



Memorandum

To: Georgia Regional Transportation Authority
From: Najemeddine Habachi, PE
Date: November 22nd, 2024
Subject: Limited Trip Generation Memorandum, DRI #4257,
Vantage Data Center - Stacks

This memo provides a summary of the limited vehicle trip generation for the Vantage Data Center – Stacks Rd, DRI #4257. With this, an expedited review is requested.

Project Description

The proposed data center is planned to be located on the south side of Stacks Road in Fulton County. The development will have access to the external roadway via two full-access driveways on Stacks Road. Since the anticipated vehicle trips for the development is less than 1,000 daily trips, a limited trip generation memorandum has been requested. A summary of the anticipated trips as calculated by the formulas in ITE Trip Generation Manual, 11th Edition (2021), for the proposed data center can be found below in **Table 1**.

Table 1: Trip Generation

Land Use Information	Project Trips			Equation Used ¹	In / Out Distribution
	Total	Inbound	Outbound		
160 - Data Center				696,981	1000 S.F.
Daily	690	345	345	$T = 0.99(X)$	50% / 50%
AM Peak Hour	85	47	38	$T = 0.13(X) - 5.63$	55% / 45%
PM Peak Hour	71	36	35	$T = 0.11(X) - 5.65$	30% / 70%

Since the land use of data center is not present in the Municode, a reduced number of required parking spaces from similar land uses (warehouse and industrial) is requested. A parking memorandum was completed using the number of daily employees to calculate if the reduced number of parking spots needed for the proposed data center will be enough and is attached in the appendix. The proposed 350 parking spaces for the development will accommodate the projected vehicles during the expected peak demand.

The CSX Feasibility Study for the adjacent railroad was requested, but the study is in progress and does not have any documents to provide to attach.

The Methodology Meeting Packet (MMP) and the Letter of Understanding (LOU) are attached in the appendix of this memorandum.



Appendix



Vantage Data Center – Stacks Rd DRI # 4257

Methodology Meeting Packet

Pre-Review / Methodology Meeting Date:
9/23/2024

Prepared For:

Vantage Data Centers
1209 Orange Street
Wilmington, New Castle County, DE 19801
(514) 237-8130

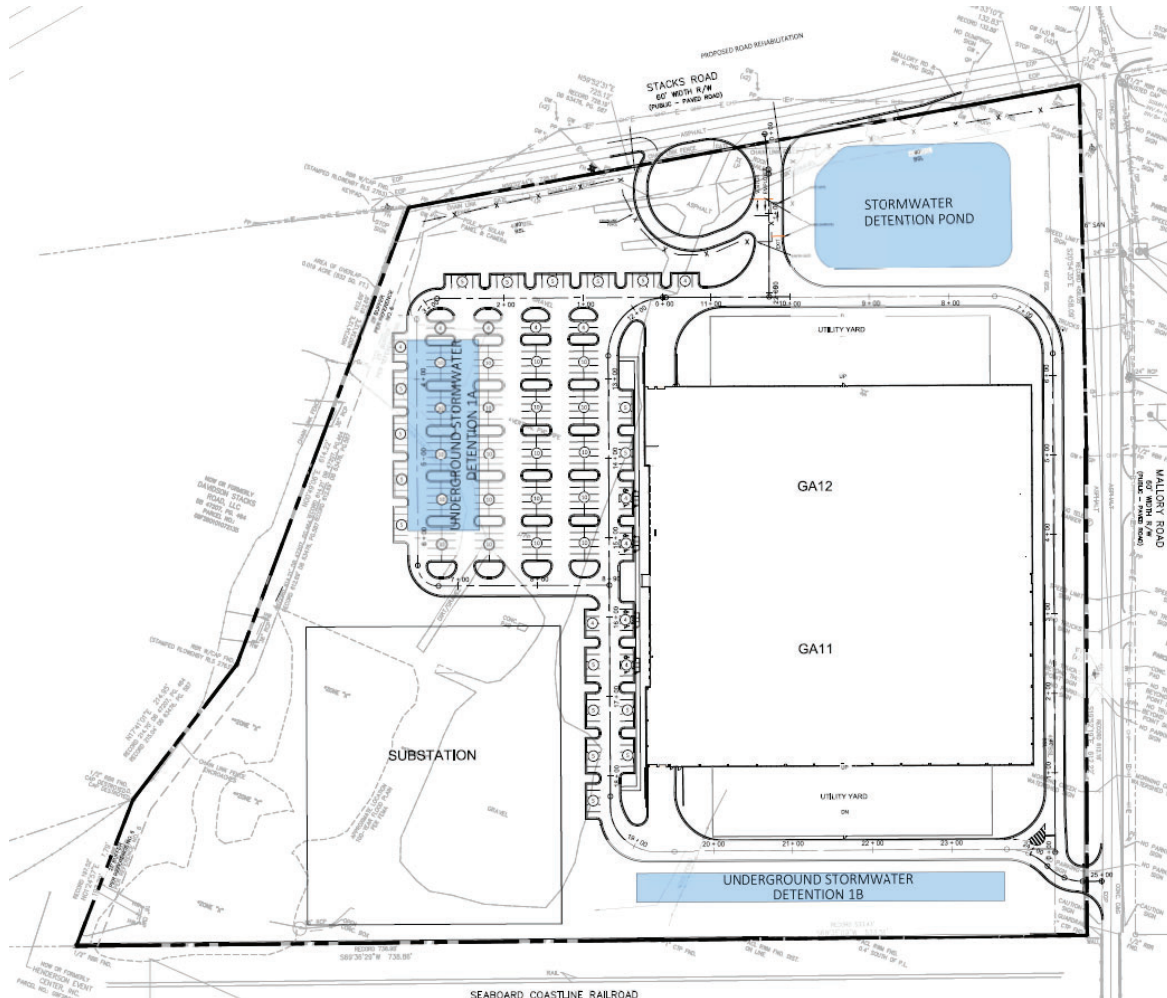
Prepared By:

