



September 6, 2019

Subject: **RagingWire Data Centers  
Parking Reduction – Special Use Request**

Attention: Evan Balmer, AICP, Planner II, Development Services

Record ID: BOA19-00624

From: Peter Norris, AIA, LEED AP

Harley Ellis Devereaux (HED) has been requested to conduct a parking demand study for the proposed PH1 RagingWire Data Centers site which will comprise of 195,895 square-feet of office space and 1,343,105 square-feet of computer room space, the latter of which will primarily be used as storage facilities for infrastructure. The site is located within the Elliot Road Technology Corridor overlay district in the City of Mesa, Arizona. Exhibit 1 shows the proposed site plan.

### Employee Population

The number of employees totals 111 for buildings PH1 through PH6 and 81 employees for building PH7. The parking study considers the following assumptions regarding employee population per phase:

- Phase One – Building PH1: 111 employees
- Phase Two – Building PH2: 111 employees
- Phase Three – Building PH3: 111 employees
- Phase Four – Building PH4: 111 employees
- Phase Five – Building PH5: 111 employees
- Phase Six – Building PH6: 111 employees
- Phase Seven – Building PH7: 81 employees

Total employees at full build-out: **747 employees**



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### Parking Count Generation

For the purpose of this analysis, warehousing will be used as a comparable land use for data halls. Per Chapter 32 of the Mesa Zoning Ordinance (MZO) for "On-Site Parking, Loading, and Circulation", the required parking space by use is 1 space per 375 sf for general offices and 1 space per 900 sf for warehousing.

Parking generation per the MZO was compared against the Institute of Transportation Engineers' (ITE) Parking Generation, 4th Edition which presents the following ratios for average peak period parking demand: 2.47 spaces per 1000 sf for office buildings and 0.51 spaces per 1000 sf for warehousing; or 0.83 vehicles per employees for office buildings and 0.78 vehicles per employees for warehousing.

Comparable ITE land use codes for the proposed site include "General Office Building" (Code 710) and "Warehousing" (Code 150). The table below presents the comparison of total parking spaces required by the Mesa Zoning Ordinance and the proposed reduced parking spaces as generated by ITE.

Parking Generator	Parking Ratio		Total Parking Required
	Office	Warehouse	
Mesa Zoning Ordinance	1 space per 375 sf	1 space per 900 sf	-
	<b>523 spaces</b>	<b>1493 spaces</b>	<b>2016</b>
ITE (proposed reduced parking)	2.47 spaces per 1000 sf	0.51 spaces per 1000 sf	-
	<b>484 spaces</b>	<b>685 spaces</b>	<b>1,169</b>
	OR		
	0.83 vehicles per employees	0.78 vehicles per employee	-
	<b>621 spaces</b>	<b>583 spaces</b>	<b>1204</b>



