

SUBMISSION BY THE NOTL AGRICULTURAL ADVISORY COMMITTEE ABOUT THE DRAFT 5 OFFICIAL PLAN

MARCH 20, 2019

The previous submission to Draft 5 of the Official Plan contained requested changes by the AAC. This submission is being made in response to the information submitted by the Consultants on March 14.

While some of the requested changes have been addressed with proposals for change, the actual changes are not known. Other requests for changes are under review by the consultant and some requests for changes require additional consultation with AAC for clarification.

The greatest concern for the AAC is that the Draft O.P. is proposing a COMMUNITY STRUCTURE that is overlain by an evolving and interconnected NATURAL HERITAGE SYSTEM. This overlay encompasses the whole agricultural area.

Section 8 is of particular concern because the section contains many policy sections about enhancement and restoration adjacent to natural features and linkages without recognizing the many negative impacts to specialty crops. Most of the natural features and linkages are on private agricultural property and most of the hydrologic linkages are engineered and constructed drains.

The features have been protected by these landowners for many years and instead of impacting them further with policies about enhancement, the O.P. had to be changed to address that impact.

Another aspect of the Draft 5 O.P. is for the recognition of the Irrigation System that requires the control structures within the hydrologic features to divert water downstream to users of the system. For the users to draw water, small dams are allowed within the drains to hold back only enough water to be used. There should be no policies in the O.P. that contradict or restrict the Irrigation System that was granted by the NOTL Act. As there is now.

Like the rest of NOTL, the agricultural area of NOTL is extremely unique. It is the most unique Specialty Crop Area in the Niagara Region. The whole agricultural area is completely Specialty Crop Area, it has the most engineered and constructed municipal drains and has a unique irrigation system.

The AAC is committed to ensuring that the Draft O.P. correctly recognizes the agricultural area and adopts policies that will not impact the viability of the farms, including any policies that will result in crop loss.

Therefore, this submission will address the areas where further changes are required. However, the concern is that there are many sections where the consultants refer to “considering a change” or are “reviewing” proposed wording or are requiring additional communication with the AAC.

Therefore, the AAC is requesting that further communication take place with the consultants to answer the questions that were posed by the consultant and to get a further answer from the consultants about the “review” of some Sections that will be made to the Draft 5 O.P. before it is completed.

The AAC is committed to ensuring that the Official Plan correctly recognizes the unique agricultural area and adopts policies that will not negatively impact the sustainability of the farms, including any policies that will result in crop loss.

CHANGES TO APPENDICES OR SCHEDULES

Request for the correct Drainage and Irrigation Map, dated Jan 3, 2018=no response from Consultants

Request for an appendix that identifies farm ponds=current map needs changes first by Brett Ruck.

Request to remove engineered and constructed drains and farm swales and road ditches from being identified as natural features on Schedule C

Section 1-HISTORY AND CONTEXT

Request to include fact that ponds on 4 Mile were constructed in the 1960's for flood control and irrigation uses by NPCA=consultants= "Discuss with NPCA" = attached information from ACC about the history of the construction of the ponds

Section 2-A FRAMEWORK FOR A SUSTAINABLE COMMUNITY

Replace comment about agriculture being referred to as the Economic Engine= consultant "will revise policies in Section 2 to address role of agriculture as economic engine"

Request for an explanation about an evolving, interconnected and natural heritage system=consultants recommended a change in wording to recognize that all features are not "natural"="A system made up of natural heritage features and areas and linkages etc."=but the words "and man-made and natural linkages" needs to be included to identify that linkages are not all "natural".

This is an example of the word changes requested by the AAC.

Request to include info about the Unique Irrigation System and the Extensive Drainage System in this Section. The information is attached =Consultants= "will review and confirm".

Section 2.2.2 consultant = "will review and consider"?

Section 2.3.2=Request to include reference to add Greenbelt Flexible Policies=no proper response

Section 2.4.2 As Section 2.4.2.1 e) refers to "existing infrastructure, add the following words:

b) "including the NOTL Agricultural Irrigation Infrastructure System" after the words "agricultural system"

COMPLETE COMMUNITIES

**As Section 2.6.1.3 c) refers to other infrastructure, add the following:
"supporting agricultural infrastructure required to meet the needs of agriculture".**

Section 2.6.2.3=Request to include word "agricultural" before the words "natural and built form" = consultant "will revise policy to address potential impact on agriculture"?

Section 2.6.4 Add a new section "The Town will work with other levels of government to secure funding for the expansion of agricultural infrastructure.

Section 2.6.5.1 =Request to add a similar response found in the Greenbelt Policy Section # 3.3.1 to state “It should be recognized that parkland, open space and trails exist within surroundings of predominately privately held lands. While some private landowners may adopt a collaborative approach with groups to allow public access across portions of their property, this is only with the consent of the landowner.”

