



REPORT FOR WATERSHED ADVISORY BOARD

RE: PERMIT APPLICATION NO: 009/19

DATE: MAY 2ND, 2019

An application for development has been submitted by Mr. Curt Farrell with regard to Ontario Regulation 159/06 the Development, Interference with Wetlands & Alterations to Shorelines & Watercourses Regulation of the CVCA.

Executive Summary

An application to develop lands along Crowe Lake is recommended by staff to be **denied**. The development proposed is to construct a new garage that will be partially located within a flood hazard. While the CVCA permits the development of new accessory structures within the floodplain, the proposed development exceeds CVCA policy size requirements.

Background and Subject Lands

On February 11th, 2019 Mr. Farrell submitted an application for development within the Crowe Lake Flood plain. The subject land is approximately 29.6 acres and is flanked by cottages to the north and south of the lot. The dwelling has frontage along Crowe Lake to the west and onto Sunset Shore Road to east. The center of the property is outside of the floodplain, however, both the shoreline (west end) and road side (east end) of the lot falls within the flood hazard.

A review of our mapping and a subsequent site visit by CVCA staff on March 22nd, 2019 indicated that the entire property was located within the CVCA Regulated area and partially within the flood hazard of Crowe Lake. The policies for development in the flood hazard were provided and explained to Mr. Farrell, including details on the size restrictions for accessory structures on March 25th, 2019. At this time Mr. Farrell was advised of his options to:

1. Amend his permit application so that his proposed accessory structure was no larger than 500ft², or;
2. Submit the permit application for the proposed 832ft² accessory structure. The application would then be recommended for denial by the CVCA. Mr. Farrell would then be provided with the option to request a hearing before the Crowe Valley Watershed Advisory Board in order to request an exception to CVCA size restrictions.

Mr. Farrell elected to apply for a hearing with the Watershed Advisory Board in order to ask for an exception to our size restriction policies.

Project Description

As per the application information provided (received February 11, 2019), it is our understanding that the proposed work is to build a 26' by 32' garage with a 10' overhang on the east side of the new garage. It would be constructed on a poured concrete engineered slab foundation designed by Trevor Day and Associates (project #930 issued February 25, 2019). The lowest opening would be at an elevation of 184.295 meters above sea level (mas), which satisfies the CVCA 1:100 flood elevation of 183.88 (184.18 including wave up rush). The new garage would be setback a distance of 177' from the shoreline of Crowe Lake. All construction will be completed according to the plans submitted with this application.

CVCA Staff Recommendation

Based on the information submitted, the CVCA staff recommends that the application be **denied** for the following reasons:

1. Our policies will permit the construction of new accessory structures in a flood hazard under specific conditions. In this application, however, the size of the proposed garage does not conform to CVCA size restrictions for development in the floodplain. The maximum size the structure permitted under CVCA policies is 500ft². The proposed garage is 800ft², thus, the proposed addition is over the allowable size limit by 300ft².
2. The applicant has room to erect a 500ft² garage almost entirely outside of the CVCA floodplain. This would have the effect of minimizing any impact to the existing flood hazard and removing the entire structure out of the hazard.

The subject site is located in a regulated area as described in Ontario Regulation 159/06. The development of a structure of the proposed size will not be permitted in accordance with Section 2. (1) (b) which states:

*Section 2. (1) Subject to section 3, no person shall undertake development, or permit another person to undertake development in or on the areas within the jurisdiction of the Authority that are,
(b) hazardous lands;*

The *Conservation Authorities Act* and the Crowe Valley Conservation Authority Watershed Planning and Regulations Policy Manual (2017) defines *hazardous lands* as “land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock.” In this case, processes associated with flooding are our concern.

The manual is intended to provide CVCA staff with policies for the purpose of administering our Regulation (159/06). When reviewing development applications, the Authority must have regard for its objectives of preventing loss of life and minimizing property damage.

The individual policies that apply to this decision are listed below and are specific to Administrative Policies and Policies for Flooding Hazards. Sections that are not relevant to this application have been removed.

Administrative Policies

The following sections speak to over-arching policies that every application must be tested against. The One Zone concept explains that the entire CVCA watershed is within a single zone where all applications adhere to the same policies. Areas subject to the regulation include several different items with hazardous lands being a critical component. Hazardous lands include all lands that are or could be flooded.

3.2 One Zone Concept

Under the one zone approach, construction activities are restricted within the Regulatory Flood Plain. Permitted development may include construction of new accessory structures, minor additions and modifications to existing agricultural operations. Other uses, such as open space that is not likely to create damage to other properties from floodwater, cause a threat to public safety or are not of a polluting nature may be permitted within the flood plain. Examples of uses or structures that would create adverse impacts in the flood plains of our riverine systems include, but are not limited to, new buildings, increases in impervious surfaces, filling activities, swimming pools, septic tile fields and tanks, as well as manure storage and handling facilities.

The One Zone Concept of floodplain management is applied throughout the entire Crowe Valley Conservation jurisdiction.

3.4 Areas Subject to the Regulation

Ontario Regulation 159/06 sets out areas where development is prohibited as well as setbacks from various ecological features. The features that are encompassed by the regulation are as follows: (irrelevant sections have been removed)

Hazardous Lands

This component of the Regulation applies to development within hazardous lands which is defined under Section 28 of the CA Act as land that could be unsafe for development due to naturally occurring processes associated with flooding, erosion, dynamic beaches, or unstable soil or bedrock.

Hazardous Lands Policies

The following policies are specific to development in the flood hazard. Any development within a flooding hazard requires permission from the CVCA. In general development within the Regulatory floodplain shall not be permitted except in accordance with the policies contained below. Policies that do not apply to this case have not been included.

