

# East Ridge Business Park Expansion: Servicing

COUNCIL PRESENTATION MARCH 9, 2021

# Agenda

- ▶ Overview of Master Plan: Preferred servicing strategy
- ▶ What has changed?
- ▶ Stormwater Management (SWM), grading & drainage
- ▶ Wastewater servicing
- ▶ Water servicing
- ▶ Utilities
- ▶ Phasing
- ▶ Estimated costs
- ▶ Next steps



MUNICIPALITY OF BROCKTON  
EAST RIDGE BUSINESS PARK (WALKERTON)  
SERVICING MASTER PLAN  
STUDY AREA LOCATION

DATE  
June 2019

PROJECT No.  
12154

SCALE  
AS SHOWN

FIGURE No.  
2.2

# East Ridge Business Park



**LOW PRESSURE SEWER SYSTEM WITH INDIVIDUAL GRINDER PUMPS ((ALTERNATIVE "B"))**

PROPOSED SWM POND

MUNICIPAL LANDS

WALKERTON SOCCER FIELDS

ROAD A

ROAD B

ROAD C

ROAD D

BRUCE ROAD 19

EASTRIDGE RD

ONTARIO RD

DURHAM STREET EAST

100 (f/m)

300

250

200

375

150

19

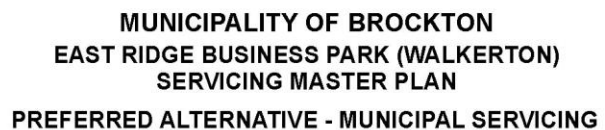
4

**Legend**

- Proposed Sanitary Sewer
- Existing Sanitary Sewer and Size (mm)
- Sanitary Manhole
- Existing Watermain
- Proposed Watermain

0 50 100 200  
METRES

Service Layer Credits: INCLUDES MATERIAL  
© 2016 OF THE QUEEN'S PRINTER FOR ONTARIO. ALL RIGHTS RESERVED



