BENZIE COUNTY BOARD OF COMMISSIONERS

448 COURT PLACE – BEULAH, MI 49617 – (231) 882-9671

www.benzieco.net

MEETING AGENDA July 14, 2020

Meeting will be held via teleconferencing Call:701-802-5100; Access Code: 795797#

PLEASE TURN OFF ALL CELL PHONES OR SWITCH THEM TO VIBRATE

9:00 a.m.

CALL TO ORDER

ROLL CALL

INVOCATION AND PLEDGE OF ALLEGIANCE

APPROVAL OF AGENDA

APPROVAL OF MINUTES – 6/23/2020

PUBLIC INPUT

ELECTED OFFICIALS & DEPT HEAD COMMENTS

ACTION ITEMS – BVT Memo of Understanding; Legal Services Contract; 2020-022 BA Functions; Cohl Stoker Toskey Legal Opinion re Maples Operating Millage

COVID-19 -

COMMISSIONER REPORTS -

COUNTY ADMINISTRATOR'S REPORT -

FINANCE – Approval of Bills

COMMITTEE OF THE WHOLE – 6/23/2020 & 7/7/2020 Consent

COMMITTEE APPOINTMENTS -

UNFINISHED BUSINESS

NEW BUSINESS –

10:00 Richard Taylor – Friends of Point Betsie Lighthouse

10:15

10:30

PRESENTATION OF CORRESPONDENCE PUBLIC COMMENT

ADJOURNMENT

Times Subject to Change

THE COUNTY OF BENZIE WILL PROVIDE NECESSARY REASONABLE AUXILIARY AIDS AND SERVICES, SUCH AS SIGNERS FOR THE HEARING IMPAIRED AND AUDIO TAPES OF PRINTED MATERIALS BEING CONSIDERED AT THE MEETING, TO INDIVIDUALS WITH DISABILITIES AT THE MEETING OR HEARING UPON THIRTY (30) DAYS NOTICE TO THE COUNTY OF BENZIE. INDIVIDUALS WITH DISABILITIES REQUIRING AUXILIARY AIDS OR SERVICES SHOULD CONTACT THE COUNTY BY WRITING OR CALLING THE FOLLOWING:

BENZIE COUNTY CLERK 448 COURT PLACE BEULAH MI 49617 (231) 882-9671

This notice was posted by Dawn Olney, Benzie County Clerk, on the bulletin board in the main entrance of the Benzie County Governmental Center, Beulah, Michigan, at least 18 hours prior to the start of the meeting. This notice is to comply with Sections 4 and 5 of the Michigan Open Meetings Act (PA 267 of 1976).

BENZIE COUNTY BOARD OF COMMISSIONERS MEETING NOTICE

Due to the Coronavirus (COVID-19) pandemic and pursuant to the requirements of Governor Whitmer's Executive Order 2020-48 which provides temporary authorization of remote participation in public meetings, the Benzie County Board of Commissioners will be conducting their **Regular Meeting** beginning at 9:00 a.m. AND Committee of the Whole beginning at 1:30 p.m. on July 14, 2020 via teleconferencing.

Below you will find the information necessary to attend the meeting. You may access this meeting via any telephone (landline or cell).

Dial-in number (US): (701) 802-5100

Access code: 795797#

If you would like to submit written comments to be read into the meeting, you may submit them to Dawn Olney, Benzie County Clerk, at dolney@benzieco.net or Maridee Cutler, Deputy County Administrator, at mcutler@benzieco.net or mail to 448 Court Place, Beulah, MI 49617. The deadline for submitting written comments is Monday, July 13, 2020 at 12:00 noon.

Public Input will be provided at the start and end of the meeting. If any person wishes to speak during public input, they should indicate by stating so when the chair calls for public input. Any individual may also contact any of the seven county commissioners with their comments. Public input rules adopted by the board still apply and each person would be given 3 minutes to speak. Individuals are not required to identify themselves to participate in the meeting but would be required to identify themselves prior to speaking.

Benzie County will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting or hearing upon thirty-days (30) notice to the County of Benzie. Individuals with disabilities requiring auxiliary aids or service should contact the County by writing or calling the following

Agendas are posted on the County Website at: www.benzieco.net

Dawn Olney Benzie County Clerk

THE BENZIE COUNTY BOARD OF COMMISSIONERS June 23, 2020

The Benzie County Board of Commissioners met in a regular session on Tuesday, June 23, 2020 in the Frank F. Walterhouse Board Room, 448 Court Place, Government Center, Beulah, Michigan.

The meeting was called to order by Chair Bob Roelofs.

Present were: Commissioners Farrell (arrived at 9:04), Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke

The invocation was given by Commissioner Roelofs and the Pledge of Allegiance was recited.

Agenda:

Motion by Jeannot, seconded by Warsecke, to approve the agenda as amended, adding Special Meeting Minutes of June 17, 2020. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Minutes:

Motion by Nye, seconded by Warsecke, to approve the regular session minutes of June 9, 2020 as amended. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Motion by Jeannot, seconded by Nye, to approve the special session minutes of June 17, 2020 as presented. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

9:03 a.m. Public Input – None

ELECTED OFFICIALS & DEPARTMENT HEAD COMMENTS

Doug Durand, Benzie Senior Resources, provided a written report and spoke regarding the Gathering Place being taken over by plexiglass due to COVID; the Gathering Place is closed thru July 31; Home Delivered Meals had a large count in May; Project Fresh coupons have been going out; lawn chore program requests have increased.

Bert Gale, Building Official, provided the board with the 1st Quarter 2020 report; they are very busy right now and they are seeing a lot of pole barns; the activity seems to be the same around the state; dealing with issues regarding a proposed marijuana establishment where the building itself is partially in the township and partially in the village – the village has a moratorium in place.

Tom King, EMS Director, reported that they had 140 calls in May, which was down by 20 from last year; the new ambulance should be shipping any day now; he was asked about the intent on a schedule for replacing ambulance – Tom stated that the intent is to replace every other year.

Rebecca Hubers, Emergency Manager, reported on the slow-wake being granted for Herring Lake, it has been publicly announced and signs have been posted; waiting to hear from Almira Township regarding Pearl Lake and the same issue; the high water issues between Frankfort and Elberta are handled by the DNR.

911 – she reported that two new hires have resigned; there is a lot of multi-tasking involved with dispatch.

COMMISSIONERS Page 2 of 5 June 23, 2020

Susan Boyd, Finance Manager, reported that they are done with the administrative budget reviews and will be setting the schedule for budget meeting to hold the BOC reviews.

ACTION ITEMS

<u>2020-020 Resolution</u>: Motion by Jeannot, seconded by Farrell, to adopt resolution 2020-020 Termination of Mass Notification Contract as to POMH as presented, authorizing the chair to sign. Roll call. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

<u>Sheriff Patrol Agreement</u>: Motion by Warsecke, seconded by Taylor, to enter into agreement with the Village of Beulah for Sheriff Patrol as presented. Roll call. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

<u>2020-021 Resolution</u>: Motion by Sauer, seconded by Nye, to approve resolution 2020-021 Approving the Undertaking to Provide Continuing Disclosure as presented. Roll call. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

COVID-19: County Administrator Deisch stated the Executive Order 129 allows for remote meeting through July 31.

Comm Farrell stated that since it is allowed, we need to continue to post as a conference call and an open meeting.

Motion by Warsecke, seconded by Farrell, to allow telephonic participation of meetings through the Governor date of July 31, 2020. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Chair Roelofs asks that IT get on board to get us the proper equipment that we need to continue this process of remote meetings.

10:29 a.m. Break 10:37 a.m. Reconvene

COMMISSIONER REPORTS

Comm Jeannot spoke regarding Benzie County resident Bob Russell making a presentation to the Northern Michigan Counties Association and MAC on the subject of broadband. Attended the legal counsel interviews; Community Action Agency summer programs for kids will be held virtually; grant was received to assist with delinquent utilities, rents or mortgages. EDC meeting will be rescheduled. Building Authority was cancelled. A written report was provided.

Comm Farrell reported that Crystal Lake Township remains closed to the public and they will see an increase in election costs. June 7 Special meeting of the Health Board to approve the Medical Director and Health Director contracts. June 11 Centra Wellness – staff is beginning to come back to work. June 15 Frankfort Elberta School Board set the school calendar for fall and they started some athletic trainings. June 16 City of Frankfort appointed some ZBA members.

COMMISSIONERS Page 3 of 5 June 23, 2020

applying for

Comm Nye reported that on June 10 she attended Benzonia Township and they have received a USDA grant to purchase a fire truck with 15% match, and they are close to accepting credit cards. June 10 -- attended the HR meeting. June 11 -- Centra Wellness. June 15 -- she attended the BTA interview. June 17 -- attended a Centra Wellness meeting regarding technology. EDC was cancelled in order to meet the OMA requirements. June 22 – Parks and Recreation meeting it was reported that the Conservancy has a purchase agreement for the Cole property. The Point Betsie Lighthouse road project will not happen this year. Steps are in at Zada Price Park.

Comm Taylor reported that she has attended the HR committee meeting and Land Bank Authority – the Habitat for Humanity will be getting two lots in Thompsonville to build two homes.

Comm Warsecke provided a written report which speaks about Colfax Township meeting on June 10; Conservation District on June 11; BTA interview on June 15; Benzie Bus meeting on June 16; County attorney interviews on June 17; and Inland Twp Planning Commission on June 18.

Comm Sauer reported that Blaine Township held a special meeting regarding "no wake"; he attended two MAC meetings. Road Commission – their MERS has gone from 41% to 46% funded, with their \$1 million in regular and extra payments; they have hired two new mechanics. Village of Elberta is having Fleis & VandenBrink research the sewer costs; they have a change in protocols in their office. Thank You to Jesse Zylstra for a well-organized Household Hazardous Waste clean-up day – things were very well controlled.

Chair Roelofs attended three meetings – Attorney Interviews, BTA interview and EMS. He stated that the EMS meeting lasted 20 minutes and he felt there was no need to hold that meeting; it was a waste of time and a waste of money.

Ken Talsma, Anderson Tackman, presented the board with the Fiscal Year Ending September 30, 2019 Benzie County Audit Report. Government auditing standards were followed during this audit. The County has received an unqualified opinion which is the best; they appreciate the assistance received from everyone here.

Motion by Jeannot, seconded by Sauer, to accept the 2019 Benzie County Audit Report as presented. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

NEW BUSINESS – Further Discussions regarding Legal Counsel with Possible Discussion Mitch Deisch, County Administrator, stated that interviews have been completed with four (4) firms and the discussion with this board was to place it on this agenda.

Chair Roelofs stated the he felt the interviews were very educational and informative.

Comm Jeannot stated that Mitch has spoken with all elected offices – Mitch commented on his discussions with them. I am comfortable with Cohl Stoker & Toskey.

Comm Nye stated that the interview selection committee choices were exceptional; feel that we would be better served with a deeper bench, I am impressed with Cohl Stoker. I respect Dick (Figura) and have a lot of respect for him.

Comm Warsecke and Taylor both agree with Comm Nye.

Comm Farrell stated that she does like the deeper bench, CST & CMDA would be best. Dave Stoker spoke a lot about Headlee.

Comm Nye feels that the number of attorneys to draw from is important.

/

COMMISSIONERS Page 4 of 5 June 23, 2020

Motion by Sauer, seconded by Warsecke, to go with Cohl Stoker & Toskey for General Civil Legal counsel with the County Administrator to work out a contract.

Chair Roelofs asked if we can use two firms – one for litigation and one for labor.

Roll call. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Mitch said Thank You to Comm Jeannot and Clerk Olney for their assistance with this.

COUNTY ADMINISTRATOR'S REPORT – Mitch Deisch

Provided a written report and added that the plexiglass will be installed in the courtrooms tomorrow; Representative O'Malley is endorsing a bill that would allow 312 arbitration to corrections officers

FINANCE

<u>Bills</u>: Motion by Warsecke, seconded by Farrell, to approve payment of the bills from June 10, 2020 thru June 23, 2020 in the amount of \$527,149.00, as presented. Roll call. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Michelle Thompson, County Treasurer, reported that tax bills are being prepared for mailing by July 1; sale of bonds will take place on Friday June 26; working with Xpert Fulfillment on a couple of projects – printing of winter tax bills; and long-term storage with accessibility for historical tax rolls; continuing to work on grants for the Betsie Valley Trail and Railroad Point Natural Area.

COMMITTEE OF THE WHOLE

Motion by Warsecke, seconded by Nye, to approve items 1-4 of the June 9, 2020 Committee of the Whole Consent Calendar as presented. Roll call. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

COMMITTEE APPOINTMENTS

BTA: Motion by Warsecke, seconded by Taylor, to appoint Irene Nugent to the vacant position on the Benzie Transportation Authority for a term ending April 30, 2021. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

County Administrator to scheduled and in-person interview with Mark Willette-Green for BTA.

UNFINISHED BUSINESS - None

PRESENTATION OF CORRESPONDENCE

- Benzie-Leelanau Health Dept minutes of June 10, 2020 received.
- Ingham County resolution Declaring Racism as a Public Health Crisis received.
- Muskegon County resolution Love Lives Here received.
- Road Commission minutes of May 28, 2020 received.

1:15 p.m. Public Input – None

Motion by Sauer, seconded by Warsecke, to adjourn at 1:15 p.m. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Bob Roelofs, Chair

Dawn Olney, Benzie County Clerk

INDEX

- 1. Approved the agenda as amended, adding Special Meeting Minutes of June 17, 2020.
- 2. Approved the regular session minutes of June 9, 2020 as amended.
- 3. Approved the special session minutes of June 17, 2020 as presented.
- 4. Adopted resolution 2020-020 Termination of Mass Notification Contract as to POMH as presented, authorizing the chair to sign.
- 5. Entered into agreement with the Village of Beulah for Sheriff Patrol as presented.
- 6. Approved resolution 2020-021 Approving the Undertaking to Provide Continuing Disclosure as presented.
- 7. Approved to allow telephonic participation of meetings through the Governor date of July 31, 2020.
- 8. Approved to go with Cohl Stoker & Toskey for General Civil Legal counsel with the County Administrator to work out a contract.
- 9. Approved payment of the bills in the amount of \$527,149.00.
- 10. Approved items 1-4 of the June 9, 2020 Committee of the Whole Consent Calendar as presented.
- 11. Appointed Irene Nugent to the vacant position on the Benzie Transportation Authority for a term ending April 30, 2021.

Elected Officials And Department Head Report

9-1-1 Police Fire / EMS

Benzie County Central Dispatch

505 S. Michigan Ave Beulah MI 49617 Non-emergency 231-882-4487 / Fax 231-882-5894



To: Board of Commissioners

From: Rebecca Hubers – Director/EMC

Re: Recap of June 2020

BCCD is again conducting testing and interviews for two ECS vacancies. I will also be pooling additional candidates for the opening that will be created by the retirement of Deputy Director Lori Lautenbach, in October – if an internal promotion occurs.

I quick glance at the Calls for Service stats show a significant increase in activity and calls through the PSAP. Many Misdial/Abandoned/Accidental 911 Calls have been received. Public response to the mandatory call back is either apologetic or inflammatory as the phone owner "did not call 911". Most new smart phones and watches have "Emergency SOS" features that can dial 911 if a button is pressed multiple times or sometimes when struck or jarred aggressively. These features can be managed in a phone's settings. On its face, the factory settings with a "safety first" ideal is a valuable safety element. However, the number of non-emergency 911 calls received can hinder other true emergency calls and are becoming an overall nuisance. Consider 197 "wrong number" calls to your phone during the month of June.

All Mobile CAD computers have been delivered and, as requested by the Board of Commissioners, all Township, City, Village fire departments and Benzie EMS were presented with billing for the install and auxiliary equipment needed to power and dock the CAD laptops. Money has been received by Homestead Township, Frankfort City, Inland Township and Benzie EMS

BCCD is moving forward with a project started by Mr. Berns to allow Text to 911. There is still program training and testing involved so the project is not presented to the public for live use at this time.

Continuing with my project to research space needs option for BCCD, I have started discussions with Byce and Associates about moving BCCD and possibly the Office of Emergency Management to the basement of the Sheriff's Office. I have had one *Teams* virtual meeting and an on-sight visit is still being scheduled. I will advise Administration of the date and time of the sight visit.

Sincerely – Rebecca Hubers

DAWN OLNEY
BENZIE COUNTY CLERK
BEULAH, MI 49617

	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
9-1-1 Calls	544	471	434	388	532	786
Admin Inbound calls	1541	1406	1402	1658	1632	1949
Transferred 9-1-1 to another PSAP	25	24	22	18	16	32
Transfers within building	156	176	138	156	157	162
Call for Service Nature types:						
Abandoned 9-1-1	55	52	56	40	76	120
Abandoned Vehicle	8		5	2	3	5
Accidental Dial	18	17	14	25	58	63
Alarm - Commercial	5	8	5	15	12	20
Alarm - Medical	10	2	7	10	6	21
Alarm - Residential	14	8	6	3	5	12
Ambulance Request	139	150	113	108	126	130
Ambulance Transfer	29	35	24	17	32	33
Animal Control Complaint	15	9	22	16	23	28
Assault	5	2	6	4	5	5
Assist Other Dept / County	5	13	12	4	3	13
Be on the Lookout	2	13	12	1	2	5
Boater in Distress	-				1	2
Boating Complaint				2	4	2
Breaking and Entering	2			5	4	2
Breaking and Entering - In progress	2		5	2	4	1
Breaking and Entering - Vehicle			1		5	
Bullying	1				3	
Bus Lights Disregarded	1	1				
Car vs Bear - Property Damage Accident		1		1		
Car vs Deer - Property Damage Accident	25	25	14	3	10	30
Careless Use	1	1	2	3	3	30
Child Neglect	1	1		3	1	
Child Abuse	1					1
Citizen Assist	3	2	5	12	9	1
Civil - Assist	3	4		13	9	21
Civil - Dispute	2	4	2	Δ		4
Civil - Standby	2	_	2	4		4
Computer Crime		2	2	1		1
Counterfeit Money / ID	1	1		1		1
·	1		22	70	- 11	
COVID - Executive Order response			22	73	14	
Criminal Sexual Conduct (CSC)		2	2	1	1	
Custody Dispute	2		3	4	3	2
Deer Permit Issued	3	1		1		
Disorderly Subject	—	1	1	2	2	2
Domestic Violence	4	2	14	6	10	7
Drug Activity					4	
Embezzlement						
EMS Centralize						
Family Trouble	5	8	1	1	9	7
Fight in Progress		1		1	1	1
Fire - Alarm	4	2	2	1	2	10
Fire - Brush	1		3	1	4	2

Fire - Chimney		2				
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Fire - Grass				2		3
Fire - Other	6	3	6	7	6	6
Fire - Structure	1	2	7	6	3	4
Fire - Vehicle		2		1		1
Fireworks Complaint					1	7
Found Property	1		8	4	6	10
Fraud	7	9	3	5	2	16
Gas Drive Off	3	3	8	3	2	2
Gas Leak (Natural Gas)				2	1	3
Harassment	4	5	4	4	5	8
Harassing Telephone Calls / Text	2	2	4	2	4	2
Hazardous Material Spill / Leak						
Identity Theft	2	1	1			
Illegal Burn	 	2	1	9	6	4
Illegal Dumping		_	1	2		6
Illegal Fireworks						
Incorrigible Youth	1		1	1	1	1
Injured Animal	2	7	4	5	4	5
Intoxicated Driver - Suspected	2	2	1	3	3	1
Intoxicated Subject	1	4	3	2	2	2
Landlord / Tenant Dispute	2	1		5	5	3
Larceny	4	6	7	3	9	17
Leaving the scene of accident	1		,		1	1
Livestock in the roadway	+ -		1		5	2
Lost Property / Animal	1	1	2	1	2	4
Loud Party	<u> </u>					
Marijuana Possession						
Malicious Destruction of Property	9	1	6	3	5	10
Minor in possession of tobacco		1	3	1		10
Minor in possession of alcohol	-	1	1		1	
Misdialed 9-1-1	7	10	15	10	11	14
Missing Person	2	10	3	3	11	3
Motorist Assist	7	5	5	3		
Neighbor Dispute	+ ′	1	3	8	4	9
Noise Complaint	2	1		2	10	4
Off Road Vehicle Complaint		1	1	4	10	<u>4</u> 1
Open Door	2	1	1		2	
Open Intoxicant in a Motor Vehicle			1		1	
Other / Misc	17	17	19	17	29	44
Parking Complaint	3	2	19	1/	1	2
Patient Transfer - EMS	1 3				1	
					1	
Peeping Tom Person in the Water	-				1	
				4	2	
Personal Injury Accident	4	6	3	1	4	
Personal Protection Order - Entry	2	2	5	6		6
Personal Protection Order - Violation Possession of Illegal Substance			1	1		1

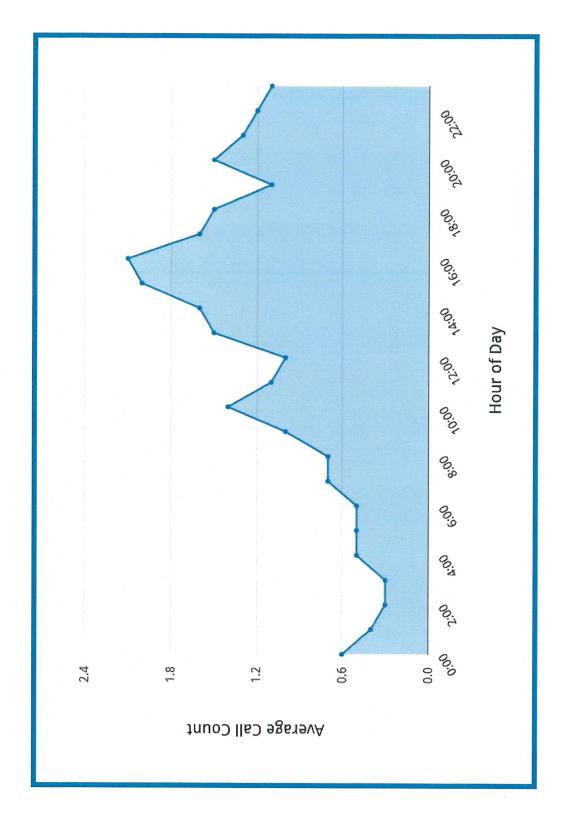
Power Line - Down, Fire, Arcing		1	4	4	3	27
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Private Property Accident	4	4	13	1	2	2
Probation Violation	1			1	1	
Property Check	1	3	2		2	
Property Damage Accident	23	17		2	4	15
Property Dispute		2	1	1	1	
Prowler						1
Reckless Driver	13	16	19	24	17	41
Road Hazard	13	15	3	4	7	10
Robbery - Armed						
Robbery - Unarmed						
Roll Over - Personal Injury Accident		2	1	1	1	
Roll Over - Property Damage Accident	4	2	1			
Runaway		_		1		
Sex Offender Violations				_	1	
Shoplifting	1	3	3		1	2
Shots fired complaint	1	1		5	6	6
Snowmobile Complaint		3			<u> </u>	
Stalking		1	1			
Suicidal Subject	4	2	5	3	2	3
Suspicious Mail / Package	1			1		1
Suspicious Person	2	3	4	4	3	3
Suspicious Telephone Call / Text	_	1		•		
Suspicious Situation	13	17	14	25	36	37
Suspicious Vehicle	5	3	4	4	4	13
Test Call	3	8	16	8	19	6
Threats	1	10	7	7	6	3
Traffic Stop	203	202	187	44	371	476
Tree Down in Road	5	3	10	16	19	40
Trespassing	1	1	3	7	7	3
Truancy	1			,	,	
Unauthorized Driving Away Automobile	1	1	1	1	2	1
Uninitiated 9-1-1 call	+ -	1				
Unknown Accident	1	3	2			2
Unwanted Person	2	3	3	6	6	6
Unwanted Telephone Calls / Texts	-	<u> </u>		0	-	
Vandalism						4
Vehicle in Ditch	18	13	1		1	1
Verbal Dispute	1	2	1	2	1	1
VIN Inspection	2	3	1	1	4	3
Warrant Attempt	- -	1			7	
Warrant Arrest						
Warrant Entry	10	12	13			5
Warrant TIP	10	14	2			<u> </u>
Water Rescue	+					
Welfare Check	10	26	14	17	11	13
	10	20	14	1/	11	13
TOTAL	806	790	810	687	1115	1/105
IOIAL	800	/30	910	007	1115	1485

Disclaimer - The calls for service nature type represents what the calltaker has determined best fits the type of call for service the caller requested, reported or described. Not all call for service nature types are listed. These call for service natures do not always represent how they are recorded by a public safety officer. Not all activity by a dispatcher is represented here.						
Smart911						
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Total number of profiles as of =	781	784	790	793	797	801
9-1-1 calls to Dispatch with profile	4	4	5	5	5	12
Chat by text	21	14	18	10	24	36
Chat with response	11	6	5	4	14	15

BENZIE COUNTY (CENTRAL DISPATCH), MI

9-1-1 Inbound Calls - Calls by Hour of Day

6/1/2020 to 7/1/2020



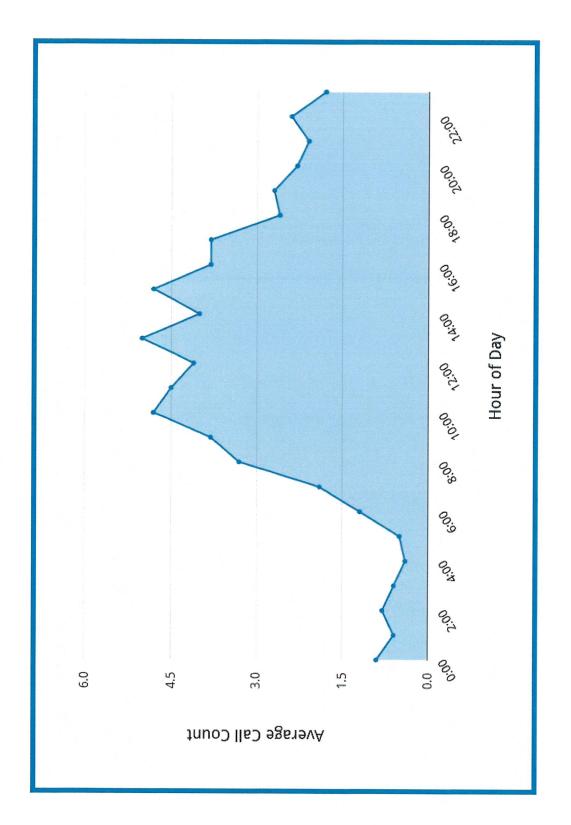
SUMMARY

Hour	Average	Highest	Total Call	Total Call Percentage	Tandem	NG911	Blind	Attended	Conference	Total
	Call Count	Call Count	Count	Count	Transfers	Transfers	Transfers	Transfers	Transfers	Transfers
	1.1	10	786	100.0%	31	0	0	1	0	32

BENZIE COUNTY (CENTRAL DISPATCH), MI

Admin Inbound Calls - Calls by Hour of Day

6/1/2020 to 7/1/2020



SUMMARY

our	Average	Highest	Total Call	Total Call Percentage	Tandem	NG911	Blind	Attended	Conference	Total
	Call Count	Call Count	Count	Count	Transfers	Transfers	Transfers	Transfers	Transfers	Transfers
1	2.6	13	1949	100.0%	0	0	146	16	0	162

ACTION ITEMS



Michigan Department of Natural Resources Parks and Recreation Division

GRANT AGREEMENT NUMBER

20-15

MEMORANDUM OF UNDERSTANDING AND AGREEMENT FOR THE

RECREATION IMPROVEMENT FUND

This information is required by authority of Part 711 of Act 451 of 1994, as amended, to qualify for reimbursement.

	are announced, to quality for formically
Grantee Betsie Valley Trail Managen	ment Council
Attention Donald Tanner, Chair Benzie	e Co. Commission
Address 448 Court Place	
City, State, ZIP Beulah, MI 49617	
Telephone (231) 882-9671	Federal Employer Identification Number (FEIN) 38-6004838

It is expressly understood by and between the parties hereto that the proposal bears the above Grant Agreement Number and associated documents including all attachments, are by this reference made part of this understanding. All materials bearing this number constitute the entire understanding between the parties.

An agreement is made between the MICHIGAN DEPARTMENT OF NATURAL RESOURCES (hereinafter called the Department; State Trails Coordinator, contracting officer) and the above-named Grantee for funding of maintenance projects along the Betsie Valley Trail.

The project period shall be from 01/01/20 to 09/30/20. This understanding shall convey a sum of money for eligible costs, but which shall not in any event exceed nine thousand (\$9,000.00) dollars.

All projects will comply with the Americans with Disabilities Act of 1990.

All work must comply with State and Federal guidelines rules, regulations, and laws.

Additional guidelines and specifications for this agreement:

- **Project Coordination:** The Department contact for this project is **Scott Slavin**, hereinafter referred to as the Coordinator. The Grantee will confer regularly with the Coordinator on the progress of this project.
- Suspended and Debarred Parties: *Sec. 3016.35 Sub awards to debarred and suspended parties. Grantees and sub grantees must not make any award or permit any award (sub grant or contract) as any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension." List of debarred parties: http://www.epls.gov.
- Payment: Where applicable, the Department agrees to reimburse the Grantee for authorized expenditures upon verification of actual expenditures up to 90 percent of the grant amount. The Department will pay the final 10 percent upon project completion and final audit. Total payment under this grant is not to exceed the actual costs or \$9,000.00, whichever is less. Initial request for payment shall be made by completing Request for Grant Reimbursement, PR4121, (additional forms are available from the address at the end of this agreement). All requests for payment must be submitted quarterly and received by the Department no later than the 30th of the last month of the quarter. A final request must be made by September 30, 2020. Requests for payment must include copies of invoices and cancelled checks for all expenditures.
- Fiscal Control and Accounting Procedures: In addition to the summary documentation submitted to the Department, the Grantee will maintain complete financial records. Documents required to be maintained for audit include purchase orders, vouchers, authorized payments, and time records for individual employee(s) charged to this program. All financial records for this Grant will be retained by the Grantee until audit, or for a minimum of three (3) years, whichever is less. Records under audit will be retained until the audit is closed.
- **Procurement:** The Grantee will use their own procurement procedures provided they reflect applicable state and local laws and regulations, to include low bidder competition bid process, as applicable.
- **Prevailing Wage and Fringe Benefits:** Any sub-contractor performing work under this agreement must comply with the requirements of P.A. 166 of 1965.



STATE OF MICHIGAN DEPARTMENT OF NATURAL RESOURCES LANSING



February 24, 2020

Mr. Donald Tanner, Chair Betsie Valley Trail Management Council 448 Court Place Beulah, MI 49617

Dear Mr. Tanner,

cc:

Please sign the attached Memorandum of Understanding for execution of your fiscal year 2020 grant of \$9,000.00. This grant is for maintenance along the Betsie Valley Trail and is capped at \$9,000.00. Please return the signed copies to me at lemarbem1@michigan.gov. Your grant amount has been reduced by \$1,000 due to a balance of \$1,783 of unused funds on your fiscal year 2019 grant.

This grant, RIF 20-15, ends on September 30, 2020. Please use the attached Grant Reimbursement Form PR4121 to submit all reimbursements. All partial or final reimbursements and supporting documentation must be submitted before or on September 30, 2020. Reimbursements submitted after the grant end date can no longer be processed. If the grant amount cannot be spent by September 30, 2019, an extension must be filed with the Non-motorized State Trails Grant Coordinator no later than August 16, 2020. An extension can be requested by reaching out to me via phone or email. If an extension is not filed by August 16th, funding will not be extended into fiscal year 2021. The State of Michigan begins their fiscal year on October 1st.

Sincerely

Megan LeMarbe

Non-motorized State Trails Grant Coordinator Trails Section, Parks and Recreation Division Michigan Department of Natural Resources 517-284-6114

Attachments: Memorandum of Understanding
Request for Grant Reimbursement Form PR4121

Scott Slavin, NLP Michigan Trails Specialist, MDNR

- Insurance: The Grantee will add the State of Michigan, Department of Natural Resources, as an
 additional insured party on Grantee's liability insurance policy. Proof of liability insurance must be
 supplied to the State Trails Coordinator prior to the Department releasing any reimbursements for
 this grant.
- Changes: From time to time, changes may be needed in the scope or an extension of the project and the grant. All changes must be submitted in writing to the Coordinator and approved by the Department 45 days prior to September 30, 2020. Changes implemented prior to approval by the Department will not be eligible for reimbursement.
- Audits: The project and related reports are subject to audit by the Department. This may include both financial audits and site visits.
- **Hold Harmless:** Each party to this agreement will be responsible for its own negligent acts, including the acts of its officers, agents, and employees.
- **Right of Cancellation:** This grant agreement may be cancelled by either party upon giving thirty (30) days' written notice to that effect to the other party.

The individuals or officers signing on behalf of the parties to this Agreement certify by their signatures that they have read, understand and agree to comply with this Agreement, and have the authority to enter into this Agreement on behalf of the Grantee.

DEPARTMENT COORDINATOR					
Printed Name:	Paul Yauk	Title:	State Trails Coordinator		
Signature:		Date:			
GRANTEE'S RI	EPRESENTATIVE(S)				
Printed Name:		Title:			
Signature:		Date:			
Printed Name:		Title:			
Signature:		Date:			
Printed Name:		Title:			
Signature:		Date:	,		

Please sign and return both copies to:

NON-MOTORIZED GRANT COORDINATOR PARKS AND RECREATION DIVISION MICHIGAN DEPARTMENT OF NATURAL RESOURCES PO BOX 30257 LANSING MI 48909

A fully executed copy will be returned for Grantee's files to the address provided on page 1.





REQUEST FOR GRANT REIMBURSEMENT

This information is required by authority of Act 451, P.A. of 1994, as amended, to receive payment.

- Payments are made on a reimbursement basis, up to ninety percent (90%) of the grant amount. The final ten percent (10%) will be withheld pending satisfactory project completion and/or audit.
- Copies of invoices and canceled checks (non-negotiable check copies are not acceptable) for listed expenditures must be submitted with each request for reimbursement.
- The average processing time is 4-6 weeks.
- Do not submit a final request until all construction is completed.
- All completed projects will be audited by the Department of Natural Resources (DNR).
- Additional documentation necessary for the audit will be requested after we receive the final request for reimbursement. Grantee Name

Contact Name

Telephone

		relephone	
Address	Grant Number	Project Name	
City, State, ZIP	e, ZIP County SIGMA Vendor		
Request Number (1, 2, 3, etc.)			
Life that it is a control of the c	equest must be made by September en all work is completed, otherwis	30 se check partial	naumont \
Complete this table of expenditures. Use additional sheet(s)	using the format below if more spa	ace is necessar.	payment.)
 Use separate sheet(s) for force account. 		•	
 Enclose all cancelled checks, invoices, payroll data, copies are not acceptable. 	contractor's statements, etc., with	request. Non-ne	gotiable check
Note: Payments will not be processed without expenditure	documentation and a	•	
DATE CHECK NO. PAYEE			
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Total Matal. F			\$
	xpenditures to Date (if match is req		\$
Total Expenditures to D	ate (should include all expenditures		\$
	Less Expenditures on Prev	ious Requests	\$
I certify all expenditures against the above have been made during the	Total Expenditures	This Request	\$
Signature of Grantee's Representative Title I certify all work and materials for which payment is requested have b work done and materials used in this project to date conform to the pl	een inspected by me or a qualified p	erson under my s	supervision, and all
	and and openingations on the with the	o wichigan Divi .	
Signature of Prime Professional Specify: Architect, Engineer, L	andscape Architect Professional Registrati	on No. and State	Date
Other Prime Professionals as Required:			
Signature of Prime Professional Specify: Architect, Engineer, L	andscape Architect Professional Registrati	on No. and State	Date
	DNR USE ONLY DO NO		The second secon
A certificate of final electrical inspection is required for electrical lighting projects prior to final payment approval.		Grant Amount	
	Less Prev	ious Payments	
Return this completed request to:	Less	Audit Balance	
MICHIGAN DEPARTMENT OF NATURAL RESOURCES	Ava	ailable Balance	
PARKS AND RECREATION DIVISION	Total Eligible Expanditure		
NON-MOTORIZED STATE TRAILS GRANT COORDINATOR PO BOX 30257	Total Eligible Expen		
LANSING MI 48909	Reimbursement Amoun		-
	DNR Grant Program Manager Signature		Date
	1		

DNR State Trails Coordinator Signature



Memo To:

Board of Commission

From:

Mitchell D. Deisch, Administrator MDeisch

Date:

June 30, 2020

Subject:

General Legal Counsel Service Contract

Attached is the draft general legal service counsel contract between Benzie County and Cohl, Stoker and Toskey, which is slated to start Wednesday July 15, 2020.

Key Points of Contract

- 1. Recommending retainer format rather than hourly rate format. Decreased monthly retainer by \$250.00 per month from amount identified in RFP.
- 2. Initial 3-year contract with the ability to extend on a yearly basis, with a 60 day out clause for either party.
- 3. Establishes general counsel retainer scope of services.
- 4. Establishes hourly rate for non-retainer services.
- 5. Identifies reimbursable costs and billings, which included travel to and from their offices. I see very little need for travel regarding general counsel services.

Cohl, Stoker and Toskey prepared and are in support of the contract. In addition, I had County Attorney Dick Figura review and approve the contract on behalf of Benzie County.

Conclusion

It is my recommendation that the Benzie County Board of Commission approve the general legal services contract with Cohl Stoker and Toskey with an initial 3-year term and authorize the County Chairperson to sign the contract.





GENERAL LEGAL SERVICES CONTRACT

THIS CONTRACT, made and entered this 15th day of July, 2020, by and between BENZIE COUNTY, a municipal corporation, whose address is 448 Court Place, Beulah, Michigan 49617 (hereinafter referred to as "County"), and COHL, STOKER & TOSKEY, P.C., whose address is 601 North Capitol Avenue, Lansing, Michigan 48933 (hereinafter referred to as "CST").

WITNESSETH:

WHEREAS, Benzie County seeks to enter into a contract to retain the law firm of COHL, STOKER & TOSKEY, P.C. as general civil counsel for the County; and

WHEREAS, the CST desires to perform general legal services for the County.

NOW THEREFORE, for and in consideration of the mutual covenants hereinafter contained, IT IS AGREED by and between the parties as follows:

- 1. <u>General Counsel Retainer and Scope of Services</u>. Beginning on July 15, 2020, the sum of \$2,500.00/mo. (the first month pro-rated at \$1,250.00 and then \$2,500.00/mo. starting August 1, forward), will be paid to CST for the following legal services:
 - a) Answer requests for legal opinions, in writing and verbally;
 - b) Provide legal advice on the Open Meetings Act, the Freedom of Information Act, MCL 46.11, and County Board rules and procedures;
 - c) Draft and review any requested ordinances;
 - d) Draft, review and negotiate county contracts and leases (non-labor related);
 - e) Review and redraft various County policies which would include, by way of example, Personnel Manual, Family Medical Leave, IT Policy, Harassment Policy, ADA Accommodation Policy, etc.;



- f) Assist the County in the sale or purchase of property including but not limited to preparing deeds;
- g) Environmental law, including solid waste regulations;
- h) Building Code issues and enforcement;
- i) Provide client updates on changes in the law and recommend legislation to the Board of Commissioners when appropriate or requested;
- j) Attend in person up to 3 Board and/or Committee meetings per 12-month period as part of retainer. Any additional meetings would be charged at normal hourly rate for in person attendance. Virtual attendance if requested included in retainer.
- k) Review and/or prepare millage ballot questions and advise the County on election related matters;
- 1) Election issues;
- m) Tax assessment, equalization and collection issues;
- n) Register of Deed issues, including automation fund and recording requirement issues;
- o) Clerk issues, including DBAs, marriage license issues;
- p) Treasurer issues, including tax collection issues;
- q) Legal services to Board of Commissioners, County Clerk, Drain Commissioner, Prosecutor, Register of Deeds, Sheriff, Treasurer, Administration, Accounting, Building Safety, Senior Services, Emergency Management, Equalization, Information Technology, Planning and Veterans Affairs;
- r) Upon request, provide an "in-service" training session for newly elected Board of Commissioners and other workshop training for supervisors/department heads. Present a workshop for supervisors on how to properly discipline employees.
- 2. <u>Hourly Rate for Special Services</u>. The sum of \$180.00 per hour will be paid to CST for any other matters not specifically mentioned above including, but not limited to, administrative proceedings before State and federal agencies, arbitrations, and court litigation. The hourly rate will



increase by \$5.00/hr. for each successive fiscal year of the Contract starting on October 1, 2022 (e.g. \$185/hr. on October 1, 2022, \$190/hr. on Oct. 1, 2023 and so on).

- 3. Reimbursable Costs and Billing. The minimum increment for time billed is 0.3 hours and the County will reimburse CST for its costs, such as filing fees, deposition fees, copies, long distance telephone charges, postage, facsimiles, and electronic legal research. CST will charge for actual travel time from the attorney's originating work location on the date of travel (e.g. Traverse City or Lansing office) to Benzie County's office or other location as necessary for the legal services provided to the County, but will not charge for mileage reimbursement. CST will provide itemized monthly statements which will be paid within 30 days of receipt, or in the case of a payment clarification question, within 30 days of the resolution of the question. Invoices will be provided to the Benzie County Finance Manager.
- 4. Term and Termination. CST will commence performance of the services required of it in this Contract on July 15, 2020 and will continue through September 30, 2023 for the initial term. The Contract will continue on annual basis thereafter and starting on or after April 1, 2023, and each successive April 1st that the Contract in in place, the yearly compensation will be reviewed between the parties for the upcoming Contract term. Notwithstanding any contrary provision, either party may terminate this Contract with 60 calendar days' prior written notice. In the event the Contract is terminated, CST will cooperate in all respects with the County and the County's new legal counsel to facilitate this transition.
- 5. <u>Independent Contractor</u>. It is expressly understood and agreed that CST is an independent contractor. The personnel employed by CST will in no way be deemed to be and will



not hold themselves out as employees of the County and will not be entitled to any fringe benefits of the County, such as, but not limited to, health and accident insurance, life insurance, longevity, paid sick or vacation leave. CST will be responsible for paying the wages of its personnel and for the withholding and payment of all income and social security taxes to the proper federal, state and local governments. CST will also be responsible for providing its personnel with workers' compensation and unemployment compensation coverage, as required by law.

- 6. <u>Insurance</u>. CST will furnish to the County a certificate of insurance providing for a commercial general liability insurance policy on an occurrence basis with policy limits of at least one million dollars (\$1,000,000), to include but not be limited to personal injury, bodily injury, property damage, and contractual liability. CST will also furnish the following certificates of insurance coverage to the County: (1) a certificate of insurance providing for professional liability insurance in an amount of at least \$1,000,000 per claim and \$1,000,000 aggregate; and (2) a certificate of insurance covering workers' compensation for CST's employees.
- 7. Non-discrimination. CST, as required by law, will not discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, marital status or disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Breach of this subsection will be regarded as a material breach of this Contract, and in the event CST is found not to be in compliance, the County may terminate this Contract effective as of the date of delivery of written notification to CST.
- 8. <u>Conflict of Interest</u>. In the event the interests of the County and interests of other clients become directly adverse in connection with any pending matters, such conflicts will be



discussed and resolved pursuant to the Michigan Rules of Professional Conduct. All information communicated between the County and CST within the attorney-client privilege will be and remain confidential, and will not be disclosed by CST, consistent with the Michigan Rules of Professional Conduct and applicable law.

- 9. <u>Dispute Resolution</u>. Unless immediately commencing litigation is necessary to preserve the rights of one of the parties, the parties agree that, prior to the commencement of any such litigation, they will first proceed in good faith to mediate their dispute. The mediator shall be selected by mutual agreement and the costs of the mediation shall be borne equally by the parties. Unless the parties mutually agree otherwise, the mediator shall be selected from the list of certified mediators maintained by the Alternative Dispute Resolution Clerk of the 19th Circuit Court. Every effort should be made to complete the mediation process within 30 days from the notice of the dispute.
- 10. Governing Law. The validity, interpretation and performance of this Contract shall be governed by and construed in accordance with the laws of the State of Michigan. The venue for the bringing of any legal or equitable action under this Contract in accordance with the statutes of the State of Michigan and Michigan Court Rules. In the event that any action is brought under this Contract in Federal Court, the venue for such action shall be the Federal Judicial District of Michigan, Western District, Northern Division.
- 11. <u>Modification</u>. Modifications, amendments, or waiver of any provisions of this Contract may be made only by the written mutual consent of the parties hereto.



- 12. <u>Disregarding Titles</u>. The titles of the section set forth in this Contract are inserted for the convenience of reference only and shall be disregarded when construing or interpreting any of the provision of this Contract.
- 13. <u>Notices</u>. Any notice required or permitted to be given under this Contract shall be deemed properly given if in writing and if mailed by first-class mail, to the residence of the Employee as appearing on the records of the Employer, or to the principle office of the Employer, to the attention of its Chairperson.
- 14. <u>Invalid Provisions</u>. If any provision of this Contract is held to be invalid, the remainder of the Contract shall not be affected thereby, except where the invalidity of the provision would result in the illegality and/or enforceability of this Contract.

IN WITNESS WHEREOF, the parties hereto have executed this Contract the day and year first above written.