The following policies apply to the development proposed:

Accessory Buildings or Structures

5.3.4.1 Accessory buildings or structures associated with an existing residential, agricultural, commercial, industrial or institutional use such as detached garages, decks, sheds, silos, gazebos and other similar structures (but not including on-shore boathouses: see Policy 5.3.5), will be permitted within a flooding hazard provided it can be demonstrated that:

- there is no feasible alternative site outside of the flooding hazard;*
 - there is no habitable floor space associated with the building or structure and no opportunity for conversion into habitable floor space in the future;*
 - the site is not subject to frequent flooding;*
 - the building or structure does not exceed a ground floor footprint of 46.5 square metres for settlement areas or shoreline development and for rural areas, the building or structure does not exceed a ground floor footprint of 100 square metres;*
 - the risk of property damage and pollution is minimized through site and facility design to ensure that the development will not result in a pollution hazard (e.g., release of a biohazard substance, nutrients, pesticides or other chemicals during a flood event);*
 - the building or structure is securely anchored to either a concrete pad or footings;*
 - no basement is proposed, and any crawl space is designed to facilitate service only;*
 - where dry floodproofing cannot be achieved, wet floodproofing is undertaken in accordance with floodproofing standards identified in Appendix C – Floodproofing Guidelines;*
 - the proposed development will not prevent access for emergency works, maintenance, and evacuation;*
 - the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;*
 - natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented and erosion hazards have been adequately addressed ; and,*
 - the plan has been carried out by a qualified professional with recognized expertise in*
-

the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the CVCA.

A site plan prepared by a qualified professional illustrating the elevations of existing and proposed grades and lowest openings of proposed buildings/structures must be submitted.

These policies apply to any addition to a dwelling that is located entirely or partially in the flood hazard regardless of whether or not the addition, or part thereof, is located in the flood hazard.

Summary

CVCA staff recommend that the application for the development of an addition be denied as it does not meet CVCA policy standards. The applicant has the option to construct an accessory structure that is almost entirely outside of the floodplain, thereby placing it outside of the hazard as well as preventing additional fill from going into the floodplain that could potentially displace water onto an adjacent property or alter the floodplain dynamic upstream or downstream of the lot. The Conservation Authority should not allow development in areas that we regulate specifically to minimize hazards to life and property that do not meet our Board approved policies and as such placing an addition of this size in the floodplain should not be approved.

Figures Enclosed: Elevation Survey (completed by applicant)
Project Drawings (submitted by applicant)
Engineered Drawings
Aerial Photography

CROWE

INST. No 182567

Pad elevation over 184.295
ENGINEERED.