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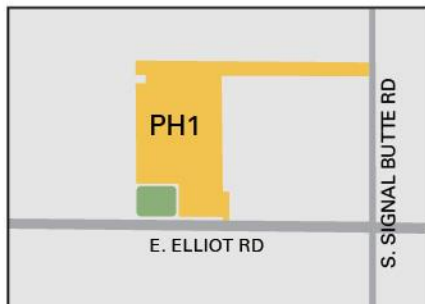
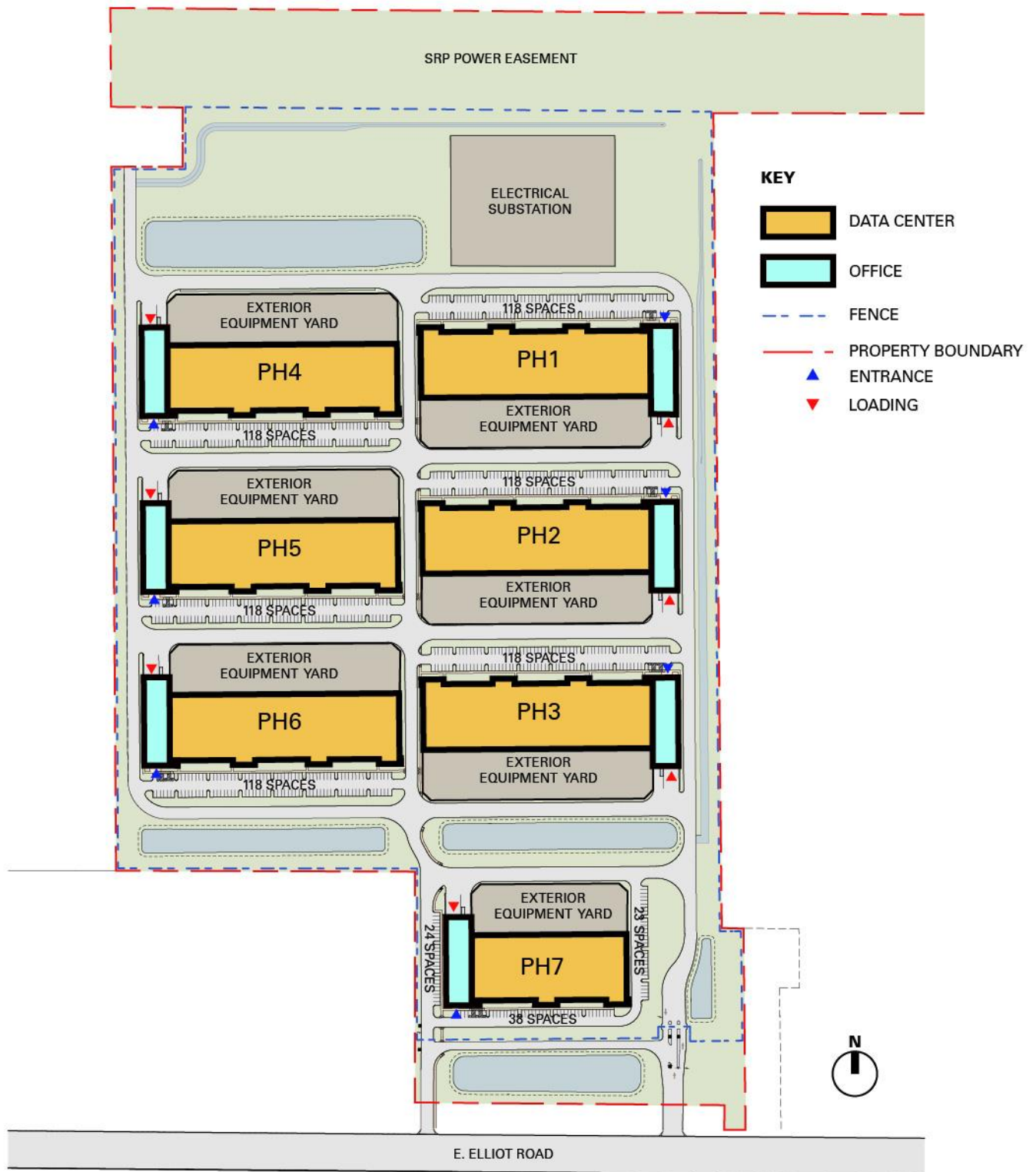
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### **Conclusion**

This project proposes a reduction of the required code parking by omitting computer room or comparable (warehousing) uses from parking generation on the following assumptions: all personnel working in the data halls are captured within the parking generation for office space; no additional personnel will arrive to the development separate from those working in offices; and all personnel will be working a 9:00 am – 5:00 pm operation (pending further operation or shift details provided by the Client).

Therefore, if all parking demand will be driven by office space, this project requests to meet the parking criteria set forth by ITE by allocating 484 spaces for employees and providing an additional 312 for visitors totaling **796** parking spaces onsite.



#### PARKING PROVIDED PER PHASE

PHASE	BUILDING	AREA	PARKING PROVIDED
Phase One	PH1	229,000 SF	118
Phase Two	PH2	229,000 SF	118
Phase Three	PH3	229,000 SF	118
Phase Four	PH4	229,000 SF	118
Phase Five	PH5	229,000 SF	118
Phase Six	PH6	229,000 SF	118
Phase Seven	PH7	165,000 SF	88
Total		1,539,000 SF	796