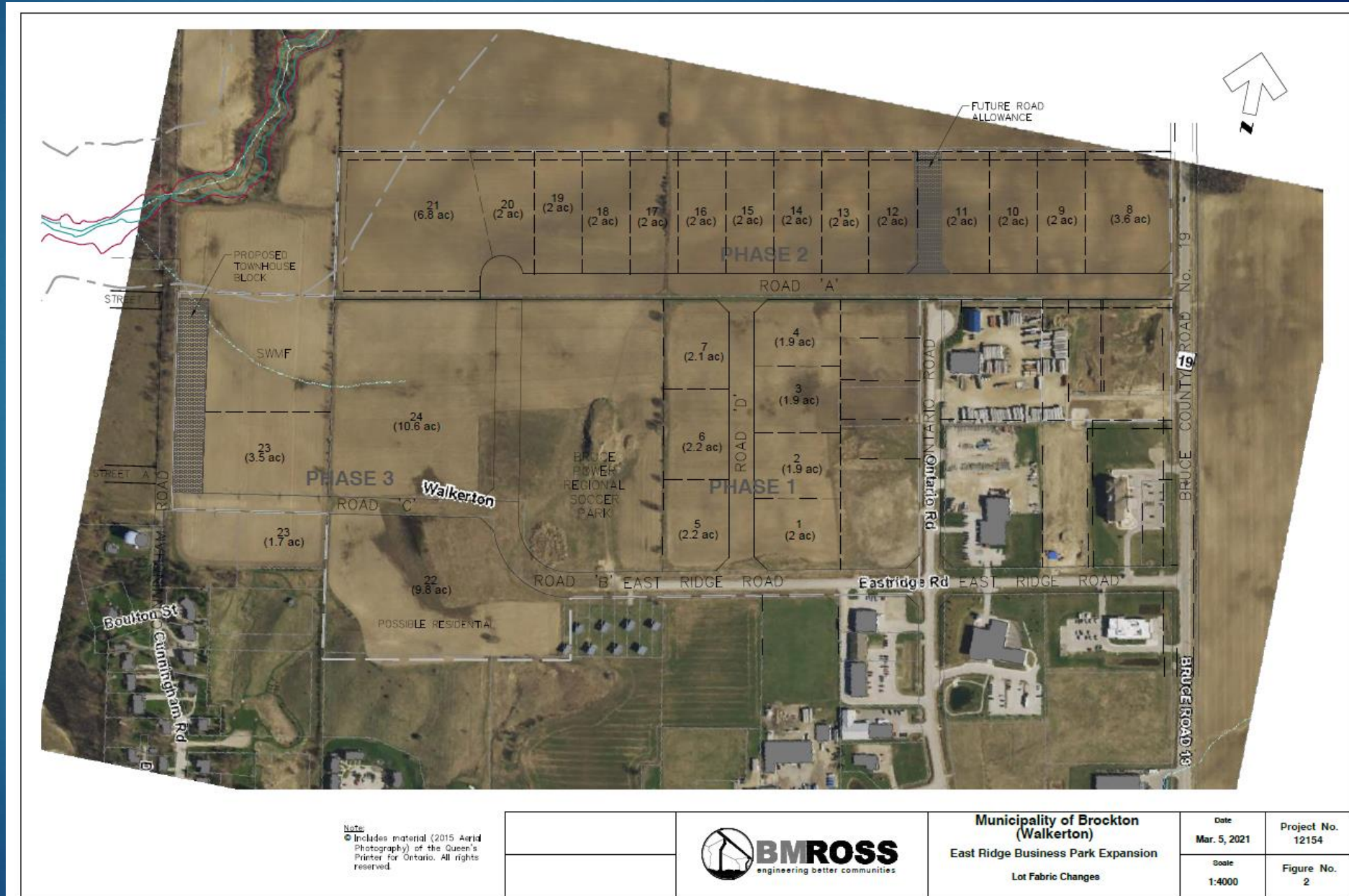
PROJECT No.  
12154

FIGURE No.  
11.1



# What has changed?

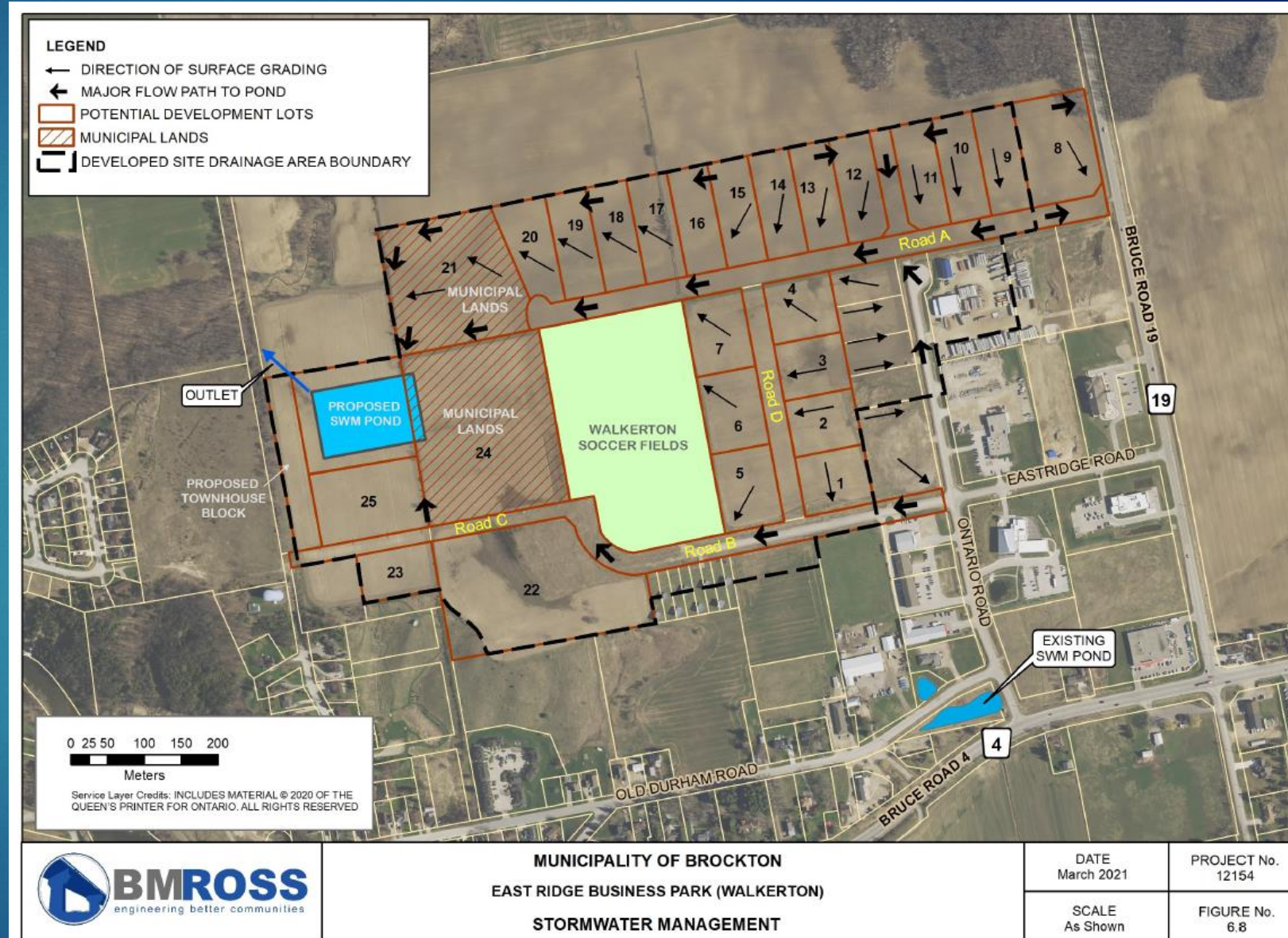
- ▶ Future road allowance for extension of Ontario Road
- ▶ Townhouses proposed along an extension of Cunningham Road
- ▶ Lot 1 sold and servicing from East Ridge Road
- ▶ Lot 22 being considered for residential use
- ▶ Note: lot fabric shown simply based on 2 acre parcels (actual sizes sold will vary)