Lowe Engineers
990 Hammond Drive, Suite 900
Atlanta, GA 30328
(770) 857-8401

DRI Name & Number:
GA 11 Data Center DRI #4257

Pre-Review / Methodology Meeting Date:
September 23rd, 2024

Project Rendering:



Project Orientation (Section 2.2.1):

Permitting Local Government:
City of South Fulton

Additional Local Government(s) with development approval authority (if applicable):
Atlanta Regional Commission (ARC), Georgia Regional Transportation Authority (GRTA), Georgia Department of Transportation (GDOT)

DRI Trigger (Rezoning, land disturbance permit, committee review, annexation, etc):
Land disturbance permit

DRI Trigger Application / Permit #:
Application / Permit # TBD

Qualifying DRI Threshold Exceeded: (Use DCA rules for non-ARC counties):

The development is located in a metropolitan area and exceeds the threshold of:

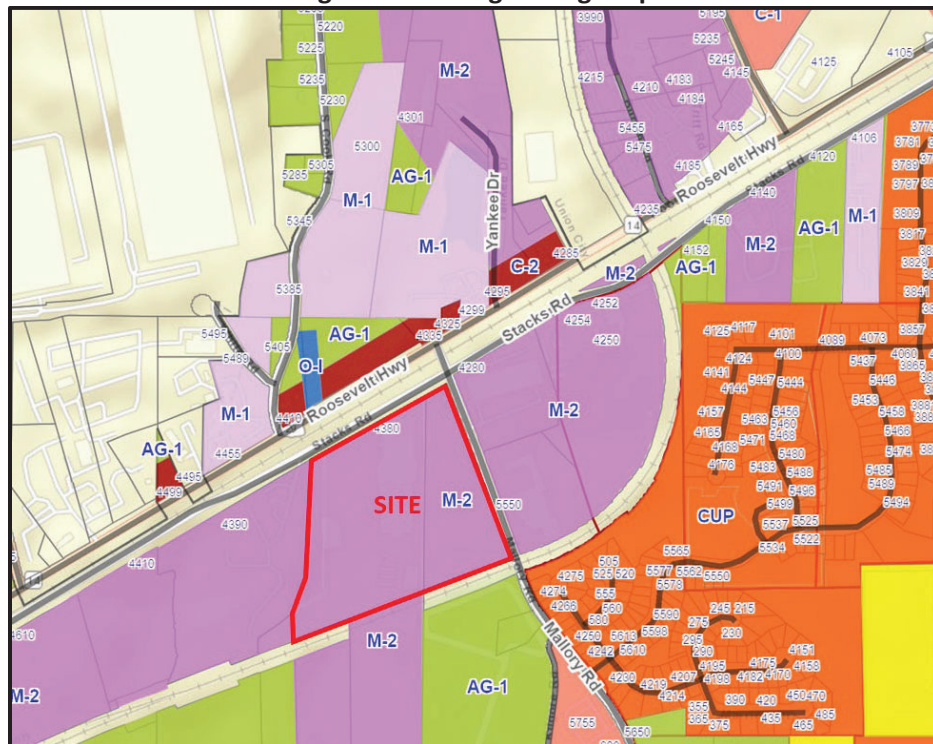
(6) Industrial Land-use exceeding 500,000 S.F.

Zoning:

Existing:

The Existing zoning is M-2 (Heavy Industrial/Manufacturing). The zoning map is shown in Figure 1.

Figure 1: Existing Zoning Map



Proposed (If a rezoning):

The proposed zoning is M2 (Not a rezoning).

Project Information (Sq. ft. and/or units for each land use type(s)):

The development is planned to be a 696,981 S.F. Data Center Facility.

Project Location:

GPS Coordinates:

33° 36' 20.52" N 84° 31' 51.2" W

Location Description:

The development is planned to be located on undeveloped land (in the southwest quadrant of the intersection of Stacks Rd and Mallory Rd, just north of the CSX Railroad).

