

**Peter J. Lesdow**  
a r c h i t e c t

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
APRIL 21 at 10:00 AM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

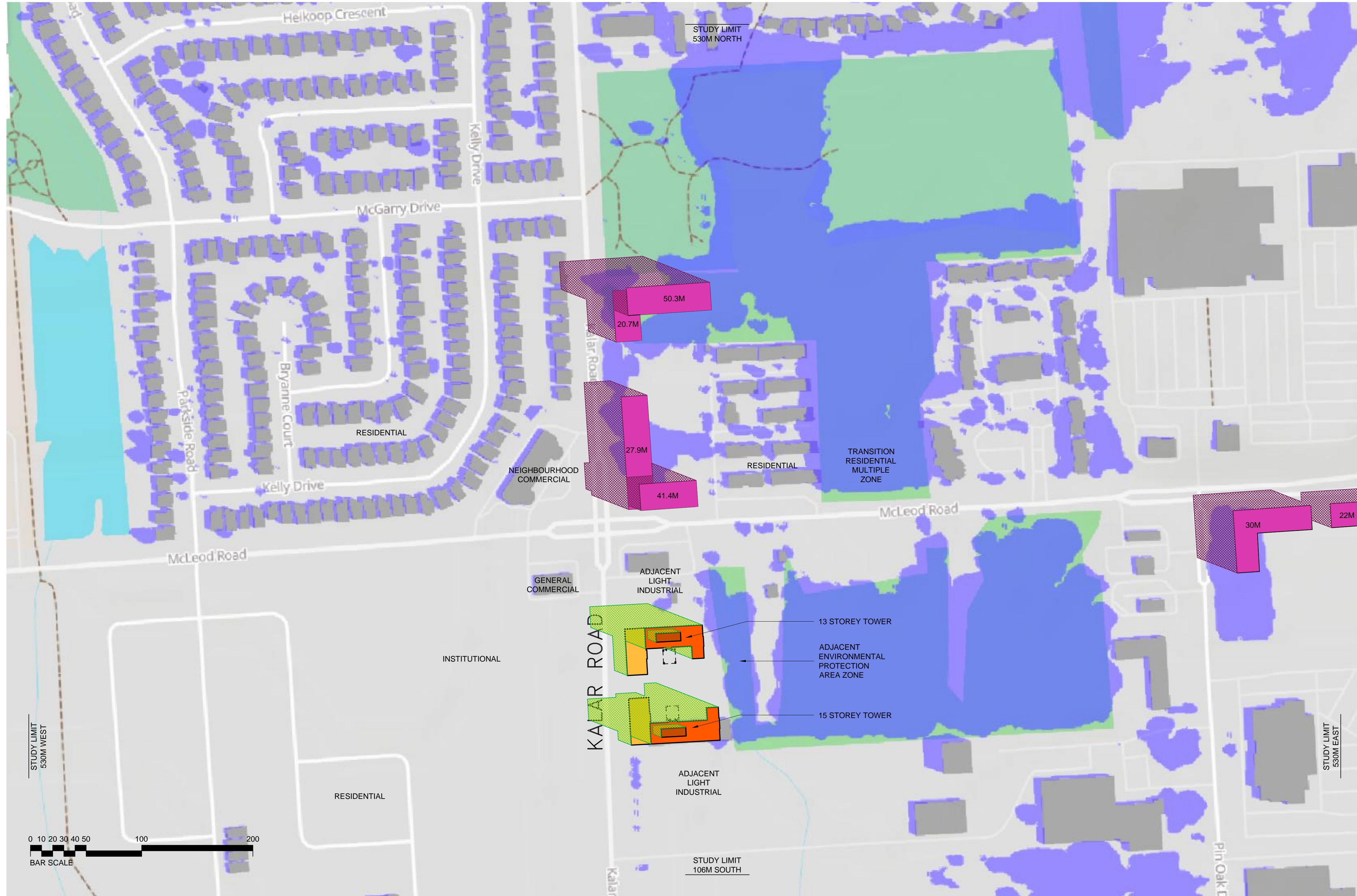
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: P.JL

23 - 05

**SH-1**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

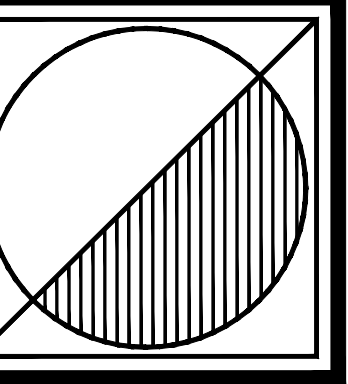
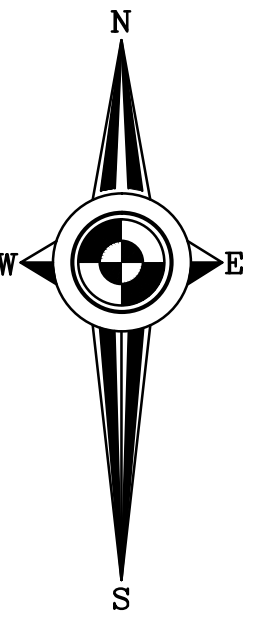
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH**:	7.7 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**:	+ 45.2 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**:	+ 52.4 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**APRIL 21 at 10:00 AM**

SCALE: 1:2000



**Peter J. Lesdow**  
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4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
APRIL 21 at 11:00 AM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

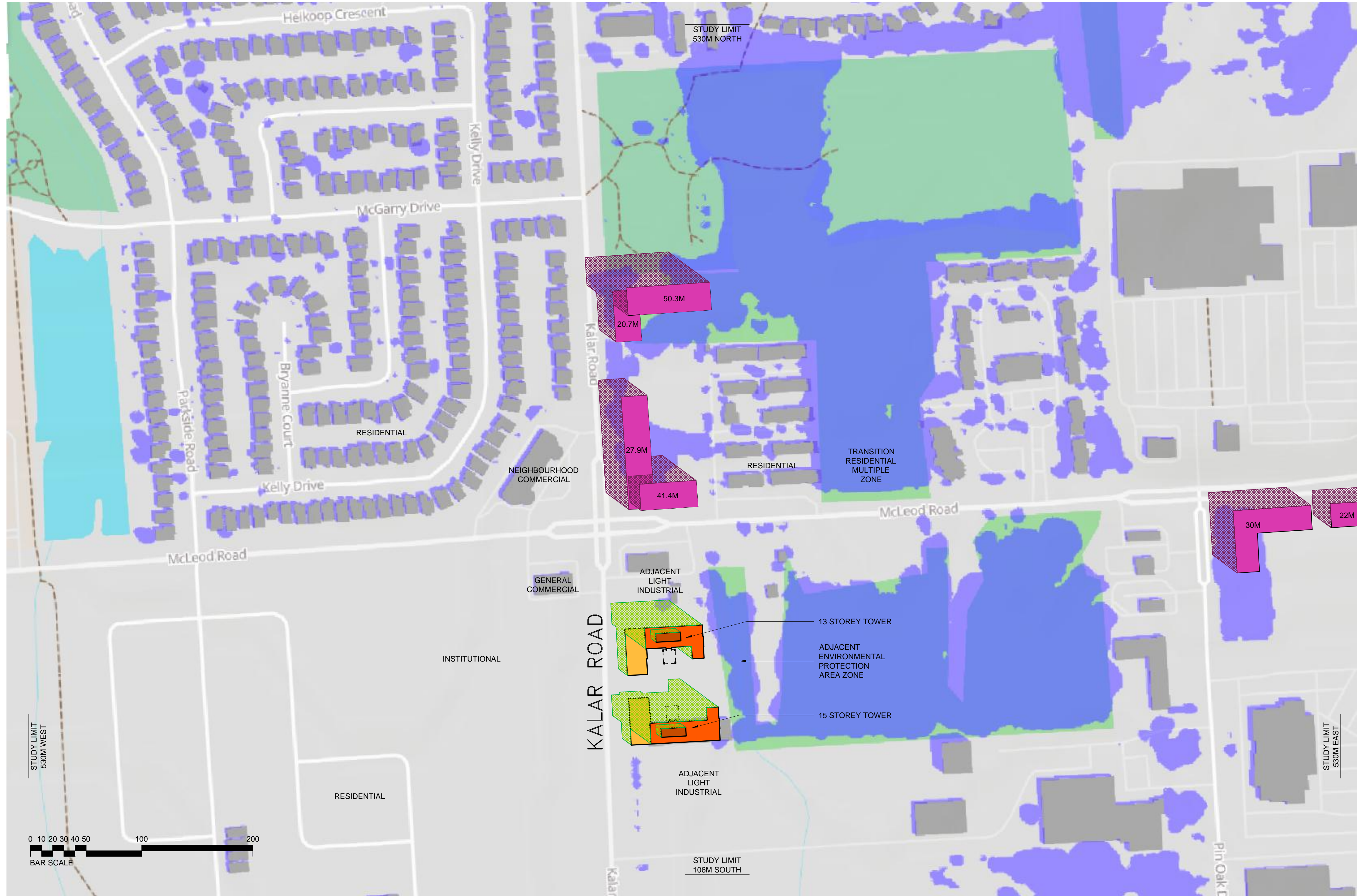
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-2**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

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BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

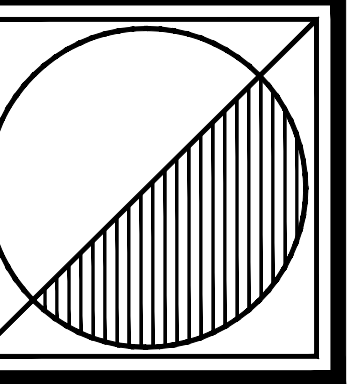
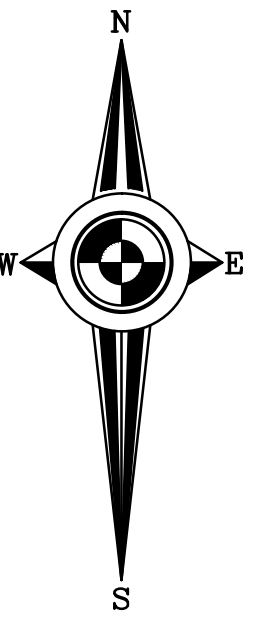
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	5.5 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 32.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 37.3 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**APRIL 21 at 11:00 AM**

SCALE: 1:2000



**Peter J. Lesdow**  
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**SHADOW STUDY**  
APRIL 21 at 12:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
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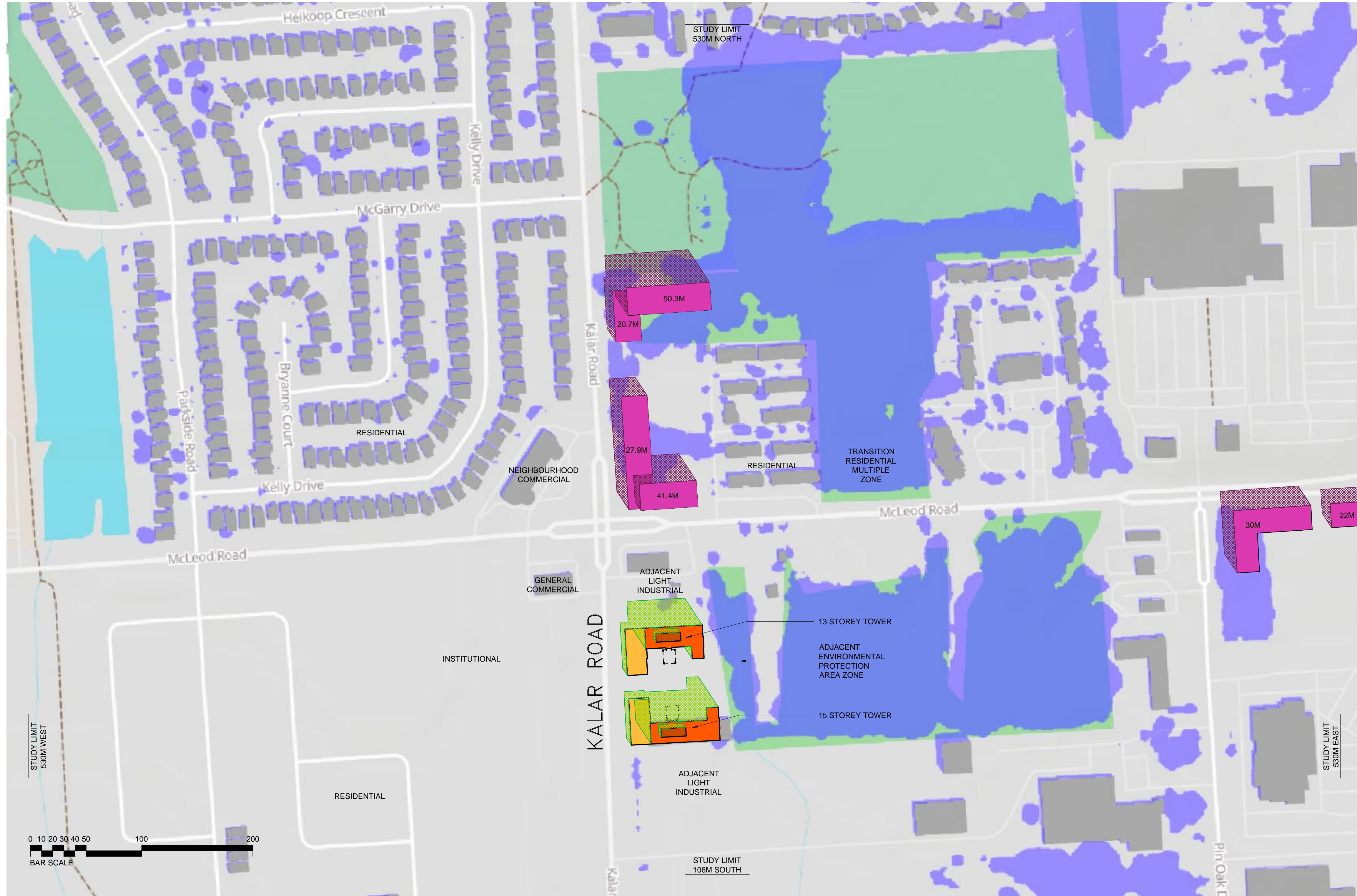
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-3**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

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BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

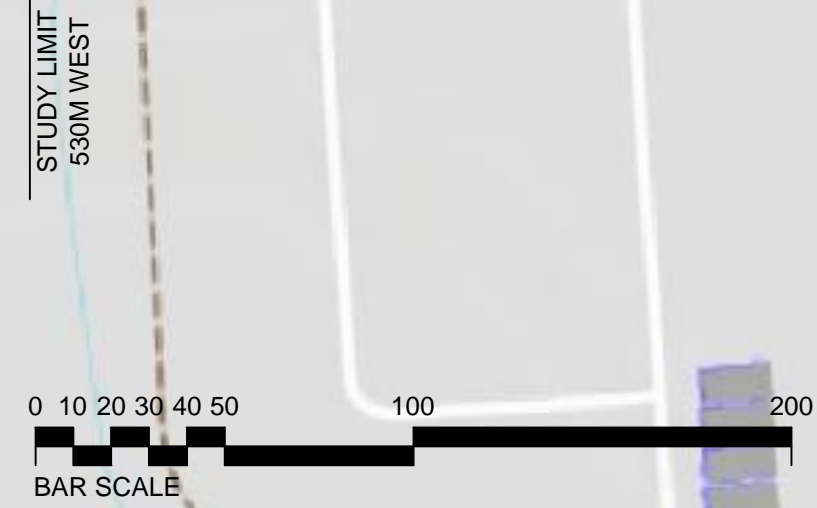
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
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**INCREMENTAL SHADOW COMPARISON**

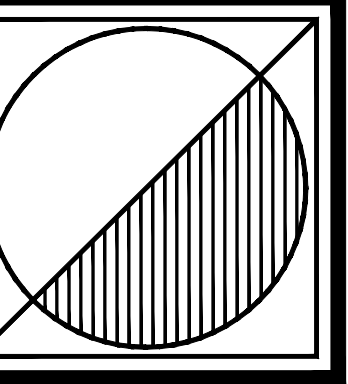
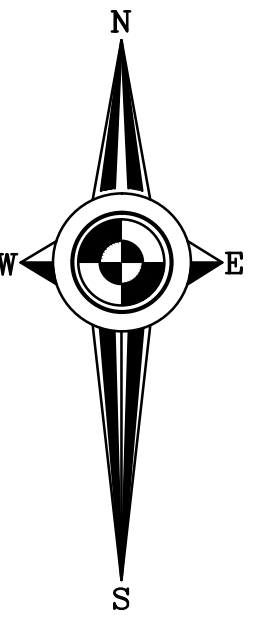
CURRENT BUILDING SHADOW LENGTH*	4.2 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 24.6 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 28.5 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**APRIL 21 at 12:00 PM**

SCALE: 1:2000



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**SHADOW STUDY**  
APRIL 21 at 1:00 PM

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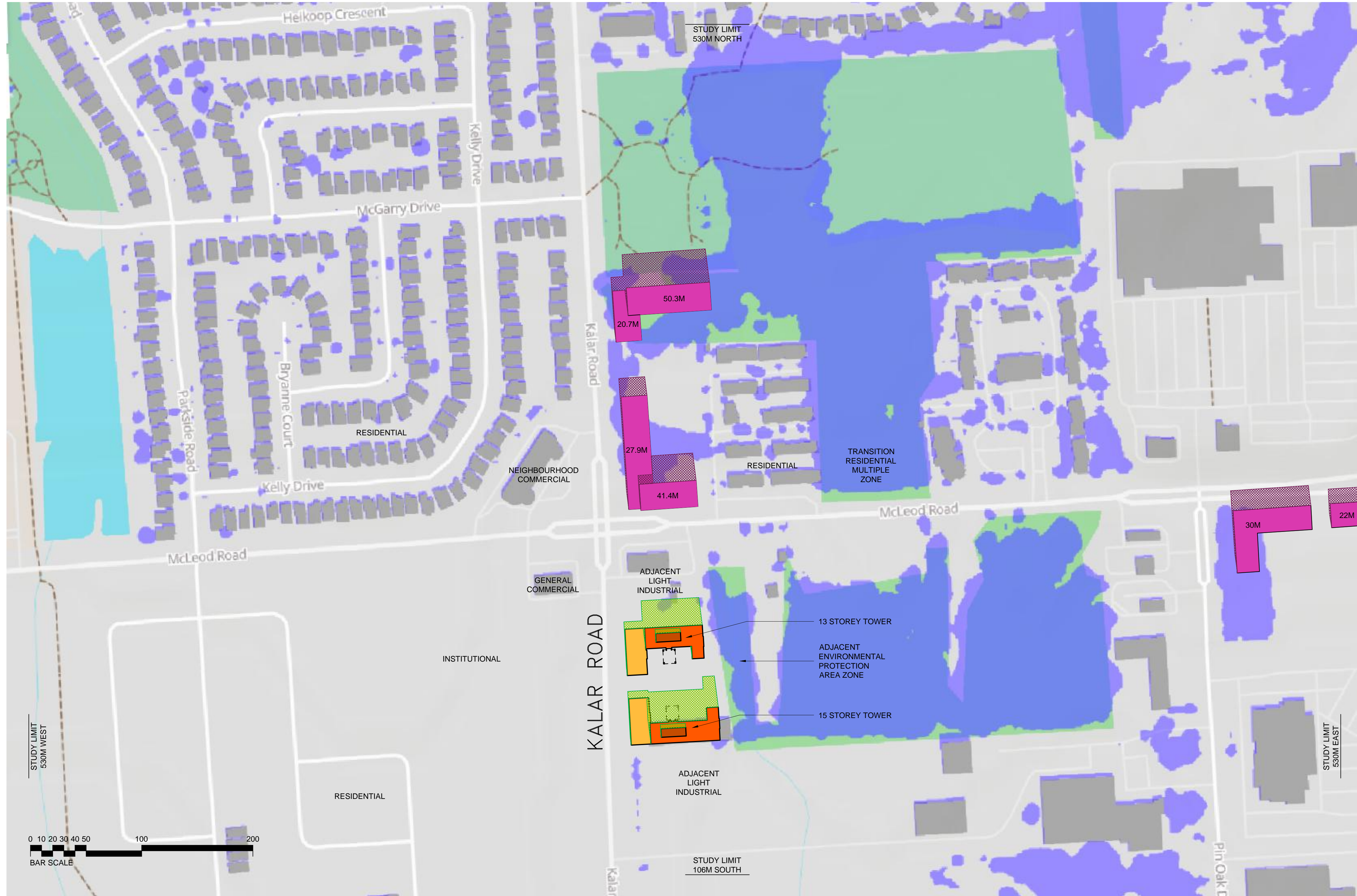
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-4**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

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BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

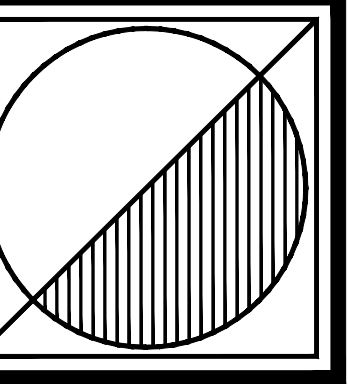
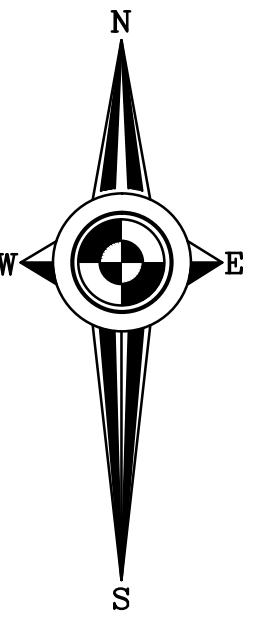
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	3.6 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 21.2 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 24.6 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**APRIL 21 at 1:00 PM**

SCALE: 1:2000



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**SHADOW STUDY**  
APRIL 21 at 2:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
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Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

