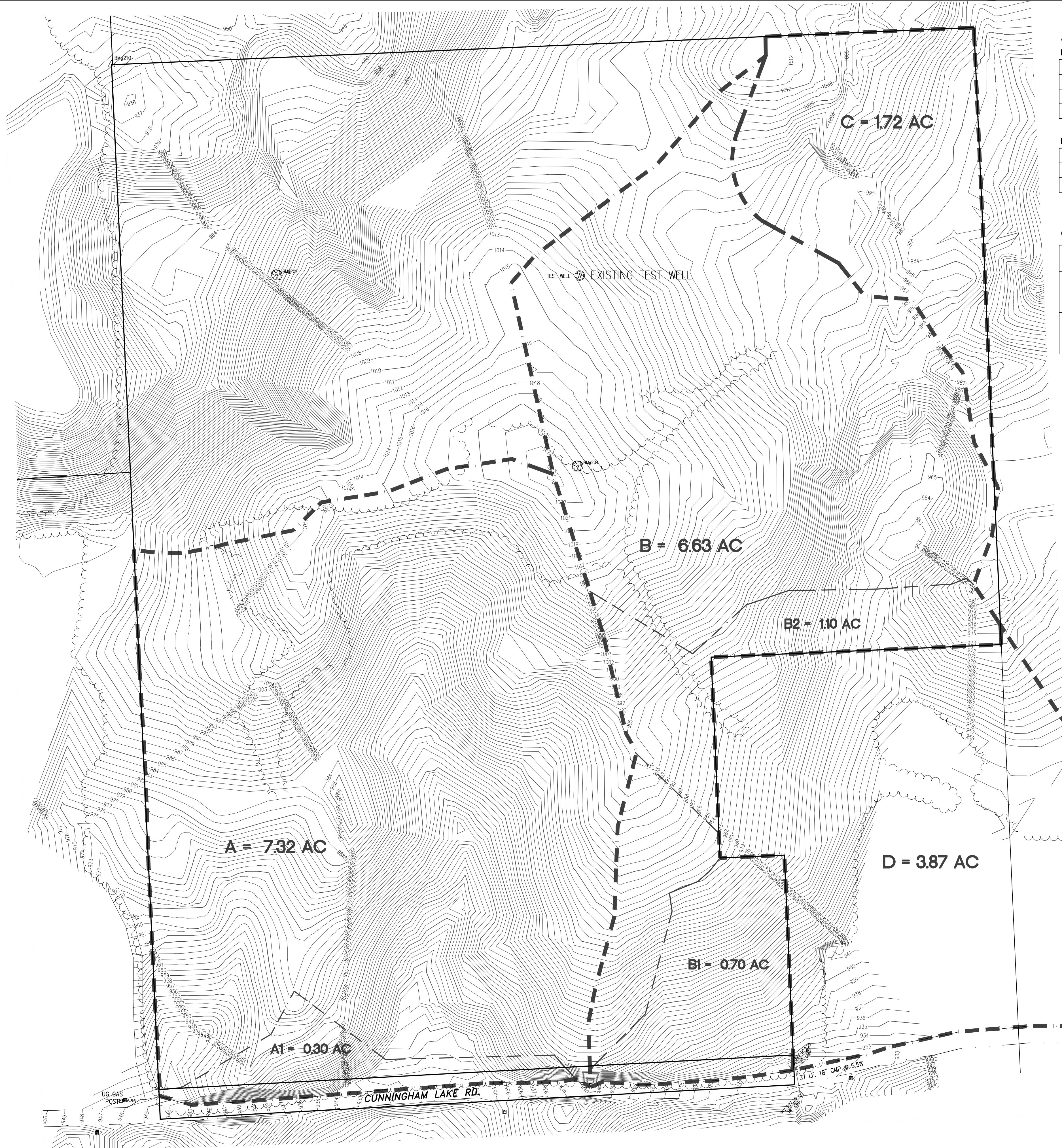
BENCHMARK #210
TOP OF MONUMENT, LOCATED AT NORTHWEST
PROPERTY CORNER.
ELEVATION = 939.48 (NAVD 88)

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DESIGN:WMP DRAFT: JHG CHECK: WMP	REVISION # DATE REVISION-DESCRIPTION	REVISION # DATE REVISION-DESCRIPTION	MOUNTAIN TOP ESTATES SITE CONDOMINIUM	WATER SHED PLAN	CLIENT: MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	SCALE: 1in. = 60ft. PROJECT No.: 183568 DWG NAME: 3568 WS ISSUED: APRIL 5, 2019	WS1
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AREA DESCRIPTIONS

EXISTING DRAINAGE AREAS:

A	- SITE SUB-AREA SURFACE DRAINING TO CUNNINGHAM LAKE ROAD
B	- SITE SUB-AREA SURFACE DRAINING TO CROSS-CULVERT
C	- SITE SUB-AREA SURFACE DRAINING TO CUNNINGHAM LAKE ROAD
D	- OFFSITE SUB-AREA SURFACE DRAINING TO CUNNINGHAM LAKE ROAD

PROPOSED DRAINAGE AREAS:

A1	- PORTION OF SUB-AREA 'A' SURFACE DRAINING TO CUNNINGHAM LAKE ROAD
B1	- PORTION OF SUB-AREA 'B' SURFACE DRAINING TO CROSS-CULVERT
B2	- PORTION OF SUB-AREA 'B' SURFACE DRAINING TO CROSS-CULVERT

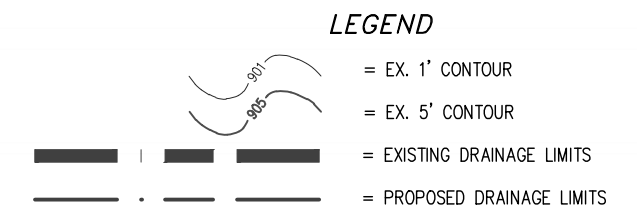
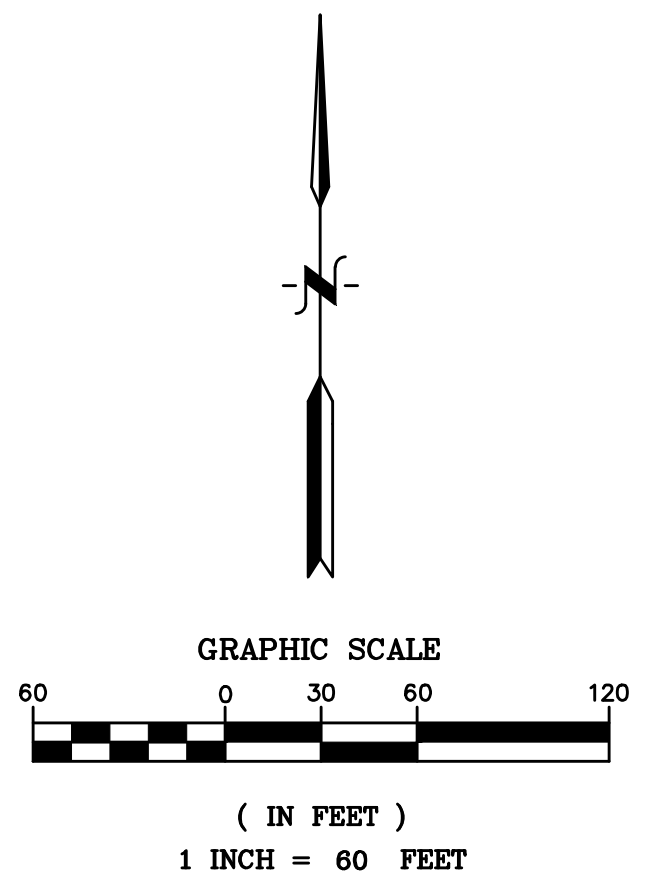
CUNNINGHAM LAKE ROAD DRAINAGE AREA -

1	AREA OF PROPERTY CONTRIBUTING DRAINAGE TO CUNNINGHAM LAKE ROAD R.O.W.	A + B + C = 15.67 ACRES
2	POST-DEVELOPMENT AREA OF DEVELOPMENT CONTRIBUTING DRAINAGE TO CUNNINGHAM LAKE ROAD R.O.W. UNDETAINED	A1 + B1 + B2 = 2.10 ACRES
3	NET DEVELOPMENT AREA CONTRIBUTING DRAINAGE TO CUNNINGHAM LAKE ROAD R.O.W.	'1' - '2' = 13.57 ACRES

EXISTING RUNOFF TO CUNNINGHAM LAKE ROAD

Tributary Area (A) =	13.57	Acres
Compound Runoff Coefficient (C) =	0.20	
Design Constant (K1) = A * C =	2.71	

1	2	3	4	5
Duration (Minutes)	Duration (Seconds)	Intensity (100-yr Storm) (In / Hr)	Col. 2 * Col. 3 (Inches)	Volume Ex to Rd Col. 4 * K1 (Cubic Feet)
5	300	9.17	2750	7464
10	600	7.86	4714	12795
15	900	6.88	6188	16793
20	1200	6.11	7333	19903
30	1800	5.00	9000	24426
60	3600	3.24	11647	31610
90	5400	2.39	12913	35046
120	7200	1.90	13655	37060