170' + TO SHORELINE

PART 3

INST. No 177835

top of slope

FRAME COTTAGE

existing driveway

RIGHT

PART 2
Area = 0.101 Acres

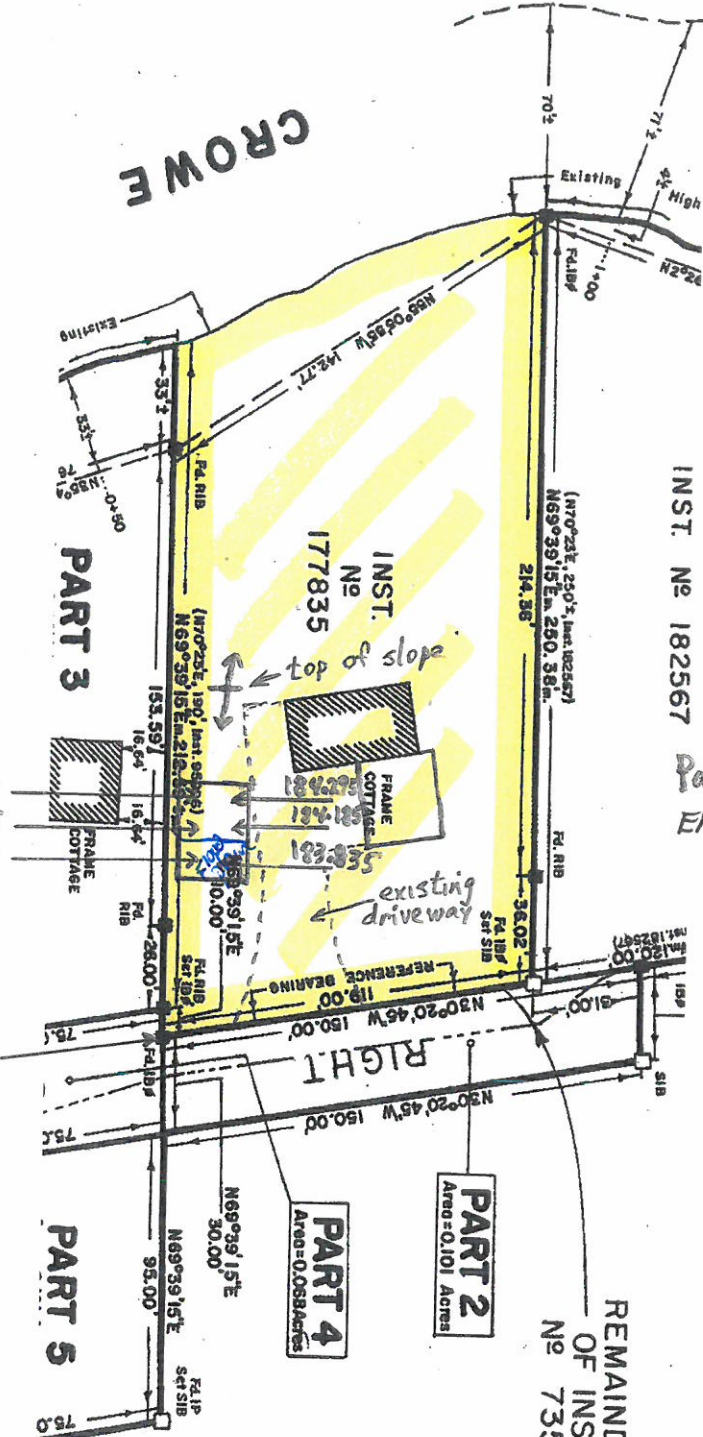
PART 4
Area = 0.058 Acres

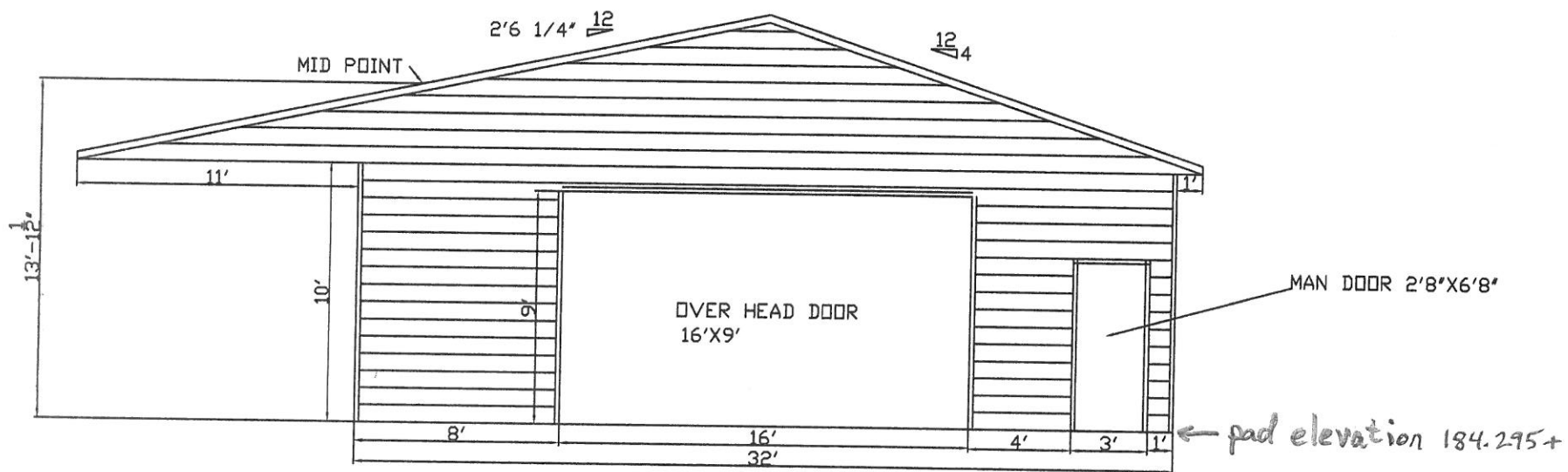
REMAINDER
OF INST. No 7356

PART 5

SLOPE IS UPWARDS
TO TOP OF SLOPE
& THEN
SLOPES DOWN TO
THE LAKE

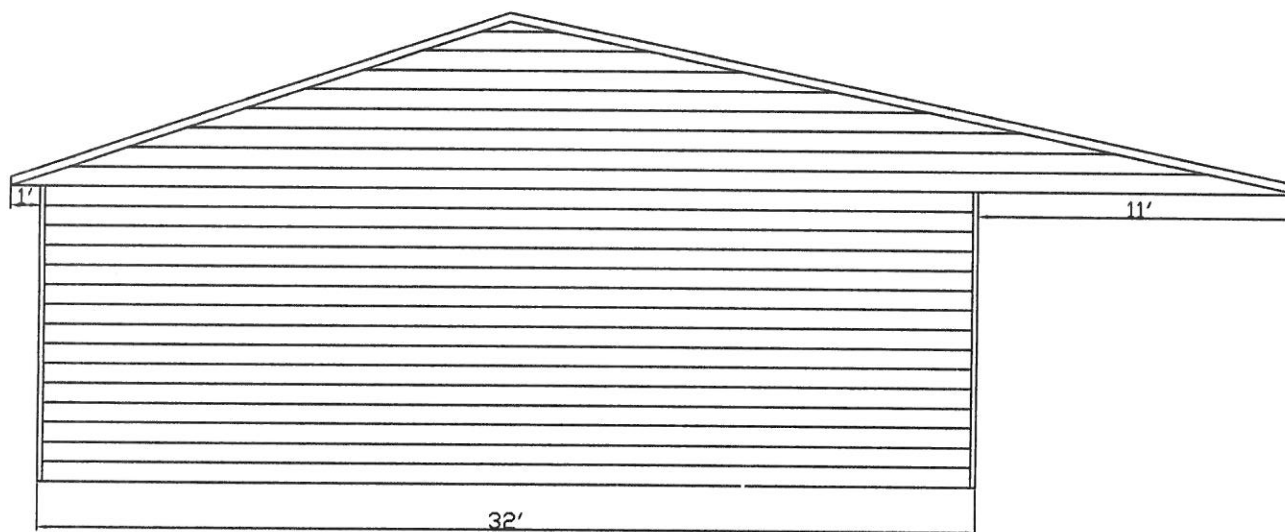
NATURAL FLOW IS DOWN THE
EXISTING DRIVEWAY TO A CULVERT
UNDER THE RD.