Section 3 THE UNIQUE SPECIALTY CROP AGRICULTURAL AREA

Section 3-Further request to change Heading to: Unique Specialty Crop Agricultural Area because the agricultural area in NOTL is the most unique specialty crop area in the Niagara Region because of the large number of man-made drains and the unique irrigation system.

Section 3.2.1.2=Request to change the word “farm” to “farm operations” =consultant= incorrect response

Section 3.2.1.2 h) = Request replace Section 3.2.1.2 with the attached information

Section 3.2.2 Objectives:

Change h) to “Managing natural heritage features as part of the agricultural system in a way that will protect the feature but not impact the ability to farm or grow specialty crops in a sustainable manner.”

Add to this section

“To ensure non-farm uses do not conflict with and are removed from agricultural activity.” and

“To support the development of fair tax policies that address value added uses and economic diversification on farms.” And

“To consolidate and simplify the regulations associated with farming on agricultural lands.”

Section 3.2.4.2 Change to” The size of farm operations will be maximized by the consolidation of other farm properties.”

Section 3.2.5.2=Request to remove the reference to “the number of labourers required for the operation” because this requirement should not be part of a zoning by-law because it is part of the Seasonal Agricultural Workers program and its guidelines and is decided between farmer and the SAWP.

Section 3.2.6.1 Change “VQA wines” to “100% Ontario grown and VQA wines” (from GGO)

Section 3.2.7.3 Remove and refer this section to AAC further discussion with AAC

Section 3.2.9.1 Agri-tourism uses: Change to:

ii) “The use has no or minimal impact on, does not interfere with and is compatible with surrounding agricultural uses and neighbouring properties.”

vi) “the timing and duration of such uses do not hinder the agricultural operation on the site or on surrounding agricultural or non-farm properties.”

Section 3.2.10.5 As the AAC is recommending an 8 hectare parcel for Estate wineries, due in part to the impact to some neighbouring properties, remove this section entirely.

Section 3.2.10.6 a) Replace “predominately locally grown fruit” to “Ontario grown fruit.” And

b) “predominately locally grown fruit” to “Ontario grown fruit.”

Section 3.2.8 Add: “Careful consideration should be given to the location of the ingress and egress locations to prevent impacts to neighbouring properties.”

Sections 3.3 and 3.3.3 Include information about Irrigation System Components = “will discuss with the Town?”

Request from AAC to include Greenbelt Policy regarding Niagara Tender Fruit and Grape Area in this Section.

Section 7-HERITAGE, ARCHAEOLOGY AND CULTURE

Due to onerous restrictions for “agricultural properties, adjacent agricultural properties and properties in the vicinity of”, AAC is requesting the removal of “working Landscapes”, tender fruit farms and estate wineries from being identified as cultural heritage landscapes or cultural heritage resources.

According to the proposed O.P. tender fruit farms are considered “cultural landscapes” and cultural landscapes are considered “cultural resources” = consultant needs clarification from AAC

Section 7.3.4 b) Request for the entire farm property which could be anywhere from 10 to 60 acres be exempt from having to complete an archaeological assessment for the whole property instead of where actual building development takes place.

Request for an exemption to the requirement for an archaeological assessment when farm consolidation takes place and the severing of an existing residential dwelling is required. It is unfair to charge for an archaeological assessment when there is no actual building construction contemplated, especially when the amount of farmland could be anywhere from 10 to 60 acres and is in full production.

Section 8-Change Heading to: NATURAL HERITAGE SYSTEM

Section 8.1.1 and 8.1.2 Replace with attached wording

Section 8.1.7 This section implies that working landscapes are a component of the natural heritage system when the reality is that the NHS should be considered a component of the Agricultural System because the Agricultural System is vastly larger than the natural area. And agriculturally zoned land that is capable of being productive should not be referred to as ‘actively used agricultural land. It should not matter if agricultural land is sitting idle for some time. Consultant= “Nothing in this section is intended to limit the ability of agricultural uses to continue. Agricultural operations and working landscapes, or actively used agricultural land, encompass the majority of the rural farmland area” consultant “Will consider wording”. But what is it?

Section 8.2.2 AAC requested changes to Natural Heritage Objectives (attached)= consultants comment= MW “will review recommended policy changes” = but what are they?

Section 8.4.9 O. P. states that “New or expanding infrastructure within the Protected Countryside shall avoid Core Natural Areas and key hydrologic features” etc. but the NOTL Act provides the Town with the ability to use watercourses for irrigation system components=ACC=remove words or add additional wording that allows this to happen=consultants recommend removing fish habitat that overlay municipal drains on Schedule C but this is not enough=AAC= the O.P. must recognize the need to install irrigation system components within or adjacent to hydrologic features.

Section 8.4.10

Section 8.4.11 AAC recommended adding words “farm and irrigation” before the word “ponds” to recognize the fact that some ponds may be used for other purposes than irrigation.