	BENZIE COUNTY
	By:
Date	Bob Roelofs, Chairperson
	Board of Commissioners
	COHL, STOKER & TOSKEY, P.C.
	D
	By:
Date	David G. Stoker, President

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Resolution # 2020 - 011

RESOLVED BY THE BENZIE COUNTY BOARD OF COMMISSIONERS

RESOLUTION AUTHORIZING THE BENZIE COUNTY BUILDING AUTHORITY TO PERORM ALL REQUIRED FUNCTIONS TO FINALIZE THE MAPLES MEDICAL CARE FACILITY GENERATOR RE-WIRING AND OTHER OUTSTANDING PROJECTS

WHEREAS, In the Spring of 2020, the Benzie County Board of Commissioners authorized the refinancing of the Maples Medical Care Facility building bond debt; and

WHEREAS, On June 26, 2020 the sale of the Maples Medical Care Facility building bond debt was completed; and

WHEREAS, on July 14, 2020 the closing of the refinanced Maples Medical Care Facility building bond debt was completed.

NOW THEREFORE BE IT RESOLVED that the Benzie County Board of Commissioners authorizes the Benzie County Building Authority to continue their role as project managers until the completion of the Maples Medical Care Facility generator re-wiring project, continuing with all their operational and financial obligations until the generator re-wiring and other outstanding projects are completed.

Dated:	July 14, 2020	
		Bob Roelofs, Chairperson
certify th	****	zie County Board of Commissioners, hereby do n was adopted by the Benzie County Board of of July 2020.
RE	CEIVED JUL 1 0 2020	Dawn Olney, Benzie County Clerk

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617 CONFIDENTIAL

COHL, STOKER & TOSKEY, P.C.

ATTORNEYS AND COUNSELORS
601 NORTH CAPITOL AVENUE
LANSING, MICHIGAN 48933
(517) 372-9000

SHAREHOLDERS
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DAVID G. STOKER
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TIMOTHY M. PERRONE
MATTIS D. NORDFJORD
GORDON J. LOVE

ASSOCIATES
COURTNEY A. GABBARA
SARAH K. OSBURN
CHRISTIAN K. MULLETT

OF COUNSEL
RICHARD D McNULTY

July 6, 2020

Attorney/Client Privilege

Mitchell D. Deisch Benzie County Administrator 448 Court Place Beulah, MI 49617

Sent Via Email

Re: Benzie County Maples Medical Care Facility Operating Millage

Dear Administrator Deisch:

I am writing to confirm our telephone conversations regarding the utilization of the County Maples Medical Care Facility operating millage and the insurance obligations relating to that facility. It is my understanding that the Board of Social Services, which operates the Medical Care Facility, has historically paid the liability and property insurance premiums on this property, but that the Michigan Municipal Risk Management Authority (MMRMA) insurance provider has questioned the insurable interest based on the ownership of the facility property. In this context you raised two specific questions, being:

My question is two-fold.

- 1. Since the Maples voted millage funds are collected by the treasurer, can Benzie County or the Treasurer withhold the necessary fees for paying the annual liability premium?
- 2. If the first answer is no, can the County require the Maples board pay rent for use and operation of the facility?

Prior to addressing these specific questions, it should be noted that the underlying factual context of the relationship between the County and the County Board of Social Service Services, which operates the Medical Care Facility, was reviewed in the Opinion issued December 12, 2019. concerning the funding of capital improvements for that Facility. (*Copy attached*) As noted

in that Opinion, the Medical Care Facility, by law,¹ is owned by the County and the Board of Social Service Services is statutorily delegated the authority to operate the Facility. The very existence of the Facility itself is a threshold policy decision of the County Board of Commissioners.² In the current situation, the title to the property is currently held by the Benzie County Building Authority and leased back to the County pending the retirement of the existing capital improvement bonds.³ The 2019 Opinion expressly reviewed that the millage for capital improvements was approved by the electorate for the Maples Medical Care Facility. As also noted in that Opinion, a second millage was also approved by the voters to support the Medical Care Facility operations. This operating millage was most recently renewed in 2017 and the ballot language approved by the voters reads as follows:

BENZIE COUNTY MEDICAL CARE FACILITY (THE MAPLES) OPERATION MILLAGE RENEWAL AUTHORIZATION QUESTION

For the purpose of continuing to provide funds for operating the Benzie County Medical Care Facility (The Maples), at the same millage level approved by the voters in 2010, as constitutionally reduced in 2016, shall the previously voted 0.3626 of one (1) mill (\$0.3626 per \$1,000 of Taxable Value) in excess of the constitutional limitation on general ad valorem taxes within the County of Benzie be continued and renewed for a period of five (5) years (2017-2021) inclusive? . . . (Emphasis added)

Therefore, as noted in the December 12, 2019 Opinion, the millage language provides that these funds may only be used by the County for "operating the Benzie County Medical Care Facility." However, as with the capital improvement millage, this is a "County" millage and the funds are the County's funds to appropriate as the Board of Commissioners deem appropriate, provided the funds are solely used for the purposes specified in the approved ballot language (i.e., operating the Maples). Thus, it is the County Board of Commissioners which must annually decide how much of this authorized millage to levy and for what authorized purposes. As with the capital improvement millage, the operating millage could be appropriated broadly with the decisions on how it will be expended left solely with the Board of Social Services, or the appropriation could be directed to certain Maples operating functions that the Board of Commissioners deem appropriate for the use of the County millage within the ballot language parameters. It is my understanding that historically the County Board has utilized the broad appropriation method and left the utilization of the operating millage appropriated to the Medical Care Facility to the discretion of the Board of Social Services.

As noted in the 2019 Opinion, the County Board of Social Services is a separate legal entity, with two of its members appointed by the County and one member appointed by the State. This entity, by statute, is charged with the responsibility for operating the County Medical Care

¹ Monticello House, Inc v Calhoun County, 20 Mich App 169, 172-173 (1970)

² OAG, 1957-58, No. 3217, p. 66 (February 25, 1958)

³ It is my understanding that the County is in the process of retiring the current bonds on the Maples property and refinancing in the County's name, which would then return ownership to the County.

Facility. As with the capital improvement millage discussed in the noted 2019 Opinion, if the County Board of Commissioners were to limit or direct the operating millage usage to specific operating purposes, a contract would likely be needed to confirm the permissible expenditures of the millage funds. In fact, the appropriation of the millage should include the requiring of a contract, even if it only directs the funds to be used for "operating the Medical Care Facility."

Thus, the County Board of Commissioners has authority to specify which "operating purposes" the millage money will be used for and to encompass the specified purposes both within its appropriation resolution and in a contract with the Board of Social Services confirming that decision. That could include specifying that the funds should be first utilized for specific purposes, such as payment of the statutory "maintenance of effort," and payment of any insurance premiums for the Facility property and liability insurance. The County could elect to withhold disbursement of these funds until such an agreement is entered, though the funds could not be directed to any purpose other than as provided in the ballot language.

Turning then to your first specific question, the County Treasurer would not be obligated to forward these millage funds until any conditions in the Board of Commissioners appropriation are met, including any required contract being entered into. Moreover, if such conditions are included in the appropriation of the funds, the Treasurer would not be authorized to disperse those funds until those conditions are complied with. If appropriation conditions have not been included in any annual appropriation for 2020, and the funds have yet to be disbursed, the Board of Commissioners could amend its appropriation to include those requirements as a condition for dispersing the funds. Again, however, the millage funds could only be utilized for the purposes in the ballot language and could not be utilized for anything other than County Medical Care Facility operations, which clearly could include such uses such as the statutory maintenance of effort payments and any insurance premiums. Thus, the County Treasurer could (and would be required to) withhold distribution of these millage funds until such an agreement is approved and executed, if required by the County appropriation.

As an alternative method, a rental agreement could be entered with the Board of Social Services for the use of the Medical Care Facility property to include the obligation of the Medical Care Facility/Board of Social Services to pay the applicable insurance premiums, the maintenance of effort payments, and similar expenses. However, that procedure would require that such a lease agreement would include the approval of the County Building Authority.

Finally, I would also note that the issues raised by the County's insurance carrier, being MMRMA, may not fully comprehend the insurable interest in the context of the Medical Care Facility status and its operations. As noted, the law provides that the Board of Social Services is not the owner of the Medical Care Facility real property, but it is solely responsible for its operations. The insurance involved in this case appears to be a mixture of both the general liability insurance and the building/real property insurance. The real property insurable interest would clearly include the County, as well as currently in this case with the County Building Authority. Most of the general liability insurance, as well as other operating insurances, such as workers compensation, would clearly fall under the operational authority of the County Board of Social Services. The insured personal property within the Medical Care Facility would be a

mixture of real property as to those items that are "fixtures," and those items of personal property that are not fixtures (and thus not owned by the County/County Building Authority). It would appear prudent to have both the liability and property insurance interests consolidated so each of the entities (the County, the Board of Social Services/Medical Care Facility, and Building Authority) are named insureds under each of these policies. As all three (3) entities hold various interests in the property, a contract would be appropriate to clarify responsibility for insurance premiums and for their payment.

To summarize your specific question, the County Board of Commissioners would have authority to condition its appropriations to the Board of Social Services out of the County Maples operating millage, which could include the requirement that a contract be entered specifying certain uses of the millage operational funds, including the payment of insurances, payment of maintenance of efforts payments, and other specified Maples operating purposes. If such an appropriation with conditions is established, the millage funds should not be disbursed by the Treasurer until the Board of Commissioners determines that those conditions are met.

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

Very Truly Yours,

COHL, STOKER & TOSKEY, P.C.

/s/ David G. Stoker

DGS/gmk Enclosure

N:\Client\Benzie\Opinions\Deisch Opn re Benzie County MCF - Final.docx

COHL, STOKER & TOSKEY, P.C.

ATTORNEYS AND COUNSELORS
601 NORTH CAPITOL AVENUE
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ASSOCIATES GORDON J. LOVE COURTNEY A. GABBARA SARAH K. OSBURN

OF COUNSEL RICHARD D McNULTY

December 12, 2019

Attorney/Client Privilege

Mitchell D. Deisch Benzie County Administrator 448 Court Place Beulah, MI 49617

Sent Via Email Only

Re:

County Medical Care Facility Bonding/Millage Issues

Dear Administrator Deisch:

This is in response to your request to confirm our prior verbal review of the issues raised by County Treasurer Michelle Thompson in the context of the Medical Care Facility millage and bonding. The issues relate to utilization of a County millage in the context of funding for the Benzie County Medical Care Facility (hereinafter referred to as "Maples").

SUMMARY

To summarize our discussion, based on the information provided and for the reasons reviewed in more detail below, I provide you with the following opinions.

The Maples Capital Improvement Millage at issue is a "County" millage and the County Board of Commissioners has the authority to decide how much of that millage to levy and for what purposes, provided it complies with its prior pledge to the bond holders and its use is consistent with the millage ballot language. If requested by the Board of Social Services, and provided there are excess millage funds beyond the pledged bond payment schedule, additional appropriations could be made by the County Board of Commissioners within its discretion and may be utilized for purposes consistent with the ballot language as the Board of Commissioners may elect to fund.

Alternatively, after September of this year, any such excess millage fund revenue could be utilized to redeem future bonds and shorten the loan period. Under this option the millage funds generated in excess of the required rent levels (the bond repayment schedule) could be appropriated to the Building Authority to retire additional future bond obligations as provided in the bonding documents.

Finally, the Board of Commissioners could elect to reduce the Capital Improvement Millage levy in a manner that would assure sufficient millage funds are collected only to meet the bond payment schedule. This would then eliminate any annual millage surplus beyond the rent/bond payment levels.

Each of these decisions would be within the jurisdiction and discretion of the County Board of Commissioners.

A. Background

By way of background, it is my understanding that the following general facts are applicable to the issues involved. The Maples is a County Medical Care Facility ("MCF") created and authorized under the provisions of the Michigan Social Welfare Act. 1 separate County millages have been approved by the Benzie County electorate relating to the Maples, including the Capital Improvement Millage, approved at the November 10, 2010 election, of 0.6350 of 1.0 mill for a period of twenty (20) years (2010-2029) inclusive, which is the millage currently at issue. The County electorate also approved the renewal of an operational millage of 0.3626 of 1.0 mill for a period of five (5) years (2017-2021) inclusive, at the August 8, 2017 election. The 2010 Capital Improvement Millage was established in conjunction with a renovation, expansion, and capital improvements project for the Maples MCF. The financing of the improvements was handled through the Benzie County Building Authority that issued bonds for the renovation/expansion projects in 2013. The questions raised by Treasurer Thompson and yourself relate to utilization of the County Capital Improvement Millage. Apparently, the funds derived from the Capital Improvement Millage now exceed the required bond payments and the question was raised as to whether the millage should be reduced to cover only the bonding liability, or should be utilized to provide additional capital improvements at the Maples facility.

Thus, the issues involved relates to both the bonds and the County Capital Improvement Millage, and involve at least three (3) separate public entities, being the Benzie County Board of Commissioners, the Benzie County Board of Social Services,² and the Benzie County Building Authority. Prior to the dealing with the specific facts, it may be helpful to review the legal roles of these separate entities in the context of the Benzie County Medical Care Facility.

B. Entities Involved

The three (3) entities involved, being the County Board of Commissioners, the County Board of Social Services, and the County Building Authority, are each recognized as separate public legal entities. They all have involvement in the Maples facility as to various aspects of

¹ MCL 400.1, et sea.

² The Board of Social Services is a statutory recognized name, which is also known as the Family Independence Agency Board [MCL 400.45(1)], and via the County website is also referred to in Benzie County as the Human Services Board.

its funding in the context of both the millage and bonding in question. Thus, the legal authority of each of these entities in the context of the County Medical Care Facility will be reviewed separately as follows:

1. County Board of Commissioners

At the outset, the question of whether to have a Medical Care Facility or not lies solely with the Board of Commissioners. Pursuant to Sections 45(2)(a) and 58 of the "Social Welfare Act," 1939 Public Act No. 280, as amended, MCL 400.1 et seq, a county may authorize, via the approval of the board of commissioners, a county social services board to supervise and operate a county medical care facility. MCL 400.58. The County, however, retains title to real property used to establish the MCF, as well as any improvements made thereon. The Board of Commissioners' legal authority over the MCF is limited to the decision as to whether such a facility shall exist, and the title and issues as to the property comprising the MCF building and grounds. The County Board of Commissioners is responsible for the care and management of County property unless other provisions are made. MCL 46.11(I). The establishment and erection of a County Medical Care Facility is therefore a matter within the discretion of the County Board of Commissioners. MCL 400.58(1). The land and buildings are owned by the County, and may be sold by the County in its discretion.

By contrast, the County Board of Social Services is not statutorily authorized to establish the County Medical Care Facility, or to acquire real property for any purpose. See MCL 400.45(2). Therefore, the County Board of Social Services may not expend funds from the Social Welfare Fund to acquire real property to expand the Medical Care Facility.

The County is generally not <u>required</u> to finance the operations of the Medical Care Facility. In *Monticello House, Inc v Calhoun County*, 20 Mich App 169, 172-173 (1970), the Court stated:

...[T]here is no express obligation on the part of the county to appropriate and expend public funds for a medical care facility of the type involved in the instant case. We have examined the statutes...and...the legislation providing for medical facilities is not of a compulsory nature, but it is permissive.

However, as part of the State's Medicaid Plan, the County may now be required to make "Maintenance of Effort" payments based upon the State Medicare Plan formula when it does elect to have a Medical Care Facility. [MCL 400.109; Berrien County v State, 136 Mich App 772 (1984)]

A County may provide funding for the Medical Care Facility, including any such Maintenance of Effort payments, by way of a dedicated millage. Dedicated millage funds must be earmarked for a particular purpose in any millage ballot proposal and may not be used for any other purpose. *Rentschler v Detroit Board of Ed*, 324 Mich 603; 37 NW2d 645 (1949); OAG, 1983-84, No. 6154, p 117, 119 (June 17, 1983). Even so, the Board of Commissioners

is not generally required to levy the tax,³ or levy it to the maximum extent, depending on the millage language. Further, although the use of the funds is restricted to the stated purposes, the County Board is not required to expend the funds at any given time for any purpose, unless required by the express terms of the millage ballot language or a contractual bonding agreement. Rather, the County Board of Commissioners has discretion to levy the tax, decide the amount to be levied in any given year, and determine whether to appropriate the funds for one or more of the permitted uses. See *King v Director of Midland County Dept of Social Services*, 73 Mich App 253; 251 NW2d 270 (1977). By contrast, the County Board of Social Services has no authority to control the millage funds, or direct their use, except as appropriated by the Board of Commissioners.

For example, the County Board of Social Services may request an appropriation of millage funds for a particular construction project. The County Board of Commissioners may approve the request and make the appropriation, in which case the County Board of Social Services would be restricted in expending the funds for that purpose. However, the County Board of Commissioners could elect to make a "general appropriation" to the Board of Social Services for purposes consistent with the express purposes in the millage ballot language, leaving it to the Board of Social Services' discretion as to how to expend the funds within that limitation.

2. County Board of Social Services

The operation and control of the County Medical Care Facility once it has been authorized as a County program by the County Board of Commissioners is vested in the County Board of Social Services, MCL 400.45(2)(a); 400.55(c); 400.58; 400.226. MCL 400.58(1), in pertinent part provides:

The county board [of social services] may, with the approval of the county board of commissioners, supervise and be responsible for the operation of a county medical care facility in, auxiliary to, or independent of the county infirmary. (Emphasis added)

In Hillsdale County Board of Commissioners et al v Hillsdale County Social Services Board, Hillsdale County Circuit Court No. 84-14-180-CZ (March 21, 1984), the Circuit Court interpreted the authority of the social services board and concluded that the social services Board had the authority to operate the Medical Care Facility and was considered the statutory employer of the Medical Care Facility personnel.

3. County Building Authority

³ A County may commit itself to levying a specific tax by pledging its full faith and credit, or pledging proceeds from a specific tax levy, as part of a bonding financing arrangement.

⁴ As an alternative, a County Medical Care Facility may be operated by a County Board of Institutions, if such a Board is established by the County Board of Commissioners. [MCL 400.58(1); MCL 400.151 *et seq*] In that case, the County Board of Institutions would have the same authority and responsibilities as a County Board of Social Services with regard to a County Medical Care Facility.

The County Building Authority is also a distinct public legal entity and is created pursuant to MCL 123.951 et seq. Building Authorities are created as a mechanism to provide funding for public capital improvements, such as the renovation/expansion of the County Medical Care Facility in this case. This statutory structure provides that once a Building Authority is established, it provides a bonding mechanism to allow for such capital improvements by the governmental entities establishing the Authority. mechanism essentially works by the establishing entity, here being the County, first creating a Building Authority. The property involved is then transferred to the Building Authority and the Authority in its own name issues bonds that generate revenue for the proposed building or The property involved is then leased back to the establishing capital improvement. governmental entity with rent payments due in an amount sufficient to pay the bonding costs, including principal and interest, for the period required for the bonds to be fully retired. Upon the bonds then being paid off, the improved property is then transferred back to the establishing governmental entity, which in this case would be the County. The Building Authority therefore is responsible for the construction of the improvement and application of the revenues (lease rentals) being paid to the bond holders. It also is the Building Authority that is then responsible, as the then owner of the facility and issuer of the bonds, to assure that the revenue from the bonds (hereinafter referred to as "Bond Funds") are utilized in the manner as represented in the bond issuing documents to the bond holders.

C. Benzie County Maples Millage/Bond Current Circumstances

Applying the foregoing, each of these governmental entities have a distinct role with regard to the County Medical Care Facility, the revenue and expansion of that facility, and the funding of those improvements. It is my understanding that the main issue involved in your inquiry related to a concern that the proposed "purpose" for the bonds, versus the "purpose" for the millage, may differ and result in differing interpretations of authorized utilization of some of the millage revenue. However, it should be initially noted that the "purpose" for the bonds and for the millage are distinct and separate criteria that are then implemented by distinctly different governmental entities in this funding structure. Thus, the effect on the purpose in the context of "bonding funds" and the "millage funds" will be reviewed separately.

1. Bonding Funds

When issuing public bonds, one of the requirements is to clarify the public purpose to the prospective bond holders. This is an essential bonding criteria as only a use that is considered a "public purpose" is eligible for many tax benefits to the potential bond purchasers. Thus, part of the bonding process involves the issuance by bond counsel of an official bond statement which clarifies the proposed "purpose" of the bond issuance. In this case the bonds were issued by the County Building Authority and the official bond statement, dated September 17, 2013, indicates that the description of the proposed project (the "purpose") and provided to the bond purchasers as set forth in Attachment 1 to this letter.

Consistent with the Building Authority funding mechanism, the property was transferred to the Building Authority and through an amended Lease, dated July 2, 2013, between the Building Authority and the County of Benzie, this same "project description" was incorporated as part of that Lease's Exhibit A.

The Amended Lease also provided, in paragraph 4, that if any of the balance from the bond proceeds (the "bond funds") remained after the completion of that described project, the funds could be used to improve or enlarge the project, or for other projects of the Building Authority, provided the use of such funds were to be improved by the Municipal Finance Division of the Michigan Department of Treasury and the County. It also provided as an alternative that any unexpended bond funds not so used could be applied to paying off the bonded debt and the County would then receive credit under the Lease to the extent those funds are deposited in the manner provided in the bonding documents.

It is also my understanding that the actual revenue proceeds from the sale of the bonds were utilized in a manner that was covered under the project description and no such excess proceeds existed from the issued bonds. Thus, the actual bond funds were entirely utilized for the purposes designated by the project description in the bond statement and Amended Lease Agreement. While the Building Authority would have had the discretion to either pay off the bonds, or provide for additional projects with excess available bond funds from the bond issuance, no such excess funds existed. At this point, the Building Authority's receipt of rental payments from the County are entirely utilized for making the required bond payments as provided in the bond repayment schedule.

2. Millage Funds

As noted above, when a special millage is approved by the voters, the use of that millage is limited to the purposes spelled out in the ballot presented to the voters. In this case, the millage approved by the voters in 2010 read as follows:

BENZIE COUNTY MEDICAL CARE FACILITY (THE MAPLES) CAPITAL IMPROVEMENT MILLAGE QUESTION

For the purpose of funding replacement of the current medical care facility building, capital improvements, debt service, and equipping the Benzie County Medical Care Facility (The Maples), shall the tax limitation on general ad valorem taxes within the County of Benzie imposed under Article IX, Sec. 6 of the Michigan Constitution be increased by 0.6350 of one (1) mill (\$0.6350 per \$1,000 of Taxable Value) for a period of twenty (20) years (2012-2031) inclusive?

If approved and levied in full, this millage will raise an estimated \$687,383 for Benzie County Medical Care Facility improvements, debt service, and equipment in the first calendar year of the levy. (*Emphasis added*)

Thus, in this case, the millage funds must be utilized "[f]or the purpose of funding replacement of the current medical care facility building, capital improvements, debt service, and equipping the Benzie County Medical Care Facility (The Maples)..." One of the authorized millage purposes was to provide for the "debt service" relating to the Maples improvements, which would have included the debt service for the above-referenced bonds. The Amended Lease Agreement between the Building Authority and the County pledged these millage dollars

beginning 2010 through 2029 for the repayment of the principal and interest in the above-referenced bonds in a sufficient amount to pay the bond repayment schedule. Thus, the millage funds involved were committed by the bonding process to make the bond payments, at a minimum, based on the repayment schedule approved in 2013. It is my understanding that the revenue received from the millage now exceeds the required payment levels in that bond schedule.⁵ Thus, there would be a surplus of the millage funds above and beyond the bond payment schedule that has created the current question.

As noted the purpose authorized for the millage's use in the ballot as approved by the voters in 2010 includes a broader scope of potential uses then just the bond "debt service" amounts pledged for the bond repayments. This has apparently raised the question as to whether the potential millage surplus could be utilized for additional capital improvements, or if the millage levy itself should be reduced to match the required bond payment schedules.

As the millage language proposed in the ballot language approved by the electors is broader than merely "debt service", the legal authority would exist to utilize excess funds for the additional purposes outlined in the ballot language, including capital improvements and equipping the Maples MCF. However, as noted above, how much should be levied, and the use of any potential surplus millage funds would be solely within the discretion of the County Board of Commissioners as this is in fact a "County" tax that the voters authorized. Thus, the levy amount would be within the discretion of the County Board of Commissioners, provided the millage is sufficient to pay the amounts in the bond payment schedule pursuant to the pledges made by the County when the bonds were issued. Sufficient millage would need to be levied that would fully met the Amended Lease's payment obligations.

It should also be noted that the bond documents indicate that any bonds maturing on or after September 1, 2021, are subject to early redemption in whole or in part on any date on or after September 1, 2020. Thus, the County Board of Commissioners could also elect to appropriate any excess millage funds to pay off future bond payments by redeeming some of the future bonds. The Board of Commissioners has the authority to appropriate additional funds for these early payment purposes and the additional funds would then be provided to the Building Authority for payment to the bond holders in accordance with the procedures in the bond documents.

Finally, as the level of millage to be levied is a decision the County Board of Commissioners must annually make, the County Board of Commissioners could elect to lower the millage level to have the revenue match only the upcoming rent due the Building Authority, being the bond payments next due in the bond repayment schedule. The County Board of Commissioners could then "right size" the millage level as mentioned by Treasurer Thompson to only cover the remaining bond debt.

⁵ It is my assumption that increases in the County's taxable value may have generated more millage funds than anticipated when the bonds were issued.

⁶ MCL 211.37

D. <u>Conclusion</u>

The Board of Commissioners could elect to appropriate any millage funds in excess of the Building Authority's rent levels for additional capital improvements at the Maples facility. If the decision of the Board of Commissioners is to appropriate the excess funds for additional capital improvements, a contract would likely be needed between the County Board of Social Services and the County Board of Commissioners clarifying the authorized purpose for those funds. Additionally, as ownership of the Maples MCF is currently in the name of the Building Authority, such capital improvements would likely also need the Building Authority's consent.

Were the County Board of Commissioners to elect to use any excess millage funds to pay off future bonds, an appropriation would then need to be approved for the Building Authority, which would need to then implement the additional bond payments consistent with the bond documents.

If the decision were to levy a reduced level of the Maples Capital Improvement Millage in an amount only sufficient to pay the current bond schedule, that would also be within the discretion of the County Board of Commissioners, but the millage fund revenue would need to be sufficient to fully cover the rent (bond payments) for the next year or the County would be responsible for any shortfall. If this decision were made, it would need to be reviewed annually to assure the levy amount will cover the rent/bond payments for each succeeding year. Further, if the bond debt were to be paid off prior to 2031, authority would still also exist to levy the millage through that year for any of the purposes listed in the 2010 ballot language. Again, this would be a decision that would need to be made by the future County Boards of Commissioners.

Finally, the decisions as to which option to implement would need to be made annually once the millage fund revenue for the next year can be determined. The Board of Commissioners could then elect to use any of these alternatives, or a mix of these options, and could vary that on a year by year basis, provided the rent/bond payment debt is also fully covered each year.

Should you have any further questions concerning the foregoing, please do not hesitate to contact me.

Very Truly Yours,

COHL, STOKER, & TOSKEY, P.C.

David G. Stoker

Attachment 1

Renovations to Benzie Medical Care Facility Preliminary Project Description

- 1) Construct three new 20 bed households on the existing site. Each household would have secure doors, access to an enclosed outdoor space, living rooms with fireplace and bookshelves, a dining room with a residential kitchen, an activity room, a spa room, barber beauty room, and staff support areas. 16 rooms will be private with accessible toilet rooms and showers. 2 rooms will be semi-private with full height partitions between the beds.
- 2) Construct a new 18 bed memory care household. The household would have secure doors, access to an enclosed outdoor space, living rooms with fireplace and bookshelves, a dining room with a residential kitchen, an activity room, a spa room, barber beauty room, and staff support areas. 16 rooms will be private with accessible toilet rooms and showers. 2 rooms will be private suites with a living room.
- 3) Construct a new lobby / reception / administration space.
- 4) Demolish unused portions of the existing facility to allow for outdoor recreation space and future expansion.
- 5) Update and expand Therapy and dietary areas as required.
- 6) Provide new interior finishes to the areas of the existing facility which will remain.

Dawn Olney

From:

Richard Taylor < rrtaylor57@gmail.com>

Sent:

Friday, July 10, 2020 12:28 PM

To:

Dawn Olney

Subject: Attachments: BCC letter adf

BCC letter.pdf

Hi Dawn,

In preparation for my presentation at the Benzie County Commissioners on Tuesday at 10, the attached introductory letter might be useful.

Also, in a separate email, I will share with you, for them, the "75%" Historic Structures Report that has been commissioned by the Friends of PBLH in conjunction with Benzie County to consider the scope of repairs needed to our Shoreline Protection System.

I look forward to addressing these issues, and the Commissioner's questions, on Tuesday. Thank you.

Best Regards,

Richard Taylor

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JUL 1 0 2020

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617 The purpose of this meeting is to update and alert the Benzie County Commissioners on the state of Point Betsie Lighthouse, and on the efforts of the Friends of PBLH to address potential repairs.

History: Point Betsie Lighthouse dates to 1858, and over time has had various improvements. In June of 2004 Benzie County and the newly formed Friends of Point Betsie Lighthouse took over the facility from the Federal government, and signed an agreement addressing various responsibilities pertaining to maintenance, use, administration and management. The Agreement was augmented by a Development Plan, which among other issues addresses funding of capital needs. Since the inception of the relationship, the Friends of PBLH has been very successful in profitably operating the facility as a major tourist attraction for the County, and in raising the necessary funds to build and complete a LEEDS certified museum and gift shop.

PBLH has two capital improvement needs – improvement of the road-end/beach access, and repairs to the crumbling circa-1944 Shoreline Protection System. The latter is being complicated and made urgent by the extremely high water in Lake Michigan. The Friends has been aware of the need for SPS improvements for several years, and last summer contacted Luedtke Engineering for a very rough estimate of costs for repairs, which were in the \$950,000 range. We initiated a capital campaign and have raised roughly \$1.2M to date. In February the Friends contracted with Baird Engineering from Wisconsin to compete an updated Historic Structures Report to more fully detail the scope of the necessary repairs, with the intent of then soliciting bids for the actual work. We were more than surprised when Baird's cost estimate range recently came back to us as between \$5.7-\$9.4M. Please see their report for more detail.

While the Development Plan addresses all sorts of responsibilities between the Friends and the County, the reality is that anything of this scope and scale was not foreseen, even though the Plan says that "It is not envisioned that the majority of the restoration or site improvements will be accomplished by the Friends (p.7)." In a recent conversation with Tim Ervin, he suggested creating a larger group of interested stakeholders, including: Benzie County, The Friends of PBLH, representatives for the offices of multiple governmental officials including Sen. Stabenow, Sen Peters, and Cong. Bergman, USDA, FEMA, the Army Corps of Eng., EGLE, and various potential granting and development entities. This reasonable approach reflects the fact that the PBLH is a local, regional, and statewide treasure of historical significance, with many constituencies that should participate in saving her. The benevolent role of Benzie County can and should include gathering and co-hosting an initial meeting of that wider group.



Dawn Olney

From: Sent: To: Subject:	Richard Taylor < rrtaylor57@gmail.com> Friday, July 10, 2020 12:31 PM Dawn Olney Fwd: 13352.101 - Pt. Betsie - 75% Draft HSR Rep	port for SPS
Dawn,		
Attached is the update to our Shoreline Protection System re preparation for our meeting o	Historic Structures Report, in anticipation of epair work. Please share with all the Benzie Con Tuesday.	soliciting bids for the actual County Commissioners in
Thank you.		
Richard Taylor		
	d.com> /। 75% Draft HSR Report for SPS	
Below is a link to a PDF of our 759 the 6 hard copies, is being sent to	% HSR for the Shore Protection System at Pt. Bet onight.	sie Lighthouse. The courier, containing
As we mentioned on our call last seem long, but they are appropri	Friday, the opinion of construction cost (OPCC) nate at this stage of the project for the following r	may seem high, and the schedule may reasons:
		RECEIVED
1. Additional work needs to be do	one on data collection and numerical modeling	.)() 1 0 2020

3. The stone market for coastal structures is very active, which tends to result in high material costs

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617

2. The concept design is generally conservative

4. We have incorporated a marine based approach into the estimate

We anticipate that the design will be come more efficient in the preliminary and final project stages, which usually results in a reduction in the OPCC.

Based on the above, please review and provide comments. We look forward to hearing from you and your colleagues.

Sincerely,

Matthew Clark

Citrix Attachments

Expires July 2, 2020

13352.101.R1.RevO_Historic Structures Report.pdf

14 MB

Download Attachments

Matthew Clark uses Citrix Files to share documents securely. Learn more.

Matthew J. Clark, P.E.*, CENG, PMP | Senior Marine Engineer

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2924 Marketplace Drive, Suite 200

Madison, WI USA 53719





Historic Structures Report - 95% Draft

Point Betsie Light Station Shoreline Protection System

July 7, 2020 | 13352.101.R1.Rev1



Historic Structures Report - 95% Draft

Point Betsie Light Station Shoreline Protection System

Prepared for:

Prepared by:





Benzie County and The Friends of Point Betsie Lighthouse, Inc.

448 Court Place Beulah, MI 49617



W.F. Baird & Associates Ltd.

For further information, please contact Matthew Clark at 608-273-0592 mclark@baird.com www.baird.com

13352.101.R1.Rev1

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Revision	Date	Status	Comments	Prepared	Reviewed	Approved
0	6/01/2020	Final	-	PST	MJC	RPA
1	7/07/2020	Draft	-	PST	MJC	MJC

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Table of Contents

1.	Admi	nistrat	strative Data1		
2. Part 1 – De			velopmental History2		
	2.1 Histo		rical Background and Context		
		2.1.1	Development & Chronology of Use of the Shoreline Protection System	2	
2.2 Phys		Physi	cal Description		
		2.2.1	Site Description	11	
		2.2.2	Contribution to Character of the Point Betsie Light Station Complex	19	
	2.3 Coastal Analysis - Water Levels		tal Analysis - Water Levels	20	
	2.4	Coas	tal Analysis – Waves	20	
		2.4.1	Coastal Analysis – Sediment Transport	21	
3.	Part 2	2 – Trea	atment and Use	25	
	3.1	Ultima	ate Treatment and Use	25	
		3.1.1	Waterfront Access	30	
	3.2	Opini	on of Cost	30	
	3.3	Schedule		31	
	3.4 Recommended Option and Approach		mmended Option and Approach	32	
		3.4.1	Next Steps	34	
3.5 Requirements for Treatment		Requi	irements for Treatment	34	
		3.5.1	Functional Requirements	34	
		3.5.2	Applicable Laws and Regulations	35	
Арр	endix	A	Concept Opinion of Probable Construction Cost		
Арр	endix	В	Coastal Conditions		
Арр	endix	С	Revetment Design		
App	endix	D	Point Betsie Site Visit		



Tables

Table 2.1: Distribution of Water Levels by Return Period	20
Table 2.2: Offshore Significant Wave Height (Hs) by Return Period.	21
Table 2.3: Wave/Water Level Return Periods	21
Table 2.4: Monthly mean Lake Michigan levels at the time of imagery	23
Table 3.1: Opinion of Probable Construction Cost	31
Table 3.2: Project Schedule	31
Table 3.3: The OPCC cost, in 2020 dollars, for a phased implementation of Option 5	32
Figures	
Figure E.1: Location Map	V
Figure E.2: Point Betsie Light Station Shoreline Protection System Existing Conditions	vi
Figure E.3: Point Betsie Light Station SPS Proposed Site Layout	viii
Figure 2.1: Historic Development of Shoreline Protection System	2
Figure 2.2: Photograph of Point Betsie Shoreline Protection System, circa 1890	3
Figure 2.3: Postcard of Point Betsie showing 1890-era SPS, circa 1910	4
Figure 2.4: View of Point Betsie from Lake Michigan showing 1890-era SPS, circa 1917	4
Figure 2.5: "Showing Shore Protection Practically Gone", circa Dec 1938	5
Figure 2.6: Construction of 1940-era SPS at Point Betsie, October 1940	6
Figure 2.7: Ice Formation Over 1940-Era SPS, January 1944	8
Figure 2.8: Undermining, Breaking and Settling of Concrete Apron, August 1947	10
Figure 2.9: Aerial Photograph Showing Groins #1 - #3, circa 1958	10
Figure 2.10: Aerial Photograph of 1944-Era SPS Showing All 7 Groins Currently Existing, circa 1961	11
Figure 2.11: Point Betsie Light Station SPS Existing Conditions	12
Figure 2.12: Typical lean in double sheet pile wall (looking north, to the south of the concrete apron). Leading ranged from 4 to in excess of 6 inches.	
Figure 2.13: Hole dug on landward side of landward steel sheet pile at known tie rod location. Tie rod penetrate wall, indicates tie rod may have been welded to the waterside face of the sheet pile	
Figure 2.14: Steel cap beam and double wall (looking north, north apron curb can be observed). Disto steel cap beam, lean in wall. Cracking and spalling of apron.	
Figure 2.15: Behind double sheet pile wall (looking south, north end of apron can be seen). The 3 feet erosion extends 20 to 30 ft behind the double sheet pile wall.	

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



13352.101.R1.Rev1 Page iii

Figure 2.16: End of north wall return (looking west). Severe wall lean. Loss of interlock and sheet pile be	
Figure 2.17: Bluff erosion at west end of stone revetment (looking north). Slope stability failure of bluff, approximately 25 feet wide.	14
Figure 2.18: Erosion behind north return wall (looking east). Erosion extends 20 to 30 feet behind sheet return wall.	
Figure 2.19: End of stone revetment (looking east). Erosion occurring at end of revetment	. 15
Figure 2.20: Bluff erosion at west end of stone revetment (looking northwest). Slope stability failure of blu approximately 25 feet wide.	,
Figure 2.21: End of stone revetment at north return wall (looking west). Erosion. Sever wall lean	. 15
Figure 2.22: South return wall (looking west). Small lean in wall. Short curtain wall observed stemming of south return wall.	
Figure 2.23: End of stone revetment (looking east). Erosion occurring at end of revetment	. 17
Figure 2.24: South Concrete Apron (Looking West-Northwest). Apron curb has cracked and settled. Sor erosion and washout appears to have occurred to the south of the apron (once the concrete apron ends extending all along the south extent to the South Return Wall).	,
Figure 2.25: Concrete apron (close up of large cracking and spalled area). Exposed welded wire mesh, does not appear to have been supported during concrete pour, and was pushed to bottom of concrete, verves little purpose.	where it
Figure 2.26: Groin 7 (looking west). Separation observed between wall and groin	. 18
Figure 2.27: Groin 6 (looking west). Separation and bent or missing sheet between wall and groin	. 18
Figure 2.28: Groin 5 (looking west). Separation between wall and groin. Two areas where sheeting appeted be missing	
Figure 2.29: Groin 4 (looking west). Groin has separated from wall. First sheet pile pairs have lost interlo are bent.	
Figure 2.30: Point Betsie shoreline conditions in 1955 and 2012	. 22
Figure 2.31: Historic shoreline comparison at Point Betsie	. 22
Figure 2.32: Shoreline change analysis between 1955 and 2015	. 23
Figure 2.33: Overview of nearshore waves and resulting longshore transport at Point Betsie	. 24
Figure 3.1: Plan View of Option Limits (Option 1 (No-Action) is Not Shown)	. 25
Figure 3.2: Option 2 – Cross-section of North End Revetment	26
Figure 3.3: Option 3 – North End Revetment (top) and West Side Revetment (bottom)	.27
Figure 3.4: Option 4 – North End Revetment (top) and West Side Wall (bottom)	28
Figure 3.5: Option 5 – North End Revetment (top) and West Side Wall and Revetment (bottom)	29
Figure 3.6: Option 5 – Phased Implementation	33

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



Page iv

Executive Summary

This Executive Summary provides a synopsis of the work undertaken for, and findings related to, the Point Betsie Light Station Shoreline Protection System (SPS) Historic Structures Report (HSR). This version of the report is representative of a 95% completion status. This SPS HSR is an amendment to the HSR for the Point Betsie Light Station completed by Quinn Evans Architects in 2005.

The Point Betsie Light Station facilities are located on the eastern shoreline of Lake Michigan, approximately five miles north of the City of Frankfort, MI, as shown in Figure E.1.

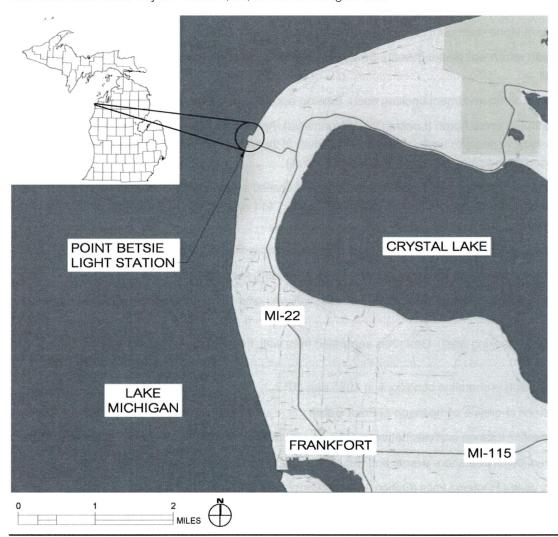


Figure E.1: Location Map

The Point Betsie Light Station shoreline is approximately 900 feet (ft) in length and is located within an extended system of sand dunes, classified as critical barrier dunes by the Michigan Department of Natural Resources (MDNR). The Point Betsie Light Station shoreline is protected by structures comprised of two

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



connecting segments as shown in Figure E.2: 1) a crib wall (inner and outer steel sheet pile walls) and seven steel sheet pile groins; and 2) a steel sheet pile wall/stone revetment on the north end.

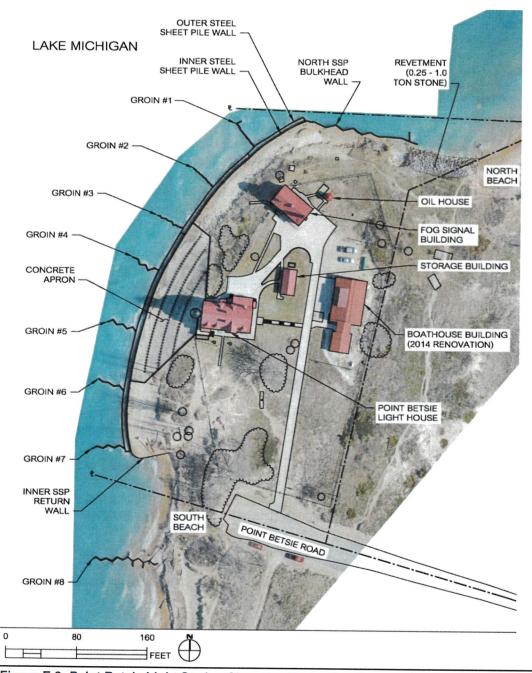


Figure E.2: Point Betsie Light Station Shoreline Protection System Existing Conditions

The structures were last upgraded in 1979 with a repair to the concrete apron, and their condition has since severely deteriorated due to decades of exposure to Lake Michigan waves, water levels, ice, and currents. Therefore, Benzie County, MI, and the Friends of Point Betsie Lighthouse are partnering to implement a project

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



to upgrade the SPS. Prior to moving ahead with the implementation of improvements at the site, the preparation of an Historic Structures Report (HSR) is required per stipulation by the US Army Corps of Engineers (USACE). This approach is also recommended by the State Historic Preservation Office (SHPO). The results of this process will be used as a plan to advance the project through the preliminary design, permitting, and final design stages.

W.F. Baird & Associates Ltd. (Baird) is assisting Benzie County and Friends of Point Betsie Lighthouse in research, concept design, and preparation of the HSR.

Research Methodology

Research for this HSR was conducted through a review of primary source material provided by the Friends of Point Betsie Lighthouse and others including photographs, historic correspondence, contract documents and plan drawings, and conversations conducted for this report. Secondary material was also reviewed, including the original 2005 Historic Structures Report for the Point Betsie Light Station produced by Quinn Evans Architects, and their preceding 2003 Feasibility Report. Other HSR examples for lighthouses in Michigan were reviewed for reporting technique.

The research of the existing conditions for the shoreline protection system was undertaken using aerial and site photography during a field investigation on May 12, 2020. In addition to this field investigation, an analysis of coastal conditions and processes was conducted using a review of wind, wave, and water level data from the National Oceanic and Atmospheric Administration (NOAA) and the USACE Wave Information Studies (WIS) project, as well as historic aerial photography.

Findings & Issues

Based on the research of the historic shore protection system and the site visit that was conducted on May 12, 2020, notable items are as follows:

- <u>Historical Context</u> Some form of shore protection system has been in place at the site for more than 100 years. The structures have included a timber cribbed wall, concrete apron, steel sheet pile groins, steel sheet pile wall, and stone dumped in bulk.
- Condition Site The Point Betsie Light Station complex was constructed along a coast that is primarily a
 sandy shoreline with the prevailing direction of sediment transport to the north/northeast. The construction
 of the previous shore protection system reduced the amount of sediment movement for many years. This
 has resulted in nearly 200 feet of erosion on the northern side of the facility and led to substantial
 overtopping of the existing structure.
- <u>Condition Shore Protection Structure (SPS)</u> The existing SPS condition has a remaining life that is very limited. The existing groins offer no wave protection, and the wall and slab system are not robust enough for continued survival under loads and weathering due to exposure to the open coast of Lake Michigan.