Unified Growth Policy Map land use area designation:
Developing Suburbs and region employment corridor

Neighboring Jurisdiction(s) (Note if DRI is within ½ mile of a neighboring jurisdiction):
Union City – 0.46 miles south of proposed site

Project Orientation Map (Section 2.2.1.2):

Figure 2: Project Orientation Map



Figure 3: Land Use Map

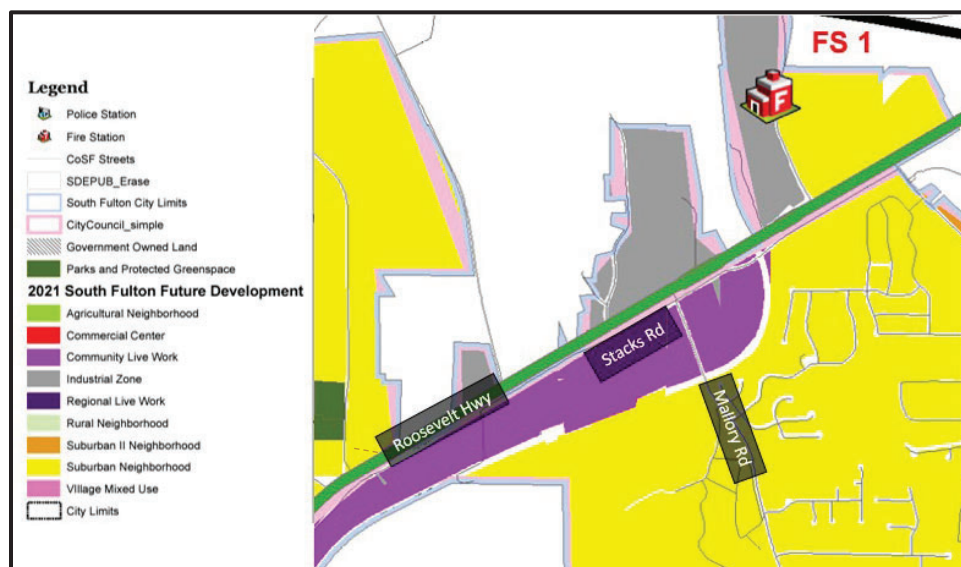


Table 1: Study Roadways

Roadway	# of Lanes	Functional Class	Ownership
Mallory Rd	2	Local	Fulton County
Stacks Rd	2	Local	Fulton County
Roosevelt Hwy (SR 29)	4	Principal Arterial	GDOT

Project Driveways & Access Points:

The proposed development will access the external roadway network via a single full-access driveway on Stacks Road with a rejection turnout lane for the gated entrance.

Project Build Out Year & Phase(s):

The development is planned for full build out in 2027. The analysis will consider full build out of the site.

Net Average Daily Trips (ADT) & Requested Review Schedule (Section 4.2.2):

The planned development will contribute 690 Daily Vehicle Trips to the study network. The requested review schedule is Expedited Review due to Limited Trip Generation (Fewer than 1,000 Gross Daily Vehicle Trips).

Government Stakeholders (Section 1.2.2) (Local government(s) and GDOT district office(s) with Study Network intersections, CIDs, transit operators, etc):

Fulton County, GDOT District 7, Atlanta Regional Commission, City of South Fulton

Applicant Stakeholders (Section 1.2.2) (Note the developer contact(s) as well as the traffic engineers, lawyers, site design engineers, etc):

Developer:

Rabih Matar
Vantage Data Centers Management Company, LLC
c/o The Corporation Trust Company
1209 Orange Street,
Wilmington, New Castle County, Delaware 19801
514-237-8130
rmatar@vantage-dc.com

Site Design Engineer

Bill Aguilar, P.E.
Lowe Engineers, LLC
990 Hammond Drive
Suite 900
Atlanta, GA 30328
770-857-8400
bill.aguilar@loweengineers.com

Lawyer

Kasey Sturm
Company: Weissman Law
One Alliance Center, 4th Floor
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Atlanta, GA 30040
404-926-4630
kaseys@weissman.com

Traffic Engineer:

Sameer Patharkar, P.E.
Lowe Engineers, LLC
990 Hammond Drive
Suite 900
Atlanta, GA 30328
770-857-8400
sameer@loweengineers.com

Applicant Email & Mailing Address:

Rabih Matar
Vantage Data Centers Management Company, LLC
c/o The Corporation Trust Company
1209 Orange Street,
Wilmington, New Castle County, Delaware 19801
514-237-8130
rmatar@vantage-dc.com

Planning Context:Programmed Projects (Section 2.2.2.1, Section 2.2.2.3):

A programmed project upgrading the bridge at the CSX rail line crossing under Roosevelt Highway. The programmed project will be minimally impacted by the proposed development.

Programmed Project Attached Design Documents: *(Note if design files are attached. The attachment shall be for the most recent design plan).*

N/A

Transportation Project Interaction with DRI (Section 2.2.2.5): *(Note if the DRI borders or intersects any of the programmed or planned transportation projects. Note if there are any aspects of the DRI that conflict with programmed or planned transportation projects).*

The project is not planned to border or intersect any planned or programmed transportation projects.

Planned Projects (Section 2.2.2.2):

No planned projects were found in the vicinity of the site.

Land Use (Character Area) and Zoning (Section 2.2.1.1, Section 2.2.2.2):Existing Zoning:

The existing zoning is M2 – Heavy Industrial/Manufacturing.

Future Land Use Map Zoning (Character Area):

The future land use map defines the site as Industrial Zone.

