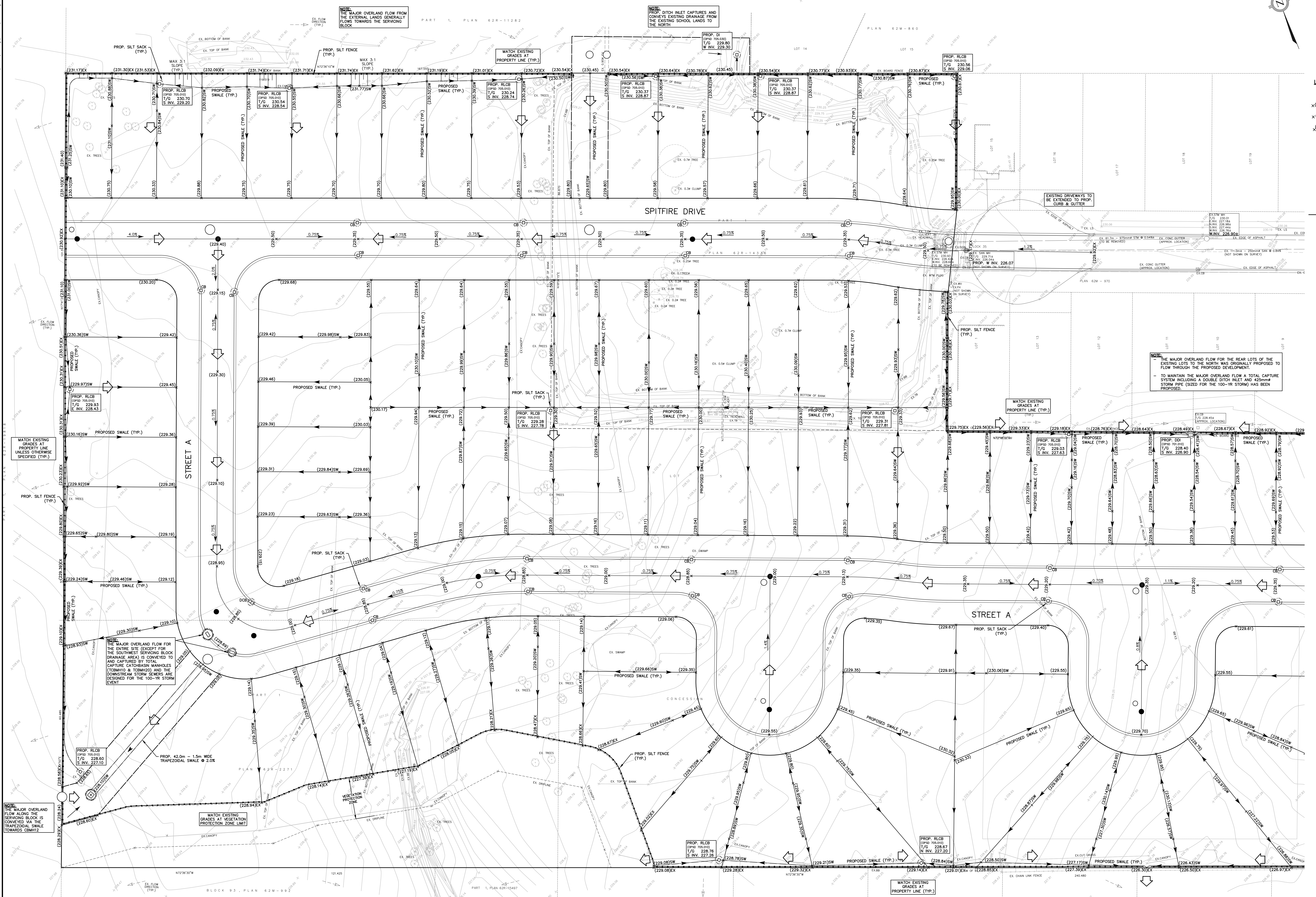


KEY MAP
 N.T.S.

- LEGEND:**
- EXISTING GROUND ELEVATION
 - PROPOSED GROUND ELEVATION
 - PROPOSED SWALE ELEVATION
 - PROPOSED ELEVATION TO MATCH EXISTING
 - PROPOSED DIRECTION OF SHEET FLOW
 - EXISTING CATCHBASIN
 - EXISTING STORM/SANITARY MANHOLE
 - PROPOSED CATCHBASIN/REAR LOT CATCHBASIN
 - PROPOSED STORM/SANITARY MANHOLE
 - PROPOSED CATCHBASIN MANHOLE
 - PROPOSED EMERGENCY OVERLAND FLOW ROUTE
 - PROPOSED SILTATION CONTROL FENCE
 - PROPOSED CATCHBASIN SILT SACK



NOTE: THE MAJOR OVERLAND FLOW FROM THE EXTERNAL LANDS GENERALLY FLOWS TOWARDS THE SERVICING BLOCK.

NOTE: DITCH INLET CAPTURES AND CONVEYS EXISTING DRAINAGE FROM THE EXISTING SCHOOL LANDS TO THE SOUTH.

NOTE: THE MAJOR OVERLAND FLOW FOR THE REAR LOTS OF THE EXISTING LOTS TO THE NORTH WAS ORIGINALLY PROPOSED TO FLOW THROUGH THE PROPOSED DEVELOPMENT.
 - TO MAINTAIN THE MAJOR OVERLAND FLOW A TOTAL CAPTURE SYSTEM INCLUDING A DOUBLE DITCH INLET AND 425mm# STORM PIPE (SIZED FOR THE 100-YR STORM) HAS BEEN PROPOSED.

NOTE: THE MAJOR OVERLAND FLOW FOR THE ENTIRE SITE (EXCEPT FOR THE SOUTHWEST SERVICING BLOCK DRAINAGE AREA) IS CONVEYED TO AND CAPTURED BY TOTAL CAPTURE CATCHBASIN MANHOLES (TOSMAN10 & TOSMAN20) AND THE DOWNSTREAM STORM SEWERS ARE DESIGNED FOR THE 100-YR STORM EVENT.

NOTE: THE MAJOR OVERLAND FLOW ALONG THE SERVICING BLOCK IS CONVEYED VIA THE TRAPEZOIDAL SWALE TOWARDS CSMT2.

BENCH MARK NOTE:
 MONUMENT 001975/010
 MOUNT HOPE SCHOOL, ALONG AIRPORT ROAD,
 0.6km WEST OF INTERSECTION WITH HIGHWAY No. 6,
 TABLE IN EAST CONCRETE FOUNDATION, 97cm
 NORTH OF CONCRETE STEPS FOR SIDE DOOR, 36cm
 BELOW BRICKWORK
 ELEVATION: 233.03m CGVD-1928

NO.	DATE	BY	REVISIONS
DESIGN	BB	CHK'D	SF
DRAWN	BB	CHK'D	SF

Nov. 1, 17

APPROVALS	
NAME	STAMP

S. LEMLEWY & ASSOCIATES LIMITED
 CONSULTING ENGINEERS
 Tel: (905) 631-6978
 Fax: (905) 631-8927
 Email: info@sl.ca
 3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