Recommendations for Treatment and Use

The recommendations for treatment and use involve rehabilitation of the shoreline protection system, as characterized in the Secretary of the Interior's Standards for Rehabilitation (36 CFR 67). The rehabilitation would involve a major improvement to the existing SPS. Five options were prepared and assessed. Option 5 was recommended and comprises of several major items, as described below and shown in Figure E.3:

- 1. Wall A steel sheet pile wall to be installed lakeward of the existing structure. The wall will have a length of approximately 540 ft and be anchored with appropriate structural tiebacks.
- 2. Revetment A rubble mound revetment with armor stones ranging in weight from 3-6 tons.

Historic Structures Report - 95% Draft
Point Betsie Light Station Shoreline Protection System



13352.101.R1.Rev1 Page vii

3. <u>Fill and Apron</u> - Placement of fill on the landward side of the new wall. The existing apron will be removed and a new apron, extending the length of the shoreline, will be constructed.

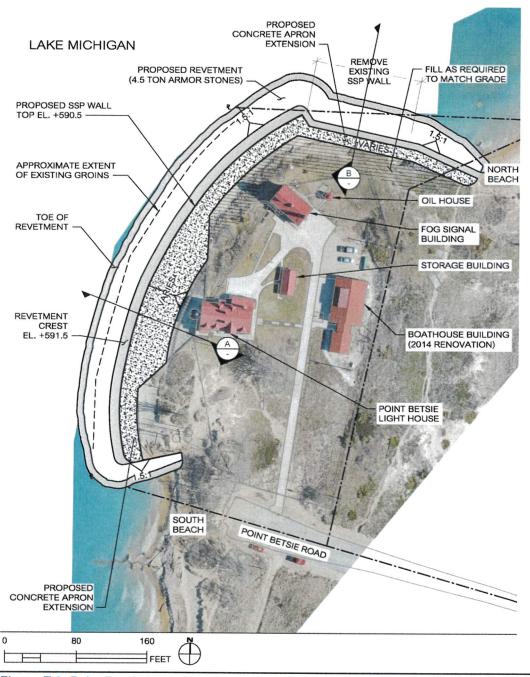


Figure E.3: Point Betsie Light Station SPS Proposed Site Layout

The use of the new SPS will be to protect the Point Betsie shoreline by reducing risk of erosion and decrease the long-term undermining of the historic light station structure. It is noted that, on the north side of the project, the proposed improvement will extend beyond the existing property line and encroach onto US Coast Guard

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



13352.101.R1.Rev1 Page viii

area. Attempts at communication have been made. Although no response has been received, further efforts will be made to establish contact.

The cost of constructing the improvements, as a single construction project, is substantial with a current concept design level estimate of \$5.85 - \$9.50 million. This range is influenced by several factors, such as the current high demand for stone in the Great Lakes, using a marine based construction approach, lack of field data (bathymetry, soil borings, etc.), and conservative design assumptions. We anticipate further analysis may result in a reduction in cost as the design of the structure should become more efficient.

Baird.

1. Administrative Data

This Shoreline Protection System Historic Structure Report (SPS HSR) is an amendment to the HSR for the Point Betsie Light Station completed by Quinn Evans Architects in 2005.

The Point Betsie Light Station, more commonly referred to as the Point Betsie Lighthouse, is located on the eastern shore of Lake Michigan, in Benzie County, MI. The light station lies approximately five miles north of the city of Frankfort, MI, on a promontory within 150 feet of the Lake Michigan shoreline. It is approximately 0.6 miles off Michigan Highway 22, connected by Point Betsie Road.

The Point Betsie Light Station was listed in the National Register of Historic Places in 1984 (Reference #84001375), and it was noted as being significant to the State of Michigan. In the Historic American Engineering Record (HAER) Inventory for the Register listing, its period of significance was noted to be 1854 to 1945. In 1998, the light station was transferred from the U.S. Coast Guard to the Bureau of Land Management (BLM). In 2004, the BLM transferred the complex to Benzie County, who in partnership with the Friends of Point Betsie, maintain it today.

The area features a series of dunes, formed during the Nipissing stage, that separate Crystal Lake from Lake Michigan. As such the shoreline in the area is mostly sandy mixed with gravel. The Point Bestie Light Station complex is sited within the primary shoreline dune.

The existing Shoreline Protection System (SPS), consisting of a crib wall structure and groins on the west side and wall and stone revetment system on the north side, has prevented erosion in the immediate area of the light station.

The existing shorelines, north and south of the light station, are sand beaches with sand dunes upland. The north shoreline appears to have receded, which would indicate that the prevailing littoral drift direction is from the south to the north. The shoreline protection system begins approximately 160 feet south of the southwest corner of the light station building.

The site re-development plan proposes to meet the physical needs of the light station site while simultaneously minimizing the impact on the dune environment and adjacent neighbors. All work in the area of the light station will be required to be accomplished under permit from Michigan Department of Energy, Great Lakes and the Environment (EGLE) (this is a joint permit between EGLE and USACE). This is due to the site's location along the shoreline being within a 'critical dune area'. Development at and around the site is subject to Part 353, Sand Dunes Protection and Management, Natural Resources and Environmental Protection Act - 1994 PA 451.¹

The contents of this HSR are gathered from the following:

- Original field work and archival research
- The Point Betsie Lighthouse Shoreline Protection Inspection, Evaluation, and Improvement Recommendations (produced by Matrix Engineering, Inc. in 2002)
- The Feasibility Study for the Michigan Lighthouse Assistance Program Grant
- The Historic Structures Report for the Point Betsie Light Station (produced by Quinn Evans Architects in 2005)
- Archival material provided by the Friends of Point Betsie Lighthouse

Historic Structures Report - 95% Draft
Point Betsie Light Station Shoreline Protection System

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¹ Point Betsie Feasibility Study

2. Part 1 – Developmental History

2.1 Historical Background and Context

2.1.1 Development & Chronology of Use of the Shoreline Protection System

Figure 2.1 below illustrates the evolution of the SPS at the Point Betsie Light Station complex. Detailed discussion of each SPS system is provided in this section.

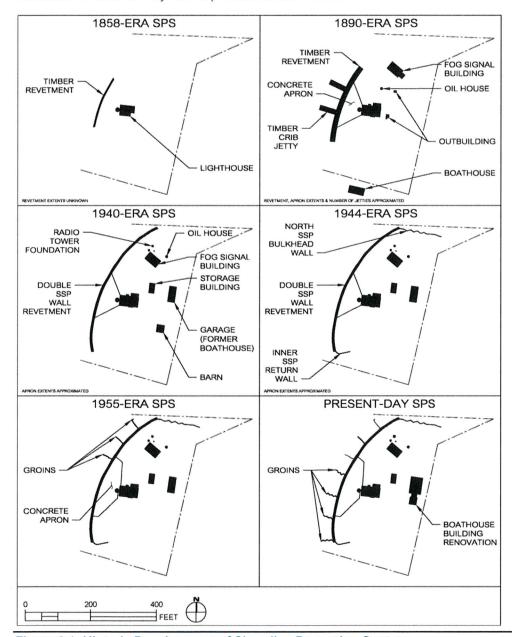


Figure 2.1: Historic Development of Shoreline Protection System

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



The scale and position of the features shown in Figure 2.1 were obtained from review of historical documents and are approximate.

"Point Betsie" was originally known by the French as Point Aux Bec Scies meaning "sawed beak point," probably due to the shape of the shoreline in the area or perhaps in reference to the merganser ducks characteristic to the area in its early years.

The first lighthouse at Point Betsie was completed in 1858, with an original 37-foot tower. As is noted in the National Register of Historic Places listing, Point Betsie was such an important coastal light that the Lighthouse Board suggested in 1880 that the original tower be replaced with a new 100-foot structure.



Figure 2.2: Photograph of Point Betsie Shoreline Protection System, circa 1890

In April 1890, the tower foundation was strengthened by underpinning it with a ring of concrete four feet deep and 16 feet in diameter at the base (see Figure 2.2), and at the same time, a new revetment (see Figure 2.3 and Figure 2.4) was built to reduce the erosion problems that had undermined the original structure.² The new revetment was 240 feet long and curved to follow the shoreline, consisting of:

Historic Structures Report - 95% Draft
Point Betsie Light Station Shoreline Protection System



² Historic American Engineering Record Inventory for Point Betsie Light Station. July 30 1979. National Register of Historic Places.

• Two rows of [timber] piles 14 feet apart, driven from 10 to 12 feet into the sand, the outer row at a distance of 18 inches from centers with the tops cut at a uniform level with the water. The inner row at distances of 6 feet from centers has the tops cut off 1 foot above the water. Above this, there is a crib construction of timber a foot square, four courses in height, with cross pieces every 12 feet. The interior is filled with broken stone ballast [fill material], and the top is planked with 3 by 12-inch timber with 2-inch-spaces. The jetties are of similar construction, 14 by 50 feet at a distance of 75 feet from each end of the revetment.³

The 1890-era shoreline protection system (SPS) likely included the construction of a concrete apron, as is evidenced in Figure 2.1.

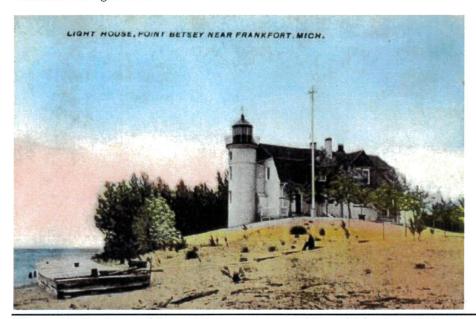


Figure 2.3: Postcard of Point Betsie showing 1890-era SPS, circa 1910

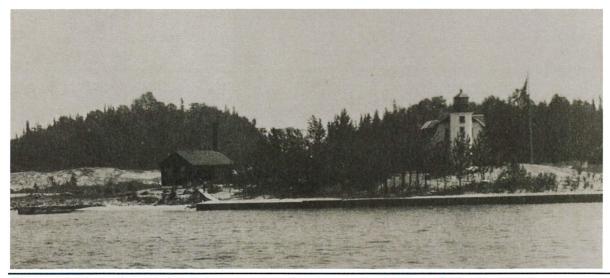


Figure 2.4: View of Point Betsie from Lake Michigan showing 1890-era SPS, circa 1917

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³ Source 17 in the HSR

This shoreline protection system remained in place from 1890 until the fall of 1940. By 1938 and 1939, the 1890-era shoreline protection system was showing signs of deterioration (see Figure 2.5), including a weathering of the crib courses and braces and a loss of fill material. In 1939, the ownership of the Point Betsie Light Station was transferred from the by-then defunct Bureau of Lighthouses to the United States Coast Guard (USCG). Also, during this time, the boathouse at Point Betsie either collapsed or was moved or removed, as photographs of the shoreline indicate a ruined structure on the shoreline to the south of Point Betsie.



Figure 2.5: "Showing Shore Protection Practically Gone", circa Dec 1938

By October 1940, construction was underway for a replacement of the timber crib revetment dating from 1890. Walter Toebe & Co. of Munising, MI, undertook the work to rebuild the revetment, which is documented in a 1941 plan drawing from the USCG – Chicago District. This revetment consisted of new SP-7 steel sheet pile (SSP) walls replacing the existing timber pile walls. The SSP walls maintained the previous dimensions of 14 feet between walls but appear to have been driven deeper underground, approximately 13 to 15 feet. The inner SSP wall was eight feet above the lake level (marked as 578.5' in 1941 – datum unknown), and the outer SSP wall was crenelated every other sheet, at the water or one foot above the water. These walls were anchored with tie rods 5'-0" on center, approximately one foot below the water. In 1890, rock fill was added between the walls. Additionally, a new length of 50 ft of SSP wall was built at the south, returning perpendicular to the shore. This is the first appearance of this return wall. It is unknown if the jetties, which ran perpendicular to the 1890-era SPS, were removed during this phase of construction.

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Figure 2.6: Construction of 1940-era SPS at Point Betsie, October 1940

The 1940-era shoreline protection system (see Figure 2.6) was not kept in place for long, because around May 28, 1943, a Lake Michigan storm damaged the SPS at Point Betsie to the point where the USCG dispatched staff to survey Point Betsie in preparation for the next iteration of shoreline protection. As E.R. Luedtke, the engineer who would eventually construct the 1944-era shoreline protection system recalls:

"5/28/43

Ensign Ahrens – classmate from U. of Wis. called on me. In Frankfort for the purpose of making a survey of washout at Point Betsie. Called at the house in the evening. Ahrens to make sketches of proposed groins and mail them to me for approximate estimate of the cost.

E.R.L."

The next year would see a start-and-stop effort between the USCG and Luedtke Engineering Co. to negotiate and install the 1944-era SPS.

On August 23, 1943, E.R. Luedtke corresponded with R.D. Gault, Lt. Commander in the Civil Engineering office of the USCG – Chicago District, noting that the neighbor to the south of Point Betsie, Arvid Zetterberg, had asked Luedtke Engineering to explore protective work. Luedtke informed Gault that "although the initial damage to your property occurred as the result of a spring storm, further scour is continually taking place" and that unless work was undertaken to protect Point Betsie, the Zetterberg property could not be saved. Luedtke commented that the "continued scour which is now occurring north and south of the lighthouse is undoubtedly

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System

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⁴ Correspondence, E.R. Luedtke to R.D. Gault, 8/23/1943

due to the combination of high water and changed currents set up by the steel wall driven in front of the lighthouse in 1940," and that the cheapest solution would be a series of groins.

Lt. Commander Gault replied to Mr. Zetterberg, thereafter, informing him that plans had been prepared for seven groins, between 112 and 144 feet long, to be constructed at Point Betsie., Upon approval by the Coast Guard headquarters, work was slated to commence as soon as possible in the fall. A related correspondence between the USCG and Luedtke took place around this time, informing Luedtke of the opportunity to submit a bid on the work at Point Betsie. E.R. Luedtke noted on September 27, 1943:

"9/27, 3:00PM

Telephone call from Ensign B.A. Ahrens, in regard to Point Betsie & Big Sable. Groins have been abandoned. Point Betsie: Will continue wall 75' north with 50' return. 175' wall changed from single to double. 75' south with 50' return. Double walls filled with stone (330 tons). Steel sheeting 13' & 14'. No walers, some tie rods."

In 1943, Luedtke submitted a bid for the work at Point Betsie of \$12,615 dollars (approximately \$188,625 in 2020, adjusted for inflation). A telegram from the USCG - Chicago District, dated October 13, 1943, informed Luedtke that their bid for the work at Point Betsie had been accepted, and that "piling is being unloaded and hauled to site… Notify this office in advance as to date construction will commence."⁵

However, disputes between the USCG and Luedtke occurred over the terms of the contract – including an episode where Luedtke withdrew their bid in frustration with the bureaucracy of the USCG, only to be informed that very day that their contract had been approved, resulting in further delays via mail. These disputes pushed the notice to proceed until December 13, 1943, which fortuitously coincided with the first heavy snowfall of winter. As Luedtke related in a letter at that time:

"Dear Sir:

This will acknowledge receipt of your telegraphic notice dated December 13 to proceed with the work covered by contract T18CG-2623. The telegram was delivered to us at 9:25 AM December 14.

Your telegram requests that we notify you when we expect to start the work. The snow storm of December 13 and 14 has made the starting date indeterminate due to the hazard of moving a crane over road leading from the highway to Point Betsie. As explained to your Lieutenant Command R.D. Gault in a telephone conversation on 11 December 1943, because of the two month delay in authorizing us to proceed with the work we have had to completely revise our plans for handling the work. All our construction units consist of skid mounted steam cranes mounted on barges. The work at Point Betsie can be most expeditiously handled with a crawler crane. We had made arrangements to rent a crawler crane. When the delay reached the stage where it appeared that winter weather would interfere with the proper progress of the work and probably result in our payment of rental on an idle crane throughout the winter months, we found it necessary to protect ourselves against this additional loss by purchasing a crane. Delivery of the crane was postponed until receipt of your notification as there was no object in unloading the crane at our yard, then alter having the expense of moving it to Point Betsie.

Yesterday, upon receipt of your telegram we called our Grand Rapids, Michigan representative who has today reported back that the crane will be loaded at Ypsilanti, Michigan

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



13352.101.R1.Rev1

⁵ Telegram, 10/13/1943

tomorrow and delivery can be expected on the morning of Saturday, December 18. Delivery will be at Point Betsie if our crane operators believe that the crane can be moved over the snow-covered access road without sliding off and wrecking the machine. If delivery at Point Betsie is deemed to hazardous the crane will either be delivered to our yard and we will still have the expense of a second move as soon as conditions are more favorable or delivery will be made on the highway near the access road if that can be done without creating a traffic hazard.

Obtaining the stone has also been complicated by the snowfall. Our supplier intended to furnish field stone which is now hidden by snow (ref. Figure 2.7). We intend to examine into this situation further.

If conditions permit we will start the work Monday, December 18, if not we will start the work when conditions do permit."

Conditions would not permit work to begin until April 17, 1944, almost four months later.



Figure 2.7: Ice Formation Over 1940-Era SPS, January 1944

The work at Point Betsie to construct the 1944-era SPS took from April 17, 1944 to June 5/6, 1944. However, during this time, the disputes between the USCG and Luedtke regarding the terms of the contract would continue and expand. In Luedtke's opinion, the material furnished by the USCG was not up to specification, and left to Luedtke to furnish materials, such as sheet pile tees and corners (despite the standard practice being that the government would furnish it), and in some cases materials were simply wrong ("washers")

Historic Structures Report - 95% Draft
Point Betsie Light Station Shoreline Protection System

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punched for ¾" bolts instead of 1" bolts... will Coast Guard pay?" noted Luedtke on April 12th, 1944). The USCG Cleveland office during this time took over responsibility for the project for the USCG - Chicago District, and in their letter to D.J. Tobin, Chief Carpenter's Mate and the USCG representative at Point Betsie during construction, they spelled out a number of issues that Tobin was to raise with Luedtke, including a reduction of the price to be paid per foot of piling and wall, and that Luedtke was responsible for covering any costs related to miscellaneous work.

"It is the interpretation of this office that the connection of new work to existing work is definitely required by the terms of the contract to be performed by the contractor. In this case reference is made to page 13, paragraphs 1 and 2 of the contract specifications, which in part read as follows:

"Work required will include the construction of two sections of rock-filled double wall revetment, the alteration of the present single-wall portion of the revetment into rock-filled double wall similar to the above new sections, the construction of single-wall returns at each end of the revetment, the construction of rock wall atop old crib jetty, the filling of some areas behind the revetment and returns with sand, and the performance of all miscellaneous work incidental thereto." (Original emphasis)

"The Government will furnish all necessary tie rods, plate washers, and nuts and a quantity of used steel sheet piling believed to be somewhat in excess of minimum requirements and will deliver same, freight paid, to the railroad yard at Frankfort, Michigan. The piling will be in various lengths ranging up to 50 feet more or less. The contractor shall furnish all other materials, all equipment, and labor necessary to the completion of the work.""

The necessary material was some 325 tons of stone, no small quantity, which would fall upon Luedtke to furnish. As W.C. Helbig, Civil Engineering Officer, wrote on May 11 to Tobin, to direct to Luedtke, "the requirements of the contract specifications for type, weight, and quality of stone fill to be placed by the contractor should be strictly adhered to." The seemingly dogmatic orthodoxy of the USCG appears to have incensed Mr. Luedtke, who it is noted on May 16, 1944 had the following conversation:

Luedtke: "I have changed my mind about writing a letter (to CCM Tobin – instead speaking to him). You are the one that told me we must get quarry stone and you are the one I am telling that we cannot get it. You have known since last December (Dec. 12) that we were planning on using field stone."

Tobin: "I told Mr. Galt about your statement that a heavy snowfall would make it impossible to find the field stone."

Luedtke: "Galt knew we were planning on using field stone before that. I told him in a telephone conversation that our only source for quarry stone in this area was Inland Stone and they could not furnish the size required therefore we must use field stone and that if the contract did not come through soon we might have a heavy snow and we would no longer be able to get the stone.

No one has written a letter to me and I am not going to write a letter to anyone. My first experience with the Coast Guard goes back 20 years when I first started with the U.S. Engineers and found the Coast Guard too lazy & shiftless to read the gage for me at hourly intervals. I have nothing but disdain and contempt for the ability of Coast Guard engineers. They do not begin to compare with West Point or Annapolis men."

Historic Structures Report - 95% Draft
Point Betsie Light Station Shoreline Protection System



13352.101.R1.Rev1

Luedtke and the USCG would complete their business by July 24, 1944.

Though the work performed by Luedtke Engineering Co. in establishing the 1944-era SPS remains to this day, there were further modifications and degradations to the SPS between then and now. By 1947, the concrete apron above the steel sheet pile walls had begun to be undermined and was consequently settling and breaking (see Figure 2.8).



Figure 2.8: Undermining, Breaking and Settling of Concrete Apron, August 1947

Furthermore, the design idea of integrating groins into the 1944-era SPS – abandoned before Luedtke undertook the work on the steel sheet pile revetment – would return. Between 1944 and 1961, three groins (#1 - #3) would be installed (see Figure 2.9), followed by the remaining four between 1961 and present day (see Figure 2.10). In 1977, work was undertaken to repair the concrete apron, which in the current condition includes three rows of concrete bollards. A steel cap beam was installed along the inner steel sheet pile wall of the 1944-era SPS in 1979.



Figure 2.9: Aerial Photograph Showing Groins #1 - #3, circa 1958

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



13352,101,R1,Rev1 Page 10



Figure 2.10: Aerial Photograph of 1944-Era SPS Showing All 7 Groins Currently Existing, circa 1961

By 1983, the Coast Guard automated the operations of the Point Betsie Light Station. In 1998, the light station was transferred from the U.S. Coast Guard to the Bureau of Land Management (BLM), and in 2004, ownership was transferred from the BLM to Benzie County.

2.2 Physical Description

2.2.1 Site Description

The physical description of the buildings and remainder of the Point Betsie Light Station complex was detailed in the Historic Structures Report produced by Quinn Evans Architects in 2005, and therefore was not investigated or reproduced in this report. A detailed description of each major element (see Figure 2.11) that constitute the shoreline protection system is provided below, which include:

- Crib Wall comprising parallel steel sheet pile walls (Inner and Outer)
- North Steel Sheet Pile Bulkhead Wall
- North End Revetment
- South Steel Sheet Pile Return Wall
- Concrete Apron
- Steel Sheet Pile Groins

Each includes information on dimensions and materials as well as a depiction of the current condition observed from the Baird site visit undertaken on May 12, 2020. Where available, information on the date of construction and name of contractor has been furnished. A complete report of the site visit is included in Appendix D.

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System

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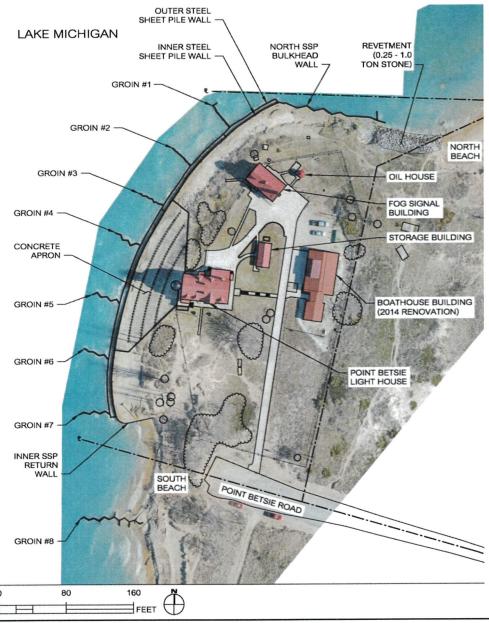


Figure 2.11: Point Betsie Light Station SPS Existing Conditions

Parallel Steel Sheet Pile Walls (Inner and Outer)

<u>Technical Description</u> - The 450 ft. structure was installed in 1943-44 by Luedtke Engineering and comprised twin parallel steel sheet pile walls, having a width of approximately of 6 feet. To connect the two walls, a total of 55 tie rods (1-inch diameter), 5 ft on center were used. Stone fill placed in between each wall was done to provide structure mass and includes a 3.5 ft layer of small stones (up to 80 lbs) overlain by a top course of 250 lb-stone. The sheet pile is SP-7 and/or M115 (outer wall is crenellated 1' each pile), manufactured by Bethlehem Steel Company. From information supplied by the USCG, the pile tip elevation of the inner piles appears to be 571.57 ft, and the tip elevation for the lakeward piles appears to be 569.57 ft. The datum of these elevations is unknown. Sand fill behind the inner sheet pile was sourced locally and placed to 18" below the top of the wall, level for 10 feet before sloping uniformly to existing grade.

Historic Structures Report - 95% Draft

Point Betsie Light Station Shoreline Protection System

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From a review of the contract specifications, it appears that over the historic timber jetty there was to be a "rock wall, terraced on its outer face - - - constructed of the larger stone across the old crib jetty. This wall shall be solidly based on sound portions of existing crib structure and shall be built to conform to the elevation and dimensions of the steel sheet pile revetment." However, the correspondence between Luedtke and the Coast Guard seems to indicate that Luedtke modified this and either simply removed the crib or enough of it to drive pile.

Site Observations:

- The wall appears to be leaning 4-6 inches in general, and in excess of 6 inches at some locations.
- Minimal corrosion observed considering age of steel; however, most typical severe corrosion zone was hidden from view due to high water levels.
- Steel cap beam has been mangled in several locations.
- Tie rods were difficult to observe due to high water conditions. However, by manually excavating the backside of the landward sheet pile wall below a known tie rod location, it was determined that the tie rods likely do not penetrate the sheet pile and are thus likely welded to the waterside face instead. This is a weak connection. Additionally, some tie rods were observed to be severed or missing.
- Significant erosion, in the range of 3 to 4 feet, has occurred to the north of the concrete apron.



Figure 2.15: Typical lean in double sheet pile wall (looking north, to the south of the concrete apron). Lean in wall ranged from 4 to in excess of 6 inches.



Figure 2.15: Steel cap beam and double wall (looking north, north apron curb can be observed). Distortion in steel cap beam, lean in wall. Cracking and spalling of apron.



Figure 2.15: Hole dug on landward side of landward steel sheet pile at known tie rod location. Tie rod did not penetrate wall, indicates tie rod may have been welded to the waterside face of the sheet pile.



Figure 2.15: Behind double sheet pile wall (looking south, north end of apron can be seen). The 3 feet of erosion extends 20 to 30 ft behind the double sheet pile wall.

Historic Structures Report - 95% Draft
Point Betsie Light Station Shoreline Protection System

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North Steel Sheet Pile Bulkhead Wall

<u>Technical Description</u> - The north return wall length is approximately 132 feet and was installed by Luedtke Engineering Co. in 1943-44.

Site Observations:

- The structures appear to be of cantilever construction as no evidence of anchorage was observed.
- Severe lean at east end of return wall, appears to be well in excess of 12 inches.
- Landward of the wall, it appears the area has experienced significant erosion due to overtopping, in the range of 3-4 feet. Water is on both side of the wall. This area has exhibited erosion for nearly two decades as it was also noted in the 2003 Matrix Report.
- The sheet piling has no landward return wall. Thus, the area is exposed and will continue to erode.



Figure 2.16: End of north wall return (looking west). Severe wall lean. Loss of interlock and sheet pile bending.



Figure 2.17: Bluff erosion at west end of stone revetment (looking north). Slope stability failure of bluff, approximately 25 feet wide.



Figure 2.18: Erosion behind north return wall (looking east). Erosion extends 20 to 30 feet behind sheet pile return wall.

Historic Structures Report - 95% Draft
Point Betsie Light Station Shoreline Protection System



Page 14

North End Revetment

<u>Technical Description</u> - Rip rap behind the north termination. This structure may have been constructed originally in 1965 as it is noted simply as "rip rap" on a USCG Plan Drawing and is not mentioned elsewhere.

Site Observations:

- The revetment appears to be a non-engineered section, comprised mostly of dumped stone.
- Bluff erosion and slope stability issues occurring at both ends of stone revetment.
- Shoreline erosion appears to continue eastward of the revetment.



Figure 2.19: End of stone revetment (looking east). Erosion occurring at end of revetment.



Figure 2.20: Bluff erosion at west end of stone revetment (looking northwest). Slope stability failure of bluff, approximately 25 feet wide.



Figure 2.21: End of stone revetment at north return wall (looking west). Erosion. Sever wall lean.

South Steel Sheet Pile Return Wall

<u>Technical Description</u> - The south return wall length is 50 feet. The structure may have been constructed in 1941 as a drawing included in the 2003 Matrix Report shows there was new piling installed, possibly at that time. 1943-44 correspondence from Luedtke notes they were instructed by the Coast Guard to "extend the South return wall for a distance of 12 feet beyond that shown on the contract drawing".

Site Observations:

- Large tree trunks and other debris was observed on top of fill landward of the wall.
- 1 2 feet of erosion behind the wall appears to have occurred along the more exposed areas, just past the curved portion of the wall.



Figure 2.22: South return wall (looking west). Small lean in wall. Short curtain wall observed stemming out from south return wall.

Concrete Apron

<u>Technical Description</u> - The apron has a trapezoidal plan shape with a base that is adjacent to the parallel steel sheet pile wall and runs 200 ft parallel to shore. The apron width extends 60 ft perpendicular from the base to the foundation of the light station building. The apron material is concrete with a thickness of 5-6 inches. Wave energy dissipating blocks are connected to the apron and made of cinder blocks filled with concrete and doweled into the apron) with mild steel reinforcing bar.

Site Observations:

- The concrete apron near the parallel steel sheet pile bulkhead was originally connected to the landward portion using rebar that was welded to a steel capping beam. All of these connections have completely severed, and the front 13 feet of concrete apron slab has settled 12 to 18 inches.
- Severe cracking and spalling have occurred within the front 13 feet section of the concrete apron. Welded wire reinforcement was observed but appeared to not have been supported during concrete pouring, and thus had settled to the bottom of the slab, thereby rendering it incapable of bridging cracks.

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System

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- Approximately 20 feet of the front of the apron appears to have been installed after the original apron
 construction, as evidenced by the differing concrete coloration, as well as the different cinder block bollards
 used.
- Erosion at the north end of the apron has exposed 4 feet of the apron footing.



Figure 2.23: End of stone revetment (looking east). Erosion occurring at end of revetment.



Figure 2.24: South Concrete Apron (Looking West-Northwest). Apron curb has cracked and settled. Some erosion and washout appears to have occurred to the south of the apron (once the concrete apron ends, extending all along the south extent to the South Return Wall).



Figure 2.25: Concrete apron (close up of large cracking and spalled area). Exposed welded wire mesh, mesh does not appear to have been supported during concrete pour, and was pushed to bottom of concrete, where it serves little purpose.

Baird.

Steel Sheet Pile Groins

<u>Technical Description</u> – There are eight steel sheet pile groins oriented perpendicular to the parallel sheet pile wall and extend seaward by approx. 30 ft. These structures were likely installed in three phases, with groins 1-3 constructed first between 1944 and 1951, groins 4-7 built between 1951 and 1961, and Groin 8 erected in 1943-44 (per correspondence between the USCG and property owner, Zetterberg). The Matrix report indicates that some of the sheets were sized at PZ27, from Bethlehem Steel Company.

Site Observations:

- All of the groins connected to the double sheet pile wall were observed to be severed from the wall.
- There were several groins with missing or bent sheet piles.
- The lengths of the individual groins appear to vary as they have been damaged during service life and parts of them have broken away.
- The capping beam on top of the groins is not present for the entire groin length.

Due to weather conditions during the May 12 site visit, it was not possible to examine the condition of the groins up close. From a review of the 2003 Matrix Report, the condition for each structure was reported as damaged with some sections missing. Given that it has been 17 years since the Matrix review, we expect that each of the groins have deteriorated further.



Figure 2.26: Groin 7 (looking west). Separation observed between wall and groin



Figure 2.27: Groin 6 (looking west). Separation and bent or missing sheet between wall and groin.



Figure 2.28: Groin 5 (looking west). Separation between wall and groin. Two areas where sheeting appears to be missing



Figure 2.29: Groin 4 (looking west). Groin has separated from wall. First sheet pile pairs have lost interlock and are bent.

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



The following items were noted in the historical research, but little to no evidence is available to indicate they still exist.

- 1. Buried Sheet Pile Wall The 2003 Matrix Report notes there is "another sheet pile wall visible in the open [joint of the concrete apron.] 13'-8" from the shoreline bulkhead at the first row of concrete blocks. This entire 13'-8" width of slab is cracked and settled along the entire length of the slab, approx. 160 L.F. This is due to the movement of the shoreline bulkhead and wave splash washing out the base under the slab."
- 2. A shoreline sheet pile wall between Groin #1 and #2 is noted in the 2003 Matrix Report but is not readily visible in aerial photography. Possibly buried, rather than removed.
- 3. The 1965 USCG Plan Drawings indicate there are structures approximately 1' wide by 30' long at the lakeward ends of each of the groins, parallel to the shoreline (forming a sort of capitalized-I shape). There is no evidence in aerial photography that these are either 1) extant or 2) emergent. If they do exist, they are either submerged and/or damaged and/or buried.
- 4. A historic timber jetty (if extant, likely partial, likely buried) near the north end of the bulkhead.
- 5. A historic boathouse foundation, noted in the 1965 USCG Plan Drawings (if extant, likely buried).
- 6. A historic timber crib revetment underneath the extent of the steel sheet pile revetment. It is possible that Luedtke left this structure in place when they undertook their construction.

Overall, based on their condition and the nature of their design, the groins make a very limited contribution to the effectiveness of the existing shoreline protection system. Their primary purpose is to trap sand, which does occur to some extent. Additionally, by providing a vertical wall, Groins No 1 and 7 do block some of the waves approaching the Light Station from oblique angles. However, from reviewing drone footage and observations made at the site, the groin field is simply not effective as a long term solution for reducing overtopping and decreasing risk of storm damage because it does little to dissipate wave energy at the shoreline. Therefore, the proposed solution should include removing the groins as part of the construction process.

2.2.2 Contribution to Character of the Point Betsie Light Station Complex

The shoreline protection system at the Point Betsie Light Station are exemplary of similar shoreline protection systems for lighthouses on the Great Lakes and on other coasts in the United States, and the engineering involved in the system (e.g. steel sheet piling) is common. The presence of an extant concrete apron is noteworthy, as these have typically been removed from other lighthouses in the Great Lakes where they existed, although steel sheet piling reinforcing a concrete caisson or similar structure as shoreline protection can be found at other lighthouses along the Lake Michigan coast, including the Ludington Breakwater Lighthouse, the South Haven light among other places, and at public sites such as along the Chicago waterfront north of the Oak Street beach, the so-called "Concrete Beach".

As the Point Betsie Light Station complex as a whole is listed on the National Register of Historic Places (NHRP), it is unlikely that the shoreline protection system in and of itself would merit being added to the NRHP. However, the shoreline protection system is, a character-defining feature of the Point Betsie Light Station complex, as it has existed as long as the lighthouse itself and has similarly undergone successive periods of maintenance and reconstruction in different forms of similar function (ref Figure 2.1). The implication of the shoreline protection system being a character-defining feature is discussed in Section 3.5.2.



2.3 Coastal Analysis - Water Levels

To assess water levels at the site, data from the nearest NOAA Gage were collected. The recording station is located at Ludington, MI approximately 55 miles south of the project site. Hourly water levels (1970-2020) were downloaded from NOAA tides and currents website for the station 9087023. Terminology is described as follows:

- Static Water Level the elevation of the water surface without surge
- Surge the amount of temporary increase in water levels caused by winds
- Still-water level the elevation of the water surface that reflects a combination of static water level and surge.

From the JPA (Joint Probability Analysis), extreme still water levels were estimated for various return periods and are presented in Table 2.1.

Table 2.1: Distribution of Water Levels by Return Period

			Return Perio	od (years)		
IGLD85 (ft)	2	5	10	25	50	100
Surge	1.02	1.12	1.18	1.25	1.31	1.38
Static WL	580.25	581.33	581.89	582.41	582.71	582.94
Stillwater WL	581.27	582.35	582.87	583.40	583.69	583.92

Climate change impacts to date are reflected in the water level data used for the above analysis. However, how climate change will influence the long-term future water levels in the Great Lakes basis is not a settled matter and scientific research underscores this issue.

As indicated in the International Joint Commission study of the Upper Great Lakes, future water levels will continue to fluctuate within a relatively narrow historical range, but levels that are higher and lower than the range can occur. Additionally, the Environmental Law and Policy Center's 2019 report on the impacts of climate change on the Great Lakes indicates small drops in water levels overall during the 21st century as opposed to previous research indicating larger decreases.

Additional future monitoring and analysis of the Great Lakes system is needed before definitive conclusions can be reached regarding how water levels will change. Thus, for the concept stage of this project we recommend that the design solution is based on a fairly conservative water level return period.

2.4 Coastal Analysis – Waves

The offshore wave climate at Point Betsie was defined using data from WIS Station 94362, located in Lake Michigan about three nautical miles from the project site in a nominal water depth of 492.1 ft. The information package that was analyzed covered a period of 35 years, extending from 1979 to 2014. The data set includes waves for all twelve calendar months. Storm waves were identified in the data set and then used to complete for the analysis.

The results indicate that the wave climate is bimodal, with most of the waves approaching from the southwest, and the north. The largest waves approach from the southwest, between 210° and 240°; and 330° and 30°, based on the wave height by direction distribution table (ref Appendix B).

Baird.

Table 2.2: Offshore Significant Wave Height (Hs) by Return Period.

Tr	1.5	2	5	10	20	25	50	100	200	500
Hs (ft.)	14.8	15.2	17.4	19.1	20.8	21.4	23.2	25.0	26.9	29.4

The Hs values in Table 2.2 above are used as inputs for Goda Equation wave transformation, which incorporates lakebed and shoreline geometry to determine the breaking wave height for a given return period.

The slope of the lakebed near the site also has a controlling effect on the breaking wave height. In general, a steeper nearshore slope results in larger breaking waves. The steepest profile was used to calculate a nearshore slope of approximately 1V:59H. A conservative slope value of 1V:50H has been used for design calculations.

As shown in Table 2.3, Goda wave transformation calculations were performed to determine the significant breaking wave height at the toe of the structure using the following wave/water level return periods. The predicted waves at the shoreline do not include a reduction due to shore ice and thus reflect an ice cover on the Great Lakes which may be representative of climate change impacts that limits ice formation.

Table 2.3: Wave/Water Level Return Periods

Н	s-breaking by Wave/Water L	evel Return F	Periods	
	TR _{wave} /TR _{wl}	10/25	25/10	100/100
	Wave (ft.)	19.06	21.36	25.00
	WL (ft. IGLD 85)	583.4	582.87	583.92
	H _{s-breaking} at toe (ft.)	10.0	9.9	10.8

2.4.1 Coastal Analysis – Sediment Transport

A total of 21 series of aerial imagery collected between 1953 and 2018 were downloaded and reviewed by Baird in consideration for shoreline change analysis. The imageries from 1955, 1977, 2012, and 2018 were identified as suitable for our analysis considering resolution, sunlight conditions, and the minimum required number of years between successive images. Additionally, a 2015 shoreline was extracted from FEMA topographic LiDAR data collected for Benzie County on April 24 to 30, 2015.

Figure 2.30 shows shoreline conditions at Point Betsie Light Station seen in May 1955 and April 2012 images. It appears that installation of the steel sheet pile groins in front of the original bulkhead wall had just started, and three of them were complete by May 1955 (to hold sand in front of the bulkhead wall perhaps in response to high lake levels). No sign of significant shoreline erosion is visible in the 1955 image, but the 2012 image shows considerable erosion on the north side of the bulkhead. It is possible that noticeable erosion on the north side of Point Betsie started with installation of the series of sheet pile groins.



Figure 2.30: Point Betsie shoreline conditions in 1955 and 2012

Figure 2.31 shows shoreline comparisons for approximately 2,000 foot stretches of shoreline on either side of Point Betsie Light Station. Note that shoreline comparisons derived from aerial imagery are sensitive to lake level conditions at the time of photography. Nevertheless, Figure 2.31 indicates that while the shoreline immediately south of Point Betsie has been relatively stable, the shoreline immediately to the northeast has been eroding since 1955. This pattern suggests that net littoral transport in the area is from south towards northeast. It is possible that sediment is already bypassing the light station bulkhead, and erosion of the north shoreline over the years has slowed down (as long as flow of sediment from south continues).



Figure 2.31: Historic shoreline comparison at Point Betsie

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



Lake level conditions at the time of each imagery are summarized in Table 2.4. We note that monthly average lake level in May 1955 was approximately only 0.4 ft higher than the lake level in April 2015. Examination of the 2015 elevation data indicated that the impact of this difference on the 2015 shoreline position would have been insignificant for our analysis. Therefore, shoreline change analysis was completed along extended reaches of shoreline on either side of Point Betsie between 1955 and 2015 (i.e., for a 60-year period), and the results are presented in Figure 2.32.

Table 2.4: Monthly mean Lake Michigan levels at the time of imagery

Date	Monthly Average Lake Level (ft, IGLD'85)
1955-05	580.4
1977-04	579.3
2012-04	577.7
2015-04	580.0
2018-07	580.8

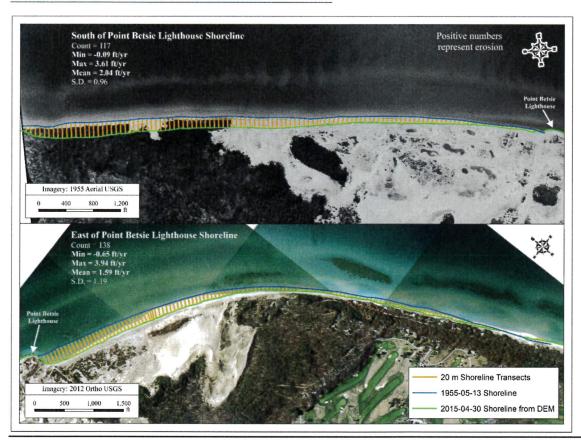


Figure 2.32: Shoreline change analysis between 1955 and 2015

Figure 2.32 shows shoreline comparison results at Point Betsie for the 1955-2015 period. Shoreline change was measured at 66-foot intervals in several sections along the shoreline. The top panel in Figure 2.32 shows shoreline comparison along approximately 6,000 ft of shoreline to the south of Point Betsie. Shoreline erosion varied from approximately 3.6 ft/year near the south end of this section to nearly zero (i.e. no shoreline erosion)

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



in the zone immediately south of Point Betsie Light Station. Average shoreline erosion rate in the 1955-2015 period was approximately 2.0 ft/year along this section.

The bottom panel in Figure 2.32 shows the change in shoreline position between 1955 and 2015 along approximately 7,500 length of shoreline northeast of Point Betsie. The shoreline change rate in the 1955-2015 period ranged from approximately 3.9 ft/year of erosion in the zone immediately north of Point Betsie Light Station to approximately 0.7 ft/year of accretion at the east end. Further to the east, the shoreline is part of the large dune system geologically formed in the Platte Lake depression and is considered an accretional/stable shoreline.

Based on the above analysis, the shoreline orientation follows a dramatic change at Point Betsie where from an approximately north-south orientation on the south side of the Point turns northeast immediately on the north side of the Point and continues in an approximately eastward direction further away (~4,000 ft) from the point. The same pattern is repeated in the nearshore bathymetry contours that results in two different wave environments relative to the local shoreline on either side of the Light Station complex as shown in Figure 2.33.

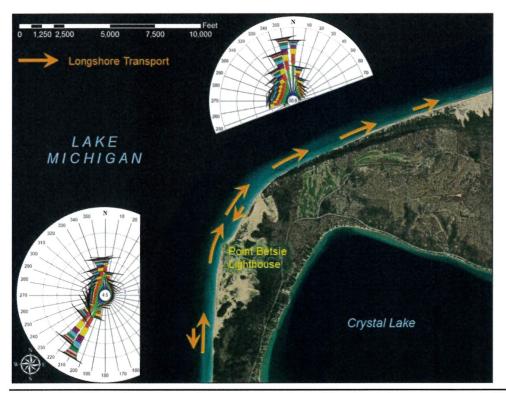


Figure 2.33: Overview of nearshore waves and resulting longshore transport at Point Betsie

South of Point Betsie, waves are bimodal (i.e., they arrive from both north and southwest directions). Waves from the southwest direction are more frequent, and therefore, the longshore transport is predominantly towards the north with occasional reversals due northerly waves. North of Point Betsie, however, waves mostly arrive from the north to west quadrant relative to the local shoreline. This results in a net easterly transport direction towards Platte River Point. The predominant transport direction at Point Betsie is towards northeast, and it is expected that sediment coming from the south is currently bypassing the bulkhead structure reaching the eastern shoreline over nearshore bars that function as bypassing shoals. Immediately north of Point Betsie Light Station, occasional reversal of transport towards the Point may occur under rare northerly wave conditions.

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System

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3. Part 2 – Treatment and Use

3.1 Ultimate Treatment and Use

A range of alternatives for the treatment of the existing SPS were considered and evaluated. A plan view is shown in Figure 3.1 that depicts the extent of each option and cross-sections of various alternatives described below are provided in Figure 3.2-Figure 3.6. Design calculations are provided in Appendix C.