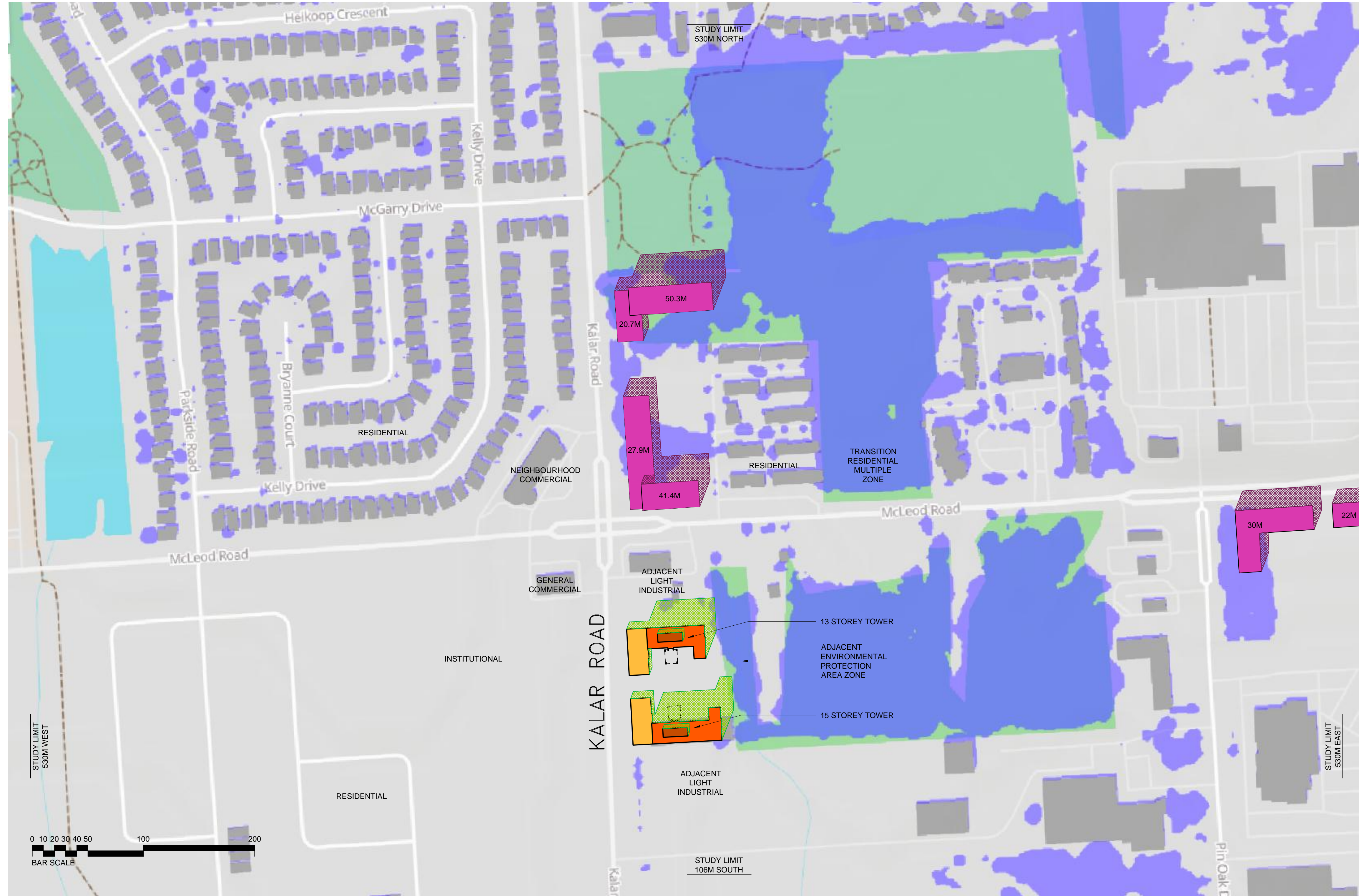
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE:	Jul. 25/24
SCALE:	AS NOTED
DRAWN BY:	MRW
CHECK BY:	PJL

23 - 05

**SH-5**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

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BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

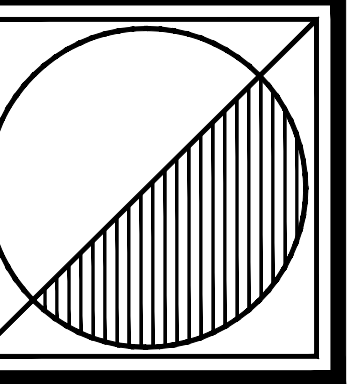
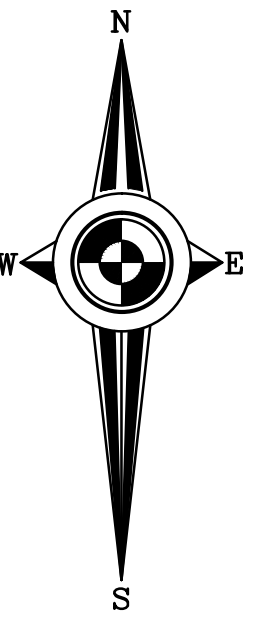
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH**:	3.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**:	+ 22.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**:	+ 25.8 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**APRIL 21 at 2:00 PM**

SCALE: 1:2000



**Peter J. Lesdow**  
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**SHADOW STUDY**  
APRIL 21 at 3:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
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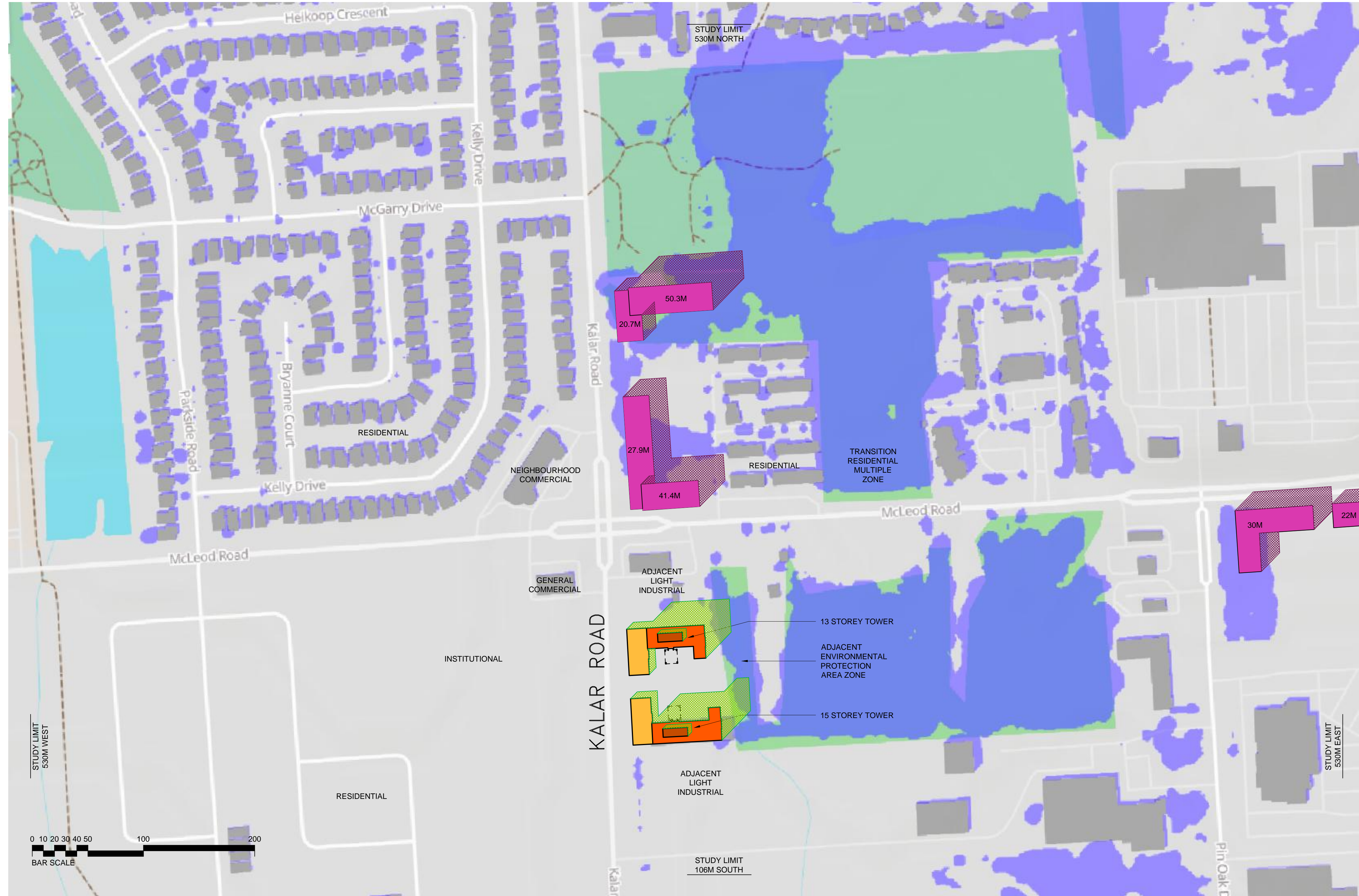
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-6**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
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BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

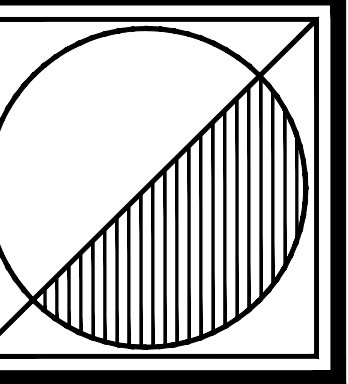
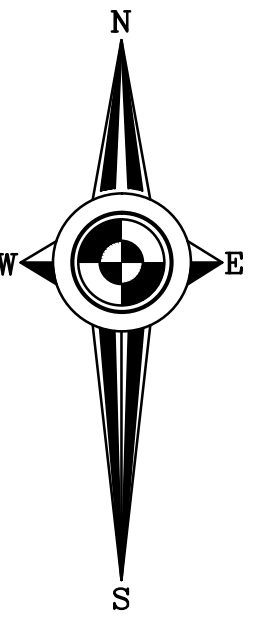
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**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	4.7 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 27.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 32.2 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**APRIL 21 at 3:00 PM**  
SCALE: 1:2000



**Peter J. Lesdow**  
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**SHADOW STUDY**  
APRIL 21 at 4:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

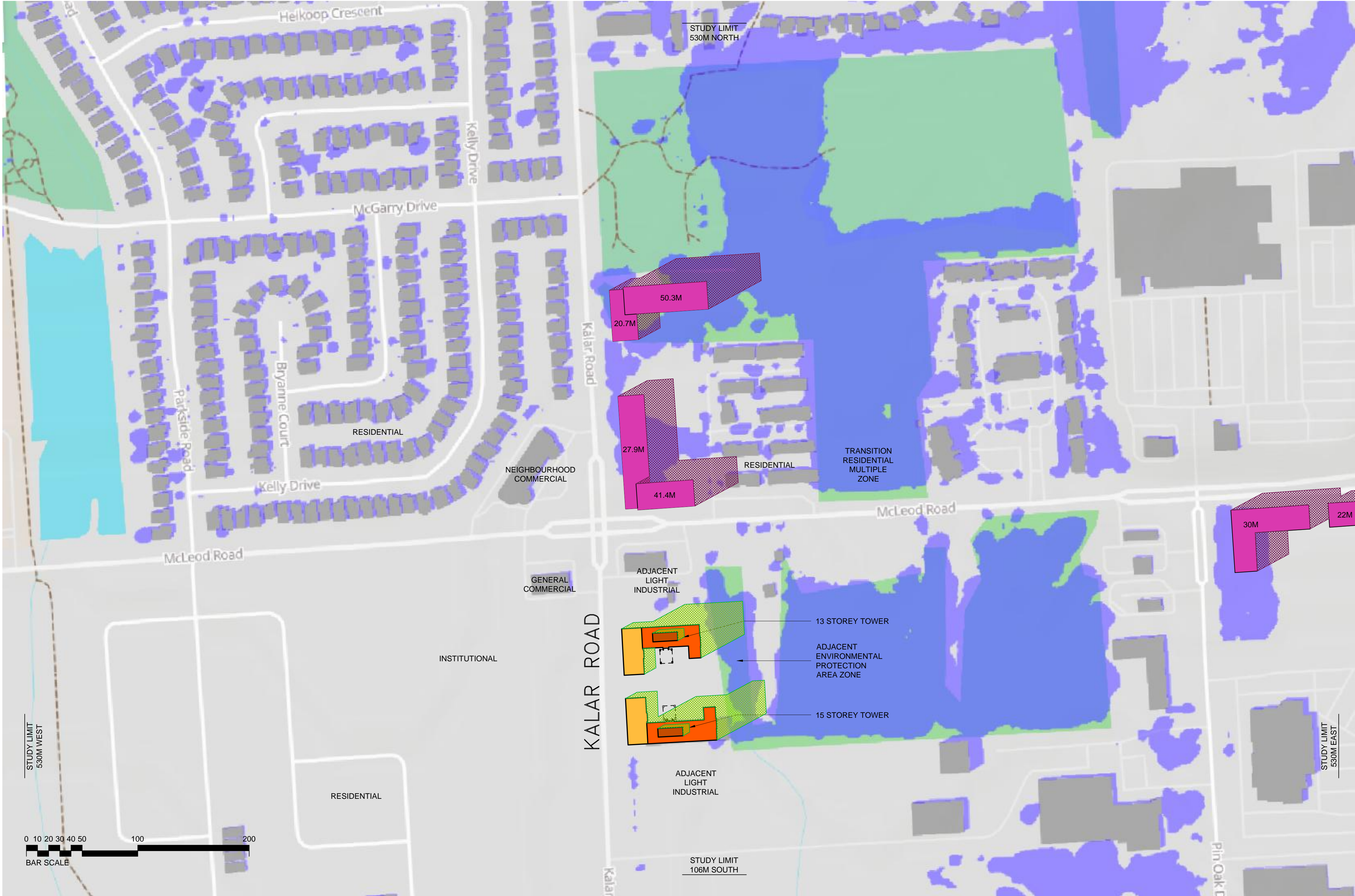
**KALAR APARTMENTS**

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Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-7**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
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GEOGRAPHIC LOCATION:  
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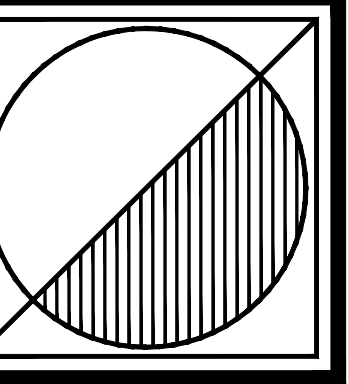
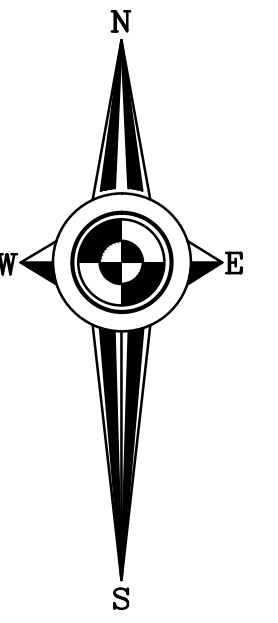
NOTE:  
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**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	6.4 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 37.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 43.8 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**APRIL 21 at 4:00 PM**  
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**SHADOW STUDY**  
APRIL 21 at 5:00 PM

DATE	REVISIONS
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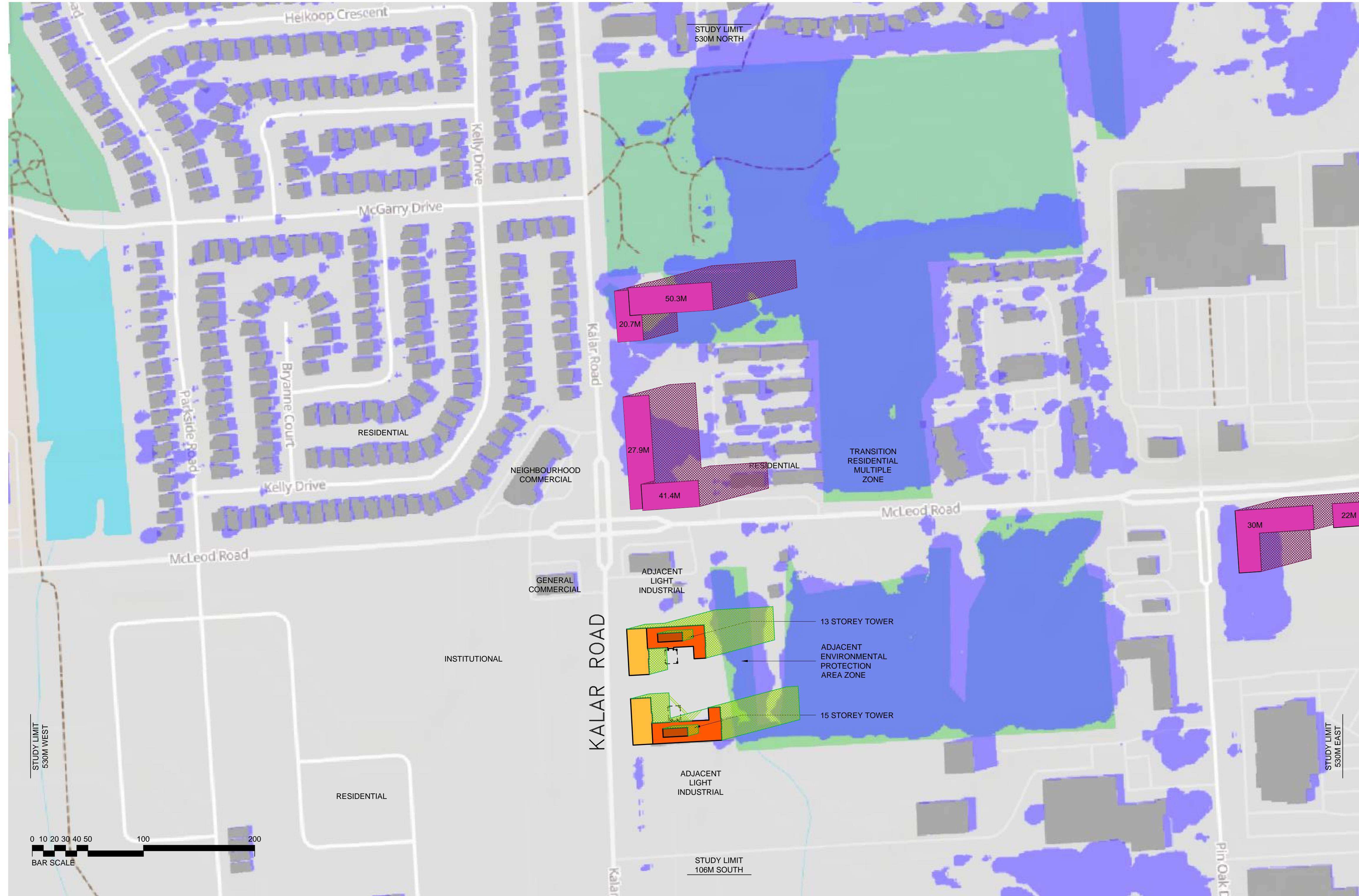
**KALAR APARTMENTS**

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DATE: Jul. 25/24  
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23 - 05

**SH-8**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
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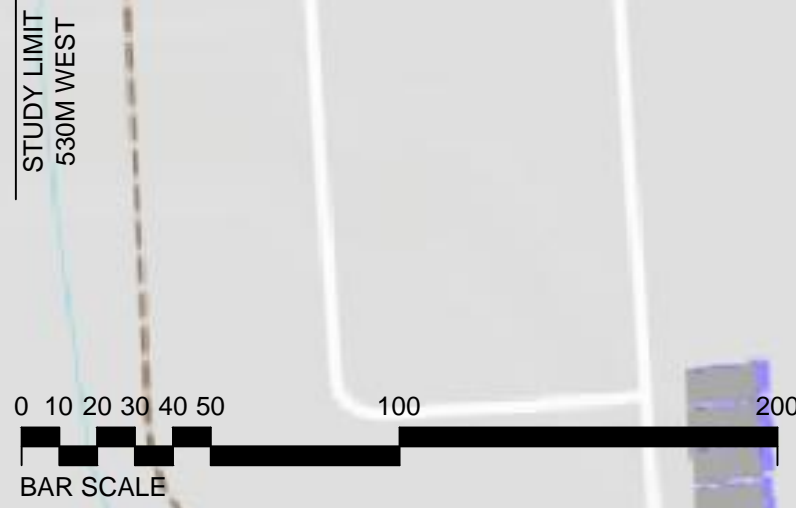
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NOTE:  
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**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	9.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 54.6 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 63.2 m

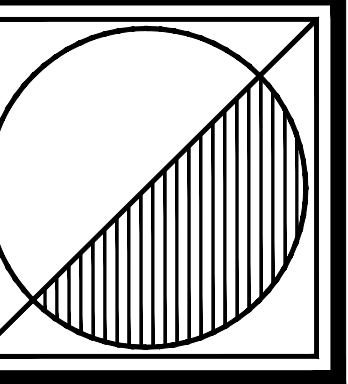
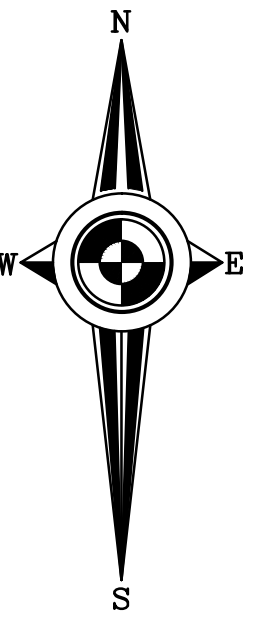
\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**APRIL 21 at 5:00 PM**

SCALE: 1:2000





**Peter J. Lesdow**  
a r c h i t e c t

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
APRIL 21 at 6:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