Also remove the words “Actively -used” because a constructed agricultural pond should not be considered a natural feature.

This section does acknowledge that “actively-used farm irrigation ponds will not be considered wetlands and the policies of this section will not apply to such ponds.” AAC= Again, the reference to only irrigation ponds is wrong. Either add “farm and irrigation ponds or change to just “farm ponds” which will include all farm ponds.

Remove the words “actively-used” to prevent a farm pond from being id as a wetland.

Sections 8.5.10 & 8.5.11 Move these sections to section 3=Unique Specialty Crop Agricultural Area

Sections 8.6.3 Due to the proliferation of the invasive species phragmites in NOTL and the intent to eradicate it, there should be no requirement for natural self-sustaining vegetation anywhere in NOTL.

Also due to the fact that most of the hydrologic features in NOTL are engineered and constructed municipal drains adjacent to specialty crops, any requirement for vegetation adjacent to these features should be low growing vegetation that works cooperatively with specialty crops and that can be maintained to prevent crop loss or the spread of the invasive species, phragmites.

Section 8.6.5 This section does not understand the nature of the Irrigation System (NOTL Act) that requires irrigation control structures to be placed within watercourses/drains to provide ability to divert augmented water downstream to users of the Irrigation System and also provide the use of small dams to hold back some augmented water for irrigation by individual users.

Remove last sentence or provide exemptions for irrigation system components and dams used by “users of the irrigation system” to be allowed within hydrologic features and in the associated Vegetation Protection Zone if needed.

Section 8.11.1 d) O.P. “enhancement programs” = consultant= “will be geared to specific situations and not to adversely impact agriculture” = AAC please state that but include words “crops” = consult AAC

Section 8.11.1 e) as this section refers to development adjacent to the natural heritage system, including opportunities for additional linkages= AAC asked if this referred to “public lands or private agricultural properties” =consultant replied this was for “public lands, not agricultural properties” =Then what about the whole section of 8.11.1? Does this section refer to “public lands?” Clarification is needed.

Section 8.11.2 ACC concerned about public trails being developed on private agricultural land. Include wording as requested for Section 9.1.4.7, similar to that of Greenbelt Policy 3.3.1.

Section 8.11.3 This section refers to the enhancement of the features of the Natural Heritage System and water resources=AAC this could refer to natural features or municipal drains which are on agricultural land, which if enhanced would potentially impact ag crops and the impact to the requirement for a barrier free area adjacent to municipal drains. Consultant suggested "consultation with adjacent landowner but a previous restoration project undertaken by NPCA has impacted an agricultural property in the past and the restoration project consisted of new plants in the bottom of the drain and now phragmites is taking over.

Unfortunately, this is an example of the problem with an overlay on top of the agricultural working landscape and it is not clear if this whole section refers to "public lands=needs further explanation and discussion with AAC

Section 9 INFRASTRUCTURE

Section 9.1.4.7 Change to: "The Town supports the maintenance and expansion of publicly owned trails located throughout the Town, in appropriate locations that consider the impact of the facilities on adjacent lands, including farmlands. This includes identifying measures to prevent trespassing on farm properties to avoid risks to farm biosecurity and crop loss."

Section 9.3.6 b) Add provision to provide for the removal of invasive species, phragmites and cattails=response from AAC included wrong section and consultant misunderstood and responded to wrong section

Section 9.4.3 ii) Change to: "the expected impact of the proposed project on agricultural lands and conservation lands."

Section 9.8 and 9.9 Remove the sections, Municipal Drain Infrastructure System and Irrigation System Infrastructure, and include this attached information in Section 3.

Section 10 IMPLEMENTATION AND ADMINISTRATION

Section 10.6.2.1 AAC requested an additional section that included "Provide and also secure access to federal and provincial funding and for available funding programs for the expansion of the NOTL Irrigation System that serves the agricultural sector but also serves the natural areas downstream." = consultant= "Sufficient support in sub c, l and j" but l and j do not include the federal and provincial governments. Clarification needed.

Section 10.7.1 e) If this is in agricultural areas, exemption should be made to remove requirement for any enhancements that could cause crop loss.

Section 10.13.4 AAC= There should be a section added to allow a home occupation to be carried out in a detached building in the agricultural area= consultant= see section 3.2.8.8 but do not see where this is addressed in this section? Clarification is needed.

Section 11.4 DEFINITIONS

Agri-Tourism Uses=AAC=Add “County inns” to section=consultant= “Remove reference to Bed and Breakfast as an example” = AAC=not what was asked for?

Estate Winery Change “locally grown” to “grown in Ontario” (GGO)

Green Infrastructure=Means natural and human-made elements that provide ecological and hydrological functions and processes. Green infrastructure can include components such as natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels. Permeable surfaces, and green roofs. AAC=What are considered natural channels?=consultant=Natural channels is a term used in the PPS that refers to watercourse restoration and realignment which attempts to reconstruct channels to emulate the physical form of a stream that is in balance with processes of erosion and deposition so that the function of the watercourse can be maintained or restored etc.=AAC surely this is not intended to reconstruct municipal drains that will definitely take productive land out of production? Clarification is required.