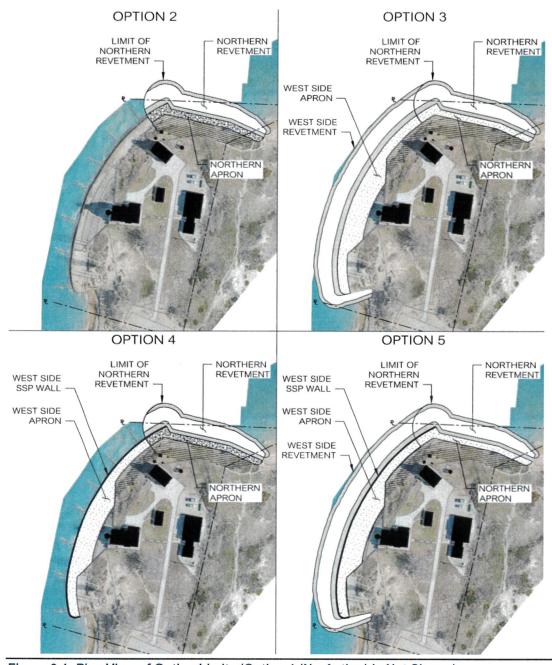


Figure 3.1: Plan View of Option Limits (Option 1 (No-Action) is Not Shown)

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It is noted that on the north side of the project, the proposed improvement will extend beyond the existing property line and encroach onto US Coast Guard area. Attempts at communication have been made. Although no response has been received, efforts to contact them will continue.

Option 1 - No Action — Under this alternative, no action will be taken to improve the condition of the SPS nor to reduce vulnerability of the Point Betsie Light Station facilities. The results of this alternative include the following:

- The deterioration of the SPS will continue and the north end will be vulnerable to rapid failure
- . The risk of coastal storm damage impact to the Pt Betsie Light Station will continue to increase

A No Action alternative offers no benefits to the long-term viability of the Point Betsie Light Station.

Option 2 – North End Revetment (Figure 3.2) – For this alternative, a revetment on the north side of the complex will be constructed. Landward improvements will involve the installation of a reinforced concrete apron. For the landward reach between the new apron and existing concrete apron (approximately 170 ft.), overtopping protection will be comprised of stone as a temporary measure. This option provides benefits on the north end of the shoreline, including:

- Shoreline stabilization
- Reduction in overtopping
- Decrease in scour of the adjacent upland area

The disadvantage of Option 2 is that it improves only the north end, leaves more than 450 ft of the existing SPS to deteriorate from overtopping, and allows continued degradation of the crib structure. Additionally, the waterfront will be accessible only at the north end, where the improvement occurs.

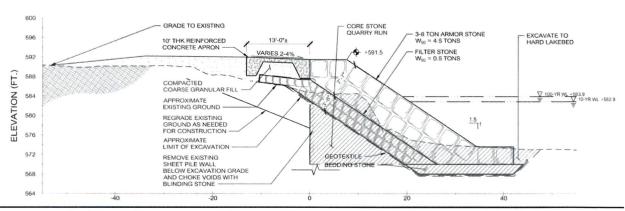
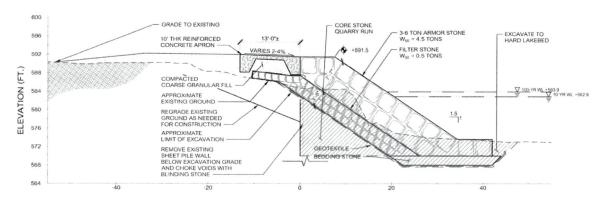


Figure 3.2: Option 2 - Cross-section of North End Revetment

Of all the areas observed during the site visit, damage of the backshore due to wave overtopping was the greatest on the northern side of the site. Therefore, it is important to construct an apron along the entire length in this reach. Where the existing sheet piling is no longer present the apron would abut to the stone revetment, where the apron subgrade, typically comprised of a granular material (with little to no fines), is encased in geotextile fabric such that, as water recedes back towards the Lake, there is no loss of subgrade to the concrete apron. Alternative options to the concrete apron extension could be considered which would serve a similar purpose, depending upon aesthetics, price, and functionality requirements.

Baird.

Option 3 – North End Revetment and West Side Revetment (Figure 3.3) – This approach involves constructing Option 1 and building a revetment over the existing crib structure on the west side and installing an apron for the entire length.



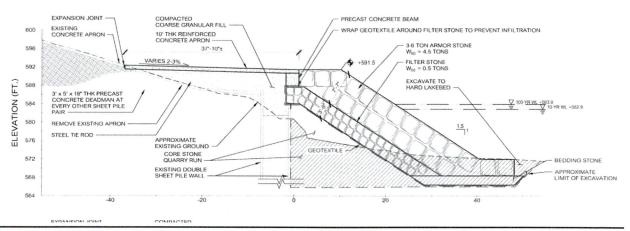


Figure 3.3: Option 3 - North End Revetment (top) and West Side Revetment (bottom)

The solution is somewhat similar to the Matrix Engineering solution. The design offers the following:

- A substantial improvement in reduction of overtopping damage for the entire site
- Robust shore protection that stabilizes the shoreline
- An apron that provides for increased protection of the full length of the shoreline
- The entire waterfront could be accessible to visitors of the Light Station

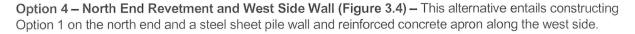
The disadvantage of Option 3 relates to the apron and revetment crest.

<u>Apron</u> - During overtopping events, the crest of the new revetment will have flow in the voids and allow movement of fill through the aging wall at several locations, leading to long term cracking of the apron slab.

Revetment Crest - The revetment is founded on a failing crib structure, with most tie rods missing or broken and a front wall that is leaning noticeably and continues to move. This type of deterioration cannot be corrected effectively. With time, the wall will continue to deteriorate and allow movement of the armor layer, which reduces the integrity of the revetment.

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System





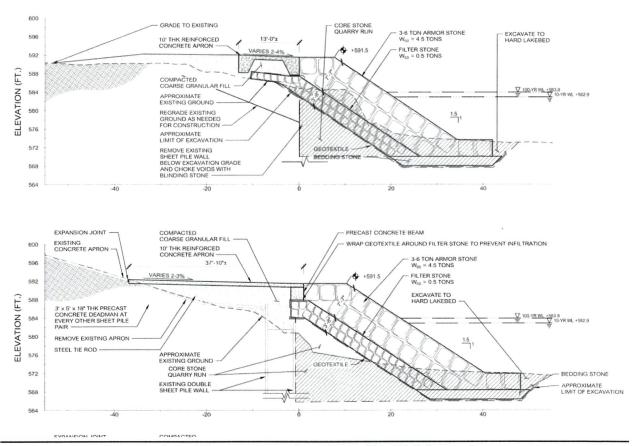


Figure 3.4: Option 4 – North End Revetment (top) and West Side Wall (bottom)

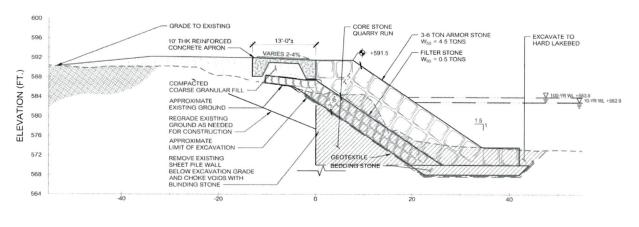
This solution provides:

- A substantial improvement in reduction of overtopping damage for the entire site
- Robust shore protection that stabilizes the shoreline
- An apron that provides for increased protection of the full length of the shoreline
- A waterfront that could be accessible to visitors of the Light Station

The main drawback for this option is that incoming wave energy is not dissipated as the wall is a fully reflective surface. During a storm event, there will only a slight overtopping reduction on the west side of the side compared to the existing conditions. However, the risk of overtopping damage will be decreased due to the reinforced concrete apron.

Baird.

Option 5 – North End Revetment and West Side Wall and Revetment (Figure 3.5) - This approach involves a shore protection system that is entirely independent of the existing crib. It includes the main features of Option 1, a new steel sheet pile wall on the west side that encapsulates the existing crib, a stone revetment adjacent to the wall, and a concrete apron placed landward along the entire length of the of the shoreline.



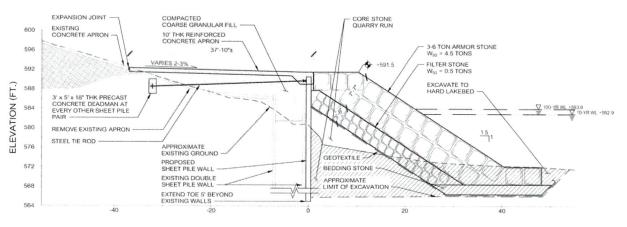


Figure 3.5: Option 5 - North End Revetment (top) and West Side Wall and Revetment (bottom)

This solution provides:

- The greatest improvement in reduction of overtopping damage for the entire site compared to the other options.
- Most robust shore protection that stabilizes the shoreline better than all other options
- An apron that provides for increased protection of the full length of the shoreline
- The entire waterfront could be accessible to visitors of the Light Station
- Longest service life of all options considered

Option 5 also eliminates the main drawback of using the existing crib as a revetment foundation. The new steel sheet pile wall will have tight interlocks and eliminate the risk of movement of the supporting slab fill.

Baird.

Other design solutions considered, but not advanced:

Offshore Structures - Create a sheltered wave climate to reduce the height of the wave impinging on the structure. To achieve this condition would require constructing offshore reefs or a series of offshore breakwaters. We have not pursued this option further as the regulatory process is would be lengthy and complicated as the project footprint would impact the lakebed over a very wide area.

<u>Underpinning</u> – Rather than focusing on the SPS, the foundation of the Light Station could be underpinned. The existing shoreline protection would be left to deteriorate. Although underpinning the Light Station foundation would be beneficial to the structure, it is quite complicated to undertake and would require an extensive field investigation. Additionally, surrounding shoreline would become a major eyesore, limiting the general appeal of the Light Station as a draw for visitors. This option is not being considered further.

Moving the Light Station – Relocating the Light Station to a safe distance away from the shoreline involves intensive logistics such as temporary support, dedicated haul route, precision jacking, lifting, transporting, and placing on a new foundation. Additionally, it will likely require purchasing of additional property as well as relocating all the other buildings near the Light Station. This option is not being considered further.

3.1.1 Waterfront Access

Under design solutions considered, the slab will be rebuilt and made horizontal in the vicinity of the where it meets the water. This provides ample opportunity for the public to get close to the water, which is usually very appealing with visitors of all ages.

Access by able bodied staff and patrons can be done by walking down the apron to the promenade. If the Friends of Point Betsie desire to accommodate visitors with children in strollers, disabled or wheelchair bound visitors then it could be done but would involve some planning. Considerations include:

- Accessible Access grades approaching the apron should conform to ADA guidelines and would involve grading the approach(es) to the apron with ramps. Ramps have a maximum slope of 1:12 and a width of 36 inches with handrails. Landings at top and bottom of each slope must 60 inches, and intermediate landings would need to be provided every 30 – 40 feet depending on slope. Local ADA guidelines should also be consulted.
- 2. Removeable The ramp system must be removeable to prevent pavement damage during the winter months and a suitable storage area made available. The ramp should ideally be light enough to be installed with manual labor or lightweight equipment.

From a review of web-based vendors, the cost of a system could range between \$5,000 to \$20,000, depending on the layout of the ramp system and other items such as elevators and structures.

If the Friends would prefer to prevent visitors from traveling to the water's edge, then a temporary fence system could be installed. Due to the severity of coastal storms a fencing system should be able to be quickly installed and rapidly removed. Cost vary significantly due to material type and aesthetics and can range from \$5,000 to \$10,000.

3.2 Opinion of Cost

For Options 1 through 5 a range of opinions of probable construction costs (OPCC) have been prepared. Table 3.1 provides a breakdown of the OPCC on a per option basis. The costs presented are for the price of the entire option being constructed in 2020 dollars.

Historic Structures Report - 95% DraftPoint Betsie Light Station Shoreline Protection System



Page 30

Table 3.1: Opinion of Probable Construction Cost

Option	Low End of OPCC Range	High End of OPCC Range
1 – No Action	No cost	No cost
2 – North End Revetment	\$1.75 million	\$2.80 million
3 - North End Revetment and West Side Revetment	\$4.75 million	\$7.70 million
4 - North End Revetment and West Side Wall	\$3.25 million	\$5.25 million
5 - North End Revetment, West Side Revetment and Wall	\$5.85 million	\$9.50 million

Allowances for mobilization, overhead, profit, and contingency are appropriate for a concept design stage. The unit process was derived using a crew-based approach that incorporated a construction methodology incorporating access to the site via marine (floating) equipment. Material costs reflect our knowledge of the current market. The overall cost was benchmarked against project currently under construction. It is anticipated that the construction cost will decrease during the design stages as the structures are optimized. The complete OPCC can be found in Appendix A.

3.3 Schedule

The project schedule is provided in Table 3.2. It presents the major remaining activities associated with implementing the project including design, permitting, and construction. Durations are based on published productivity rates and our experience with previous projects.

We have prepared the schedule based on Option 5 being undertaken as one single project. If the Friends decide to implement the project via phasing then we suggest that all engineering, design and permitting is undertaken in Phase 1. In this way, the risk of delaying implementation of Phases 2 and 3, due to regulatory issues, will be greatly reduced.

Table 3.2: Project Schedule

Activity	Duration	Days from Notice to Proceed
Notice to Proceed	0 days	0
Preliminary Design (data collection, modeling, design advancement)	90 days	90
Permit Application	30 days	120
Permitting – Regulatory Review	90 days	210
Final Design & Bid Docs	45 days	255
Bidding	40 days	295
Contracting	30 days	325
Contractor Mobilization	30 days	355
Construction	150 days	505
Final Completion	30 days	535

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3.4 Recommended Option and Approach

If Option 1 (No Action) is taken, then it is recommended that formal monitoring of the SPS be undertaken and include survey transects at select locations and visual inspection, both of which should be performed annually for up to a 3-5 year period.

Option 2 is the minimum treatment we recommend as it addresses the need on the north end, at the most vulnerable part of the existing SPS.

Option 3 is considered a better solution than Options 1 and 2 as it is a more complete solution and provides additional protection to the entire shoreline.

Option 4 is considered a better solution than Options 1, 2, and 3 as it will be independent of the existing structure and provide a medium-term solution as a shoreline protection system.

Option 5 (stone revetment, steel sheet pile wall and reinforced concrete apron) is the best approach for improving the existing SPS as it provides a solution with a longer service life and greatest reduction in overtopping damage compared to the other options.

Implementing Option 5 - From discussions with the Friends group, the current available construction funding is at \$1.1 million. Based on the current condition of the existing SPS and the amount of available funding, implementing Option 5 will require phasing the works as follows:

<u>Phase 1</u> – Construct the revetment at the north end (Option 1) within the next two years. This portion of the system is by far the most vulnerable as water is on both sides of the wall and the back slope has scoured by about three to four feet. The length of this Phase 1 reach should extend from the landward end of the proposed revetment and terminate about 50 ft south of the north end of the crib structure as show in Figure 3.6. To protect the Phase 1 area before construction of Phase 2, it is recommended that apron protection be installed in the form of a scour mat of suitably sized stones from the north end to the existing apron.

<u>Phase 2</u> – Construct the wall and apron along the west side within the next three to four years. In combination with Phase 1 work, the result will be a complete system, like Option 4, one that should last for 25-30 yrs.

<u>Phase 3</u> – Construct the revetment along the west side, adjacent to the wall. This phase can be constructed within 10 years of completing Phase 2. The resulting system should provide robust protection for 20 years beyond Phase 2.

There will be a cost disadvantage as a phased construction process would require multiple mobilizations and inefficiencies would occur with having to re-establish laydown areas, etc.

Table 3.3: The OPCC cost, in 2020 dollars, for a phased implementation of Option 5

Phase	OPCC – Low End of Range	OPCC – High End of Range
Phase 1	\$1.75 million	\$2.80 million
Phase 2	\$1.85 million	\$3.05 million
Phase 3	\$3.00 million	\$4.90 million
Total for Phasing Option 5	\$6.60 million	\$10.75 million

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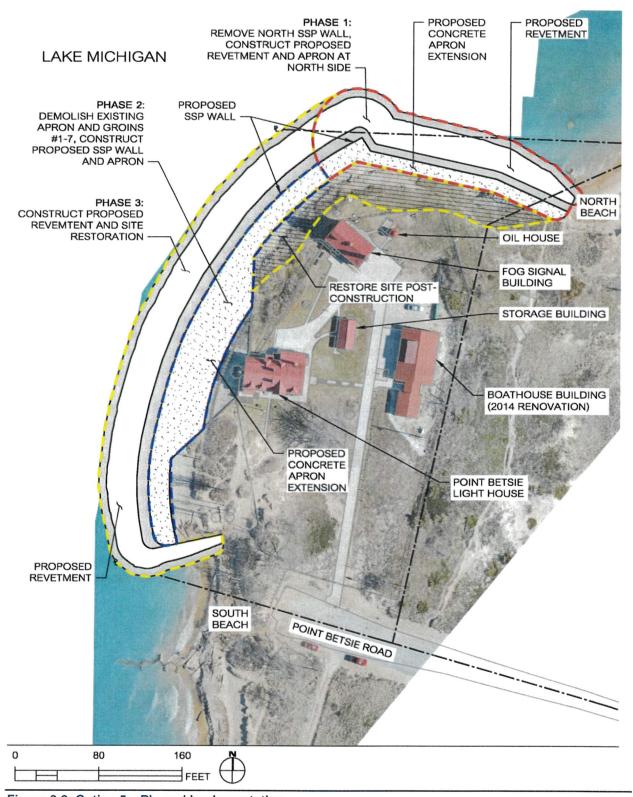


Figure 3.6: Option 5 - Phased Implementation

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3.4.1 Next Steps

To advance the project to a Preliminary Design level, the following is recommended:

- <u>Pre-app Meeting</u> Meet with regulatory officials and understand their concerns regarding the proposed solution. The goal is to determine if there is a "showstopper" issue that influences the design
- <u>Data Collection</u> Undertake a detailed bathymetric and topographic surveys to develop an updated base map of the site. Additionally, borehole drilling should be carried out to determine the soil profile within the footprint of the facilities. Probing of the area adjacent to the crib wall and apron would be a good idea to determine is obstructions exist that may impact the wall anchor design or major obstructions to driving of piles
- <u>Analysis</u> Undertake numerical modeling of waves and sediment transport to establish the design wave height and impacts to the coastline due to the project footprint
- Design Carry out detailed engineering and dimensioning of all aspects of the project elements
- Permitting Prepare a formal application to construct the project and receive approval
- Opinion of Cost Update the opinion of cost for the preferred alternative
- Plans and Specifications Prepare a draft set of plans and specifications

Cost Reduction - Constructed cost reductions during detailed design phases are expected as the design is optimized based on new information and additional analysis as described in the above paragraph. Areas identified that could reduce the project's ultimate cost include:

- Reduced crest elevation Lowering the crest will result in more overtopping, but with the concrete apron this may be acceptable
- <u>Single armor layer</u> Has been utilized in recent Great Lakes projects. Placement can be slow and tricky, and often ends with "paved" placement, which increases overtopping relative to a two-layer revetment with more randomly oriented stones
- <u>Hard lakebed elevation is higher than assumed</u> The results may indicate that the hard lakebed is at a shallower elevation than previously assumed. Due to the water depth at the toe of the structure controls the breaking wave height, this can lead to reduced crest elevation and armor stone size
- Reduced Armor stone size Reduce costs as proportion of less costly stone in the structure increases
- Reduced crest width Currently three stones in most areas, could be two stones or fewer along the tie-ins

An additional means of cost reduction to pursue is to discuss the project with potential marine contractors and see if they consider land-based construction method is feasible, which could decrease estimated costs by up to twenty percent.

3.5 Requirements for Treatment

3.5.1 Functional Requirements

The function of the shoreline protection system at Point Betsie is to reduce the risk of damage to the shoreline around the Point Betsie Light Station complex due to wave overtopping and erosion, including damage to the concrete apron, the proposed revetment, or any of the complex' buildings. The SPS should be robust enough to meet or exceed a 50-year storm standard, per Michigan state regulations described below. The SPS rehabilitation should seek to reduce the risk of disruption to longshore sediment transport around Point Betsie to limit impacts to the beaches to the north and the south of the Point.

As the shoreline protection system is not considered accessible to the public, its design will not take into consideration Americans with Disabilities Act (ADA) compliance for slopes, guard rails, or other protections.

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3.5.2 Applicable Laws and Regulations

The permitting process for the project will involve extensive communication with regulatory agencies and project stakeholders. This is necessary for the applicant to be fully compliant and for the regulatory agencies to obtain the information they need to make an informed decision. It is anticipated that the approach will involve the following steps:

- Pre-Application Meeting A meeting is needed with regulatory authorities for the purposes of introducing them to the project, confirming the type of permits needed, and early stage identification of potential issues.
- 2. <u>Permit Application</u> To proceed with the rehabilitation, a Joint Permit Application will be needed. This permit satisfies regulatory requirements from both the Michigan Department of Environment, Great Lakes and Energy (EGLE) and the USACE. Salient Points include:
 - The Michigan Natural Resources and Environmental Protection Act of 1994, Part 323 "Shorelands Protection and Management" is the applicable law pertaining to the rehabilitation of the SPS at Point Betsie.
 - Point Betsie is located within both a Critical Dune Area and a High-Risk Erosion Area. These
 designations carry particularities that will need to be addressed in the permitting process. Per Part 323
 Administrative Rules, R 281.22 High-risk erosion areas, (8), the permit application shall contain all the
 following information:
 - (a) A legal description of the property.
 - (b) A description of the proposed permanent structure.
 - (c) A sketch of the proposed site which shows the location of the proposed permanent structure in relation to the location of the property lines and prominent features.
 - (d) The signature and address of the applicant.

Furthermore, per Part 323 Administrative Rules, R 281.22 High-risk erosion areas, (11), A special exception shall be granted, and a portion of the required setback distance waived, for the installation of an approved shore protection project if all of the following conditions are met:

- (a) A local agency is contractually responsible for the perpetual care of the shore protection structure. The responsibility will be defined in a written agreement between the department and the local agency. The local agency shall agree to perform maintenance or repairs to maintain the integrity of the shore protection. The local agency shall submit to the department a financial plan for maintaining the structure.
- (b) The shore protection structure is designed and constructed to meet or exceed a 50- year storm standard. The design and construction shall be certified by a professional engineer. If the structure is constructed in the waters of the Great Lakes or lies below the ordinary high watermark, a permit pursuant to the provisions of Act No. 247 of the Public Acts of 1955, as amended, being S322.701 et seq. of the Michigan Compiled Laws, shall be obtained for the shore protection structure.
- (c) A favorable finding is made by the local agency, with input by the department, that a greater public good exists to support the use of a shore protection structure rather than a natural shoreline in terms of all of the following: (i) The preservation of fish and wildlife habitat. (ii) The value to the entire community of a natural shoreline as opposed to the value to the entire community of additional development that is made possible by the shore protection. (iii) The impact of the loss of sand movement along the shoreline. (iv) The impact on erosion of land in the immediate area of the shore protection structure. Before making the finding, the local agency shall hold a public

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Point Betsie Light Station Shoreline Protection System

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⁶ S324.32312 of the Michigan Compiled Laws

hearing. Notice shall be sent to all riparian's within 300 feet of the proposed shore protection structure and to the department.

- (d) A favorable finding is made by the department that a greater public good exists to support the use of a shore protection structure rather than a natural shoreline in terms of all of the following: (i) The preservation of fish and wildlife habitat. (ii) Protection of the public trust. (iii) The impact of the loss of sand movement along the shoreline. (iv) The impact on the erosion of land in the immediate area of the shore protection structure.
- (e) There is a minimum of 30 feet from the shore protection to any permanent structure. If the bluff or dune is unstable due to height, slope, wind erosion, or groundwater seepage, the department may require a setback of more than 30 feet or an engineered bluff or dune stabilization plan, or both. In areas of steep slopes, a greater setback may be necessary to provide access for maintenance equipment and a safe building site. If the parcel has existing permanent structures which are less than 30 feet from the proposed shore protection, there shall be sufficient access to permit the maintenance and repair of the shore protection.
- (f) Shore protection is already a common feature of the shoreline lying within 1,000 feet of the proposed shore protection structure.
- Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires that each federal agency identify and assess the effects its actions may have on historic buildings. Under Section 106, each federal agency must consider public views and concerns about historic preservation issues when making final project decisions. Consulting parties may include the State (or Tribal) Historic Preservation Officer, the local government, an applicant for federal assistance (if one is involved) and interested federally recognized Indian tribes or Native Hawaiian organizations. Historic preservation organizations and others with an interest in the preservation outcomes of the project or those with a legal or economic interest may also be invited to join consultation. The agency also plans how it will involve the public.

The federal agency determines how historic properties might be affected by the project and whether any of those effects would be considered adverse. The agency does so in consultation with other participants in the review. "Adverse effects" are those that diminish characteristics qualifying a property for inclusion in the National Register.

With regards to assessing adverse effects, in consultation with SHPO, the agency official shall apply the criteria of adverse effect to historic properties within the area of potential effects. The agency official shall consider any views concerning such effects which have been provided by consulting parties and the public. There may be certain adverse impacts that could be considered as a result of construction (e.g., removal of the groins as physical destruction of part of the property, damage due to vibration during pile-driving and movement of construction equipment). However, we defer to SHPO and federal agencies to make the comprehensive determination of adverse impacts.

If there are no potential adverse effects to a historic property, the review may conclude here. If there is a potential adverse effect, in the final step of the process, the agency explores measures to avoid, minimize, or mitigate adverse effects to historic properties and reach agreement with the State (or Tribal) Historic Preservation Officer (and the ACHP in some cases) on measures to resolve them. If a resolution was achieved, a Memorandum of Agreement (MOA) or Programmatic Agreement (PA), which records the resolution measures agreed upon to resolve adverse effects, is developed in consultation and executed prior to approval of the project. If a resolution was not agreed, the federal agency must obtain formal advisory comments from the ACHP, which are sent to the head of the agency, who then must consider them in making a final decision about whether the project will proceed.

 As the work at Point Betsie will be a rehabilitation of a historic structure, the Secretary of the Interior's Standards for Rehabilitation (Department of Interior regulations, 36 CFR 67) will be followed (if the Historic Preservation Tax Incentive program is to be engaged, these are regulatory rules. If not, they

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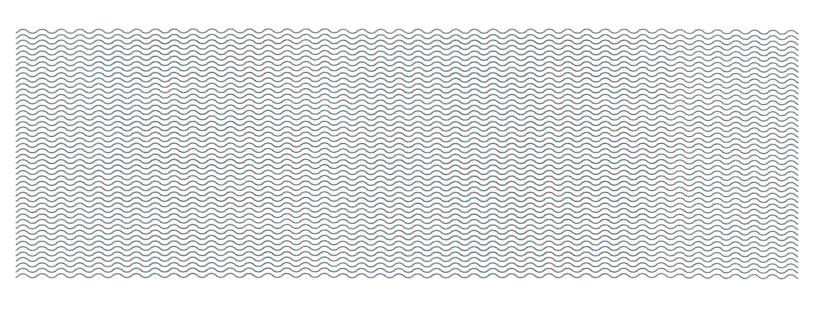
are advisory). To be certified, a rehabilitation project must be determined by the Secretary of the Interior to be consistent with the historic character of the structure(s) and, where applicable, the district in which it is located. The following Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

These standards pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and the interior, related landscape features and the building's site and environment as well as attached, adjacent, or related new construction.

The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility. The Standards are:

- A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
- o The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
- Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
- Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
- o Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- o Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.
- 3. <u>Permit Review</u> According to the EGLE, generally it will take from 30 to 90 days from the time the application is submitted until a decision is made. During this time, it may be required to respond to additional queries from the agencies. These are usually requested in writing and could delay the permit determination decision.





Appendix A

Concept Opinion of Probable Construction Cost

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Working Note



 Project/Proposal Number :
 13352.101
 Date : 07-Jul-20

 Staff Member :
 RMB

 Title :
 Point Betsie HSR Concept OPC

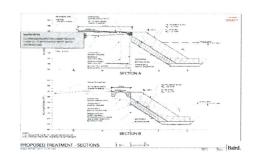
 Summary / Description :
 Class 5 OPC for Point Betsie HSR Concept

File Reference: \\srv-mad4\Projects\13352.101 Point Betsle Lighthouse\05_Analyses\04_HSR Concept OPC\\13352.101.W PST.Rev1_HSR Concept OPC_Alternates v2_xisx|Baind-WorkingNotes

Description

Summary of Design Criteria for Intake and Pipeline Alignment - Ref SMEF Pty Ltd Drawing 0859.111-C07 Rev A





Inputs / Methods

Inputs / Methods

Concept Sketches

Reference

"\\srv-mad4\Projects\13352.101 Point Betsie Lighthouse\10_Reports&Pres\03_HSR Concept Sketch"

	Assumptions
Sequence	Construction Method
1. Mob/Laydown Area	Land
2. Demo existing apron	Land
3. Excavate for anchor wall	Land
4. Lay down wall anchorage	Land
5. Fill behind wall	Land
6. Install new apron	Land
7. Sort and salvage revetment stone	Marine
9. Install SSP Wall	Marine
8. Remove Groins (pull using marine plant crane)	Marine
9. Excavate in front of SSP wall	Marine
10. Place Revetment Stone	Marine
11. Site Restoration	Land

Unit Cost Notes

1. Unit costs based on bids (Petosky and Bay View projects), or develped using MII

Stone Assumptions: Unit weight = 165 pcf; porosity = 0.3

- 2. Marine Plant scaling from MII cost ratio for SSP Wall, land based vs barge based per LF. Land: \$306.09 Marine: \$542.15. Scaling factor = 1.77
- 3 There are compounding conservative assumptions influencing the current cost, which will likely lower as the design progresses.

	Review	
	IVEALERA	
D-1	DCT FAI	
Reviewer	PST, EAL	

Escalated Cost

1.77

MII Cost Book (2016 USD)	(2.5% inflation) (2020 USD)	Land Based Cost (2020 USD)	Scaled Marine Cost (2020 USD)	Bay View Bid Tab (2019)	2020 Cost plus 25%	Basis/Comments / Assumptions
						10%
\$10.34	\$11.41					MII land-based (MI equip/labor)
\$10.33	\$11.40					MII land-based (MI equip/labor) 5 days of Marine plant at \$15k/day
		\$50.00	\$88.50			Based on similar 2020 Baird project in MI
		\$20.00	\$35.40	\$121.00		Based on similar 2020 Baird project in MI Based on similar 2019 Baird project in MI
		\$20.00	\$35.40	\$123.00	\$157.59	Based on similar 2019 Baird project in MI Based on similar 2020 Baird project in MI Marine-based 2020 cost from MII
		\$1.25	\$2.21			Based on similar 2020 Baird project in MI
\$289.04	\$319.05					Based on similar 2020 Baird project in MI MII land-based (MI equip/labor)
		\$126.08				
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\$3,955.00 \$885.78						MII land-based (MI equip/labor) MII land-based (MI equip/labor)
\$76.97	\$84.96					Based on similar 2020 Baird project in MI
						Based on similar 2020 Baird project in MI
\$1.90	\$2.10					MII land-based (MI equip/labor): coarse grading + fini
\$10.05	\$11.09					MII land-based (MI equip/labor): 30 SY/hr

Marine Scale Factor (see working note):

1.77

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Marine Scale Factor (see working note):

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Marine Scale Factor (see working note):

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		\$20.00	\$33.40	\$121.00	\$155.03	Based on similar 2019 Baird project in MI
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Assume 50% used as filter, 50% as core

	Section B		STA	L	SF C	F
3 —	Assumes horizontal from toe + bedding area; feels high	North	0+50	50	662	33100
		North	1+00	50	545	27250
		North	1+50	50	514	25700
		North	2+00	50	557	27850
		East	2+50	50	506	25300
		East	3+00	50	402	20100
	Section A	East	4+00	50	461	23050
i—		East	4+50	50	403	20150
		East	5+00	50	391	19550
		East	5+50	50	349	17450
Mill have		East	6+00	50	442	22100
		East	6+50	50	475	23750
		South	7+00	42	862	36204
NAME OF TAXABLE PARTY.	Section A	East	4+00	50	461	23050
		East	4+50	50	403	20150
DE.		East	5+00	50	391	19550
		East	5+50	50	349	17450
The second		East	6+00	50	442	22100
		East	6+50	50	475	23750
		South	7+00	42	862	36204
		East	3+50	50	407	20350
	Section A	East	4+00	50	461	23050
		East	4+50	50	403	20150
		East	5+00	50	391	19550
		East	5+50	50	349	17450
		East	6+00	50	442	22100
i i i		East	6+50	50	475	23750
CONTRACTOR OF THE PARTY OF THE		0				

South

7+00

42

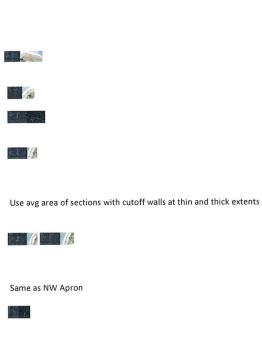
862

36204 666412



Revolved Section B



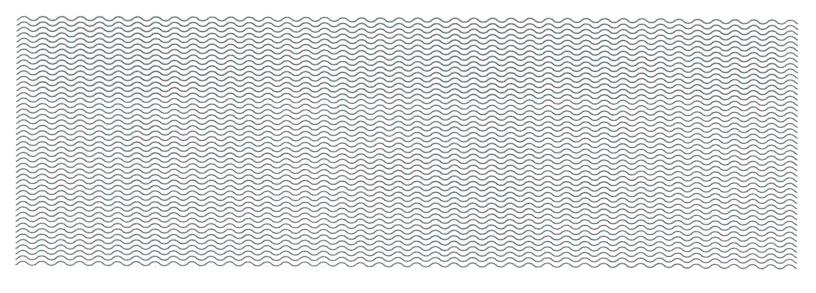


no deadman excavation in NW area (150 ft)









Appendix B

Coastal Conditions

Baird.

Working Note



Innovation Engineered.

Project/Proposal Number :	13352.101	Date	21 April 2020	
Staff Member :	Jen Farrow			
Title:	Coastal Analysis for	Point Betsie, MI		
Summary / Description :	Waves and Water Le	evels Analysis		
File Reference :	13352.101.W1.JJF.R	evA		

Water Levels

The following water levels analysis was completed for the Frankfort Bluffs. Water level data from the NOAA Ludington Gage was used, which is the closest, and most relevant gage to Point Betsie, therefore the results of the Joint Probability Analysis (JPA) can be used.

Hourly water levels were downloaded from NOAA tides and currents website for the station 9087023 Ludington, MI. Hourly water level data was available from 1970 – 2020. The station is located approximately 55 miles south of the project site.

https://tidesandcurrents.noaa.gov/waterlevels.html?id=9087023



This data was batch downloaded using the code:

\\SRV-OAK4\Projects\13352.101 Point Betsie Lighthouse\05 Analyses\02 Water Levels\get NOAA9087096 WLs.py

13352.101.W1.JJF.RevA Page 1 of 10



The saved water level data set is saved here:

\\SRV-OAK4\Projects\13352.101 Point Betsie Lighthouse\05 Analyses\02 Water Levels\NOAA 9087023 hourly.bts

In preparation for the Joint Probability Analysis (JPA), a surge analysis was conducted to

A gaussian smoothing factor is applied to the WL dataset, which takes a moving 30-day average of the hourly water levels, generating

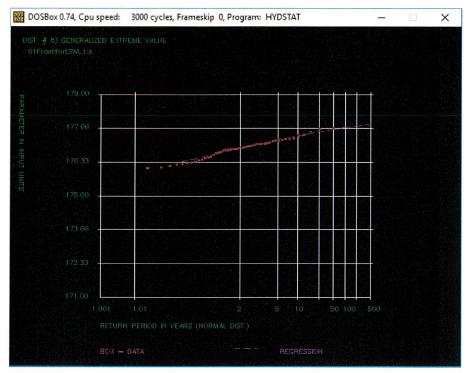
HYDSTAT was used to conduct a joint probability analysis. HYDSTAT working files are saved here: \\SRV-OAK4\Projects\13352.101 Point Betsie Lighthouse\05_Analyses\02_Water Levels\HYDSTAT

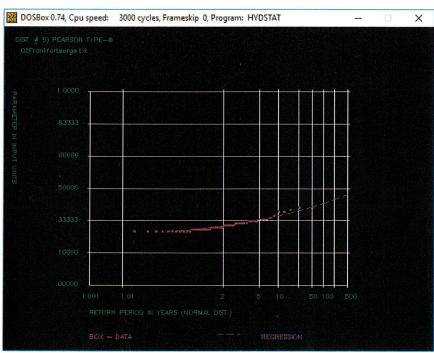
From the JPA, extreme water levels were estimated for the 2, 5, 10, 25, 50, and 100 -year return periods. The Joint Probability Approach analyses multiple combinations of surge and static water levels to give the return probability estimates of combined surge and static water levels. GEV distribution was selected for static water level, based on minimum least-squares and best fit, Pearson Type 3 distribution was selected for surge based on minimum least-squares value and best fit, and GEV distribution was selected for the combined water level/Stillwater level based on minimum least-squares and chi-square values, and best fit. The plots of the distribution are presented below.

		Return Period (years)					
IGLD85 (m)	2	5	10	25	50	100	
Surge	0.31	0.34	0.36	0.38	0.40	0.42	
Static WL	176.86	177.19	177.36	177.52	177.61	177.68	
Stillwater WL	177.17	177.50	177.66	177.82	177.91	177.98	
			Return Peri	od (years)			
IGLD85 (ft)	2	5	Return Peri 10	od (years) 25	50	100	
IGLD85 (ft)	2 1.02	5 1.12			50 1.31	100 1.38	
			10	25			
Surge	1.02	1.12	10 1.18	25 1.25	1.31	1.38	

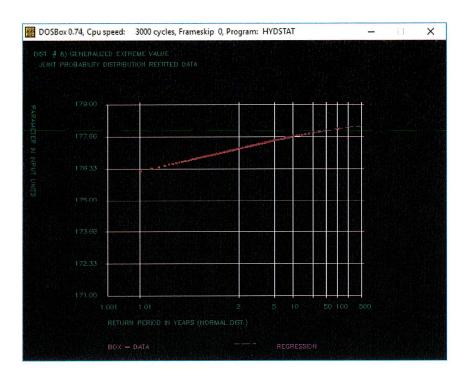
13352.101.W1.JJF.RevA Page 2 of 10











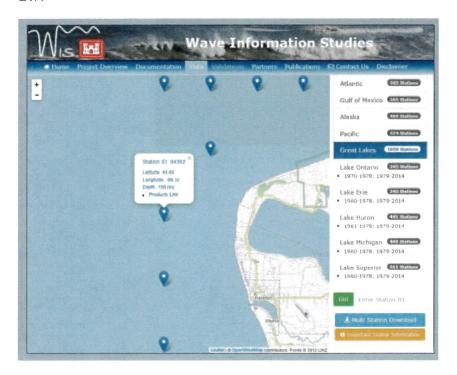


Waves Analysis

Offshore waves records from WIS Station 94362 from 1979 - 2014. X-wave was used to transform this offshore wave rose (150 m depth) to the nearshore (depth 15 m). The application uses Snell's law to transform it. Azimuth of the shoreline is 280 degrees. The wave roses for the offshore and nearshore waves are provided below.

All work is saved here: \\SRV-OAK4\\Projects\13352.101 Point Betsie Lighthouse\03_Data\02_Physical\\Waves

EVA is saved here: \\SRV-OAK4\\Projects\13352.101 \text{Point Betsie Lighthouse}\05_Analyses\01_Waves \text{EVA}

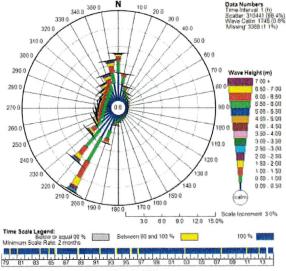


Deepwater Wave Climate

The offshore wave hindcast shows wave distribution offshore of Point Betsie at a depth of 150 m. The wave climate is bimodal with most of the waves approaching from the southwest, and the north. The largest waves approach from the Southwest, between 210° and 240°; and 330° and 30°, based on the wave height by direction distribution table.







Selected Range. 81 Jan 1979 01AM to 31 Dec 2014 11PM Calm Wave Conditions: Ware heights 2.0 am Waves: Source File: WSRV-0AAR-Preschatti3502 101 Point Beties Lighthousel/03_Datal/02_Physical/Waves 6/194/09/25/194/25/2016 Entire Range 01 data 1979 01AM to 31 Dec 2014 11PM Variables RANG MWD 179 With Unsakformation had Applied

Point Betsie Offshore Waves

WIS Station 94362

Wave Distribution By Height And Direction Date Range: 01 Jan 1979 01AM to 31 Dec 2014 11PM Season: All

							Way	e Heigh	t (m)										
Direction	0.00- 0.50	0.50- 1.00	1.00- 1.50	1.50- 2.00	2.00- 2.50	2.50- 3.00	3.00- 3.50	3.50- 4.00	4.00- 4.50	4.50- 5.00	5.00- 5.50	5,50- 6.00	6.00- 6.50	6.50- 7.00	7.00+	Total	A (%)	C (%H	faximur eight (n
0.0	19895	8793	3642	1421	686	291	122	86	41	9	6		2	1		34995	11.21	99.44	6.63
15.0	9233	4197	1358	403	133	35	7	10	6	2	2	1				15387	4.93	88.23	5.51
30.0	4423	2251	627	145	28	11	4	3								7492	2.40	83.30	3.6
45.0	2765	1424	305	39	3	1										4537	1.45	80.90	2.53
60.0	1930	810	96	10												2846	0.91	79.45	1.7
75.0	1512	491	68	16												2087	0.67	78.54	1.8
90.0	1313	402	45	20	3											1783	0.57	77.87	2.1
105.0	1216	385	42	10												1653	0.53	77.30	1.9
120.0	1327	372	32	8												1739	0.56	76.77	1.8
135.0	1557	504	51	13	1											2126	0.68	76.21	2.0
150.0	1902	717	117	14	1											2751	0.88	75.53	2.1
165.0	2369	1101	207	36	4											3717	1.19	74.65	2.4
180.0	3105	1813	482	121	18	1										5540	1.77	73.46	2.5
195.0	8218	4430	1509	421	110	22	3									14713	4.71	71.68	3.3
210.0	19882	20241	12377	5983	2575	1098	429	123	33	14	4	4	3	1	3	62770	20.11	66.97	7.5
225.0	13355	10663	4578	2146	1062	450	230	118	47	10	4	1	2		1	32667	10.46	46.86	7.1
240.0	6770	4659	2372	1106	482	219	94	33	18	4	1					15758	5.05	36.40	5.1
255.0	4584	3696	2312	1088	541	225	71	19	16	4						12556	4.02	31.35	4.8
270.0	3296	3388	1962	1040	388	165	70	38	10	3						10360	3.32	27.33	4.5
285.0	3084	3104	1909	949	394	160	56	21	11	2						9690	3.10	24.01	4.9
300.0	3135	2950	1823	844	328	122	60	18	4		2					9286	2.97	20.91	5.3
315.0	3804	3666	2291	1083	523	217	98	48	7	2	3					11742	3.76	17.93	5.2
330.0	5461	4652	3409	1831	901	389	167	76	30	9	2	1				16928	5.42	14.17	5.5
345.0	10545	7300	4574	2566	1220	626	253	131	61	30	8	1	2	1		27318	8.75	8.75	6.6
Totals	134681	92009	46188	21313	9401	4032	1664	724	284	89	32	8	9	3	4	310441			
A(%)	43.14	29.47	14.79	6.83	3.01	1.29	0.53	0.23	0.09	0.03	0.01	0.00	0.00	0.00	0.00		99,44		
C(%)	99.44	56.30	26.83	12.03	5.21	2.19	0.90	0.37	0.14	0.05	0.02	0.01	0.01	0.00	0.00				



Wave Distribution By Height And Period (All Directions)

Date Range: 01 Jan 1979 01AM to 31 Dec 2014 11PM

Season: All

Wave Height (m)	0.00-	1.00-2.00	2.00- 3.00	3.00- 4.00	War 4.00- 5.00	5.00- 6.00	d(s) 6.00- 7.00	7.00- 8.00	8.00- 9.00	9.00- 10.00	10.00+	Total	C(%)	Maximur Period (s)
	2.00									10.00				
0.00-0.50		3.63	18.56	15.07	4.48	1.28	0.11	0.01	0.00			43.14	99.44	8.53
0.50-1.00			0.59	10.51	13.66	3.50	1.13	0.07	0.01			29.47	56.30	8.29
1.00-1.50				0.12	5.34	7.62	1.40	0.28	0.03			14.79	26.83	8.88
1.50-2.00					0.12	3.97	2.40	0.28	0.05	0.00		6.83	12.03	9.20
2.00-2.50					0.00	0.35	2.19	0.39	0.07	0.00		3.01	5.21	9.59
2.50-3.00						0.01	0.62	0.56	0.10	0.01		1.29	2.19	9.80
3.00-3.50						0.00	0.04	0.38	0.10	0.01		0.53	0.90	9.45
3.50-4.00							0.00	0.11	0.12	0.01		0.23	0.37	9.61
4.00-4.50								0.01	0.07	0.01		0.09	0.14	9.75
4.50-5.00								0.00	0.02	0.01	0.00	0.03	0.05	10.01
5.00-5.50									0.00	0.01	0.00	0.01	0.02	10.24
5.50-6.00									0.00	0.00	0.00	0.00	0.01	10.45
6.00-6.50										0.00	0.00	0.00	0.01	11.06
6.50-7.00										0.00	0.00	0.00	0.00	10.92
7.00+										5.00	0.00	0.00	0.00	11.28
Totals		3.63	19.15	25,70	23.61	16.73	7.90	2.09	0.57	0.05	0.01	99.44		
C(%)	99.44	99.44	95.81	76,66	50.96	27.36	10.63	2.73	0.63	0.06	0.01			

Meta Data

0.56% Calm Conditions (Wave Height<0.00 m and Wave Period<0.00 s) Number of records this selection: 3 10441

Number of records this selection: Total records used in selected interval

3 12 18 7 3 38 8

(including calms): Missing data (not included in calculation): Variables: HM0 MWD TP

 Wave height (all data):
 Max: 7.57
 Min: 0.00
 Mean: 0.76

 Wave height (scatter only):
 Max: 7.57
 Min: 0.00
 Mean: 0.76

 Wave period (all data):
 Max: 11.28
 Min: -777.77
 Mean: -0.21

 Wave period (scatter only):
 Max: 11.28
 Min: -777.77
 Mean: -0.21

Legend

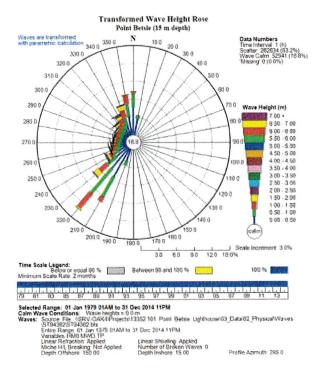
Row and column percentages have the following meanings: Total -- based on number of records used in selected interva C -- percent exceedance derived from 'Total'

Frequencies of occurrence are reported in 'percentage'



Nearshore Wave Climate

The wave rose below shows the distribution of transformed offshore waves. From the distribution, the largest waves approach from 240° to 315°.