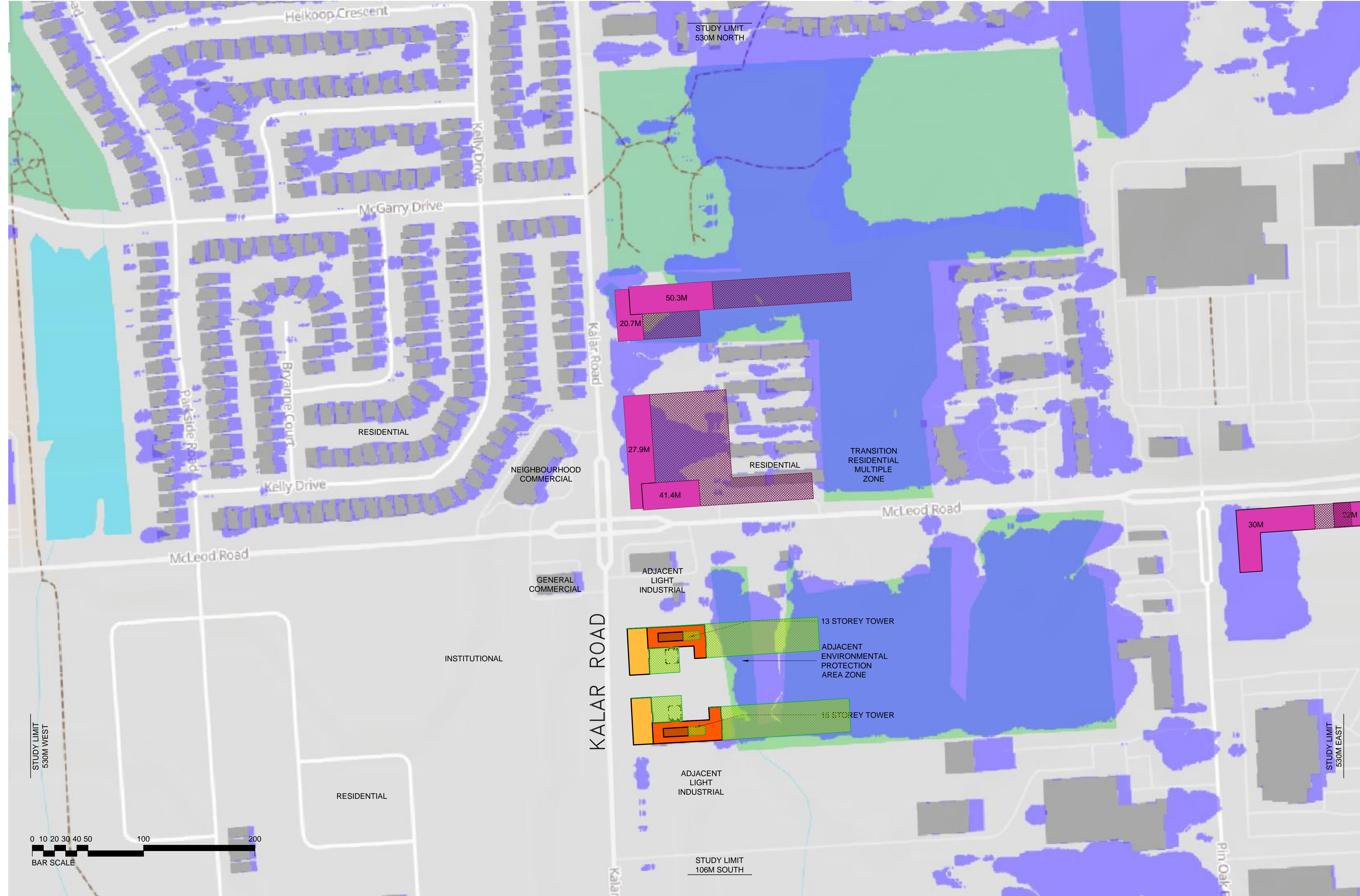
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-9**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

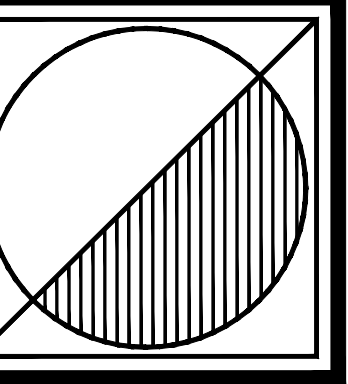
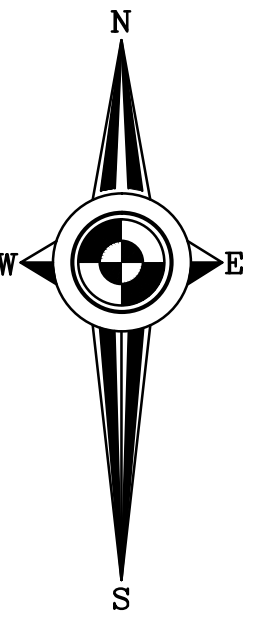
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	14.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 87.0 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 100.7 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**APRIL 21 at 6:00 PM**

SCALE: 1:2000



**Peter J. Lesdow**  
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**SHADOW STUDY**  
JUNE 21 at 10:00 AM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

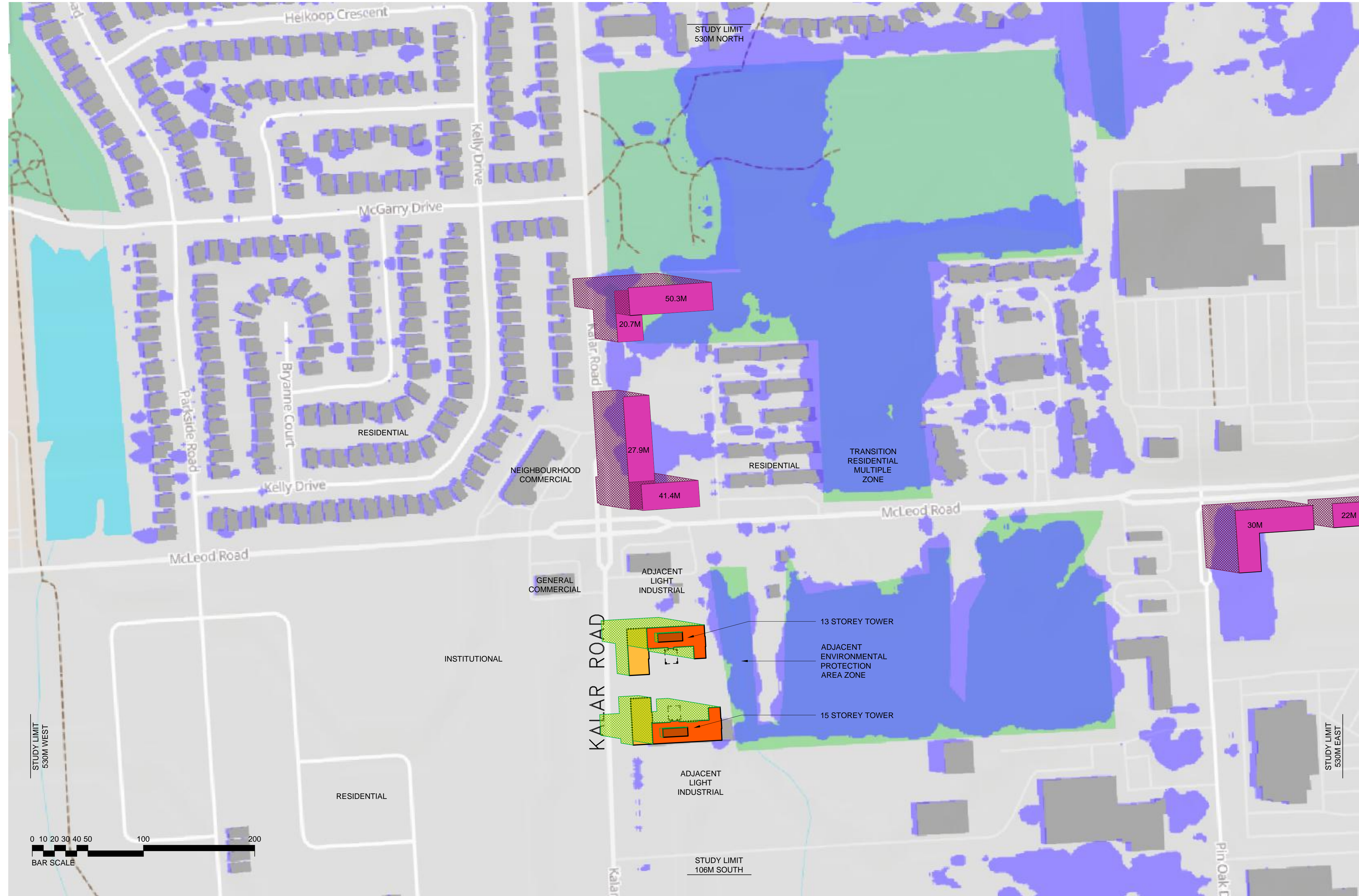
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-10**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

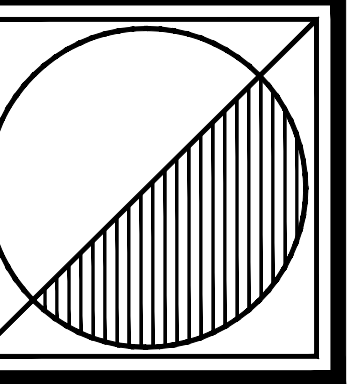
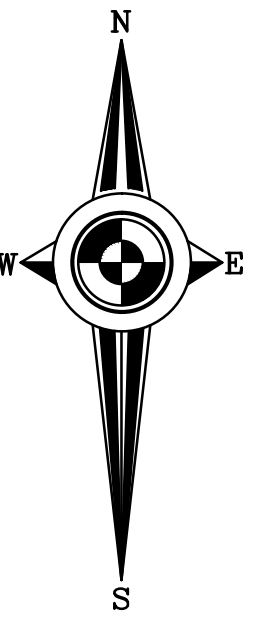
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	6.0 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 35.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 40.9 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**JUNE 21 at 10:00 AM**

SCALE: 1:2000



**Peter J. Lesdow**  
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Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
JUNE 21 at 11:00 AM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

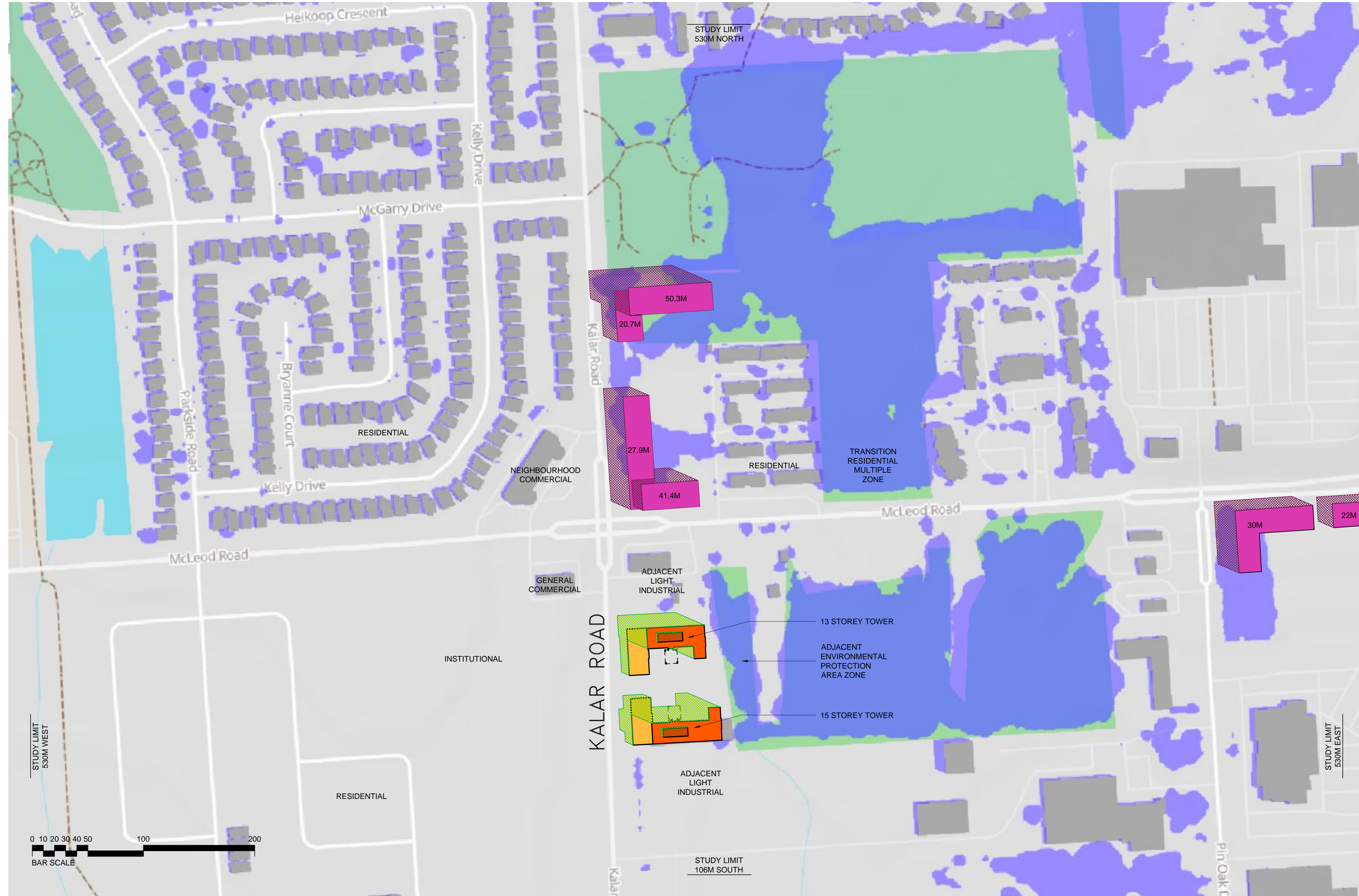
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-11**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

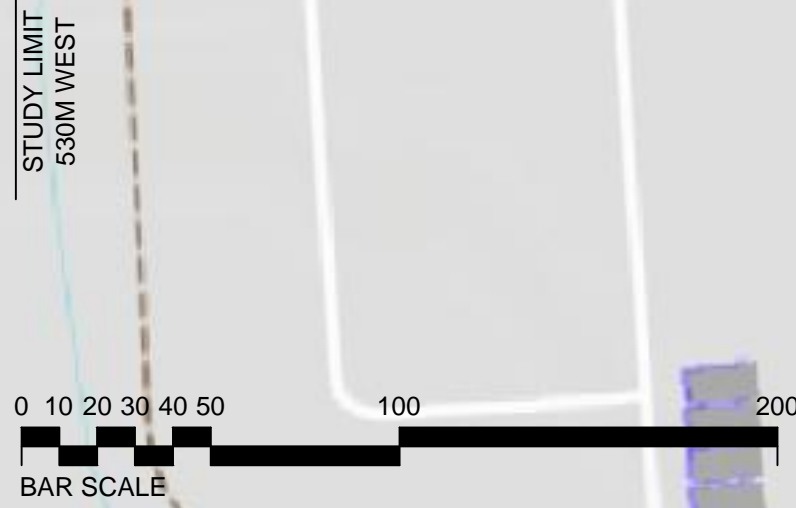
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

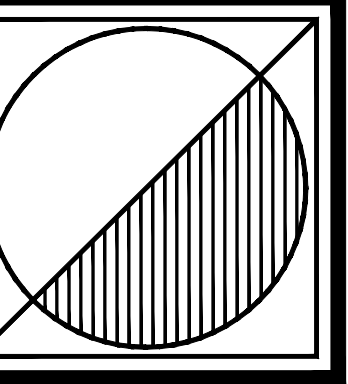
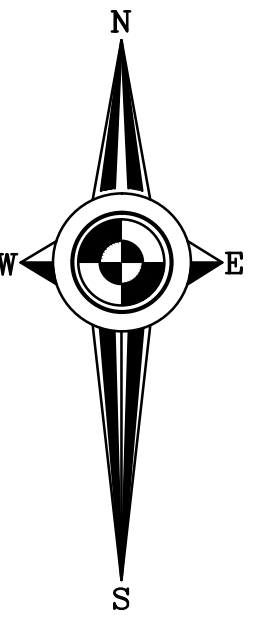
CURRENT BUILDING SHADOW LENGTH*	4.1 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 24.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 28.1 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**JUNE 21 at 11:00 AM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

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Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
JUNE 21 at 12:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

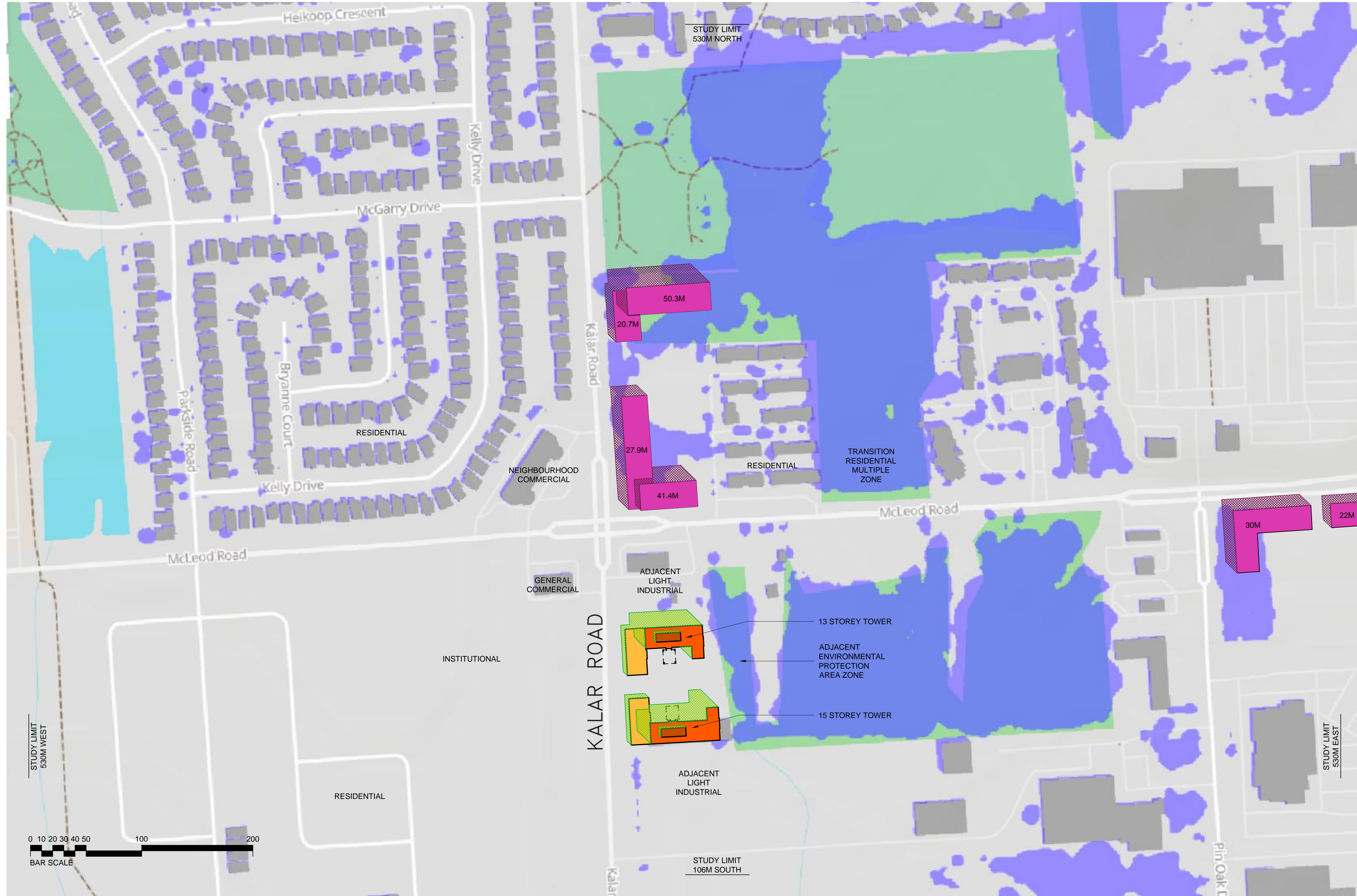
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-12**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the "https://ShadeMap.app" online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

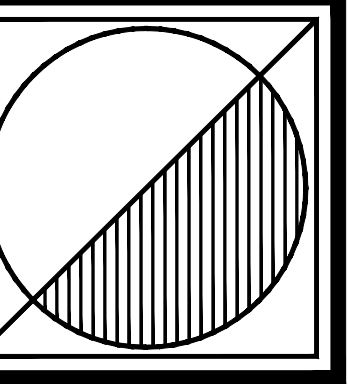
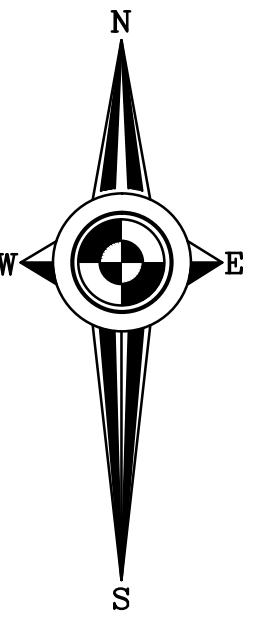
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	2.9 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 16.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 19.4 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**JUNE 21 at 12:00 PM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

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**SHADOW STUDY**  
JUNE 21 at 1:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