Land Use Vision & Goals:

The proposed land use is Data Center. The proposed land use is consistent with the character area goals (“preserve the integrity of industrial areas in the City of South Fulton and the impact on the surrounding neighborhoods”).

Relation to Existing Land Use Plans (Character Area):

The existing area south of Roosevelt Hwy is primarily undeveloped and industrial. The proposed land-use is in line with the stated goals and zoning for the City of South Fulton Character Area of Industrial Zone.

Chattahoochee River / Metropolitan River Protection Act *(If applicable): (Note if any portion of the DRI property is within the MRPA Chattahoochee River 2,000 foot buffer. If within the buffer, also provide a statement on how the DRI relates to the Chattahoochee River Lands vision, and note any coordination that has occurred with the Atlanta Regional Commission’s Natural Resource Group to date).*

N/A

Alternative Mode Access (Section 2.2.3)

Existing Alternative Transportation Map (Section 2.2.3.1):

There are bus transit stations located along Roosevelt Hwy, north of the site vicinity.

Bicycle and Pedestrian Context (Section 2.2.3.3):

Description of Existing Infrastructure:

There are no bicycle facilities in the vicinity of the proposed development on Stacks Rd.

Sidewalk & Streetscape Ordinance Standards (Under proposed zoning if a rezoning):

Fulton County, Georgia – *Code of Ordinances Article IX. – Required Improvements*

9.2. – Streets.

G. Industrial zoned developments (M-1A, M-1 and M-2 zoning districts).

1. For developments with publicly dedicated internal streets, a sidewalk shall be provided along one side of the street.
2. For developments with frontage on an external publicly dedicated street(s), a sidewalk shall be required along the entire frontage.

Potential Pedestrian & Bicycle Destinations:

The MARTA bus station and nearby residential units could pose as potential pedestrian destinations. For a conservative analysis, no reductions from vehicle trips were made.

Transit Accommodations (Section 2.2.3.4):

Existing Transit Routes

MARTA Route 180 Roosevelt Highway travels along the vicinity of the site.

Existing High-Capacity Transit Stations:

N/A

Existing Transit Service Details (Headways, span, operating days, etc.):

This route operates on weekdays, with northbound routes available from 4:45 am-12:15 am and southbound operating 5:18 am-12:19 am. Weekend operations are available northbound from 5:34 am-11:35 pm and southbound 6:08 am-12:09 pm.

Proposed Pedestrian Route to Access Transit:

The closest bus stop is 0.1 miles from the site and crosses active railroad tracks. Pedestrians would have to cross Stacks Rd and cross the railroad tracks on Mallory Rd to reach the bus stop on Roosevelt Hwy.

Transit Stop Ridership: (existing and projected).

Transit ridership is projected to remain the same as in existing conditions.

Transit Stop Amenity Standards:

Bus stop at the corner of Mallory Rd and Roosevelt Hwy has no sidewalk. It has a MARTA Bus Stop sign and a trash can.

Trip Generation & Adjustments

Trip Generation Inputs (Section 2.2.4.1):

ITE Trip Generation Manual Used:

Trip Generation Manual 11th Edition

ITE Land Use Code(s):

160- Data Center

ITE Independent Variable Inputs for each Land Use Code: (# units, sq. ft., etc).

1,000 Sq Ft GFA

Day & Time of Day of ITE Surveys:

N/A

ITE Trip Generation Formula Used:

Weekday Average Rate - 0.99(X)

Weekday Peak Hour of Adjacent Street One Hour Between 7 and 9 AM: $T = 0.13(X) - 5.63$

Weekday Peak Hour of Adjacent Street One Hour Between 4 and 6 PM: $T = 0.11(X) - 5.65$

Trip Generation Calculation Alternative Approaches (If applicable):

N/A

Trip Generation Reductions:

N/A, Daily trips are already less than 1,000.

Redeveloped Square Footage (If applicable - the DRI will replace existing development in operation when traffic counts were taken):

N/A

Alternative Mode Reduction (Section 2.2.4.2):

Contributing Factors:

Summary of Existing and Proposed Bicycle / Pedestrian / Transit:

MARTA Route 180 Roosevelt Hwy operates North/South in the vicinity of the site.

There are no existing bicycle facilities.

Parking Requirements & Proposed Amount (Specific numbers must be included):

Since there are no parking requirements set specifically for data centers, similar land uses per Fulton County Code of Ordinances Section 18.2.1 Minimum Number of Off-Street Parking Space Required:

“Warehouse: 1 per 5,000 SF”

“Industrial and Manufacturing: One per 1,000 square feet”

Required parking for a 696,981 S.F. warehouse is 140 and a 696,681 S.F. industrial and manufacturing is 697 spaces. A memo containing parking calculations for a similar Vantage Data site is attached.