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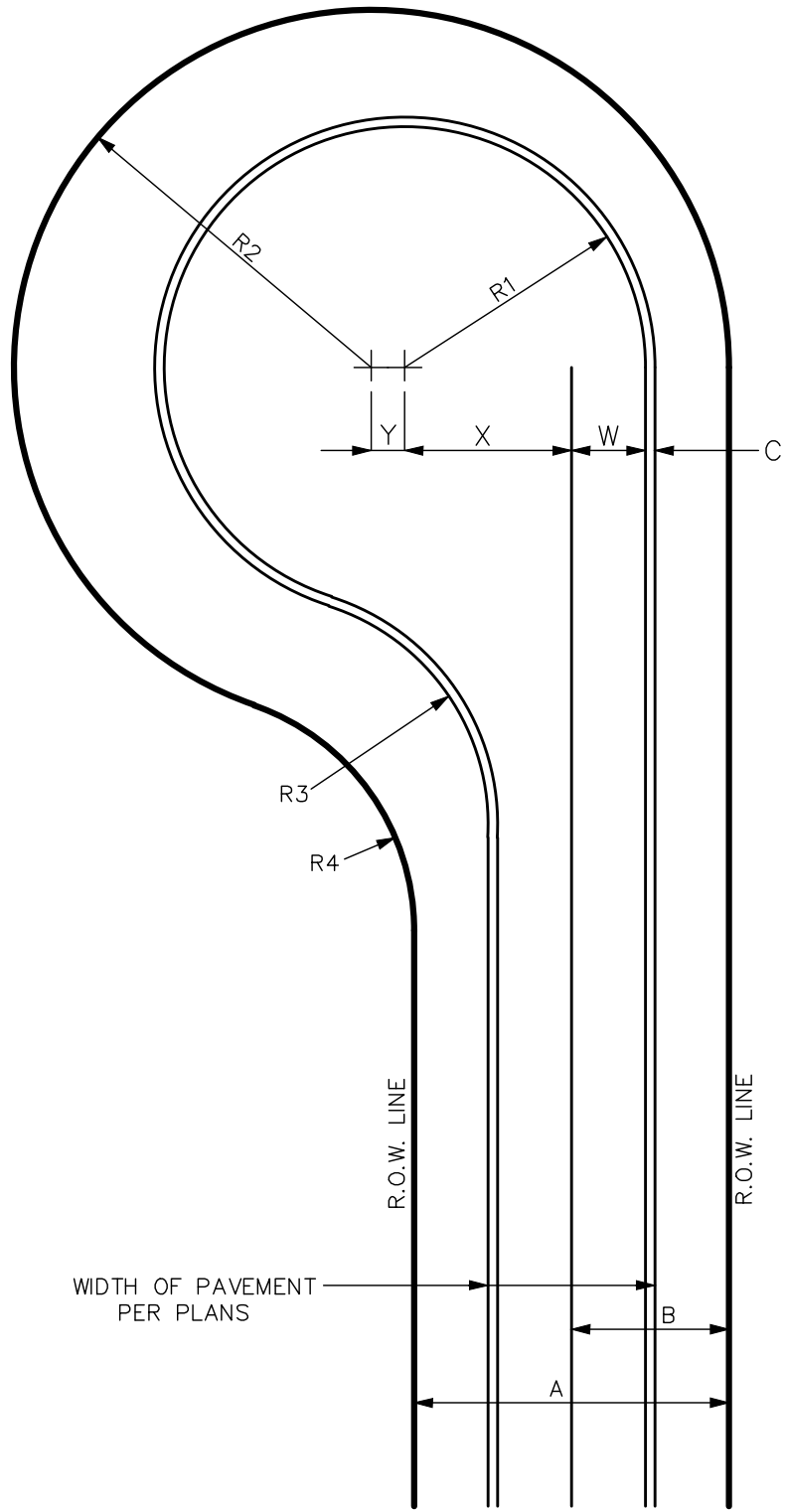
DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

MOUNTAIN TOP ESTATES
SITE CONDOMINIUM

CUNNINGHAM LAKE ROAD
DRAINAGE AREA PLAN PLAN

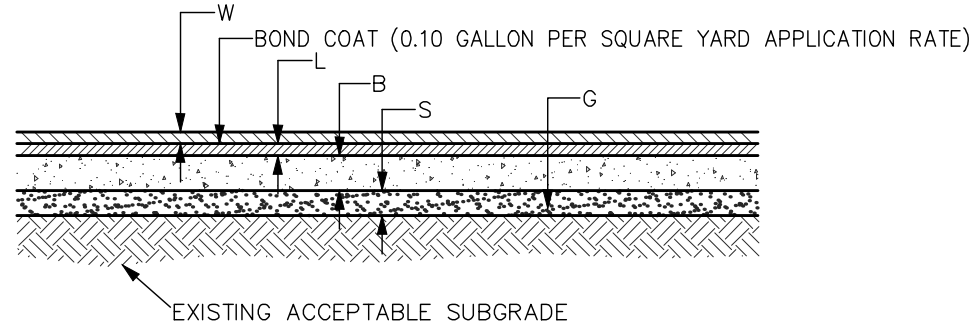
CLIENT:	SCALE: 1in. = 60ft.
MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	PROJECT No.: 183568 DWG NAME: 3568 EX ISSUED: APRIL 5, 2019

WS2



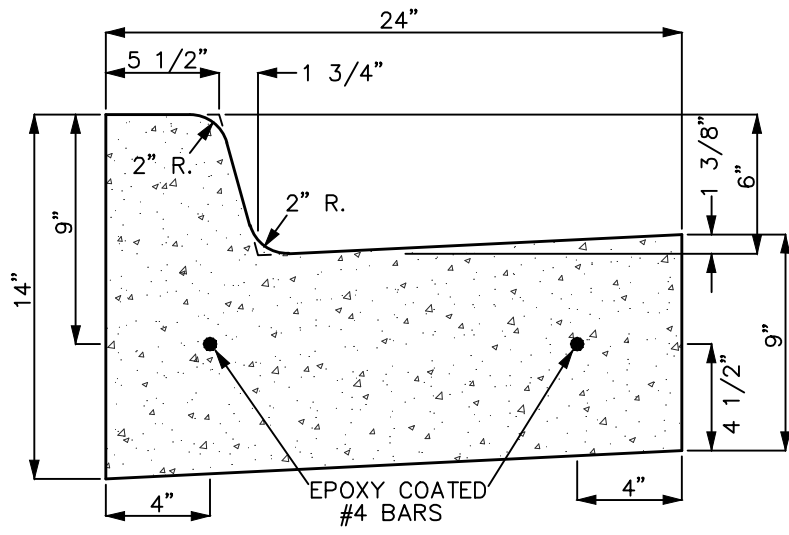
CUL-DE-SAC WITH CURB DETAIL

KEY	DESCRIPTION	DIMENSION
A	ROAD RIGHT OF WAY WIDTH	50'
B	CENTERLINE OFFSET TO RIGHT OF WAY	25'
C	CURB AND GUTTER WIDTH	13'
R1	PAVEMENT RADIUS	50'
R2	RIGHT OF WAY RADIUS	75'
R3	BACK OF CURB RETURN RADIUS	50'
R4	RIGHT OF WAY RETURN RADIUS	50'
W	PAVEMENT LANE WIDTH	11'
X	CENTERLINE OFFSET TO R1	40'
Y	R1 OFFSET TO R2	10'

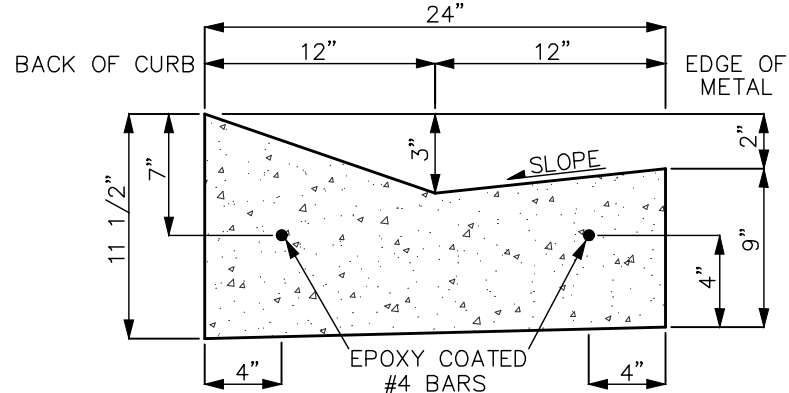


STANDARD DUTY BITUMINOUS PAVEMENT CROSS SECTION

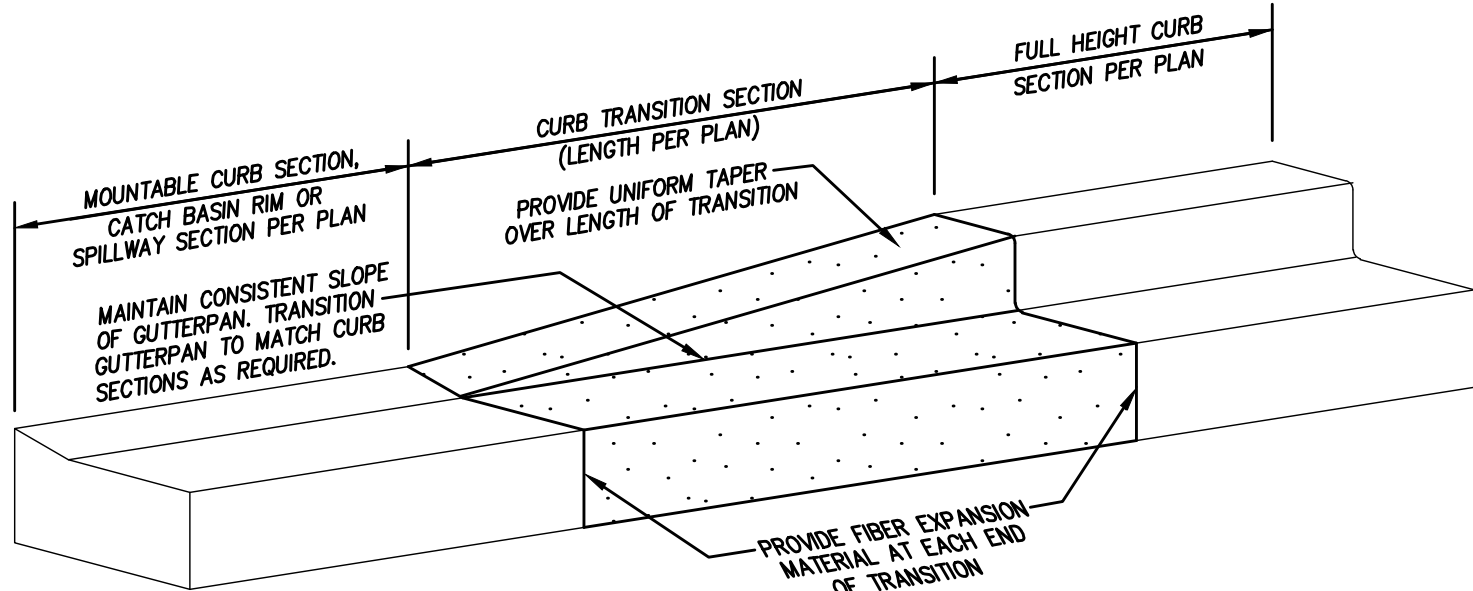
KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 36A	1.5"
L	LEVELING COURSE	MDOT 13A	1.5"
B	AGGREGATE BASE	MDOT 21AA (SEE NOTES 4&7)	8"
S	GRANULAR SUBBASE	MDOT CLASS II (SEE NOTES 4&6)	12"
G	GEOGRID	N/A	N/A