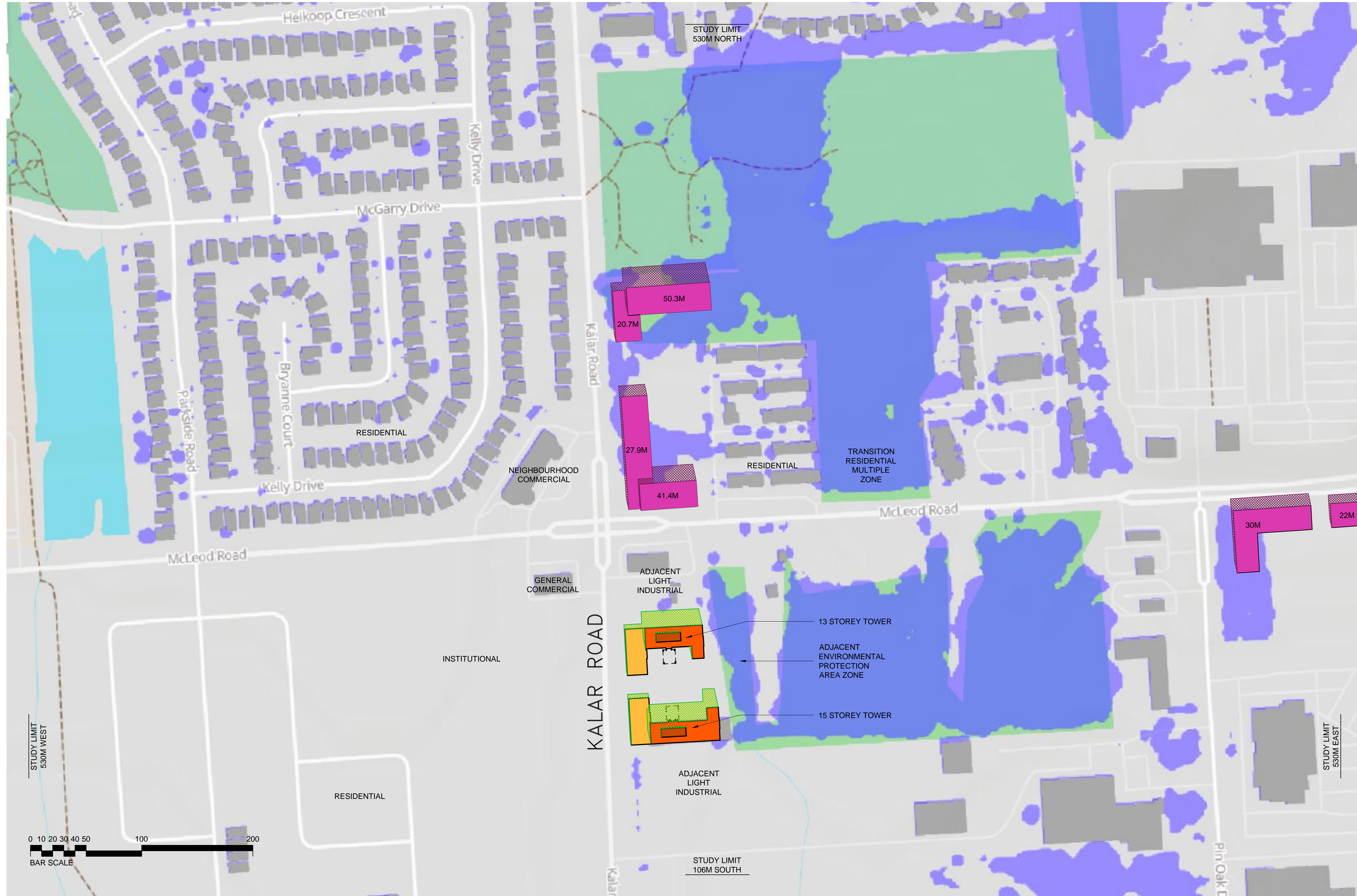
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-13**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

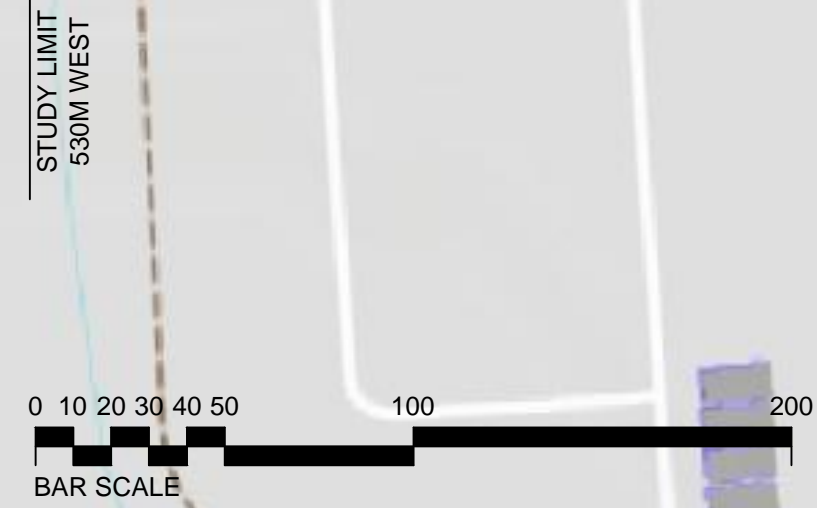
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	2.2 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 12.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 14.9 m

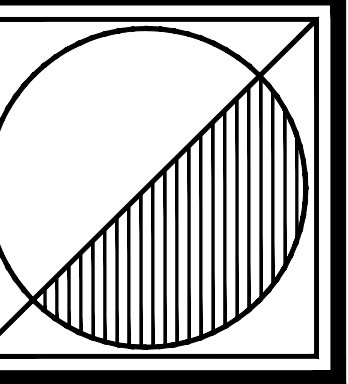
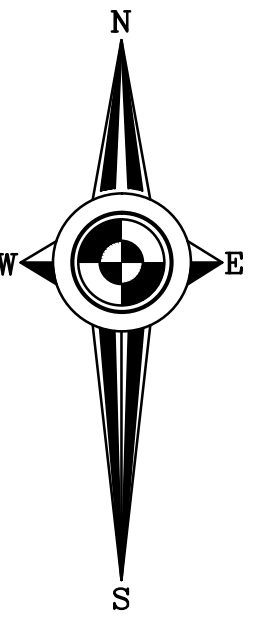
\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**JUNE 21 at 1:00 PM**

SCALE: 1:2000





**Peter J. Lesdow**  
a r c h i t e c t

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**SHADOW STUDY**  
JUNE 21 at 3:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

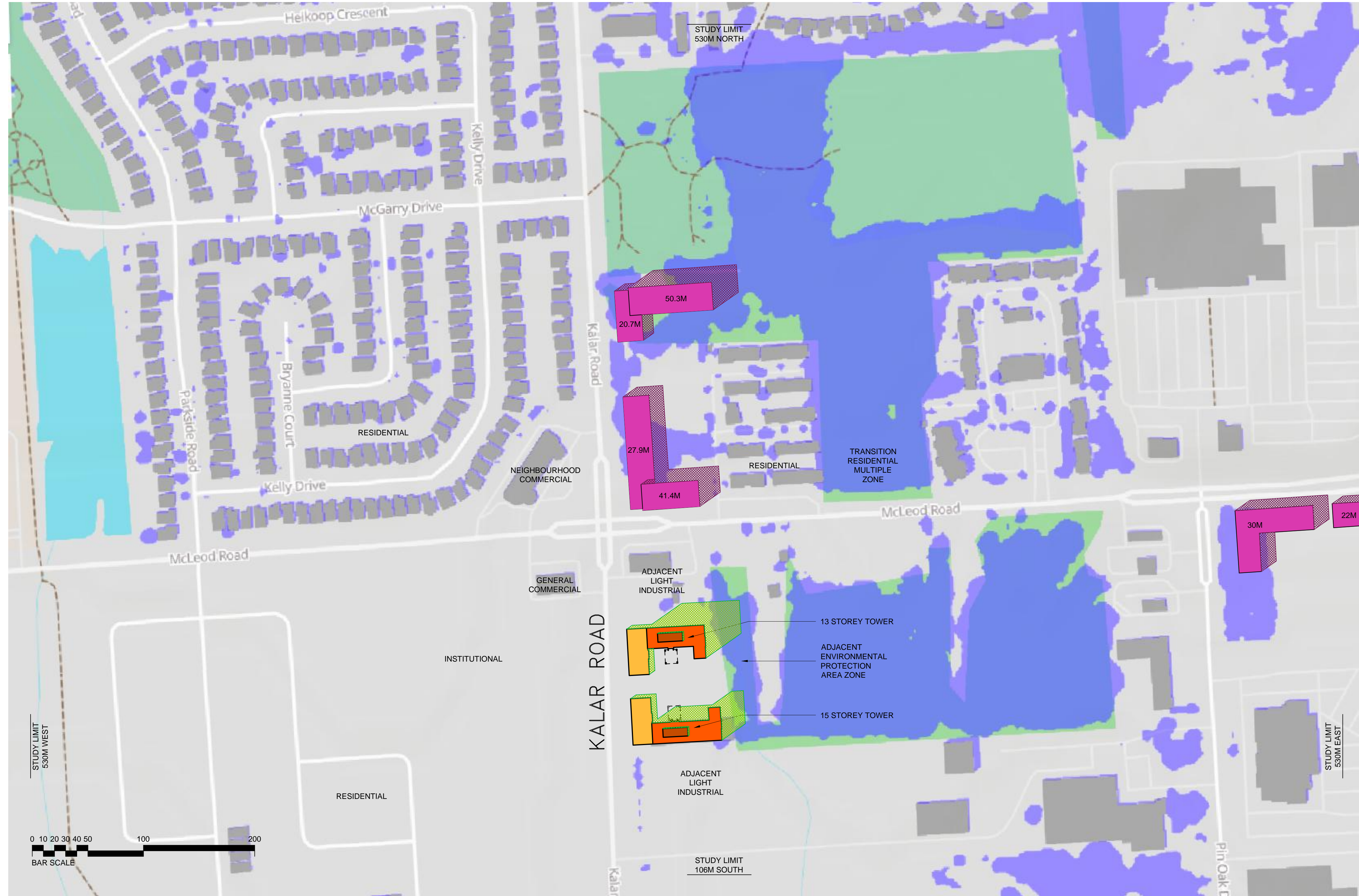
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-15**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

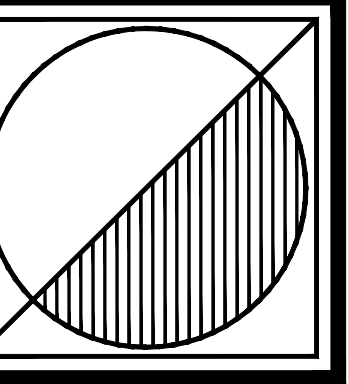
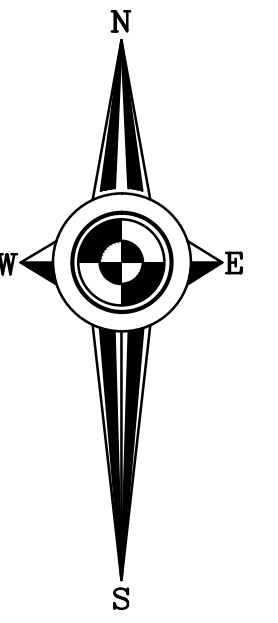
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	3.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 19.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 22.3 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**JUNE 21 at 3:00 PM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

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**SHADOW STUDY**  
JUNE 21 at 4:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

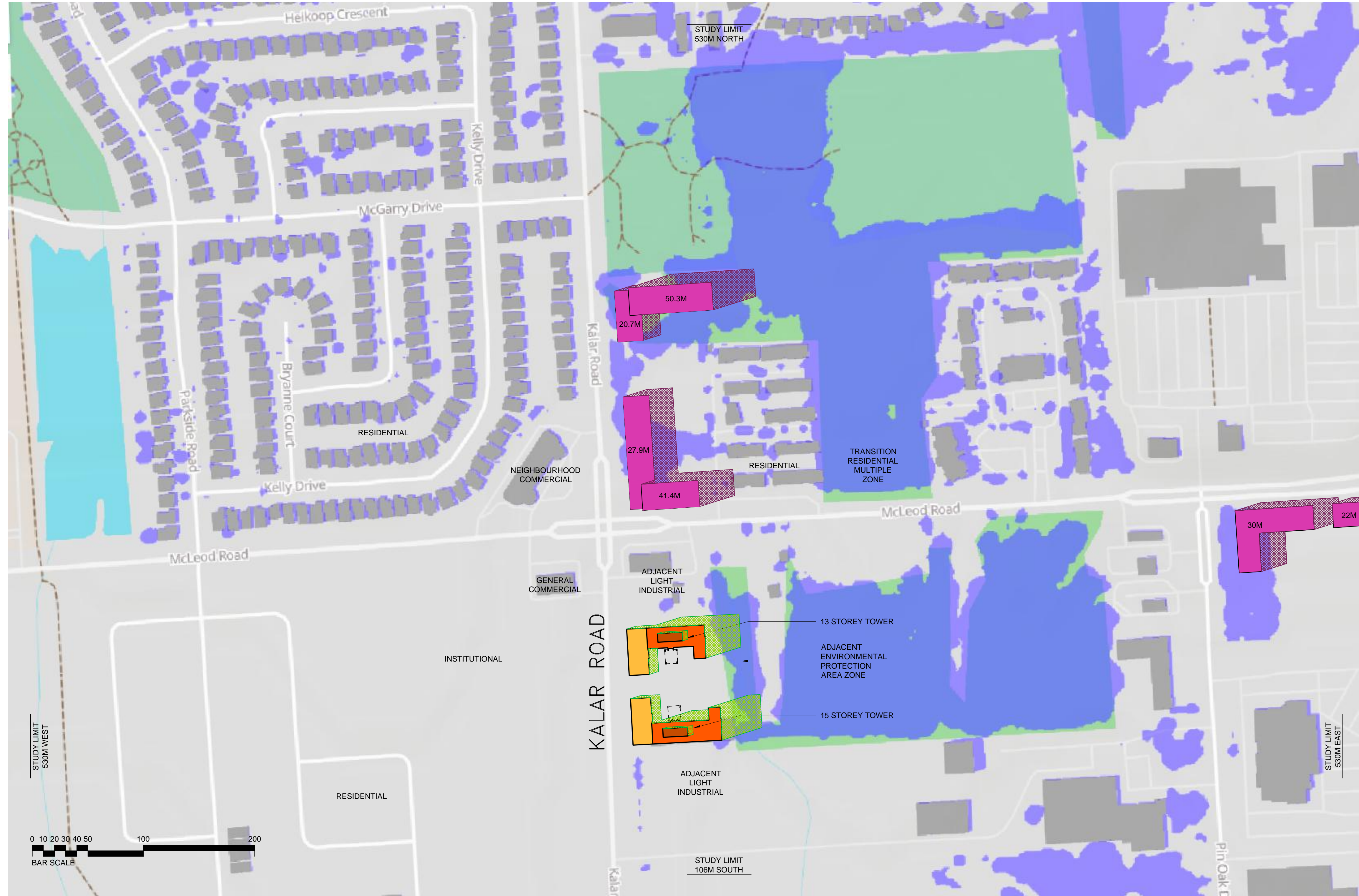
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-16**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

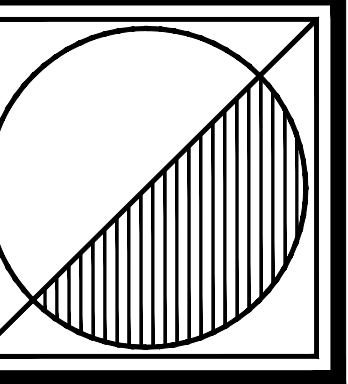
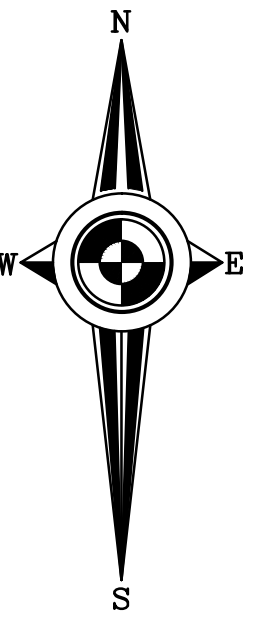
CURRENT BUILDING SHADOW LENGTH*	4.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 28.1 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 32.5 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**JUNE 21 at 4:00 PM**  
SCALE: 1:2000





**Peter J. Lesdow**  
a r c h i t e c t

4465 Durand Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
JUNE 21 at 5:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

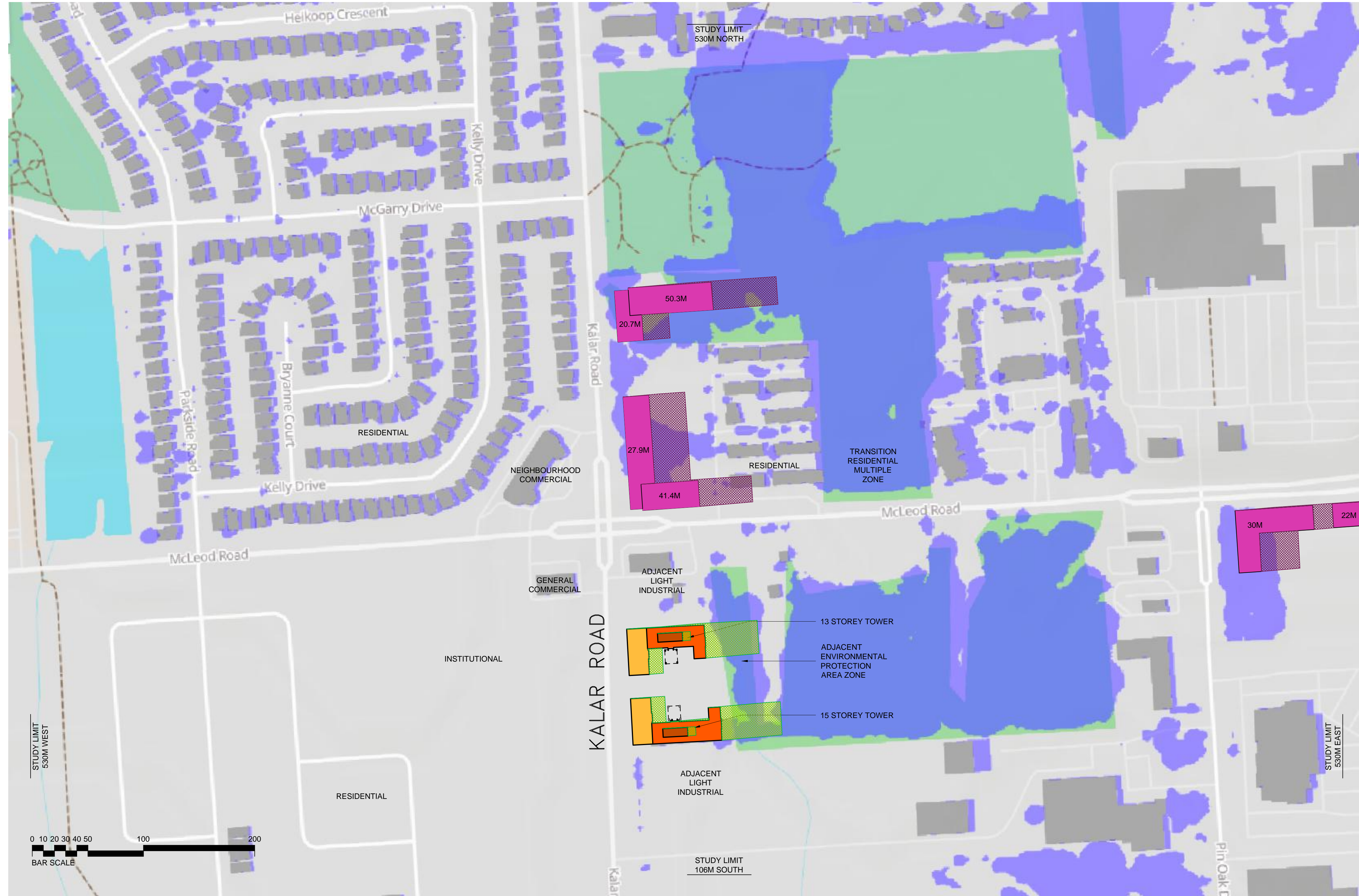
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-17**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

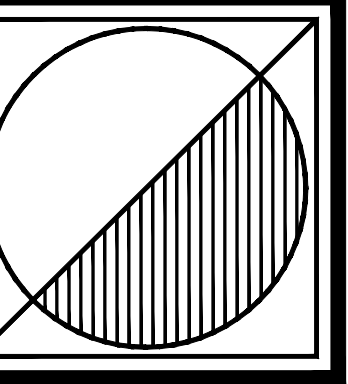
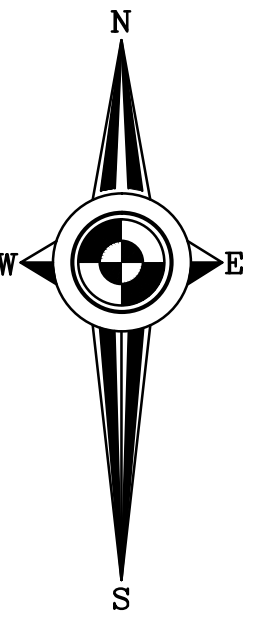
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	7.0 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 40.9 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 47.4 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**JUNE 21 at 5:00 PM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
JUNE 21 at 6:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