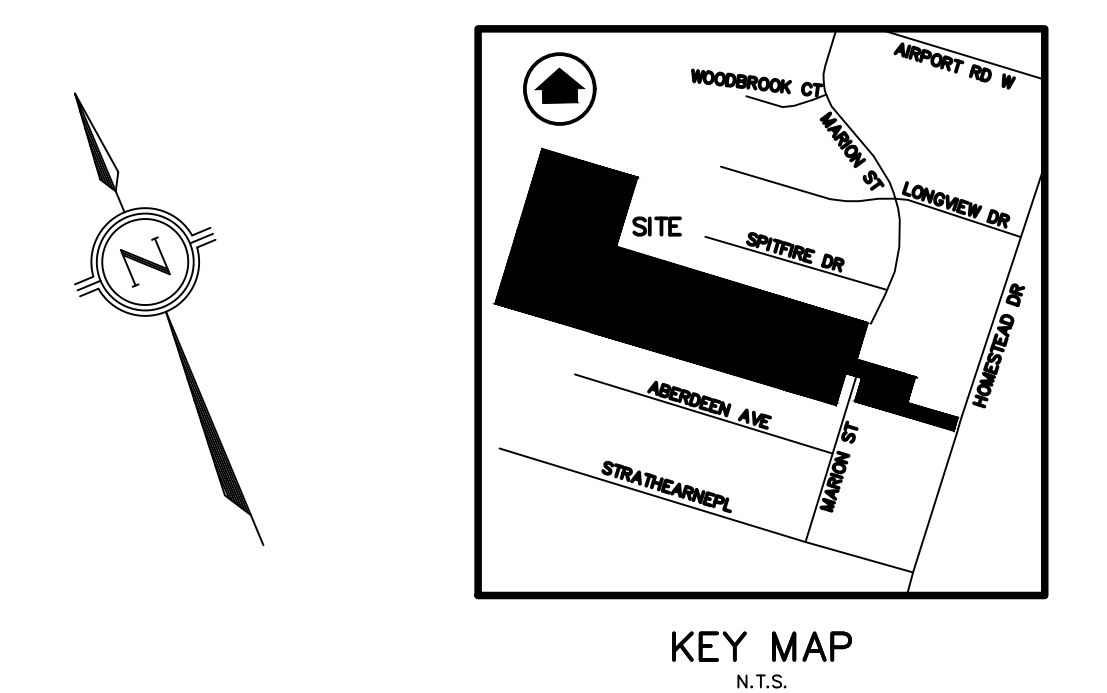
CLIENT: BRANTHAVEN MOUNT HOPE INC.
 720 OVAL COURT
 BURLINGTON, ONTARIO

PROJECT NAME: MOUNT HOPE DEVELOPMENT
 80 MARION ST & 3306 HOMESTEAD DR
 HAMILTON, ONTARIO

TITLE: PRELIMINARY GRADING & EROSION CONTROL PLAN
 1 OF 2

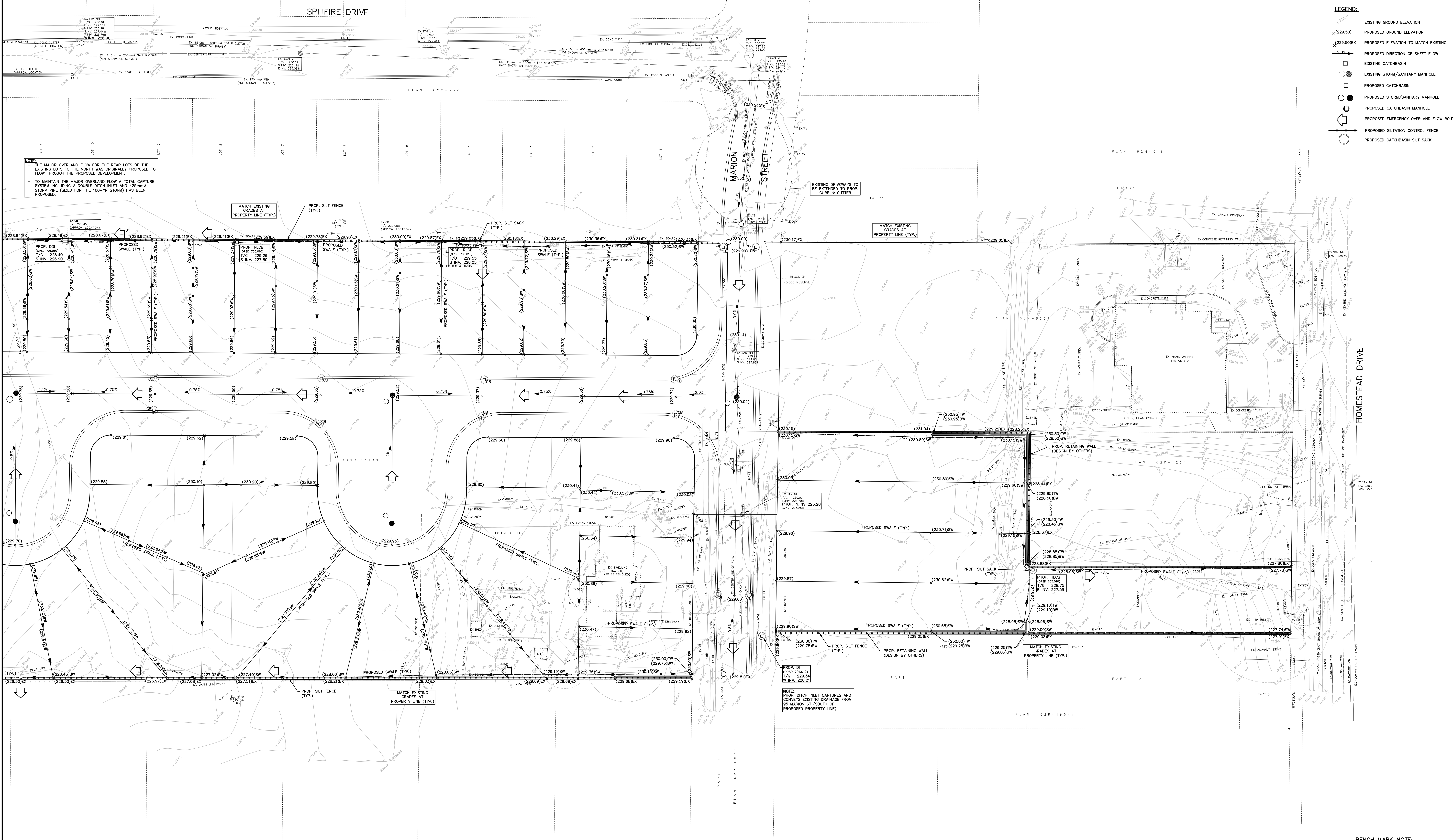
PROJECT No.: 16108
DRAWING No.: C101

SCALE: 1:300



KEY MAP
 N.T.S.

- LEGEND:**
- EXISTING GROUND ELEVATION
 - (229.50) PROPOSED GROUND ELEVATION
 - (229.50)EX PROPOSED ELEVATION TO MATCH EXISTING
 - PROPOSED DIRECTION OF SHEET FLOW
 - EXISTING CATCHBASIN
 - EXISTING STORM/SANITARY MANHOLE
 - PROPOSED CATCHBASIN
 - PROPOSED STORM/SANITARY MANHOLE
 - PROPOSED CATCHBASIN MANHOLE
 - PROPOSED EMERGENCY OVERLAND FLOW ROUTE
 - PROPOSED SILTATION CONTROL FENCE
 - PROPOSED CATCHBASIN SILT SACK



NOTE:
 1. THE MAJOR OVERLAND FLOW FOR THE REAR LOTS OF THE EXISTING LOTS TO THE NORTH WAS ORIGINALLY PROPOSED TO FLOW THROUGH THE PROPOSED DEVELOPMENT.
 2. TO MAINTAIN THE MAJOR OVERLAND FLOW & TOTAL CAPTURE SYSTEM INCLUDING A DOUBLE DITCH INLET AND 425mm² STORM PIPE (SIZED FOR THE 100-YR STORM) HAS BEEN PROPOSED.

NOTE:
 PROP. DITCH INLET CAPTURES AND CONVEYS EXISTING DRAINAGE FROM 85 MARION ST (SOUTH OF PROPOSED PROPERTY LINE).

BENCH MARK NOTE:
 MONUMENT 001975/160
 MOUNT HOPE SCHOOL, ALONG AIRPORT ROAD,
 0.6km WEST OF INTERSECTION WITH HIGHWAY No. 6,
 TABLET IN EAST CONCRETE FOUNDATION, 57cm
 NORTH OF CONCRETE STEPS FOR SIDE DOOR, 36cm
 BELOW BRICKWORK
 ELEVATION: 233.03m CGVD-1928

NO.	DATE	BY	REVISIONS
DESIGN	BB	CHK'D	SF
DRAWN	BB	CHK'D	SF

Nov. 1, 17

APPROVALS	
NAME	STAMP

S. LEMELLYN & ASSOCIATES LIMITED
 CONSULTING ENGINEERS
 Tel: (905) 631-6978
 Fax: (905) 631-8927
 email: info@lema.on.ca
 3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