MDOT TYPE F4 CURB



3" MOUNTABLE CURB



CURB TRANSITION DETAIL

- NOTES:
- CURB TRANSITIONS SHALL BE SMOOTH. PROVIDE SPECIAL FORMING AND LABOR IF NEEDED. CURB TRANSITIONS ARE INCIDENTAL TO CURB WORK.
 - CONTRACTOR SHALL ADJUST THE ELEVATION OF THE TOP OF CURB AS NEEDED TO MAINTAIN THE GUTTER LINE AT A CONSTANT SLOPE BETWEEN THE DIFFERENT CURB CROSS SECTIONS.
 - WHEN PRESENT, THE CURB TRANSITION MAY BEGIN AT A CATCH BASIN OR PAVED SPILLWAY SECTION.

PRIVATE ROAD CONSTRUCTION NOTES:

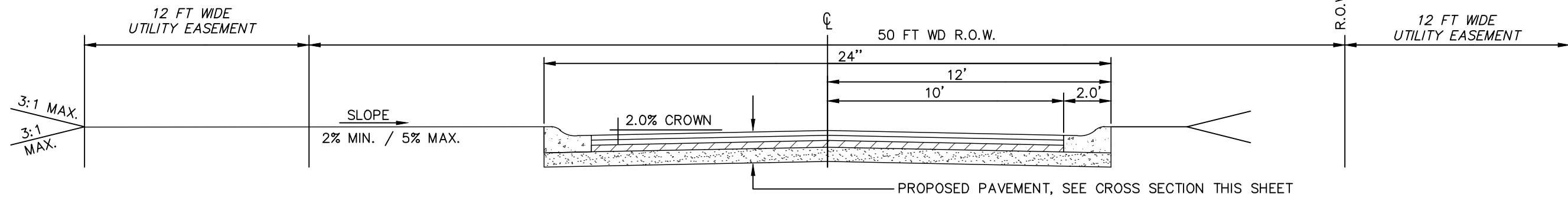
- The grading, roadway and ditch specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
- Road work shall include site clearing of vegetation and tree stumps; stripping and stockpiling of topsoil for reuse; mass grading cuts and fills; removal of unsuitable soils from the roadway influence area; culvert placement; subgrade preparation including fine grading and proof roll; subgrade undercuts and/or placement of geotextile fabric if needed; placement and preparation of granular subbase and aggregate base courses including fine grading and compaction; placement of concrete curb and gutter; watering of aggregate base within 24 hours of paving to obtain optimum moisture content; bituminous and/or concrete pavement including placement, compaction and bond coats; cleaning of bituminous pavements between courses if needed; preparation, finish work and restoration as needed to connect to existing pavements, ditches, driveways, etc.; adjustment of storm and utility structure castings to match finish grade; placement of shoulders and finish grading of ditches; pavement markings; topsoil placement; seed & mulch; site cleanup; restoration; and other work as shown on the project plans and specifications.
- Existing and proposed grades shown in the road profile view(s) are along the centerline of each road. Refer to the plan view and curve tables on the project plans for horizontal alignment and curve data. Proposed contours for ditches, curbs and road crown may not be shown in the plan view and/or grading plan.
- Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of roadway.
- Contractor shall coordinate construction staking, testing, documentation submittal and observation with the appropriate Agency, Surveyor and/or Engineer as required for construction, certification and/or acceptance of the private road(s). All materials used and work done shall meet or exceed the requirements and specifications noted on the project plans. Any materials used or work done that does not meet said requirements and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.
- Contractor shall take all appropriate job site safety precautions. Refer to the Traffic Control specifications of the appropriate Regulatory Agency for work within a public road right of way.
- Contractor shall take precautions to prevent contamination of road materials during handling, installation and construction procedures. Contaminated materials shall be removed and replaced at Contractor's expense.
- Clear vision areas shall be created where required; refer to the Clear Vision Area detail on the project plans. Relocate existing signs/utilities as acceptable to the appropriate Agency. Owner/Developer shall coordinate installation of permanent street signage after completion of roadway.
- When side slopes within utility easements exceed 1 on 10 (10%), Contractor shall rough grade a flat shelf within the easement area as acceptable to Engineer and restore following underground utility installation.

CONCRETE CURB NOTES:

- Refer to the project plans for the proposed locations of the specific curb types.
- The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the General Notes and Curb Cross Section Details on the project plans for additional requirements.
- Extend the base and/or subbase material of the appropriate adjacent pavement cross-section horizontally to 1 foot behind the back of curb. Concrete curb shall be constructed on no less than 6" of combined depth of compacted base/subbase material.
- Concrete material shall meet or exceed the specification requirements of the appropriate Local Municipality. If not specified by the Local Municipality, then the concrete material shall be MDOT P1 (I-A) 6.0 sack concrete pavement mixture with a minimum 28 day design compressive strength of 4,000 PSI and 6.5% (+/-1.3%) entrained air. Contractor shall submit concrete mix design and aggregate mechanical analysis report to the Local Municipality and Engineer for review and approval prior to use.
- Install transverse contraction control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse contraction control joints in curb with 1" minimum depth at 10' on center. Tool joints in fresh concrete or saw cut within 8 hours.
- Install transverse expansion control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse expansion control joints in curb as follows: 400' maximum on center, at spring points of intersecting streets and within 10' on each side of catch basins. Transverse expansion control joints shall be 1" thick asphalt fiber joint filler matching entire curb cross section.
- Provide 1" asphalt fiber control joint between back of curb and all other concrete structures, such as concrete sidewalks and concrete driveways.
- Curb Contractor shall provide final adjustment of catch basin castings in curb line. Castings shall be tucked pointed to structure water tight with concrete or mortar inside and outside of casting.
- Install curb cuts for all existing and proposed sidewalks and pedestrian ramps in accordance with the American Disabilities Act and the Barrier Free Design requirements of the appropriate Local, County and/or State Agency. Refer to MDOT Standard Plan R-28, latest revision. Install curb cuts for all existing and proposed vehicular ramps and drives as noted on the project plans.

GENERAL NOTES:

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



TYPICAL PRIVATE ROAD CROSS SECTION

NOT TO SCALE



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

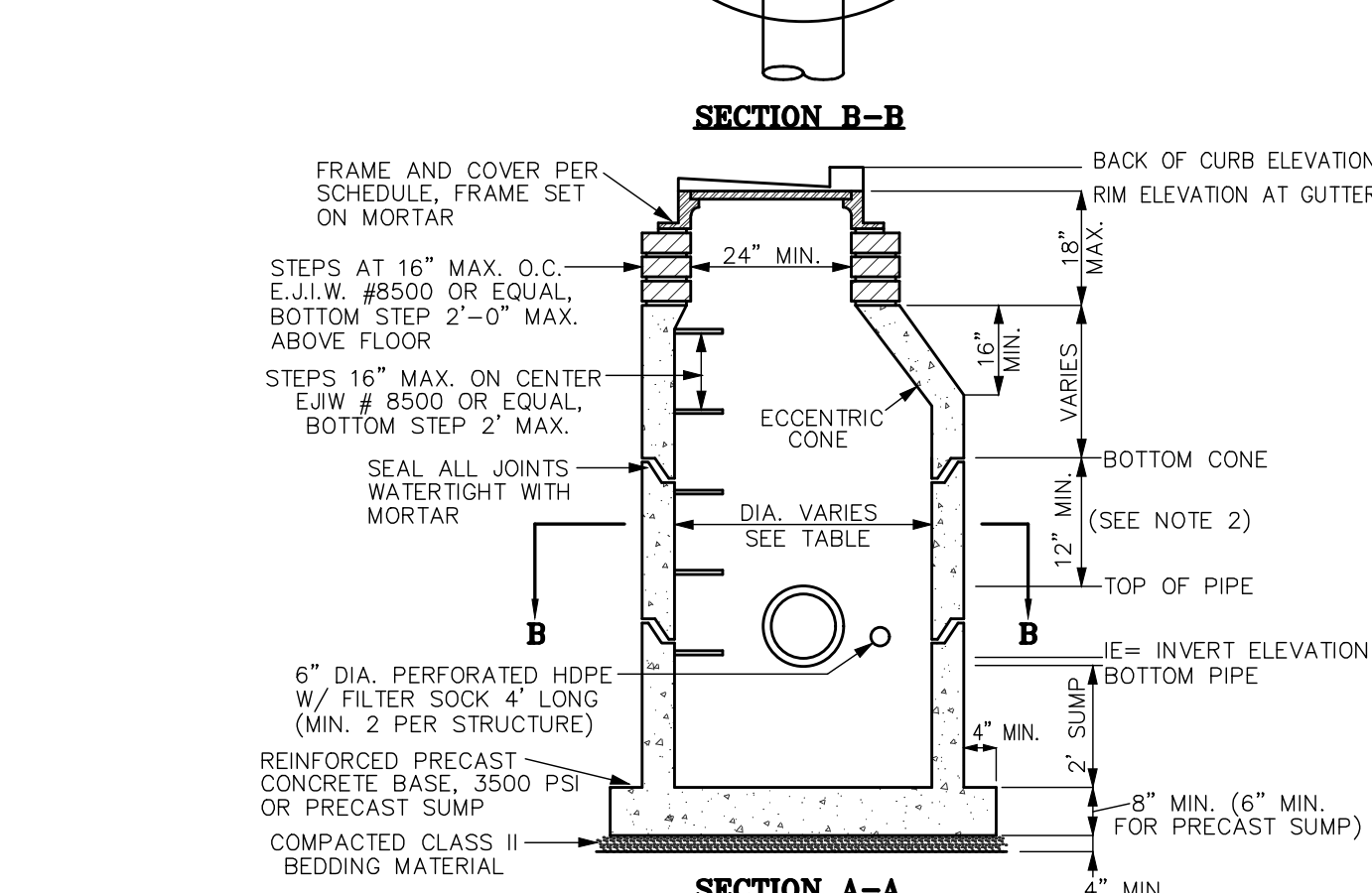
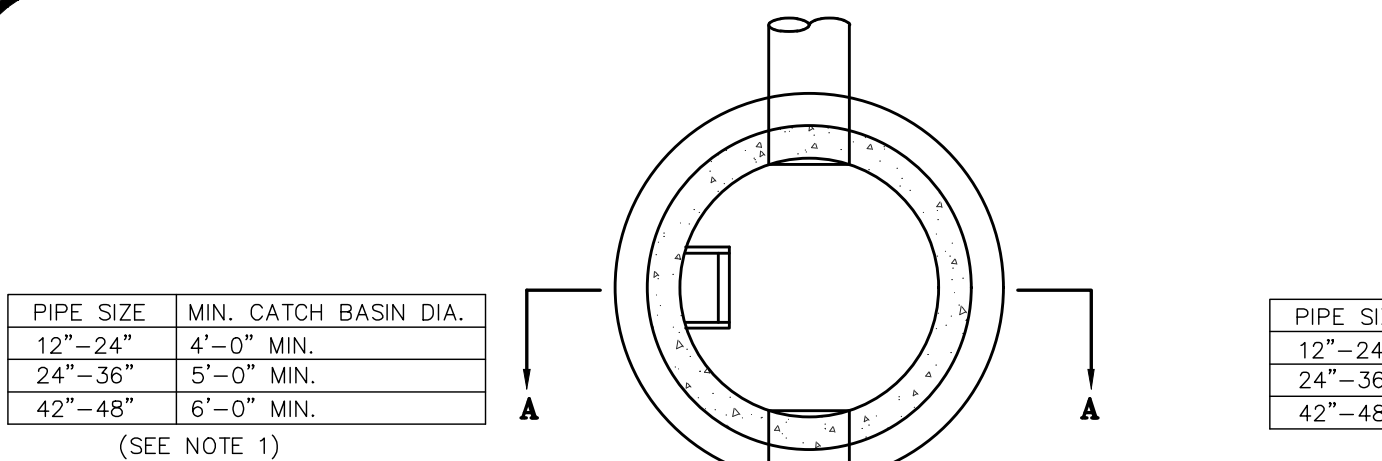
MOUNTAIN TOP ESTATES SITE CONDOMINIUM

GENERAL NOTES & DETAILS

CLIENT:
MOUNTAIN TOP ESTATES, LLC
P.O. BOX 469
BRIGHTON, MICHIGAN 48116
810-229-2752

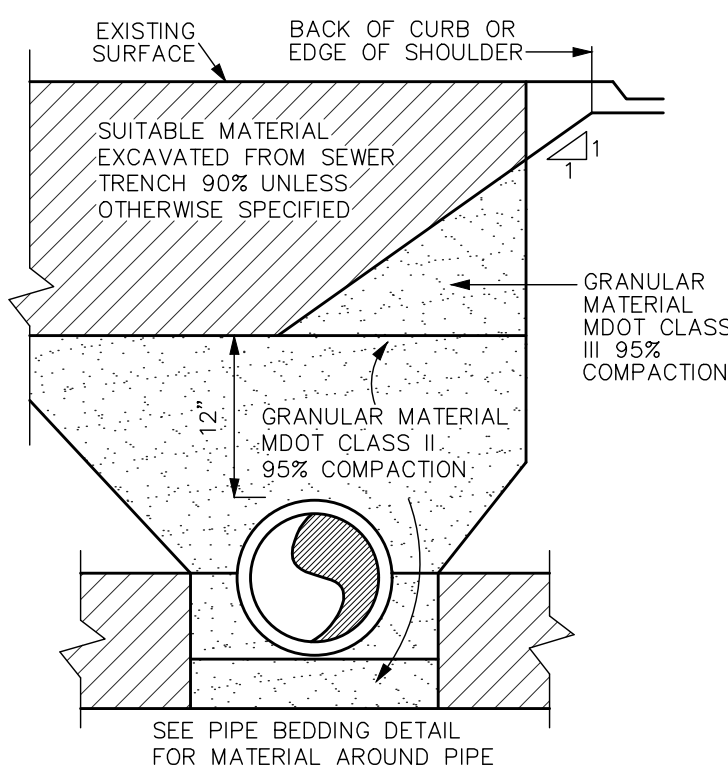
SCALE: AS NOTED
PROJECT No.: 183568
DWG NAME: 3568 DT
ISSUED: APRIL 5, 2019

DT1



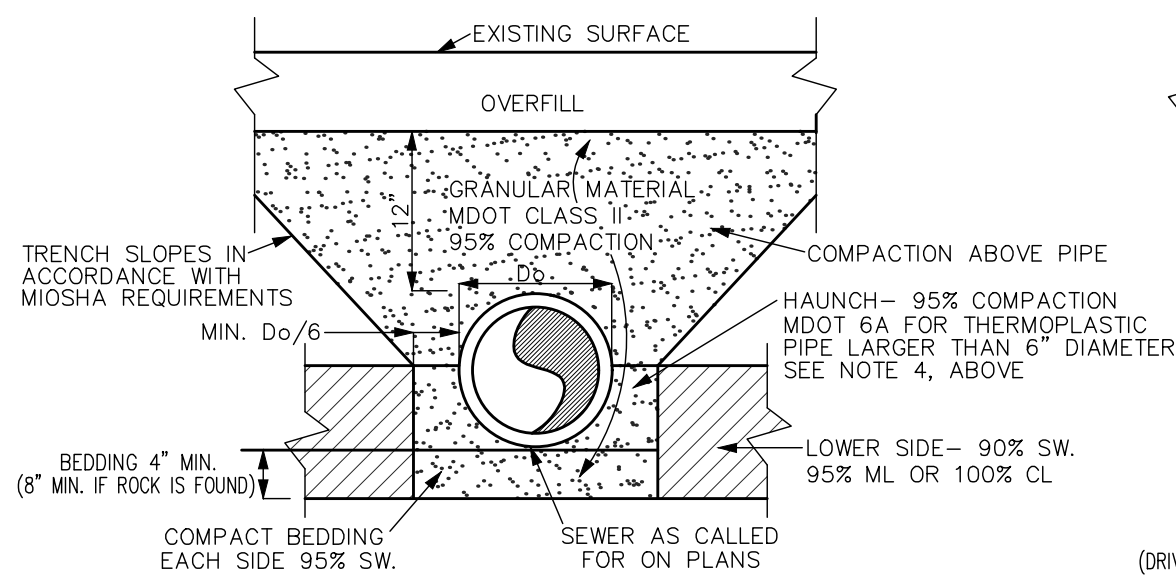
STORM STRUCTURE "A" STANDARD CATCH BASIN

- NOTES:
1. FURNISH LARGER STRUCTURE DIAMETER AS NEEDED TO MAINTAIN 6" MIN CLEAR BETWEEN PIPE OPENINGS.
 2. FURNISH LOW PROFILE STRUCTURE ONLY WHEN NECESSARY TO MAINTAIN PROPER CLEARANCE ABOVE PIPES.