Infrastructure=AAC= include irrigation infrastructure system components or a separate section for agricultural infrastructure. = consultant “Considering amendment”? But what is it?

Linkages-Hydrologic- provide a definition of hydrologic linkages to include the fact that the majority of the linkages are engineered and constructed municipal drains.

Linkages-Provide a definition of land linkages that include the fact that the majority of the land linkages are privately held productive agricultural lands

Natural Open Space= means public or private land in a natural state including land maintained in a natural state essentially devoid of human activities, buildings and structures=AAC=This should not include specialty crop agricultural land that was formerly farmed and is still capable of being farmed, even if it is lying idle for a time=consultant= “will review” ? Clarification is needed.

Natural Heritage Features and Areas=means features and areas, including significant wetlands, significant coastal wetlands, other coastal wetlands in ecoregions se, 6 e and 7 e, fish habitat, significant woodlands and significant valleylands in ecoregions 6e and 7e, habitat etc. =AAC this is the problem with the draft O.P.=fish habitat is considered a natural feature and engineered and constructed drains are not natural features and the draft O.P. is referring to drains as fish habitat .

Natural heritage system means a system made up of natural heritage features and areas (fish habitat), and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. These systems can include natural heritage features and areas, federal and provincial parks and conservation reserves, other natural heritage features, lands that have been restored or have the potential to be restored to a natural state, areas that support hydrological functions, and working landscapes that enable ecological functions to continue.=AAC=working specialty crop landscapes(farmland) should not be considered “natural” for any reason = consultant=PPS defn.-are reviewing as per other comments It is not the intent that farmland is being considered as natural, but rather supports some natural processes and functions. The language will be reworded to make this clearer=AAC is concerned about what is meant by ‘some natural processes and functions’. Is this meant to refer to fish habitat or what? Clarification is needed.

Natural self-sustained vegetation means vegetation dominated by native plant species that can grow and persist without human management, protection, or tending=AAC There should be no requirement for natural self-sustaining vegetation on specialty crop land, especially when NOTL is inundated by the invasive species phragmites= consultant Addressed in compliance with GBP's. Confirmed. There is no requirement for a vegetation protection zone (natural self-sustaining vegetation) on specialty crop land that is being used for agriculture/agricultural related practices. AAC- but what about the word "is being used"? What about agricultural zoned land that is sitting idle? Clarification needed by AAC

Surface water features means water-related features on the earth's surface, including headwaters, rivers, stream channels, inland lakes, seepage areas, recharge/discharge areas, springs, wetlands and associated riparian lands etc. AAC are these features "natural"? Explanation needed?

Wetlands=Include the statements "Farm and irrigation ponds are not considered wetlands. As such, where such farm ponds are mapped as wetlands on the Schedules to this Plan, they will not be considered wetlands and the policies of this section will not apply to such ponds. Currently-known locations of farm ponds that occur within wetland boundaries have been identified on Schedule C."

Working landscape-Remove the words "actively used" in reference to agricultural land. It should not matter if agriculturally zoned land is sitting idle for some time.

Attached for inclusion in the Official Plan is information from the AAC about The Unique Specialty Crop Area, the Environmental Benefits provided by Specialty Crop Farms, SECTION 3.2.1.2, Sections 8.1.1 and 8.1.2, the NOTL Municipal Drain and Irrigation Infrastructure Systems, a page from the Greenbelt Plan 2017 about Parkland, Open Space and Trails, and the History of the Virgil Dams.

Due to the fact that there are many areas in the proposed draft that are under review by the consultants and therefore not known to the AAC, the AAC is asking that another Draft be produced that includes the changes proposed by the consultants.

The AAC is also requesting that a hard copy of Sections 1, 2, 3, 7, 8, 9, 11 be made available to members of the AAC to review.

CHANGES TO THE OFFICIAL PLAN

REPLACE THE HEADING IN SECTION 3 WITH THE FOLLOWING:

REPLACE THE FIRST PARAGRAPH IN SECTION 3 WITH THIS WORDING:

THE UNIQUE SPECIALTY CROP AGRICULTURAL AREA

THE TOWN OF NOTL IS LOCATED IN THE NIAGARA REGION, EAST OF THE NIAGARA RIVER AND SOUTH OF LAKE ONTARIO, WITHIN THE GREATER GOLDEN HORSESHOE. THE TOWN'S LOCATION SOUTH OF LAKE ONTARIO IN THE SHADOW OF THE NIAGARA ESCARPMENT, CREATES A UNIQUE MICRO CLIMATE WHICH SUPPORTS PRODUCTIVE AGRICULTURAL LANDS THAT PRODUCE CROPS, MANY OF WHICH CANNOT BE GROWN ELSEWHERE IN ONTARIO.

