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DATE: October 5, 2021

SUBJECT: Traffic Impact Statement  
Proposed Residential Development  
Aurora, Illinois

This memorandum summarizes the results and findings of a traffic evaluation conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed redevelopment of the former Abraham Lincoln Elementary School located at 631/641 S. Lake Street in Aurora, Illinois. The development site will be located on the west side of Lake Street between Ridgeway Avenue and 3<sup>rd</sup> Street. As proposed, the site will be redeveloped with 36 work-force units and 73 parking spaces. Access will be provided on Lake Street and Woodlawn Avenue. **Figure 1** shows an aerial view of the site location.

The purpose of this evaluation is to determine the trip and parking generation characteristics of the proposed residential development and determine the adequacy of the proposed parking supply in accommodating the projected parking demand.

### Existing Traffic Conditions

The following provides a detailed description of the physical characteristics of the roadway system including geometry and traffic control, adjacent land uses, and average daily traffic volumes along the area roadways.

*Lake Street (IL 31)* is a northeast-southwest minor arterial that generally provides one lane in each direction divided by a painted median in the vicinity of the site. At its unsignalized intersection with Ridgeway Avenue, Lake Street provides a combined through/left-turn lane on the northeast-bound approach and a combined through/right-turn lane on the southwest-bound approach. At its unsignalized intersection with 3<sup>rd</sup> Street, Lake Street provides an exclusive left-turn lane and a through lane on the northeast-bound approach and a combined through/right-turn lane on the southwest-bound approach. Lake Street is under the jurisdiction of the Illinois Department of Transportation (IDOT), is not classified as a Strategic Regional Arterial (SRA) and carries an Annual Average Daily Traffic (AADT) volume of approximately 15,400 vehicles (IDOT 2019). Lake Street has a posted speed limit of 30 miles per hour.



**Aerial View of Site**

**Figure 1**

*Woodlawn Avenue* is a northeast-southwest minor arterial that generally provides one lane in each direction in the vicinity of the site. At its unsignalized intersection with Ridgeway Avenue, Woodlawn Avenue provides a combined left-turn/right-turn lane on the westbound approach. A standard crosswalk is provided on the east leg of this intersection. At its all-way stop-sign controlled intersection with 3<sup>rd</sup> Street, Woodlawn Avenue provides a combined through/right-turn lane on the northeast-bound approach and a combined through/left-turn lane on the southeast-bound approach. In addition, a standard style crosswalk is provided on the west leg of this intersection. Parking is not permitted on the south side of the road and truck traffic is not permitted on this road. Woodlawn Avenue is under the jurisdiction of the City of Aurora and has a posted speed limit of 25 miles per hour.

*Ridgeway Avenue* is a northwest-southeast local roadway that generally provides one lane in each direction in the vicinity of the site. At its unsignalized intersection with Lake Street, Ridgeway Avenue provides a combined left-turn/right-turn lane on the southeast-bound approach under stop sign control. At its unsignalized intersection with Woodlawn Avenue, Ridgeway Avenue provides a combined through/right-turn lane on the northwest-bound approach and a combined through/left-turn lane on the southeast-bound approach. Parking is not permitted on the east side of the road, Monday through Friday. Ridgeway Avenue is under the jurisdiction of the City of Aurora and carries an AADT volume of approximately 2,150 vehicles (IDOT 2018).

*3<sup>rd</sup> Street* is a northwest-southeast local roadway that provides one lane in each direction in the vicinity of the site and extends from Lake Street to Woodlawn Avenue. At its unsignalized intersection with Lake Street, 3<sup>rd</sup> Street provides a combined left-turn/right-turn lane on the southbound approach under stop sign control. In addition, a standard style crosswalk is provided on the north leg of this intersection. At its all-way stop-sign controlled intersection with Woodlawn Avenue, 3<sup>rd</sup> Street provides a combined left/right-turn lane on the northwest-bound approach. In addition, a standard style crosswalk is provided on the south leg of this intersection. 3<sup>rd</sup> Street is under the jurisdiction of the City of Aurora and carries an AADT volume of approximately 400 vehicles (IDOT 2018).

## Traffic Characteristics of the Proposed Development

As previously indicated, the development site, which was previously occupied by the former Abraham Lincoln Elementary School, will be redeveloped with 36 work-force units and 73 parking spaces. Access to the former Abraham Lincoln Elementary School was provided via the following access drives:

- A full movement access drive (western access) on Lake Street located approximately 400 feet northeast of Ridgeway Avenue. This access provides one inbound lane and one outbound lane.
- A full movement access drive (eastern access) on Lake Street located approximately 615 feet northeast of Ridgeway Avenue. This access provides one inbound lane and one outbound lane.
- A full movement access drive on Woodlawn Avenue located approximately 655 feet northeast of Ridgeway Avenue. This access provides one inbound lane and one outbound lane.