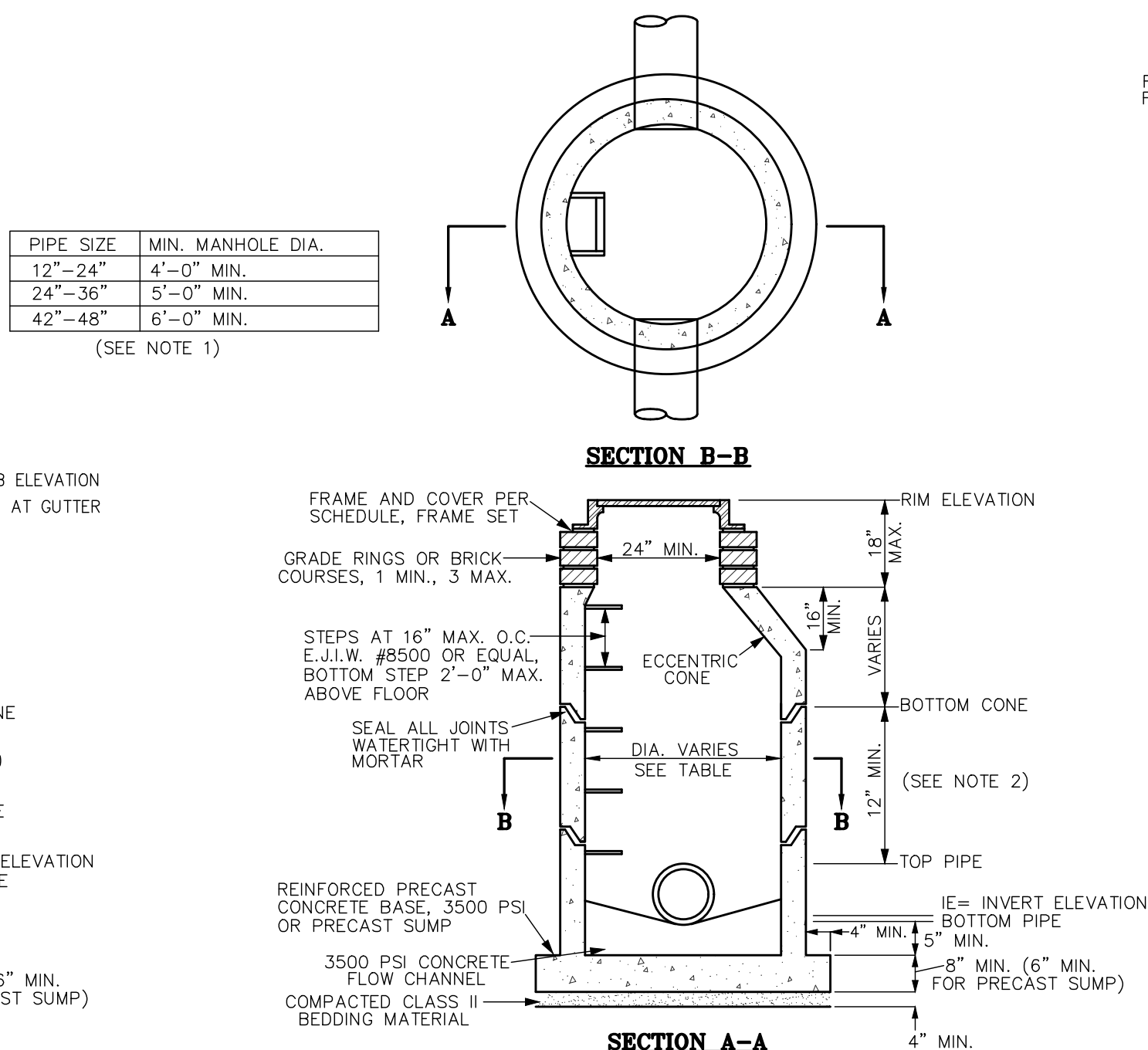
TRENCH A - PIPE UNDER OR WITHIN INFLUENCE OF DRIVEN SURFACE

- NOTES:
1. COMPACTION PRESENTED AS STANDARD PROCTOR VALUES.
 2. SOIL TYPES AASHTO DESIG.
GRAVEL SANDY (SW) A1, A3
SANDY SILTY (ML) A2, A4
SILTY CLAY (CL) A5, A6, A7
 3. SOIL IN HAUNCH AND LOWER SIDE ZONES OUTSIDE OF D_o/6 FROM SPRING LINE SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS THE SOIL IN THE OVERFILL ZONE.
 4. MATERIALS AROUND THERMO. PLASTIC PIPE WITH DIAMETER 6 INCHES SHALL PASS 0.5 INCH SIEVE. MATERIALS AROUND OTHER PIPES SHALL PASS 1.5 INCH SIEVE.



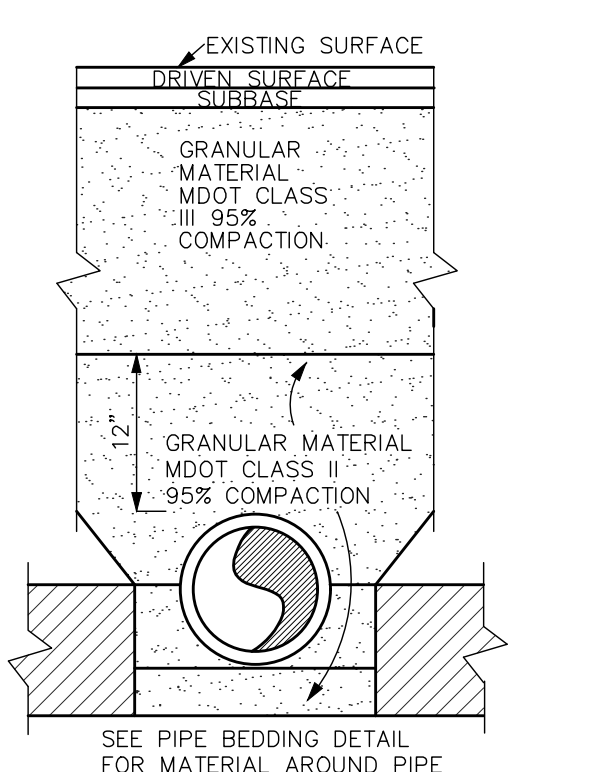
PIPE BEDDING DETAIL

TRENCH DETAILS

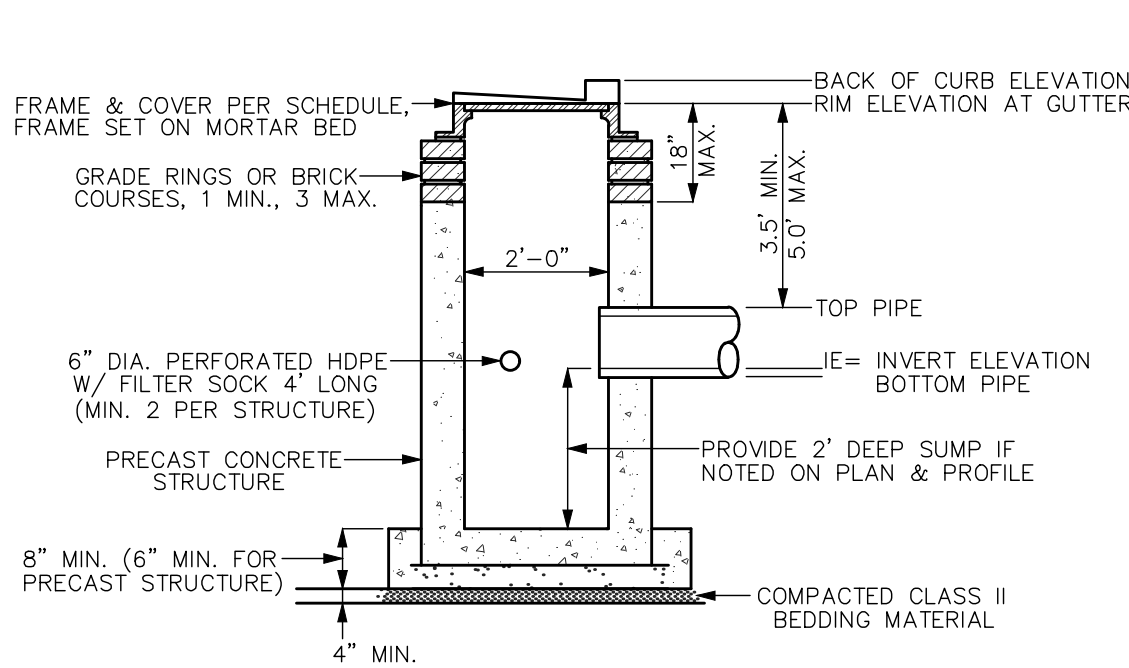


STORM STRUCTURE "B" STANDARD MANHOLE

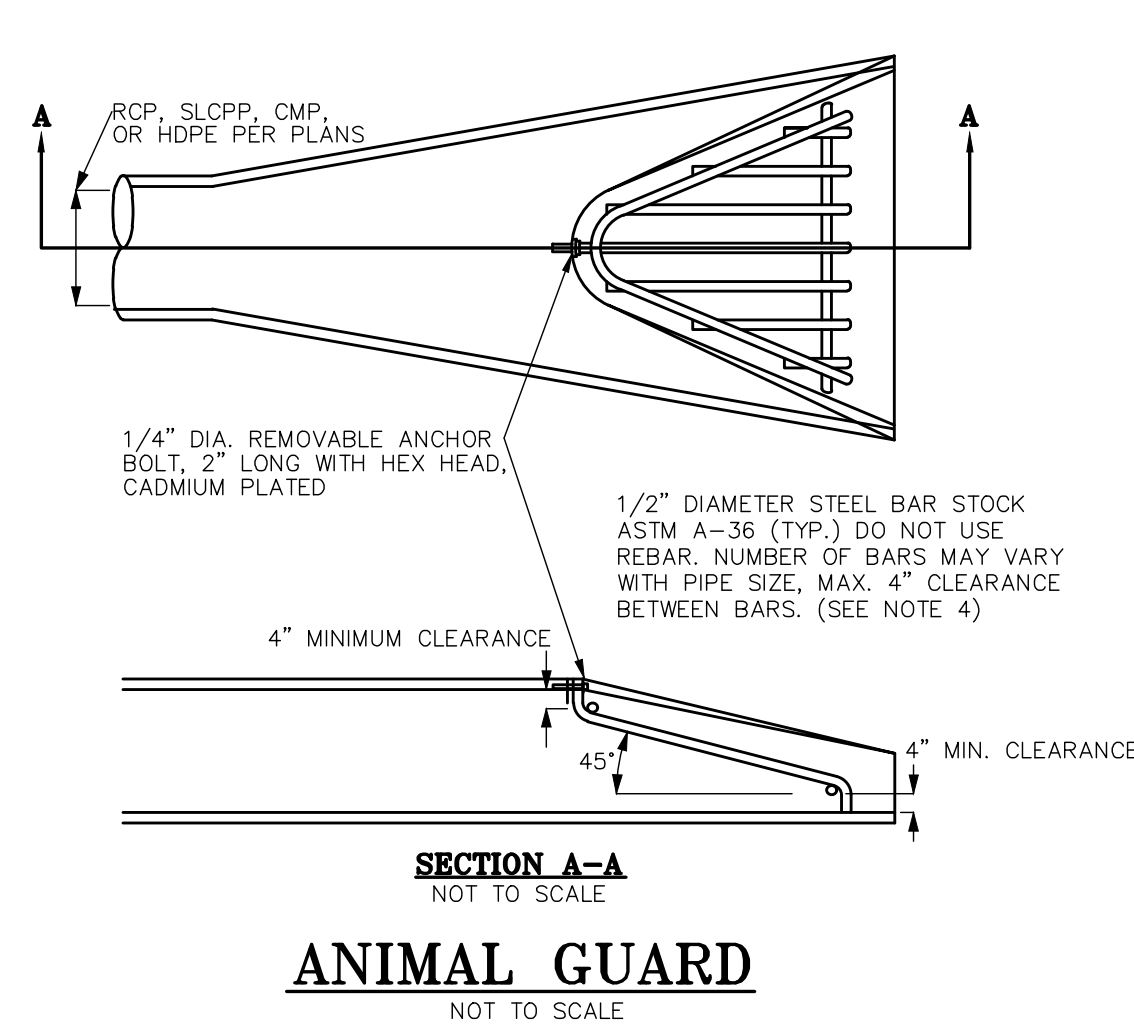
- NOTES:
1. FURNISH LARGER STRUCTURE DIAMETER AS NEEDED TO MAINTAIN 6" MIN CLEAR BETWEEN PIPE OPENINGS.
 2. FURNISH LOW PROFILE STRUCTURE ONLY WHEN NECESSARY TO MAINTAIN PROPER CLEARANCE ABOVE PIPES.