BASED ON THIS UNIQUE AND FINITE RESOURCE, THE TOWN HAS A LONG ESTABLISHED HISTORY AND A DEEP ROOTED AGRICULTURAL HERITAGE. AGRICULTURE IS AN INTEGRAL PART OF THE CHARACTER OF THE TOWN AND OCCUPIES THE MAJORITY OF THE LAND BASE AND IS PART OF THE GREENBELT PROTECTED COUNTRYSIDE. THE MAJORITY OF THE AGRICULTURAL LAND IS IN ACTIVE AND INTENSIVE CROP PRODUCTION.

THE UNIQUE AGRICULTURAL AREA IN NOTL IS DISTINGUISHED FROM OTHER AGRICULTURAL AREAS IN THE PROVINCE BY NUMEROUS FACTORS INCLUDING THE EXTENSIVE MAN-MADE MUNICIPAL DRAIN INFRASTRUCTURE SYSTEM, THE COMPREHENSIVE IRRIGATION INFRASTRUCTURE SYSTEM THAT SERVES THE SECTOR, THE SMALLER THAN NORMAL FARM PARCELS, THE INTENSITY OF FARM OPERATIONS, THE RANGE AND TYPE OF COMMODITIES THAT CAN BE PRODUCED, THE LENGTH OF CROP CYCLES, THE RANGE OF ON-FARM USES THAT SUPPORT PRODUCTION AND THE BEST MANAGEMENT PRACTICES OF MAINTAINING PERMANENT SOD AROUND ORCHARDS AND VINEYARDS AND IN BUFFERS ADJACENT TO WATERCOURSES. TENDER FRUIT AND GRAPE CROPS ARE HIGHLY DEPENDENT ON THE NEED FOR CRITICAL AIR FLOW AND ALSO AN ENVIRONMENT FREE FROM PESTS AND DISEASES THAT ARE HARBOURED IN UNMANAGED VEGETATION AND WOODLOTS. GREENHOUSES ARE DEPENDENT ON AN ENVIRONMENT THAT IS FREE FROM SHADING.

IN ADDITION TO BEING DESIGNATED AS PROTECTED COUNTRYSIDE IN THE GREENBELT PLAN 2017, THE AGRICULTURAL LANDS IN THE TOWN HAVE BEEN IDENTIFIED BY THE PROVINCE AS A SPECIALTY CROP AREA WHERE HIGHLY VALUABLE TENDER FRUIT AND PREMIUM GRAPE CROPS CAN SUCCESSFULLY BE GROWN DUE TO THE BENEVOLENT CLIMATE AND SOME OF THE BEST SOILS IN THE PROVINCE. THE EXTENSIVE MUNICIPAL DRAINAGE INFRASTRUCTURE SYSTEM AND THE COMPREHENSIVE IRRIGATION INFRASTRUCTURE SYSTEM HAVE BEEN INTEGRAL TO THE DEVELOPMENT OF AGRICULTURE IN NOTL.

BY IDENTIFYING THE LAND AS A SPECIALTY CROP AREA, THE PROVINCE HAS IMPOSED THE HIGHEST LEVELS OF PROTECTION ON THE TOWN'S RURAL LAND BASE FOR CROP PRODUCTION AND TO CREATE CIRCUMSTANCES WHERE AGRICULTURAL OPERATIONS WILL CONTINUE AND FLOURISH. TO THIS END, THE GREENBELT PLAN 2017 PROVIDED REDUCED BUILDING SETBACKS FROM MUNICIPAL DRAINS, FARM SWALES AND ROAD DITCHES TO A MIN OF 15M AND ALSO AN EXEMPTION FOR A VEGETATION

PROTECTION ZONE OF SELF-SUSTAINING VEGETATION IF THE LAND IS AND WILL CONTINUE TO BE USED FOR AGRICULTURAL PURPOSES.

THE VALUE OF THE AGRICULTURAL AREA IN THE TOWN IS NOT TO BE UNDER ESTIMATED. IT IS A HIGHLY VALUABLE, NON-RENEWABLE RESOURCE THAT MUST BE PROTECTED FOR FUTURE GENERATIONS. TO ACHIEVE THIS, CONSIDERATION WILL BE GIVEN TO IMPLEMENTING POLICIES THAT WILL MANAGE NOTL AGRICULTURE AS A SYSTEM, IDENTIFYING THE ESSENTIAL COMPONENTS REQUIRED TO SUSTAIN IT AND THE POTENTIALLY CONFLICTING USES THAT NEGATIVELY IMPACT IT.

THE TOWN SUPPORTS THIS GOAL AND THROUGH THIS OFFICIAL PLAN IMPLEMENTS POLICIES FOR THE PROTECTED COUNTRYSIDE THAT PROTECT THE LAND BASE, SUPPORT A HEALTHY AND VIABLE AGRICULTURAL SYSTEM AND CONTROL A LIMITED NUMBER OF PRE-EXISTING USES.