Point Betsie Nearshore Wave Distribution

(15 m depth)

Transformed Waves Distribution By Height And Direction

Date Range: 01 Jan 1979 01AM to 31 Dec 2014 11PM

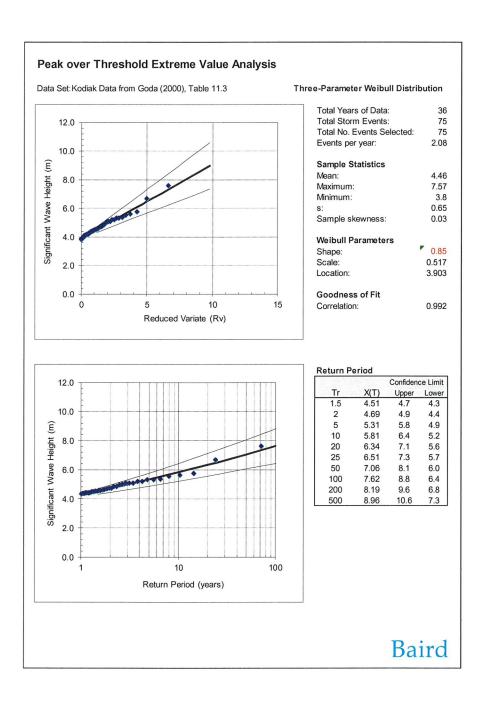
	444	***	
S	2250	nn:	All

							Way	e Height	(m)										
Direction	0.00- 0.50	0.50- 1.00	1.00- 1.50	1.50- 2.00	2.00- 2.50	2.50- 3.00	3.00- 3.50	3.50- 4.00	4.00- 4.50	4.50- 5.00	5.00- 5.50	5.50- 6.00	6.00- 6.50	6.50- 7.00	7.00+	Total	A (%)	C (%)H	laximun eight (m
0.0	21602	9097	443	3												31145	9.87	82.45	1.81
15.0	1735	24														1759	0.56	72.59	0.64
30.0																		72.03	
45.0																		72.03	
60.0																		72.03	
75.0																		72.03	
90.0																		72.03	
105.0																		72.03	
120.0																		72.03	
135.0																		72.03	
150.0																		72.03	
165.0																		72.03	
180.0																		72.03	
195.0	6282	2550	99													8931	2.83	72.03	1.29
210.0	23694	19365	7842	238	1											51140	16.21	69.20	2.09
225,0	14445	15398	10289	4633	\$78	37										45680	14,48	52.99	2.84
240.0	6958	5102	3047	1568	781	427	113	23	3	4	4					18030	5.71	38.52	5.24
255.0	4698	3800	2517	1185	548	164	42	26	8							12988	4.12	32.80	4.50
270.0	3362	3451	2100	1044	361	136	71	15	8							10548	334	28.69	4.17
285.0	3144	3143	2009	946	346	133	32	19	2	1						9775	3.10	25.35	4.55
300.0	3199	2989	1940	879	271	134	39	6		3						9460	3.00	22,25	4.76
315.0	3891	3766	2588	1335	618	262	118	28	7	3						12616	4.00	19.25	4.76
330.0	5577	5079	4387	3107	1126	315	59	3								196.53	6.23	15.25	3.61
345.0	10876	9345	7123	1125	12											28481	9.03	9.03	2.37
Totals	109463	83109	44384	16063	4942	1608	474	120	28	11	4	0	0	0	0	260206			
A(%)	34.69	26.34	14.06	5.09	1.57	0.51	0.15	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00		82.45		
C(%)	82.45	47.77	21.43	7.37	2.28	0.71	0.20	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00				



Extreme Waves

A storm list was created from the Offshore wave data, using a peak over threshold (POT) approach: threshold wave height of 3.6 m, minimum storm duration of 6 hours, and interval between storms of 12 hours. The storm list was used to conduct an extreme value analysis (EVA). Results are below for Weibull distribution:

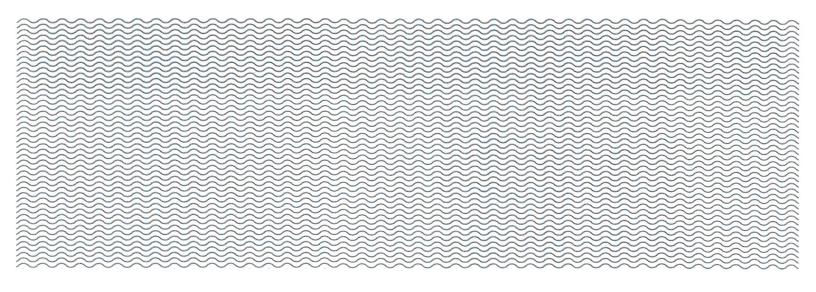


Working Note



		Feet	
Tr	X(T)	Conf_u	Conf_I
1.5	14.80	15.4	14.1
2	15.19	16.1	14.4
5	17.42	19.0	16.1
10	19.06	21.0	17.1
20	20.80	23.3	18.4
25	21.36	24.0	18.7
50	23.16	26.6	19.7
100	25.00	28.9	21.0
200	26.87	31.5	22.3
500	29.40	34.8	24.0
		Meters	
Tr	X(T)	Conf_u	Conf_I
1.5	4.51	4.7	4.3
2	4.63	4.9	4.4
5	5.31	5.8	4.9
10	5.81	6.4	5.2
20	6.34	7.1	5.6
25	6.51	7.3	5.7
50	7.06	8.1	6
100	7.62	8.8	6.4
200	8.19	9.6	6.8
500	8.96	10.6	7.3

13352.101.W1.JJF.RevA Page 10 of 10



Appendix C

Revetment Design

Baird.

Working Note



Project/Proposal Number:	13352.101	Date	8 May 2020				
Staff Member :	RMB						
Title:	Revetment Design for Point Betsie, MI						
Summary / Description :	Elevations, Stone Sizing						
File Reference :	13352.101.W1.RMB.RevA						

Offshore Wave Height by Return Period (T_R)

From "13352.101.W1.JJF.RevA_Coastal Conditions"

Tr	1.5	2	5	10	20	25	50	100	200	500
Hs (ft.)	14.8	15.2	17.4	19.1	20.8	21.4	23.2	25.0	26.9	29.4

Water Levels by Return Period (TR)

From "13352.101.W1.JJF.RevA_Coastal Conditions"

Return Period (years)

IGLD85 (ft)	2	5	10	25	50	100
Surge	1.02	1.12	1.18	1.25	1.31	1.38
Static WL	580.25	581.33	581.89	582.41	582.71	582.94
Stillwater WL	581.27	582.35	582.87	583.4	583.69	583.92

Revetment Design Considerations

Toe Elevation

The Matrix Engineering design section (crest el. +587.0) was projected using a 2:1 slope onto a surface created from 2012 NOAA Lidar data using Civil 3D. Toe elevations range from + 572.4 to +576.3. Because the waves are depth limited, the depth of water at the structure toe is the controlling factor for wave height, and thus armor stone size. An additional three-foot depth allowance has been added to the design elevation of +572.4 to account for lakebed erosion occurring since the 2012 survey and also potential sand

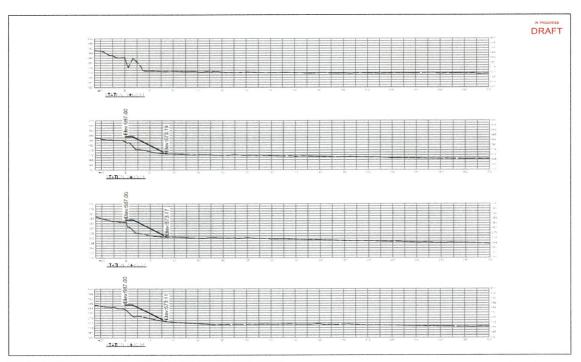
13352.101.W1.RMB.RevA Page 1 of 5



cover over hard ground at the toe location. A bathymetric survey, and additional jet probes are recommended to understand the nature of the lakebed prior to final design.







PT. BETSIE SECTIONS - 2003 MATRIX REVETMENT

OINT BETSIE LIGHTHOUSE HSR

NOTE: ALL, ELEVATIONS IN FT. AND REFERENCE KILD 85

TRANSPORT

TRANSPORT

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Nearshore Slope

The slope of the lakebed near the site also has a controlling effect on the breaking wave height. In general, a steeper nearshore slope results in larger breaking waves. The steepest profile was used to calculate a nearshore slope of approximately 1V:59H. A conservative slope value of 1V:50H has been used for design calculations.

Goda Breaking Wave Height

Goda wave transformation calculations were performed to determine the significant breaking wave height at the toe of the structure using the following wave/water level return periods.

Calcs available at "P:\13352.101 Point Betsie Lighthouse\05_Analyses\03_Revetment\13352.101.W.RMB_Goda_Force.xls"

H _{s-breaking} by	Wave/Water	Level	Return	Periods
----------------------------	------------	-------	--------	---------

TR _{wave} /TR _{wl}	10/25	25/10	100/100
Wave (ft.)	19.06	21.36	25.00
WL (ft. IGLD 85)	583.4	582.87	583.92
H _{s-breaking} at toe (ft.)	10.0	9.9	10.8

13352.101.W1.RMB.RevA Page 3 of 5



1977 SPM Hudson Equation - Stone Sizing

Hudson stone sizing calculations were performed to determine stone sizing for a 2-layer rubblemound revetment. 1977 SPM stability coefficient (K_D) values were utilized, as Baird's experience is they are best for shallow water applications, when compared to 1984 SPM values. A conservative (i.e. results in larger stone size) 1V:1.5H structure-face slope was utilized for stone sizing calculations.

Calcs available at "P:\13352.101 Point Betsie Lighthouse\05_Analyses\03_Revetment \13352.101.W.RMB.RevA_Hudson & Volume .xlsx"

Average armor and filter stone sizing for the wave/water level return periods are:

T _{R_wave} /T _{R_wI}	10/25	25/10	100/100
Armor Stone W ₅₀ (tons)	3.6	3.5	4.5
Filter Stone W ₅₀ (tons)	0.4	0.4	0.5

Overtopping (Relative Freeboard Method)

Based on extensive experience with physical modelling of coastal structures and comparison to published empirical guidance, Baird has developed a "rule of thumb" approach to estimate the required crest elevations for coastal structures to meet various functional and stability requirements. This approach utilizes the "relative freeboard", F_{rel} , which is defined as the structure freeboard (F = structure crest height above the design water level) divided by the significant breaking wave height, Hs (i.e. F_{rel} = F/H_s). Baird's rule of thumb approach for the severity of wave overtopping for damage to revetment structures is summarized below:

- Severe overtopping and flooding F/H_s < 0.5
- Moderate overtopping and flooding F/H_s ~ 0.75
- Limited overtopping and flooding F/H_s > 1

Damage to the structure crest and backshore area is an important consideration for F/Hs < ~ 0.75-1, with a splash pad or hardscape promenade required to prevent erosion behind the crest. Suitable grading and drainage (berms, swales) are also required to prevent site flooding.

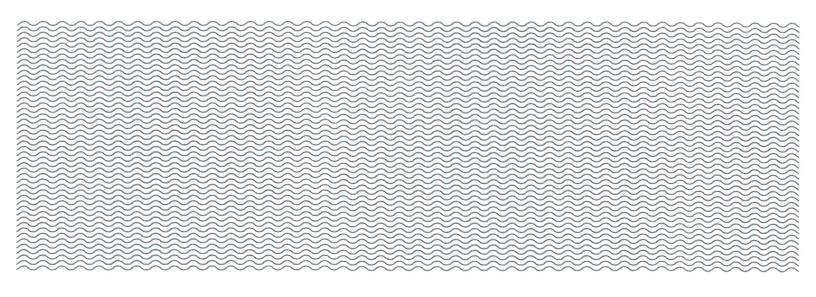
A summary of F_{rel} values at varying crest elevations by return period combination is below.

Crest	El	F _{rel} (per T _R)						
(ft. IGLD 85)	(ft. LWD)	10/25	25/10	100/100				
585.5	+8.0	0.27	0.34	0.18				
587.5	+10	0.53	0.60	0.42				
589.5	+12	0.78	0.86	0.65				
591.5	+14	1.04	1.12	0.88				
592.5	+15	1.17	1.25	1.00				

Note: The 2002 Matrix Engineering proposed section has a crest height of +587.0 IGLD, or +9.5 LWD.



Calcs available at: "\srv-mad4\Projects\13352.101 Point Betsie Lighthouse\05_Analyses\03_Revetment\13352.101.W.RMB.RevA_Revetment Working Calcs.xlsx"



Appendix C

Revetment Design

Baird.

Working Note



Project/Proposal Number:	13352.101	Date	8 May 2020		
Staff Member :	RMB				
Title:	Revetment Design for Point Betsie, MI				
Summary / Description :	Elevations, Stone Sizing				
File Reference :	13352.101.W1.RMB.RevA				

Offshore Wave Height by Return Period (T_R)

From "13352.101.W1.JJF.RevA Coastal Conditions"

Tr	1.5	2	5	10	20	25	50	100	200	500
Hs (ft.)	14.8	15.2	17.4	19.1	20.8	21.4	23.2	25.0	26.9	29.4

Water Levels by Return Period (TR)

From "13352.101.W1.JJF.RevA Coastal Conditions"

Return	Period	(years)
--------	--------	---------

		***		***************************************		***************************************
IGLD85 (ft)	2	5	10	25	50	100
Surge	1.02	1.12	1.18	1.25	1.31	1.38
Static WL	580.25	581.33	581.89	582.41	582.71	582.94
Stillwater WL	581.27	582.35	582.87	583.4	583.69	583.92

Revetment Design Considerations

Toe Elevation

The Matrix Engineering design section (crest el. +587.0) was projected using a 2:1 slope onto a surface created from 2012 NOAA Lidar data using Civil 3D. Toe elevations range from + 572.4 to +576.3. Because the waves are depth limited, the depth of water at the structure toe is the controlling factor for wave height, and thus armor stone size. An additional three-foot depth allowance has been added to the design elevation of +572.4 to account for lakebed erosion occurring since the 2012 survey and also potential sand

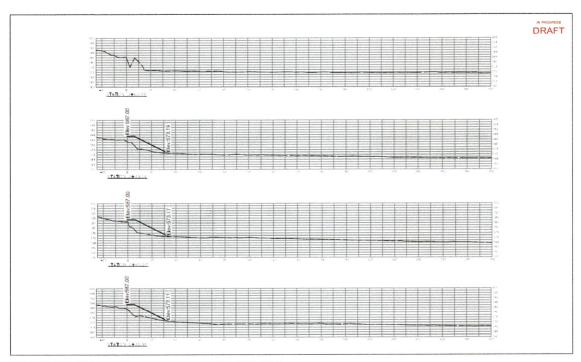
13352.101.W1.RMB.RevA Page 1 of 5



cover over hard ground at the toe location. A bathymetric survey, and additional jet probes are recommended to understand the nature of the lakebed prior to final design.







PT. BETSIE SECTIONS - 2003 MATRIX REVETMENT

OINT BETSIE LIGHTHOUSE HSR



Nearshore Slope

The slope of the lakebed near the site also has a controlling effect on the breaking wave height. In general, a steeper nearshore slope results in larger breaking waves. The steepest profile was used to calculate a nearshore slope of approximately 1V:59H. A conservative slope value of 1V:50H has been used for design calculations.

Goda Breaking Wave Height

Goda wave transformation calculations were performed to determine the significant breaking wave height at the toe of the structure using the following wave/water level return periods.

Calcs available at "P:\13352.101 Point Betsie Lighthouse\05_Analyses\03_Revetment\13352.101.W.RMB_Goda_Force.xls"

Hs-breaking k	ЭУ	Wave/Water	Level	Return	Periods
---------------	----	------------	-------	--------	---------

TR _{wave} /TR _{wl}	10/25	25/10	100/100
Wave (ft.)	19.06	21.36	25.00
WL (ft. IGLD 85)	583.4	582.87	583.92
H _{s-breaking} at toe (ft.)	10.0	9.9	10.8

13352.101.W1.RMB.RevA Page 3 of 5



1977 SPM Hudson Equation - Stone Sizing

Hudson stone sizing calculations were performed to determine stone sizing for a 2-layer rubblemound revetment. 1977 SPM stability coefficient (K_D) values were utilized, as Baird's experience is they are best for shallow water applications, when compared to 1984 SPM values. A conservative (i.e. results in larger stone size) 1V:1.5H structure-face slope was utilized for stone sizing calculations.

Calcs available at "P:\13352.101 Point Betsie Lighthouse\05_Analyses\03_Revetment \13352.101.W.RMB.RevA_Hudson & Volume .xlsx"

Average armor and filter stone sizing for the wave/water level return periods are:

T _{R_wave} /T _{R_wl}	10/25	25/10	100/100
Armor Stone W ₅₀ (tons)	3.6	3.5	4.5
Filter Stone W ₅₀ (tons)	0.4	0.4	0.5

Overtopping (Relative Freeboard Method)

Based on extensive experience with physical modelling of coastal structures and comparison to published empirical guidance, Baird has developed a "rule of thumb" approach to estimate the required crest elevations for coastal structures to meet various functional and stability requirements. This approach utilizes the "relative freeboard", F_{rel} , which is defined as the structure freeboard (F = structure crest height above the design water level) divided by the significant breaking wave height, Hs (i.e. F_{rel} = F/H_s). Baird's rule of thumb approach for the severity of wave overtopping for damage to revetment structures is summarized below:

- Severe overtopping and flooding F/H_s < 0.5
- Moderate overtopping and flooding F/H_s ~ 0.75
- Limited overtopping and flooding F/H_s > 1

Damage to the structure crest and backshore area is an important consideration for F/Hs < ~ 0.75-1, with a splash pad or hardscape promenade required to prevent erosion behind the crest. Suitable grading and drainage (berms, swales) are also required to prevent site flooding.

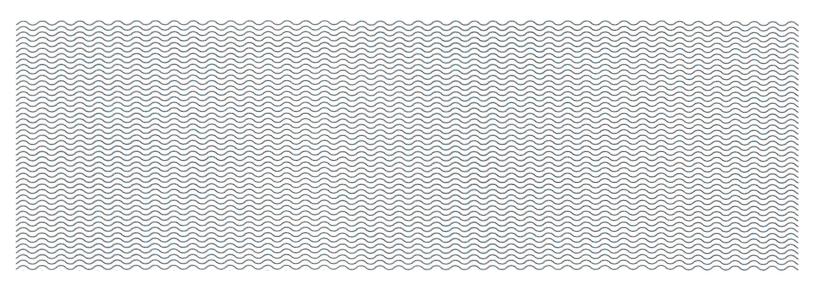
A summary of F_{rel} values at varying crest elevations by return period combination is below.

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Note: The 2002 Matrix Engineering proposed section has a crest height of +587.0 IGLD, or +9.5 LWD.



Calcs available at: "\\srv-mad4\\Projects\13352.101 Point Betsie Lighthouse\05_Analyses\03_Revetment\13352.101.W.RMB.RevA_Revetment Working Calcs.xlsx"



Appendix D

Point Betsie Site Visit

Baird.

Working Note



Project/Proposal Number :	13352.101	Date	12 May 2020		
Staff Member :	K. Jacobson				
Title:	Point Betsie Site Visit Summary				
Summary / Description :	n: Notes and photographs related to a Site Visit at the Pt. Betsie Lighthouse				
File Reference : 13352.101 - 04 Notes & Calcs – Rev. A Pt. Betsie Site Visit					

Site Visit Conditions

Kelly Jacobson and Rodey Batiza performed an on-site inspection of the shoreline protection system that is currently protecting the Point Betsie Lighthouse and the surrounding property, near Frankfort, Michigan. The site inspection was performed on May 12, 2020 under cooler than seasonally normal, with a high temperature that was in the mid-40's, under predominantly sunny skies, with consistent 10-15 mph winds from the southwest. Lake Michigan water levels were observed to be high, as was anticipated since monthly record high water levels for Lake Michigan (and Huron, as they are considered one lake) have occurred over the last several months leading up to May, 2020. NOAA recorded a water level for Lake Michigan from a buoy near Ludington, MI of 581.9' at the time of the site visit. Wave heights were consistent and in the range of 2 to 4 feet.

In addition to physically walking the site and taking photos by hand using a camera, a drone was used to take orthotropic photos and oblique video of the shoreline protection system.

Site Description

Figure 1 below shows an overall plan view of the existing conditions. The underlaying orthomosaic photo shown in the figure was derived from overlapping photos taken from a drone that was deployed while on site. The shoreline protection system is primarily comprised of steel sheet pile bulkhead walls, where there is a double wall (two sheet pile walls that are parallel to each other) that extends across the main exposed face of the shoreline, and returns shoreward both to the north and the south as single sheet pile walls. The double wall is approximately 6 ft wide and was observed to be filled with mansized rocks with tie rods extending between the two walls spaced at every over sheet pile pair. From existing drawings, the landward sheet piling is 15'-0" long and the shoreward sheet piling is 13'-0" long. The shoreward sheet piling is staggered in a sawtooth shape, with the top of the sheet piling approximately 2 feet below the top of the landward sheet piling (note that top of the landward sheet piling is all at one elevation).

In addition to the bulkhead walls there are eight (8) groins, seven (7) of which extend from the double bulkhead wall, and one of which is independent of the bulkhead, on the southern edge of the site. The groins are made from steel sheet piles and extend about 60 ft out from the face of the bulkhead wall. There is also a concrete apron which extends from the landward face of the double sheet pile wall to the lighthouse building, extending approximately 200 ft parallel to shore, and 60 ft perpendicular to shore up to the base of the lighthouse building. The apron has several bollards connected to it that are made using concrete cinder blocks, refer to Figure 2 that are filled with concrete and doweled into the slab (i.e. concrete apron) using mild steel reinforcing bars.

Page 1 of 31 13352.101



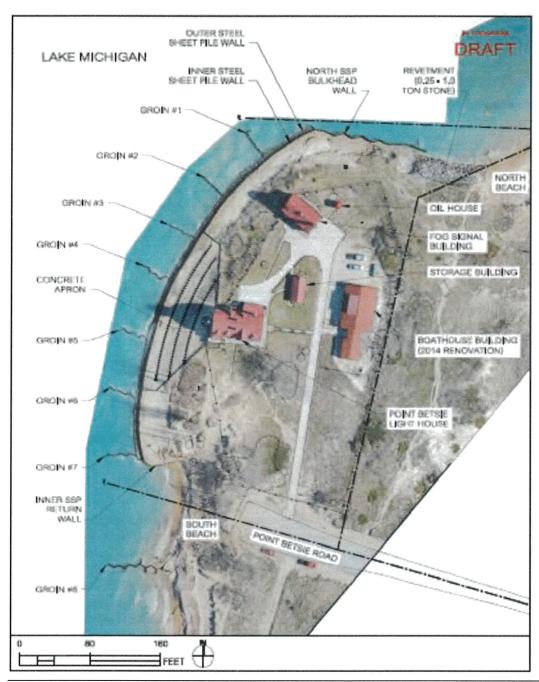


Figure 1: Point Betsie Lighthouse Overall Site Plan



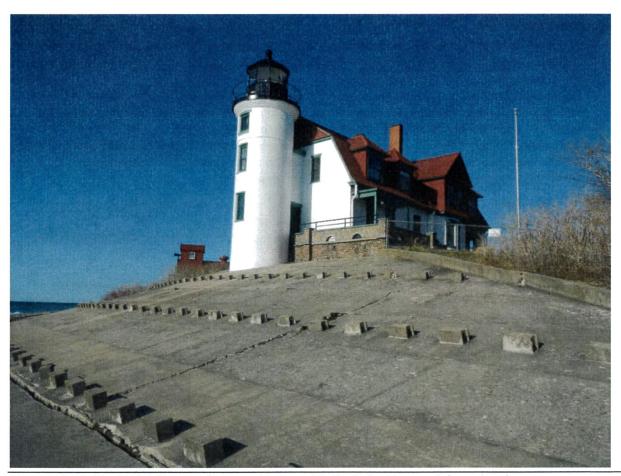


Figure 2: Point Betsie Lighthouse - Concrete Apron and Bollards (looking north from shore)

Site Observations and Photos

A similar engineering inspection was performed by Matrix Engineering, Inc. on May 6, 2002, roughly 20 years ago. The observations found in 2002 were generally found to accurate, with the exception that in some places a greater state of degradation has occurred. The main observations are included in the following subsections as photo logs with descriptive footers according to the following primary shoreline protection elements: Concrete Apron, Double Sheet Pile Wall, Groins, South Return Wall, and North Return Wall.

Generally, the existing shoreline protection system is showing signs of degradation, and is generally in need of repair, but does not appear to be showing any signs of immediate collapse, and generally appears to be stable. The shoreline protection elements were constructed over several different time periods where the system as a whole is nearing 70 years old, or greater. Marine structures are not commonly designed for a service life in this range and thus the shoreline protection system currently in place has likely exceeded its intended life cycle.

Due to the high water levels and waves, access was limited to along the length of the landward sheet pile wall. As such, the engineer was not able to neither confirm tie rod dimensions nor determine if decisively the number of tie rods that are currently missing or damaged; similarly, the state of the submerged protection elements, primarily the condition of the sheet piles below the water line at the time of the site visit, was not able to be visually assessed. Likewise, the lakebed between the groins, and any sand that may be present, was not visible at the time of the site visit.

Primary findings are listed below by main shoreline protection element.



Concrete Apron

- Concrete apron near the bulkhead was originally connected to the landward steel sheet pile using rebar that was
 welded to a steel cap beam. All of these connections have completely severed, and the front 13 feet of concrete
 apron slab has settled 12 to 18 inches.
- Severe cracking and spalling has occurred within the front 13 feet section of the concrete apron. Welded wire
 reinforcement was observed but appeared to not have been supported during concrete pouring, and thus had
 settled to the bottom of the slab, thereby rendering it incapable of bridging cracks.
- Approximately 20 feet of the front of the apron appears to have been installed after the original apron construction, as evidenced by the differing concrete coloration, as well as the different cinder block bollards used.
- Erosion at the north end of the apron has exposed 4 feet of the apron footing.

Double Sheet Pile Wall

- · Wall is leaning between 4 inches, and in excess of 6 inches at some locations.
- Minimal corrosion observed considering age of steel, however most typical severe corrosion zone was hidden from view due to high water levels
- Steel cap beam has been mangled in several locations.
- Tie rods were difficult to observe due to high water conditions, however, by excavating the backside of the landward sheet pile wall down to below a known tie rod location, it was determined that the tie rods likely do not penetrate the sheet pile, and are thus likely welded to the waterside face instead. This is a weak connection. Some tie rods were visually observed to be severed or missing.
- Significant erosion, in the range of 3 to 4 feet, has occurred to the north of the concrete apron.

Groins

- All of the groins connected to the double sheet pile wall were observed to be severed from the wall.
- There were several groins with missing or bent sheet piles

South Return Wall

- · Debris was collecting, such as a few large tree trunks
- · 1 to 2 feet of erosion appears to have occurred along the south wall until just past the curved return in the wall

North Return Wall

- Severe lean at end of return wall
- · Bluff erosion and slope stability issues occurring at both ends of stone revetment
- 3 to 4 feet of erosion appears to have occurred, across a 20 to 30 feet width behind the return wall



Concrete Apron



Figure 3: South Concrete Apron (Looking North). Steel channel has been damaged. Apron has severed from the steel sheet pile, settled in the order of 12 to 18 inches, significant cracking. Double sheet pile wall is leaning 4-6 inches.



Figure 4: South Concrete Apron (Looking North). Concrete cracking within apron footing, mild efflorescence spider webbing.





Figure 5: South Concrete Apron (Looking Northeast). Cracking and separation of lower apron from upper apron. Lower apron is approximately 13' wide, from landward sheet pile to separation point.



Figure 6: South Concrete Apron (Looking West-Northwest). Apron curb has cracked and settled. Some erosion and washout appears to have occurred to the south of the apron (once the concrete apron ends, extending all along the south extent to the South Return Wall).





Figure 7: South concrete apron (looking northwest). Settlement in apron. Cracking and spalling. Damage to steel cap beam.



Figure 8: Concrete apron (looking north, near the south end of the apron). Separation between the front 13 feet segment of apron and the back. Exposed steel sheet piling observed within separation. Noticeable change in concrete coloration, and newer cinder block bollards can be seen, indicating the lower 20 feet of apron is newer than the upper portion of the apron.





Figure 9: Concrete Apron (looking north, near center of apron). Separation of lower 13 feet segment of concrete apron. Note change in concrete coloration approx. 6 feet landward of lower apron separation.



Figure 10: Close view of separation between lower 13 feet segment of apron and the upper portion of apron.





Figure 11: Close view of separation between lower 13 feet segment of apron and the upper portion of apron (looking north)



Figure 12: Typical cinder block bollard. Note rebar dowels can be observed.



Figure 13: Concrete apron (looking north, just past the center point of the apron). Settlement and cracking.



Figure 14: Concrete apron (looking north, just past center point of apron)





Figure 15: Concrete apron (close up of large cracking and spalled area). Exposed welded wire mesh, mesh does not appear to have been supported during concrete pour, and was pushed to bottom of concrete, where it serves little purpose.



Figure 16: Typical apron dowel location. Dowel welded to steel cap beam has severed (at all locations along length of apron).



Figure 17: North concrete apron (looking southwest). Minimum of 2 feet erosion, exposing lower portion of original footing. Debris collection. Cracking in apron footing.



Figure 18: North concrete apron (looking northwest). Note difference in concrete coloration between lower apron and upper apron, as well as the different type of cinder block bollard (no flare on ends of newer cinder blocks, flat face).



Figure 19: Lower portion of north concrete apron (looking north). Note difference in concrete coloration between lower apron and upper apron.



Figure 20: Lower portion of south concrete apron (looking south). Note difference in concrete coloration between lower apron and upper apron.





Figure 21: Concrete initials and date (located at southern edge of lower/newer concrete pour, near apron curb). Indicates the lower, and newer, concrete pour was performed in 1977.



Double Sheet Pile Wall



Figure 22: Typical lean in double sheet pile wall (looking north, to the south of the concrete apron). Lean in wall ranged from 4 to in excess of 6 inches.



Figure 23: Transition in landward sheet pile wall to from "straight" sheets to "z-sheets" (looking west, to the south of the concrete apron).



Figure 24: Hole dug on landward side of landward steel sheet pile at known tie rod location. Tie rod did not penetrate wall, indicates tie rod may have been welded to the waterside face of the sheet pile.



Figure 25: Typical missing and loose bolts at steel cap beam connection to bulkhead. Waves were observed to cause "clanging" in the cap beam due to it being loose.



Figure 26: Steel cap beam and double wall (looking north, north apron curb can be observed). Distortion in steel cap beam, lean in wall. Cracking and spalling of apron.



Figure 27: Distortion in steel cross-channel between double wall.

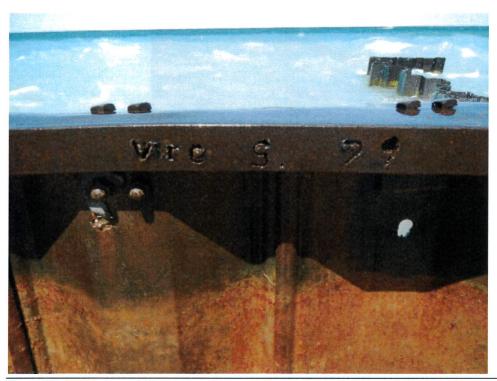


Figure 28: Date burned into steel cap beam. Indicates steel cap beam was installed around 1979. Note steel distortion at bolts.



Figure 29: Termination of steel cap beam extending past the north end of the apron. Approximately 3 feet of erosion may have occurred.



Figure 30: Channel cross-beam near termination of steel cap beam (looking south, north end of apron can be seen. Note the erosion that has occurred behind the double sheet pile wall.



Figure 31: Behind double sheet pile wall (looking south, north end of apron can be seen). The 3 feet of erosion extends 20 to 30 ft behind the double sheet pile wall.



Groins

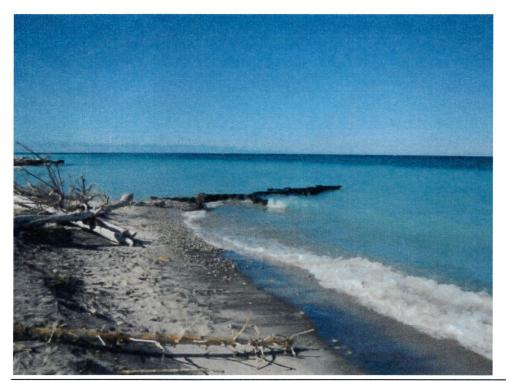


Figure 32: Groin 8 (looking south)



Figure 33: Groin 7 (looking west). Separation observed between wall and groin.



Figure 34: Groin 6 (looking west). Separation and bent or missing sheet between wall and groin.



Figure 35: Groin 5 (looking west). Separation between wall and groin. Two areas where sheeting appears to be missing.



Figure 36: Groin 4 (looking west). Groin has separated from wall. First sheet pile pairs have lost interlock and are bent.



Figure 37: Groin 3 (looking west). Separation between wall and groin. Several sheet piles appear to be missing.



Figure 38: Groin 2 (looking west). Separation between wall and groin. Several sheet piles appear to be bent or missing.



Figure 39: Groin 1 (looking west). Separation between wall and groin. Debris lodged in gap between wall and groin. First sheet pile is either bent or broken.



South Return Wall



Figure 40: South return wall (looking southwest). Debris present. Erosion observed.

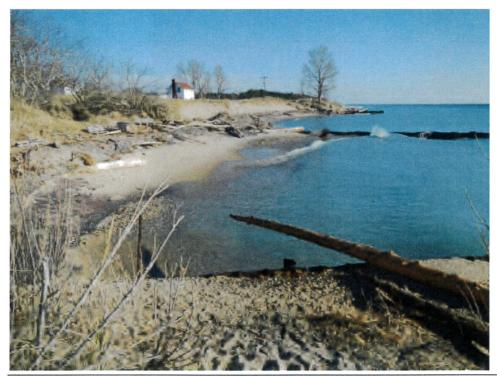


Figure 41: South return wall (looking south). Debris observed.



Figure 42: South return wall (looking west). Small lean in wall. Short curtain wall observed stemming out from south return wall.



Figure 43: South return wall extension (looking west)



North Return Wall



Figure 44: North return wall (looking west) at end of stone revetment. Erosion and severe wall lean.



Figure 45: End of stone revetment (looking east). Erosion occurring at end of revetment.



Figure 46: End of stone revetment (looking north). Erosion occurring at end of revetment.



Figure 47: End of stone revetment at north return wall (looking west). Erosion. Sever wall lean.



Figure 48: End of north wall return (looking west). Severe wall lean. Loss of interlock and sheet pile bending.



Figure 49: Bluff erosion at west end of stone revetment (looking north). Slope stability failure of bluff, approximately 25 feet wide.



Figure 50: Bluff erosion at west end of stone revetment (looking east). Slope stability failure of bluff, approximately 25 feet wide.



Figure 51: Bluff erosion at west end of stone revetment (looking northeast). Slope stability failure of bluff, approximately 25 feet wide.





Figure 52: Bluff erosion at west end of stone revetment (looking northwest). Slope stability failure of bluff, approximately 25 feet wide.



Figure 53: Erosion behind north return wall (looking east). Erosion extends 20 to 30 feet behind sheet pile return wall.

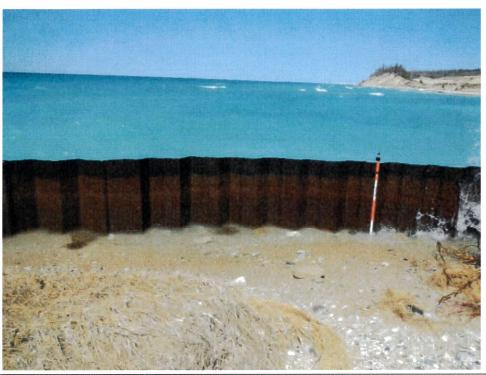


Figure 54: Erosion behind north return wall (looking north).

Commissioner Reports

Art Jeannot Commissioner Report July 14, 2020

- Participated in 5 meetings on behalf of the County since our June 23rd meeting.
- **7/2 Lake Township** Good turnout at the clean-up day despite distancing concerns. Number of absentee ballots for August election have increased compared to previous years.
- 7/7 BOC Budget Discussions All Commissioners participated.
- **7/8 Friends of PB Lighthouse** The attractions at the lighthouse will remain closed for this year. The apartment will continue to be available for rent. The solution for the breakwater wall is an on going discussion. Dick Taylor, Chair, will be making a presentation at this meeting.
- **7/9 Maples** Met with Scott Harrison, Chair, to discuss document of understanding between the BOC and Maples. This will be an agenda item for this meeting.
- **7/13 Almira Township** Considering request for hazardous duty pay. I have put Mark Roper in touch with Susan Boyd for update on how and when to qualify.
- Other
 - I have stayed in contact with many of my assigned committees and agencies by phone. The
 purpose is to share information regarding the current situation (COVID-19) and determine if the
 BOC needs to act on any issues on the group's behalf.
 - Building Authority meeting will be be July 15th at 10am. We will be discussing a resolution at this
 meeting as a result of re-funding the bond for the Maples project.

July 14, 2020 Commissioner's Report to BOC Linda Farrell District #3

I have attended 3 meetings on the behalf of Benzie County since our June 23rd meeting:

July 6 - SUD (Substance Use Disorder) Oversight Board

 We approved numerous PA2 Funds Use requests, including funds for a CWN MAT (Medication Assisted Treatment) clinics in Benzie and Manistee Counties which serve up to 100 people in both counties. Benzie County will receive \$5,960; Manistee \$94,892. The money is apportioned based on the number of people served per county.

July 7 - With the other County Commissioners I attended the Budget Review meeting (by phone).

(July 8th - HR meeting was postponed)

July 13 - FEAS School Board

- They are busy writing 3 required Plans for Re-Opening based on five defined phases of district Coronavirus levels/activity.
- They approved several contracts, including for Administrative Units, Superintendent, TBAISD and Centra Wellness
- There was a presentation by Ella Larsen, student from the Interact Club, on the club's plan
 to have solar panels installed at the school. This included a fundraising plan. Ella was also
 appointed the Student Representative to the School Board for the 20-21 School year.

July 14 - Tonight is Crystal Lake Township meeting



District 6

Commissioner Report

E. Warsecke

Solid Waste - 6-24-20

- Scrap tire grant approved
- Scrap tire collection 7-18 in Thompsonville from 9am 1pm
- -Household hazzardous waste and tires at the road commission 8-15-20 from 9am 1pm

Headlee Subcommittee - 7-2-20

Budget Meeting 7-7-20

Colfax Township 7-8-20

- Doug Durand presented the Senior Resources report
- Clean up day was a success 50 yards collected which is 5 more than last year

Inland Township 7-13-20

- 17 fire dept calls for service the previous month
- Planning commission has received the requested info on the gravel pit and the next meeting is 7-20 at 6pm
- The proposed farmers market this Saturday may be cancelled due to lack of vendors
- Annual audit has been completed

Benzie School Board 7-13-20

- Update given on the bond proposal Golf outing fundraiser Sunday at the Crystal Lk Golf course. 5 teams are still needed. They are putting together informational postcards and will be mailing them out to voters.
- The school will be supplying Chromebook computers to HS students for their 4 years.

County Administrator Report



Memo To:

Board of Commission

From:

Mitchell D. Deisch, Administrator

Date:

July 8, 2020

Subject:

Administrator Update 7/14/2020 BOC Meeting

- 1. Headlee Restoration The full BOC will be discussing the Headlee Restoration process at the Committee of the Whole July 14, 2020 Meeting. Some highlights to date.
 - a. Emails to Township Supervisors regarding the Tax Allocation Board (TAB) sent
 - b. Contacted ISD Superintendent Nick Ceglarek regarding a TAB representative. Waiting to hear back from Mr. Ceglarek.
 - c. Reached out to former Howell City Manager Shea Charles regarding participating in a phone conversation with the Headlee Restoration Subcommittee #3, who is responsible for producing educational materials. The City of Howell did a great job laying out their request in 2018. Mr. Charles agreed to participate in a future meeting.
 - d. Discussed with Probate Judge John Mead his role in nominating a Benzie resident.

More discussion will follow with the full BOC at the 7/14/2020 COTW meeting.

- 2. Next Budget Meetings The next budget meetings are scheduled for Tuesday July 21, 2020 (all day) and Wednesday July 22, 20 (1/2 day, starting at 9:00 am). Incorporated into the draft 20/21 FY budget is a 5% (2.5% Emergency Management & 2.5% 911) increase in wages for Emergency Manager/Central Dispatch Director Rebecca Hubers. Please note that Ms. Hubers did not ask for this to happen. This was a discussion with Chair Bob Roelofs and I in recognition of Ms. Hubers performing multiple duties. Ultimately the BOC will decide on this salary increase during the budgeting process.
- 3. Vacation Just a reminder I will be on vacation Thursday July 16, 2020 through Sunday July 19, 2020, back in the office Monday July 20, 2020.