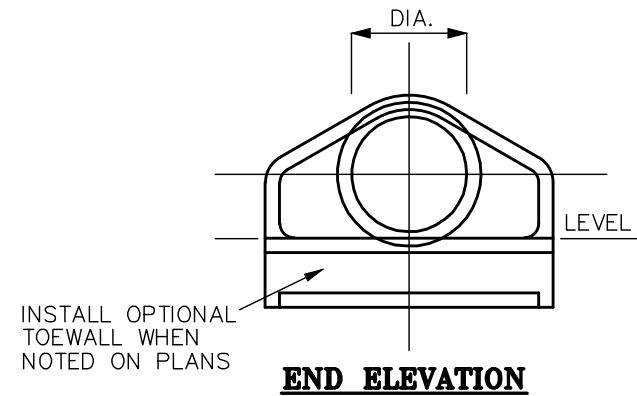
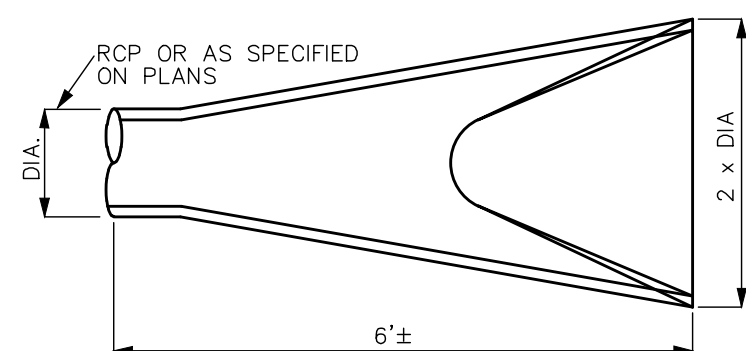
TRENCH B - PIPE NOT UNDER DRIVEN SURFACES



STORM STRUCTURE "C" 2' DIAMETER CATCH BASIN



- NOTES:
1. ANIMAL GUARD REQUIRED ON ALL FLARED END SECTIONS OF 15" DIAMETER PIPE OR GREATER.
 2. CONTRACTOR MAY SUBSTITUTE ALTERNATE GRATING LAYOUT AS APPROVED BY OWNER/ENGINEER/AGENCY PRIOR TO INSTALLATION.
 3. DETAIL SHOWN FOR RCP FLARED END SECTION. PROVIDE SIMILAR ANIMAL GUARD FOR FLARED END SECTIONS ON CMP, HDPE, AND SLCP.
 4. WELD ALL CONNECTIONS FULL STRENGTH PER AMERICAN WELDING SOCIETY STANDARDS.



FLARED END SECTION

- NOTES:
1. RCP FLARED END SECTION SHOWN. PROVIDE SIMILAR FLARED END SECTION FOR CMP, SLCP OR HDPE PIPE.
 2. PROVIDE RIP-RAP PER RIP-RAP DETAILS FOR ALL OUTLET FLARED END SECTIONS.
 3. INSTALL FLARED END SECTION WITH INVERT ELEVATION ELEVATION LEVEL AS VIEWED FROM END.

- STORM SEWER NOTES:
1. The storm sewer and stormwater management specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
 2. Storm sewer work shall include clearing of vegetation and tree stumps, stripping and stockpiling of topsoil for reuse, excavation of pipe trench, placement of pipe bedding, placement of pipe and structures including castings, connection to existing structures, tuck pointing of structures, backfill of pipe trench, compaction of backfill, finish grading to provide positive drainage to structures, adjustment of castings to match finish grade, topsoil placement, seed & mulch, site cleanup and restoration, and other work as shown on the project plans and specifications.
 3. Existing and proposed grades shown in profile view, when provided on the project plans, may be in relation to the centerline of road or item other than the centerline of pipe. The pipe lengths and grades shown in profile view on the project plans may not be to scale.
 4. RCP when shown on the project plans shall be reinforced concrete pipe and shall conform to the specifications for reinforced concrete pipe per ASTM C76. RCP pipe joints shall be bell-and-spigot with rubber gaskets conforming to ASTM C433. Non-gasketed joints shall only be utilized when authorized by the Owner, Engineer AND Municipality. Non-gasketed joints of pipe having a diameter of 30 inches or greater shall be tuck-pointed on the inside with cement mortar after the backfill process is complete. Install reinforced concrete end sections incidental to work. Saw cut pipes to length as needed. When pipe class is not shown on the project plans, provide the following:
Pipe cover to proposed grade: 0 to 4 feet Class V
4.1 to 10 feet Class III*
10.1 to 18 feet Class IV
18.1 feet and greater Class V
 - * Use Class IV under paved surfaces
 5. CMP when shown on the project plans shall be corrugated metal pipe and shall conform to the specifications for corrugated metal pipe per AASHTO Designation M36. CMP shall be 16-gauge steel minimum for 24 inch diameter or smaller and 14-gauge steel minimum for 30 inch diameter or greater. Install galvanized steel end sections and connection bands, incidental to work. Connection bands for CMP pipe joints located under paved surfaces shall be gasketed couplers. Saw cut pipes to length as needed.
 6. HDPE - Type S when shown on the project plans shall be high density polyethylene pipe with a smooth interior and shall conform to the specifications for high density polyethylene pipe per AASHTO Designation M252 Type S for pipes of 3" to 10" diameter and per AASHTO Designation M294 Type S for pipes of 12" to 60" diameter. HDPE - Type S pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with rubber gaskets conforming to ASTM F477. Tamp backfill at spring line of HDPE - Type S pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.
 7. HDPE - Type C when shown on the project plans shall be high density polyethylene pipe with a corrugated interior and shall conform to the specifications for high density polyethylene pipe per AASHTO Designation M252 for pipes of 3" to 10" diameter and per AASHTO Designation M294 for pipes of 12" to 60" diameter. HDPE - Type C pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with rubber gaskets conforming to ASTM F477. Tamp backfill at spring line of HDPE - Type C pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.
 8. CPVC when shown on the project plans shall be corrugated polyvinyl chloride pipe and shall conform to the specifications for corrugated polyvinyl chloride pipe per ASTM F794 and F949. CPVC pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with rubber gaskets conforming to ASTM F477. Tamp backfill at spring line of CPVC pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.
 9. PVC when shown on the project plans shall be polyvinyl chloride pipe and shall conform to the specifications for polyvinyl chloride pipe per ASTM D2751, maximum SDR of 26. PVC pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with rubber gaskets conforming to ASTM F477 or solvent welded type conforming to ASTM D2564. Tamp backfill at spring line of PVC pipe. Saw cut pipes to length as needed.
 10. Concrete storm structures shall be pre-cast and shall conform to the specification of pre-cast concrete structures per ASTM C478. Joints of concrete storm structure sections shall be bell-and-spigot with rubber gaskets conforming to ASTM C433. Brick, concrete block or cast in place storm structures may be substituted for pre-cast storm structures ONLY when authorized by the Owner, Engineer AND Municipality; refer to MDOT standard plan R-1, latest revision. Pipe openings in pre-cast structures shall be factory installed. All temporary openings in storm structures shall be tuck-pointed watertight with cement mortar. Refer to MDOT standard plan R-2, latest revision, for alternate on-line storm structure details when pipe exceeds 42 inch diameter.
 11. Tap existing structures as acceptable to the Engineer and Municipality, incidental to work. All temporary openings in storm structures shall be tuck-pointed watertight with cement mortar.
 12. Backfill all storm sewer in accordance with the Pipe Trench details provided on the project plans. Provide pipe bedding that meets or exceeds both the specifications of the Pipe Trench details on the project plans and the recommendation of the pipe manufacturer, incidental to work.
 13. When edge drains and/or under drains are shown on the project plans, connection to storm structures is incidental to work. During storm sewer construction, install first 10 linear feet of edge drain and/or under drain from the storm structures in each specified direction and install temporary cap at end. Complete installation of edge drain following preparation of the subgrade when under paved surface or following finish grade when not under paved surface.
 14. Install removable plugs in storm sewer stubs as acceptable to Engineer and Municipality, incidental to work. Mark the end of all storm sewer stubs with a 2" x 4" wooden stake extending a minimum of 12" above finish grade, incidental to work.
 15. Storm structure castings shall be coated with water based asphaltic paint by the manufacturer. Seams and temporary openings between storm structures and castings shall be tuck-pointed water tight with cement mortar. Coordinate correct curb box / hood / "T" back as needed to match curb profile. See casting schedule on project plans for additional requirements.
 16. Provide 3.5' minimum cover from the top of pipe of all roof drain pipes to the proposed finish grade when site conditions allow. When pipe cover is less than 3.5', install 2" thick by 24" wide Styrofoam insulation centered over the top of pipe at 12" above top of pipe or as required by the Local Municipality