TO BE INCLUDED IN SECTION 3

ENVIRONMENTAL BENEFITS PROVIDED BY BEST MANAGEMENT PRACTICES ON SPECIALTY CROP FARMS IN NOTL

MILLIONS OF GRAPE VINES AND FRUIT TREES PLANTED IN PERMANENT SOD THAT TOGETHER:
ELIMINATES CONTINUOUS CULTIVATION THEREBY REDUCING EMISSION INTO THE ATMOSPHERE
PREVENTS SOIL EROSION IN ORCHARDS, VINEYARDS, DRAINS AND NATURAL WATERCOURSES
IMPROVES WATER QUALITY BY FILTERING FARM RUNOFF BEFORE ENTERING ADJACENT WATERWAYS
IMPROVES WATER HOLDING CAPACITY OF SOIL THEREBY ELIMINATING FLOODING
ABSORBS SULPHUR DIOXIDE, OZONE AND OTHER POLLUTANTS
ACTS AS AIR FILTERS, ABSORBING CO₂ AND EXPELLING FRESH OXYGEN INTO THE ATMOSPHERE
MODERATES THE EFFECTS OF SUN, RAIN AND WIND
HELPS TO LOWER THE AIR TEMPERATURE
PROVIDES LINKAGES BETWEEN EXISTING NATURAL FEATURES
PROVIDES HABITAT AND WILDLIFE CORRIDORS
THE USE OF INTEGRATED PEST MANAGEMENT THAT REDUCES THE AMOUNT OF CHEMICAL USE TO PREVENT CROP LOSS THAT MINIMIZES ECONOMIC, HEALTH AND ENVIRONMENTAL RISKS

ADDITIONAL CHANGES TO DRAFT 5 O. P. SECTION 3.2.1.2 TO BE REPLACED WITH:

In managing the agricultural system, the Town will respect and respond to the unique characteristics of agriculture in NOTL which include:

Agriculture's major role as the largest integral part of the Town's working landscape and economy

A majority of active agricultural productive land within the Greenbelt Natural Heritage System

The entire agricultural area of NOTL is recognized as a Unique Specialty Crop Area

Finite supply of agricultural land capable of growing specialty crops

Climatically suitable environment below the escarpment

Perennial crops

Small individual farm parcel size

Farm operations comprised of unrelated farm parcels

Intensive farms/farm operations

Labour intensive farms/farm operations

Diversity of production

Longer time frames for crops to reach maturity

Best management practices utilized by farmers

Negative impacts to specialty crops from natural vegetation that create reservoirs for insects, pests, diseases and that also block critical air flow

Negative impact from invasive species like phragmites and bulrushes

Variety and number of agriculture-related and on-farm diversified uses including a significant component of agri-tourism uses

Reliance on support infrastructure (farm services, storage, retail, packing and shipping structures, irrigation systems and components and potable water

An extensive municipal drainage system that reduces the threat of flooding, provides the ability to grow specialty crops and provides the opportunity for augmented flow for farm irrigation

Access to a unique irrigation system, that utilizes engineered and constructed municipal drains and some natural watercourses to provide an augmented flow of water during dry periods that sustains crops and natural areas

Impact of active interfaces between agricultural and community land uses

Replace Sections 8.1.1 and 8.1.2 with the following:

8.1.1 The Town's landforms and watercourses, including engineered and constructed municipal drains, provide key ecological functions and linkages that connect its natural features to a broader ecosystem encompassing the Niagara Escarpment, the Greenbelt and the Lake Ontario and Niagara River watersheds. Defining a system of linked natural heritage features and linked hydrological features and associated lands will assist the Town in maintaining, restoring and enhancing, in appropriate locations, ecologically sustainable and resilient landscapes. Natural heritage systems planning takes a strategic approach to addressing biodiversity loss, land use change and the uncertainties of climate change so that there will be clean air, clean water and a rich diversity of plant and animal life to sustain present and future generations. In addition this planning in the unique specialty crop area of NOTL will require careful consideration to prevent proposed policies from negatively impacting the specialty crops grown in NOTL.

Section 8.1.2 The Natural Heritage System is an integral component of the broader Agricultural System. The unique agricultural features and associated infrastructure contribute to a unique relationship between agriculture and the natural system. The agricultural area contains an extensive network of underground field tiles, engineered and constructed municipal drains, some of which are used for the augmentation of water for irrigation purposes. A few of these drainage features connect the natural areas found in the headwater areas of the Escarpment with the lower reaches of the hydrologic features draining into Lake Ontario. However, most of the constructed drains are not connected to the Niagara Escarpment. They originate in the agricultural area below the Escarpment. The Town's remaining natural features are primarily located on private land, including private agricultural land. There is a long tradition of farming and voluntary environmental stewardship by many farmers. It is important to recognize that stewardship and integrate the Natural Heritage System with the Agricultural System in a sustainable manner with policies that will not negatively impact the specialty crops grown in a very unique Specialty Crop Area.