As proposed, access to the site will be provided via the two existing access drives on Lake Street and one proposed access drive on Woodlawn Avenue. Consideration should be given to converting the western access drive on Lake Street onto an outbound-only access drive in order to minimize the potential conflicts between the Lake Street access drives and to restrict the pick-up/drop-off lane to one-way traffic. Access on Woodlawn Avenue will be located approximately 390 feet northeast of Ridgeway Avenue. This drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. It should be noted that the existing access drive on Woodlawn Avenue located approximately 655 feet northeast of Ridgeway Avenue will be eliminated. A copy of the site plan is included in the Appendix.

## Development Traffic Generation

The estimates of traffic to be generated by the proposed development are based upon the proposed land use type and size using data published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10<sup>th</sup> Edition. Land-Use Code 220 (Multifamily Housing Low-Rise) was utilized for the proposed residential development. **Table 1** shows the vehicle trips estimated to be generated by the proposed residential development during the weekday morning and weekday evening peak hours in addition to the weekday daily volumes.

Table 1  
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

ITE Land Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Weekday Two-Way Daily
		In	Out	Total	In	Out	Total	
220	Multifamily Homes (36 units)	4	14	18	15	9	24	230



## Trip Generation Comparison

The traffic that will be generated by the proposed residential development was compared to the traffic previously generated by the former Abraham Lincoln Elementary School. Based on information provided, the former Abraham Lincoln Elementary School had an enrollment of 190 students, ranging from kindergarten to the fifth grade. Land-Use Code 520 (Elementary School) was utilized in estimating the trips generated by the former Abraham Lincoln Elementary School. As can be seen in **Table 2**, the proposed development will generate significantly less traffic during the morning peak hour, early afternoon peak hour, and on a daily basis and similar amount of traffic during the evening peak hour.

Table 2  
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

ITE Land Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Early Afternoon Peak Hour			Weekday Evening Peak Hour			Weekday Two- Way Daily
		In	Out	Total	In	Out	Total	In	Out	Total	
220	Multifamily Homes (36 units)	4	14	18	9	5	14	15	9	24	231
520	Elementary School (190 students)	69	58	127	29	36	65	15	17	32	359
<b>Difference</b>		<b>-65</b>	<b>-44</b>	<b>-109</b>	<b>-20</b>	<b>-31</b>	<b>-51</b>	<b>0</b>	<b>-8</b>	<b>-8</b>	<b>-128</b>

## Traffic Evaluation

As can be seen in Table 1, the proposed residential development will be a low traffic generator and will not significantly increase traffic on the adjacent roadway system. When the estimated weekday morning peak hour, weekday evening peak hour, and daily traffic volumes anticipated to be generated by the proposed residential development are compared to the AADT traffic volumes, the proposed residential development traffic will amount to approximately two percent or less of the existing traffic along Lake Street.

In addition, as can be seen in Table 2, the proposed residential development will generate 109 fewer trips during the weekday morning peak hour, 51 fewer trips during the weekday early afternoon, eight less trips during the weekday evening peak hour, and 128 fewer trips daily.

Given the low estimated traffic to be generated by the proposed residential development, the access drives and area roadway system will be adequate in accommodating the future traffic volumes generated by the proposed residential development.

## Access Evaluation

Access to the proposed development will continue to be provided via two access drives on Lake Street and one access drive on Woodlawn Avenue. The access drive on Woodlawn Avenue serving the former elementary school, which was located approximately 655 feet northeast of Ridgeway Avenue, will be eliminated. The access drive on Woodlawn Avenue serving the proposed residential development will be located approximately 390 feet northeast of Ridgeway Avenue. The outbound movements from all access drives should be under stop sign control.

Consideration should be given to converting the western access drive on Lake Street onto an outbound-only access drive in order to minimize the potential conflicts between the Lake Street access drives and to restrict the pick-up/drop-off lane to one-way traffic.

Given the low volume of traffic that will be generated and the flexibility the access system will provide, the proposed access drives via Lake Street and Woodlawn Avenue will be adequate in accommodating the future traffic volumes.