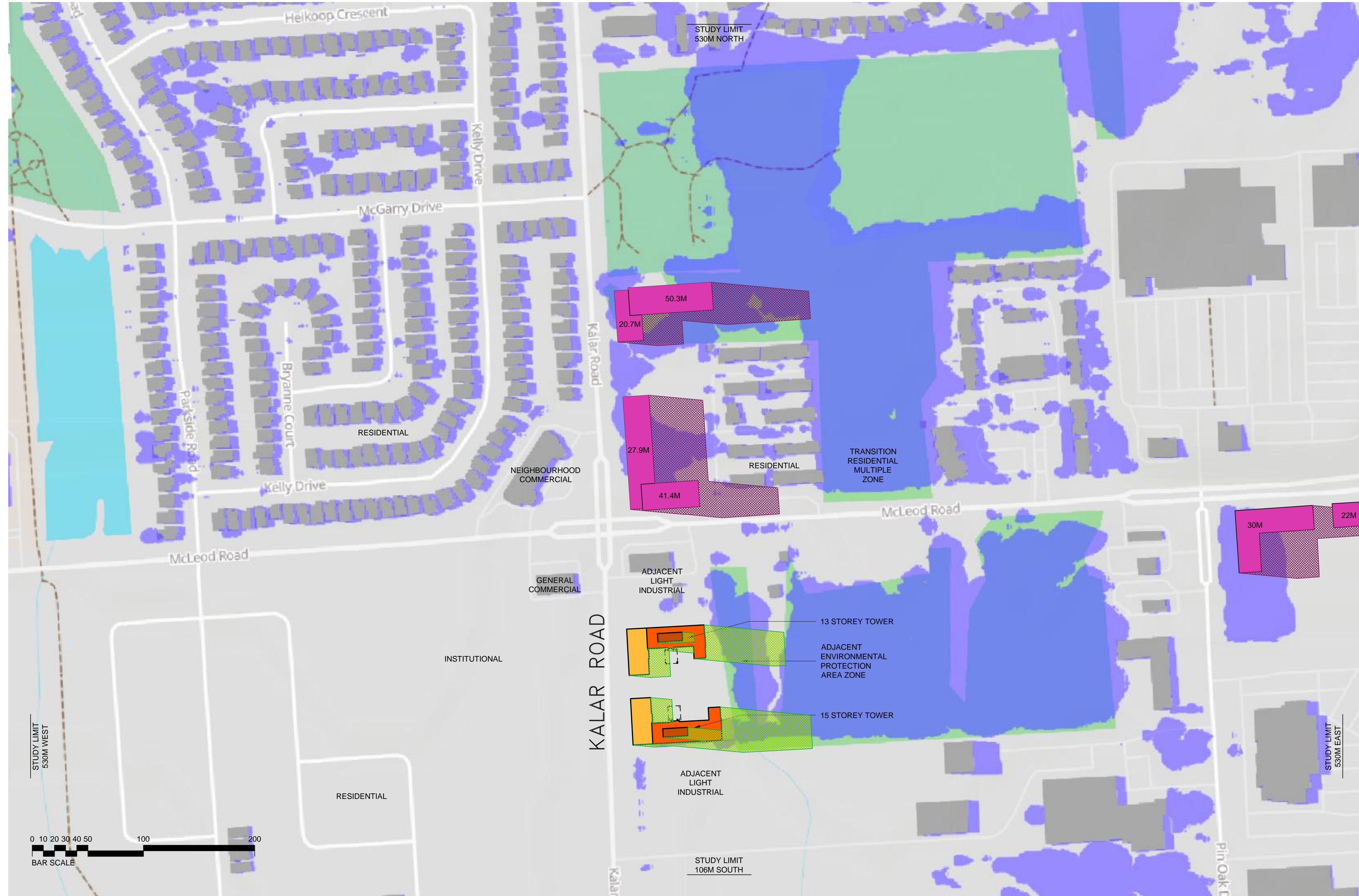
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-18**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

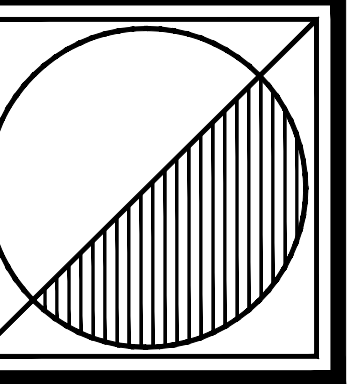
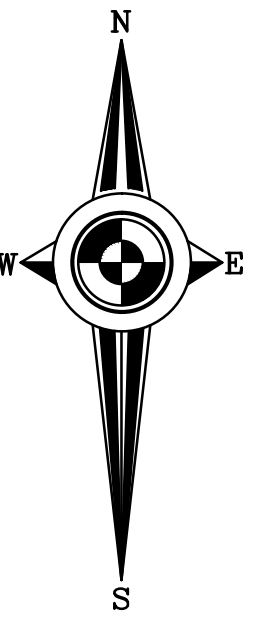
NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH**:	10.5 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**:	+ 61.5 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**:	+ 71.2 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**JUNE 21 at 6:00 PM**  
SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
SEPT. 21 at 10:00 AM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

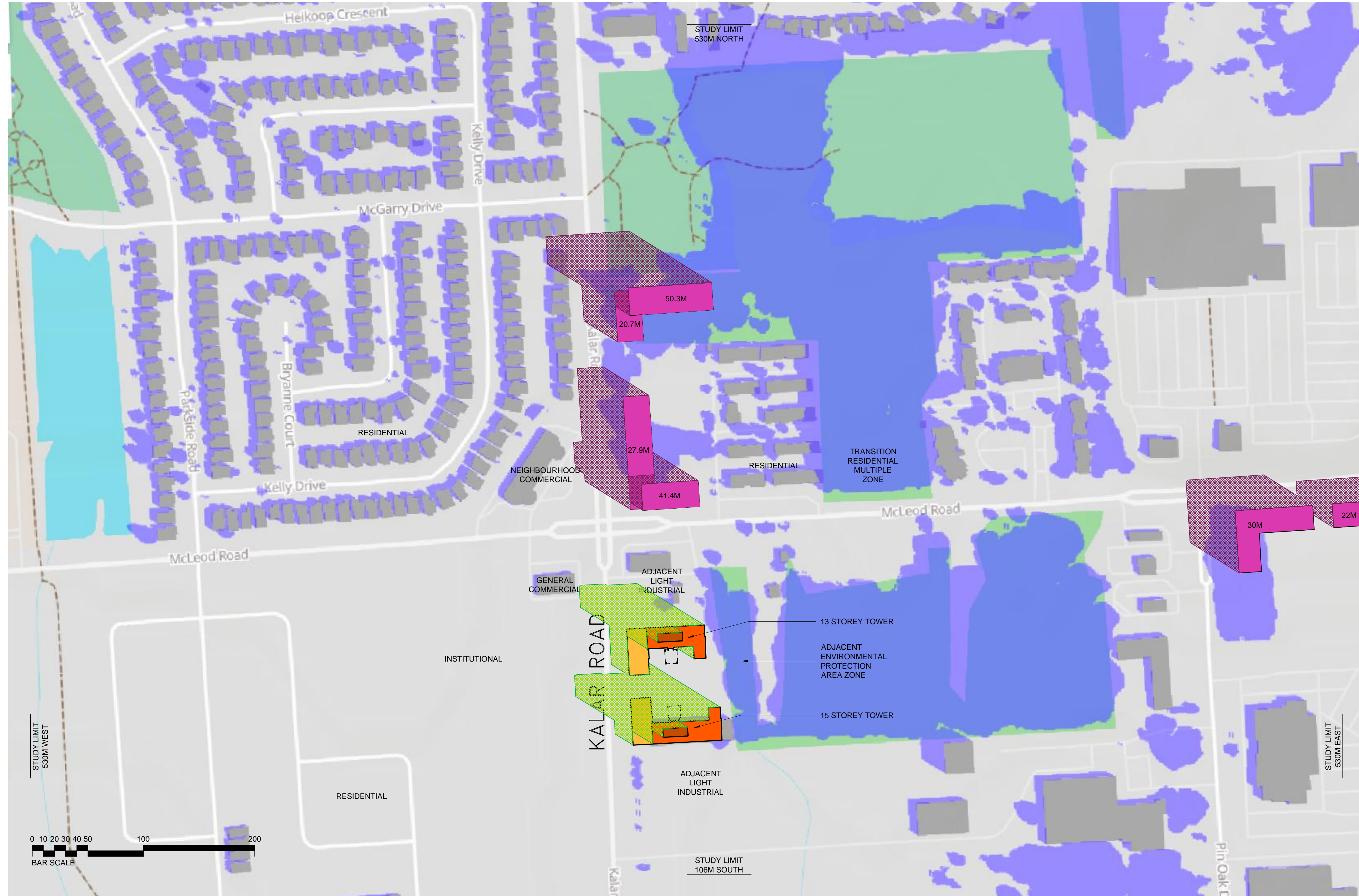
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-19**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

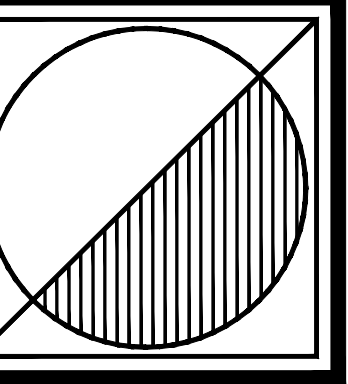
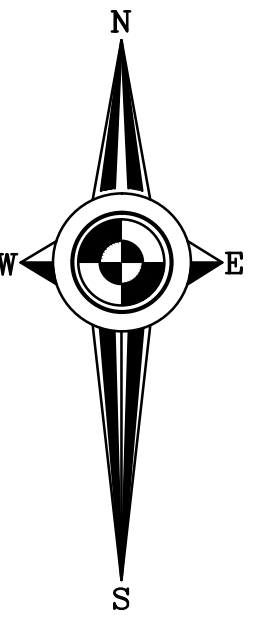
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	10.4 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 60.6 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 70.7 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**SEPT. 21 at 10:00 AM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

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Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
SEPT. 21 at 11:00 AM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

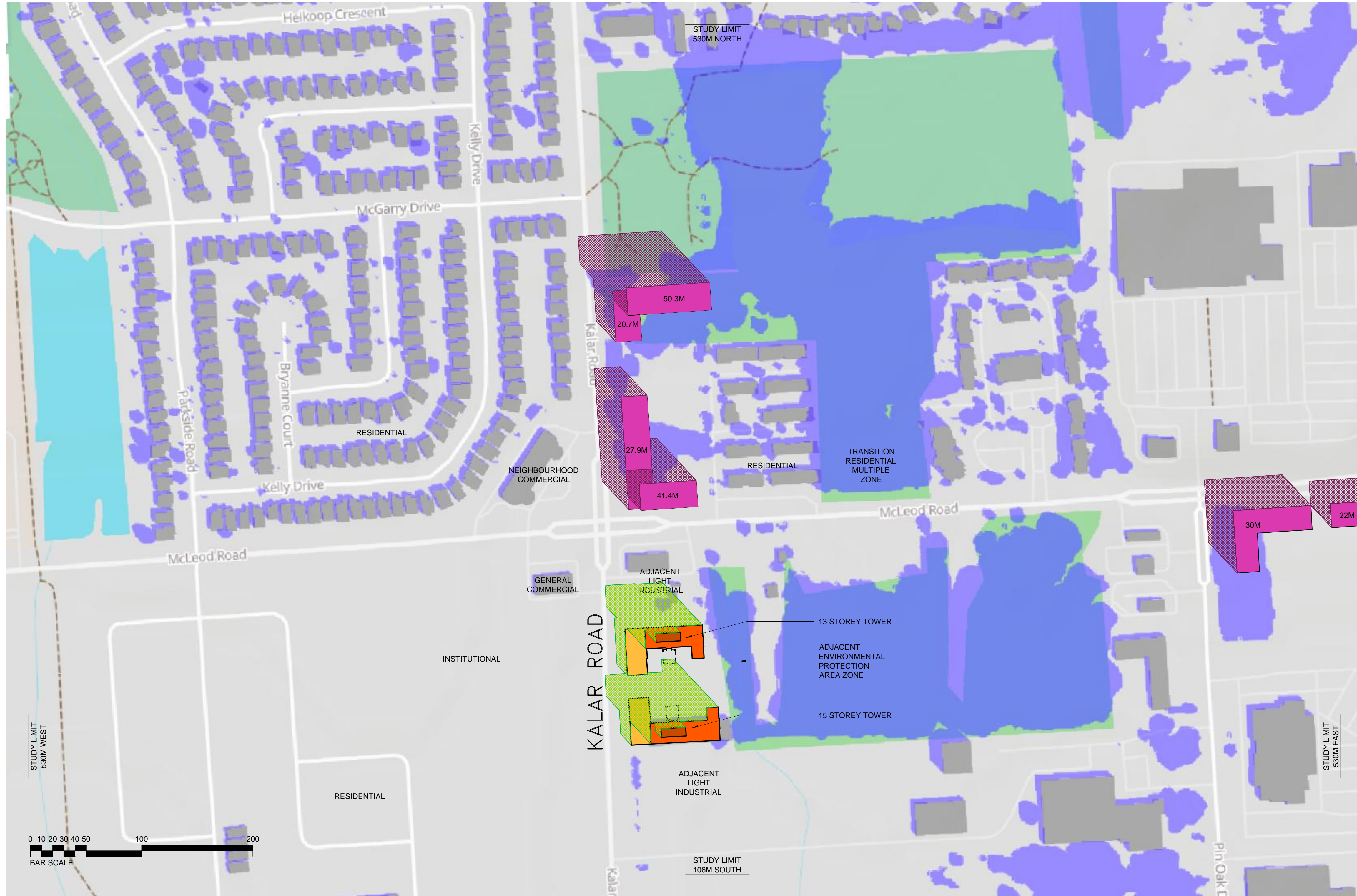
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-20**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

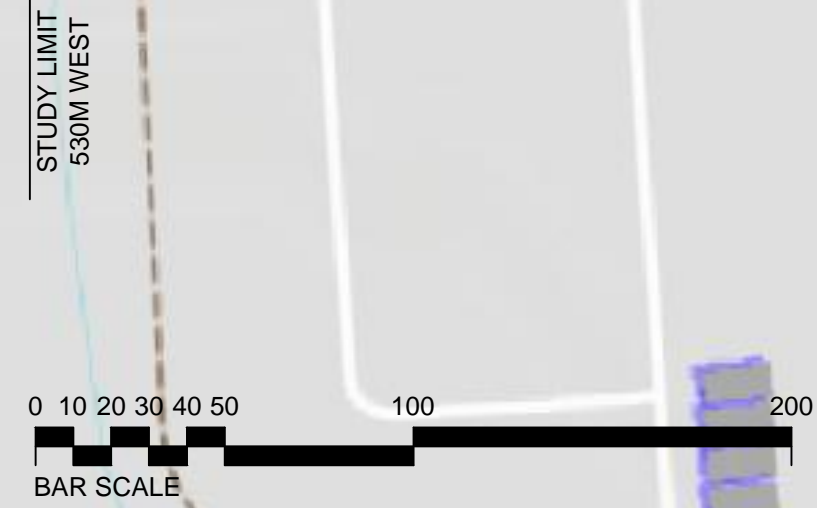
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

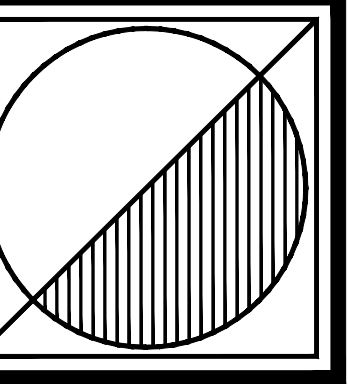
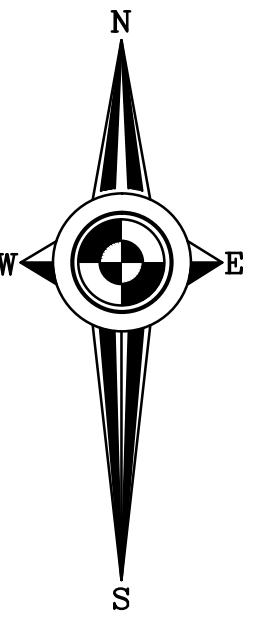
CURRENT BUILDING SHADOW LENGTH*	7.6 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 44.4 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 51.4 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**SEPT. 21 at 11:00 AM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

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Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
SEPT. 21 at 12:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

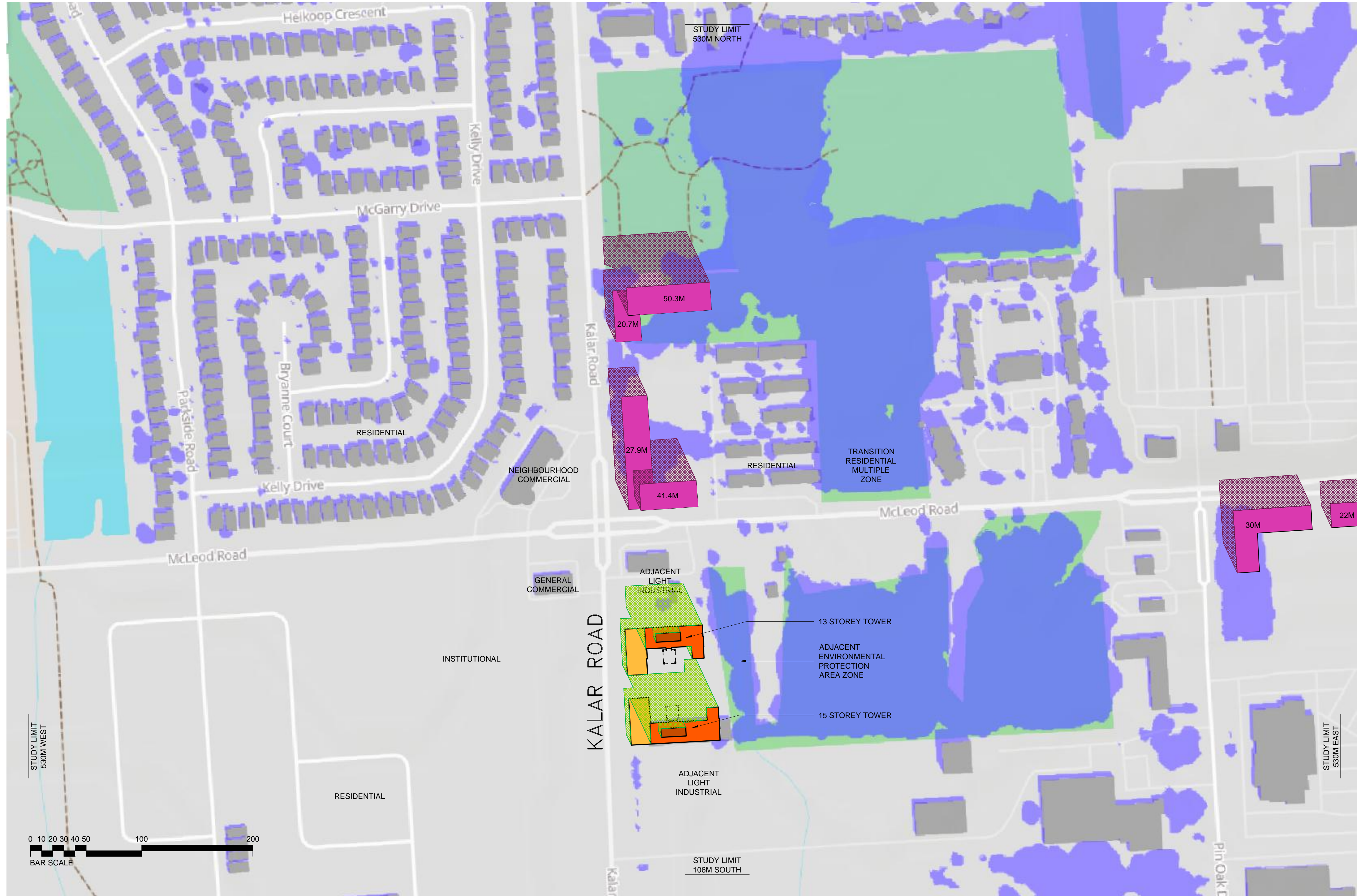
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-21**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	6.0 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**:	+ 35.5 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**:	+ 41.1 m

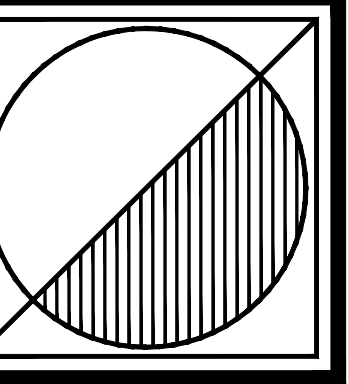
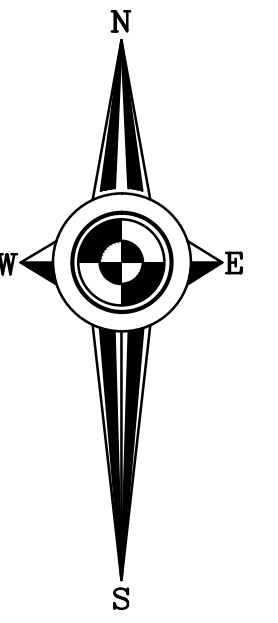
\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**SEPT. 21 at 12:00 PM**

SCALE: 1:2000







**Peter J. Lesdow**  
a r c h i t e c t

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Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
SEPT. 21 at 3:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

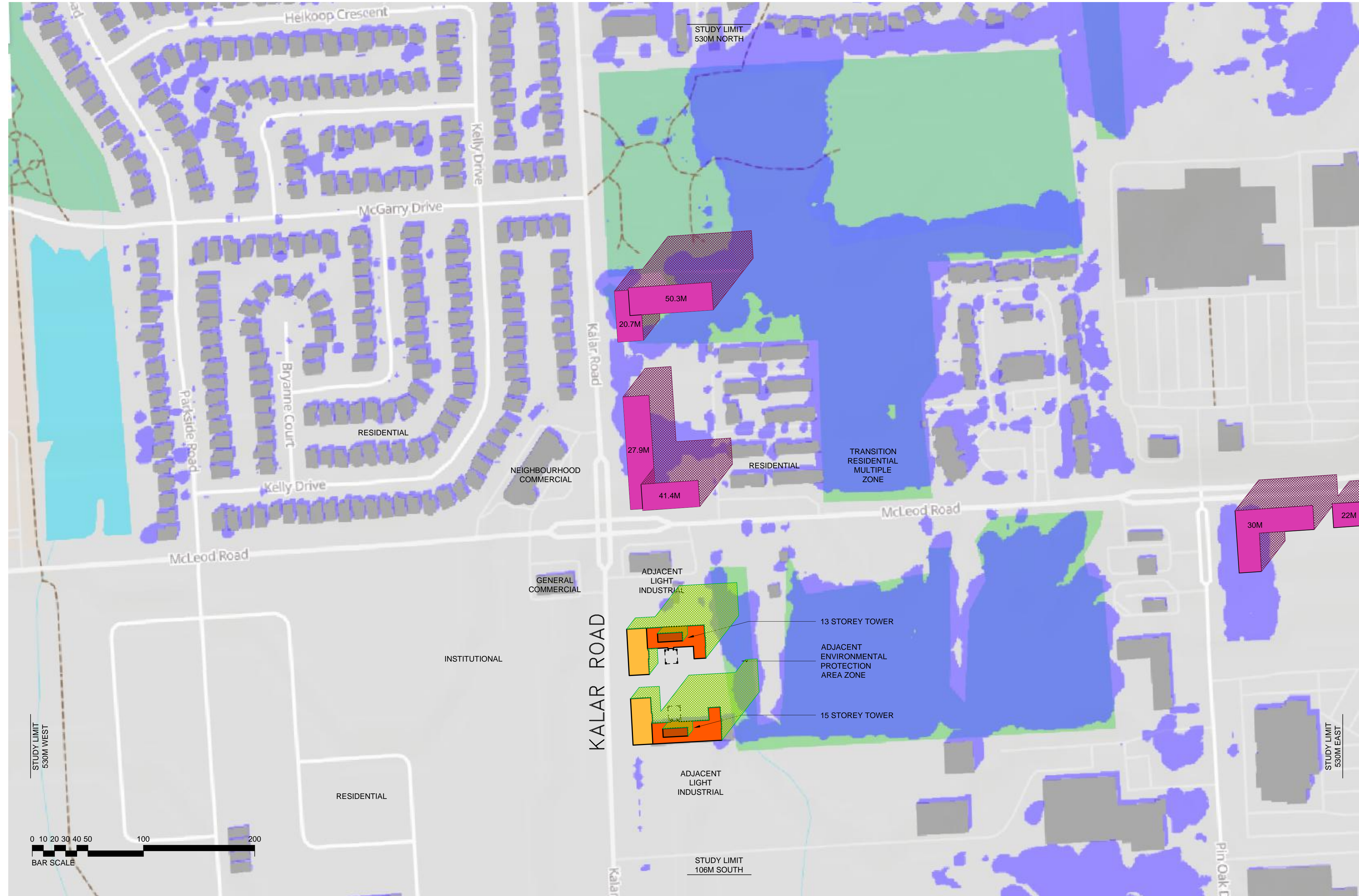
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-24**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