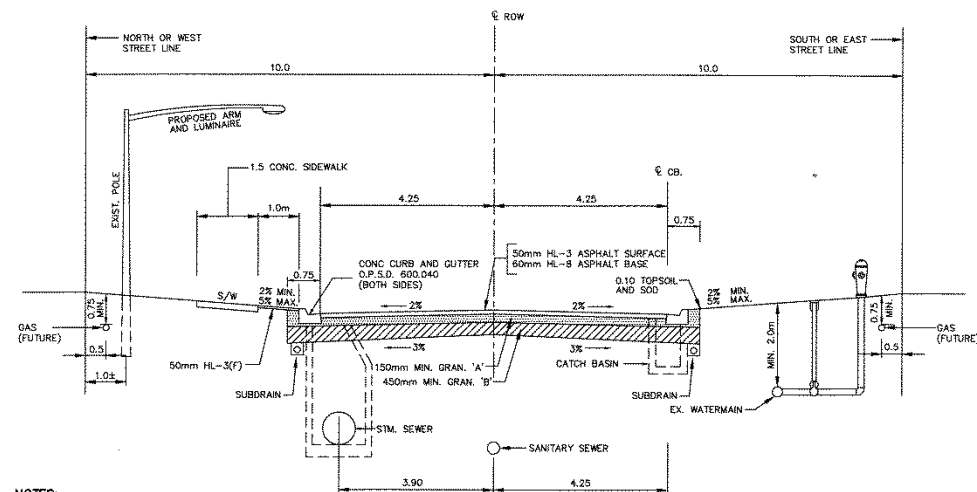
# SWM

- ▶ Lot 8 drains to Bruce Road 19
- ▶ Rest of expansion area to drain to the SWM Block
- ▶ Roads A, B & D ditches
- ▶ Regrading portion of East Ridge Road ditch
- ▶ Road C storm sewer
- ▶ Perimeter ditch along north sides Lots 9 to 21
- ▶ Reduced SWM Block size
- ▶ Evaluating options to keep SWM pond cut within SWM Block or expand to south into Lot 25
- ▶ Evaluating impact on design for servicing townhouses and extension of Cunningham Road



# Roads

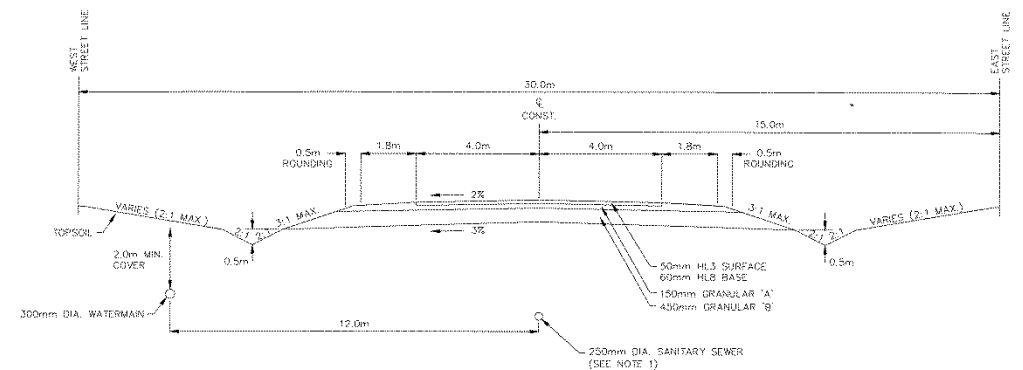
- ▶ Urban road section: Road B & Road C (i.e. curb & gutter, storm sewer and sidewalk from proposed residential subdivision to the soccer park)
- ▶ Rural road section: Road A & Road D (i.e. ditches)



NOTES:

1. ROAD CROSSINGS DEPTHS FOR UTILITIES - HYDRO 1.2 MIN.  
- BELL TELEPHONE, UNION GAS, CABLE TV 1.0 MIN.  
- WATER 2.0 MIN.
2. ALL WATER SERVICE BOXES TO BE SET AT PROPERTY LINE.

TYPICAL SECTION - URBAN INDUSTRIAL  
(EAST RIDGE ROAD, ROAD C)  
N.T.S.



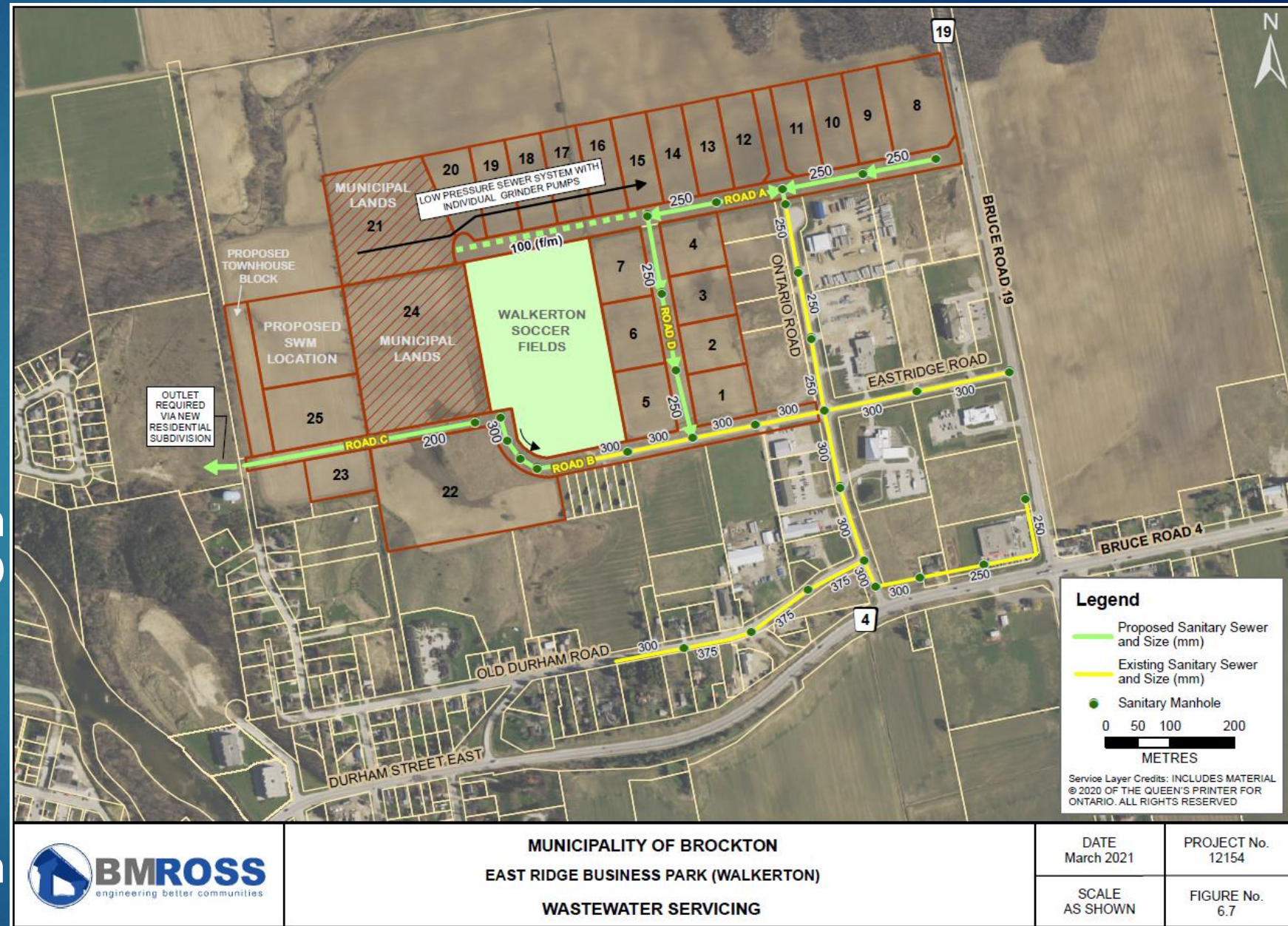
NOTES:  
1. 100mm DIA. LOW PRESSURE SEWER IS REQUIRED ON ROAD A FROM THE WESTERLY END OF ROAD A TO ROAD D. ALL OTHER LOCATIONS TO HAVE 250mm DIA. GRAVITY SANITARY SEWER.