Alternative Parking Provided (I.e. car share, vanpool, etc. If applicable):

N/A

Affordable Housing (If applicable):

N/A

Transportation Demand Management (If applicable):

N/A

Supplemental Commuter Data (If applicable):

N/A

Proposed Reduction Percentage:

N/A

Proposed Reduction Justification Explanation:

As stated in the attached parking study,

Internal Capture / Mixed Use Reduction (Section 2.2.4.3):

N/A

Pass-by Trips Reduction (Section 2.2.4.4):

Proposed Pass-by Trips Table:

N/A

Trip Generation Summary Table (Section 2.2.4.5): *(Summarize the trip generation reductions using the table format below).*

	Trips
Gross Daily Trips	690
Alt. Mode Reduction	- 0
Mixed Use Reduction	- 0
Pass-by Reduction	- 0
Net Daily Trips	690

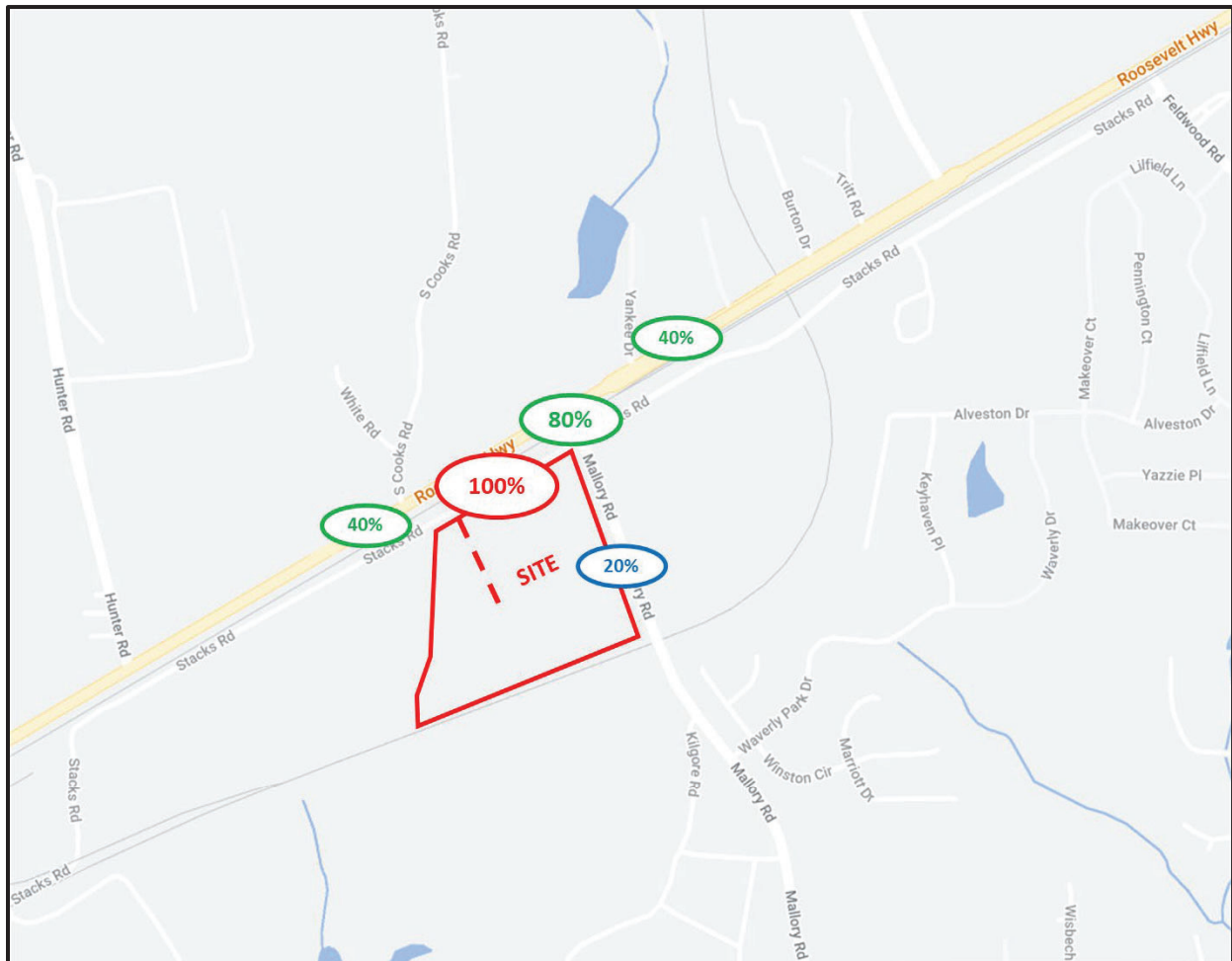
Trip Assignment & Study Network (Section 2.2.5)

Description of Trip Assignment Methodology:

There is no outlet left of the site so **ALL** vehicles will turn right.

Trip Assignment Map: (Per Section 2.2.5.1: The map shall use different colors for each direction and use a smaller font size each time the trip assignment passes through an intersection approach. The map shall include trip assignment percentages for all Study Network approaches where Projects trips will be modeled. A separate Trip Assignment Map shall be prepared for each individual land use type).