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

MOUNTAIN TOP ESTATES SITE CONDOMINIUM

STORM SEWER NOTES & DETAILS

CLIENT:	SCALE:	AS NOTED
MOUNTAIN TOP ESTATES, LLC P.O. BOX 469 BRIGHTON, MICHIGAN 48116 810-229-2752	PROJECT No.: 183568 DWG NAME: 3568 DT ISSUED: APRIL 5, 2019	

DT2



MEMORANDUM

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

TO: Honorable Board of Trustees
FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director
DATE: May 15, 2019
RE: Article 3 Zoning Ordinance Text Amendments
Ordinance No. Z-19-02

MANAGERS REVIEW: _____

In consideration of the approval recommendation by the Township Planning Commission on 4/08/19 and the recommendation by the Livingston County Planning Commission on 5/15/19 please find the attached proposed rezoning ordinance for your review. The proposed ordinance involves a text amendment to the minimum lot area requirement in the Urban Residential (UR) District contained within Article 3 – Residential and Agricultural Districts of the Township Zoning Ordinance. The proposal would reduce the minimum lot area requirement from the existing 18,000 square feet (2.4 units per acre) to 14,500 square feet (3 units per acre). This change is requested to address a density gap identified between the Master Plan and Zoning Ordinance.

As required pursuant to the Charter Township Act (Act 359 of 1947) the Board is being asked to introduce and conduct the first reading on the proposed Ordinance. Staff is requesting the second reading, public hearing and consideration for adoption be set for the Monday, June 3rd, 2019 regularly scheduled meeting. A draft publication as required by law is also attached.

As such please consider the following action:

Moved by _____, supported by _____ to introduce and conduct the first reading on proposed ordinance number Z-19-02, a text amendment to the minimum lot area requirement in the UR district within Article 3 and to set the second reading, public hearing and consideration for adoption before the Township Board on Monday, June 3rd, 2019 for the purpose of considering the proposed zoning map amendment.

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

ORDINANCE NO. Z-19-02

AN ORDINANCE TO AMEND ARTICLE 3 OF THE ZONING ORDINANCE OF GENOA CHARTER TOWNSHIP IN REGARD TO MINIMUM LOT AREA FOR THE URBAN RESIDENTIAL (UR) ZONING DISTRICT.

THE TOWNSHIP OF GENOA ORDAINS:

SECTION 1: SHORT TITLE: This Ordinance shall be known as the “**Amendment to Zoning Ordinance Article 3 regarding the minimum lot area of the Urban Residential (UR) District**”.

SECTION 2: SUMMARY OF ORDINANCE: Pursuant to the Michigan Zoning Enabling Act (P.A. 110 of 2006), notice is hereby given that an ordinance to amend the Zoning Ordinance regulating the development and use of land in Genoa Charter Township has been adopted by the Township Board on _____. The Board conducted the second reading and approved Ordinance #Z-19-02 to adopt the ordinance and amend the Zoning Ordinance of the Charter Township of Genoa by amending Article 3 in regard to minimum lot area in the Urban Residential zoning district. The following provides a summary of the regulatory effect of the ordinance.

Article 3 of the Zoning Ordinance, entitled Residential and Agricultural Districts, Table 3.02 Residential and Agricultural Districts and Table 3.04.01 Dimensional Standards – Residential Districts is hereby amended as follows:

***Table 3.02** is amended to reduce the minimum lot area per dwelling unit from 18,000 square feet to 14,500 square feet lot area;*

***Table 3.04.01** is amended to reduce the minimum lot area per dwelling unit from 18,000 square feet to 14,500 square feet lot area;*

REPEALOR: All ordinances or parts of Ordinances in conflict herewith are repealed.

SEVERABILITY: Should any section, subsection, paragraph, sentence, clause, or word of this Ordinance be held invalid for any reason, such decisions shall not affect the validity of the remaining portions of the Ordinance.

SAVINGS: This amendatory ordinance shall not affect violations of the Zoning Ordinance or any other ordinance existing prior to the effective date of this Ordinance and such violation shall be governed and shall continue to be separate punishable to the full extent of the law under the provisions of such ordinance at the time the violation was committed.

EFFECTIVE DATE: These ordinance amendments were adopted by the Genoa Charter Township Board of Trustees at the regular meeting held on _____ and ordered to be given publication in the manner required by law.

On the question: “SHALL THIS ORDINANCE NOW PASS?” the following vote was recorded:

Yeas:
Nays:
Absent:

I hereby approve the adoption of the foregoing Ordinance this ____th day of _____, 2019.

Paulette Skolarus
Township Clerk

Bill Rogers
Township Supervisor

Township Board First Reading: 5/20/19
Date of Posting of Proposed Ordinance: 5/21/19
Date of Publication of Proposed Ordinance: 5/26/19
Township Board Second Reading and Adoption:
Date of Publication of Ordinance Adoption:
Effective Date:



March 27, 2019

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
Subject:	Proposed amendment to Urban Residential District (Article 3 of the Zoning Ordinance)

Dear Commissioners:

As requested, we have prepared this memo to assist the Planning Commission with its consideration of amendments proposed to the UR Urban Residential zoning district contained in Article 3 of the Township Zoning Ordinance.

By way of recent meetings regarding a conceptual development plan, a gap in residential density was found between the Master Plan and Zoning Ordinance.

More specifically, the Small Lot Single Family Residential category in the Master Plan calls for single-family residential development of 2 to 3 dwelling units per acre of land. However, the comparable zoning districts of SR Suburban Residential and UR Urban Residential allow for a density of 2 to 2.4 units per acre (when public sanitary sewer is available), respectively.

The next zoning district in terms of density is MDR (Medium Density Residential), which allows for just over 4 units per acre.

As such, there is currently nothing in the Zoning Ordinance that properly addresses the density gap between 2 and 4 units per acre. UR is the closest fit; however, it results in an awkward density calculation that does not accurately reflect the guidance of the Master Plan.

The primary options to address this situation would be the creation of a new residential zoning district or an amendment to the existing UR District lot area requirements. Staff and our office believe the latter is the most appropriate method.

Accordingly, the draft amendment provided for your consideration entails a reduction in the minimum UR lot area from 18,000 square feet (2.4 units per acre) to 14,500 square feet (3 units per acre).

The sections impacted are limited to 3.02 Listing of Residential Districts and 3.04 Dimensional Standards.

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 bborden@safebuilt.com.

Respectfully,
SAFEBUILT STUDIO


Brian V. Borden, AICP
Planning Manager

Mr. Boorstein showed the current zoning of the subject and surrounding properties. He showed a video of the conceptual site plan, which would include a storage facility, flex office space, retail space and restaurants. He explained how placing the detention basin in the property to the north will allow the development of that property as well as the redevelopment of the property to the south. It will also decrease the amount of storm-water that is currently entering into the municipal system. Additionally, the site can be easily redeveloped, by changing the buildings, when use needs change.

There was a discussion regarding which type of PUD would be appropriate for this site. The predominant use is the proposed climate-controlled storage facility and this type of use has not been added as an allowable use, although staff has drafted ordinance language to add it. Additionally, gas stations are not allowed in the current zoning district; however, the existing station has been grandfathered. Commissioner Rauch believes the gas station should be completely redeveloped as part of the project.

Mr. Borden noted that the proposed renderings show a lot of metal and EFIS on the buildings. Mr. Doug Necci of DRN Architects explained the architecture and proposed materials. He presented sample materials.

The applicant stated they will review the Township's comments and present a revised plan in the future.

OPEN PUBLIC HEARING #4... Consideration of Zoning Ordinance Text amendments to Article 3 of the Zoning Ordinance, entitled "Residential and Agricultural Districts".

A. Recommendation of Text Amendments.

Mr. Borden reviewed the proposed changes to Article 3, Urban Residential District, of the Zoning Ordinance. It was discovered that the Master Plan does not match the Zoning Ordinance. The proposal is to change the minimum lot area per dwelling unit for the Urban Residential (UR) District from 18,000 to 14,500 square feet of lot area.

The call to the public was made at 9:09 pm with no response.

Moved by Commissioner Dhaenens, seconded by Commissioner Rickard, to recommend to the Township Board approval of text amendments to Article 3 of the Zoning Ordinance, Urban Residential, to change the minimum lot area per dwelling unit from 18,000 to 14,500 square feet to better implement the Master Plan. **The motion carried unanimously.**

ADMINISTRATIVE BUSINESS

- (h) Encourage wise use and development of lake shoreline in recognition of the existing small lot development patterns and the sensitive environmental ecosystem surrounding the lakes; and,
- (i) Prohibit any land use that would substantially interfere with the development, utilization or continuation of single family dwellings in the District.

3.01.03 Medium Density Residential: The Medium Density Residential (MDR) District is intended to provide detached single family residential on smaller lots and attached residential town-homes with individual entrances and garages. This district is intended for infill development within urban service areas of the Township planned for higher density residential with the necessary public water, public sewer, transportation and public services in place to support higher densities. The MDR district is intended to promote the goals and future land use map of the Genoa Township Master Plan.

3.01.04 High Density Residential: The High Density Residential District is intended to provide rental or individually owned duplexes and other multiple dwelling units at a density consistent with the infrastructure and land capabilities. This district is intended for infill development within urban service areas of the Township planned for higher density residential with the necessary public water, public sewer, transportation and public services in place to support higher densities. Special provisions are provided for various types of housing for the elderly in recognition of the need for such facilities and their relatively low impact in comparison with other multiple family uses of similar density. The HDR district is intended to promote the goals and future land use map of the Genoa Township Master Plan.