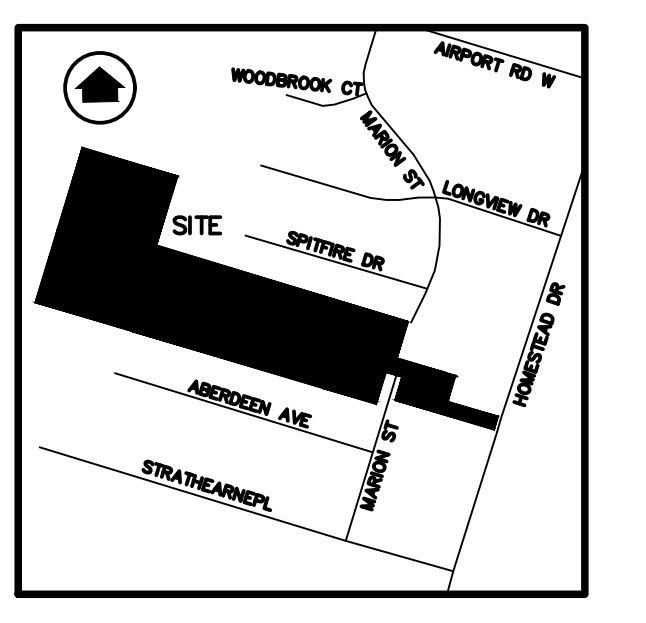
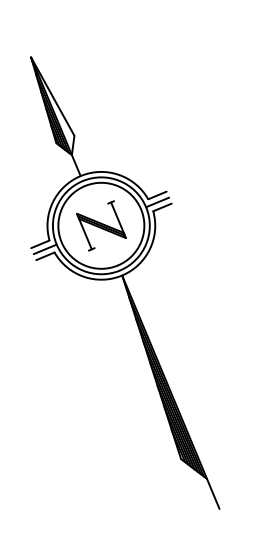
CLIENT:
 BRANTHAVEN MOUNT HOPE INC.
 720 OVAL COURT
 BURLINGTON, ONTARIO

PROJECT NAME:
 MOUNT HOPE DEVELOPMENT
 80 MARION ST & 3306 HOMESTEAD DR
 HAMILTON, ONTARIO

TITLE:
 PRELIMINARY GRADING &
 EROSION CONTROL PLAN
 2 OF 2

PROJECT No.: 16108
DRAWING No.: C102

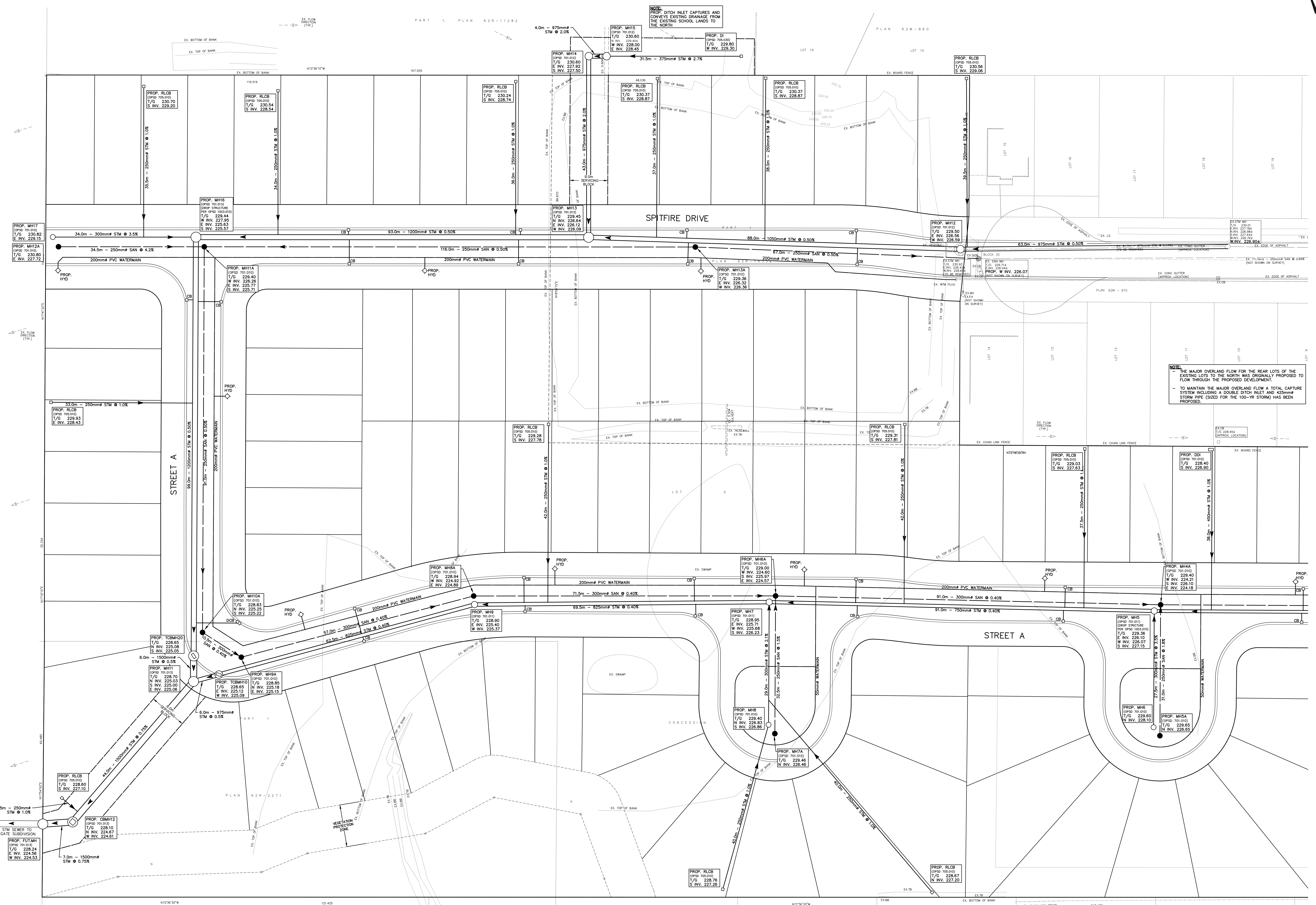
SCALE: 1:300



KEY MAP
N.T.S.

LEGEND:

- EXISTING CATCHBASIN
- EXISTING STORM/SANITARY MANHOLE
- PROPOSED CATCHBASIN/REAR LOT CATCHBASIN
- PROPOSED STORM/SANITARY MANHOLE
- PROPOSED CATCHBASIN MANHOLE
- PROP. HYD ○ PROPOSED HYDRANT



NOTE:
 THE MAJOR OVERLAND FLOW FOR THE REAR LOTS OF THE EXISTING LOTS TO THE NORTH WAS ORIGINALLY PROPOSED TO FLOW THROUGH THE PROPOSED DEVELOPMENT.
 - TO MAINTAIN THE MAJOR OVERLAND FLOW A TOTAL CAPTURE SYSTEM INCLUDING A DOUBLE DITCH INLET AND 425mm STORM PIPE (SIZED FOR THE 100-YR STORM) HAS BEEN PROPOSED.

BENCH MARK NOTE:
 MONUMENT 001975010
 MOUNT HOPE SCHOOL, ALONG AIRPORT ROAD,
 0.6km WEST OF INTERSECTION WITH HIGHWAY No. 6,
 TABLET IN EAST CONCRETE FOUNDATION, 57cm
 NORTH OF CONCRETE STEPS FOR SIDE DOOR, 36cm
 BELOW BRICKWORK
 ELEVATION: 233.03m CGVD-1928

NO.	DATE	BY	REVISIONS
DESIGN	BB	CHK'D	SF DATE
DRAWN	BB	CHK'D	SF DATE

Nov. 1, 17

APPROVALS	
NAME	STAMP

S. LEMELLYN & ASSOCIATES LIMITED
 CONSULTING ENGINEERS

3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8
 Tel: (905) 631-8979
 Fax: (905) 631-8927
 Email: info@slae.ca