Figure 4: Trip Assignment



Draft Study Network:

Study Network 7% Table (Including all table columns specified in Section 2.2.5.1):

Study Intersections:

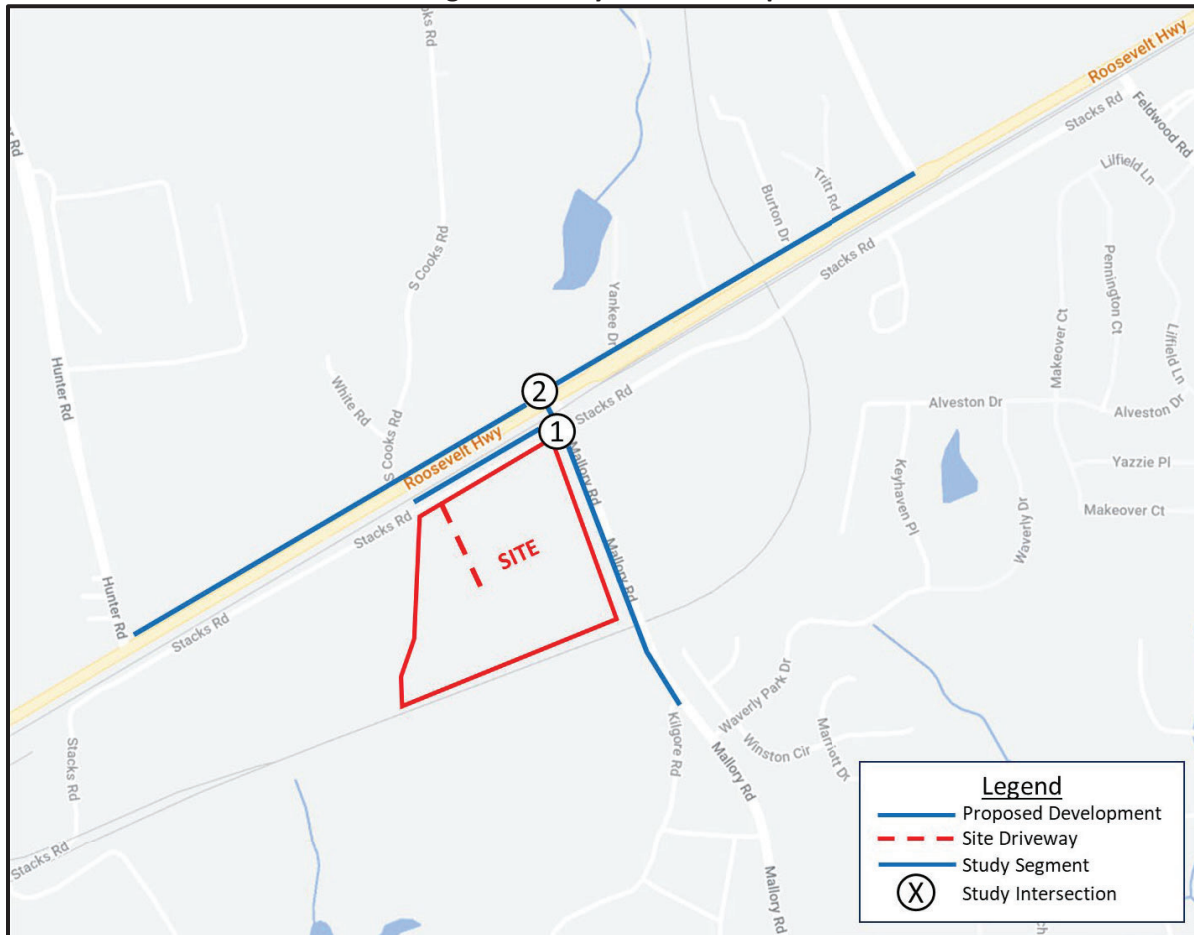
- 1) Stacks Rd at Mallory Rd
- 2) Mallory Rd at Roosevelt Hwy

Study Segments:

- 1) Stacks Rd from Site Driveway to Mallory Rd
- 2) Roosevelt Hwy from Mallory Rd to Welcome All Rd
- 3) Roosevelt Hwy from Mallory Rd to Hunter Rd
- 4) Mallory Rd from Stacks Rd to Roosevelt Hwy
- 5) Mallory Rd from Stacks Rd to Kilgore Rd

Study Network Map (Including all map features specified in Section 2.2.5.1):

Figure 5: Study Network Map



Proposed Study Network Additions or Deletions: (Note any preliminary intersections for discussion for potential addition (beyond 7% analysis) or deletion from the 7% rule's draft Study Network. Note the reasoning for addition or deletion).

Level of Service Standard(s) (Section 3.2.2.1):

Adjustments for Unified Growth Policy Map or ½ mi. of High Capacity Transit Station (If applicable)

N/A

Scenario Modeling

The MMP shall include the following information regarding inputs to the TIS level of service analysis:

Background Growth (Section 2.2.5.2):

Proposed Background Growth Rate:

A 1.5% per year growth rate is proposed for the study network.

Historic Traffic Count Growth Data:

Fulton County has seen an average growth rate of 1.5% per year for the past 10 years. Fulton County's growth rate has spanned between 0.86% and 1.8% since 2013.

The City of South Fulton Economic Plan 2018-2040 references a 1% per year growth rate.

Nearby Developments or DRIs Underway:

No nearby developments or DRIs underway were found in the site vicinity.

Multiple Growth Rate Accommodations: Note if the Applicant is requesting different growth rates for individual roadways instead of a uniform rate across the Study Network. If the Project has multiple phases, note if the Applicant is proposing different growth rates for each phase.