TYPICAL SECTION - RURAL INDUSTRIAL  
(ROAD D)  
N.T.S.



# Sanitary Sewer

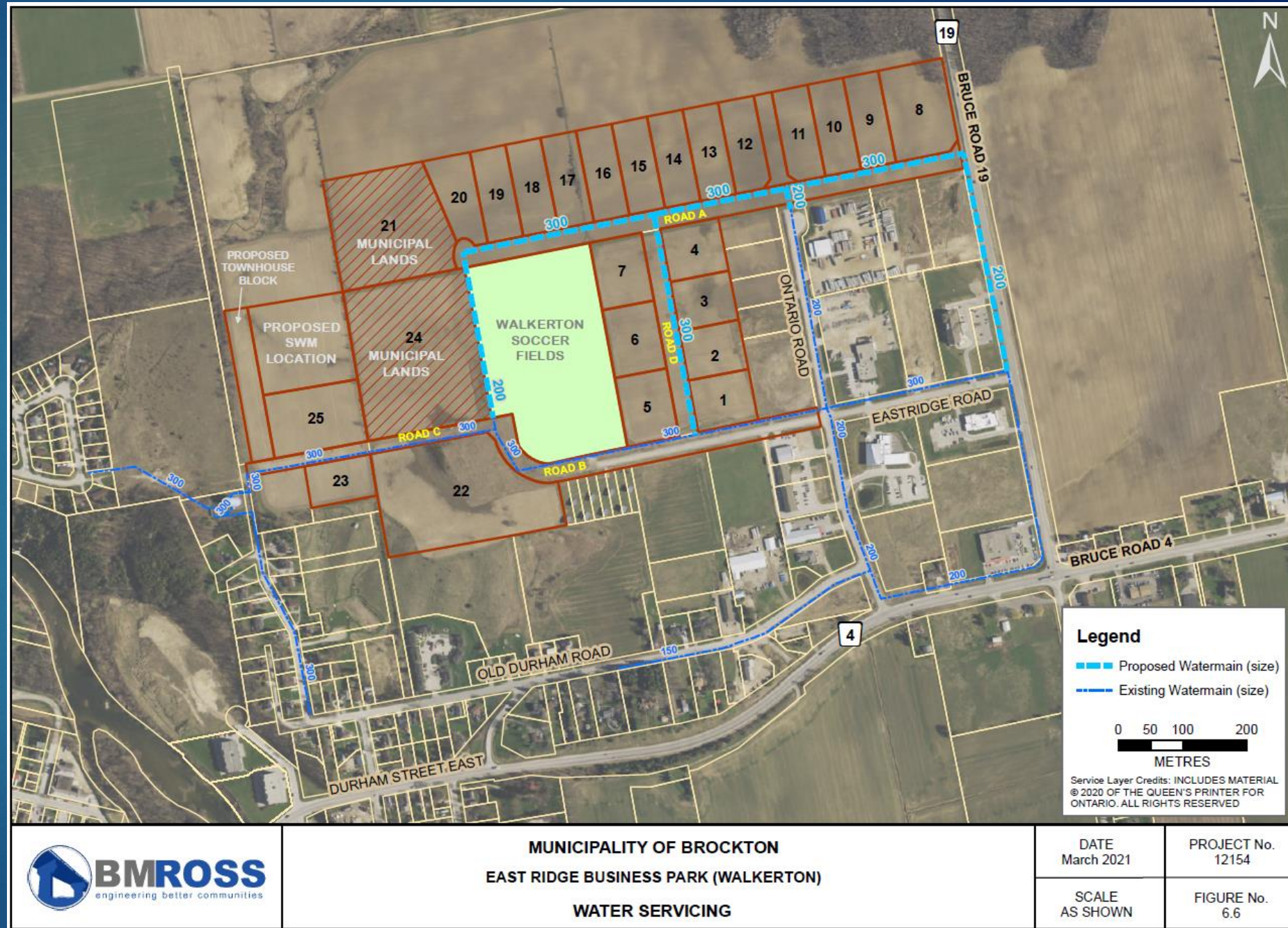
- ▶ New gravity sewer:
  - ▶ Road D
  - ▶ Portion of Road A to Road D
  - ▶ Portion of Road A to Ontario Road
- ▶ Low pressure sewer on Road A west of Road D (grinder pumps)
- ▶ Road B: Extend sewer to the west, if needed.
- ▶ Road C: New sewer (requires outlet through proposed subdivision)