## Parking Evaluation

As proposed, the residential development will provide a total of 73 parking spaces. The parking estimated to be generated by the proposed development was based on the City of Aurora Zoning Ordinance and the *ITE Parking Generation Manual* 5<sup>th</sup> Edition. The estimated parking demand for each methodology is as follows:

### City of Aurora Zoning Ordinance:

- Multifamily Housing: Two parking spaces per unit requiring 72 spaces.
  - 72 spaces required, resulting in a surplus of one parking space

### ITE Parking Generation Manual, 5<sup>th</sup> Edition

- Multifamily Housing (Low-Rise): Land-Use Code 220
  - Weekday: 85<sup>th</sup> Percentile Parking Demand: 55 spaces or 1.52 spaces per unit
  - Saturday: 85<sup>th</sup> Percentile Parking Demand: 58 spaces or 1.61 spaces per unit

As such, the peak parking requirements per the City of Aurora Zoning Ordinance per *ITE Parking Generation Manual* can be accommodated by the proposed parking supply of 73 parking spaces.

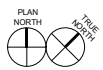
## Conclusion

Based on the proposed development plan and the preceding evaluation, the following conclusions and recommendations are made:

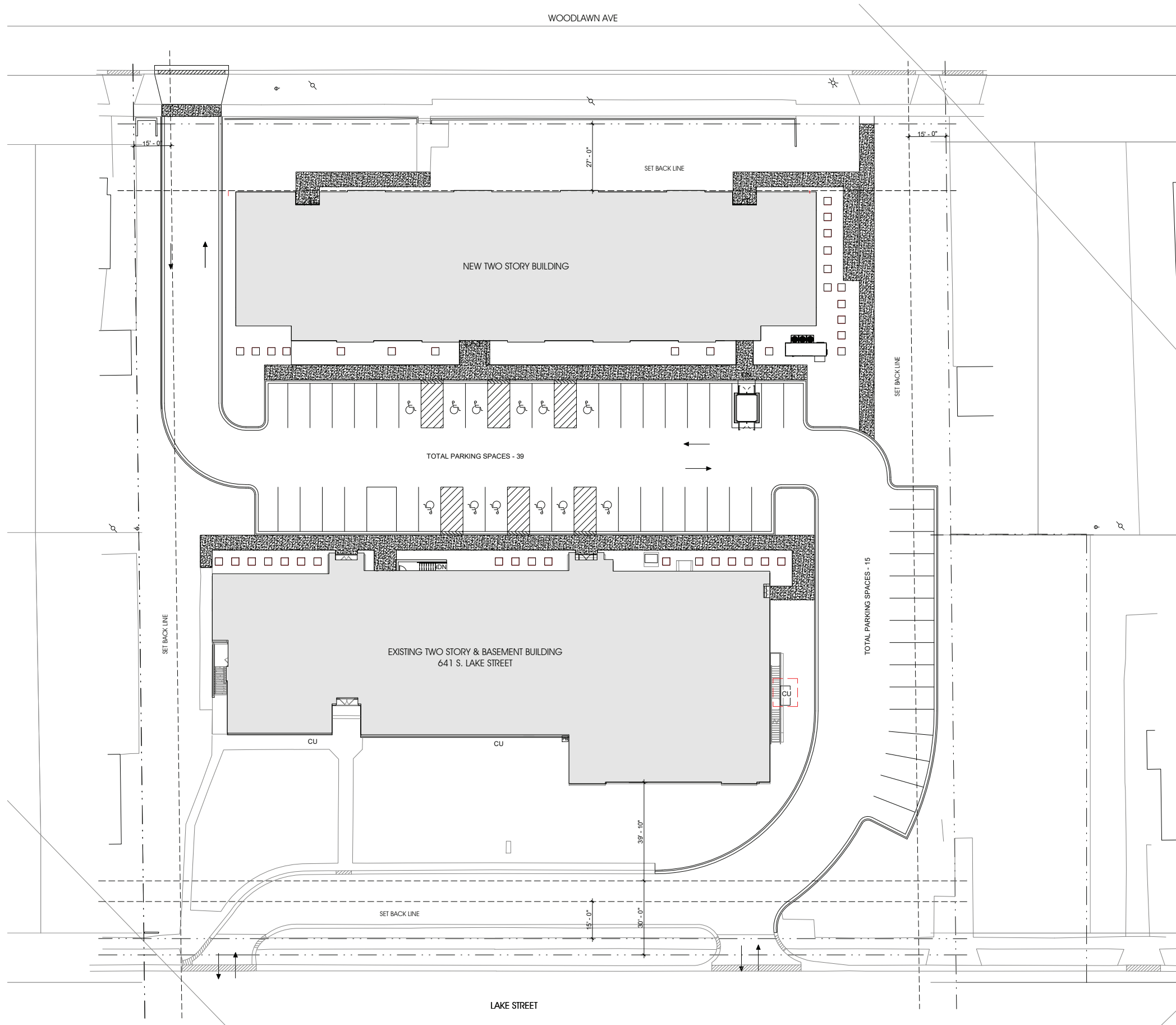
- The proposed residential development will be a low traffic generator and will not significantly increase traffic on the adjacent roadway system
- Given the low estimated traffic to be generated by the proposed residential development, the area roadway system will be adequate in accommodating the future traffic volumes generated by the proposed residential development.
- The proposed access drives via Lake Street and Woodlawn Avenue will be adequate in accommodating the future traffic volumes.
- The proposed parking supply of 73 residential parking spaces will be adequate in accommodating the parking demand of the development based on the City of Aurora Zoning Ordinance and the information published in the ITE *Parking Generation Manual* 5<sup>th</sup> Edition.