RECEIVED

BENZIE GOUNTY CLERK BEULAH, MI 49617

JUL 0 9 2020



Benzie County Municipalities

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617

			supervisor@laketownship org	(leannot)
www.laketwp.org	5153 Scenic Hwy.	1 st Thursday 7:00 pm	Anne Grobe	Lake Township
			mcbenzie@yahoo.com	
	Benzonia, MI		231-871-1396	(Sauer)
	5490 Benzie Hwy.	1 st Wednesday 7:00 pm	Matthew Emery	Joyfield Township
			supervisor@inlandtownship.org	
	Interlochen, MI		231-275-7029	(Warsecke)
	19668 Honor Hwy.	2 nd Monday 6:00 pm	Paul Beechraft	Inland Township
			supervisor@homesteadtownship.org	
	Honor, MI		231-352-6772	(Taylor)
www.homesteadtwp.org	11508 Main St.	1 st Monday 6:00 pm	John Hancock	Homestead Township
			cndigger@hotmail.com	
			231-352-4717	(Sauer)
	Elberta Village Hall	2 nd Tuesday 7:00 pm	Carl Noffsinger	Gilmore Township
			Supervisor.clt@gmail.com	
	Frankfort, MI		231-352-4915	(Farrell)
www.crystallaketwp.org	1651 Frankfort Hwy.	2 nd Tuesday 7:00 pm	Amy Ferris	Crystal Lake Township
			cwtplanning@hotmail.com	
	Thompsonville		231-378-2334	(Warsecke)
www.colfaxtwp.org	7607 Michigan Ave.	2 nd Wednesday 7:00 pm	Ron Evitts	Colfax Township
			blainesupervisor@gmail.com	
	Arcadia, MI		231-352-5968	(Sauer)
	4760 Herring Grove Dr.	1 st Tuesday 7:30	Tom Campbell	Blane Township
			supervisor@benzoniatownship.org	
	Benzonia MI		231-882-4411	(Nye)
www.benzoniatownship.org	1020 Michigan Ave.	2 nd Wednesday 7:30 pm	Jason Barnard	Benzonia Township
			supervisor@almiratownship.org	
	Lake Ann, MI		231-275-5862	(Jeannot)
www.almiratownship.org	7276 Ole White Dr.	2 nd Monday 6:00 pm	Mark Roper	Almira Township
	Beulah, MI	am	231-645-1187	
www.benzieco.net	448 Court Place	2 nd and 4 th Tuesday 9:00	Bob Roelofs	Benzie County
Website	Address	Meeting Dates	Elected Leader	Governmental Unit

plattetownship.org		www.frankfortmich.com	www.lakeann-mi.com	https://villageofhonor.org	https://villageofbenzonia.com	www.villageofelberta.com		www.villageofbeulah.net	www.frankfort.k12.mi.us	benzieschools.net
11935 Fowler Rd. Honor, MI	14731 Thompson Ave. Thompsonville, MI	412 Main Street Frankfort, MI	19650 Maple St. Lake Ann, Ml	10922 Platte Street Honor, MI	1276 Michigan Avenue Benzonia, MI	151 Pearson St. Elberta, MI	14714 Lincoln Ave. Thompsonville, MI	7228 Commercial St. Beulah, MI 49617	534 11 th Street Frankfort, MI	9300 Homestead Rd Benzonia, MI
Meets quarterly	2 nd Tuesday 7:00 pm	3 rd Tuesday 5:00 pm	2 nd Tuesday 7:00 pm	2 nd Monday 6:00 pm	1st Monday 6:00 pm	3 rd Thursday 7:00 pm	2 nd Monday 7:00 pm	2 nd Thursday 5:30 pm		2 nd Monday 7:00 pm
Paul Solem 231-835-0631 Plattetownship.gmail.com	Ron Hitesman 231-378-2477 weldonsupervisor@acegroup.com	Liz Dobrzynski, Mayor Josh Mills, Supt. 231-352-7117	Jim Sturmer lakeannpresident@gmail.com	Bill Ward 586-419-0099 bill@villageofhonor.org	Tim Flynn 231-8829981	Jennifer Wilkins 231-352-7201	Gene Smith 231-378-2560	Dan Smith 231-882-4451 geezerdan@charter.net	Jeff Tousley 231-651-9008	Matt Olson 231-882-9653
Platte Township (Jeannot)	Weldon Township (Sauer)	City of Frankfort (Farrell)	Village of Lake Ann (Roelofs)	Village of Honor (Taylor)	Village of Benzonia (Nye)	Village of Elberta (Sauer)	Village of Thompsonville (Sauer/Warsecke)	Village of Beulah (Nye)	Frankfort- Elberta Schools (Farrell)	Benzie Central Schools (Warsecke)

Finance Report

BILLS TO BE APPROVED JULY 14, 2020

w-65

Motion to approve Vouchers in the amount of:

\$ 57,597.93 General Fund (10

- \$ 18,258.38 Jail Fund (213)
- \$ 22,092.02 Ambulance Fund & ALS (214)
- \$ 40,834.21 Funds 105-238
- \$ 2,030.39 ACO Fund (247)
- \$ 26,650.12 Building (249)
- \$ 8,041.09 Dispatch 911 Fund (261)
- \$ 138,349.86 Funds 239-292
- \$ 49,149.16 Funds 293-640
- \$ 25,254.72 701 Fund
- \$ Trust and Agency Funds & MSU Trust and Agency Fund (702-771)

\$ 388,257.88

RECEIVED
JUL 1 0 2020

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617

Payables June 23, 2020 to July 9, 2020

	TOTALS	300.00	61		1		ı	8	5	5	5	5	\$ 5	\$ \$	\$ · •	9	5	·	· •	5	\$ 388.257.88
	FUND 702-771																				
FUND 701	TRUST/ AGENCY		1 574 39		9 080 35																25,254.72
	FUND 293-690		7.629.85	+	3 609 76	+															49,149.16 \$
	FUND 239-292		\$ 16.619.80 \$		95.099.30	26,630.76															\$ 138,349.86 \$
	FUND 261 DISPATCH		\$ 6,878.33	_	\$ 1.013.00 \$	149.76															\$ 8,041.09 \$
	FUND 249 BUILDING		\$ 256.12			\$ 26,394.00															\$ 26,650.12
	FUND 247 ACO		\$ 1,263.77			\$ 766.62															\$ 2,030.39
	FUND 105-238	\$ 300.00	\$ 418.82		\$ 16,256.76	\$ 23,858.63														_	\$ 40,834.21
250	FUND 214 ALS		\$ 7,326.09		\$ 4,445.28	\$ 10,320.65														- 1	\$ 22,092.02
CINID 242	JAIL		\$ 4,646.16		\$ 4,632.73	\$ 8,979.49														\neg	\$ 18,258.38
ELIND 464	GENERAL	-	\$ 14,841.42		\$ 14,670.60	\$ 28,085.91														-	\$ 57,597.93
	DATE		_	6/30/2020		7/9/2020														1	Totals

206-K-9 Fund
207-Sheriff Reserve's
208-Dive Team
209-Resourse Officer
210-Benzie Kids
211-D.A.R.E. Fund
215-FOC

230-BVTMC 's 232-Planning/Zoning 235-CBDG

235-CBDG 238-EDC 245-Remonumentation 256-Reg of Deeds 262-911-Training

269-Law Library
270-Platte River Bridge
271-Housing Grant
276-Council on Aging
285-Pt. Betsie Lighthouse
292-Child Care Fund
293-Soldiers Relief Fund

310-Gov't Ctr Addition-Debt 315-Benzie Leelanau Health 321-Jaii Bond 371-Jaii Bldg Debt Millage 425-Equipment Replace

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY EXP CHECK RUN DATES 06/22/2020 - 07/09/2020 JOURNALIZED

1/14

Page:

JOURNALIZI PAID

77017 76910 76953 77056 76921 77020 77025 77007 Amount Check 76948 77058 76873 76885 76888 76876 77003 76855 77059 76927 76929 77031 76854 76926 76998 76845 77012 77042 76989 76894 76940 76934 76946 17.25 94.88 29.33 48.30 117.30 147.30 307.80 307.80 217.50 152.50 89.78 24.00 42.90 501.96 47.60 300.00 67.52 307.80 175.00 7,995.18 468.64 60.00 366.90 88.80 1,487.50 1,061.25 15.89 962.50 1,601.45 7,995.18 528.64 2,962.50 2,266.50 60.00 9,580.37 Due Date 07/02/20 07/09/20 07/09/20 07/02/20 07/02/20 06/25/20 07/09/20 07/09/20 07/09/20 06/25/20 07/09/20 07/09/20 06/25/20 07/09/20 07/09/20 06/25/20 06/25/20 06/25/20 07/02/20 07/02/20 06/25/20 07/02/20 07/02/20 07/09/20 07/09/20 07/09/20 07/09/20 07/02/20 07/02/20 06/25/20 28949 & 28929 140588/140587 5010754058 18-0110-CA 9856581004 33995-720 19-027-FY Invoice 454967-0 454286-0 2020087 MILEAGE 1150781 070720 053120 043020 070120 063020 063020 053120 053120 053120 062220 063020 061920 062620 305717 070420 31960 362620 083020 DP325 Total For Dept 101 BOARD OF COMMISSIONERS DP327 38328 COURT Total For Dept 142 JUVENILE DIVISION ENDING COURT COORDINATOR WEEK ENDING DRUG COURT COORDINATOR WEEK ENDING COUNTY 3 MONTH COPIER MAINTENANCE Total For Dept 136 DISTRICT COURT Total For Dept 141 FRIEND OF THE Total For Dept 131 CIRCUIT COURT rotal For Dept 172 ADMINISTRATOR REIMBURSEMENT TRAVEL & MEALS DRUG COURT COORDINATOR WEEK TRANSCRIPT-10/17/19 HEARING WATER/JULY RENTAL/DELV FEE SHARED EXPENSES MAY 20202 COURT APPOINTED ATTORNEY COURT APPOINTED ATTORNEY COURT APPOINTED ATTORNEY COURT APPOINTED ATTORNEY MAGAZINE SUBSCRIPTION MILEAGE 05/19 - 06/11 TONER/BINDERS/FOLDERS SELF SCREENING SIGNS SUPPLIES/FORMS MILEAGE - JUNE 2020 MILEAGE - JUNE 2020 SHARED EXPENSES FOC MILEAGE/PHONE REIM MILEAGE MAY & JUNE TINCH / WINCHESTER MILEAGE ALLOWANCE COURT INTERPRETER PROBATION COPIER MILEAGE & MEALS Invoice Desc. PRINTER TONERS ZOOM ACCOUNT CELL PHONES EVALUATION CYPHERS DRUG TEST JACKPINE BUSINESS CEN Д MCCARDEL WATER CONDIT CAMERON CLARK
NETLINK BUSINESS SOLU JACKPINE BUSINESS CEN FELICE J. KELLEY-WARE REDWOOD TOXICOLOGY LA CLINICAL PSYCHOLOGY A MICHIGAN MUNICIPAL LE FIDELITY LANGUAGE RES WELLS FARGO VENDOR FI FELICE J. KELLEY-WARE FELICE J. KELLEY-WARE KISH DYKSTRA & SCOTT MANISTEE COUNTY FOC NORTH POINTE LEGAL, MCDONALD, PATRICK QUAGLIA, VINCENT VERIZON WIRELESS HEINS, PATRICIA SMITH & JOHNSON O'BRIEN, AMANDA FELICZAK, KAREN MANISTEE COUNTY VISA=KIM NOWAK TAYLOR, SHERRY WARSECKE, EVAN DAVID DOBREFF DEISCH, MITCH SPILLAN, JOHN GRAFF, JACOB TEANNOT, ART SAUER, GARY Vendor REIMBURSEMENT TO MANISTE DISTRICT CT APPOINTED AT DISTRICT CT APPOINTED AT PROBATE CT APPOINTTED AT COURT APPOINTED ATTORNEY PROBATE CT APPOINTTED AT DRUG DRUG - DRUG PRINTING & PUBLISHING PRINTING & PUBLISHING PRINTING & PUBLISHING EXPENSES -PROBATION EXPENSES Inv. Line Desc PROJECT EXPENSES EXPENSES EXPENSES INTERPRETER FEES OFFICE SUPPLIES OFFICE SUPPLIES OFFICE SUPPLIES OFFICE SUPPLIES OFFICE SUPPLIES SUPPLIES CELLULAR PHONES LEGAL FEES LEGAL FEES BOARD OF COMMISSIONERS PROJECT PROJECT PROJECT OFFICE TRAVEL TRAVEL TRAVEL TRAVEL TRAVEL TRAVEL TRAVEL Dept 141 FRIEND OF THE COURT Dept 142 JUVENILE DIVISION Dept 136 DISTRICT COURT 101-136-727.00 Dept 172 ADMINISTRATOR COURT Dept 215 COUNTY CLERK 101-215-727.00 Fund 101 GENERAL FUND Dept 131 CIRCUIT 101-131-727.00 101-172-860.00 101-101-860.00 101-101-860.00 101-131-727.00 101-131-805.00 101-131-810.00 101-131-813.00 101-131-860.00 101-131-860.00 101-131-967.00 101-131-967.00 101-136-727.00 101-136-727.00 101-136-805.00 101-136-805.10 101-136-805.10 101-136-853.00 101-141-964.10 101-142-860.00 101-142-900.00 101-172-900.00 101-101-860.00 101-131-805.00 101-131-810.00 101-131-811.00 .01-131-860.00 101-131-967.00 GL Number Dept 101

501.96

Total For Dept 215 COUNTY CLERK

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
JOURNALIZED
PAID

2/14

Page:

Line Desc Vendor
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VISA=MICHELLE THOM THOMPSON, MICHELLE THOMPSON, MICHELLE
BENZIE COUNTY BENZIE COUNTY
VISA=DAWN OLNEY
BENZIE COUNTY ROAD KSS ENTERPRISES NUGENT ACE HARDWARE NUGENT ACE HARDWARE
KSS ENTERPRISES GOTTSCHALK CLEANING
SUMMITT COMPANIES AMERICAN WASTE PTS COMMUNICATION
VERIZON WIRELESS DTE ENERGY
FIGURA, RICHARD
VISA=SARA SWANSON VISA=SARA SWANSON VERIZON WIRELESS THOMSON REUTERS -
RELX INC. DBA LEXISNE VISA=SARA SWANSON
DIXON, CRAIG
OFFICE DEPOT FEDERAL EXPRESS CORP. PITNEY BOWES GLOBAL F NETLINK BUSINESS SOLU TEAM FINANCIAL GROUP, TEAM FINANCIAL GROUP,

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY EXP CHECK RUN DATES 06/22/2020 - 07/09/2020 JOURNALIZED PAID

Page: 3/14

GL Number	Inv. Line Desc	Vendor	Invoice Desc.	Invoice	Due Date	Amount	Check
Fund 101 GENERAL FUND Dept 285 CENTRAL SERV	FUND		Total For Dept 285 CENTRAL SERVICES			5,053.94	
Dept 286 TECHNOLOGY SUPPORT 101-286-970.00 EQUIE	SUPPORT EQUIPMENT	I.T. RIGHT	ADDITIONAL OFFICE 365 LICENSE IN E	20164801	07/02/20	76.29	76930
			Total For Dept 286 TECHNOLOGY SUPPORT	RT	ı	76.29	
101-301-727.00	OFFICE SUPPLIES	VISA=TSCHENDEL 7161	UNIF INT OFF SUPP	7161 06292020	07/24/20	85,32	76963
101-301-748.00	GAS, OIL & GREASE		20		07/01/20	59.85	76902
101-301-748.00	OIL	XPRESS LUBE	14 TAHOE K2	51709	07/10/20	50.90	76968
101-301-748.00	OIL &	COUNTY ROAD	2 FUEL CARDS	5290	07/15/20	12.00	76978
101-301-748.00	OIL &		FUEL JUNE 2020	1325	07/15/20	1,953.22	76978
101-301-748.00	GAS, OIL & GREASE		ည	52236	07/15/20	50.90	77061
101-301-749.00	VEHICLE REPAIRS	DA DESTENS	TAHOE - ALINK/SWAY BAR	013133	07/10//50	388.16	76858
101-301-749.00		WATSON BENZIE LIC	18-1 VISOR SHPPORT	19260	07/10/20	21 75	76965
101-301-749.00		THIRLBY AUTOMOTIVE -		898300	07/15/20	33.19	77050
101-301-751.00	UNIFORMS	VISA=TED SCHENDEL	T&S UNIF JAIL REPAIRS	7419 06292020	07/24/20	188.45	76961
101-301-751.00	UNIFORMS	VISA=TSCHENDEL 7161	UNIF THT OFF SUPP	7161 06292020	07/24/20	302.49	76963
101-301-751.00	UNIFORMS	EMBROID ME OF TRAVERS	SHERIFF UNIFORMS	E19608	07/15/20	196.00	96697
101-301-752.10	DRY CLEANERS	ROBBIE'S DRY CLEANERS	DRY CLNG JUNE 2020		07/15/20	80.80	76947
101-301-835.10	BLOOD RESTITUTIONS	MUNSON MEDICAL CENTER	BLOOD DRAW	10759 BC20 CLOU	07/14/20	22.30	76882
101-301-830.00	TELEPHONE	VERIZON WIRELESS	CELL PHONES	9856581004	06/25/20	49.89	76894
101-301-850.00	TELEPHONE		JAII, TV	0010078062120	05/23/20	341.83 44.83	76913
101-301-850.00	TELEPHONE	VISA=ROSA KYLE	PHONE	7179 06292020	07/24/20	66.0	76960
			Total For Dept 301 SHERIEF		į	3 892 87	
Dont 333 SECONDARY BOAR BAMBOT	דים שונים יוונים		1			10.400	
101-333-725.00	ROAD FAIROL FRINGE BENEFITS		EMPLOYEE DENTAL INSURANCE FOR JULY	RIS0002914261	06/25/20	120.61	76846
101-333-/48.00	GAS, OLL & GREASE	BENZIE COUNTY ROAD CO	FUEL JUNE 2020	1325	07/15/20	157.90	76978
			Total For Dept 333 SECONDARY ROAD F	PATROL		278.51	
Dept 426 EMERGENCY MANAGEMENT	MANAGEMENT						
101-426-725.00	FRINGE BENEFITS	DELTA DENTAL PLAN OF	EMPLOYEE DENTAL INSURANCE FOR JULY	RIS0002914261	06/25/20	35.66	76846
101-426-957.00	MISCELLANEOUS	CHARTER COMMINICATION	CHARTER CARLE TIME 2020	0010110061320	06/25/20	101 00	76844
101-426-957.00	MISCELLANEOUS			0975	06/25/20	13.95	76897
101-426-957.00	MISCELLANEOUS	IDSI INTERNATIONAL	TANAGER - ANNUAL CO	20200035	07/02/20	1,050.00	76931
101-426-970.00	EQUIPMENT	ERECYCLE TC	E-REYCLE FOR EM/BCCD/BCSO ELECTRON	630201	07/02/20	75.00	76924
			Total For Dept 426 EMERGENCY MANAGEMENT	MENT	ŀ	1,320.50	
Dept 648 MEDICAL EXAMINER	AMINER						
101-648-861.00		FAMILY	SPACE/TRANSPORTS MAY	063020	07/09/20	1,350.00	77010
101-648-861.00	BURLAL TRANSLTS	JOWETT FAMILY FUNERAL	AUTOPSY SPACE/TRANSPORTS JUNE 2020	063020	07/08/20	450.00	77011
101-648-970.00		CARE WAS		26096	07/09/20	420.00	77004
			Total For Dept 648 MEDICAL EXAMINER		ŀ	4,170.00	
Dept 649 MENTAL HEALTH	ГТН						
101-649-836.00	APPROPRIATIONS	CENTRA WELLNESS NETWO	MONTHLY APPROPRIATIONS	992	07/09/20	10,091.92	76987
			Total For Dept 649 MENTAL HEALTH			10,091.92	

Dept 751 PARKS & RECREATION DEPARTMENT

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
JOURNALIZED
PAID

4/14

Page:

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Amount	35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00 35.00	3,877.96 175.00 175.00 175.00	1,032.07 1,032.07	57,597.93 120.61 196.45 100.39 226.67 42.98 90.00	827.10 147.81 147.81 974.91	300.00
Due Date	06/25/20 06/25/20 06/25/20 06/25/20 06/25/20 06/25/20 06/25/20 06/25/20 06/25/20 06/25/20 06/25/20	06/25/20 07/02/20 07/02/20 07/02/20	07/09/20	06/25/20 07/15/20 07/27/20 07/24/20 08/06/20 07/10/20	07/09/20	06/22/20
Invoice	062220 062220 062220 062220 062220 062220 062220 062220 062220 062220 062220 062220	© RECREATION DEPARTMENT FOR JULY RISO002914261 BENEFIT 070120 E SUPPLEM 070120 E SUPPLEM 070120	INSURANCE 725-2019FA COMPENSATION INSURANC	LY RISO002914261 1325 1C33-TM6J-H93M 7161 06292020 1G6V-KC3R-4RYL PC 07072020 939561-202006-1	725-2019FA COMPENSATION INSURANC CER MILLAGE FUND	K9 OUTING 2020
Invoice Desc.	PARKS & REC PER DIEM PARKS & REC MILEAGE	Total For Dept 751 PARKS & RECREAT EMPLOYEE DENTAL INSURANCE FOR JULY RETIREE HEALTH SUPPLEMENT BENEFIT MONTHLY RETIREE HEALTHCARE SUPPLEM MONTHLY RETIREE INSURANCE FOR JULY	52 MEDICAL INVOICE 71 WORKERS	Total For Fund 101 GENERAL FUND EMPLOYEE DENTAL INSURANCE FOR JULY FUEL JUNE 2020 THUMB DRIVES INTEL COLLECTION UNIF THY OFF SUPP FLO LGT BULBS/ FOLDERS PETTY CASH REIMB INTEL	Total For Dept 000 2019 FINAL AUDIT INVOICE Total For Dept 871 WORKERS COMPENSATION INS Total For Fund 205 TNT OFFICER MILLAGE FUND	CASH FOR OUTING BANK
Vendor	DEMITROFE, CATHY DUPERRON, SEAN HOOGTERP, EDWARD KRAUS, CHARLES LEACH, KASSIE MICK, TED PEACOCK, TAD ZENKER, SUSAN K. DEMITROFE, CATHY DUPERRON, SEAN HOOGTERP, EDWARD KRAUS, CHARLES LEACH, KASSIE MICK, TED PEACOCK, TAD	DELTA DENTAL PLAN OF CONQUEST, JEFF KOSIBOSKI, JEFFREY TUCKER, DAVID DELTA DENTAL PLAN OF	ES	DELTA DENTAL PLAN OF BENZIE COUNTY ROAD CO AMAZON CAPITAL SERVIC VISA=TSCHENDEL 7161 AMAZON CAPITAL SERVIC BENZIE COUNTY SHERIFF TRANSUNION RISK & ALT	MICHIGAN COUNTIES WOR	KETZ, CHRISTA
Inv. Line Desc	FUND RECREATION DEPARTMENT PER DIEM PER DIEM PER DIEM PER DIEM PER DIEM PER DIEM TRAVEL	INSURANCE MEDICAL/DENTAL/VISION IN MEDICAL/DENTAL/VISION IN MEDICAL/DENTAL/VISION IN MEDICAL/DENTAL/VISION IN MEDICAL INSURANCE - RET	Dept 871 WORKERS COMPENSATION INSURANCE 101-871-828.00 WORKERS COMP INSURANCE	FRINGE BENEFITS GAS, OIL & GREASE INTELL/INVESTIGATIONS INTELL/INVESTIGATIONS INTELL/INVESTIGATIONS INTELL/INVESTIGATIONS INTELL/INVESTIGATIONS INTELL/INVESTIGATIONS INTELL/INVESTIGATIONS	COMPENSATION INSURANCE INSURANCE & BONDS S K-9 FUND	PROJECT EXPENSES
GL Number	Fund 101 GENERAL FUND Dept 751 PARKS & RECR 101-751-721.00 101-751-721.00 101-751-721.00 101-751-721.00 101-751-860.00 101-751	Dept 852 MEDICAL INS 101-852-717.00 101-852-717.00 101-852-717.00 101-852-717.00 101-852-874.00	Dept 871 WORKERS COM 101-871-828.00	Fund 205 TNT OFFICER MILLAGE FUND Dept 000 205-000-725.00 FRINGE BENE 205-000-748.00 GAS, OIL \$\epsilon\$ 205-000-840.00 INTELL/INVE 205-000-840.00 INTELL/INVE 205-000-840.00 INTELL/INVE 205-000-840.00 INTELL/INVE 205-000-840.00 INTELL/INVE 205-000-840.00 INTELL/INVE	WORKERS 28.00 SHERIFF	Dept 000 206-000-967.00

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY EXP CHECK RUN DATES 06/22/2020 - 07/09/2020 JOURNALIZED PAID

Page: 5/14

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Amount	856.20	36.87	229.81 96.16 65.40 442.28 24.99 100.00 49.89 272.54 150.00 72.50 260.02 260.02 260.02 260.02 260.02	2,312.17 70.00 4,660.44 49.95 27.00 135.50 438.00 761.13 567.85 174.00 236.00 308.00 283.42 175.00 190.00 906.00 461.25 975.00 1,995.00 140.00
Due Date	•	06/25/20 07/15/20	07/20/20 07/20/20 07/25/20 08/06/20 07/30/20 07/30/20 07/17/20 07/17/20 07/17/20 07/25/20 07/25/20	07/10/20 07/25/20 07/15/20 07/110/20 07/10/20 07/24/20 07/24/20 07/15/20 07/15/20 07/10/20 07/15/20 07/15/20 07/15/20 07/15/20 07/15/20 07/15/20 07/15/20 07/11/20
Invoice	ND	RISO002914261 1325 OFFICED	14HD-VCPV-3947 14HD-VCPV-3947 36019 1G6V-KC3R-4RYL 3717833 9856581006 247890065708 MA 1502 20200613 06252020 1444 1527505 7419 06292020 06292020 6759	PC 07072020 99079 1325 PC 07072020 013130 P20000059 06292020 7195 7419 06292020 19584 2659 BC-727 100033595 063020041 070720 PC 07072020 PC 07072020 140588/140587 06392020 7195 7419 06292020 276299 20164846 1RLR-TQDW-NPPC
Invoice Desc.	Total For Dept 000 Total For Fund 206 SHERIFF'S K-9 FUND	EMPLOYEE DENTAL INSURANCE FOR JULY FUEL JUNE 2020 Total For Dept 000	FOR FUND 209 SCHOOL RESOURCE TAINT/EQUIP 19 VITAL OXIDE 5T BULBS/ FOLDERS SE PU JULY 2020 PHONES AT GAS 2020 OOR REPAIR S FOR SIGN REPAIRS JUNE 2020 ANN INSPECT 06/2020 AREPAIRS REPAIRS	TOTAL FOR DEPT 265 BUILDING & GROUNDS PETTY CASH REIMB JUNE MEALS JAIL 2020 FUEL JUNE 2020 11 A CARAVAN HEATER CONTROL 68976 01 BLACK CORRECTIONS VAN DECALS UNIF & T&S UNIF & T&S UNIF 2020 2 11 CORRECTIONS NAME PLATES DRY CING JUNE 2020 12 LEGAL FEES - JUNE 2020 12 LEGAL FEES - JUNE 2020 13 CHANEY BAL + CR FEE POV MANOL 06102020 MEAL ALLOWANCE-SUPERVISORY TRAININ 07 PETTY CASH REIMB PUTY CASH REIMB COUNTY 3 MONTH COPIER MAINTENANCE 1. UNIF & T&S ANNUAL LIVESCAN FEES 07/01/2020 TO 2. JAIL BOOKING COMPUTER JAIL MONITOR CONTROL
Vendor		DELTA DENTAL PLAN OF BENZIE COUNTY ROAD CO	AMAZON CAPITAL SERVIC ENTRAL CLEANING SYST AMAZON CAPITAL SERVIC AMERICAN WASTE VERIZON WIRELESS DTE ENERGY ACCESS WINDOW, DOOR & MICHIGAN SHERIFFS ASS NUGENT ACE HARDWARE SUMMITT COMPANIES VISA=TED SCHENDEL VISA=TROY LAMERSON SHERMIN-WILLIAMS	BENZIE COUNTY SHERIFF CANTEEN SERVICES BENZIE COUNTY ROAD CO BENZIE COUNTY SHERIFF HEIGES PERFORMANCE, I INK 231 VISA-DAN SMITH VISA-EDD SCHENDEL EMBROID ME OF TRAVERS ROBBIE'S DRY CLEANERS FIGURA, RICHARD CORRECTIONAL RECOVERY FASPSYCH, LLC BATES, SIERRA BENZIE COUNTY SHERIFF NETLINK BUSINESS SOLU TEAM FINANCIAL GROUP, VISA-EDD SCHENDEL ID NETWORKS, INC. I.T. RIGHT
Inv. Line Desc	SHERIFF'S K-9 FUND SCHOOL RESOURCE OFFICER	FRINGE BENEFITS GAS, OIL & GREASE	JAIL OPERATIONS FUND BUILDING & GROUNDS BUILDING & GROUNDS BAILON MAINTENANCE SUPPLIES 83.00 EQUIP. SERVICES & SUPPLI EARBACE PICK-UP TELEPHONE TELEPHONE TELEPHONE JAIL REPAIRS 35.00 JAIL REPAIRS 35.00 JAIL REPAIRS 35.00 JAIL REPAIRS 35.00 JAIL REPAIRS	CORRECTIONS OFFICE SUPPLIES FOOD SUPPLIES GAS, OIL & GREASE GAS, OIL & GREASE GAS, OIL & GREASE VEHICLE REPAIRS VEHICLE REPAIRS UNIFORMS UNIFORMS UNIFORMS UNIFORMS UNIFORMS FIEGAL FEES PRISONER MEDICAL - BENZI PRISONER MEDICAL - BENZI PRISONER TRANSFER EQUIPMENT LEASE - COPIER EQUIPMENT LEASE - COPIER EQUIPMENT LEASE - COPIER TRAINING & SCHOOLS TRAINING & SCHOOLS TRAINING & SCHOOLS COMPUTER EQUIPMENT COMPUTER EQUIPMENT
GL Number	200	Dept 000 209-000-725.00 209-000-748.00	Fund 213 JALL OPERATIONS FUDDENT 265 BUILDING & GROUNDS 213-265-782.00 MAINT 213-265-783.00 EQUIT 213-265-783.00 EQUIT 213-265-783.00 EQUIT 213-265-784.00 GARBY 213-265-95.00 TELE 213-265-95.00 JALL 213-265-935.00 JALL 213-265	Dept 351 JAIL - CO 213-351-727.00 213-351-740.00 213-351-748.00 213-351-748.00 213-351-749.00 213-351-749.00 213-351-749.00 213-351-751.00 213-351-751.00 213-351-751.00 213-351-751.00 213-351-940.00 213-351-940.20 213-351-940.20 213-351-940.20 213-351-961.00 213-351-961.00 213-351-961.00 213-351-963.00 213-351-963.00

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
JOURNALIZED
PAID

6/14

Page:

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GL Number	Inv. Line Desc	Vendor	Invoice Desc.	Invoice	Due Date	Amoiint	אָט
Fund 213 JAIL OPERA Dept 351 JAIL - COF	OPERATIONS FUND - CORRECTIONS						
Dept 852 MEDICAL INSURANCE	NSURANCE		Total For Dept 351 JAIL - CORRECTIONS	ONS		13,038.53	
213-852-717.00	MEDICAL/DENTAL/VISION IN	DELTA DENTAL PLAN OF	EMPLOYEE DENTAL INSURANCE FOR JULY	RIS0002914261	06/25/20	903.17	76846
RS	COMPENSATION INSURANCE		Total For Dept 852 MEDICAL INSURANCE)E	I	903.17	
213-871-828.00	WORKERS COMP INSURANCE	MICHIGAN COUNTIES WOR	2019 FINAL AUDIT INVOICE	725-2019FA	07/09/20	2,004.51	77018
			rotal For Dept 871 WORKERS COMPENSATION INSURANC	ATION INSURANC	ļ	2,004.51	
214	MEDICAL SERVICES (EMS) FUND		Total For Fund 213 JAIL OPERATIONS	FUND	ļ	18,258.38	
Dept 265 BUILDING & GROUNDS 214-265-750:00	& GROUNDS MAINTENANCE SHEET TES	C ESTOCKED TO FEE					
214-265-750.00		VISA=THOMAS KING FRANKFORT HARDWARE	VISA BILL ST 3 SUPLIES	7-10-20	06/25/20	55.47	76899
214-265-750.00	MAINTENANCE SUPPLIES		7	171686	07/09/20	26.97	77024
214-265-850.01	INTERNET SERVICE	DIRECT TV	ST 2 CABLE	37512733113	06/25/20	162.98	76848
214-265-853.00		VERIZON WIRELESS	INTERNET SERVICE CELL DHONRS	404669354	07/02/20	301.43	76912
214-265-853.00	CELLULAR PHONES	VERIZON WIRELESS	CELL PHONES	9856581005 9856581004	06/25/20	92.96	76894
214-265-922.00		MCCARDEL WATER CONDIT	WATER CONDITIONER FOR ST 3	6-20-20	06/25/20	52.50	76875
214-265-923.00	FUEL - PROPANE GAS	DIE ENERGY	GAS CHARGES 1901 N TVILLE RD	059 5461	06/25/20	45.76	76849
214-265-935.00	OING REPAIR	A J'S EXCAVATING LLC		9100 209 3107 7 11176	06/25/20 06/25/20	53.99	76849 76838
			Total For Dept 265 BUILDING & GROUNDS	SO	ı	1 180 58	
Dept 655 ADVANCED LIFE							
214-655-727.00	OFFICE SUPPLIES	PERSONNEL CONCEPTS	FINAL AMOUNT DUE ON STATE AND FED	9343483887	06/25/20	251.15	76887
214-655-727.00	OFFICE SUPPLIES	VISA=THOMAS KING	VISA BILL	7-10-20	06/25/20	164.14	76899
214-655-735.00		VIENM FINANCIAL GROUP,	COPIER PAYMENT	40019080	07/02/20	198.34	76954
214-655-735.00		BOTHN TREE MEDICAL T	VISA BILL Men suedetes	7-10-20	06/25/20	(115.76)	76899
214-655-735.00		TREE MEDICAL,	MED SUPPLIES	83680297	07/09/20	10.65	76984
214-655-735.00	MEDICAL SUPPLIES	TREE MEDICAL,		83676193	07/08/20	184.00	76984
214-655-735.00		TREE MEDICAL,		83676191	07/09/20	99.72	76984
214-655-735.00	MEDICAL SUPPLIES	BOUND TREE MEDICAL, L		83676192	07/09/20	824.96	76984
214-655-735.00		MINSON MEDICAL, L	MED SUPPLIES	83681981	07/09/20	85.76	76984
214-655-735.10		AIRGAS	OXYGEN	5-31-20	07/09/20	450.00	77023
214-655-735.10	AL SUPPLIES -	PURITY CYLINDER GASSE	OXYGEN	00988735	07/08/20	299.89	76971
214-655-748.00	OIL &	WEX BANK	FUEL BILL	62368790	06/25/20	425 17	76900
214-655-748.00	GAS, OIL & GREASE	щ.	FUEL	1329	07/09/20	1,502.45	76978
214-833-743.00	VEHICLE REPAIRS	THIRLBY AUTO - ALS/EM	PLUGS AND COIL PACKS FOR A33	874858	06/25/20	404.50	76889
214-655-800.01	CONTRACTED SERVICES - RI	BENZIE TRANSPORTATION	A33 MISSFIRE	2416	07/09/20		76981
214-655-860.00			MEAL ALLOWANCE /NORTH CAROLINA_AMBH	BEN0520	06/25/20	2,500.00	76884
214-655-860.00	TRAVEL	TIMOTHY GUENTHARDT	MEAL ALLOWANCE/NORTH CAROLINA-AMBU	TRAVEL	06/25/20	150.00	76897
214-633-860.00	TRAVEL	VISA=THOMAS KING	VISA BILL	7-10-20	06/25/20	1,347.40	76899
214-655-970.00	EQUIPMENT	STRIKER FLEX FINANCIA	INSTALLMENT PAYMENT-MONITOR	177315	07/02/20	3,945.51	76950
	,	פאסיוסיספ השטיקשטים	FORTABLE SUCTION FOR NEW AMBULANCE	104235	07/09/20	488.50	76982

14,030.56

Total For Dept 655 ADVANCED LIFE SUPPORT (ALS)

Dept 851 INSURANCE & BONDS

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY EXP CHECK RUN DATES 06/22/2020 - 07/09/2020 JOURNALIZED PAID

7/14

Page:

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Amount	1,424.00	1,424.00	1,213.29	4,243.59	4,243.59	22,092.02	121.73	121.73	53,69	53.69	175.42	10.85	10.85	10.85	166.86 128.50	295.36	295.36	120.00 210.00 210.00 120.00 35.00 35.00 35.00 35.00 14,431.04 15,220.84 44.89 44.89
Due Date	07/09/20	06/36/30	. 07/57/00	07/09/20			07/15/20		07/09/20			07/09/20	•	•	07/15/20 07/15/20	•	•	07/09/20 07/09/20 07/09/20 07/02/20 07/02/20 07/02/20 07/02/20 07/02/20 07/02/20
Invoice	M0001121	& BONDS	SURANCE	725-2019FA	COMPENSATION INSURANC	ÆDICAL SERVICES (E	1325	IIP	725-2019FA	COMPENSATION INSURANC	OAD PATROL FUND	725-2019FA	WORKERS COMPENSATION INSURANC	PATROL FUND	1325 11268		OL FUND	07072020 07072020 07072020 07072020 06302020 06302020 06302020 3802646 2006-00181 9856581004 06302020
Invoice Desc.	COVERAGE FOR NEW AMBULANCE	Total For Dept 851 INSURANCE (EMPLOYEE DENTAL INSURANCE FOR	r Dept 852 MEDICAL	2019 FINAL AUDIT INVOICE	Total For Dept 871 WORKERS CON	Total For Fund 214 EMERGENCY MEDICAL	FUEL JUNE 2020	Total For Dept 338 LAKE TOWNSHIP	2019 FINAL AUDIT INVOICE	Total For Dept 871 WORKERS COM	Total For Fund 216 SEASONAL ROAD PATROL	2019 FINAL AUDIT INVOICE	Total For Dept 871 WORKERS COM	Total For Fund 217 SNOWMOBILE	FUEL JUNE 2020 FUEL & OIL MARINE	Total For Dept 000	Total For Fund 220 MARINE PATROL	JUNE SITE ATTENDANT SWAC PER DIEM SWAC PER DIEM SWAC PER DIEM RECYCLE SERVICES FOR JUNE 2020 HHW COLLECTION FRANKFORT CELL PHONES SWAC MILEAGE
Vendor	MICHIGAN MUNICIPAL RI	DELTA DENTAL PLAN OF		MICHIGAN COUNTIES WOR			BENZIE COUNTY ROAD CO		MICHIGAN COUNTIES WOR			MICHIGAN COUNTIES WOR			BENZIE COUNTY ROAD CO CRYSTAL LAKE MARINA			BURNETT, DIANE DAVID SCHAFFER STEFFES, MELONIE WOOD, MARLENE ANNIE BROWNING DAVID SCHAFFER WARREN, TODD WOOD, MARLENE AMERICAN WASTE DRUG & LABRATORY DISP VERIZON WIRELESS DAVID SCHAFFER WARREN, TODD
Inv. Line Desc	MEDICAL SERVICES (EMS) FUND & BONDS LIABILITY & BUILDING INS	ISURANCE MEDICAL/DENTAL/VISION IN		WORKERS COMPENSATION INSURANCE (28.00 INSURANCE & BONDS		SEASONAL ROAD PATROL FUND	GAS, OIL & GREASE	871 WORFEDS COMPENSANTAN TREMPARED	INSURANCE & BONDS		CNOWNOBILE DAMEOU ETHE	WORKERS COMPENSATION INSURANCE INSURANCE INSURANCE		ROL FUND	GAS, OIL & GREASE GAS, OIL & GREASE		SOLID WASTE/RECYCLING FUND	WAGES-ATTENDANT WAGES-ATTENDANT WAGES-ATTENDANT WAGES-ATTENDANT PER DIEM PER DIEM PER DIEM PER DIEM CONTRACTED SERVICES HAZARDOUS WASTE TELEPHONE TRAVEL TRAVEL
GL Number	Fund 214 EMERGENCY Dept 851 INSURANCE 214-851-828.10	Dept 852 MEDICAL INSURANCE 214-852-717.00 MEDI	į	Dept 871 WORKERS CO) 214-871-828.00		Fund 216 SEASONAL ROAD	338-7	Nent 871 WORKEDS CO	216-871-828.00		TIT SNOWNOBITE			Fund 220 MARINE PATROL FUND	Dept 000 220-000-748.00 220-000-748.00		228	Dept 000 228-000-703.05 228-000-703.05 228-000-703.05 228-000-721.00 228-000-721.00 228-000-721.00 228-000-721.00 228-000-800.00 228-000-800.00 228-000-800.00 228-000-800.00

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
JOURNALIZED
PAID

8/14

Page:

GL Number	Inv. Line Desc	Vendor	Invoice Desc.	Invoice	Due Date	Amount	Check
Fund 228 SOLID WAST	SOLID WASTE/RECYCLING FUND						
	TRAVEL PUBLIC RELATIONS-PRINTG/ PROJECT EXPENSES - GRANT	WOOD, MARLENE NETLINK BUSINESS SOLU CM RUBBER TECHNOLOGIE	SWAC MILEAGE COUNTY 3 MONTH COPIER MAINTENANCE FRANKFORT SCRAP TIRE	06302020 140588/140587 39956-40166	07/02/20 06/25/20 07/09/20	1.16 179.58 2,013.00	76967 76883 76990
Ĭ.	TNSTIRENCE		Total For Dept 000			32,882.01	
	MEDICAL/DENTAL/VISION IN	DELTA DENTAL PLAN OF	EMPLOYEE DENTAL INSURANCE FOR JULY	RIS0002914261	06/25/20	36.87	76846
Dept 871 WORKERS CO	COMPENSATION INSTRANCE		Total For Dept 852 MEDICAL INSURANCE	Œ		36.87	
71-828.00	WORKERS COMP INSURANCE	MICHIGAN COUNTIES WOR	2019 FINAL AUDIT INVOICE	725-2019FA	07/09/20	1,872.78	77018
			Total For Dept 871 WORKERS COMPENSATION	TION INSURANC		1,872.78	
Fund 231 SOIL EROSION Dept 723 SOIL EROSION	ON (SESSC) FUND ON CONTROL		Total For Fund 228 SOLID WASTE/RECYCLING	CLING FUND		34,791.66	
231-723-800.00		ASSOCIATED GOVERNMENT	PERMITS FOR JUNE 2020	2105	07/09/20	3,500.00	76974
			Total For Dept 723 SOIL EROSION CON	CONTROL		3,500.00	
			Total For Fund 231 SOIL EROSION (SE	(SESSC) FUND	•	3.500.00	
Fund 247 ANIMAL CONTROL FUND Dept 265 BUILDING & GROUNDS 247-265-853.00 CELLUI 247-265-924.00 ELECTH	FROL FUND GROUNDS CELLULAR PHONES ELECTRIC & HEATING	VERIZON WIRELESS	PHONES	9856581004	06/25/20	99.78	76894
		DIE ENERGI	GAS BILL FOR MAY	910020929329	06/25/20	60.25	76849
J	CONTROL		Total For Dept 265 BUILDING & GROUNDS	DS		160.03	
30-727.00 30-835.30 30-900.00 30-970.00	OFFICE SUPPLIES LIVESTOCK EXPENSES PRINTING & PUBLISHING EQUIPMENT	VISA=KYLE MAURER ROGER KNAPP NETLINK BUSINESS SOLU VISA=KYLE MAURER	PRINTERS AND INVERTER FOR TRUCKS/R BOARDING/FEED FOR SMITH CASE HORSE COUNTY 3 MONTH COPIER MAINTENANCE PRINTERS AND INVERTER FOR TRUCKS/R	5047 07-2020 140588/140587 5047	06/25/20 07/09/20 06/25/20	25.43 560.00 65.30	76895 77034 76883
			148		-	0000	06007
Dept 852 MEDICAL INS 247-852-717.00	INSURANCE MEDICAL, DENTAL, VVISTON IN	פס אהום והחאפת החופת	THE TOTAL STREET			1,506.26	
	WH NO. 10 10 11 11 11 11 11 11 11 11 11 11 11		TEE DENTAL INS	RIS0002914261	06/25/20	157.48	76846
SS	COMPENSATION INSURANCE		Total For Dept 852 MEDICAL INSURANCE	ជ		157.48	
247-871-828.00	WORKERS COMP INSURANCE	MICHIGAN COUNTIES WOR	2019 FINAL AUDIT INVOICE	725-2019FA	07/09/20	206.62	77018
			Total For Dept 871 WORKERS COMPENSATION	TION INSURANC		206.62	
Fund 249 BUILDING DE	DEPARTMENT FUND		Total For Fund 247 ANIMAL CONTROL F	FUND	•	2,030.39	
371-800.00 371-900.00	CONTRACTED SERVICES PRINTING & PUBLISHING	ASSOCIATED GOVERNMENT NETLINK BUSINESS SOLU	PERMITS FOR JUNE 2020 COUNTY 3 MONTH COPIER MAINTENANCE	2105 140588/140587	07/09/20 06/25/20	9,792.00 256.12	76974 76883
Dept 372 PLUMBING INSPECTOR	SPECTOR		Total For Dept 371 BUILDING INSPECTOR	OR	'	10,048.12	
249-372-800.00	CONTRACTED SERVICES	ASSOCIATED GOVERNMENT	PERMITS FOR JUNE 2020	2105	07/09/20	2,908.00	76974
			Total For Dept 372 PLUMBING INSPECTOR	JR	ı	2,908.00	

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INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
JOURNALIZED
PAID

9/14

Page:

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Fund 249 BUILDING DEPARTMENT Dept 373 MECHANICAL INSPECTOR 249-373-800.00	BUILDING DEPARTMENT FUND MECHANICAL INSPECTOR 00.00 CONTRACTED SERVICES	ASSOCIATED GOVERNMENT	PERMITS FOR JUNE 2020	2105	07/09/20	5,355.00	76974
Dant 375 FIBORDICAL INCRECHOR	TNonograph		Total For Dept 373 MECHANICAL INSP	INSPECTOR	I	5,355.00	
249-375-800.00	INSFECTOR CONTRACTED SERVICES	ASSOCIATED GOVERNMENT	PERMITS FOR JUNE 2020	2105	07/09/20	8,339.00	76974
			Total For Dept 375 ELECTRICAL INSP	INSPECTOR	1	8,339.00	
Fund 256 REG OF DEEL	256 REG OF DEEDS AUTOMATION FUND		Total For Fund 249 BUILDING DEPARTMENT	TENT FUND	ı	26,650.12	
Dept 000 256-000-800.00	RECORD CONVERSIONS	FIDLAR TECHNOLOGIES I	MEDIA CONVERSION OF GRANTOR/GRANTE	I4239F0-IN	07/02/20	1,761.00	76928
			Total For Dept 000		I	1,761.00	
259	INDIGENT DEFENSE COUNSEL		Total For Fund 256 REG OF DEEDS AU	DEEDS AUTOMATION FUND	1	1,761.00	
Dept 000 259-000-720.00	COUNTY SHARE TO MANISTEE	MANISTEE COUNTY	MIDC - 4TH QUARTER PAYMENT	070120	07/09/20	22,984.00	77016
			Total For Dept 000		l	22,984.00	
Fund 260 CPL CLERK TECHNOLOGY FUND	ECHNOLOGY FUND		Total For Fund 259 INDIGENT DEFENSE	COUNSEL	ı	22,984.00	
260-000-970.00	EQUI PMENT	IDENTISYS	NEW PRINTER FOR CPL W/ 12 MONTH WA	490631	07/09/20	2,152.60	77006
			Total For Dept 000		1	2,152.60	
			Total For Fund 260 CPL CLERK TECHNO	TECHNOLOGY FUND	ı	2,152.60	
Fund 261 911 EMERGEN Dept 325 DISPATCH/CO	911 EMERGENCY SERVICE FUND DISPATCH/COMMUNICATION						
325-7 325-7 325-8 325-8	OFFICE SUPPLIES OFFICE SUPPLIES 911 MAINTENANCE CONTRACT 911 MAINTENANCE CONTRACT	VISA=RHUBERS EXCEL OFFICE FURNISHI ID NETWORKS, INC. WESTTEL INTERNATIONAL	JUNE 15, 2020 RHUBERS VISA CHARGES REPLACEMENT OFFICE CHAIR ARM PADS ANNUAL SERVICE RENEWAL CAD 7/1/20 911 MONTHLY MAINTENANCE AUGUST 20	0975 0000156 276298 1498	06/25/20 07/02/20 06/25/20 07/02/20	379.00 75.00 6,208.00 938.00	76897 76925 76865 76966
			Total For Dept 325 DISPATCH/COMMUNICATION	CATION	ľ	7,600.00	
Dept 852 MEDICAL INS 261-852-717.00	INSURANCE MEDICAL/DENTAL/VISION IN	DELTA DENTAL PLAN OF	EMPLOYEE DENTAL INSURANCE FOR JULY	RIS0002914261	06/25/20	291.33	76846
NOO OUTWOOD 150 took	TO SECULIAR STATE OF THE CONTROL		Total For Dept 852 MEDICAL INSURANCE)E		291.33	
Dept 8/1 WOKKEKS COM 261-871-828.00	COMPENSATION INSURANCE WORKERS COM INSURANCE	MICHIGAN COUNTIES WOR	2019 FINAL AUDIT INVOICE	725-2019FA	07/09/20	149.76	77018
			Total For Dept 871 WORKERS COMPENSATION INSURANC	ATION INSURANC		149.76	
מרס פתוסתים 26/	מחושוים מסוושריםםטים מינומטים		Total For Fund 261 911 EMERGENCY SI	SERVICE FUND	l	8,041.09	
Dept 000	ELIONE FOND						
264-000-967.00	PROJECT EXPENSES	VANCE OUTDOORS INC	SIG SAUER P365 9 MM	3732630-IN	07/30/20	423.26	77054
			Total For Dept 000			423.26	