# Watermain

- ▶ New 250 or 300mm dia. on Road A & Road D
- ▶ New 200mm dia. loop connections to both ends of the Road A watermain

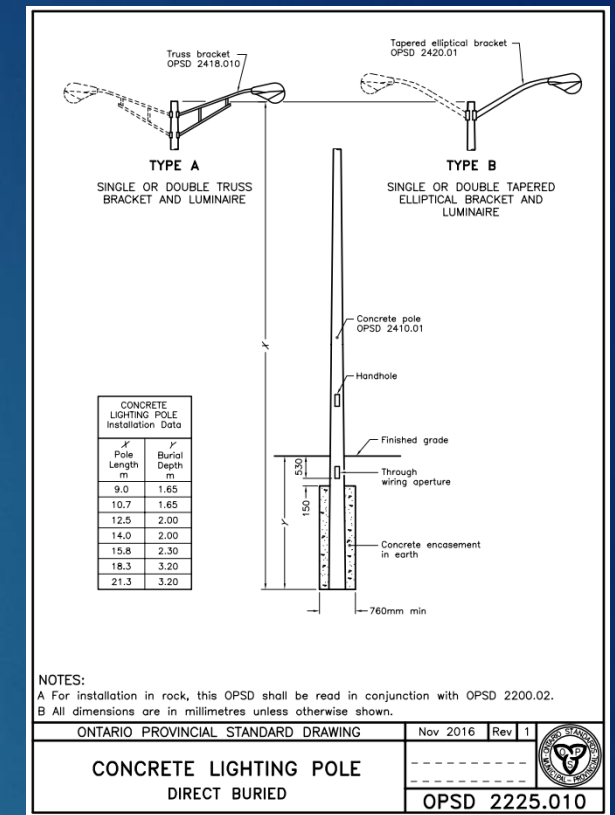


## ► Electrical

- ## ► Street lighting

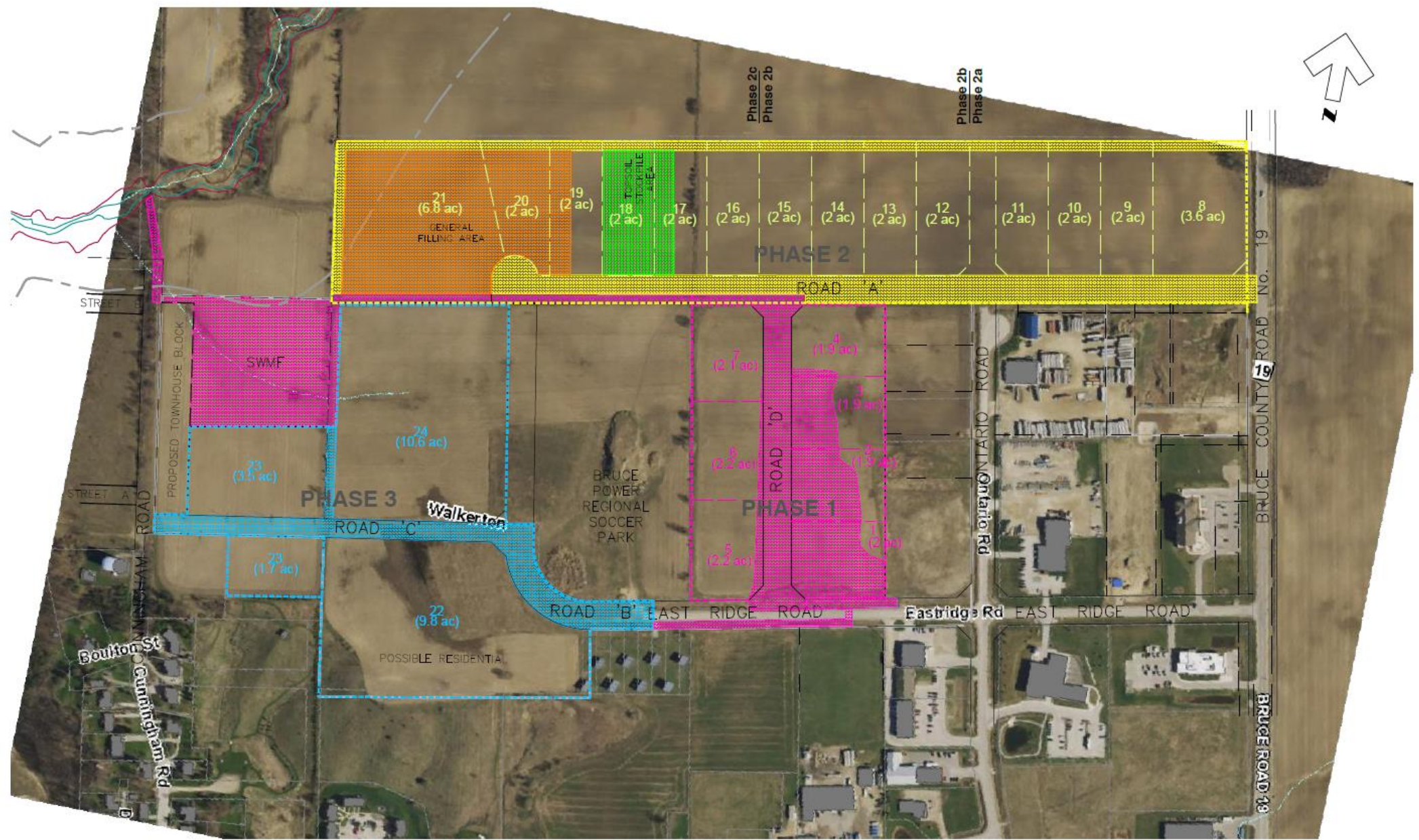
- Natural gas (Enbridge)