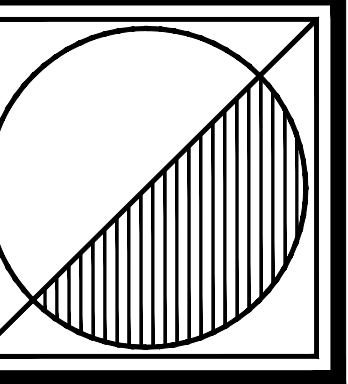
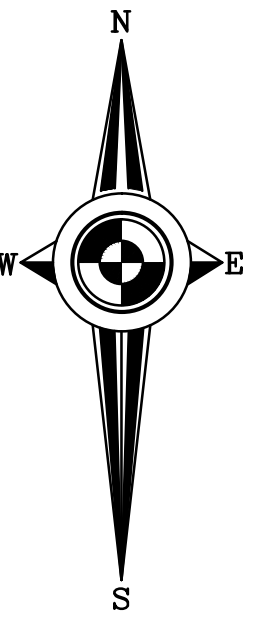
CURRENT BUILDING SHADOW LENGTH*	7.0 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 41.1 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 47.6 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**SEPT. 21 at 3:00 PM**

SCALE: 1:2000





**Peter J. Lesdow**  
a r c h i t e c t

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**SHADOW STUDY**  
SEPT. 21 at 4:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

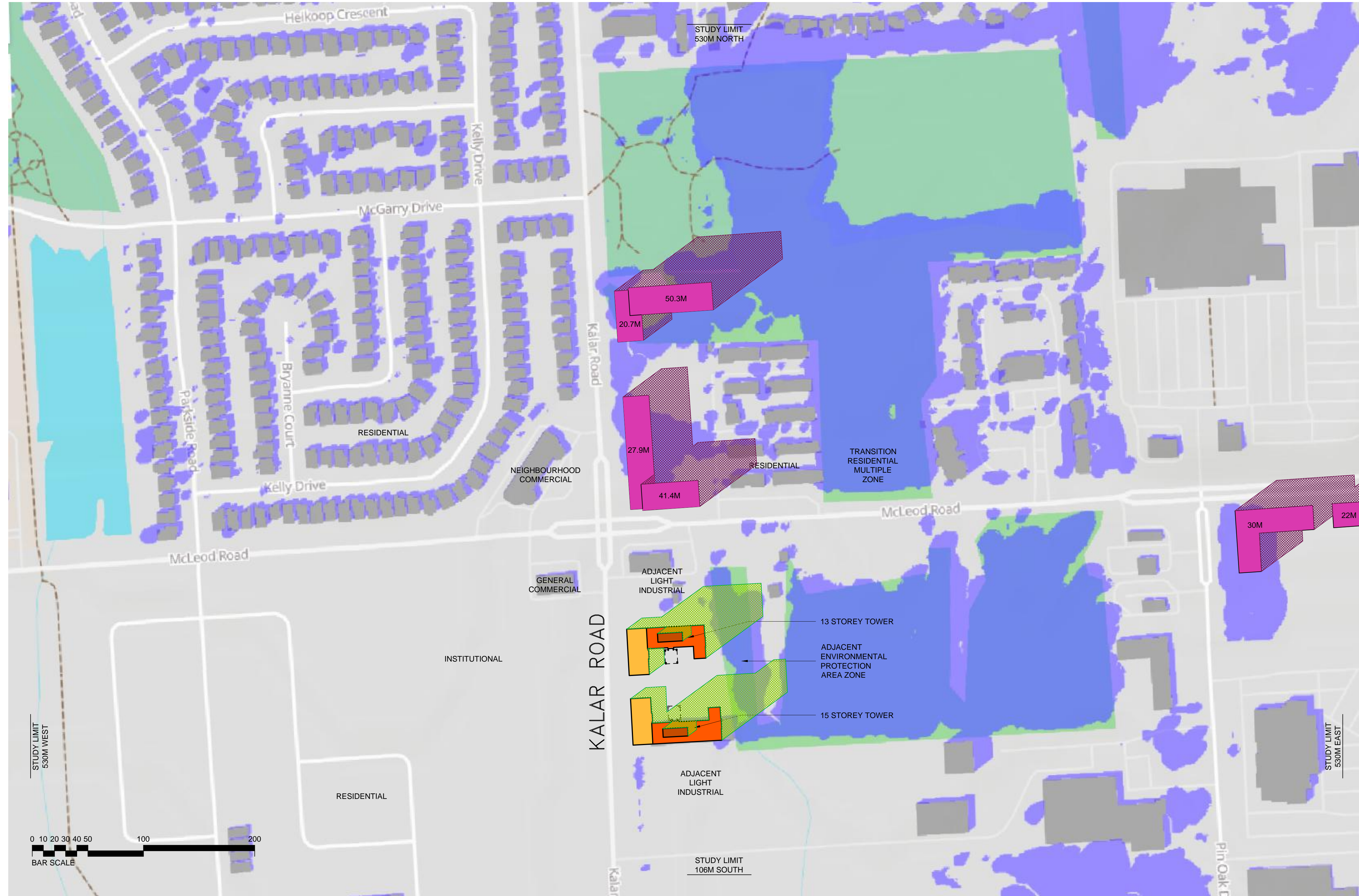
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-25**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

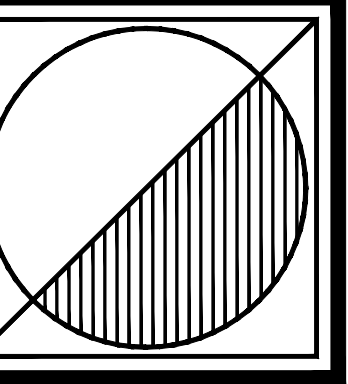
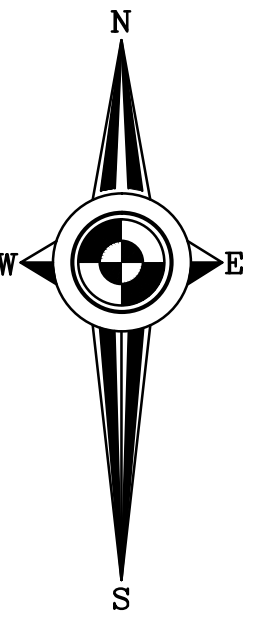
CURRENT BUILDING SHADOW LENGTH*	9.2 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 54.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 62.8 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**SEPT. 21 at 4:00 PM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
SEPT. 21 at 5:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

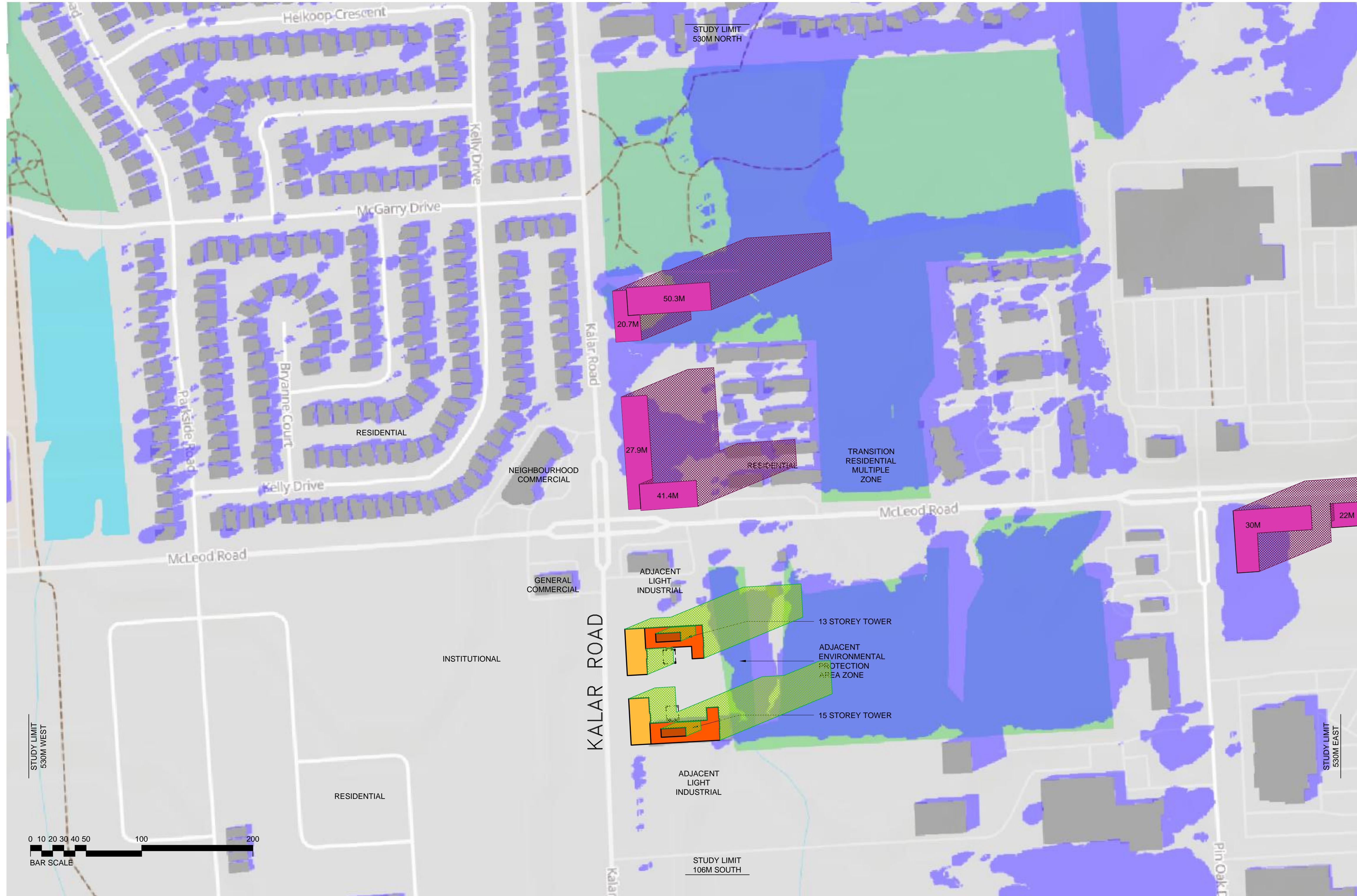
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-26**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

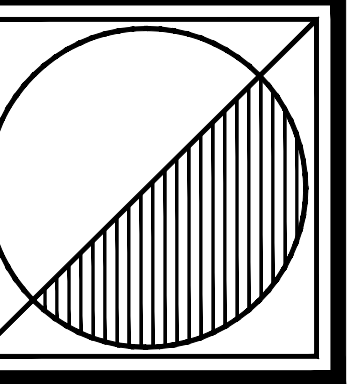
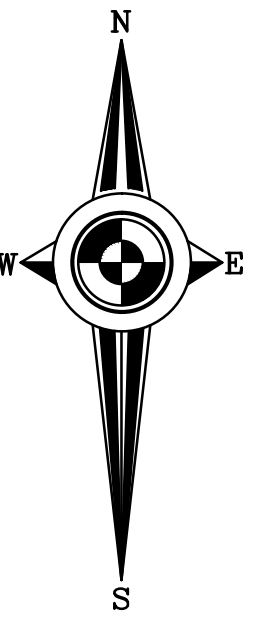
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	14.0 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 82.2 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 95.1 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**SEPT. 21 at 5:00 PM**  
SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

4465 Durand Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.337.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
SEPT. 21 at 6:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

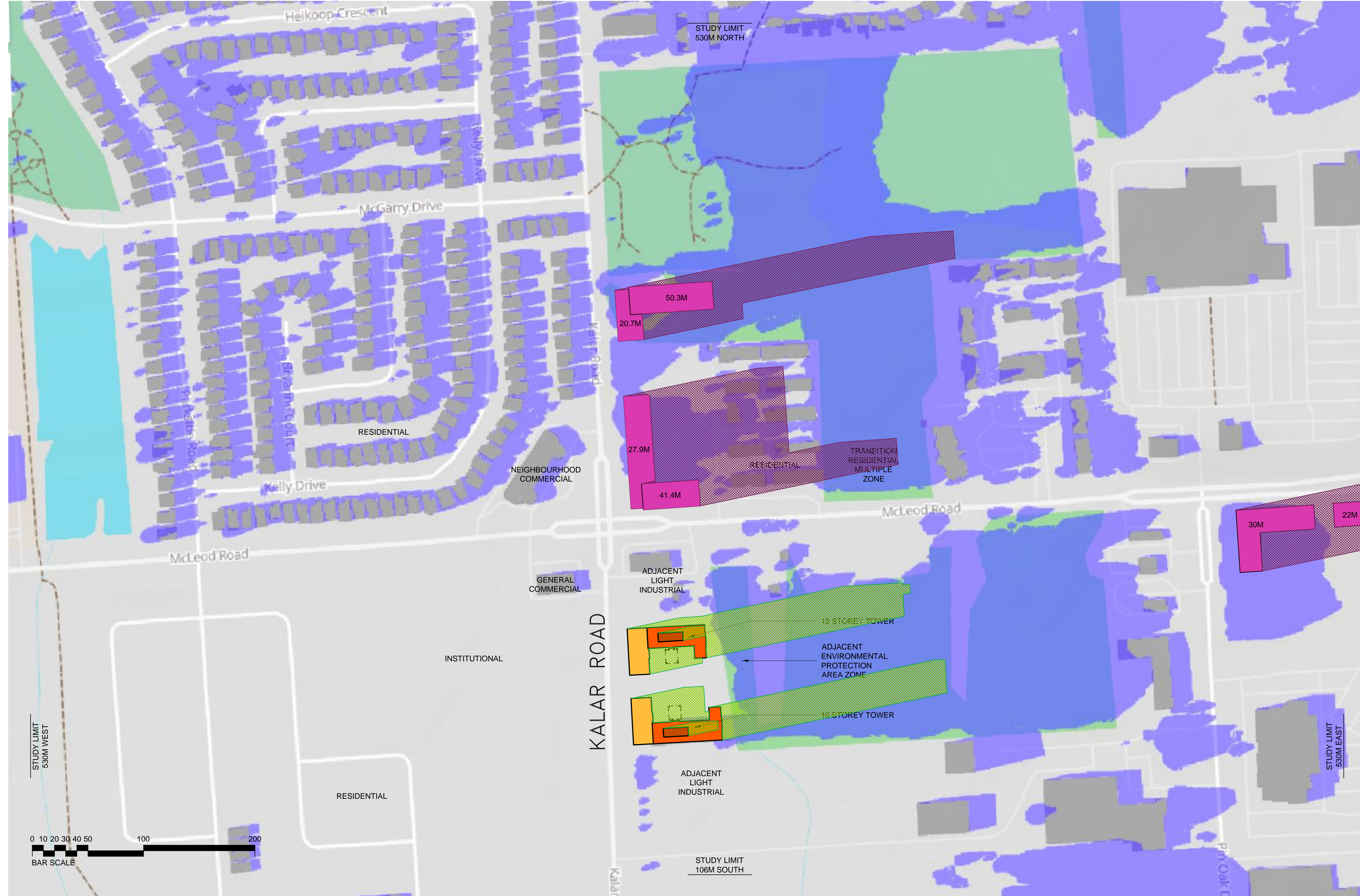
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: P.JL

23 - 05

**SH-27**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	26.4 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 155.2 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 179.6 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**SEPT. 21 at 6:00 PM**

SCALE: 1:2000

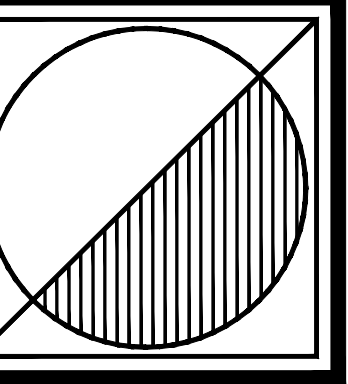
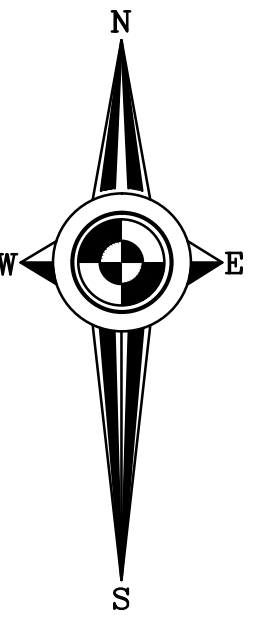


STUDY LIMIT  
530M WEST

STUDY LIMIT  
530M NORTH

STUDY LIMIT  
106M SOUTH

STUDY LIMIT  
530M EAST



**Peter J. Lesdow**  
a r c h i t e c t

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**SHADOW STUDY**  
DEC. 21 at 10:00 AM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

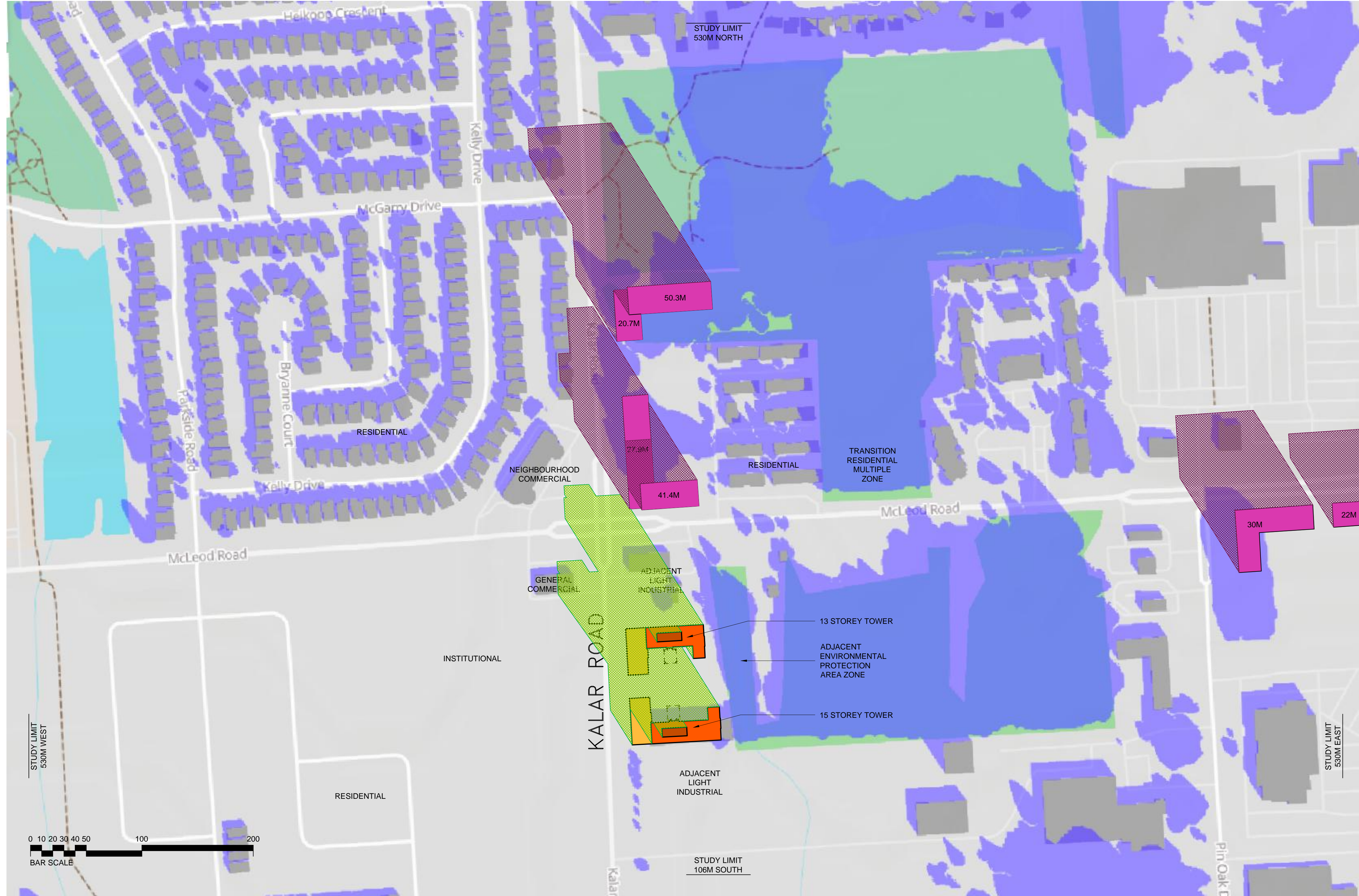
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-28**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG  
7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