# Appendix





1 SITE  
1" = 20'-0"



**SITE INFORMATION:**  
• PRESUMED AREA = 2.69 ACRES

**EXISTING BUILDING INFORMATION:**  
**BUILDING STORIES:**

BELOW GRADE = 1 FLOOR  
ABOVE GRADE = 2 FLOORS

**BUILDING SQUARE FOOTAGE:**

TOTAL GROSS = 42,587 SF

**BUILDING GROSS SQUARE FOOTAGE PER FLOOR:**

BASEMENT = 12,826 SF  
FIRST FLOOR = 16,331 SF  
SECOND FLOOR = 13,430 SF

**NEW BUILDING INFORMATION:**  
ABOVE GRADE = 2 FLOORS

**BUILDING SQUARE FOOTAGE:**

TOTAL GROSS = 27,844 SF

**BUILDING GROSS SQUARE FOOTAGE PER FLOOR:**

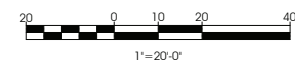
FIRST FLOOR = 13,922 SF  
SECOND FLOOR = 13,922 SF

**TOTAL UNIT COUNTS:**  
• NEW BUILDING - 22 UNITS  
• EXISTING BUILDING - 14 UNITS  
• TOTAL - 36 UNITS

**PARKING COUNTS:**  
• REQUIRED - 72 SPACES  
• PROVIDED - 73 SPACES

UNIT TYPE MATRIX - EXISTING BUILDING				
UNIT TYPES	UNIVERSAL DESIGN CHECKLIST ITEMS	TYPE A	SENSORY	ADAPTABLE
UNIT TYPE E1 - STUDIO	2.6, 2.7, 3.3, 3.4, 3.10, 4.3a, 4.3b, 4.3c, 4.3d, 4.6c, 4.6d, 4.6e, 5.2b, 5.3c, 5.7a, 5.7d, 5.7e, 5.7f, 5.7g, 7.3, 7.4			
UNIT TYPE E2 - 2 BED	2 (107,207)			1 (207)
UNIT TYPE E3 - 2 BED	4 (105,106,205,206)	1 (205)		
UNIT TYPE E4 - 3 BED	1 (110)			
UNIT TYPE E5 - 3 BED	4 (106,108,206,208)		1 (208)	1 (108)
UNIT TYPE E6 - 3 BED	1 (109)			1 (109)
UNIT TYPE E7 - 3 BED	1 (101)	1 (101)		
UNIT TYPE E8 - 3 BED	1 (201)			
TOTAL	14	2	1	3

UNIT TYPE MATRIX - NEW BUILDING				
UNIT TYPES	UNIVERSAL DESIGN CHECKLIST ITEMS	TYPE A	SENSORY	ADAPTABLE
UNIT TYPE N1 - STUDIO	2.6, 2.7, 3.3, 3.4, 3.10, 4.3a, 4.3b, 4.3c, 4.3d, 4.6c, 4.6d, 4.6e, 5.2b, 5.3c, 5.7a, 5.7d, 5.7e, 5.7f, 5.7g, 7.3, 7.4			
UNIT TYPE N2 - 1 BED	3 (102,109,202)	1 (109)		1 (102)
UNIT TYPE N3 - 1 BED	1 (106)			1 (106)
UNIT TYPE N4 - 2 BED	2 (108,206)			
UNIT TYPE N5 - 3 BED	1 (209)			
UNIT TYPE N6 - 3 BED	11 (103, 104, 105, 107, 110, 203, 204, 205, 207, 208, 210)	1 (110)	1 (205)	2 (104, 105)
UNIT TYPE N7 - 3 BED	4 (101,111,201,211)			1 (111)
TOTAL	22	2	1	5



PROGRESS