- ## ► Communications





# PHASING



## LEGEND:

- PHASE 1
- PHASE 2
- PHASE 3

## Note:

© Includes material (2015 Aerial Photography) of the Queen's Printer for Ontario. All rights reserved.



**BMROSS**  
engineering better communities

**Municipality of Brockton  
(Walkerton)**  
**East Ridge Business Park Expansion**

Construction Phasing  
(Preliminary)

Date  
Mar. 5, 2021

Project No.  
12154

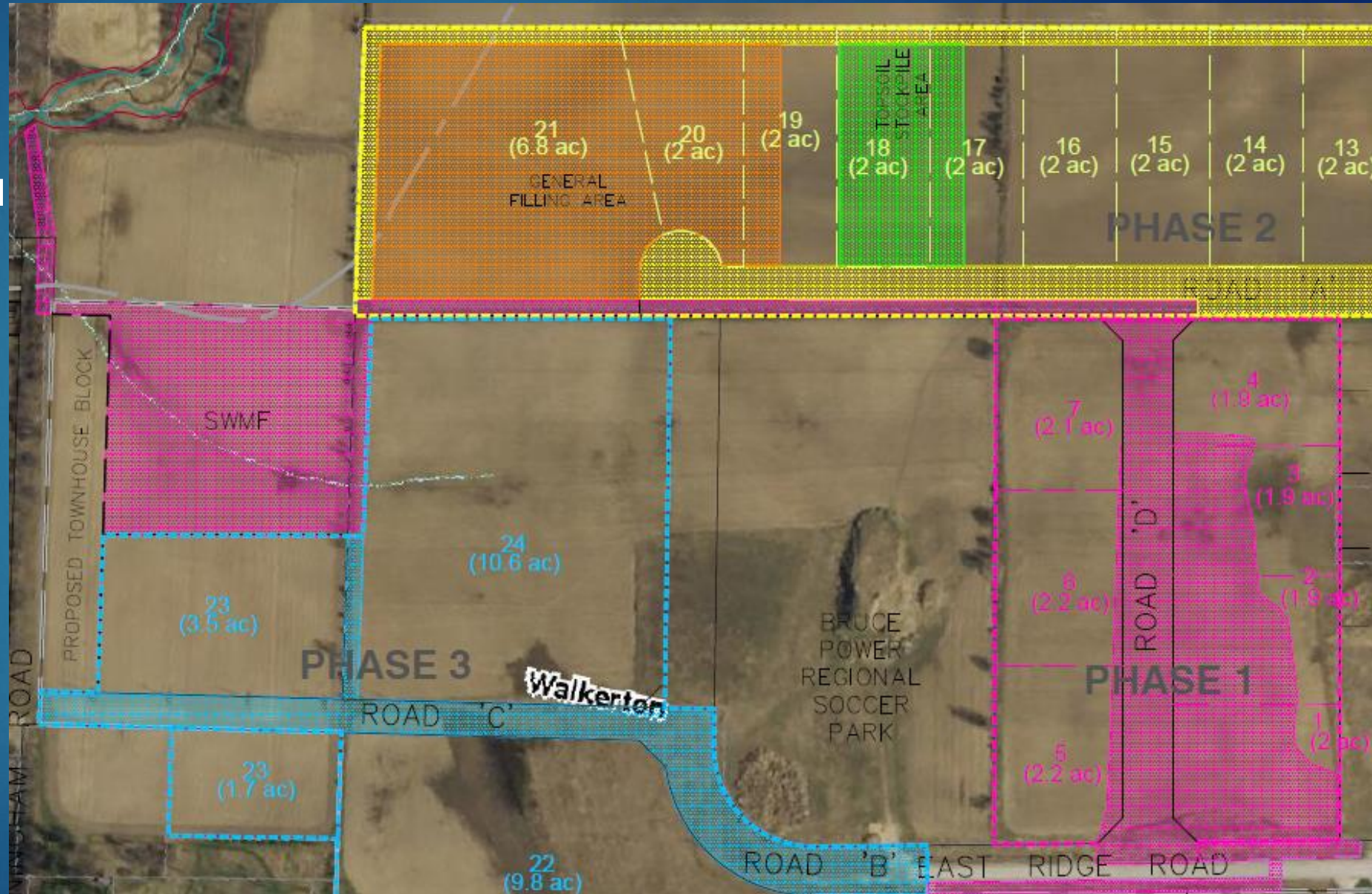
Scale  
1:4000

Figure No.  
1



# Phase 1

- ▶ SWMF including outlet sewer/ditch to tributary
- ▶ Pre-grading work of Road D and adjacent lots, including
  - ▶ Filling of Lots 19-21
  - ▶ Topsoil stockpile
- ▶ Road D, including:
  - ▶ Ditches
  - ▶ Regrading East Ridge Road ditch
  - ▶ Ditch to SWM
  - ▶ Sanitary sewer
  - ▶ Watermain
  - ▶ Utilities, including street lighting
- ▶ 12.2 acres + sold lot