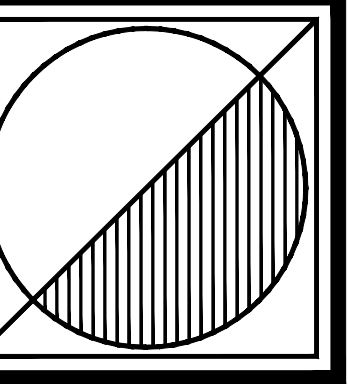
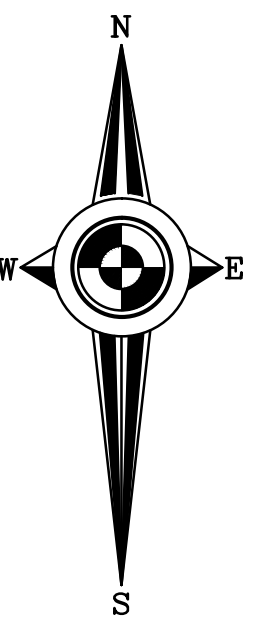
NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	20.0 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	P+ 138.2 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	P+ 157.1 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

**DEC. 21 at 10:00 AM**  
SCALE: 1:2000



**Peter J. Lesdow**  
architect

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
DEC. 21 at 11:00 AM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

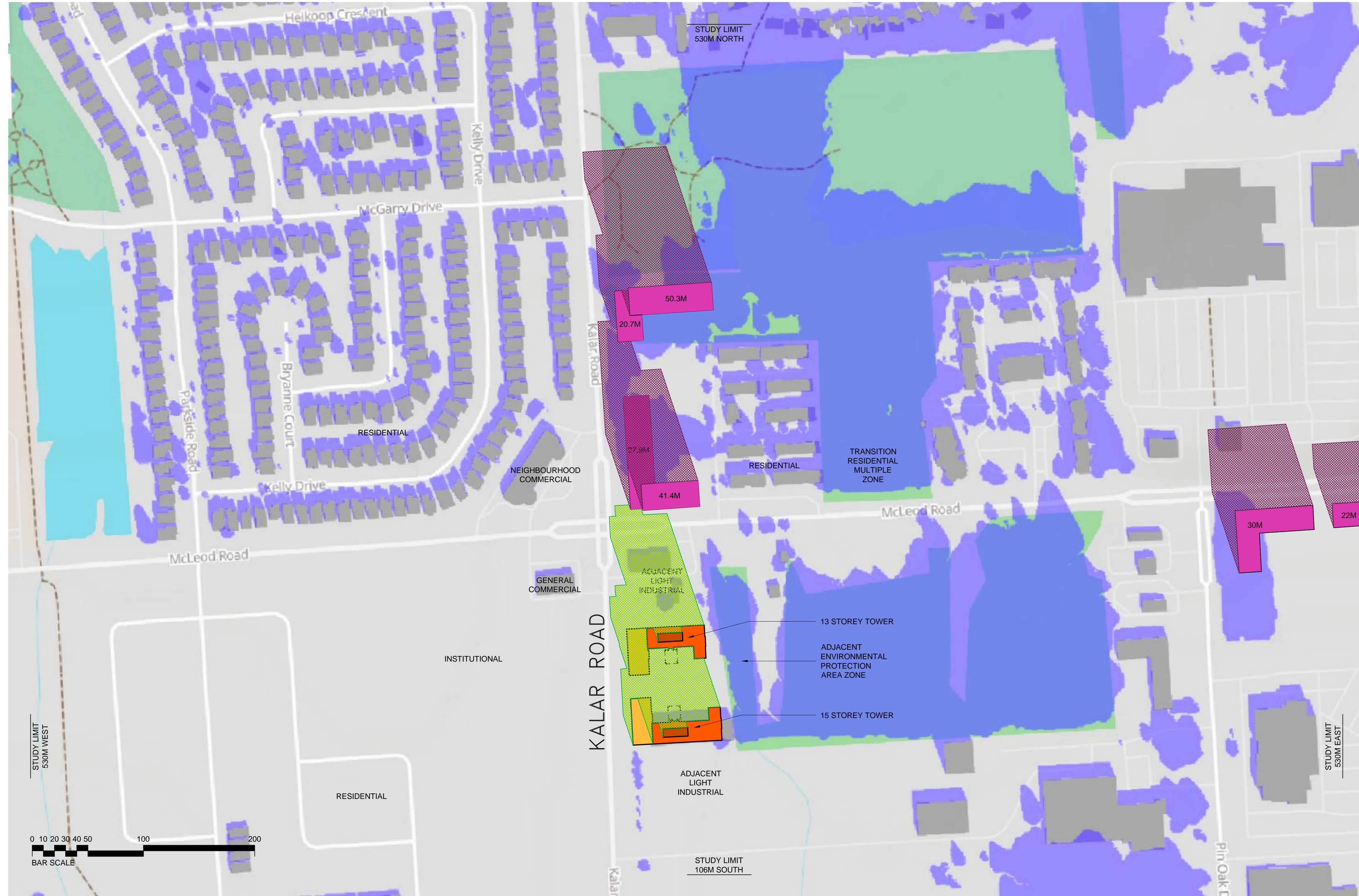
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-29**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

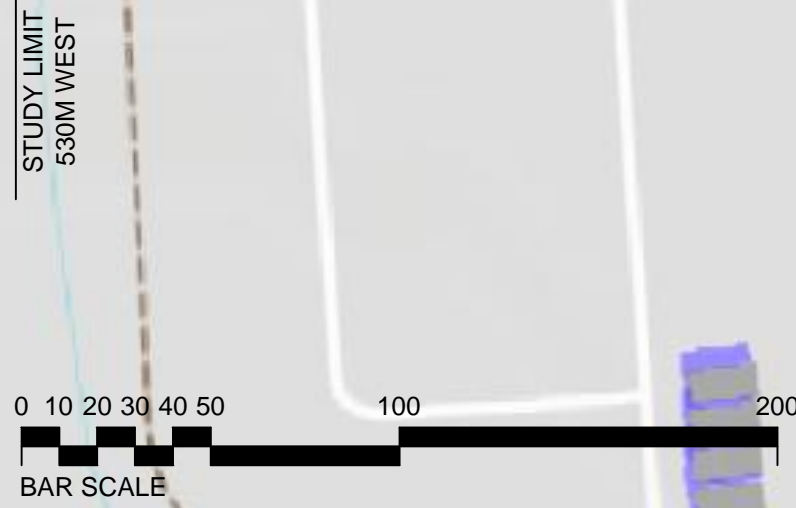
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

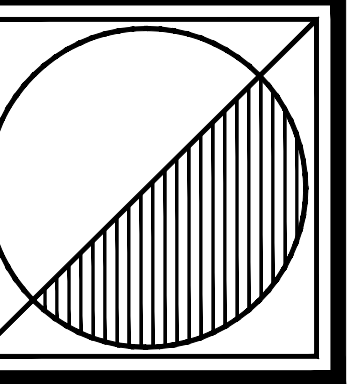
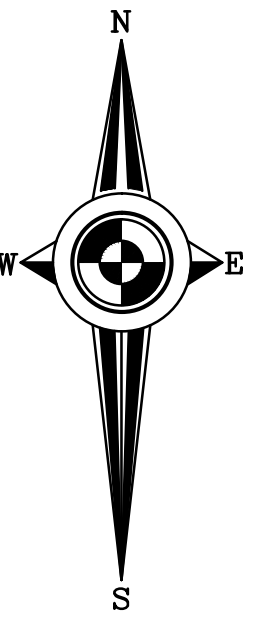
CURRENT BUILDING SHADOW LENGTH*	15.4 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	+ 105.9 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	+ 120.4 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**DEC. 21 at 11:00 AM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

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Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
DEC. 21 at 12:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

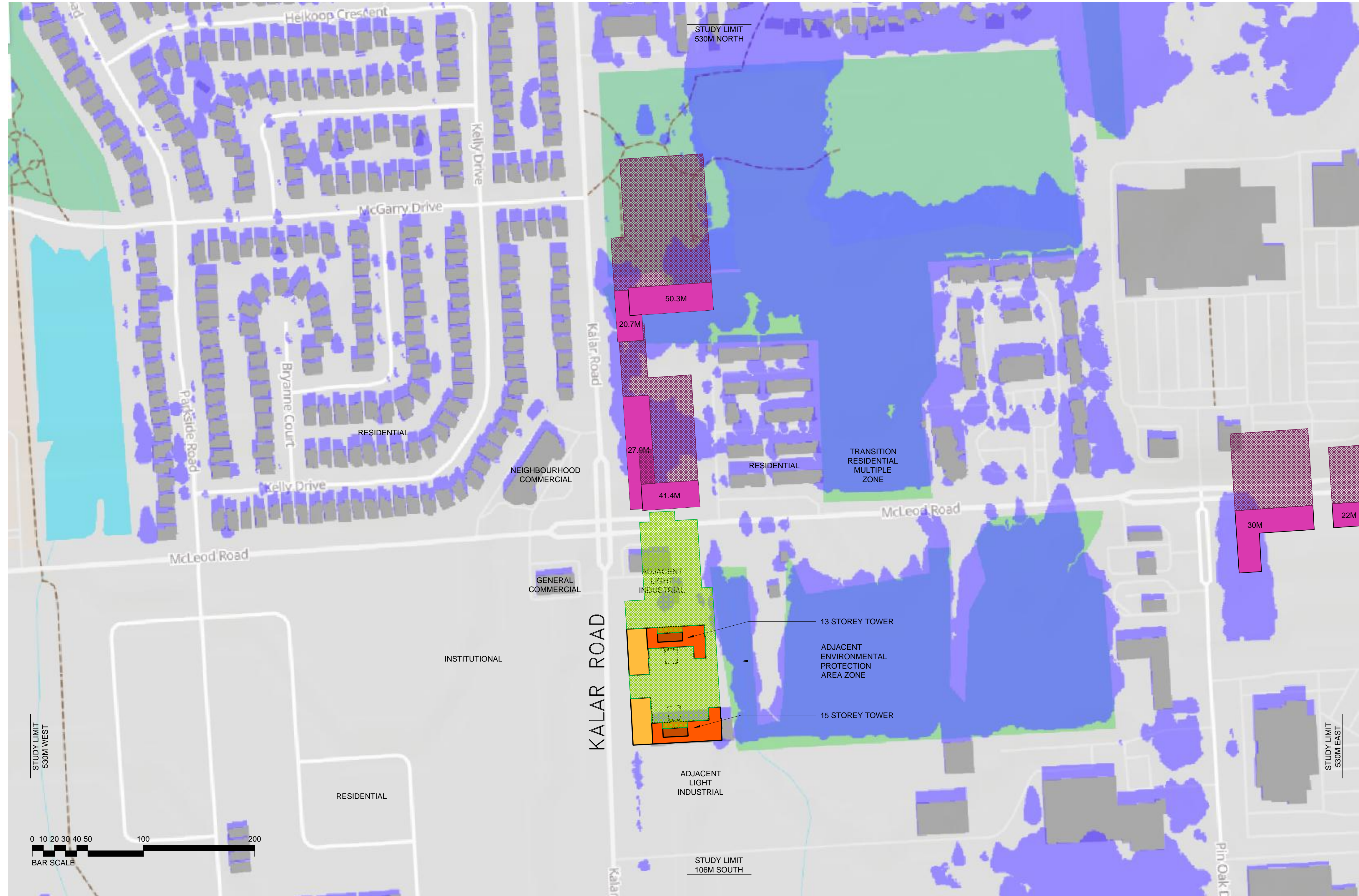
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-30**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

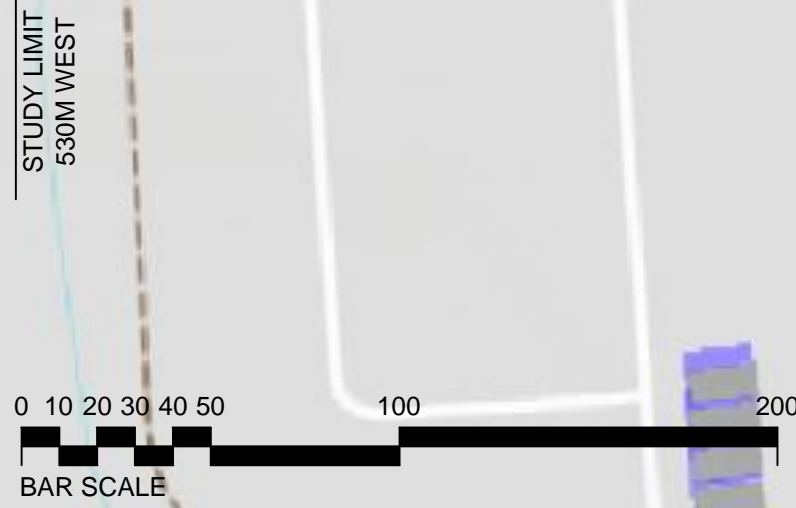
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

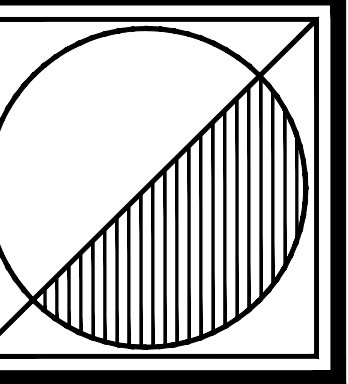
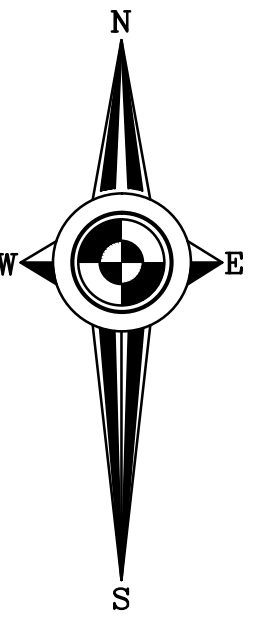
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH**:	13.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**:	P+ 95.4 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**:	P+ 108.4 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**DEC. 21 at 12:00 PM**  
SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

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Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
DEC. 21 at 1:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

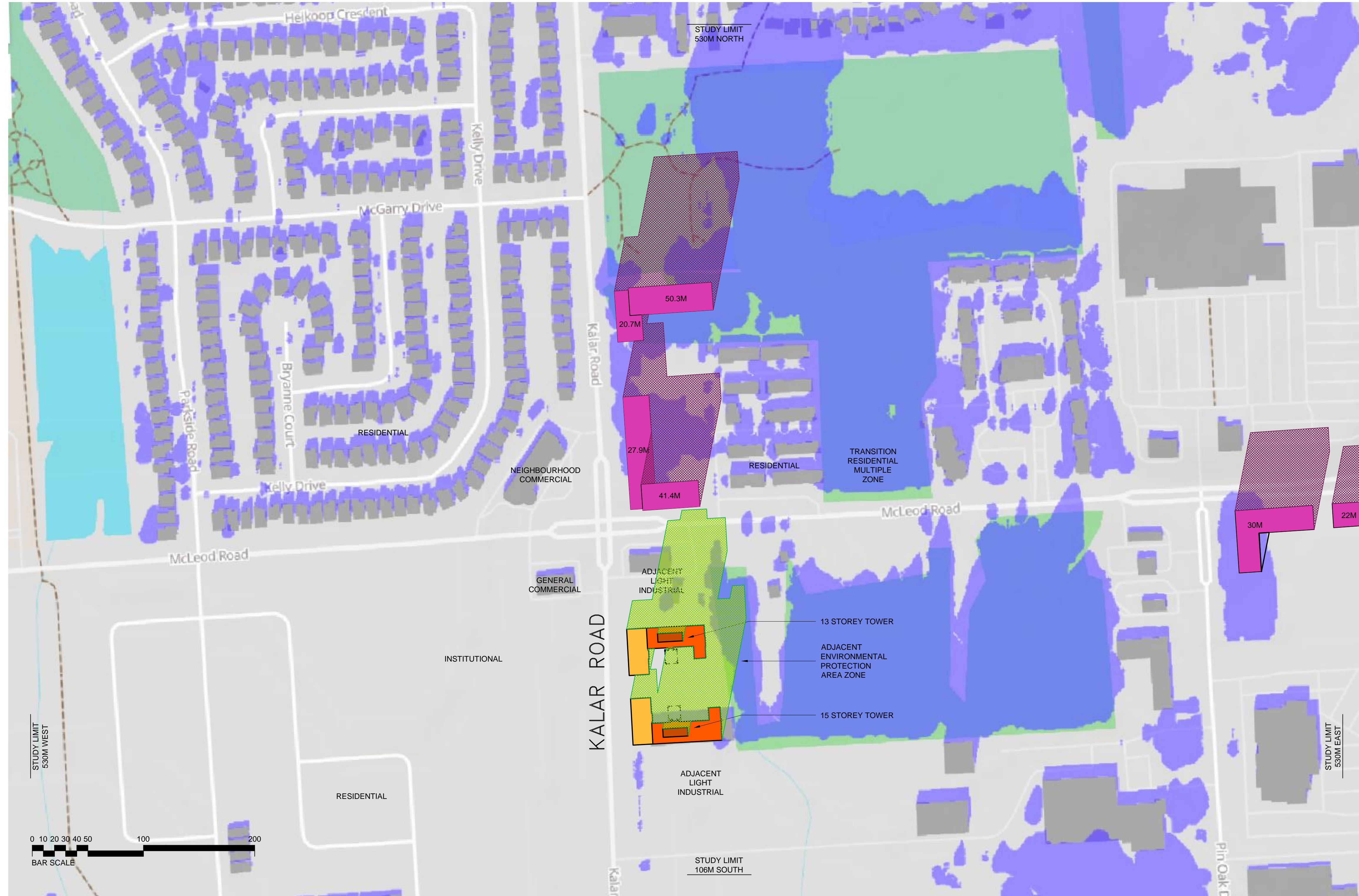
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-31**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	14.3 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	P+ 98.7 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	P+ 112.2 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M

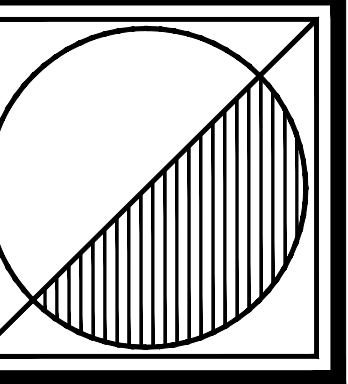
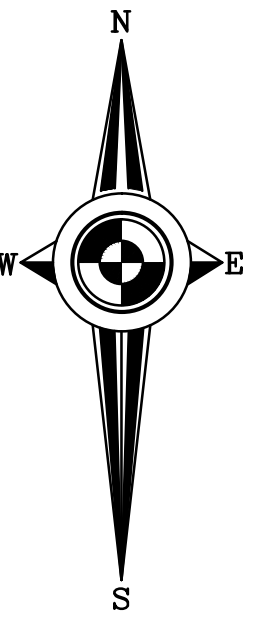


**DEC. 21 at 1:00 PM**

SCALE: 1:2000







**Peter J. Lesdow**  
a r c h i t e c t

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
DEC. 21 at 3:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/OPA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/OPA COMMENTS

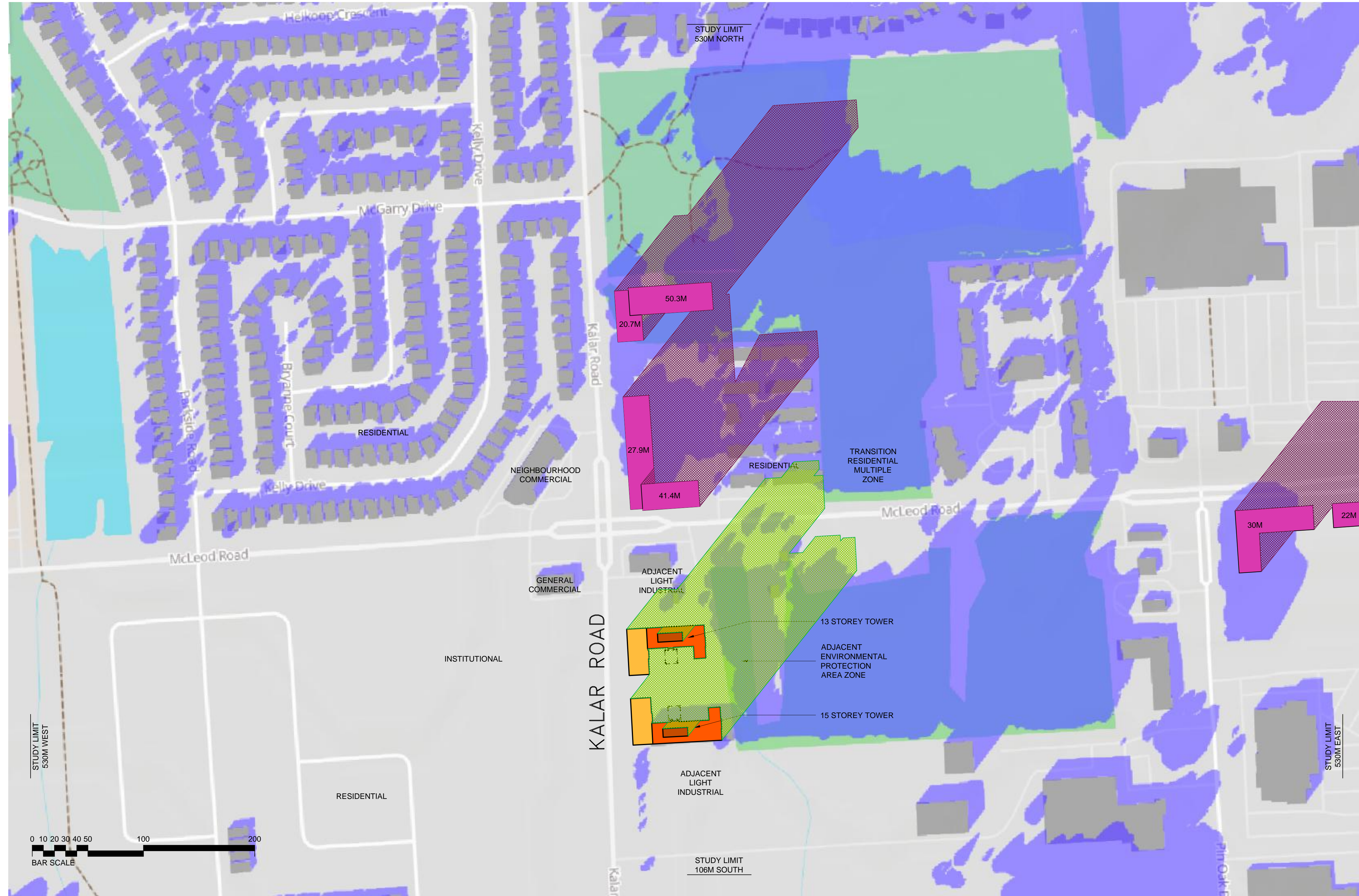
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-33**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