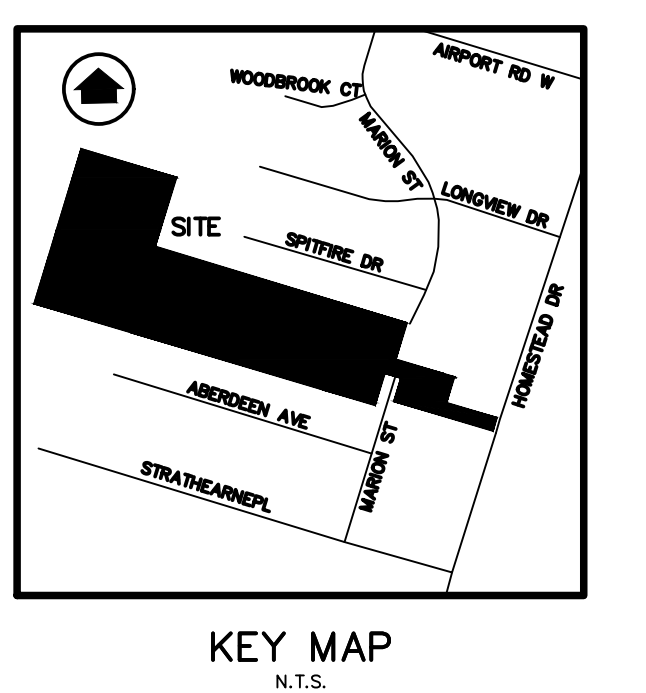
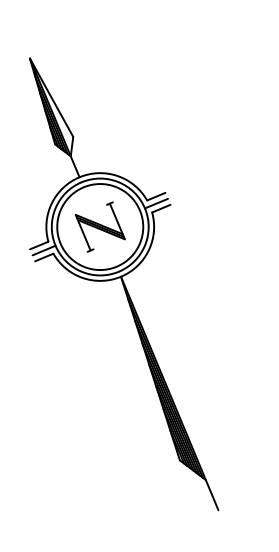
CLIENT: **BRANTHAVEN MOUNT HOPE INC.**
 720 OVAL COURT
 BURLINGTON, ONTARIO

PROJECT NAME: **MOUNT HOPE DEVELOPMENT**
 80 MARION ST & 3306 HOMESTEAD DR
 HAMILTON, ONTARIO

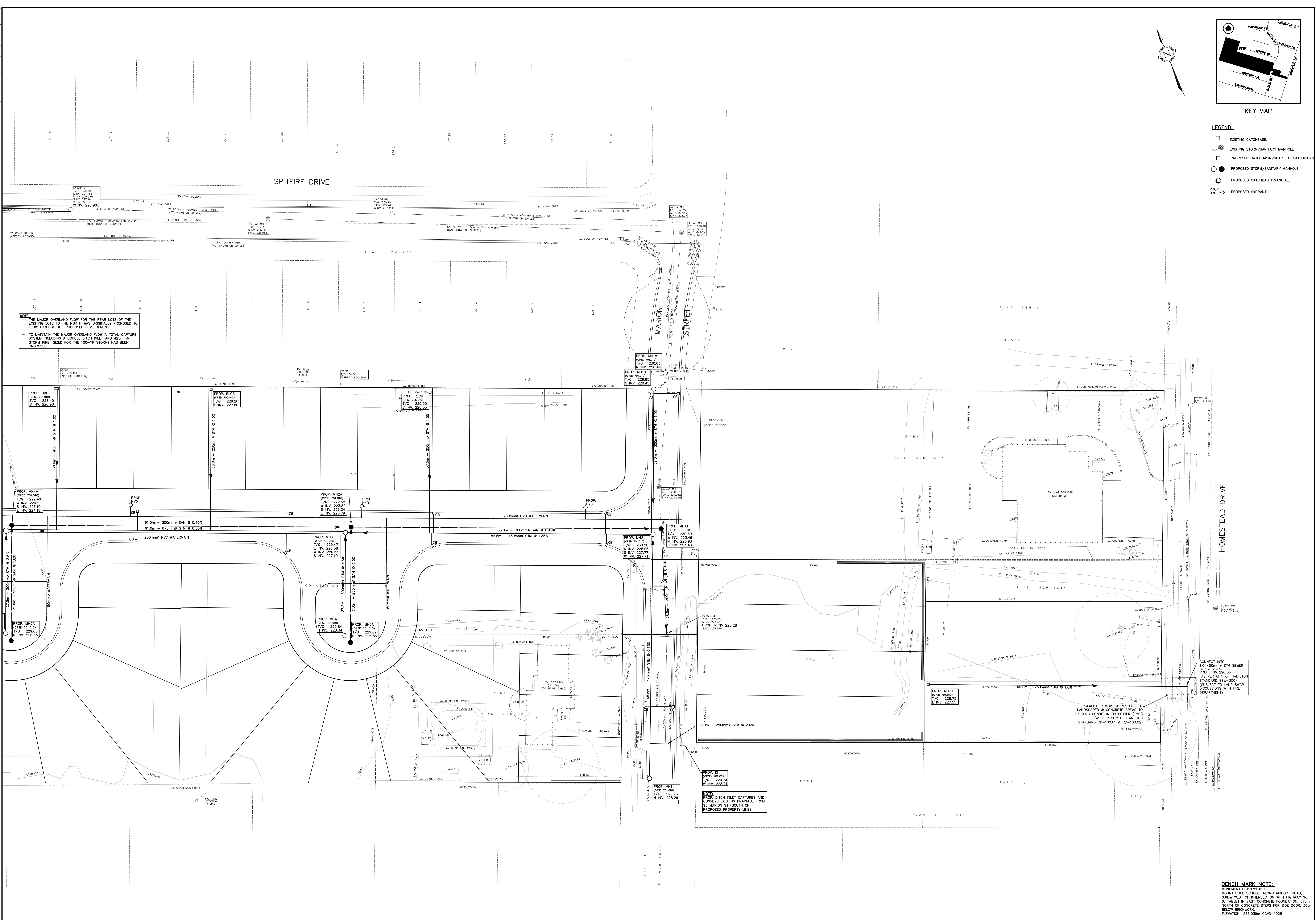
TITLE: **PRELIMINARY SITE SERVING PLAN**
 1 OF 2

PROJECT No.: 17065
 DRAWING No.: C103

SCALE: 1:500



- LEGEND:**
- EXISTING CATCHBASIN
 - EXISTING STORM/SANITARY MANHOLE
 - PROPOSED CATCHBASIN/REAR LOT CATCHBASIN
 - PROPOSED STORM/SANITARY MANHOLE
 - PROPOSED CATCHBASIN MANHOLE
 - PROP. HYD
 - PROPOSED HYDRANT



NOTE:
THE MAJOR OVERLAND FLOW FOR THE REAR LOTS OF THE EXISTING LOTS TO THE NORTH WAS ORIGINALLY PROPOSED TO FLOW THROUGH THE PROPOSED DEVELOPMENT.
- TO MAINTAIN THE MAJOR OVERLAND FLOW A TOTAL CAPTURE SYSTEM INCLUDING A DOUBLE DITCH INLET AND 425mm^Ø STORM PIPE (SIZED FOR THE 100-YR STORM) HAS BEEN PROPOSED.

NOTE:
PROP. DITCH INLET CAPTURES AND CONVEYS EXISTING DRAINAGE FROM 85 MARION ST (SOUTH OF PROPOSED PROPERTY LINE)

NOTE:
SAWOY, REMOVE & RESTORE EX. LANDSCAPED & CONCRETE AREAS TO EXISTING CONDITION OR BETTER (TYP.) (AS PER CITY OF HAMILTON STANDARD RS-100.01 & RS-100.02)

CONNECT INTO EX. 450mm^Ø STM SEWER
PROP. INV. 228.86
(AS PER CITY OF HAMILTON STANDARD SEW-300)
SUBJECT TO LAND SWAP DISCUSSIONS WITH FIRE DEPARTMENT

BENCH MARK NOTE:
MONUMENT 001975U160
MOUNT HOPE SCHOOL, ALONG AIRPORT ROAD,
0.6km WEST OF INTERSECTION WITH HIGHWAY No. 6,
TABLET IN EAST CONCRETE FOUNDATION, 57cm
NORTH OF CONCRETE STEPS FOR SOLE DOOR, 3cm
BELOW BRICKWORK.
ELEVATION: 233.03m CGVD-1928

NO. DATE BY REVISIONS				
DESIGN	BB	CHK'D	SF	DATE
DRAWN	BB	CHK'D	SF	Nov. 1, 17

APPROVALS

STAMP

S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS
Tel: (905) 631-6978
Fax: (905) 631-8927
email: info@slaw.ca
3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