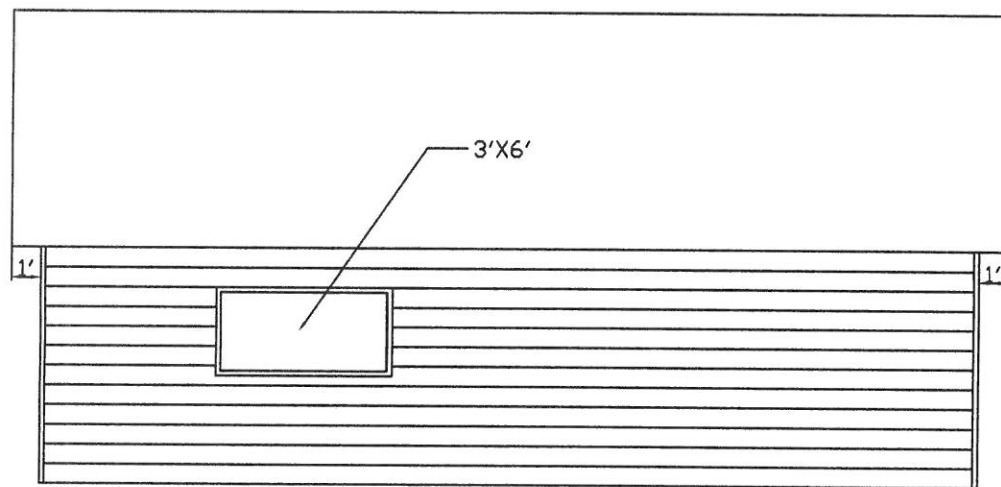


FRONT ELEVATION

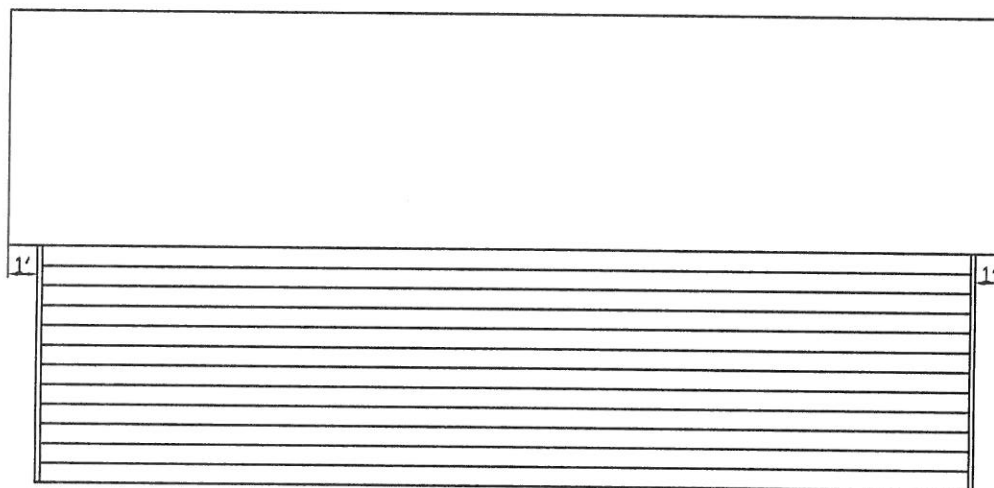
← DRIVEWAY →



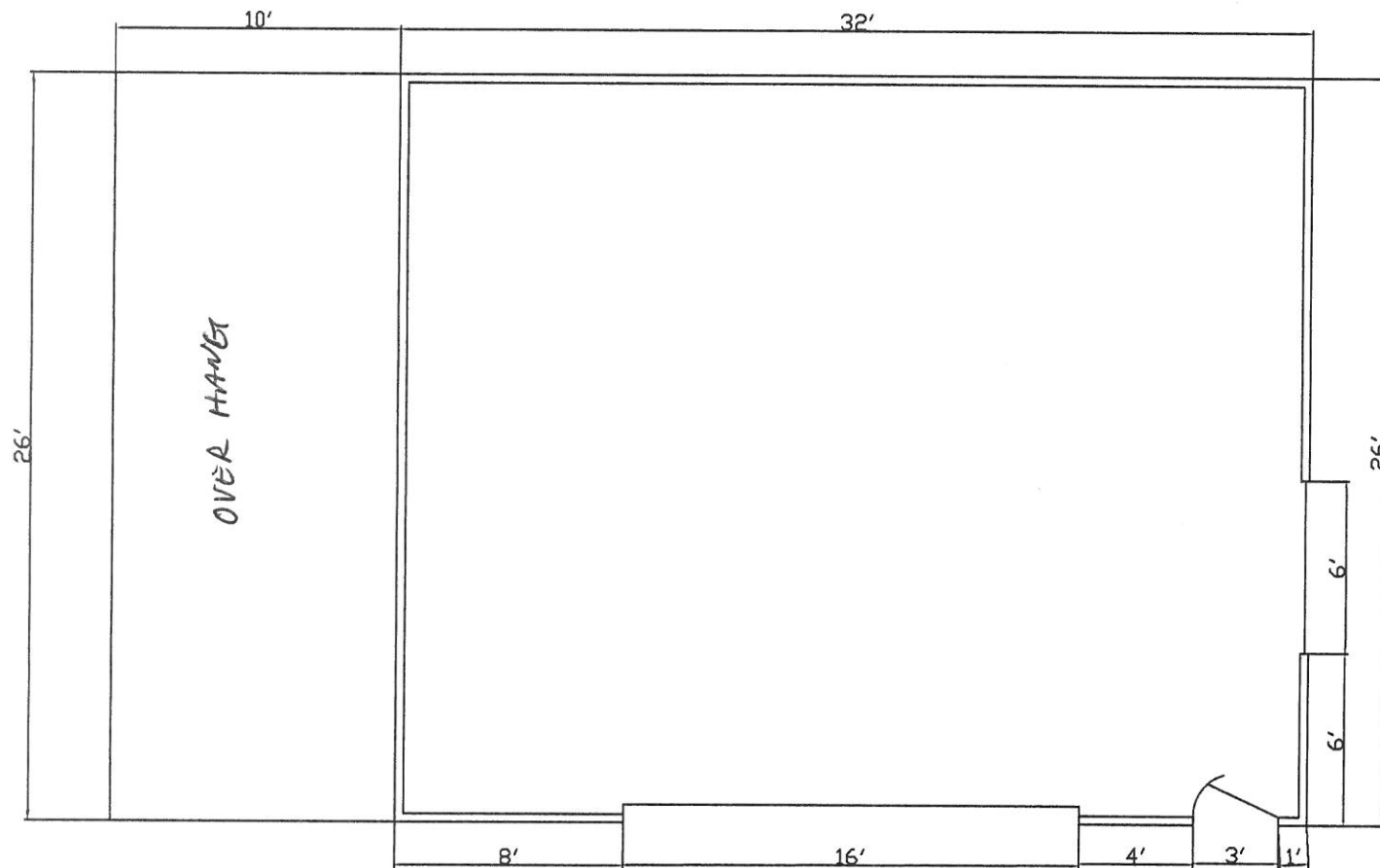
REAR ELEVATION



RIGHT SIDE ELEVATION

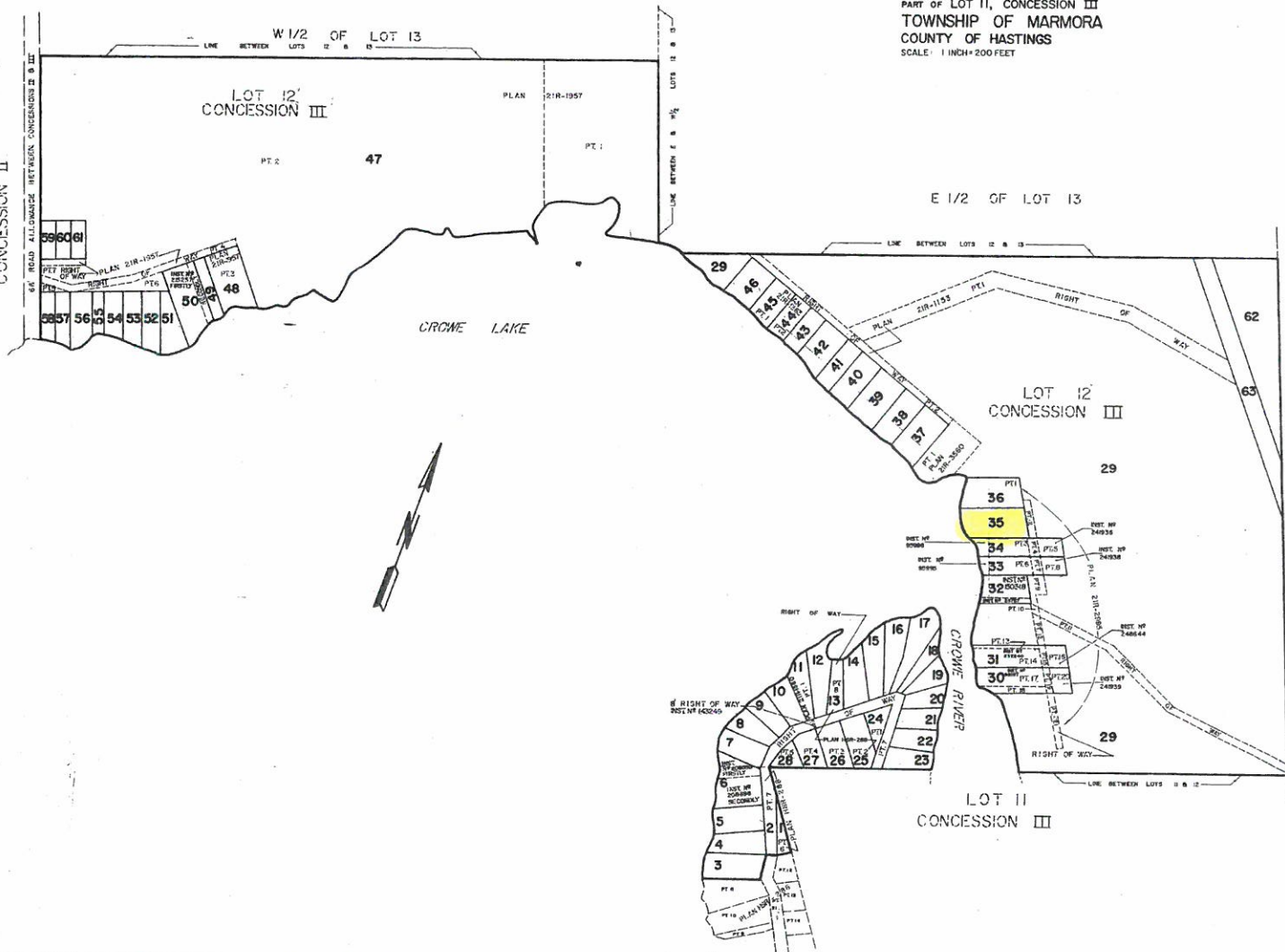


LEFT SIDE ELEVATION



PLAN VIEW

CONCESSION II



REGISTRAR'S COMPILED PLAN

BEING A GRAPHIC INDEX OF
LOT 12, CONCESSION III
AND
PART OF LOT 11, CONCESSION III
TOWNSHIP OF MARMORA
COUNTY OF HASTINGS
SCALE: 1 INCH = 200 FEET

PLAN No 2133

REGISTERED IN LAND REGISTRY OFFICE
FOR THE REGISTRY DIVISION OF
HASTINGS (INT 21)
AT 11.04 O'CLOCK A.M. ON THE
9th DAY OF MARCH, 1976