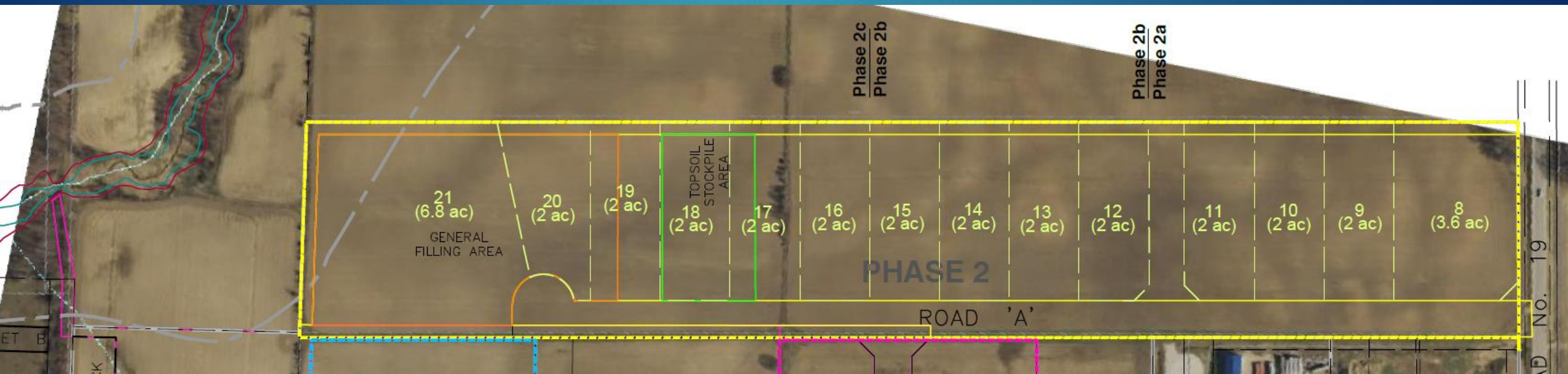
# Phase 2

## ► Could split into 3 sub-phases:

- Phase 2a (east): Ontario Road to Bruce Road 19 (9.6 acres)
- Phase 2b (central): Road D to Ontario Road (8 acres)
- Phase 2c (west): west of Road D (16.8 acres)

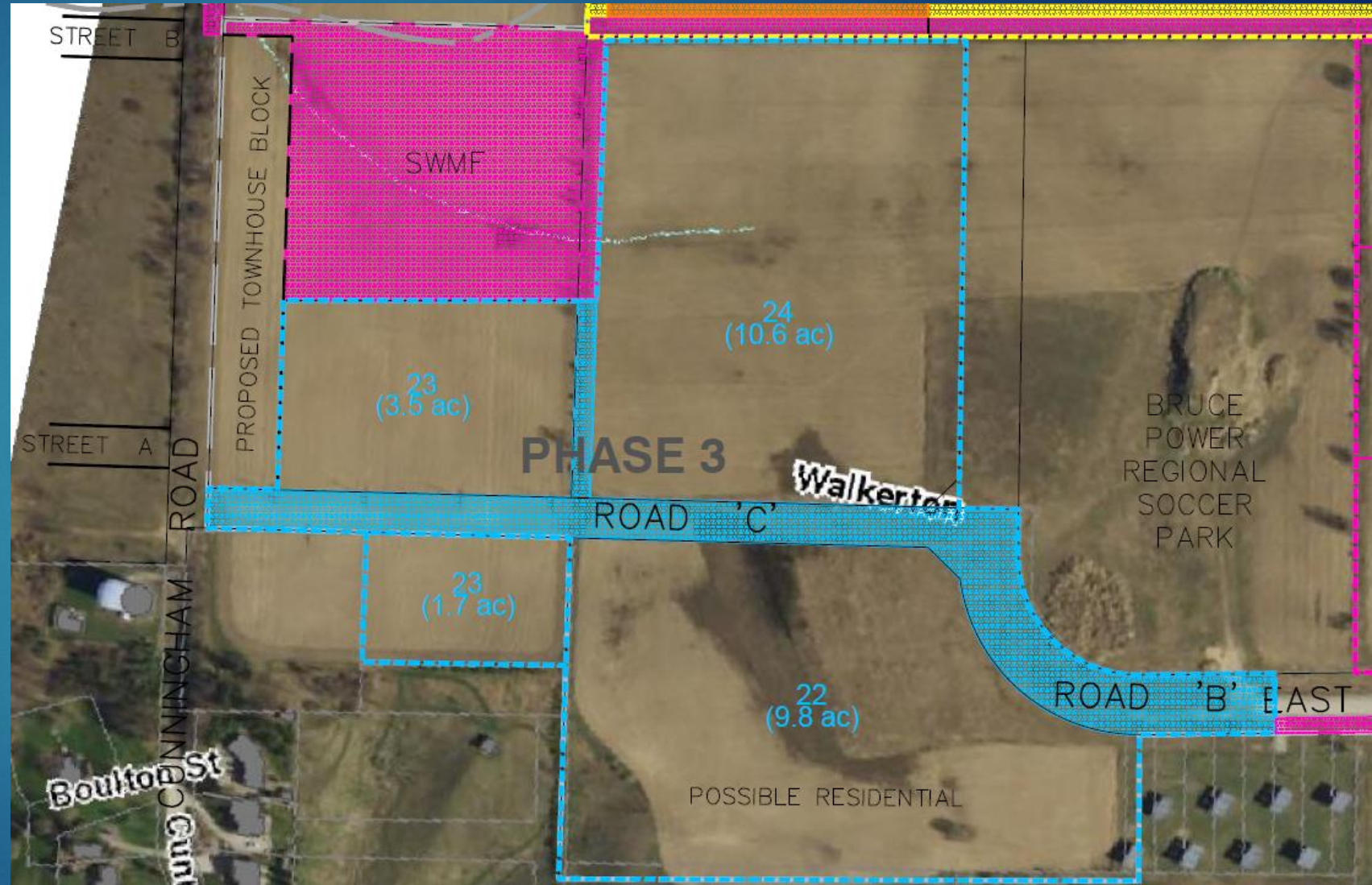
## ► Road A, including:

- Ditches, including north perimeter ditch and outlet to road ditch
- Gravity sanitary sewer east of Road D
- Low pressure sanitary sewer (grinder pumps) west of Road D
- Watermain, including looping
- Utilities, including street lighting



# Phase 3

- ▶ Road B & Road C, including:
  - ▶ Curb & gutter
  - ▶ Sidewalk
  - ▶ Sanitary sewer
  - ▶ Storm sewer
  - ▶ Ditch to SWMF
  - ▶ Utilities (gas; communications)
  - ▶ Street lighting
- ▶ Note: Watermain and overhead hydro already exist
- ▶ Note: Sanitary sewer outlet via. adjacent subdivision required
- ▶ 25.6 acres





# Costs

## Opinion of Probable Cost Summary

Item	Construction	Engineering		Total
		Design	Contract Admin.	
<b>Phase 1</b>				
Road D	\$923,000	\$32,300	\$78,500	\$1,033,800
Pre-grading (3±m lowering of hill)	\$212,000	\$7,500	\$17,900	\$237,400
Stormwater Management	\$547,500	\$19,000	\$46,700	\$613,200
Drainage Ditch (end of Road A to SWMF)	\$30,000	\$1,000	\$2,600	\$33,600
Existing Drainage Ditch regrading (south end Road D westerly past soccer field)	\$10,000	\$400	\$800	\$11,200
<b>Subtotal</b>	<b>\$1,722,500</b>	<b>\$60,200</b>	<b>\$146,500</b>	<b>\$1,929,200</b>
<b>Phase 2a</b>				
Road A	\$795,000	\$28,000	\$67,000	\$890,000
Drainage Ditch	\$65,000	\$2,000	\$6,000	\$73,000
East Watermain Loop (Optional)	\$155,000	\$5,000	\$14,000	\$174,000
<b>Subtotal</b>	<b>\$1,015,000</b>	<b>\$35,000</b>	<b>\$87,000</b>	<b>\$1,137,000</b>
<b>Phase 2b</b>				
Road A	\$560,000	\$20,000	\$47,000	\$627,000
Drainage Ditch	\$52,500	\$2,000	\$4,000	\$58,500
<b>Subtotal</b>	<b>\$612,500</b>	<b>\$22,000</b>	<b>\$51,000</b>	<b>\$685,500</b>
<b>Phase 2c</b>				
Road A	\$647,000	\$23,000	\$55,000	\$725,000
West Watermain Loop (Optional)	\$99,000	\$3,000	\$9,000	\$111,000
<b>Subtotal</b>	<b>\$746,000</b>	<b>\$26,000</b>	<b>\$64,000</b>	<b>\$836,000</b>
<b>Phase 3</b>				
Road B/C – East Ridge Road	\$1,455,000	\$50,900	\$123,700	\$1,629,600
Drainage Ditch (sewer outlet to SWMF)	\$8,000	\$300	\$700	\$9,000
Cunningham Road sanitary sewer (if required)	\$135,000	\$4,700	\$10,300	\$150,000
<b>Subtotal</b>	<b>\$1,598,000</b>	<b>\$55,900</b>	<b>\$134,700</b>	<b>\$1,788,600</b>
<b>Total</b>	<b>\$5,694,000</b>	<b>\$199,100</b>	<b>\$483,200</b>	<b>\$6,376,300</b>

### Notes:

1. Pricing is based on 2020 tender prices or estimates of unit prices
2. Excess Soils Regulation should not impact cost for soil management so long as all soils managed within the business park expansion area.
3. Excludes services on South side of Roads B & C.
4. Excludes sanitary sewer outlet that is required downstream of Road C through a proposed residential subdivision.
5. Excludes vegetative buffer around SWM facility.
6. Excludes recreational trail through the SWM block.
7. Assumed seed and cover restoration of disturbed areas.
8. Excludes utilities (hydro, gas, communications) and street lighting
9. Excludes HST
10. Excludes approvals fees (e.g. SVCA; MECP)
11. Phase 2 pre-grading includes placing excavated soil on Phase 3 lot areas. Restoration of disturbed areas excluded from the above.
12. Assumes limited size of services; some industries may require larger services (e.g. for fire suppression).
13. Using a 10% contingency allowance and 12% engineering
14. Excludes lot entrances and driveway culverts



# Next Steps & Anticipated Schedule

- ▶ Finalize detailed design (Goal: end of March/early-April)
  - ▶ General lot grading
  - ▶ Stormwater management
  - ▶ Municipal servicing (sanitary, water, road)
- ▶ Submission to SVCA for Permit (Goal: end of March)
- ▶ Utilities design (by others; Goal: end of April)
- ▶ Submission to MECP for ECA (SWMF; sewers) (Goal: end of April)
- ▶ Tendering (Goal: end of April/May)
- ▶ Construction (Late summer/Fall 2021)