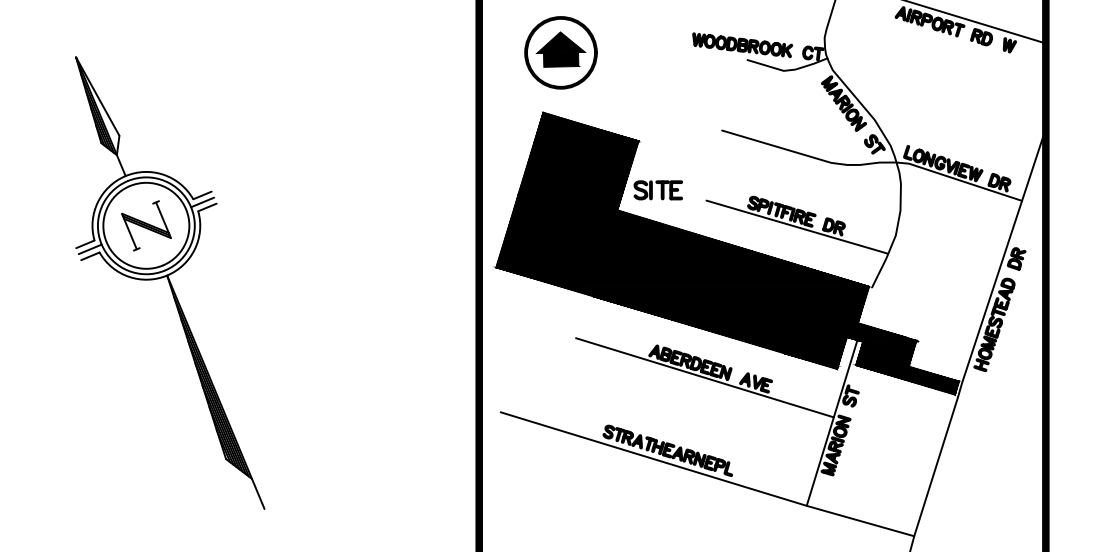
CLIENT: BRANTHAVEN MOUNT HOPE INC.
720 OVAL COURT
BURLINGTON, ONTARIO

PROJECT NAME: MOUNT HOPE DEVELOPMENT
80 MARION ST & 3306 HOMESTEAD DR
HAMILTON, ONTARIO

TITLE: PRELIMINARY SITE SERVICING PLAN
2 OF 2

PROJECT No.: 16108
DRAWING No.: C104

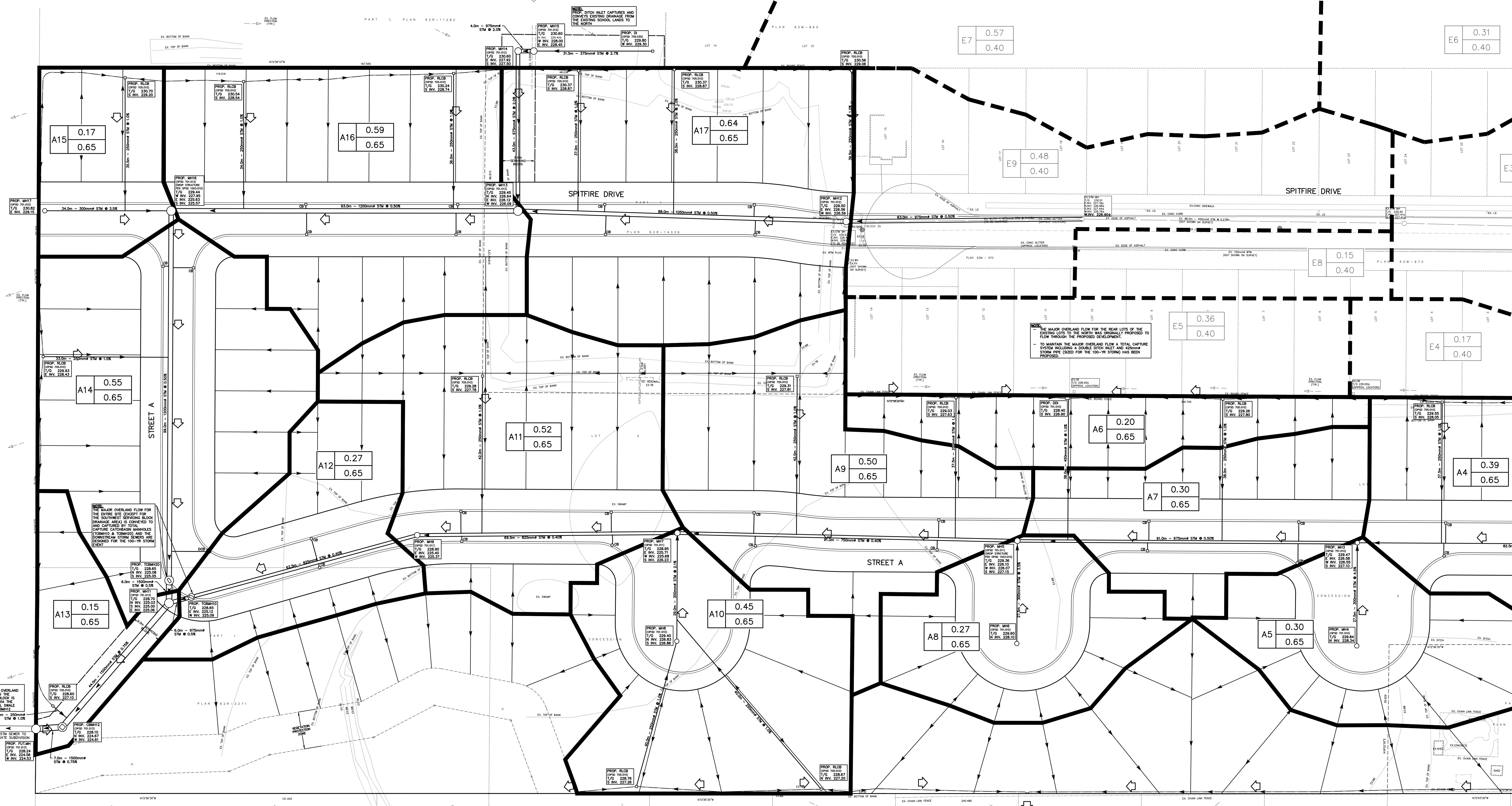
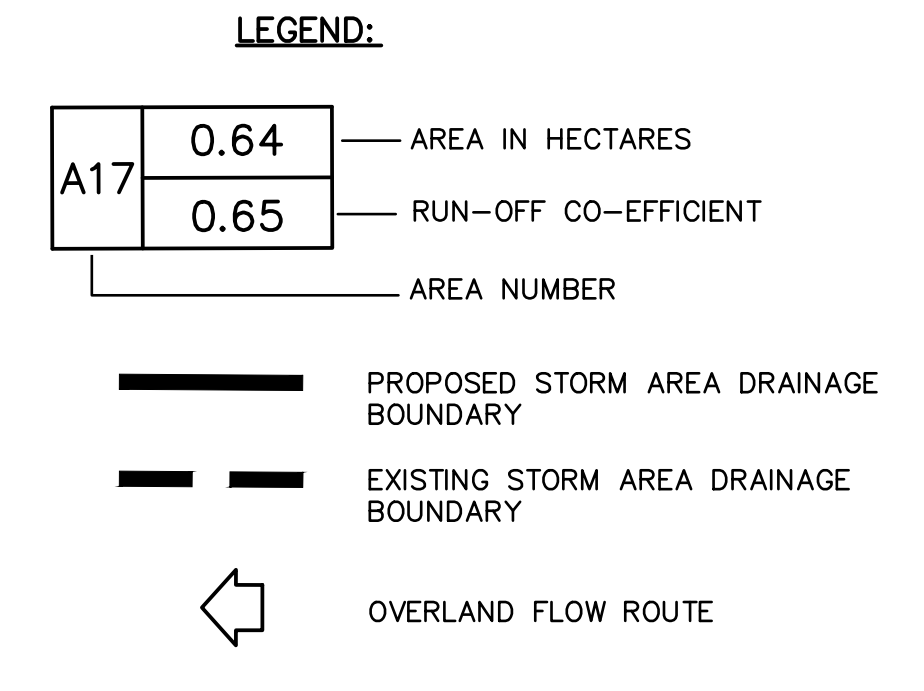
SCALE: 1:300