423.26

Total For Fund 264 SHERIFF FORFEITURE FUND

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
JOURNALIZED
PAID

10/14

Page:

GL Number	Inv. Line Desc	Vendor	Invoice Desc.	Invoice	Due Date	Amolint	Check
Fund 269 LAW LIBRARY FUND Dept 000	Y FUND	1					
269-000-800.00 269-000-901.00 269-000-901.00 269-000-901.00	CONTRACTED SERVICES RESOURCE MATERIALS RESOURCE MATERIALS RESOURCE MATERIALS	SWANDER, CANDICE MANISTEE COUNTY MATTHEW BENDER & CO., THOMSON REUTERS - WES	LAW LIBRARIAN - JAN - JUNE 2020 SHARED EXPENSES MAY 20202 MI EVIDENCE COURTROOM MANUAL LIBRARY PLAN CHARGES	LIBRARIAN 053120 19014996 842667534	07/02/20 06/25/20 07/02/20	750.00 96.80 213.30	76952 76873 76942
			Total For Dept 000	r 0 0 1		1,876.00	//051
Fund 276 COMMISSION	COMMISSION ON AGING MILLAGE FUND		Total For Fund 269 LAW LIBRARY FUND	0		1,876.00	
276-000-800.00	CONTRACTED SERVICES	BENZIE SENIOR RESOURC	MNTHLY PYMT FOR CONTRACTED SERVICE	070120	07/02/20	92,325.00	76909
			Total For Dept 000			92,325.00	
Fund 285 POINT BETSI	POINT BETSIE LIGHTHOUSE FUND		Total For Fund 276 COMMISSION ON AGING MILLAGE	SING MILLAGE F		92,325.00	
285-000-967.00	PROJECT EXPENSES	WF BAIRD & ASSOCIATES	POINT BETSIE LIGHTHOUSE HISTORIC S	71401	06/25/20	15,487.00	76901
Dept 806 2019 MCZM GRANT	FRANT		Total For Dept 000		•	15,487.00	
285-806-800.00 285-806-800.00	CONTRACTED SERVICES CONTRACTED SERVICES	FLEIS & VANDENBRINK FLEIS & VANDENBRINK	PT BETSIE ROAD END/DESIGN PLANS EG POINT BETSIE ROAD END-DESIGN PLANS	55988 56108	06/25/20 07/09/20	1,036.00	76856
			Total For Dept 806 2019 MCZM GRANT		•	1,291.00	
Fund 292 CHILD CARE FUND	FUND		Total For Fund 285 POINT BETSIE LIGHTHOUSE FUND	SHTHOUSE FUND	•	16,778.00	
292-000-850.00	TELEPHONE	CAMERON CLARK	MILEAGE/PHONE REIM	6/26	07/02/20	50.00	76910
			Total For Dept 000		•	50.00	
Fund 293 VETERAN'S RELIEF FUND	ELIEF FUND		Total For Fund 292 CHILD CARE FUND		•	50.00	
293-000-727.00 293-000-900.00 293-000-900.00 293-000-900.00 293-000-970.00	OFFICE SUPPLIES PRINTING & PUBLISHING PRINTING & PUBLISHING PRINTING & PUBLISHING EQUIPMENT	VISA=MICHELLE THOMPSO NETLINK BUSINESS SOLU MIDWESTERN BROADCASTI PIONEER GROUP JACKPINE BUSINESS CEN TKS SECURITY	COFFEE MAKER FOR VA OFFICE COUNTY 3 MONTH COPIER MAINTENANCE RADIO ADVERTISING FOR VETERANS ADVERTISING FOR VETERANS OFFICE FURNITURE FOR VETERANS SECURITY CAMERAS FOR VA	052820 140588/140587 071012020 43100328 454603-0	06/25/20 06/25/20 07/02/20 07/09/20 06/25/20	105.99 57.19 1,920.00 2,600.00 5,029.67	76896 76883 76943 77027 76866
			0.0			12,149.85	26097
Fund 296 JUVENILE JU Dept 000	JUSTICE FUND		Total For Fund 293 VETERAN'S RELIEF	. FUND	•	12,149.85	
296-000-800.00	CONTRACTUAL SERVICES	LORI WADE	SOCIAL WORKER CONTRACT	JULY	07/02/20	1,250.00	76939
			Total For Dept 000			1,250.00	
Fund 401 CAPITAL IMPROVEMENT FUND	ROVEMENT FUND		Total For Fund 296 JUVENILE JUSTICE FUND	FUND	•	1,250.00	

Fund 401 CAPITAL IMPROVEMENT FUND

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
JOURNALIZED
PAID

11/14

Page:

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Dept 000 401-000-967.00	PROJECT EXPENSES	WATSON BENZIE LLC	2020 DURANGO/VIN 1C4SDJFT4LC368060 Total For Dept 000	DURANGO	06/29/20	33,677.00	76905
DELINQUENT T	516 DELINQUENT TAX REVOLVING FUND		Total For Fund 401 CAPITAL IMPROVEMENT	ENT FUND	l	33,677.00	
Dept 000 516-000-694.00 516-000-999.00 516-000-999.00	CASH OVER/SHORT CONTINGENCY CONTINGENCY	DAVID OR KATHERINE LO U.S. POSTMASTER - BEU SUNTRUST BANK	OVERPAYMENT ON DELINQUENT TAXES 01 POSTAGE FOR DELINQUENT TAX MAILING QTRLY BANK FEES	070620 07012020 20030055	07/09/20 07/02/20 07/09/20	733.30 439.76 29.25	76994 76958 77048
			Total For Dept 000		1	1,202.31	
Fund 532 TAX FORECLOSURE FUND	URE FUND		Total For Fund 516 DELINQUENT TAX REVOLVING	EVOLVING FUND	ſ	1,202.31	
	CONTRACTED SERVICES - RE LEGAL FEES	BENZIE COUNTY REGISTE LUCAS V. MIDDLETON	TO RECORD 24 REDEMPTIONS FORECLOSURE PETITION	070720 16	07/09/20 07/09/20	720.00	76977 77015
			Total For Dept 253 COUNTY TREASURER		1	870.00	
Fund 701 GENERAL AGENCY FUND	CY FUND		Total For Fund 532 TAX FORECLOSURE	FUND		870.00	
Dept 136 DISTRICT COURT 701-136-214.01	RT DUE TO SHERIFF'S DEPT -	BENZIE COUNTY SHERIFF	JUNE 2020 OWI REIMBURSEMENT	DP331	02/60/20	118 00	76980
701-136-228.20	DUE STATE - DNR JUDGEME	OF MICHI	2020 FEE	DCST06/2020	07/09/20	20.00	77044
701-136-228.37		STATE OF MICHIGAN	JUNE 2020 FEE STRANSMITTAL	DCST06/2020	07/09/20	75.00	77044
701-136-228.42	STATE -	OF.	2020 FEE	DCST06/2020	07/09/20	70.00	77044
/U1-136-228.56 701-136-228.56	DUE STATE - OWI REIMBURS DUE STATE - RETIING FEE	STATE OF MICHIGAN	JUNE 2020 FEE STRANSMITTAL	DCST06/2020	07/09/20	300.00	77044
701-136-228.57	STATE -		2020 FEE	DCST06/2020	07/09/20	75.00	77044
701-136-228.58 701-136-228.59	DUE STATE - CIVIL FILING	STATE OF MICHIGAN	JUNE 2020 FEE STRANSMITTAL	DCST06/2020	07/09/20	1,792.00	77044
701-136-265.00	H BONDS P		APPLIED/C	DE328	07/08/20	3,042.50	76969
701-136-265.00	BONDS	COUR!		DP340	07/09/20	100.00	76970
701-136-265.00	CASH BONDS PAYABLE CASH BONDS PAYABLE	SHELAGOWSKI, TRACY LY YORK, WAYNE SHERMAN	BOND RETURNED ROND RETURNED	19-279-SM	07/09/20	500.00	77036
701-136-271.00		E OF RC	Н	18-091-FY	06/25/20	40.00	76851
701-136-271.00		ESTATE OF ROBERT LOVE	FROM ELLEN KAY	18-091-FY	06/25/20	15.00	76852
701-136-271.00	RESTITUTIONS PAYABLE RESTITUTIONS PAYABLE	HERN, MICHAEL	RESTITUTION FROM CAITLYN E FITZHUG	17-284-FY 17-284-EV	06/25/20	40.00	76859
701-136-271.00			PAYMENT FROM CA	17-284-FY	06/25/20	20.00	76861
701-136-271.00			PAYMENT	17-284-FY	06/25/20	20.00	76862
701-136-271.00	RESTITUTIONS PAYABLE RESTITUTIONS PAYABLE	HOMAN, LYNN MARGO, MICHAEL	RESTITUTION PAYMENT BY JONATHAN HA	18-351-SM 18-262-ST	06/25/20	50.00	76863
701-136-271.00				18-034-+FY	06/25/20	25.00	76877
701-136-271.00		MCKIDDIE, KYLE	RESTITUTION FROM CRYSTAL PUTNEY	18-034-FY	06/25/20	50.00	76878
701-136-271.00				13-245-FY	06/25/20	5.00	76890
/UI-136-2/1.00 701-136-271.00	RESTITUTIONS PAYABLE RESTITUTIONS PAYABLE	TIMMER, JEREDITH	RESTITUTION PAYMENT FROM BRADON M RESTITITION FROM KRAIG HIMSEAN	13-245-FY	06/25/20	5.00	76891
701-136-271.00		٠,		18-016-FY	07/09/20	10.00	76983
701-136-271.00	RESTITUTIONS PAYABLE	CENTRAL STATE BANK		18-107-FY	07/09/20	20.00	76988

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INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
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Fund 701 GENERAL AGENCY FUND Dept 136 DISTRICT COURT 701-136-271.00 RESTIT 701-136-271.00	RT RESTITUTIONS PAYABLE RESTITUTIONS PAYABLE RESTITUTIONS PAYABLE RESTITUTIONS PAYABLE RESTITUTIONS PAYABLE RESTITUTIONS PAYABLE	HERN, MICHAEL RYKSE, BRAD SHOP AND SAVE SHOP AND SAVE SINGLETON, MEGAN SLAUGHTER, SUZANNE	RESTITUTION PYMT FROM CAITLYN E FI RESTITUTION PYMT FROM LARRY L BROW RESTITUTION PYMT FROM EUGENE PLONS RESTITUTION PYMT FROM JAMES M MATT RESTITUTION PYMT FROM SHAWN K ROBE RESTITUTION PYMT FROM SHAWN K ROBE	17-284-FY 19-203-FY 19-412-SM 18-464-SM 19-375-SM	07/09/20 07/09/20 07/09/20 07/09/20 07/09/20		77005 77035 77038 77039
701-136-271.00 701-136-275.00		क्स क्य	FIRE FROM ONLINE CRE	13-038-ST 13-245-FY DP344	07/09/20 07/09/20 07/09/20	15.00 5.00 10.00	77041 77052 77014
Dept 141 FRIEND OF THE 701-141-222.04	E COURT DUE MANISTEE - STATUTORY	MANISTEE COUNTY TREAS	Total For Dept 136 DISTRICT COURT FOC FEE COLLECTIONS	0000	00/00/00	8,364.83	
701-141-222.05	DUE MANISTEE - PROCESSIN	MANISTEE COUNTY TREAS		063020 063020	07/02/20	279.17	76941
Dept 148 PROBATE COURT 701-148-228.06	I DIIR STATE - SHADEN DEES	Ç				80.006,2	
701-148-228.42 701-148-228.56 701-148-228.58	STATE - G STATE - C STATE - C	STATE OF MICHIGAN STATE OF MICHIGAN STATE OF MICHIGAN	JUNE 2020 FEE TRANSMITTAL JUNE 2020 FEE TRANSMITTAL JUNE 2020 FEE TRANSMITTAL	PCST06/2020 PCST06/2020 PCST06/2020	07/09/20 07/09/20 07/09/20	669.88 60.00 125.00	77043 77043 77043
		5	2020 TO 70	PCST.06/2020	07/09/20	900.00	77043
Dept 215 COUNTY CLERK			TOTAL THE ENORMIE			1,754.88	
701-215-228.05 701-215-228.37	DUE STATE - NOTARY FEES	MICHIGAN DEPARTMENT O	EE TRANSMI		07/09/20	2.00	77019
701-215-228.42	STATE -	STATE OF MICHIGAN	CIRCUIT COURT FEE TRANSMITTAL	JUNE 2020	07/09/20	771.52	77045
701-215-228.56	ı	STATE OF MICHIGAN	COURT FEE		07/09/20	325.00	77045
701-215-228.58	DUE STATE - SIAIE JURI DUE STATE - CIVIL FILING	STATE OF MICHIGAN	CIRCUIT COURT FEE TRANSMITTAL	JUNE 2020	07/09/20	25.00	77045
701-215-228.59	٠, ٢	0	CIRCUIT COURT FEE TRANSMITTAL		07/09/20	1,547.00 443.50	77045
701-215-265.00	CASH BONDS PAYABLE CASH BONDS PAYABLE	BENZIE COUNTY CLERK	BOND MONEY APPLIED FRANCIS AMOND	19-2666-FH	06/25/20	225.00	76842
701-215-265.00	PA		MONEY	19-2659-FH	05/25/20	225.00	76843
701-215-271.00	RESTITUTIONS PAYABLE		FROM DEVIN SCAR	19-2626-FH	06/25/20	35.00	76857
701-215-271.00		VALLES AND CAROLINE HE KELLY GILLMAN	RESTITUTION FROM LUCAS BRIGHT RESTITUTION FROM DAVID WALTON	11-2233-FH	06/25/20	10.00	76867
701-215-271.00		KRISTINA EGGEMAN	FROM DONOVE	16-2456-FC	07/02/20	25.00	89897
701-215-271.00	RESTITUTIONS PAYABLE RESTITUTIONS DAVABLE	CORI AND JESSE SMOKER	FROM	19-2639-FH	07/09/20	110.00	76991
701-215-271.00		JAMES AND CAROLINE HE	RESTITUTION FROM LUCAS BRIGHT	11-2233-FH	07/09/20	10.00	77008
701-215-271.00	SNOI		FROM RODERI	13-2328-FH	07/08/20	10.00	77009
701-215-299.03	COURT			19-2668-FH	06/25/20	450.00	76869
701-215-239.03	CIRCUIT COURT MISCELLANE	CORESOURCE ATTN: REFU	AMBULANCE PAID TWICE JUDITH DOWDAL	19-1104	07/02/20	304.66	76916
701-215-299.03	COURT	JEAN LUEDIKE	OVERPAYMENT AMBULANCE OVERPAYMENT AMBULANCE	19-16991	07/02/20	1,620.00	76917
701-215-299.03	CIRCUIT COURT MISCELLANE	KATHY WEIDEN		18-21937	07/02/20	91.50	76935
Dant 267 DDOGGGGGGGG	Vawaonii		Total For Dept 215 COUNTY CLERK		l	7,318.97	
701-267-268.00	CANINE ADVOCATE FUND	CODY KASTL	Q2 K9 FOOD AND GROOMING	ДЗ К9 FOOD & G	07/02/20	190.81	76914

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Total For Dept 267 PROSECUTING ATTORNEY

Dept 268 REGISTER OF DEEDS

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INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
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INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 06/22/2020 - 07/09/2020
JOURNALIZED
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14/14

Page:

Finance Issues:

Approval of bills from June 24 through July 14, 2020 in the amount of \$388,257.88.

I am working with Xpert Fulfillment on a couple of projects; one is printing and mailing of the winter tax bills for the townships (instead of the Treasurer's Office) and the other is long term storage with accessibility for historical tax rolls, as well as scanning for ease of accessibility. We need to add this to the Committee of the Whole for discussion under Buildings and Grounds. There would be realized savings if we were all able to utilize their storage capacity. Tax roll storage would be funded by Tax Foreclosure/DTRF funds and General Ledgers would be funded by the General Fund.

The tax legislation that I spoke of at the last meeting was vetoed by the Governor. There is legislation in progress very similar to the vetoed bills, and I hope they fall by the wayside like the others. It involves a great deal of effort, cost, and confusion for little reward to the taxpayer financially hit by Covid-19. Three are plenty of ways in which we can assist, that is already in place.

On June 29, we foreclosed on 13 properties, 5 of which are "clean up" pieces, where small pieces are found during the mapping process and are put back on the tax rolls to be foreclosed upon so we have control over them. We try to pick them up at the land bank and sell them for a \$200 handling fee and back taxes to those neighboring parcels that it seems a right fit. There is also five 10-acre parcels, 3 of which are fully wooded. That leaves 2 parcels that either have a structure or debris that needs to be removed before sale and another vacant lot in the Village of Thompsonville. As we have already published the July 20 date for last day to pay, we will honor it if anyone comes forward to pay taxes before then. It is only right.

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FROM 10/01/2019 TO 07/13/2020 FUND: ALL FUNDS CASH ACCOUNTS

CASH SUMMARY BY FUND FOR BENZIE COUNTY

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Ending Balance 07/13/2020	10,627.8	,680,920.9	4 4	7. 04. 4	696.4	717.0	0.0	4,040.9	525.3	36, 789.6	•	7,034.I	200 200	0.01 0.01	2000	5,956.5	, 332. I	78,413.6	273.00	0.826.0		0,000	56.5	T, 409.T	3,223.0	8,911.2	40,080.I	7.428.	1, 188.3	0.020.	404.0	0.401.	10 530 0	7,629.9	,024.	,766.3	,179.0	11,104.0	,087.6	4,913.2	4,204.7	2,058.7	2,343.7	10,136.	10,999.9	,050.4
Total Credits	477,263.0	,296,916.9	23,440.	0.040	000.		0.0	27.	49.1	,987,044.4	37.	8,891.1	, 532.		y, xox. o	14,81U.2	97,343.9	7,2/3.	χ	0.000,4	0	0	0.0	1/2.8	7,742.0	0.0	,655.3	62,848.0	.00/,	0.0	0.7/8	O. D. T. O. C.	7 469,031.9	011.4	910.0	5.3	4,671.0	137.9	55,814.3	0.0	4,725.4	61,951.3	928.	77.1	29,50	5,540.
Total Debits	053,474.8	,960,829.9	42,580.	6.001,7	00.0	0	0.	3.9	0,459.3	,274,826.7	3,422.	,270.6	18/3.	0.0	2,904.4	T. CUU, OT	I,554.6	3/,289.7	2.7	0.020.2	0.00	32. I	634.4	258.9	5,210.4	T,800.0	9,121.7	56,164.6	3,575.2		4,366.4	7 004 . 7	10 302 6	615.7	785.9	73.9	,335	6,060.3	28,688.7	17,453.3	,748.6	83,478.	824.0	1.3	26,96	,786.1
Beginning Balance 10/01/2019	3,160.4	17,007.	9,008.4	434.3	1 6 9		0.0	6.	3,715.0	07.3	o.	74.7	رد. د ک	16.6	391.0	2, 763.5	121.5	1,399.2	(941.5	0.0 0.0	0.0	11.9	0,122.0	,323.1	5,755.2	/, III. 2	54,613.7	9,112.2	24,924.	629.9	0.00	39,300.7	7 L 10. 1	000	4,148.5	7.77.	,156	329,181.71	,962.0	7,45	4,18	0,53	,447.7	(1,720.	,536.9	
Description	GENERAL FUND	BENZIE COUNTY ROAD COMMISSION		K-9 FOND	SHERIFF'S RESERVES FUND	ACHOOT, RESOURCE OFFICER	D. A. R. F. FUND	BENZIE KIDS	JAIL OPERATIONS FUND	EMERGENCY MEDICAL SERVICES (EMS) FUN	FRIEND OF THE COURT FUND	SEASONAL ROAD PATROL FUND	CLE PATROL				BENZIE-LEELANAU DIST HEALTH DEPT FUN	CYCLING FUND	TRAIL		CDBG GRANTS		BROWNFIELD REDEVELOPMENT AUTHORITY F			ORMATION	ANIMAL CONTROL FUND				INDIGENT DEFENSE COUNSEL	CPL CLERK TECHNOLOGY FUND	WII EMEKGENCI VEKVICE FOND	LOCAL CORRECTION OPPICER'S TRAINING		JUSTICE TRAINING (302) FUND	RARY FUND	COMMISSION ON AGING MILLAGE FUND	POINT BETSIE LIGHTHOUSE FUND	FAMILY COURT GRANTS	CHILD CARE FUND	VETERAN'S RELIEF FUND	VETERAN'S MEMORIAL FUND		GOVERNMENT CENTER ADDITION DEBT FUND	MAPLES DEBT/MILLAGE FUND
Fund	101	201	205	206	207	000	217	212	213	214	215	216	217	218	219	220	221	228	230	231	235	241	243	244	245	246	247	249	256	258	259	260	7 Q Z	200	264	265	269	276	285	287	292	293	295	296		312

CASH SUMMARY BY FUND FOR BENZIE COUNTY FROM 10/01/2019 TO 07/13/2020

FUND: ALL FUNDS CASH ACCOUNTS

Ending Balance 07/13/2020	286.67	211,814.13	90,190.07	18,115.02	50,225.50	3,679,267.27	4,207,366.23	693,919.47	48,044.50	4,656.47	1,408.10	52,160.25	182,407.42	74,127.17	79,738.80	31,647.48	15,519,070.18
Total Credits	00.00	237,758.82	315,155.78	00.00	85,063.48	8,057,716.41	6,637,522.95	591,610.04	122,495.88	2,101.46	2,788.10	00.0	10,321,430.72	1,990,720.93	00.00	115,348.78	59,816,612.40
Total Debits	00.00	248,899.55	282,577.89	5,430.00	77,109.51	8,759,936.31	6,300,255.44	604,081.11	80,728.35	1,050.73	2,538.37	00.0	6,035,110.44	2,043,464.92	44,906.82	114,667.15	55,751,287.67
Beginning Balance 10/01/2019	286.67	200,673.40	122,767.96	12,685.02	58,179.47	2,977,047.37	4,544,633.74	681,448.40	89,812.03	5,707.20	1,657.83	52,160.25	4,468,727.70	21,383.18	34,831.98	32,329.11	19,584,394.91
Description	JAIL RESERVE FUND	CAPITAL IMPROVEMENT FUND	MCF RENOVATIONS FUND	RAILROAD POINT	EQUIPMENT REPLACEMENT FUND	MEDICAL CARE FACILITY FUND	DELINQUENT TAX REVOLVING FUND	TAX FORECLOSURE FUND	CDBG HOUSING GRANT FUND	BUILDING AUTHORITY	COMMISSARY/CONCESSION FUND-JAIL	TREASURER'S TAX ADMINISTRATION FUND	GENERAL AGENCY FUND	PAYROLL CLEARING FUND	LIBRARY PENAL FINE FUND	SHERIFF'S INMATE TRUST FUND	TOTAL - ALL FUNDS
Fund	371	401	412	415	425	512	516	532	535	569	595	616	701	704	721	764	

Committee Of The Whole

THE BENZIE COUNTY BOARD OF COMMISSIONERS COMMITTEE OF THE WHOLE June 23, 2020

The Benzie County Board of Commissioners met as a Committee of the Whole on Tuesday, June 23, 2020, 448 Court Place, Government Center, Beulah, Michigan.

The meeting was called to order by Vice Chair Evan Warsecke at 1:30 p.m.

Present were: Commissioners Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke

The Pledge of Allegiance was recited.

Agenda:

Motion by Roelofs, seconded by Nye, to approve the agenda as presented. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Minutes:

Motion by Nye, seconded by Roelofs, to approve the Committee of the Whole minutes of May 26, 2019 as presented. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

1:46 p.m. Public Input – None

Kyle Mauer – Animal Control Discussion: Discussion was held regarding the possible moving of Animal Control supervision under the Sheriff, it is currently supervised by the County Administrator. Reasons for doing so: safety aspects; no means to use LEIN; report writing system on the road; could get additional training through the Sheriff Dept; search warrants; chain of command. ACO needs to migrate to the Sheriff Dept.

Comm Warsecke asked how many search warrants you do per year? 4 or 5; 2 were drugs, 2 were neglect abuse. How often do you have a deputy with you on search warrants? Always Are you using the same frequency as the deputies? Yes

Comm Nye stated the ACO used to be under the Sheriff – why did it move to admin?

Comm Jeannot indicated it was Sheriff initiated

Comm Taylor asked what changes would you see? Badge – maybe clothes

Comm Roelofs stated that until you are a certified police officer, there should be no recognition of the Benzie County Sheriff Department; there should be one person that the ACO reports to and I feel it should be the Undersheriff.

Comm Jeannot said that should be up to the Sheriff.

Sheriff Schendel stated that it would be more efficient and for safety reasons.

Comm Farrell asked – will line still be drawn to separate the Sheriff Dept/ACO?

Mitch responded that if they go under the Sheriff, you give up everything but control of the money. Comm Nye asked about union ramifications? Yes, one is currently in the FOPLC and Maurer will fall into a union as well.

Comm Jeannot asked about ACO & Shelter – how do you manage the difference. Together with the Animal Welfare League – Shelter side won't change – ACO part will.

Doreen Carter, President of the AWL, stated that they are in support of this; feel it is important to be under the Sheriff.

Comm Roelofs says we need some legal clarifications – union, nepotism; bring this back in July.

Committee of the Whole Page 2 of 3 June 23, 2020

Rebecca Hubers – Letter of Understanding: Motion by Sauer, seconded by Roelofs, to recommend to the Board of Commissioners to enter into a Letter of Understanding between Benzie County and Command Officers Association of Michigan regarding Benzie County Central Dispatch Deputy Director/Emergency Communications Supervisor as presented. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Mitch Deisch:

- a. Electronic Meeting Policy: Some discussion on whether or not this policy should be changed due to the possibility of a commissioner needing more than once per quarter to attend a meeting electronically the board all felt that no changes need to be made.
- b. General Operation Millage Restoration Discussion: Mitch feels that we are ready to move forward to Group 2 of Commissioners Nye, Roelofs and Warsecke, County Treasurer, Finance Manager, County Administrator. The second committee will review documents and make a recommendation for a ballot initiative date. Meeting will be scheduled for July 2 at 2:00 p.m.

3:13 p.m. Public Input – None

Motion by Roelofs, seconded by Warsecke, to adjourn at 3:13 p.m. Ayes: Farrell, Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Evan Warsecke, Chair (COTW)

Dawn Olney, Benzie County Clerk

Committee of the Whole
Page 3 of 3
June 23, 2020

Motion by ______, seconded by ______, to approve the Committee of the Whole Consent Calendar as follows:

1. To enter into a Letter of Understanding between Benzie County and Command Officers Association of Michigan regarding Benzie County Central Dispatch Deputy Director/Emergency Communications Supervisor as presented.



THE BENZIE COUNTY BOARD OF COMMISSIONERS COMMITTEE OF THE WHOLE -- BUDGET July 7, 2020

The Benzie County Board of Commissioners met as a Committee of the Whole for the purpose of holding 2020-21 Budget Hearings on Tuesday, July 7, 2020, 448 Court Place, Government Center, Beulah, Michigan.

The meeting was called to order by Commissioner Evan Warsecke at 9:00 a.m.

Present were: Commissioners Farrell (phone), Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke

The Pledge of Allegiance was recited.

Motion by Roelofs, seconded by Jeannot, to approve the agenda as amended, allowing Mr. King to make his presentation when he arrives. Ayes: Farrell (phone), Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

9:02 a.m. Public Input -- None

Susan Boyd, Finance Manager, indicated that at this point we have a \$273,000 shortfall.

The following budgets were discussed today:

231 - Soil Erosion: Requested budget remains the same as FY 19-20.

249 - Building Department: Discussion regarding the fund balance and whose is it (County or Building); the rent will be reviewed since there has been no increase for several years; Mitch will review the AGS contract and report back on July 21 at the budget meeting.

101-649 – Mental Health – Donna Nieman

They are requesting an additional \$2,366 to begin bringing the Maintenance of Effort up to where it should be. Requesting \$171,907 to fulfill the requirement, which includes the \$51,833 for continuation of the jail contract.

Tom King, EMS, over weekend saw the loss of equipment in the Platte River – LUCUS, estimated cost of \$13,762, will get a claim into the insurance company.

Motion by Jeannot, seconded by Roelofs, to recommend to the Board of Commissioners to move forward with the purchase of a LUCUS CPR device for EMS, not to exceed \$13,762 with the understanding that this transaction could happen prior to the next meeting. Roll call. Ayes: Farrell (phone), Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

243 – Brownfield Redevelopment Authority – Ed Kowalski

Liability to the Land Bank for the Honor property of \$4,834.50, the tax capture is how we pay that; we have available \$1,266 to go to the Land Bank for that. \$1,200 for schools/training.

244 – EDC Enterprise Fund – Ed Kowalski

Village of Benzonia has paid off their water loan; discussion regarding per diems to the board members – the members are very deserving of this and Ed would support it.

Committee of the Whole -- Budget Page 2 of 4 July 7, 2020

Comm Jeannot asks if the EDC is dissolved, then what happens to the \$22,007 fund balance? \$19,000 Village of Benzonia payment would go to Venture North.

101-275 – Drain Commissioner – Ed Hoogterp

Contracted services – for someone to maintain the lake levels; Dams were inspected in 2019 and in good shape; Dam Repairs – Crystal Lake and Deadstream Dams need minor repairs; increase training & schools from \$200.00 to \$400.00.

412 – MCF Renovations Fund – Michelle Thompson

In preparing this budget it was assumed to work on the generator project with the Transfer In of \$350,000.

569 – Building Authority – Michelle Thompson

Refunding of the bonds occurred on June 26, 2020 so the activity of expenses by the building authority will be declining.

Discussions with Michelle Thompson, County Treasurer, regarding the Building Department fund balance – could be used for scanning the old records for instance. We may have an invoice coming that would come out of that line. Still remains that the Board of Commissioners can use those funds.

101-751 – Parks & Recreation – Cathy Demitroff

Went back to the 17-18 budget due to the Master Plan being completed but needs to be updated every 5 years. They have 11 regular meetings per year and occasionally a special meeting. Comm Jeannot stated that we are looking at a shortfall and inquired regarding the requested budget for per diems - a couple extra were budgeted for in case of the need for special meetings.

10:30 a.m. Break

10:36 a.m. Reconvene

101-261 – MSU Extension – Jennifer Berkey

MSU has held their county expenses to 0% increase; this is the very minimum budget they can operate on for the coming year. All programs and courses have moved to virtual for the entire state. Continue to be a great partner to the county; saw 500 more people over last year; received school improvement grants through MSU; helped to grow 5 new businesses.

101-670 - DHHS Board

No changes; per diem and mileage only.

Susan Boyd reported that the Building Department won't have that kind of fund balance; could use it to hire a part time person to scan and digitize their records into BS&A and attach to each property number.

11:08 a.m. Break

11:30 a.m. Reconvene

101-267 – Prosecuting Attorney – Sara Swanson

Committee of the Whole -- Budget Page 3 of 4 July 7, 2020

Requesting an additional full-time Assistant Prosecuting Attorney; there were still crimes committed during the COVID lock-down; no jury trials are being held but will be and witnesses will be needed. Victim Advocate position is grant funded; we need someone here regularly; someone to be able to step in with emergencies.

11:55 a.m. Public Input: None

Motion by Roelofs, seconded by Nye, the meeting was adjourned at 11:57 a.m. Roll call. Ayes: Farrell (phone), Jeannot, Nye, Roelofs, Sauer, Taylor and Warsecke Nays: None Motion carried.

Evan Warsecke, Chair

Dawn Olney, Benzie County Clerk

Committee of the	Whole	Budget
Page 4 of 4		
July 7, 2020		

Motion by	, seconded by	, to approve the Committee of the Whole – Buc	dget
Consent Calendar a	s follows:		

1. To move forward with the purchase of a LUCUS CPR device for EMS, not to exceed \$13,762 with the understanding that this transaction could happen prior to the next meeting.



Committee Appointments

Correspondence

Benzie Transportation Authority - May 2020 Statement of Activities

	ACOC WELL	,	Oct - May 2020	0000	2020	May 2019	May 2019	Oct-May 2019
	Actual	Budget	Actual	get	Annual Budget	Actual	Budget	Actual
Income			And the state of t					
40100 · Passenger/Contract Fares	972.38	14,000.00	77,467.79	107,000.00	160,762.00	16,150.24	11,500.00	92,766.06
40615 - Advertising Income	15,000.00	975.00	19,525.00	6,000.00	10,000.00	3,875.00	850.00	7,000.00
40710 . Sale of Maintenance Services	1,575.64	1,655.00	4,996.77	12,380.00	19,000.00	2,245.02	2,000.00	3,518.40
40760 - Gains from Sale Capital Assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,100.00
40810 - Donations	220.00	00:00	320.00	00.00	00.0	00.00	00.00	00.0
40800 . Taxes Levied Directly for/by TA	00.00	00.00	642,352.29	643,126.85	643,126.00	-4,652.05	0.00	618,994.42
41101 · State Operating Assistance	53,016.00	53,016.00	424,128.00	424,128.00	638,286.00	53,011.00	53,011.00	424,088.00
41301 · Section 5311	0.00	00.00	147,415.00	155,626.00	311,252.00	00.00	0.00	116,886.68
41361 - CARES Act	00.0	00.00	147,414.00	0.00	00.0	00.00	0.00	00.0
41398 · RTAP	0.00	00.00	690.92	700.00	5,500.00	251.50	00.00	1,370.44
41400 · Interest Income/Other Revenue	143.56	300.00	3,345.09	2,925.00	4,000.00	775.06	100.00	4,576.99
Total Income	70,927.58	69,946.00	1,467,654.86	1,351,885.85	1,791,926.00	71,655.77	67,461.00	1,277,300.99
Expense								
50101 · Operators, Salaries and Wages	64,419.71	82,394.00	627,624.34	699,954.00	1,070,725.00	82,661.70	81,450.00	642,659.77
50209 . 457 Co-Match	620.00	830.00	6,700.00	7,150.00	10,000.00	00.00	0.00	0.00
50200 · Fringe Benefits	20,217.79	19,462.00	156,879.57	180,520.00	281,932.00	21,347.50	19,623.00	165,982.72
50310 · Board Compensation	320.00	160.00	2,910.00	1,840.00	2,000.00	120.00	280.00	520.00
50399. Service Expense	6,742.27	6,767.00	76.984.15	71,063.00	98,000.00	12,017.67	6,640.00	79,940.02
50401 - Fuel and Lubricants	2,127.78	9,400.00	21,680.03	73,825.00	113,000.00	9,286.65	8,500.00	78,735.69
50402 · Tires and Tubes	1,861.88	00.0	5,038.12	12,500.00	12,500.00	416.04	0.00	9,773.52
50404 · Major Purchase	0.00	520.00	3,659.49	3,500.00	3,500.00	00.00	0.00	3,500.00
50405 · Office Supplies	100.00	1,195.00	5,212.63	7,005.00	9,000.00	339.10	530.00	6,516.78
50406 · Parts Revenue Vehicles	1,415.76	1,750.00	16.347.22	15,250.00	22,000.00	2,469.24	1,600.00	15,217.22
50407. Parts for Non Revenue Vehicles	51.98	100.00	51.98	00.009	1,000.00	26.78	90.00	87.24
50499 · Materials and Supplies	3,667.81	2,247.00	23.163.12	20.469.00	26,519.00	3,319.46	2,172.00	21,377.98
50500 · Utilities	3,511.86	3,500.00	30,881.87	32,760.00	45,820.00	3,235.13	3,905.00	33,349.67
50603 - Insurance	11,074.25	00.00	24,177.00	30,280.00	30,280.00	12,180.25	00.0	27,915.00
50700 · Taxes and Fees	0.00	400.00	993.14	1,168.00	1,400.00	583.00	70.00	1,467,69
Un-employment	14,960.00	00.0	37,114.00	00.00	0.00	00'0	0.00	0.00
50902 . Travel, Meetings & Training	490.08	750.00	4,646.07	6,600.00	14,500.00	450.16	1,000.00	6,652.64
50903 · Association Dues and Subscript	171.73	950.00	4,384.82	4,765.00	00.000,9	916.54	500.00	5,465.17
51205 · Sharp Copier/Dispatch Lease	0.00	00.0	0.00	0.00	00.0	00.0	250.00	415.60
57402 · Ineligible RTAP	-230.98	00.0	1,515.92	700.00	5,500.00	00.0	0.00	1,620.44
Total Expense	131,521.92	130,425.00	1,049,963.47	1,169,949.00	1,753,676.00	149,369.22	126,610.00	1,101,197.15
	-60,594.34	-60,479.00	417,691.39	181,936.85	38,250.00	-77,713.45	-59,149.00	176,103.84

RCEVE

JUN I 8 2020

\$9,771.77 \$580,389.25 \$250,365.21 \$840,526.23

Honor Bank - Money Mkt MichiganClass - liquid asset security system

Total

Honor Bank Checking



EATON COUNTY BOARD OF COMMISSIONERS

JUNE 17, 2020

RECEIVED

JUN 2 3 2020

RESOLUTION TO DECLARE RACISM AS A PUBLIC HEALTH CRISIS

BENZIE COUNTY CLERK BEULAH, MI 49617

Introduced by Commissioner Joseph Brehler

Commissioner Brehler moved for the approval of the following resolution. Seconded by Commissioner Haskell.

WHEREAS, race is a social construction with no biologic basis, a social system with multiple dimensions, including individual racism, which is internalized or interpersonal; and

WHEREAS, systemic racism is institutional or structural, a system of structuring opportunity and assigning value based on the social interpretation of how one looks that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and depletes the strength of the whole society through the waste of human resources; and

WHEREAS, racism is rooted in the foundation of America for more than 400 years. From the time chattel slavery began in the 1600s, to the Jim Crow era, to the declaration of the war on drugs that which has led to the mass incarceration of Black people, racism has remained a presence in American society while subjecting Black people to hardships and disadvantages in every aspect of life; and

WHEREAS, racism, including unconscious and conscious bias, causes persistent racial discrimination in Criminal Justice, Social Capital, Voter Suppression, Education, Transportation, Employment, Food Access, Mental Health and Health Behaviors, Socioeconomic Status, Environmental Exposure, Access to Health Services, and Public Safety; and

WHEREAS, historical racism in Michigan has impacted Black Michiganders including Black Eaton County residents. Discriminatory housing practices in the 20th century, known as redlining, and discriminatory housing covenants contributed to the segregation of the Black community. Black citizens across the state of Michigan have been limited to areas with restricted access to healthy foods, lack of clean water, and other essential resources, leading to a variety of health issues, including reduced life expectancy, higher rates of infant and maternal mortality, and higher rates of lead poisoning; and

WHEREAS, older adults and people of any age who have serious underlying medical conditions are at higher risk for severe illness from COVID-19, Black people have higher incidence of chronic illnesses than other races causing them to die from COVID-19 at 3.8 times the rate of white people; and

WHEREAS, Black people are disproportionately suffering in-part due to these long standing, unaddressed health disparities as a result of systemic racism and other socioeconomic inequities. Indicators of health disparities include Black infant mortality, which is 12.9 percent compared to White infant mortality at 6.4 percent; prevalence of diabetes, which is 17.5 percent for Blacks

compared to 7.7 percent for Whites; and 20 percent of Black residents state that they lack access to health care; and

WHEREAS, there is clear data to illustrate that racism negatively impacts the lives of Black people in Eaton County and the privileges that other Americans experience inhibit them from fully understanding how racism impacts Black people in America – for example the performance of simple tasks like driving while Black, walking/running in neighborhoods, wearing a hoodie, going to the store, or just going to a park all come with certain risk not experienced by others. Concerned parents prepare their Black youth at an early age by having "The Talk" with their children in order to attempt to protect them; and

WHEREAS, the American Public Health Association, National Association of County and City Health Officials, and the American Academy of Pediatrics have declared racism as a public health crisis, this Board believes that now is the time to do the same. The disparities caused by racism that we have outlined in this resolution represent a public health crisis which affects us all; and

WHEREAS, we as a governmental body have a responsibility to ensure an optimal quality of life for all of our Black Eaton County residents.

NOW, THEREFORE, BE IT RESOLVED, that the Eaton County Board of Commissioners hereby declares racism as a public health crisis that affects all members of our society on a local (urban and rural), state, and national level and demands action from all levels of government and society.

BE IT FURTHER RESOLVED, that the Eaton County Board of Commissioners advocates for relevant policies that improve health in the Black community, and support local, state, and federal initiatives that advance social justice.

BE IT FURTHER RESOLVED, that Eaton County will assess its local ordinances, health regulations and internal policies and procedures to ensure racial equity and promote diversity as core elements in all organizational decision-making.

BE IT FURTHER RESOLVED, that the Eaton County Board of Commissioners calls upon all members of the community to come together to work toward achieving community-oriented solutions to address the legacy of racial injustices faced by Black communities.

BE IT FURTHER RESOLVED, that this Board of Commissioners urges other governmental bodies to declare racism as a public health crisis and to immediately take steps to intentionally address and support methods that will strategically reduce the long-term impact of systemic racism.

BE IT FURTHER RESOLVED, that the Board of Commissioners requests that the County Clerk forward copies of this resolution to the Governor of the State of Michigan, Eaton County's State Legislative delegation, the Michigan Association of Counties, Barry-Eaton District Health Department, the Michigan Association of Local Public Health, Community Mental Health Authority – Clinton, Eaton and Ingham Counties, the Community Mental Health Association of Michigan and local units of government within Eaton County. Carried.

STATE OF MICHIGAN

COUNTY OF EATON

I certify that the foregoing is a true and accurate copy of the resolutions adopted by the Eaton County Board of Commissioners, that such resolutions were duly adopted at a regular meeting held on June 17, 2020, and that notice of such meeting was given as required by law.

Diana Bosworth, Clerk of the Eaton County Board of Commissioners

[SEAL]

RECEIVED

JUN 23 2020

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617

BENZIE COUNTY PARKS AND RECREATION COMMISSION

Cathy Demitroff- Chair Tad Peacock- Vice Chair Barb Skurdall- Secretary Sean Duperron Ted Mick Rhonda Nye Charles Kraus Ed Hoogterp Susan Zenker

Regular Meeting February 24, 2020 Benzie County Government Center

Vice Chair Tad Peacock called the meeting to order at 5:02pm.

<u>Present:</u> Charles Kraus, Susan Zenker, Rhonda Nye, Ed Hoogterp, Ted Mick, Sean Duperron, Barbara Skurdall, Tad Peacock

Absent: Cathy Demitroff

Others Present: Don Tanner, Ann Bourne, Barbara Marshall Ikens, Tim Figura

Peacock asked for motion to approve the agenda for February 24, 2020. Kraus moved, Nye supported. Peacock asked to move the public input from item number 6 to number 4. Mick moved, all in favor.

Peacock moved for motion to approve meeting minutes from January 27, 2020. Mick motioned to approve, Duperron seconded with the following corrections:*

*Zada Price Park section: Make SEEDS capital as it is organization, add district in same sentence after conservation. Change Industry 16 to Image 360 and replace "Have the funds for the signage at the Conservation District" to "Funds for signage are being held at the Conservation District.

*Recreational programs section: Change: Look into ongoing funding to keep the ice rink going to She is looking into funding to keep the ice rink going.

Duperron moved that we go into a closed session pursuant to section8 (d) of the Michigan open meetings act to consider the possible acquisition of real property. Nye supported

Roll Call: Tad Peacock: Yes, Barb Skurdall: Yes, Susan Zenker: Yes, Rhonda Nye: Yes, Sean Duperron: Yes, Charles Kraus: Yes (Demitroff and Hoogterp absent) Motion passed.