N/A

Programmed Transportation Project Modeling (Section 3.2.2.4):

No programmed transportation projects will be modeled in background conditions. The TIS will calculate the LOS for Existing, Background, and Build conditions as outlined in Section 3.2 of the requirements.

Pedestrian Crosswalk Adjustment Factor (Section 2.2.4.2, Section 3.2.4.2) (If applicable):

N/A

Vehicle Delay Factor for Transit Vehicles and/or Other Curbside Usage (Section 2.2.5.3) (If applicable):

N/A

Enhanced Focus Area for Dense Urban Environments (Section 3.2.4.2) (If applicable):

Proposed Curbside Management Approach:

N/A

Proposed Modeling Adjustments:

N/A

Enhanced Focus Area for Heavy Vehicles (Section 3.2.4.1) (If applicable):

Proposed Truck Routing:

N/A

Heavy Vehicle Modeling Percentage (Section 2.2.4.1, Section 3.2.4.1):

N/A

Site Access Analysis for Pavement Condition, Roadway Width and Corner Radii: Note the roadway segments that the TIS will analyze between the Project truck driveway entrance(s) and the nearest Study Network intersection(s) in both directions.

N/A

Proposed Pedestrian Infrastructure (Sidewalks and crosswalks including along driveways):

N/A

Draft Schedule

Proposed Traffic Count Approach (Section 2.3, Section 2.4):

Proposed Collection Date(s):

Traffic data will be collected on a weekday (Tuesday-Thursday) while school is in session.

Local School Schedule(s):

Fulton County Schools

- October 14-15th Fall Break
- November 5th Remote learning day
- November 25th-29th Thanksgiving Holidays
- December 23rd-January 3rd Winter Break
- January 6th Teacher Workday
- January 20th MLK Day Schools Closed

Atlanta Public Schools

- October 14th-18th Fall Break
- November 5th Students off
- November 25th-29th Thanksgiving Break
- December 23rd-January 3rd Winter Break
- January 6th Teacher Workday
- January 20th MLK Day Schools Closed

Existing Counts (If applicable, note date and source(s)):

N/A

COVID-19 Approach: *(If GpRTA has determined traffic patterns are still irregular due to the COVID-19 pandemic, or for any other reason, the applicant shall provide an approach for utilizing existing counts when available, and an approach for conducting new counts and extrapolating traffic growth using control count locations where existing pre COVID-19 count data is not available.)*

Counts collected after July 15, 2022 will not need to be adjusted for COVID-19.

Draft Transportation Study Submittal Date (Optional):

TBD

Anticipated GRTA Review Schedule (Section 4.2) *(Optional)*:

TBD

DCA DRI 'Initial Form' & 'Additional Form' Submittal Date(s): *(Forms must be submitted before review begins.) (Optional)*

Key Permitting Local Government Review Board Date(s):

TBD

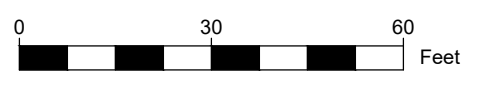
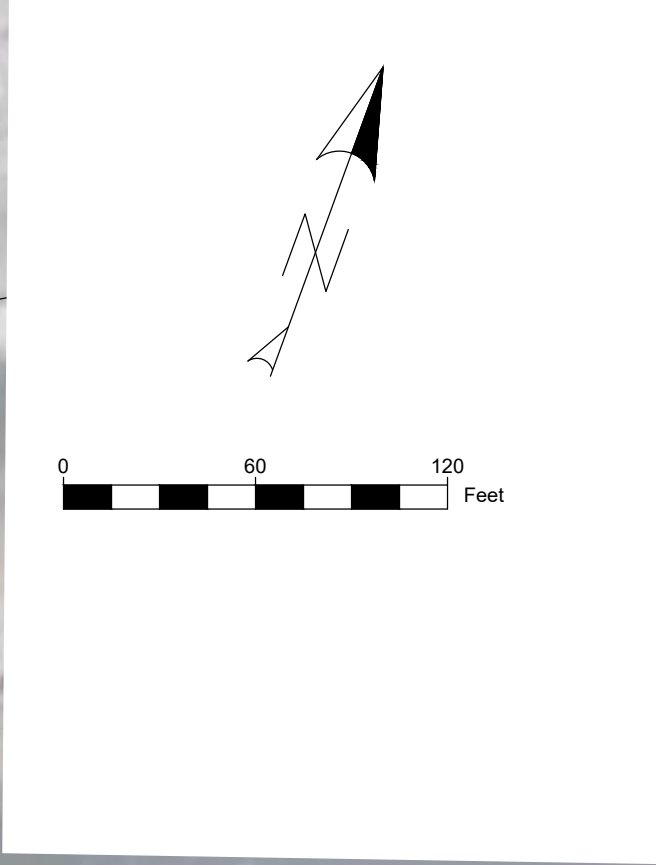
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