MOUNT HOPE SCHOOL/NORTH LANDS DRAINAGE TO EXISTING CULVERT	
EX4	1.72
EX3	0.70
EX2	0.97
EX1	10.58
	0.24

MOUNT HOPE SCHOOL DRAINAGE TO PROPOSED DITCH INLET	
EX4	2.30
	0.38

MOUNTMELE PHASE 1/NORTH LANDS DRAINAGE TO EXISTING STORM SEWER SYSTEM ON SPITFIRE DRIVE	
EX2,5A,EXT	14.00
	0.38

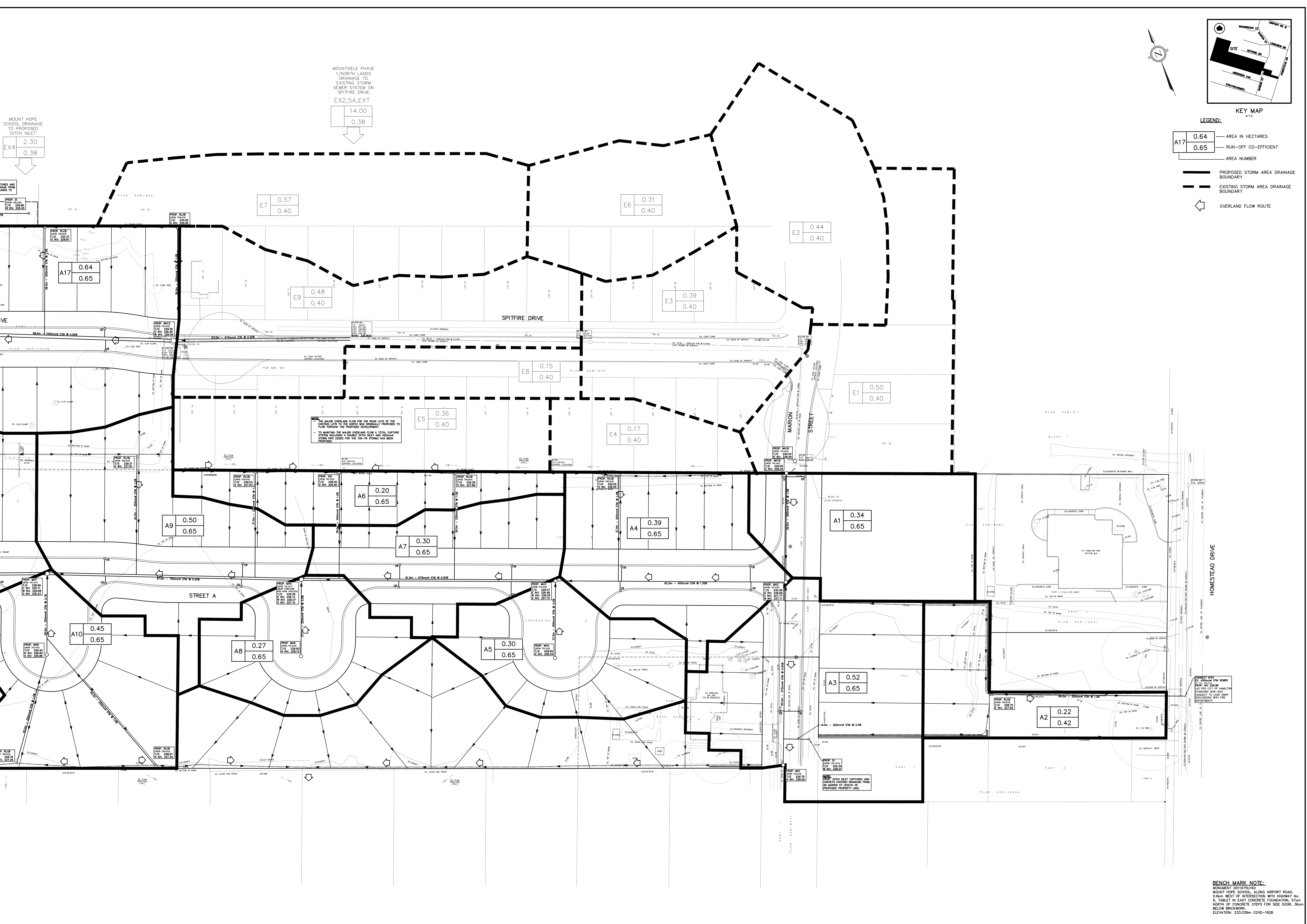


THE MAJOR OVERLAND FLOW FOR THE REAR LOTS OF THE EXISTING LOTS TO THE NORTH AND WEST IS PROPOSED TO FLOW THROUGH THE PROPOSED DEVELOPMENT.
 TO MAINTAIN THE MAJOR OVERLAND FLOW A DITCH CAPTURE SYSTEM INCLUDING A DOUBLE END RILEY AND FLOW CONTROL BOX (EXIST FOR THE 100-YR STORM) HAS BEEN PROVIDED.

THE MAJOR OVERLAND FLOW FOR THE REAR LOTS OF THE EXISTING LOTS TO THE NORTH AND WEST IS PROPOSED TO FLOW THROUGH THE PROPOSED DEVELOPMENT.
 TO MAINTAIN THE MAJOR OVERLAND FLOW A DITCH CAPTURE SYSTEM INCLUDING A DOUBLE END RILEY AND FLOW CONTROL BOX (EXIST FOR THE 100-YR STORM) HAS BEEN PROVIDED.

BENCH MARK NOTE:
 MONUMENT 0019775100
 MOUNT HOPE SCHOOL ALONG AIRPORT ROAD,
 0.6km WEST OF INTERSECTION WITH HIGHWAY No. 8,
 TABLE IN EAST CONCRETE FOUNDATION, 57cm
 NORTH OF CONCRETE STEPS FOR SIDE DOOR, 36cm
 BELOW BRICKWORK
 ELEVATION: 233.03m CGVD-1928

<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>REVISIONS</th> </tr> <tr> <td>DESIGN</td> <td>BB</td> <td>CHK'D</td> <td>SF</td> </tr> <tr> <td>DRAWN</td> <td>BB</td> <td>CHK'D</td> <td>SF</td> </tr> </table>				NO.	DATE	BY	REVISIONS	DESIGN	BB	CHK'D	SF	DRAWN	BB	CHK'D	SF	<table border="1"> <tr> <th>DATE</th> <th>BY</th> </tr> <tr> <td>Oct. 25, 17</td> <td>SF</td> </tr> </table>		DATE	BY	Oct. 25, 17	SF	<p>APPROVALS</p> <p>_____ STAMP</p>		<p>S. LEMMELYN & ASSOCIATES LIMITED CONSULTING ENGINEERS Tel: (905) 631-8979 Fax: (905) 631-8927 Email: info@slac.on.ca 3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8</p>		<p>CLIENT: BRANTHAVEN DEVELOPMENT CORP. 720 OVAL COURT BURLINGTON, ONTARIO</p> <p>PROJECT NAME: MOUNT HOPE DEVELOPMENT 80 MARION ST & 3306 HOMESTEAD DR HAMILTON, ONTARIO</p>		<p>TITLE: STORM DRAINAGE AREA PLAN 1 OF 2</p> <p>PROJECT No.: 17065 DRAWING No.: DAP-1</p> <p>SCALE: 1:400</p>	
NO.	DATE	BY	REVISIONS																										
DESIGN	BB	CHK'D	SF																										
DRAWN	BB	CHK'D	SF																										
DATE	BY																												
Oct. 25, 17	SF																												