REPLACE WORDING IN SECTION 9.8 WITH THE FOLLOWING AND MOVE THIS SECTION TO SECTION 3

Section 9.8 Pg. 148 CHANGE HEADING TO: AGRICULTURAL INFRASTRUCTURE

MUNICIPAL DRAINS

One of the unique aspects of the NOTL Specialty Crop Area is the extensive agricultural infrastructure system in the form of engineered man-made municipal drains that have been constructed as far back as 100 years ago. This infrastructure has provided the ability to grow specialty crops on land that was formerly recognized as swamp land. Often these drains originated as surface features dug by farm family members, some hand dug.

The majority of the municipal drains originate in the flat private agricultural land area below the Escarpment. Some of the drains also include large sections of open and unopened road ditches. Some drains drain south to north and some drain latterly, west to east or east to west. Only one drain has some permanent flow that becomes essentially non-existent during the summer according to a NPCA Assessment Report.

The municipal drains are considered part of the Town's infrastructure and are developed and maintained in accordance with the requirements of the Drainage Act.

The Town supports the design, construction and maintenance of Requisition and Petition Drains authorized under the Drainage Act in accordance with Best Management Practices to avoid significant detrimental effects on farmland, water resources, natural areas and fish and wildlife habitat.

Where development, site alteration or building is proposed adjacent to a municipal drain, a buffer zone, a minimum 7.5 metres in width measured from the stable top of bank shall be required to provide access for drain maintenance and to protect the integrity of the drains. The buffer zone adjacent to the drains will be planted with permanent low growing vegetation that works cooperatively with specialty crops and that can be maintained to prevent crop losses.

Currently municipal drains may be identified as flood plain and may have set back restrictions identified in the implementing Zoning By-Law. Areas identified as floodplain adjacent to municipal drains may be due to undersized Town road culverts identified in a study completed in 2008.

Section 9.8 Pg. 148 AGRICULTURAL IRRIGATION SYSTEM

Another unique aspect of the Specialty crop Area of NOTL is the presence of an Irrigation Infrastructure System that was initiated due to the lack of baseflow when it was needed the most to irrigate these crops, the dry summer months.

The NOTL Act that granted NOTL specific provincial legislation to establish and maintain an Irrigation System throughout the Town was adopted in 1990 through the help of a former NOTL MPP, Mike Dietsch.

Prior to the adoption of an irrigation system, a petition is required from landowners in each system area. After a petition is granted, each Irrigation System is engineered and designed to prevent any negative

impacts to surrounding properties. Costly studies are required as a condition to obtain a Permit to Take Water before a system is adopted by the Town and then constructed.

Landowners are charged for the cost of studies, capital works and annual operating costs, including a portion of the wages for the Drainage and Irrigation Superintendent. The capital costs are net of any provincial or federal grants available. The annual operating costs are net of any financial support from the Town.

Currently there are five separate Irrigation Systems that serve the agricultural area with augmented water. The constructed OPG Hydro Reservoir and the Hydro Canal, the Niagara River and the Welland Canal are the sources of water. Pumps, siphons, buried pipe and open ditches or drains and control structures are used to direct the water to the drains that eventually drain south to north to reach the farmland downstream. These control structures are required to be placed within the drains to direct the water flow from a lateral position to a northern flow.

The use of water for irrigation purposes is allowed between May 15 and Sept 15 unless unforeseen need is required outside of that time frame. Farmers are encouraged to construct ponds on their property to store water for later irrigation use.

The water not used for irrigation purposes continues to flow freely downstream to nourish the natural areas before emptying into Lake Ontario.

While only some drains are augmented presently, plans are being made to expand the irrigation infrastructure system to provide much needed relief to other landowners during dry periods. Due to the very high cost of the capital works for the expansion of the system, these expansions are dependent on upper level government financial support.

Section 9.8.5 Pg. 148 to be replaced with:

9.8.5 Within the Protected Countryside, infrastructure serving the agricultural sector, such as an agricultural irrigation system, may need certain elements to be located within a Core Natural Area, Fish Habitat or a key hydrologic feature or within the vegetation protection zone of such a feature. In such instances, these elements for infrastructure may be established within the feature itself or its associated vegetation protection zone.

3.3 PARKLAND, OPEN SPACE AND TRAILS

3.3.1 Description

A system of parklands, open spaces, water bodies, and trails across the Greenbelt is necessary to provide opportunities for recreation, tourism and cultural/natural heritage appreciation, as well as to support environmental protection. This system currently supports a variety of passive and active uses, as well as health, economic and other quality of life benefits within the Greenbelt.