A. R. R. R.
DEPUTY LAND REGISTRAR

APPROVED FOR REGISTRATION
10th March 1977
A. C. R. R.
DEPUTY CHIEF CLERK

CAUTION - THIS PLAN IS PREPARED IN ACCORDANCE WITH SEC. 81(2) OF THE REGISTRY ACT, R.S.O. 1970, CHAP. 409, FOR THE PURPOSE OF ILLUSTRATING GRAPHICALLY THE RELATIVE POSITION OF THE INSTRUMENTS SHOWN IN THE SCHEDULE FOR OWNERSHIP AND BOUNDARY INFORMATION. SEE PREVIOUSLY REGISTERED INSTRUMENTS.
THIS PLAN IS NOT A PLAN OF SUBDIVISION WITHIN THE MEANING OF SEC. 29, 32 OR 33 OF THE PLANNING ACT. SEVERANCE APPROVAL FROM THE APPROPRIATE PLANNING AUTHORITY MAY BE REQUIRED FOR CONVEYANCE OF ANY OF THE LOTS SHOWN.

SCHEDULE							
LOT	INSTRUMENT	LOT	INSTRUMENT	LOT	INSTRUMENT	LOT	INSTRUMENT
1	144917	17	131047	33	24935	47	24935
2	144917	18	204218	34	95996	48	166829
3	24779	19	221343	35	24936	49	31126
4	234398	20	244659	36	235094	50	235094
5	208699	21	187170	37	239690	51	7997
6	208699	22	134085	38	8501	52	46411
7	208699	23	24404	39	135126	53	128815
8	187380	24	229406	40	184258	54	38009 R
9	154335	25	229406	41	247639	55	8690
10	142325	26	223584	42	44380	56	8606
11	103318	27	208543	43	5165	57	1809
12	131546	28	186272	44	25588	58	51325
13	131546	29	7356 R (PT)	45	199729	59	201098
14	28945	30	24937	46	27440	60	7356 R (PT)
15	208056	31	24938	61	27440	62	7356 R (PT)
16	181902	32	28767	63	7356 R (PT)	64	7356 R (PT)

NOTE:
PT DENOTES PART OF
R DENOTES REMAINDER

RECEIVED AND DEPOSITED AS
PLAN 21R-2995
 DATE Feb 3 1977.
B. R. Pickard
 DEPUTY LAND REGISTRAR FOR
 THE REGISTRY DIVISION OF
 HASTINGS. (NO. 2)

I HEREBY CERTIFY THAT
 THIS PLAN IS NOT A PLAN
 OF SUBDIVISION WITHIN THE
 MEANING OF SECTION 20.33
 OR 23 OF THE PLANNING ACT.

CAUTION

THIS PLAN IS NOT A PLAN
 OF SUBDIVISION WITHIN THE
 MEANING OF SECTION 20.33
 OR 23 OF THE PLANNING ACT.

PLAN AND FIELD NOTES OF SURVEY
 OF PART OF
**LOT 12
 CONCESSION 3**
TOWNSHIP OF MARMORA
COUNTY OF HASTINGS
 SCALE 1" = 60' B. ROGER PICKARD O.L.S. 1976.

PART	DESCRIPTION	AREA	INST. NR.
1	Part of Lot 12, Concession 3	0.0142 Acres	187541
2	"	0.1000 "	7356
3	"	0.1000 "	7356
4	"	0.0800 "	7356
5	"	0.1400 "	7356
6	"	0.0100 "	7356
7	"	0.0400 "	7356
8	"	0.0400 "	7356
9	"	0.0100 "	7356
10	"	0.1400 "	7356
11	"	0.0800 "	7356
12	"	0.0400 "	7356
13	"	0.0400 "	7356
14	"	0.0400 "	7356
15	"	0.0400 "	7356
16	"	0.0400 "	7356
17	"	0.0400 "	7356
18	"	0.0400 "	7356
19	"	0.0400 "	7356
20	"	0.0400 "	7356
21	Part of Lot 12, Concession 3	0.0100 Acres	7356

NOTE

Bearings are astronomical and are derived from that part
 of the Eastern Limit of a Plan of Survey by M.L. McAlpine,
 O.L.S. dated August 19, 1975, a copy of which is on record in
 the office of Hume and Pickard Limited, Ontario Land
 Surveyors, and shown as N 30° 20' 45" W.

All bearing lines shown on this plan are verified.

Periodic Offsets are perpendicular to shore however unless
 otherwise shown.