MOUNT HOPE SCHOOL DRAINAGE TO PROPOSED DITCH INLET

EX4	2.30
	0.38

MOUNTVILLE PHASE 1/NORTH LANDS DRAINAGE TO EXISTING STORM SEWER SYSTEM ON SPITFIRE DRIVE EX2,5A,EXT

	14.00
	0.38

PROPOSED STORM DRAINAGE TO EXISTING STORM SEWER SYSTEM

PROP. BASIN	17/8	228.41	1/8	228.56
	17/8	228.41	1/8	228.56

PROPOSED STORM DRAINAGE TO EXISTING STORM SEWER SYSTEM

PROP. BASIN	17/8	228.41	1/8	228.56
	17/8	228.41	1/8	228.56

PROPOSED STORM DRAINAGE TO EXISTING STORM SEWER SYSTEM

PROP. BASIN	17/8	228.41	1/8	228.56
	17/8	228.41	1/8	228.56

PROPOSED STORM DRAINAGE TO EXISTING STORM SEWER SYSTEM

PROP. BASIN	17/8	228.41	1/8	228.56
	17/8	228.41	1/8	228.56

PROPOSED STORM DRAINAGE TO EXISTING STORM SEWER SYSTEM

PROP. BASIN	17/8	228.41	1/8	228.56
	17/8	228.41	1/8	228.56

NO.	DATE	BY	REVISIONS
DESIGN	BB	CHK'D	SF DATE
DRAWN	BB	CHK'D	SF Oct. 25, 17

APPROVALS

STAMP

S. LLEWELLYN & ASSOCIATES LIMITED
 CONSULTING ENGINEERS

TEL: (905) 631-6978
 FAX: (905) 631-8927
 EMAIL: info@slle.com

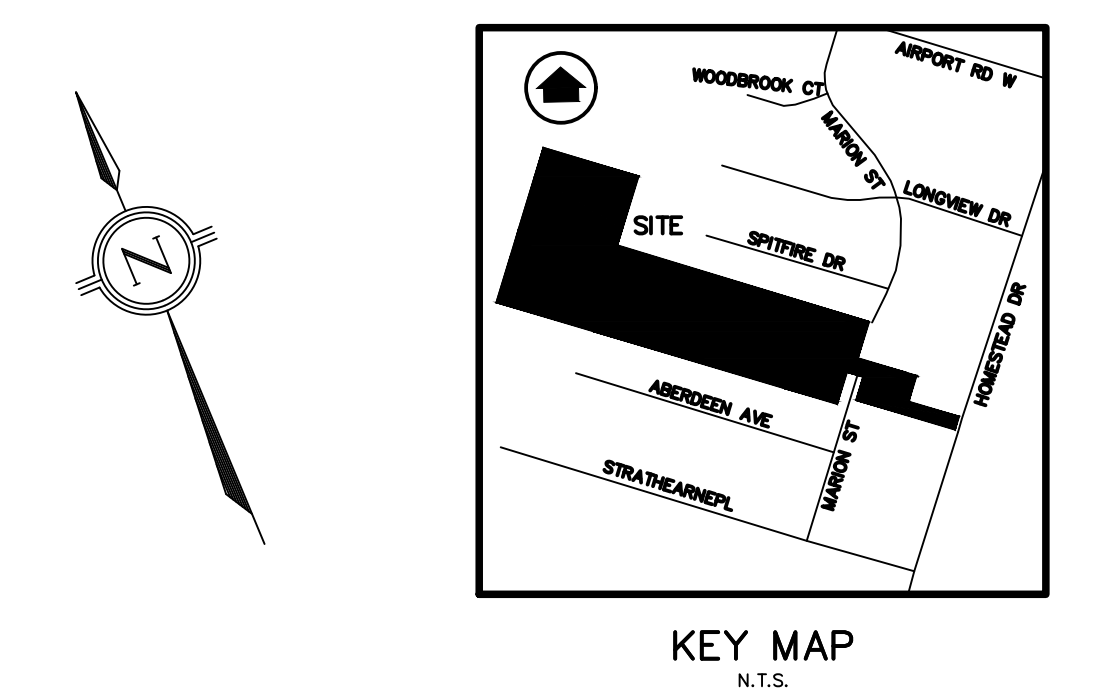
3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

CLIENT
 BRANTHAVEN DEVELOPMENT CORP.
 720 OVAL COURT
 BURLINGTON, ONTARIO

PROJECT NAME
 MOUNT HOPE DEVELOPMENT
 80 MARION ST & 3306 HOMESTEAD DR
 HAMILTON, ONTARIO

TITLE
 STORM DRAINAGE
 AREA PLAN
 2 OF 2

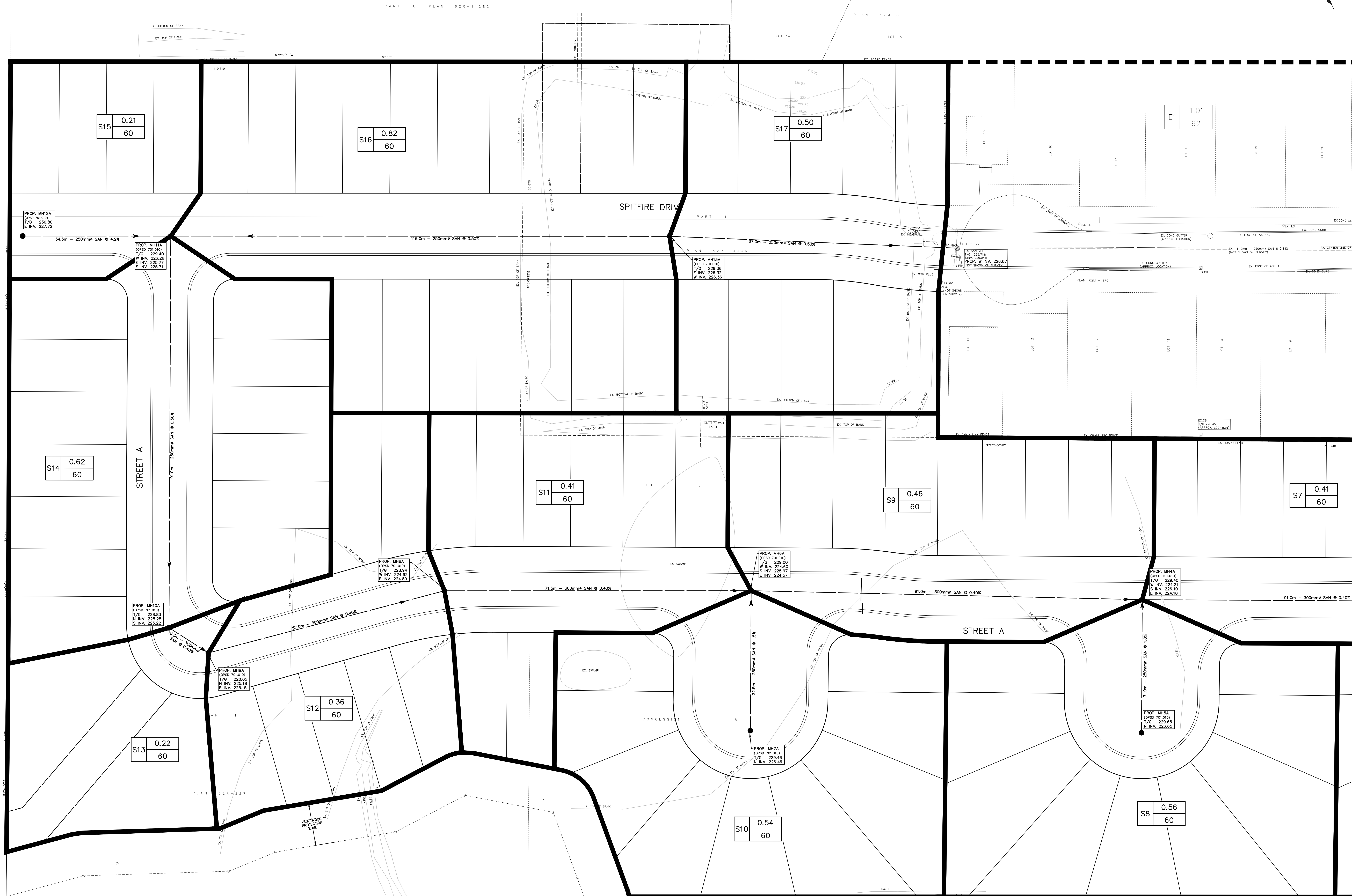
PROJECT No. 17065
SCALE 1:400
DRAWING No. DAP-2



LEGEND:

S1	0.10	AREA IN HECTARES
	60	POPULATION DENSITY (PERSON PER HECTARE)
		AREA NUMBER

— PROPOSED SANITARY AREA DRAINAGE BOUNDARY
 - - - EXISTING SANITARY AREA DRAINAGE BOUNDARY



BENCH MARK NOTE:
 MONUMENT 001975/010
 MOUNT HOPE SCHOOL, ALONG AIRPORT ROAD,
 0.6km WEST OF INTERSECTION WITH HIGHWAY No. 6,
 TABLE IN EAST CONCRETE FOUNDATION, 57mm
 NORTH OF CONCRETE STEPS FOR SIDE DOOR, 36cm
 BELOW BRICKWORK
 ELEVATION: 233.03m CGVD-1928

NO.	DATE	BY	REVISIONS
DESIGN	BB	CHK'D	SF DATE
DRAWN	BB	CHK'D	SF Oct. 25, 17

APPROVALS

STAMP	
-------	--

S. LEMMELYN & ASSOCIATES LIMITED
 CONSULTING ENGINEERS
 Tel: (905) 631-8979
 Fax: (905) 631-8927
 email: info@slae.com
 3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