Nye made motion to permit Ann Bourne and Don Tanner to participate in closed session to provide relevant historical information regarding the proposed acquisition. Skurdall supported. All in favor.

Hoogterp moved that we reopen our regular session. Zenker seconded. Motion passed.

RECEIVED

JUN 2 4 2020

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617 Duperron moved that the Park and Recreation Commission recommend that the Board of County Commissioners authorize the administration and legal counsel to proceed in accordance with the recommendation made by legal counsel in the closed session. Mick seconded.

Roll Call: Tad Peacock: Yes, Barb Skurdall: Yes, Ed Hoogterp: Yes Charles Kraus: Yes, Rhonda Nye: Yes, Ted Mick: Yes Sean Duperron: Yes, Susan Zenker: Yes. Motion passed

Nye moved that we accept the annual drawl of \$5,000.00 from the Railroad Pointe Endowment fund for the expansion of Railroad Pointe. Kraus seconded.

Roll Call: Tad Peacock: Yes, Barb Skurdall: Yes, Ed Hoogterp: Yes Charles Kraus: Yes, Rhonda Nye: Yes, Ted Mick: Yes Sean Duperron: Yes, Susan Zenker: Yes. Motion passed

Committee Reports:

Railroad Point: Nye had nothing to report

Point Bestie Lighthouse: Hoogterp shared that the final plans by Fleis and VandenBrink are near completion for the road end project. The current design shows 33 parking spaces, sidewalks and a circular turnaround at the end of Point Betsie Road, also a short boardwalk for beach access. Michigan EGLE generally approves a 5-foot-wide board walk, Point Betsie is asking for an 8-foot-wide boardwalk to better accommodate wheelchair traffic. Preliminary costs estimate at approximately \$550,000.00(including 10% contingency). The goal is to begin construction this fall, after Labor Day, or in spring 2021 with completion before Memorial Day 2021.

Hoogterp updated on the Shoreline Protection System project, as discussed previously Point Betsie shows signs of deterioration, which is accelerating as a result of high water levels on Lake Michigan. The first step is a completion of a Historic Structures Report (HSR). Point Betsie received one proposal after requesting bids in January 2020, seeking a consultant with experience in similar projects to research and write the shoreline HSR. That bid was from W.F. Baird and Associates based out of Madison, WI. Bairds bid of \$45,550 includes assessing the conditions of existing SPS, analyze costal conditions, review and develop concept design for repair or restoration of SPS and estimate probable construction costs. The Benzie Board of Commissioners will be asked to approve the bid at the February 25th meeting as submitted, with the intent of presenting the final contact to the Board of Commissioners in early march. Baird's work should be completed by July 2020. The HSR must be approved by the U.S. Army Corps of Engineers and the Michigan State Historic Preservations Office. When those are complete the Friends of Point Betsie will seek bids for final design and construction.

<u>Trail Reports:</u> Duperron shared there is a Natural Rivers input process happening now for the Louis Bridge Overlook plans. DNR has a plan to improve the Lewis Bridge Overlook for accessibility, resurfacing and possibly bike racks. That area right now is not really accessible right now. It is in a Natural Rivers review process right now. Duperron will bring plans when he has them.

<u>Recreational Facilities & Access:</u> Nye shared her and Don Tanner met with Sara from SRP designs regarding the carry in boat launch at the outlet. Sarah will start getting plans in order to then schedule a meeting with all invested parties.

Zada Price Park: Peacock had nothing to report

<u>Recreational Programs:</u> Skurdall met with Shelly Thompson regarding the ice rink funding after the last meeting. When the time comes Skurdall will have means to direct the ice rink funding to Shelly Thompson at the treasurer's office. Skurdall also spoke with Aubrey Parker about getting something in the Betsie Current in the fall to promote the ice rink.

Skurdall shared she attended the February Beulah Village meeting, the Northway park was discussed. Skurdall would like to look into getting grants not only for tennis court but Whole Park. Equipment is also in bad repair, if the fence came down it would need to be replaced. Can playground equipment/updates be added to the master plan under Northway Park, check with Elizabeth Calcutt about amending the Northway Park section of the master plan.

Old Business: Nothing to Report

<u>New Business:</u> Nye shared that Rebecca Hubers, our emergency manager is hosting a presentation at Garden Theater on the erosion issue on March 12th from 6pm-8pm.

Nye spoke about a request for Non-mandated services at the County level, there are staffing levels that need to be looked at. The Park and Recreation is listed as a Non-mandated committee, is this correct? Nye to speak with Don Tanner to see if Park and Recreation is Non-mandated or mandated.

Public Input: None

Correspondence: None

Other Business: None

With no other business to come before the board, Meeting adjourned at 6:17pm

Minutes respectfully submitted by Kassie Leach, Recording Secretary

Barbara Skurdall, Secretary



Page 3: Minutes of the Arenac County Board of Commissioners' Meeting of June 23, 2020:

Enbridge Resolution Continued:

WHEREAS, Consequences to energy supply, local producers, regional airports and refineries, jobs, local economies and the pocketbook of Michiganders across the entire state are too great for Line 5 to be shut down before the tunnel replacement can be completed.

WHEREAS, Issues have been raised by several concerned parties regarding the possibility and impact of a breach in Line 5 into the Straits of Mackinac. These concerns have resulted in the State of Michigan and Enbridge negotiating an "agreement" for a 5-year \$500 million project, to construct a tunnel 100 feet below bedrock to encase Line 5, the entire length of the Straits, in one-foot-thick concrete walls in order to mitigate chances of any leaks of product into the Great Lakes.

Whereas, the recently elected Michigan Attorney General, Dana Nessel has subsequently opposed the negotiated "agreement" and filed a law-suit in Ingham County Circuit Court to close down Line 5 immediately effectively cancelling all efforts to begin construction of the tunnel; and

WHEREAS, this action may very well provide unintended consequences for all parties as the litigation to close down Line 5 may take years to be resolved in the courts with no assurance of the outcome; and

WHEREAS, the time to resolve the litigation may simply result in the delay of the start of the construction of the tunnel thereby leaving the existing Line 5 in place unnecessarily for several additional years.

WHEREAS, Enbridge has demonstrated a willingness to work with the state to both protect the Great Lakes and ensure the continued safe delivery of energy we all rely on.

NOW, THEREFORE BE IT RESOLVED that the Arenac County Board of Commissioners hereby joins with other Michigan Counties in extending its support for Enbridge's proposed tunnel replacement project and urges the State of Michigan to work with Enbridge to complete the tunnel project as quickly as possible and not disrupt Line 5 service before the tunnel can be completed.

AND BE IT FURTHER RESOLVED that Arenac County sends this resolution to all counties of Michigan as an invitation to join in expressing support for increasing the safety of our current energy infrastructure as our society simultaneously seeks energy efficiencies and energy alternatives that will continue to reduce negative impacts and risks to our environment.

Roll Call Vote: Yes: Salgat, Burke, Mrozinski, & Woolhiser. No: None. Absent: Kroczaleski.

Resolution carried by a four (4) yes to zero (0) no and one (1) absent vote. Chair directed that the County Clerk distribute as directed.

Motion 8: Authorization of Budget Line Item Transfer:

Moved by Ms. Burke & 2nd by Ms. Salgat to authorize the Budget & Finance Committee to prepare a Budget Adjustment of up to \$7,000 to the Building Department Budget to pay for required National Flood Insurance Program required inspections of about 40 homeowners affected properties by the May 18-19, 2020 Flood. Motion carried.

Committee will prepare a proposed Budget Adjustment and transfer of funds into the Arenac County Building Department Budget Inspection Line Item from an appropriation adjustment.

JUN 2 4 2020

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617

Page 3: Minutes of the Arenac County Board of Commissioners' Meeting of June 23, 2020:

Enbridge Resolution Continued:

WHEREAS, Consequences to energy supply, local producers, regional airports and refineries, jobs, local economies and the pocketbook of Michiganders across the entire state are too great for Line 5 to be shut down before the tunnel replacement can be completed.

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Whereas, the recently elected Michigan Attorney General, Dana Nessel has subsequently opposed the negotiated "agreement" and filed a law-suit in Ingham County Circuit Court to close down Line 5 immediately effectively cancelling all efforts to begin construction of the tunnel; and

WHEREAS, this action may very well provide unintended consequences for all parties as the litigation to close down Line 5 may take years to be resolved in the courts with no assurance of the outcome; and

WHEREAS, the time to resolve the litigation may simply result in the delay of the start of the construction of the tunnel thereby leaving the existing Line 5 in place unnecessarily for several additional years.

WHEREAS, Enbridge has demonstrated a willingness to work with the state to both protect the Great Lakes and ensure the continued safe delivery of energy we all rely on.

NOW, THEREFORE BE IT RESOLVED that the Arenac County Board of Commissioners hereby joins with other Michigan Counties in extending its support for Enbridge's proposed tunnel replacement project and urges the State of Michigan to work with Enbridge to complete the tunnel project as quickly as possible and not disrupt Line 5 service before the tunnel can be completed.

AND BE IT FURTHER RESOLVED that Arenac County sends this resolution to all counties of Michigan as an invitation to join in expressing support for increasing the safety of our current energy infrastructure as our society simultaneously seeks energy efficiencies and energy alternatives that will continue to reduce negative impacts and risks to our environment.

Roll Call Vote: Yes: Salgat, Burke, Mrozinski, & Woolhiser. No: None. Absent: Kroczaleski.

Resolution carried by a four (4) yes to zero (0) no and one (1) absent vote. Chair directed that the County Clerk distribute as directed.



STATE OF MICHIGAN)

)SS COUNTY OF ARENAC) I, RICKY R. ROCKWELL, CLERK OF THE COUNTY OF ARENAC, STATE OF MICHIGAN, AND CLERK OF THE CIRCUIT COURT, IN AND FOR SAID COUNTY AND STATE, THE SAME BEING A COURT OF RECORD, HAVING A SEAL; DO HEREBY CERTIFY THAT I HAVE

COMPARED THE FOREGOING TRANSCRIPT OF THE RECORD NOW ON FILE AND REMAINING IN MY OFFICE, THAT I HAVE FOUND THE SAME TO BE A TRUE AND CORRECT TRANSCRIPT OF SUCH RECORD AND THE WHOLE THEREOF. OF SUCH RECORD AND THE WHOLE THEREOF.

448 COURT PLACE – BEULAH, MI 49617 – (231) 882-9671

IN TESTIMONY WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED THE SEAL OF THE CIRCUIT COURT ABOVE MENTIONED, THIS DAY OF IN THE CITY OF STANDASH, ARENAC COUNTY MICHIGAN

TANTO NAMED

RICKY R. ROCKWELL, ARENAC COUNTY CLERK



"Menominee County - Where the Best of Michigan Begins"

MENOMINEE COUNTY BOARD OF COMMISSIONERS

Menominee County Courthouse 839 10th Avenue Menominee, MI 49858 www.menomineecounty.com Jason Carviou – County Administrator Sherry DuPont – Administrative Assistant Telephone: (906) 863-7779 or 863-9648 Fax: (906) 863-8839

$\underline{\mathbf{RESOLUTION} - 2020-21}$

Resolution in Support of the 2020 Upper Peninsula State Fair

WHEREAS, the Upper Peninsula State Fair has provided a place for folks from across the nation to experience and celebrate the unique culture and heritage of Michigan's Upper Peninsula since 1928; and

WHEREAS, fairgoers to the Upper Peninsula State Fair positively impact the regional economy by spending more than \$5 million annually at area hotels, restaurants, retail stores, and small businesses; and

WHEREAS, in response to the COVID-19 Pandemic, the Upper Peninsula State Fair Authority has created a risk mitigation plan to reduce the spread of COVID-19 and to ensure the health & safety of fairgoers to the 2020 Upper Peninsula State Fair; and

WHEREAS, the Menominee County Board of Commissioners supports the Upper Peninsula State Fair Authority's desire to host the Upper Peninsula State Fair this August 17 – 23, 2020.

NOW THEREFORE, IT IS RESOLVED that the Menominee County Board of Commissioners asks Governor Whitmer to approve the risk mitigation plan presented by the Upper Peninsula State Fair Authority; and

BE IT FURTHER RESOLVED that the Menominee County Board of Commissioners asks Governor Whitmer to make any changes necessary to existing Executive Orders or to provide any other guidance necessary that allows the 2020 Upper Peninsula State Fair to take place as planned; and

BE IT FURTHER RESOLVED that a copy of Resolution 2020-21 be sent to Governor Gretchen Whitmer, Senator Ed McBroom, Representative Beau LaFave, Representative Sara Cambensy, Representative Gregory Markkanen, Representative Lee Chatfield, the Upper Peninsula State Fair Authority, and to every County Clerk in the State of Michigan.



Roll call vote: AYES: 9 NAYS: 0
RESOLUTION DECLARED ADOPTED. Gerald Piche, Chairman Date
STATE OF MICHIGAN)) ss. COUNTY OF MENOMINEE)
I hereby certify that the foregoing is a true and complete copy of Resolution 2020-21 adopted by the County Board of Commissioners at a special meeting held on June 23 , 2020 , and I further certify that the public notice of such meeting was given as provided by law.
Marc Kleiman Menominee County Clerk



ADOPTED – JUNE 23, 2020 AGENDA ITEM NO. 17

Introduced by the:

INGHAM COUNTY BOARD OF COMMISSIONERS

RESOLUTION TO CREATE THE INGHAM COUNTY RACIAL EQUITY TASKFORCE

RESOLUTION #20 – 271

WHEREAS, on June 9, 2020 the Ingham County Board of Commissioners unanimously adopted resolution #20-254 to declare racism as a public health crisis in the County of Ingham; and

WHEREAS, resolution #20-254 notes that "racism, including unconscious and conscious bias, causes persistent racial discrimination in Criminal Justice, Social Capital, Voter Suppression, Education, Transportation, Employment, Food Access, Mental Health and Health Behaviors, Socioeconomic Status, Environmental Exposure, Access to Health Services, Housing, and Public Safety"; and

WHEREAS, resolution #20-254 resolved that "Ingham County is recommitting its full attention to improving the quality of life and health of our Black Ingham County residents"; and

WHEREAS, resolution #20-254 resolved that the Ingham County Board of Commissioners advocates for relevant policies that improve health in the Black community, and support local, state, and federal initiatives that advance social justice.

THEREFORE IT BE RESOLVED, that the Ingham County Board of Commissioners hereby establishes the Ingham County Racial Equity Taskforce, a broadly representative advisory board made up of Ingham County leaders, employees, and the community to achieve community-centered solutions to address the legacy of racial injustices faced by Black communities.

BE IT FURTHER RESOLVED, the charge of the Ingham County Racial Equity Taskforce is to support an overarching goal of achieving equitable outcomes in wealth accumulation and income, education, safety, health and other measures of well-being among all Black Ingham County residents.

BE IT FURTHER RESOLVED, the Ingham County Racial Equity Taskforce will report annually to the Ingham County Human Services Committee of the Ingham County Board of Commissioners.

BE IT FURTHER RESOLVED, that the Ingham County Racial Equity Taskforce will develop within six months a comprehensive set of recommendations for realignment of county and community resources and investments aimed at creating equitable outcomes in the areas of wealth accumulation and income, education, safety, health and other measures of well-being among all county residents and county employees.

BE IT FURTHER RESOLVED, the Ingham County Racial Equity Taskforce will, with the input of county residents, identify and track metrics pertaining to, but not limited to, areas involving criminal justice, social capital, environmental, voter suppression, education and transportation.

JUN 3 0 2020

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617 BE IT FURTHER RESOLVED, the Ingham County Racial Equity Taskforce will convene county residents in a variety of locations and settings to hold broad-based, inclusive listening sessions aimed at prioritizing the needs of Black residents of Ingham County.

BE IT FURTHER RESOLVED, the make-up of the Ingham County Racial Equity Taskforce will consist of fifteen Ingham County residents, which will include two members of the Board of Commissioners, one of whom represents the Human Services Committee and at least one Ingham County employee.

BE IT FURTHER RESOLVED, in addition to the fifteen member committee, the Chairperson of the Board of Commissioners will serve as an ex-officio member and one representative from each of the following Ingham County advisory boards/committees shall serve as non-voting members of the Taskforce: Ingham County Equal Opportunity Committee, Ingham County Board of Health, Ingham County Community Health Center Board, Health in All Policies Committee, and the Ingham County Women's Commission.

BE IT FURTHER RESOLVED, the Ingham County Racial Equity Taskforce will be chaired by one presiding member of the Ingham County Board of Commissioners selected and appointed by the Chairperson of the Ingham County Board of Commissioners.

BE IT FURTHER RESOLVED, members of the Taskforce shall be appointed to three year staggered terms, with one-third of the initial terms expiring December 31, 2021, one third expiring December 31, 2022 and the remaining third expiring December 31, 2023.

BE IT FURTHER RESOLVED, that the Board of Commissioners hereby appropriates up to \$20,000 from the Contingency Fund for appropriate resources to ensure that the Ingham County Racial Equity Taskforce is adequately staffed and supported.



TUSCOLA COUNTY BOARD OF COMMISSIONERS

125 W. Lincoln Street Suite 500 Caro, MI 48723 Telephone: 989-672-3700 Fax: 989-672-4011

TUSCOLA COUNTY RESOLUTION 2020-05 RESOLUTION IN SUPPORT OF LINE 5

WHEREAS, Enbridge's Line 5 has been operating safely and reliably in Michigan for more than 65 years; and

WHEREAS, Enbridge's Line 5, a light crude and natural gas liquids pipeline, helps to safely meet Michigan's energy needs by fulfilling more than half of the propane needs of the state; and

WHEREAS, the products delivered to regional refineries provide jobs and ultimately fuel our lives; and

WHEREAS, multiple and extensive inspections and safety tests over the last several years have confirmed the integrity of Line 5 at the Straits of Mackinac as fit for service; and

WHEREAS, Enbridge has proposed to invest \$500 million to make a safe pipeline safer by placing a tunnel with one-foot-thick concrete walls 100 feet underground and make the chances of a leak into the Straits virtually zero; and

WHEREAS, consequences to energy supply, local producers, regional airports and refineries, jobs, local economies and the pocketbook of Michiganders across the U.P. and the state are too great for Line 5 to be shut down before the tunnel replacement can be completed; and

WHEREAS, Enbridge has demonstrated a willingness to work with the state to both protect the Great Lakes and ensure the continued safe delivery of energy we all rely on.

NOW, THEREFORE, BE IT RESOLVED that the Tuscola County Board of Commissioners extends its support for Enbridge's proposed tunnel replacement project and urges the State of Michigan to work with Enbridge to complete the tunnel project as quickly as possible and not disrupt Line 5 service before the tunnel can be completed.



Motion by Commissioner Young, seconded by Commissioner Grimshaw to adopt Resolution 2020-05. A roll call vote was taken. Motion carried with:

Yeas: Grimshaw, Young, Vaughan, Jensen, Bardwell

Nays: None

Absent: None

RESOLUTION DECLARED ADOPTED.

Thomas Bardwell, Chairperson Tuscola County Board of Commissioners

I, Jodi Fetting, Tuscola County Clerk, do hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Tuscola County Board of Commissioners at its meeting on June 25, 2020.

Tuscola County Clerk

Dawn Olney



From: Maridee Cutler

Sent: Thursday, June 25, 2020 4:13 PM

To: Dawn Olney

Subject: RE: Census Announcements, Self-Response Rate for 6/23 and Please Help!

Maridee Cutler – CHRS, SHRM-CP Deputy County Administrator Benzie County



From: Kris S Steinberg (CENSUS/CG FED) < kris.s.steinberg@2020census.gov>

Sent: Thursday, June 25, 2020 3:49 PM

To: Kris S Steinberg (CENSUS/CG FED) < kris.s.steinberg@2020census.gov> **Subject:** Census Announcements, Self-Response Rate for 6/23 and Please Help!

RECEIVED

JUN 25 2020

DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617

Dear Partners and Non-Partners:

I hope your week is going well. Below you will find this weeks update of the Self-Response Rates.

Census Announcements:

- 1. The delivery of materials to addresses identified in the Update Leave program has been completed. Please encourage your community to respond.
- 2. The Census Bureaus will be mailing reminder postcards to post offices boxes between June 24 and July 3. Please see attached announcement.
- 3. The Census Bureau is promoting Surge Week July 13-17 (see attached letter). A final push before Non-Response Follow-up begins.

Please Help!

- 1. I need locations to setup for Mobile Questionnaire Assistance program starting July 13 (#2 below in timeline reminders). Must be able to follow the State of Michigan COVID-19 restrictions and must service a low Self-Response Rate (20% and below to start).
- 2. I do not know your community. Please send me names and locations for transitory locations (#5 in timeline reminders).
- 3. I do not have access to the ACO's list of location and contacts for Service Based Enumeration or for Counting people experiencing homelessness (#'s 6 and 7 in the timeline reminders). If the organization

was not contacted by the Traverse City Area Census Office before the COVID-19 restrictions began, then please send me the contact information.

Timeline Reminders:

- 1. Reminder postcards sent post office boxes June 24 July 3, 2020.
- 2. The *Mobile Questionnaire Assistance Program* will begin and will focus initially of tracts with Self-Response Rates at or below 20% (see attached file) <u>July 13, 2020</u>
- 3. Surge Week (#3 in Census announcements above) July 13-17, 2020.
- 4. In Person Group Quarters Enumeration July 1 September 3, 2020.
- 5. The "Non-Response Follow-Up" field operation is scheduled for August 11-October 31, 2020.
- 6. *Enumeration of transitory locations* (Census takers count people staying at campgrounds, RV parks, marinas, and hotels if they do not usually live elsewhere) <u>September 3-28, 2020</u>
- 7. **Service Based Enumeration** (service providers at soup kitchens, shelters, and regularly scheduled food vans to count the people they serve) <u>September 22-24, 2020</u>.
- 8. Counting individuals experiencing homelessness September 22-24, 2020
- 9. The *General Census ends* October 31, 2020
- 10. The apportionment counts will be delivered to the President by April 30, 2021.
- 11. The redistricting counts to the states will be delivered by July 31, 2021.

Please contact me if you have any questions or information for me.

Sincerely, Kris

Kris Steinberg, Partnership Specialist

Chicago Region

O/M: (920) 866 0132

census.gov | @uscensusbureau

Shape your future. START HERE > 2020census.gov

National / Michigan / County's (Benzie, Lake, Manistee, Mason, Mecosta, Newaygo, and Oceana) and their Municipalities **VS** Population Numbers 2010/2019; Update Leave Address (UL %); Low Response Score (LRS %); and Self-Response Rate (SRR %)

0-39.9% 40-49.9% 50-69.9% 70% +

surpassed 2010

4/11 6/7 6/15 3/23
National 47.9% 60.7 61.4 61.7

¹Self Response Rates

⁴Population totals

Self-Response Rates

	totais		_						
County with Municipalities	2010 Census	2019 Estimate			2010	4/11	6/7	6/15	6/23
Benzie Co. (19)	17,525	17,766	²UL%	3LRS	46.5%	35.5%	46.0%	48.0%	48.4%
City - Frankfort	1,286	1,290	14.6	13.3	49.2	30.8	40.8	41.8	41.9
Vlg. Benzonia	497	506	6.5	18.0	51.7	X	48.0	51.2	51.2
Vlg. Beulah	342	345	6.9+	14.6- 16.7	19.4	13.2	17.4	20.1	20.6
Vlg. Elberta	372	371	29.3	18.0	60.0	3.4	6.0	47.0	47.0
Vlg. Honor	328	331	2.9	16.7	39.3	30.8	47.8	48.8	49.3
Vlg. Lake Ann	268	271	4.3+	16.2	28.6	29.8	40.5	44.6	45.2
Vlg.Thompsonville	441	453	29.3	16.2	50.2	42.8	62.3	63.0	63.0
Almira Twp.	3,645	3,700	6.5	16.7	61.1	52.4	66.6	67.9	68.3
Benzonia Twp.	2,727	2,748	2.6, 6.5, 29.3	14.6-18	43.1	30.8	39.8	41.3	41.6
Blaine Twp.	551	559	29.3	18.0	46.5	32.8	37.7	38.9	38.9
Colfax Twp.	654	674	4.3	16.2	59.9	43.7	59.9	59.9	60.2
Crystal Lake Twp.	957	965	14.6	13.3	30.3	21.3	29.2	30.4	31.3
Gilmore Twp.	821	827	29.3	13.3-18	63.4	25.4	30.5	52.9	53.1
Homestead Twp.	2,357	2,404	2.6, 29.3	16.7-18	56.0	40.9	57.0	58.1	58.4
Inland Twp.	2,070	2,109	4.3	16.2	71.0	55.6	70.6	71.0	71.1
Joyfield Twp.	799	817	29.3	16.2	65.6	51.6	60.0	60.8	61.3
Lake Twp.	759	766	2.6	14.6- 16.7	26.9	19.1	23.4	24.8	25.1
Platte Twp.	354	358	2.6	16.7	55.5	37.0	54.6	54.6	55
Weldon Twp.	542	549	4.3, 29.3	16.2-18	26.5	20.4	28.5	31.1	31.8
Lake Co. (17)	11,539	11,853	²UL%	3LRS	27.3%	16.5%	20.6%	23.2%	24.7%
Vlg. Baldwin	1,208	1,079	57.9, 71.6	20-21.7	53.7	44.3	54.9	55.9	55.9
Vlg. Luther	318	324	53.2	19.0	60.2	38.3	44.0	45.6	45.6
Chase Twp.	1,137	1,186	57.9	20.0	65.4	53.5	60.7	60.7	61.1
Cherry Valley Twp.	396	416	57.9, 53.1	19-20	30.6	17.4	21.5	24.2	25.6
Dover Twp.	395	411	57.9, 53.2	19-20	41.9	24.0	28.4	32.8	36.2
Eden Twp.	487	512	66.7, 53.2	14.2-19	26.2	11.7	14.7	19.8	20.5
Elk Twp.	985	1,022	66.7	14.2	28.1	16.1	20.1	22.7	23.8
Ellsworth Twp.	817	855	53.2	19.0	49.6	34.2	41.4	43.2	44.6
Lake Twp.	862	891	71.6	21.7	15.9	6.4	8.9	10.5	12.7
Newkirk Twp.	632	654	53.2	19.0	31.1	15.1	18.8	23.0	24.4
Peacock Twp.	492	514	66.7, 53.2	14.2- 19.0	19.5	7.5		13.3	15.2
Pinora Twp.	717	752	57.9, 53.2	19-20	55.3	40.8	48.6	50.7	50.7
Pleasant Plains Twp.	1,581	1,625	57.9, 71.6	20-21.7	30.9	18.8	24.4	27.1	28.1

Sauble Twp.	333	346	66.7	14.2	24.4	15.4	18.3	21.9	23.1
Sweetwater Twp.	245	258	66.7, 71.6	14.2- 21.7	21.4	16.9	18.8	21.0	22
Webber Twp.	1,699	1,621	66.7, 57.9, 71.6, 53.2	14.2- 21.7	31.6	20.6	26.5	27.6	28.8
Yates Twp.	761	790	57.9	20.0	19.3	7.0	10.3	14.3	15.8
Manistee Co. (20)	24,733	24,558	²UL%	3LRS	55.3%	43.0%	52.5%	53.9%	54.1%
City - Manistee	6,226	6,114	0.0, 0.0	17.3- 20.7	64.1	46.6	61.5	61.8	61.9
Vlg. Bear Lake	286	286	0	14.3	56.8	39.5	45.9	46.5	46.5
Vlg. Copemish	194	193	6.3	18.7	63.1	38.4	46.4	48.2	48.2
Vlg. East Lake	512	502	0, 13.8	16.4	69.2	X	19.9	59.8	60.2
Vlg. Kaleva	470	460	6.3	18.7	62.7	43.9	50.2	51.3	52
Vlg. Onekama	411	404	13.8	14.7	54.5	25.7	38.9	40.6	41.2
Arcadia Twp.	639	631	0	14.3	45.6	26.7	38.2	38.6	38.6
Bear Lake Twp.	1,751	1,724	13.8, 6.5	14.8- 14.7	58.6	41.5	53.8	53.9	54.1
Brown Twp.	747	739	0.0, 6.5	19.8	65.1	54.5	61.9	62.4	62.4
Cleon Twp.	957	954	6.3	18.7	60.6	51.4	59.9	60.8	60.8
Dickson Twp.	993	985	6.5, 32.0	15.3- 19.8	50.2	42.6	48.3	48.8	49
Filer Ch. Twp.	2,325	2,289	11.5, 0.0	16.4- 17.3	74.9	66.3	74.9	76.0	76
Manistee Twp.	4,034	4,078	0.0, 6.5, 11.5, 0.0	14.8- 16.4	68.4	53.2	60.3	66.7	67
Maple Grove Twp.	1,316	1,301	6.3, 6.5	18.7- 19.8	55.0	42.7	49.5	49.9	50.2
Marilla Twp.	393	391	6.3, 6.5	18.7- 19.8	52.2	42.0	50.6	50.6	50.6
Norman Twp.	1,553	1,541	6.5, 32	15.3- 19.8	38.6	26.8	31.1	33.0	34.2
Onekama Twp.	1,329	1,307	13.8	14.7	43.9	26.7	36.4	37.7	37.9
Pleasanton Twp.	818	814	6.3, 0.0	14.3- 18.7	47.7	34.6	43.4	43.8	44.1
Springdale Twp.	781	855	6.3	18.7	48.3	35.4	41.3	42.7	43.3
Stronach Twp.	821	835	32.0, 11.5, 0.0	15.3- 17.3	59.1	46.5	53.2	54.6	54.8
Mason Co. (20)	28,705	29,144	²UL%	3LRS	59.1%	46.0%	57.2%	57.8%	58.00%
City - Ludington	8,076	8,108	0.0, 3.4	17.2-22	65.7	54.5	64.4	64.8	64.9
City - Scottville	1,214	1,211	0	20.0	66.9	51.1	69.1	69.2	69.2
Vlg. Custer	284	285	0.0, 20.2	19.7-20	70.8	56.0	68.1	68.1	68.1
Vlg. Fountain	193	198	10.5	18.2	76.3	57.6	63.5	63.5	64.7
Vlg. Free Soil	144	144	10.5	18.2	64.5	53.0	67.5	67.5	67.5

Amber Twp.	2,535	2,599	0	20.0	73.0	52.2	70.7	70.8	70.9
Branch Twp.	1,328	1,355	20.3	19.7	47.8	36.8	41.6	44.0	44.3
Custer Twp.	1,254	1,271	0.0, 20.2	19.7-20	72.7	56.8	69.2	69.3	69.3
Eden Twp.	582	595	0.0, 20.3	19.7-20	58.2	41.4	50.3	50.8	50.8
Free Soil Twp.	822	818	10.5	18.2	60.8	47.0	53.7	54.0	54.2
Grant Twp.	909	926	0.4	15.7	65.2	40.6	59.2	59.6	59.9
Hamlin Twp.	3,408	3,486	0.4, 0.6	13.1- 15.7	56.3	41.9	54.0	54.4	54.8
Logan Twp.	312	322	20.3	19.7	36.1	22.7	26.8	28.5	29.3
Meade Twp.	181	182	10.5	18.2- 19.7	35.4	23.2	28.5	29.0	29.5
Pere Marquette Ch Twp.	2,366	2,440	0.0, 0.4	16.8-20	64.7	45.5	58.1	58.9	59.2
Riverton Twp.	1,153	1,165	0.4	16.8	70.8	49.4	67.8	68.0	68.1
Sheridan Twp.	1,072	1,095	10.5, 20.3	18.2- 19.7	40.8	31.0	35.1	36.9	37
Sherman Twp.	1,186	1,214	10.5, 0.0, 20.3	18.2-20	77.8	59.3	67.0	67.6	67.8
Summit Twp.	924	945	0.4	16.8	42.5	30.4	40.3	40.4	40.6
Victory Twp.	1,383	1,412	0.4, 0.0	15.7-20	71.4	46.9	64.0	64.4	64.4
Mecosta Co.(21)	42,798	42,798	²UL%	3LRS	60.3%	45.2%	55.6%	56.5%	56.8%
City - Big Rapids	10,601	10,363	0	22.7- 35.8	67.0	41.4	55.4	55.7	55.9
Vlg. Barryton	355	353	4.8	18.4	66.7	51.0	60.2	60.2	60.2
Vlg. Mecosta	457	454	0	16.2	65.6	37.3	55.7	55.7	55.7
Vlg. Morley	493	493	0	18.1	65.7	53.6	61.2	61.2	61.2
Vlg. Stanwood	211	212	0	18.1	70.2	50.0	57.4	58.5	58.5
Aetna Twp.	2,229	2,330	0.0, 0.0	18.1- 22.7	67.4	56.6	64.7	64.7	64.8
Austin Twp.	1,561	1,581	0, 0.0, 0.7	15.4- 18.1	65.0	52.4	64.2	64.2	64.2
Big Rapids Ch. Twp.	4,028	4,487	0, 0.0, 0.0	22.7- 23.7	75.8	48.9	62.4	62.6	62.6
Chippewa Twp.	1,212	1,212	4.8, 28.5	16.2- 18.4	40.7	21.7	25.5	37.6	37.9
Colfax Twp.	1,933	1,934	28.5, 0.0	16.2- 19.1	73.8	58.0	67.1	67.7	67.8
Deerfield Twp.	1,816	1,833	0.0, 0.7	15.4- 18.1	81.4	59.6	68.7	68.7	68.7
Fork Twp.	1,604	1,626	4.8	18.4	58.4	45.7	51.3	51.9	52.2
Grant Twp.	686	695	0	16.2- 19.1	68.5	46.9	60.1	60.6	60.8
Green Ch. Twp.	2 200	0.004	1				64.6	64.7	64.7
orcen en. Twp.	3,292	3,331	28.5, 0.0	19.1	70.5	46.4	61.6	61.7	61.7

Martiny Twp.	1,625	1,638	3.2, 0.0	16.2- 17.1	44.4	35.4	41.5	41.8	41.8
Mecosta Twp.	2,615	2,664	0.0, 0.0	18.1- 22.7	65.1	47.9	62.2	62.6	62.8
Millbrook Twp.	1,113	1,116	0.7	15.4	74.4	59.6	68.0	68.4	68.6
Morton Twp.	4,311	4,333	0.0, 0.7	15.4- 16.2	53.8	41.3	49.2	49.7	49.7
Sheridan Twp.	1,393	1,414	4.8, 3.2	17.1- 18.4	52.4	39.7	47.8	48.6	48.7
Wheatland Twp.	1,403	1,410	4.8, 0.0, 0.7	15.4- 18.4	72.6	56.2	66.2	66.3	66.5
Newaygo Co (29)	48,460	48,980	²UL%	3LRS	59.3%	47.2%	56.9%	57.5%	57.7%
City - Fremont	4,081	4,080	0	18.6	73.2	56.1	74.1	74.3	74.5
City - Grant	894	884	1.5, 0.0	20.2- 20.8	62.5	47.2	63.7	63.7	64.1
City - Newaygo	1,976	2,067	0.6	19.0	67.3	49.9	65.6	65.7	66.0
City - White Cloud	1,408	1,387	0.6	21.0	64.5	48.8	57.0	57.7	58.2
Vlg. Hesperia	954	929	4.5	19.1	70.5	56.1	66.7	66.7	66.7
Ashland Twp.	2,773	2,769	0	20.8	70.9	55.8	64.9	65.0	65
Barton Twp.	717	815	22.4	18.4	66.4	49.4	56.6	56.8	57.1
Beaver Twp.	509	510	22.4	18.4	57.0	32.4	37.9	38.9	39.4
Big Prairie Twp.	2,573	2,645	0.6, 0.8	17.3-19	53.3	39.3	45.1	45.4	45.5
Bridgeton Twp.	2,141	2,166	0.0, 0.0	16.2- 20.8	71.2	58.6	67.3	67.8	67.9
Brooks Twp.	3,510	3,536	0.0, 0.6	14.1-19	58.8	41.4	54.8	55.1	55.2
Croton Twp.	3,228	3,289	0.8, 0.9, 0.0	17.3- 19.1	60.2	41.8	52.1	52.2	52.2
Dayton Twp.	1,949	1,954	4.5, 0.0	16.2- 19.1	74.9	65.1	76.3	76.5	76.5
Denver Twp.	1,928	1,964	22.4, 4.5	18.4- 19.1	69.0	49.9	56.9	58.4	58.4
Ensley Twp.	2,635	2,718	0	18.2	74.3	60.9	67.5	67.5	67.6
Everett Twp.	1,862	1,855	0.0, 0.6, 0.6	14.1-21	66.3	48.8	57.9	58.0	58
Garfield Twp.	2,537	2,584	0.0, 0.6, 0.0	14.1- 20.8	66.4	53.7	61.5	61.5	61.7
Goodwell Twp.	547	551	22.1	18.4	59.2	47.0	54.8	54.8	54.8
Grant Twp.	3,294	3,319	0.0, 1.1	18.2- 20.2	78.6	57.1	71.7	72.1	72.2
Home Twp.	232	232	22.4	18.4	40.6	29.1	34.0	36.8	37.7
Lilley Twp.	797	813	22.4	18.4	39.6	21.2	25.3	28.0	28.4
Lincoln Twp.	1,275	1,263	4.5, 0.6	19.1-21	63.4	41.2	49.6	49.8	49.8
Merrill Twp.	667	672	22.4	18.4	35.2	15.4	19.5	23.3	24.5
Monroe Twp.	320	323	22.4	18.4	47.1	24.3	27.8	34.5	36.1

Norwich Twp.	607	606	22.4	18.4	69.8	47.4	54.1	54.1	54.1
Sheridan Ch Twp.	2,510	2,454	0	16.2	74.9	59.7	69.7	69.7	69.7
Sherman Twp.	2,109	2,121	4.5, 0.0	14.1- 19.1	63.3	52.1	58.6	58.8	59
Troy Twp.	283	286	22.4	18.4	50.6	24.1	28.9	30.6	30.6
Wilcox Twp.	1,098	1,117	0.6	21.0	65.1	44.5	52.2	52.6	52.6
Oceana Co. (23)	26,570	26,467	²UL%	3LRS	52.4%	38.3%	48.5%	49.6%	49.8%
City - Hart	2,126	2,068	1.2	21.1	65.3	43.7	63.3	63.4	63.7
Hesperia	954	929	6.6	18.2	70.5	56.1	66.7	66.7	66.7
Vlg. New Era	451	440	0	21.9	76.2	56.1	72.2	72.2	74.3
Vlg. Pentwater	857	848	24	15.7	41.0	24.0	31.0	34.7	35.8
Vlg. Rothbury	432	448	0	21.9	64.8	38.5	57.0	57.5	57.5
Vlg. Shelby	2,065	2,012	0	21.9	64.9	45.5	64.4	64.4	64.5
Vlg. Walkerville	247	260	10.5	22.8	69.6	41.5	49.2	49.2	49.2
Benona Twp.	1,437	1,434	0.7	17.5	42.0	32.5	37.8	38.3	38.5
Claybanks Twp.	777	776	0.7	17.5	58.1	41.7	48.6	49.1	49.8
Colfax Twp.	462	462	10.5	22.8	32.4	22.4	25.9	27.9	28.1
Crystal Twp.	838	850	10.5	22.8	55.0	40.7	45.8	46.7	47
Elbridge Twp.	971	980	10.5	22.8	61.3	50.1	57.3	57.3	57.3
Ferry Twp.	1,292	1,295	6.6	18.2	73.3	55.9	65.2	65.5	65.5
Golden Twp.	1,742	1,752	19.9	15.3	31.3	21.5	25.8	26.6	26.9
Grant Twp.	2,976	2,974	0	21.9	68.0	44.5	62.5	62.8	63
Greenwood Twp.	1,184	1,184	6.6	18.2	69.2	48.9	59.4	59.8	60.1
Hart Twp.	1,853	1,849	1.2	21.1	69.5	45.3	63.3	64.3	64.3
Leavitt Twp.	891	887	10.5	22.8	57.3	37.7	44.7	48.2	48.4
Newfield Twp.	2,401	2,377	6.6	18.2	61.1	46.6	53.2	54.7	54.8
Otto Twp.	826	845	6.6	18.2	70.4	51.8	59.4	60.1	60.1
Pentwater Twp.	1,515	1,487	24	15.7	40.0	24.6	31.3		36.1
Shelby Twp.	4,096	4,028	0	21.9	70.5	48.2	66.1	66.2	66.5
Weare Twp.	1,210	1,219	24	15.7	64.9	45.3		And the second second	62.8

1-Self-Response Rate = Percentage of people responding on their own (without someone coming to the door) compared to the invitations sent out. The interactive mapper is at https://2020census.gov/en/response-rates.html

2-UL = Update Leave program. These addresses will not receive an invitation letter. They will instead have a field worker come to their door, update that the address is correct and leave the census information in a bag on their door. This program occurs in areas that:

⁻Do not have city-style addresses.

⁻Do not receive mail through city-style addresses.

⁻Receive mail at post office boxes or at drop points.

⁻Have been affected by major or natural disasters.

⁻Have high concentrations of seasonally vacant housing

3-LRS (Low Response Score). It is a Prediction of the percentage of the population that will NOT self-respond to the Census mailings in March of 2020. It is based on previous Census returns and other Census survey returns such as the American Community Survey. The mapper for this is at https://www.census.gov/library/visualizations/2017/geo/roam.html

4-The 2010 population number is the final result of the 2010 Census. The 2019 to Census is the result of estimates using other Census yearly survey's including the American Community Survey.

599.75

600.25

CRYSTAL LAKE ELEVATION

LEGAL LEVELS JAN. 1 - APR. 30 8 NOV. 1 - DEC. 31

MAY 1 - OCT. 31 B.M. N. SIDE BOAT RAMP ELEV. 601.87

NAME	DATE	DISTANCE	ELEVATION	HIGH +	COMMENT
0.5	1-2 00	TO WATER	1.50.01/	LOW -	
CD	1-2-20		600,24	,	1 - 11
CD	3-19-20	1.69	600.18	+,43	ice on lake
CD	3-25-20	_	Le D D. 10		ice on lake
CD	4-2-20	1.68	400,19	+,44	
CD	4-9-20			, -	to rough
CD	4-16-20				to rough
CD	4-22-20	~	L		drop one board
CD	4-23-20	1.72	Le00.15	+,40	
CD	4-25-20	-		-	drop one board
CD	4-30-20	B.			to rough - lots of rain
CD	5-7-20	~		1	to rough
CD	5-14-20	1.65	400,22		3
CD	5-21-20	1.42	600.45		lots ofrain Sunday + Mond
CD	5-28-20	1.35	400.52	+.27	/
CD	6-4-20	1.45	600.42	4.17	
CD	6-11-20				to rough
CD	6-18-20	1.5	400.37	+.12	3
CD	6-24-20		· .	_	lift one board.
CD	6-25-20	1.4	400.47	+.22	
CD	7-2-20	1,52	600.25	0	
				· / ·	
		;	J. N. ok		RECEIVED
			- 1.	***	JUL 0 8 2020
					DAWN OLNEY BENZIE COUNTY CLERK BEULAH, MI 49617
	,				
	·	L			



LITTLE PLATTE LAKE ELEVATION



LEGAL LEVEL 586.7

B.M. & IRON NE ABUTMENT ELEV. 589.44

3-19-20	2.53	-0:0:	-	
		586.91	1.21	
	2.75	586.69	01	
3-25-20	2.85	586.59	11	
4-2-20	2.74	586,7	0	
4-9-20	2.83	586,61	09	
4-16-20	3.00	586.44	26	
4-22-20	p-		_	put one board in
4-23-20	3.01	586,43	27	9
4-30-20	2.60	586.84	7.14	lots of rain day-befor
5-7-20	2.81	586.63	07	3393010
5-14-20	3	586.44		put one board in
5-21-20	2.36	587.08	+.38	lots of vain Sunday + Mood
5-26-20		Management of the Control of the Con	,	pull one board
5-28-00	2.63	586.81	+.11	
Le-4-20	2.87	586.57	13	
le-5-20	-			put one board in
6-11-20	2.61	58683	+.13	
6-18-20	2.75	586.69	01	
6-25-20	2.47	586.97	+.27	
7-2-20	. \	1		RECEIVED
				JUL 0 8 2020
				DAWN OLNEY
				BENZIE COUNTY CLERK BEULAH, MI 49617
	4-2-20 4-9-20 4-16-20 4-22-20 4-23-20 4-30-20 5-7-20 5-14-20 5-26-20 5-28-20 6-11-20 6-18-20	4-2-20 2.74 4-9-20 2.83 4-16-20 3.00 4-22-20 3.01 4-30-20 2.60 5-14-20 3 5-26-20 - 5-28-20 2.63 2-4-20 2.87 2-5-20 - 6-11-20 2.47	4-9-20 2.74 586.7 4-9-20 2.83 586.61 4-16-20 3.00 586.44 4-23-20 3.01 586.43 4-30-20 2.60 586.84 5-14-20 3 586.63 5-26-20 - 528-30 2.63 586.81 6-18-20 2.97 586.87 6-25-20 - 586.69	4-2-20 2.74 586.7 0 4-9-20 2.83 586.61 = .09 4-16-20 3.00 586.4426 4-22-20 3.01 586.4327 4-32-20 3.01 586.84 + .14 5-7-20 2.81 586.6307 5-14-20 3 586.4426 5-26-20 5-28-20 2.63 586.81 + .11 2-4-20 2.87 586.8713 2-5-20 6-11-20 2.61 586.83 + .38 6-18-20 2.75 586.8901