Sec. 3.02 LISTING OF RESIDENTIAL DISTRICTS

The Single Family Residential Districts of Genoa Township include:

Table 3.02 Residential and Agricultural Districts	
District	Minimum Lot Area Per Dwelling Unit
Agricultural (AG)	10 acre lot area
Country Estate (CE)	5 acre lot area
Rural Residential (RR):	2 acre lot area
Low Density Residential (LDR):	43,560 sq ft. lot area
Suburban Residential (SR):	21,780 sq. ft. lot area with public sanitary sewer 43,560 sq. ft. lot area without public sanitary sewer
Urban Residential (UR):	18,000 14,500 sq. ft. lot area; must have public water and sanitary sewer
Lakeshore Resort Residential (LRR):	12,800 sq. ft. lots of record in existence on 1/1/1991. 43,560 sq. ft. lots created after 1/1/1991 without public sanitary sewer 21,780 sq. ft. lots created after 1/1/1991 with public sanitary sewer
Medium Density Residential (MDR)	10,000 sq. ft. lot area with public sanitary sewer Duplexes and townhouses up to 5 units per acre
High Density Residential (HDR)	Duplexes, attached townhouses and apartments up to 8 units per acre

Sec. 3.04 DIMENSIONAL STANDARDS

3.04.01 Residential Schedule of Area and Bulk Requirements. All lots, buildings, and structures shall comply with the area height and bulk requirements in Table 3.04.01:

Table 3.04.01 DIMENSIONAL STANDARDS - RESIDENTIAL DISTRICTS										
District	Minimum Lot Size ^(m) or Maximum Density		Maximum Building Height		Principal Structure Minimum Yard Setback^{(g) (h) (i)}				Max Lot Coverage	(Per Unit) Floor Area
	Min. Lot Area, Max. Units Per Acre ^{(a) (b)}	Width^{(c) (d)}	Stories	Feet^(e)	Front^(f)	Smaller Side	Total 2 Sides	Rear		
Agricultural (AG)	40 acres for farms, 10 acres for non-farm dwellings		2	35	75	40	80	60	NA	980 sq. ft.
Country Estate (CE)	5 acres	220 ft	2	35	75	40	80	60	NA	1500 sq. ft.
Rural Residential (RR)	2 acres	200 ft	2	35	50	30	60	60	NA	1200 sq. ft.
Low Density Residential (LDR)	1 acre	150 ft	2	35	50	30	60	60	NA	980 sq. ft.
Suburban Residential (SR)	21,780 sq. ft., with public sewer; 1 acre without public sewer	100 ft	2	35	40	20	40	50	20% bldg, 35% imp. sur.	980 sq. ft.
Urban Residential (UR)	18,000 14,500 square feet per unit, requires public sewer and water	90 ft.	2	25	35	10 ^(j)	25 ^(j)	50	35% bldg, 50% imp. sur.	980 sq. ft.
Lakeshore Resort Residential (LRR)	12,800 square feet lots of record in existence on 1/1/91, requires public sanitary sewer 1 acre lots created after 1/1/91 without public sanitary sewer. 21,780 square foot lots created after 1/1/91 with public sanitary sewer.	80 ft	2	25	35	10 ^(k)	20 ^(k)	40	35% bldg, 50% imp. sur.	900 sq. ft.
Medium Density Residential (MDR)	10,000 sq. ft. per single family lot 5 units per acre for duplexes and attached townhomes Requires public sewer and water	75 ft	2	35	25 ^(l)	5 ^(l)	20 ^(l)	30	35% bldg footprint, max 50% impervious surface	900 sq. ft.
High Density Residential (HDR)	8 units per acre assuming all setbacks and other requirements can be met, min 21,780 sq. ft. per building Requires public sewer and water	165 ft	3	40	35 ^(l)	15 ^(l)	30 ^(l)	30	35% bldg footprint, max 50% impervious surface (bldg plus paved areas)	efficiency = 450 sq. ft. 1 bedroom = 600 sq. ft. 2 bedroom = 750 sq. ft. 3 bedroom = 900 sq. ft. each addl = 150 sq ft Ground floor = 500 sq ft/unit

(as amended 3/5/10)

Board Correspondence



Liv.Co UPDATE

Monthly News from the
Livingston County Commissioners



May 2019

Livingston County Board of Commissioners



District 1 - Kate Lawrence

District 2 - William Green

District 3 - Wes Nakagiri

District 4 - Douglas G. Helzerman

District 5 - Donald S. Parker

(Board Chairman)

District 6 - Robert J. Bezotte

District 7 - Carol S. Griffith

District 8 - Dennis L. Dolan

(Board Vice-Chairman)

District 9 - Gary Childs

"The mission of Livingston County is to be an effective and efficient steward in delivering quality services within the constraints of sound fiscal policy. Our priority is to provide mandated services which may be enhanced and supplemented to improve the quality of life for all who work, reside, and recreate in Livingston County."

MDCs Purchased for Law Enforcement & Fire Services



Livingston County has purchased 22 mobile data computers (MDCs) to be utilized by local and county law enforcement and fire service agencies. The MDCs were purchased from fiscal year 2018 Homeland Security Grant Program funds. The new MDCs

will allow law enforcement and fire services to better communicate from their response units. The MDCs won't replace response unit radios, but will enhance communications between dispatch and responders, allowing these agencies to better serve our citizens. Everything from running law enforcement information sharing, emergency response information, and medical information can be done from the new MDCs.

Monthly Meetings

5/6/2019 - General Government &
Health & Human Services
Meeting at 7:30 PM

5/8/2019 - Finance Committee at
7:30 AM

5/13/2019 - Full Board Meeting at
7:30 PM

5/15/2019 - Personnel Committee
at 8:30 AM

5/20/2019 - Infrastructure &
Development & Public Safety at
7:30 PM

5/22/2019 - Finance Committee at
7:30 AM

5/28/2019 - Full Board Meeting at
7:30 PM

EMS Will Provide Transportation for Marquette Hospital Move

On June 2nd, Livingston County EMS will provide ambulance transportation to move patients in Marquette General Hospital from the "old" hospital to the "new" hospital. Marquette General Hospital will reimburse Livingston County EMS for the transportation services rendered. This pre-planned move to the newly constructed hospital

allows for Livingston County EMS and the Region 1 Medical Coalition to test the Region One evacuation plan and use this move as a learning experience. EMS Director Jeff Boyd estimates the move of 110 –130 patients will be completed in about 12 hours.



Resolutions Passed by the Board of Commissioners & Appointments

- The 2019 - 2023 Livingston County Parks and Open Space Plan has been adopted. The Plan will be used as a guideline for improving recreation and enhancing open space conservation in Livingston County. You can see a copy of the 2019-2023 Parks & Open Space Plan at:
<https://www.livgov.com/parks/Pages/default.aspx>.
- A part-time Deputy Circuit Court Clerk position has been increased to a full-time Deputy Courtroom Clerk. In February 2019 a Local Administrative Order took effect that substantially reallocated docket assignments between judges. This reassignment has increased the number of court sessions the County Clerk must attend.
- In compliance with the Employee Business Expense Policy, a summary of all County employees who traveled outside of Michigan during 2018 for professional development was compiled in the 2018 Out-of-State Travel Report and presented to the Board.
- The Tax Allocation Board meets yearly to review the proposed budgets of each respective township, school district, and the County and determine the tax rate. The Estimated 2020 General Fund Budget for Livingston County was agreed upon and submitted to the Tax Allocation Board.
- The Equalization Department has examined the assessment rolls of the sixteen townships and three cities within Livingston County to ascertain whether the real and personal property in the respective townships and cities have been equally and uniformly assessed at true cash value. Equalization presented their data that equalized the townships' and cities' valuations to the Board where it was approved and adopted as the equalized value of all taxable property.
- Community Corrections will submit the 2020 Community Corrections Grant Application to the Michigan Department of Corrections for funding. Funding is requested to provide outpatient treatment, group programming, and more.
- Central Dispatch has completed a budget amendment and funds transfer to cover incurred owner responsibility costs related to the new 911 facility project in the amount not to exceed \$175,580.
- As a result of the acquisition of Arcadia Benefits Group, Inc., the county's current provider of service, by Navia Benefit Solutions, Inc., a service agreement with Navia to continue the county's flexible spending account and Cobra administration services was approved.
- Livingston County will participate in the fiscal year 2018 Homeland Security Grant Program (HSGP.) The HSGP is the funding mechanism for building and sustaining national preparedness capabilities.
- C&C Sports of Brighton will provide 2 loaner Sea-Doos for use in the patrol of County waterways during the 2019 Marine Safety Program.
- A one-year agreement with Vance Outdoors, Inc. to provide ammunition supply services for the Livingston County Sheriff's Office has been approved.
- The Board has authorized the issuance of Refunding Bonds that were used to defray part of the cost of constructing, furnishing, and equipping County Jail facilities to be issued and sold.
- A first quarter supplemental appropriation to the fiscal year 2019 budget has been approved.
- The following individuals have been appointed to a seat on the Livingston County Building Authority.
 - Ken Hinton - Term expires 12/31/2022
 - Cynthia Catanach - Term expires 12/31/2022
 - Jennifer Nash - Term expires 12/31/2021
 - Barbra Cox - Term expires 12/31/2021
 - Mike Arens - Term expires 12/31/2020

Please Note: The Liv.Co Update highlights a portion of resolutions and work completed by the Livingston County Board of Commissioners. Please refer to the Board's meeting minutes for more information regarding specific resolutions. To be redirected to the Board's Meeting Minutes, please click [here](#) or visit www.livgov.com