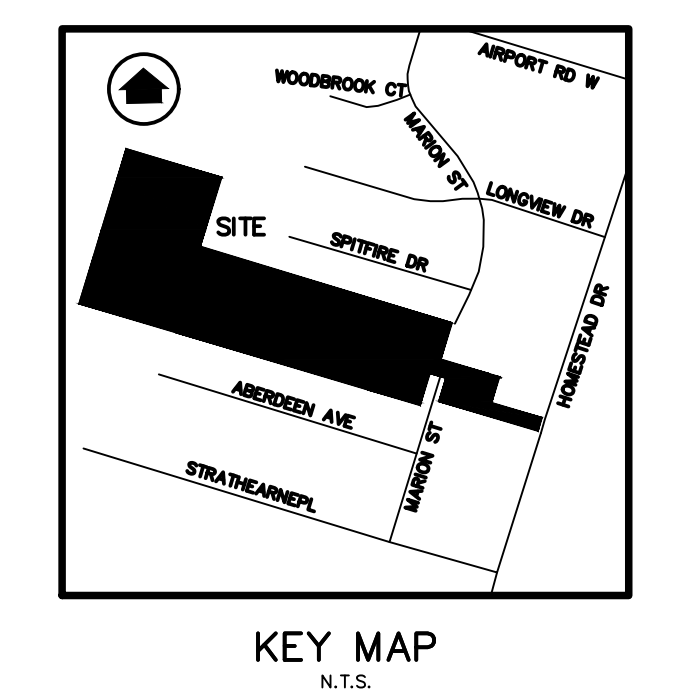
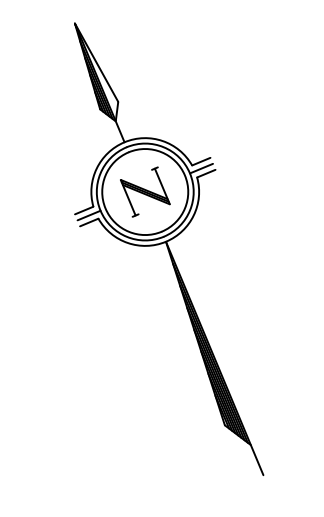
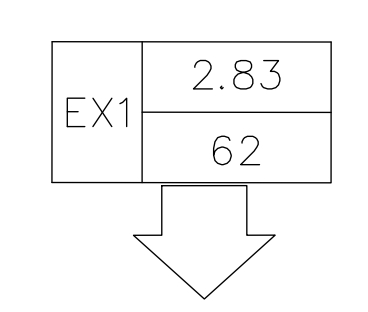
CLIENT
 BRANTHAVEN DEVELOPMENT CORP.
 720 OVAL COURT
 BURLINGTON, ONTARIO

PROJECT NAME
 MOUNT HOPE DEVELOPMENT
 80 MARION ST & 3306 HOMESTEAD DR
 HAMILTON, ONTARIO

TITLE
 SANITARY DRAINAGE
 AREA PLAN
 1 OF 2

PROJECT No. 17065
SCALE 1:300
DRAWING No. DAP-3

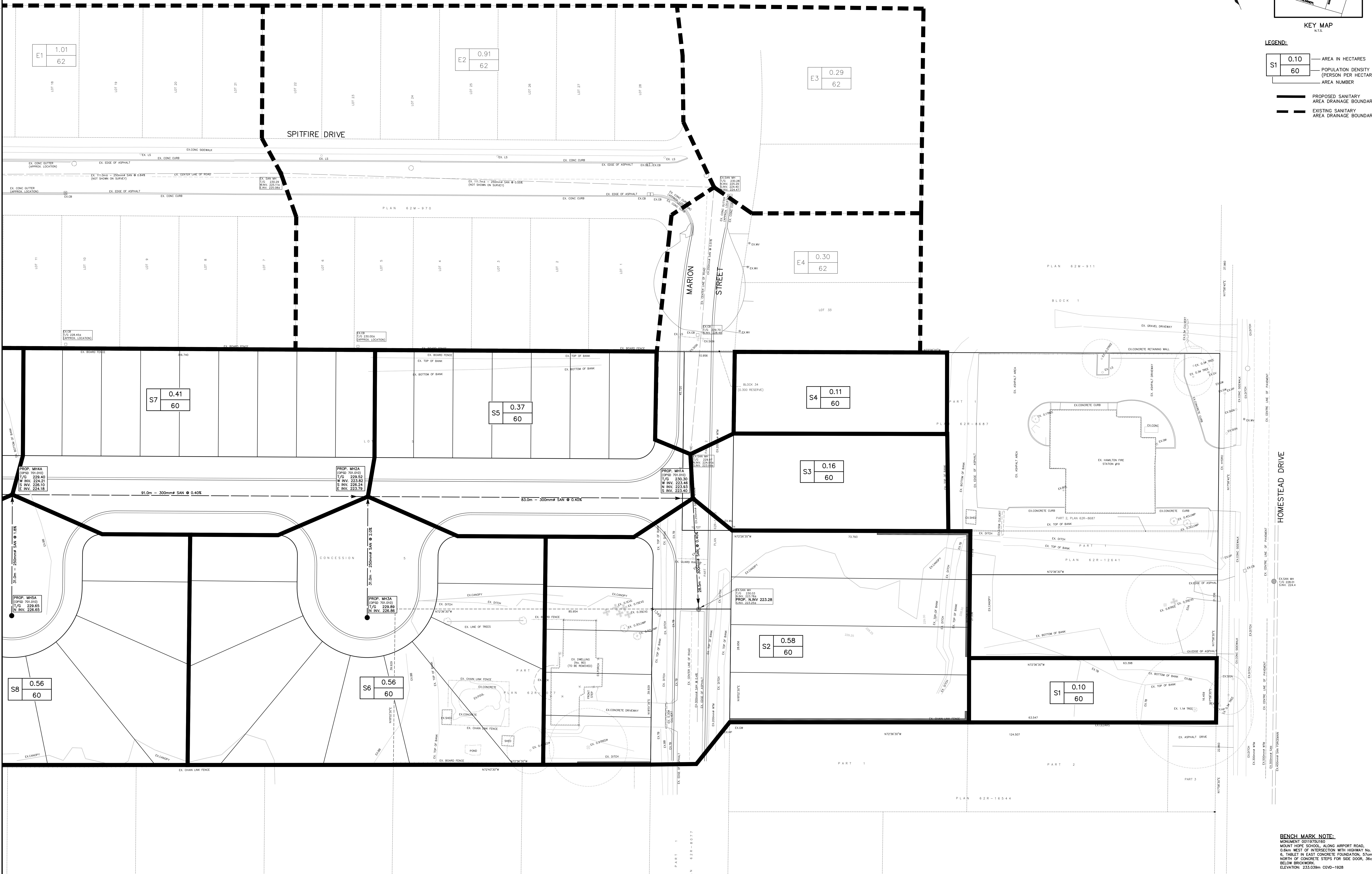
DRAINAGE FROM
 MOUNTVILLE PHASE 1



LEGEND:

S1	0.10	AREA IN HECTARES
	60	POPULATION DENSITY (PERSON PER HECTARE)
		AREA NUMBER

——— PROPOSED SANITARY AREA DRAINAGE BOUNDARY
 - - - - - EXISTING SANITARY AREA DRAINAGE BOUNDARY



BENCH MARK NOTE:
 MONUMENT 0019750160
 MOUNT HOPE SCHOOL, ALONG AIRPORT ROAD,
 0.6km WEST OF INTERSECTION WITH HIGHWAY No. 6,
 TABLE IN EAST CONCRETE FOUNDATION, 57cm
 NORTH OF CONCRETE STEPS FOR SIDE DOOR, 36cm
 BELOW BRICKWORK
 ELEVATION: 233.039m CGVD-1928

NO.	DATE	BY	REVISIONS
DESIGN	BB	CHK'D	SF
DRAWN	BB	CHK'D	SF

Oct. 25, 17

APPROVALS

STAMP

S. LEMELLYN & ASSOCIATES LIMITED
 CONSULTING ENGINEERS
 Tel: (905) 631-6978
 Fax: (905) 631-8927
 email: info@slae.ca
 3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

CLIENT:
 BRANTHAVEN DEVELOPMENT CORP.
 720 OVAL COURT
 BURLINGTON, ONTARIO

PROJECT NAME:
 MOUNT HOPE DEVELOPMENT
 80 MARION ST & 3306 HOMESTEAD DR
 HAMILTON, ONTARIO

TITLE:
 SANITARY DRAINAGE AREA PLAN
 2 OF 2

PROJECT No.: 17065
SCALE: 1:300
DRAWING No.: DAP-4