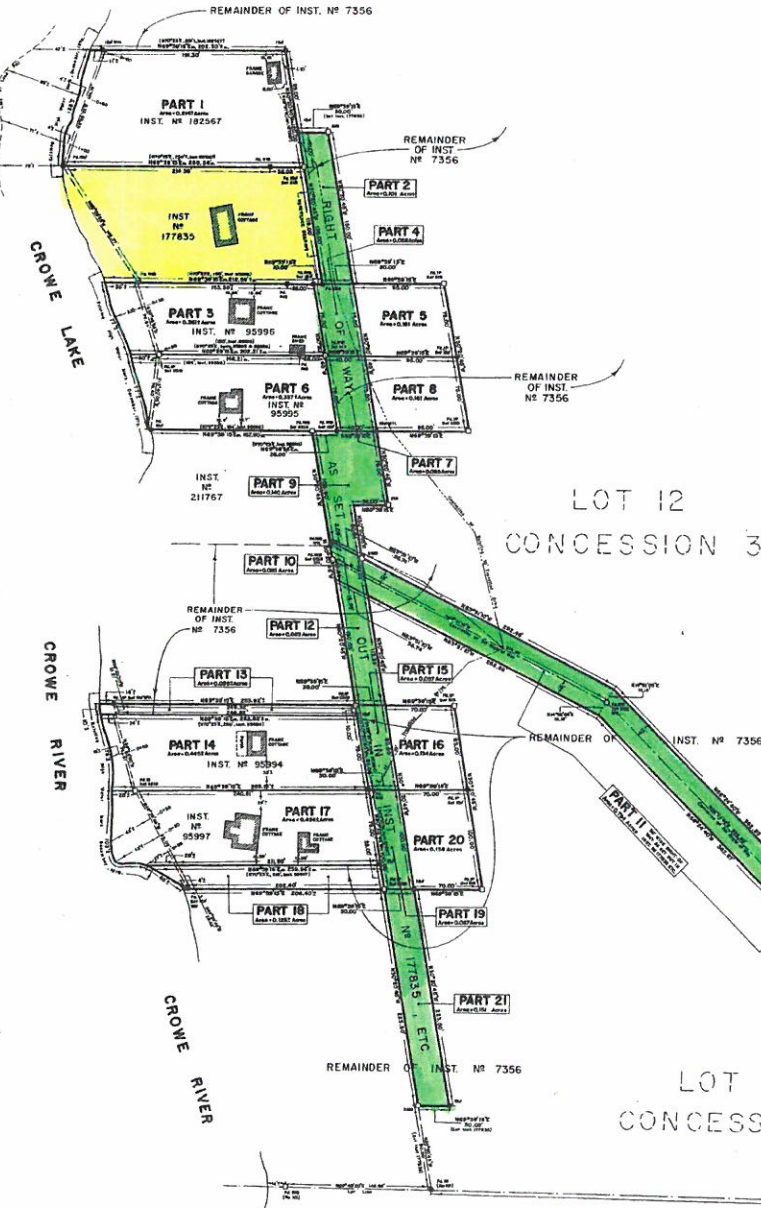
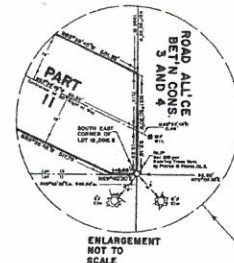
LEGEND

- Standard Iron Bar 1" x 1/4"
- Short Standard Iron Bar 1/2" x 24"
- Round Iron Bar 3/4" diameter x 24"
- Iron Bar 3/4" x 24"
- Round Iron Bar
- M.T.C. Ministry of Transportation & Communications
- M.C.N. Municipal Council Number
- R.P. Registered Plan
- Iron Pipe
- Measured
- Witness
- Found

SURVEYOR'S CERTIFICATE

- I HEREBY CERTIFY THAT:
- This survey and plan are correct and in accordance with
 the SURVEYS ACT and the REGISTRY ACT and the
 regulations made thereunder;
 - The survey was completed on the 21st day of December, 1976.