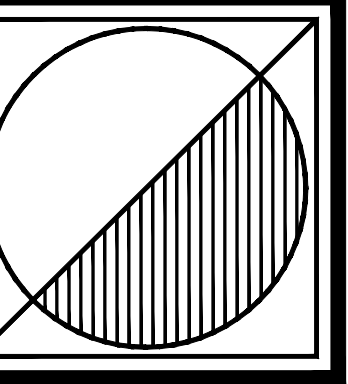
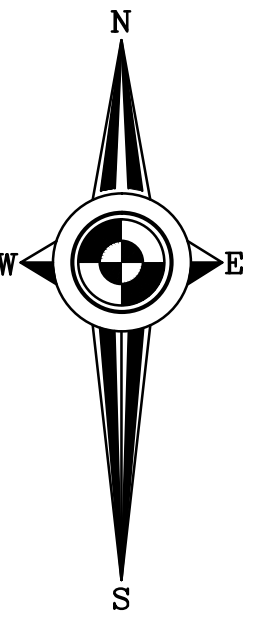
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH\*: 25.0 m  
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS\*\*: P+ 172.2 m  
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS\*\*: P+ 195.8 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M 15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M 15 STOREYS: 53.0 M



**DEC. 21 at 3:00 PM**  
SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

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Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
DEC. 21 at 4:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/OPA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/OPA COMMENTS

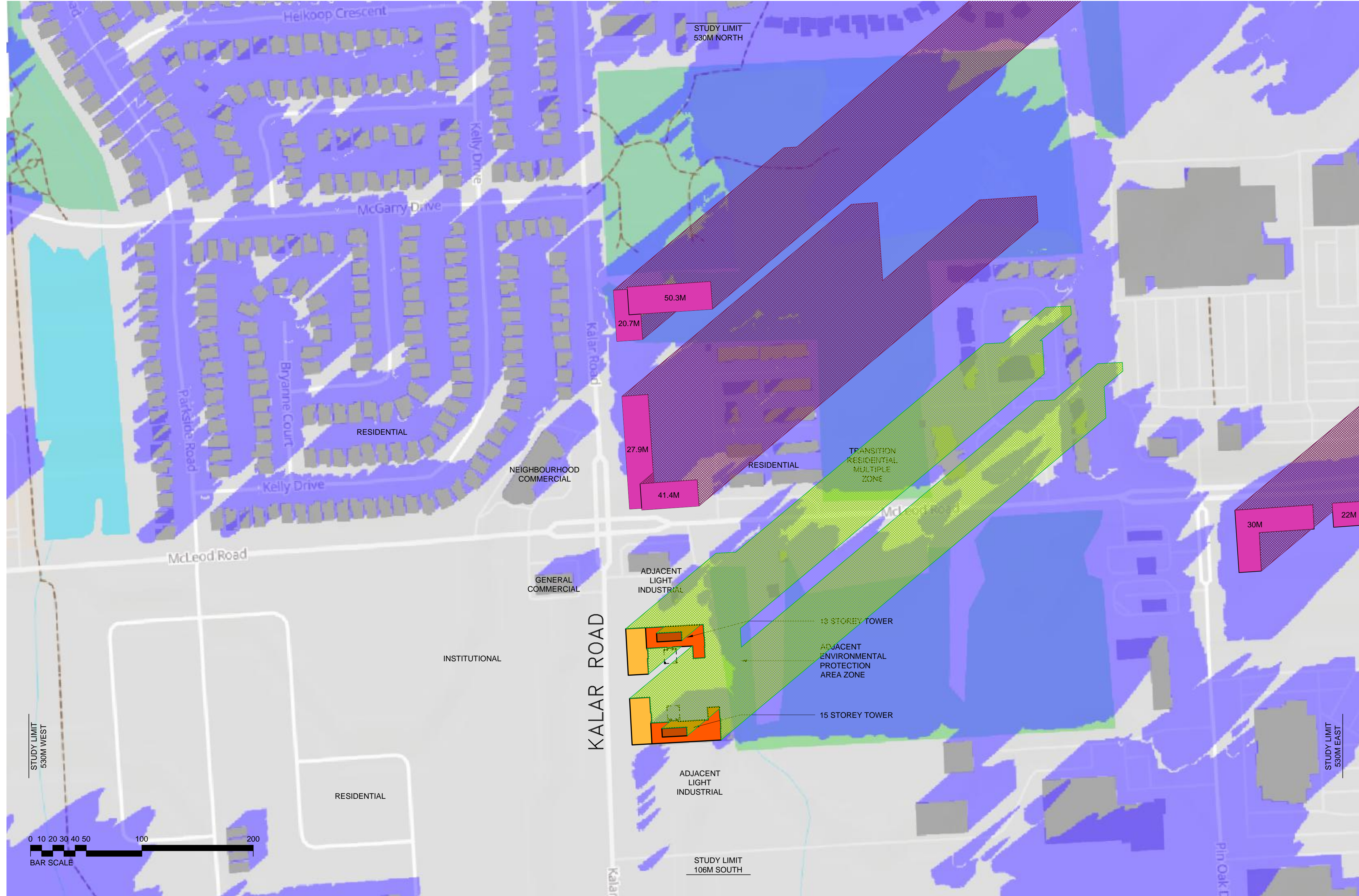
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-34**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

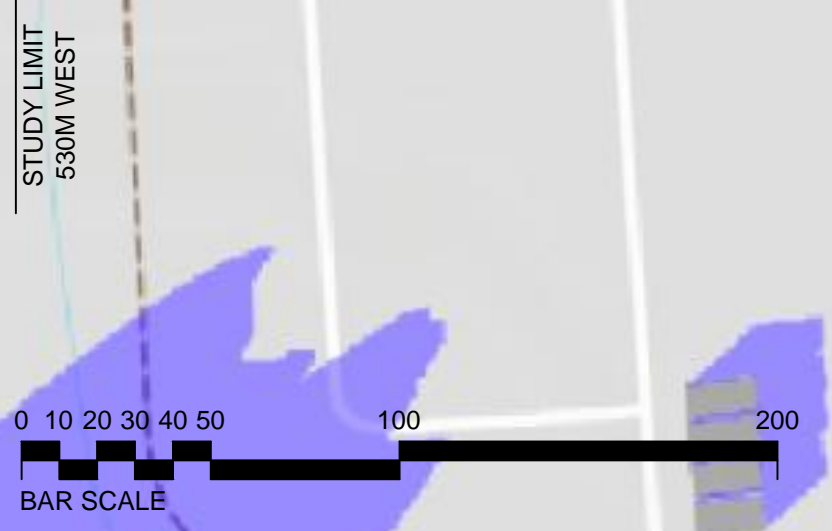
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

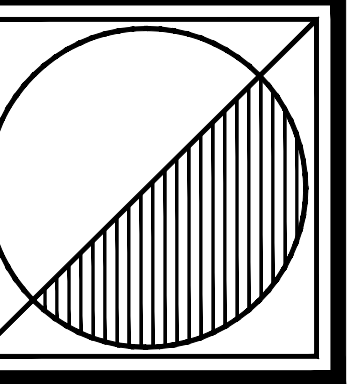
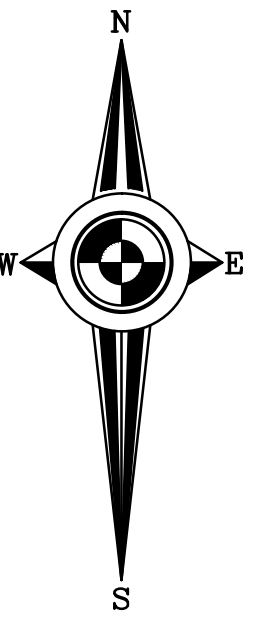
**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH*	57.8 m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**	P+ 398.1 m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**	P+ 452.5 m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\* FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**DEC. 21 at 4:00 PM**  
SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
DEC. 21 at 5:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA/ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA/ZBA COMMENTS

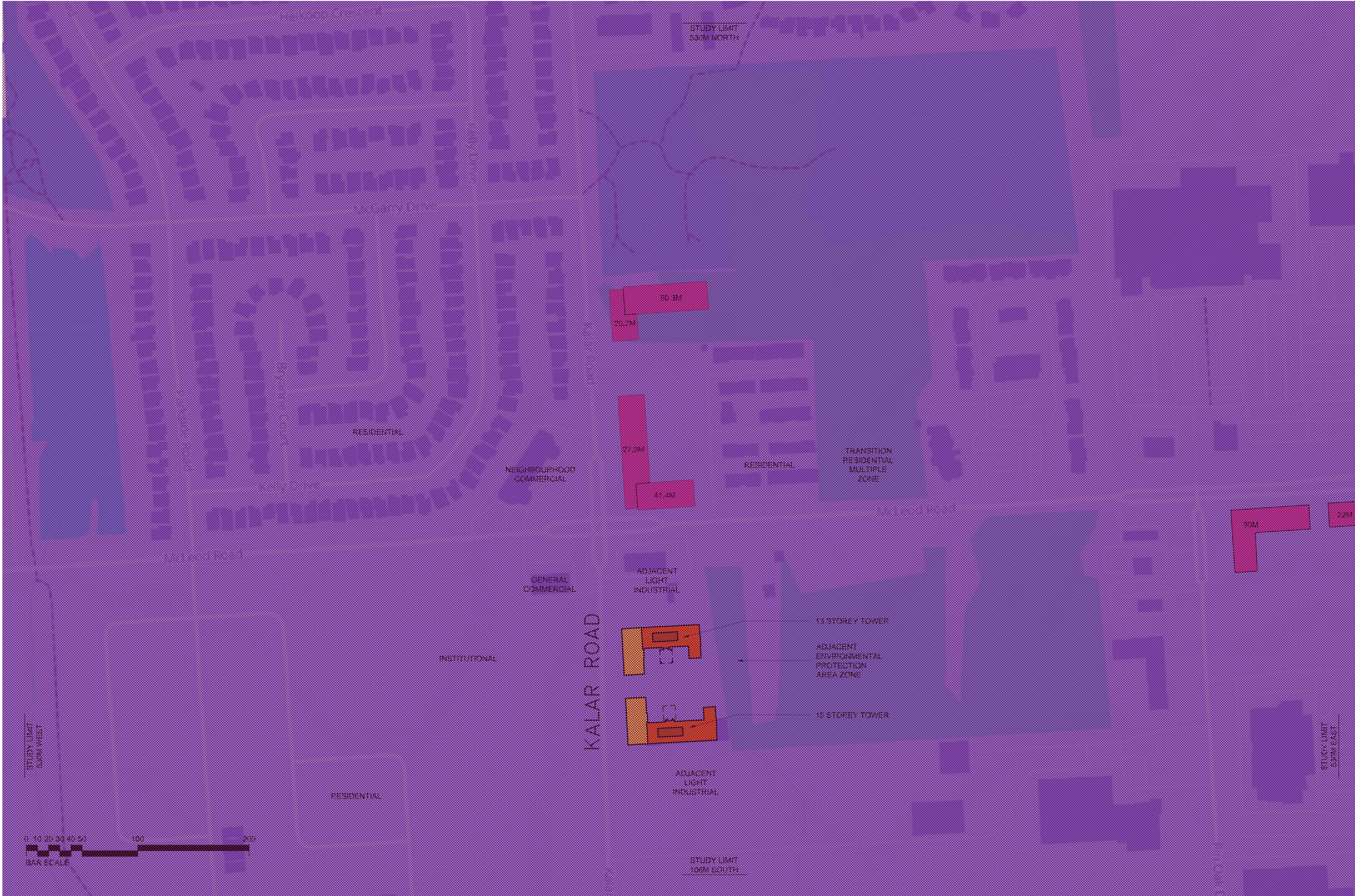
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-35**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

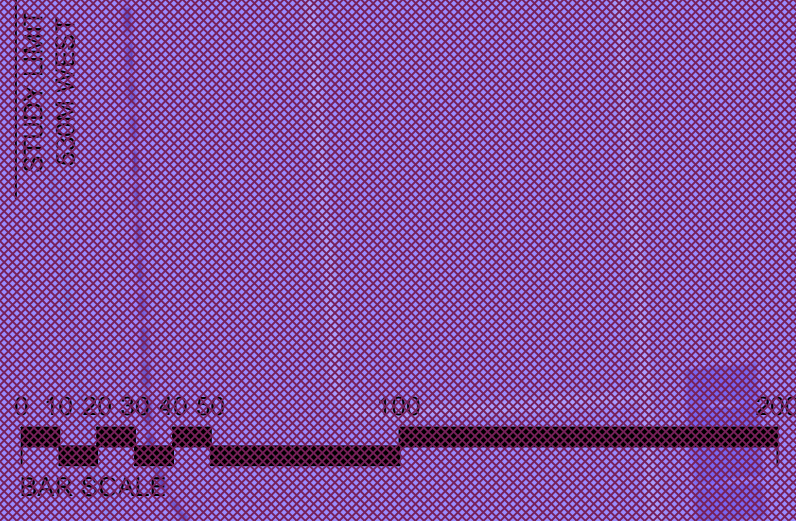
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

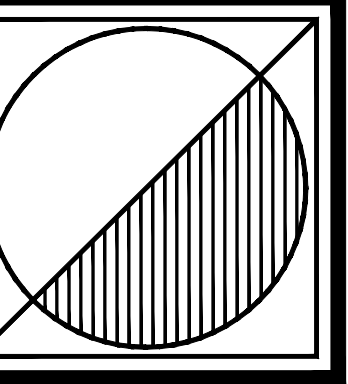
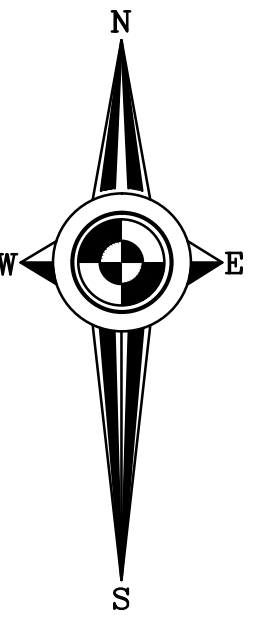
CURRENT BUILDING SHADOW LENGTH**:	N/A m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**:	N/A m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**:	N/A m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\*FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**DEC. 21 at 5:00 PM**

SCALE: 1:2000



**Peter J. Lesdow**  
a r c h i t e c t

4465 Drummond Road, Unit 11 at Niagara Falls, Ontario L2E 6Z5  
Telephone: 905.357.1112 email: peter@pjlarchitect.com



**SHADOW STUDY**  
DEC. 21 at 6:00 PM

DATE	REVISIONS
Apr. 08 / 23	PRE-CONSULTATION APPLICATION
Feb. 27 / 24	FOR OPA / ZBA APPLICATION
Jul. 12 / 24	TO ADDRESS CITY OPA / ZBA COMMENTS

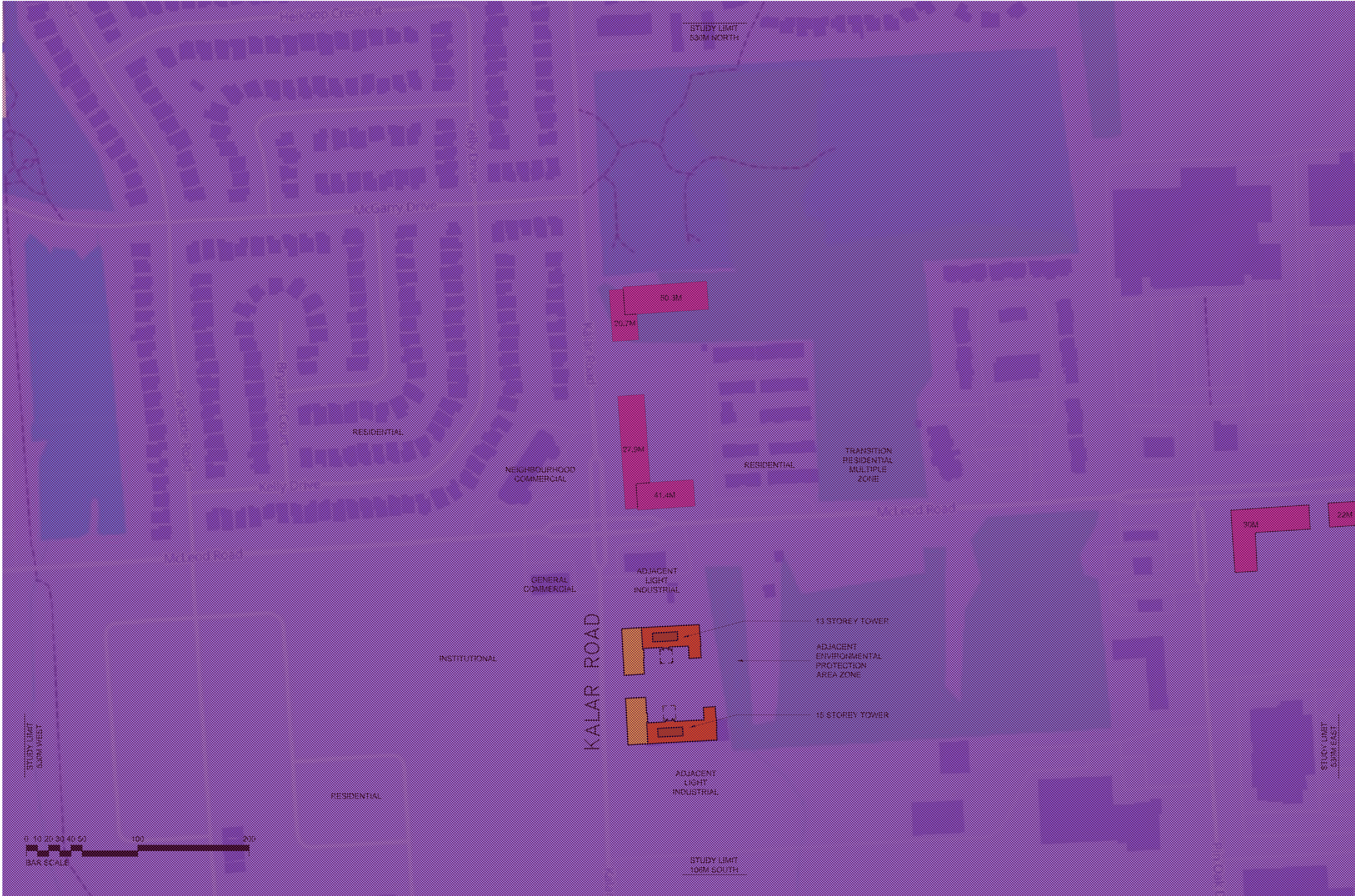
**KALAR APARTMENTS**

7302 Kalar Road  
Niagara Falls, ON

DATE: Jul. 25/24  
SCALE: AS NOTED  
DRAWN BY: MRW  
CHECK BY: PJL

23 - 05

**SH-36**



- LEGEND**
- PROPOSED 13 OR 15 STOREY TOWER
  - PROPOSED MECHANICAL PENTHOUSE
  - PROPOSED 3-STOREY PODIUMS
  - PROPOSED SHADOW CONDITION
  - APPROVED AND UNBUILT BUILDINGS TO HEIGHTS NOTED
  - APPROVED AND UNBUILT BUILDING SHADOW
  - EXISTING BUILDINGS
  - EXISTING SHADOW

Existing shadow casts have been determined through the use of the 'https://ShadeMap.app' online software, Latitude 43.07064, Longitude -79.132607 set to date and time noted this page.

BEARING AND LENGTH OF PROPERTY BOUNDARY ALONG 7302 KALAR ROAD: N2°12'00"W, 123.81 M

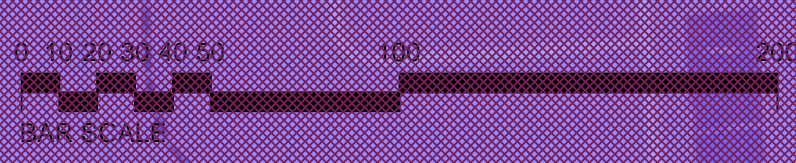
GEOGRAPHIC LOCATION:  
LATITUDE: 43° 04' 06.9" N  
LONGITUDE: 79° 08' 05.0" W

NOTE:  
THE 15 STOREY TOWER TO TOP OF MECHANICAL PENTHOUSE DEFINES THE STUDY COVERAGE AREA OF 10 x 53.0 M = 530 M TO EAST, WEST & NORTH OF PROPERTY, AND 2 x 53.0 M = 106 M TO SOUTH OF PROPERTY

**INCREMENTAL SHADOW COMPARISON**

CURRENT BUILDING SHADOW LENGTH**:	N/A m
ADDITIONAL BUILDING SHADOW LENGTH AT 13 STOREYS**:	N/A m
ADDITIONAL BUILDING SHADOW LENGTH AT 15 STOREYS**:	N/A m

\* FROM APPROXIMATE 6.0M HEIGHT  
\*\*FROM TOP OF MAIN BUILDING BODY AT:  
13 STOREYS: 41.25 M    15 STOREYS: 46.80 M  
OR FROM TOP OF PENTHOUSE IF APPLICABLE, NOTED AS 'P'  
13 STOREYS: 47.35 M    15 STOREYS: 53.0 M



**DEC. 21 at 6:00 PM**

SCALE: 1:2000