It should be recognized that parkland, open space and trails exist within surroundings of predominantly privately held lands. While private land owners may, and do, adopt a collaborative approach with groups ~~such as hiking and snowmobile associations~~ to allow public access across portions of their property, this is only with the consent of the landowner.

Maintaining and expanding the supply of publicly accessible parkland, open space and trails is encouraged through strategic planning activities that identify, plan for and protect these resources for current and future generations. The planning and activity associated with parkland, open space and trail uses should maximize the opportunity to cooperate with all landowners.

Throughout the Greenbelt, there is existing public parkland and open space, as well as existing major trails such as the Bruce Trail, the Trans Canada Trail, the Niagara Greenway and the Lake Ontario Waterfront Trail. This system of parks and trails provides significant economic benefits and opportunities for a multitude of uses and activities compatible with the Greenbelt's vision and goals. This system should serve as a base for future decisions on parkland and open space use and trail development.

3.3.2 Parkland, Open Space and Trail Policies

The Province should, in partnership with municipalities, conservation authorities, non-government organizations, and other interested parties:

1. Encourage the development of a system of publicly accessible parkland, open space and trails where people can pursue the types of recreational activities envisaged by this Plan, and to support the *connectivity* of the Natural Heritage System;
2. Encourage the development of a trail plan and a coordinated approach to trail planning and development in the Greenbelt to enhance key existing trail networks and to strategically direct more intensive activities away from sensitive landscapes; and
3. Promote good stewardship practices for public and private lands within the Greenbelt, including clear demarcation of where public access is permitted.

Virgil

H. Leonard

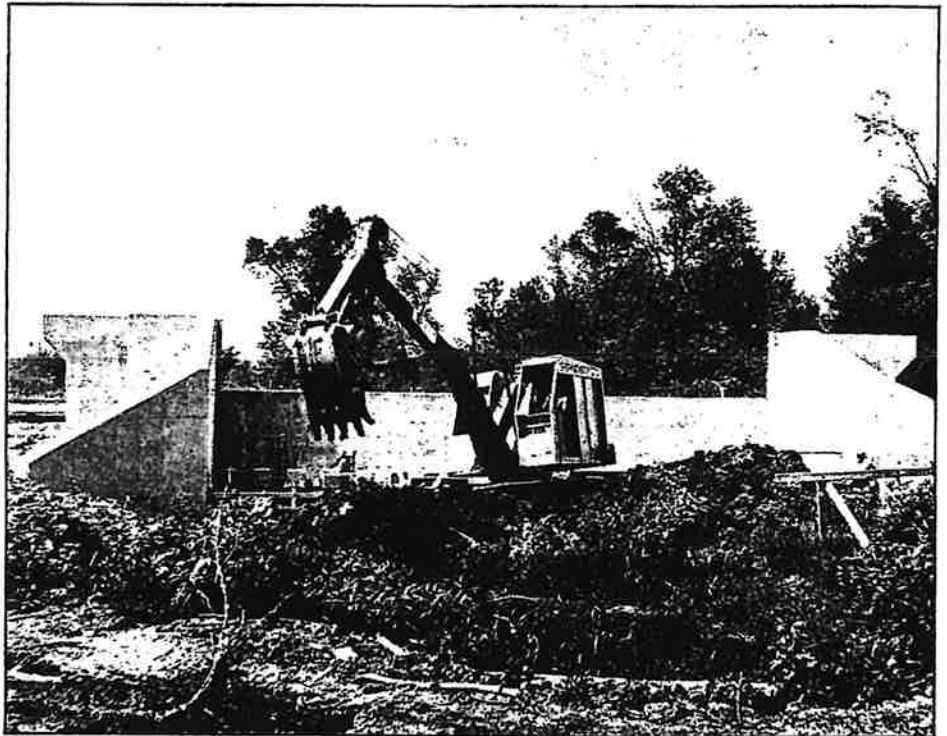
Virgil Dams and Conservation Area

During the 1960's, when Ontario was experiencing a period of drought, the Authority built two earth dams on the Four-Mile Creek in Virgil at the request of the former Township of Niagara to control the flow of the creek and provide water for irrigation.

The construction of the Virgil Dams was recommended in the 1964 Water Report and the Authority acted immediately by appointing consulting engineers who submitted their plans in September of the next year. Total approval for this project was received a year later; construction began in 1966 and was completed in 1967. Since then, sufficient water supplies have been available at the site.

Wildlife shrub planting and erosion control projects have also been completed at this conservation area. Two experimental plantations, the Jubilee Tulip Tree Plantation and the Niagara Nut Grove have been started.

In 1973 the Town of Niagara-on-the-Lake donated eight acres of land on the north side of Highway 55, making the total property owned by the Authority at the Virgil Dams and Conservation Area 123 acres.



Construction in 1966 of the lower dam on the Four Mile Creek in Virgil.



Virgil Dam, lower structure, spring 1984.