B. R. Pickard
 January 5, 1977. B. Roger Pickard
 Ontario Land Surveyor

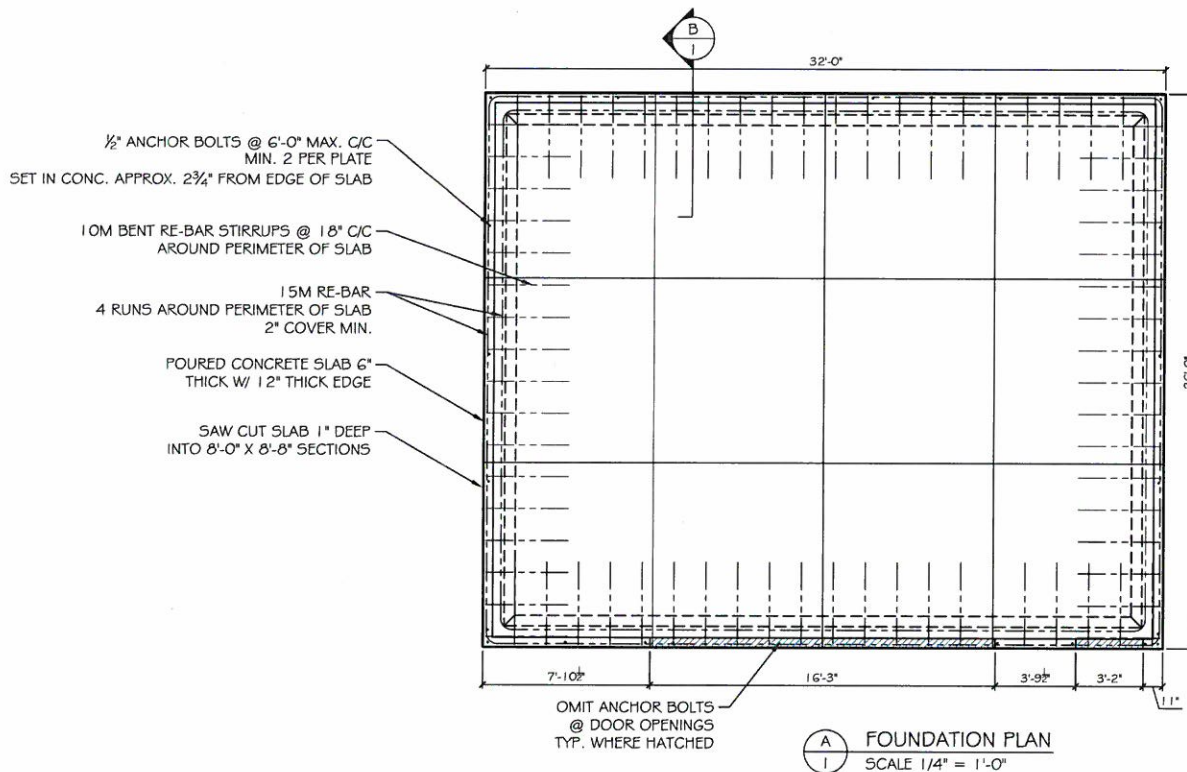


LOT 11, CONCESSION 3

LOT 12
 CONCESSION 4

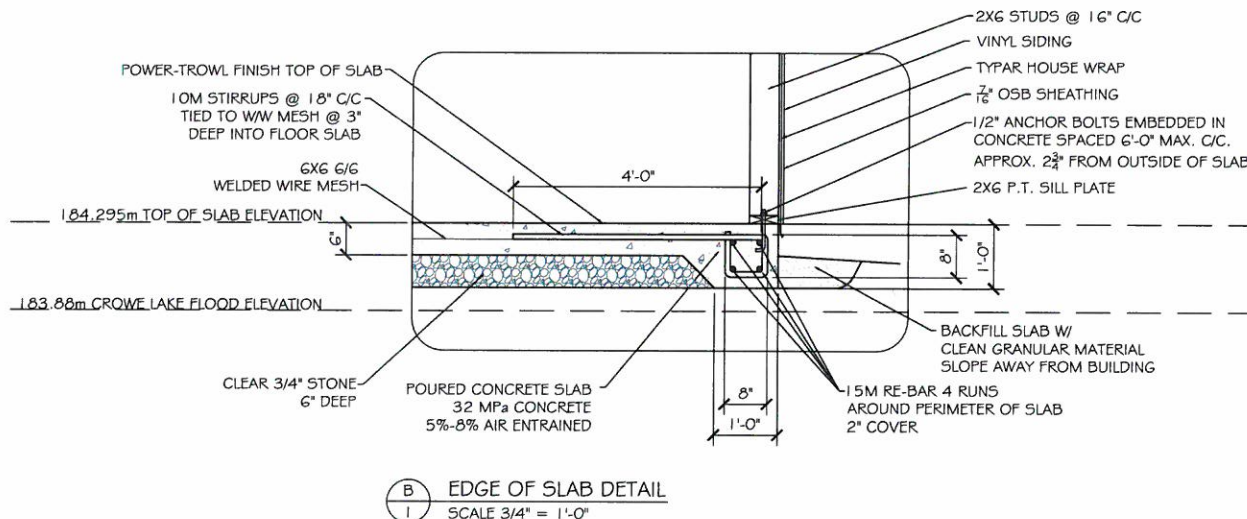
HUME and PICKARD LTD.
 Ontario Land Surveyors
 248 Church Street, Barrie, Ontario
 849-1200 1633466-4345

81R 8915



FOUNDATION NOTES:

1. CONCRETE MATERIAL TO BE 32 MPa MIN. AGED COMPRESSIVE STRENGTH, 5%-8% AIR ENTRAINED.
2. SPIN TROWEL FINISH SURFACE.
3. EXCAVATE AS REQUIRED TO LEVEL SITE READY FOR FILL AND BUILDING.
4. STRIP ALL ORGANIC TOPSOIL AND ANY UNSATISFACTORY SUBSOIL OFF THE ENTIRE BUILDING FOOTPRINT PLUS A MINIMUM OF 3'-0" ALL AROUND THE OUTSIDE OF THE FOOTPRINT. REMOVE ALL STUMPS AND ROOTS FROM THE FOOTPRINT. BACKFILL HOLES WITH WELL COMPACTED GRANULAR FILL.
5. UP-FILL SITE AS REQUIRED FOR THE BUILDING. USE GOOD CLEAN GRANULAR FILL (CRUSHER RUN/BREAKER RUN FOR THICKER FILL DEPTHS, CLEAR 3/4" STONE OR GRANULAR 'A' FOR FINAL TOPPING OF FILL). UP-FILL IN LAYERS WELL MECHANICALLY COMPACTED.
6. "PROOF ROLL" TOP OF FILL WITH VIBRATING PLATE TAMPER OR VIBRATING ROLLER COMPACTOR.
7. ESTABLISH FINAL LEVEL OF THE BUILDING AND FINAL SITE GRADES SO THAT THE SITE IS SLOPED AWAY FROM THE BUILDING ON ALL SIDES. ESTABLISH FINAL EXTERIOR GRADE TO BE 6" BELOW TOP OF SLAB. RAMP UP GRADE AT DOORWAYS TO 1" BELOW TOP OF SLAB.
8. DO NOT SET ONE CORNER OF THE SLAB ON BEDROCK AND THE REST ON FILL. IF BEDROCK IS ENCOUNTERED ENSURE A MINIMUM OF 6" OF FILL OVER THE ROCK AND COMPACT THE REST OF THE UNDER-FLOOR FILL THOROUGHLY.
9. WHERE SITE CONDITIONS REQUIRE DEVIATION FROM THESE PLANS THE BUILDER SHALL NOTIFY THE DESIGNER SO THAT SUITABLE CHANGES TO THE DESIGN CAN BE MADE



PLAN - DESIGN - BUILD

BCIN 101814
15 GEORGE ST. WEST
HAVELOCK, ONTARIO,
CANADA, K0L 1Z0
705-778-3291

PROJECT # 930
ISSUED 25-Feb-19
REVISED
FILE NAME
Farrell50G.dwg

DRAWN BY: E.F.
CHECKED BY: TREVOR DAY
BCIN 32144
I HAVE REVIEWED &
TAKE RESPONSIBILITY
FOR THIS DESIGN

CLIENT
CURT FARRELL

NO.	REVISION	DATE	BY

PROJECT
FARRELL SLAB ON GRADE FOUNDATION
27 SUNSET SHORE RD. MARMORA

SHEET CONTENTS
FOUNDATION PLAN &
EDGE OF SLAB DETAIL

SCALE
AS NOTED

SHEET NO.
1 OF 1