Presumptive Impact Table

Growth Rate Data

Parking Memo

Site Plan



	STOP BAR (PAVEMENT MARKING)
	TRAFFIC FLOW ARROW (PAVEMENT MARKING)
	"YIELD" (PAVEMENT MARKING)
	DIRECTIONAL ARROWS (PAVEMENT MARKING)
	"ONLY" DIRECTIONAL ARROWS (PAVEMENT MARKING)
	HANDICAP STALL
	CONCRETE WHEEL STOP
	A.D.A. STD HANDICAP RAMP
	PARKING SPACE PAINT
	SIGN
	LIGHT POLE
	DUMPSITER PAD
	TRANSFORMER PAD
	CONCRETE
	STANDARD DUTY PAVEMENT
	HEAVY DUTY PAVEMENT

- 42 "TYPE C" CURB RAMP. SEE SHEET C9.01 FOR DETAILS
- 43 "TYPE D" CURB RAMP. SEE SHEET C9.01 FOR DETAILS
- 44 STOP SIGN (R1-1). SEE DETAIL SHEET C9.01
- 45 LANDSCAPE AREA. SEE SHEET L-1 FOR FURTHER DETAIL
- 46 DIRECTIONAL ARROWS. SEE DETAIL SHEET C9.01
- 47 CROSSWALK. SEE DETAIL SHEET C9.00
- 48 4" WIDE SINGLE SOLID YELLOW LINE (SSWL)
- 49 4" WIDE DOUBLE SOLID YELLOW LINE (DSYL)
- 50 CONCRETE TRANSFORMER PAD PER UTILITY OWNER'S REQUIREMENT
- 51 CONCRETE BOLLARDS. SEE DETAIL SHEET C9.03.
- 52 RETAINING WALL. DESIGN AND PERMITTED BY OTHERS.
- 53 DO NOT ENTER SIGN
- 54 RIGHT TURN ONLY SIGN
- 55 PROPOSED DUMPSTER ENCLOSURE WITH CONCRETE APRON. SEE ARCHITECTURAL PLANS FOR DETAILS
- 56 ADA PARKING AREA SEE DETAIL SHEET C9.01
- 57 ADA PARKING SIGN SEE DETAIL SHEET C9.01

TOTAL PARKING REQUIRED:	350
TOTAL PARKING PROVIDED:	350
LANDSCAPE REQUIREMENTS	
FRONT LANDSCAPE BUFFER:	FRONT BUFFER
SIDE LANDSCAPE BUFFER:	SIDE BUFFER
REAR LANDSCAPE BUFFER:	REAR BUFFER
PARKING ISLANDS:	LANDSCAPE ISLAND WIDTH

ADDRESSES	4800 STAKES ROAD, SOUTH FLUTTON, GA 30149
TOTAL PROPERTY AREA:	23.64 AC
DISTURBED AREA:	22.93 AC
IMPERVIOUS AREA:	11.31 AC
PERVIOUS AREA:	12.34 AC
OPEN SPACE PROVIDED	7.54 AC
ZONING CLASSIFICATION	
ZONING:	M-2
ADJACENT ZONING:	ADJ ZONING
JURISDICTION:	FLUTTON COUNTY
BUILDING SUMMARY GA-11	
PROPOSED OFFICE AREA:	14,206 SF
PROPOSED DATA MODULE AREA:	143,780 SF
PROPOSED TOTAL BUILDING AREA:	355,662 SF
STORIES OF THE BUILDING:	3-STORIES
FLOOR AREA RATIO (FAR):	2.91
BUILDING SUMMARY GA-12	
PROPOSED OFFICE AREA:	14,206 SF
PROPOSED DATA MODULE AREA:	143,780 SF
PROPOSED TOTAL BUILDING AREA:	355,662 SF
STORIES OF THE BUILDING:	3-STORIES
FLOOR AREA RATIO (FAR):	2.91

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL INTERIOR CURB RADII TO BE 5' UNLESS OTHERWISE NOTED.
3. PARKING LOT AND ROAD STRIPING SHALL BE IN ACCORDANCE WITH GDOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION.
4. ACCESSIBLE PARKING, SIGNAGE, WARNING STRIPES AND STRIPING SHALL BE IN ACCORDANCE WITH CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN
5. ALL LAND DISTURBANCE TO BE STABILIZED WITH VEGETATION UPON COMPLETION OF DEMOLITION.
6. ALL TREES SHALL HAVE PROPER PROTECTION DURING CONSTRUCTION UNLESS APPROVED PLANS SPECIFY OTHERWISE.
7. TOPOGRAPHIC SURVEY BY LOWE ENGINEERS, DATED OCT 2023.
8. FLOODPLAIN IS PRESENT ON SITE AS DEPICTED BY FEMA FIRM PANEL NUMBER 13121C04567 & 13121C04572, DATED 9/18/2013.
9. OWNER IS RESPONSIBLE FOR OBTAINING ANY NECESSARY AGREEMENTS FROM ADJACENT PROPERTY OWNERS IN ORDER TO PERFORM THE PROPOSED OFFSITE WORK, INCLUDING STORM DRAINAGE, UTILITY CONNECTIONS, SIDEWALK, CURB AND GUTTER AND PAVEMENT TI-INS AND GRADING.
10. ALL NEW ASPHALT AND/OR PAVEMENT SHALL MEET THE GEOTECHNICAL REPORT RECOMMENDATION, REPORT PREPARED BY XXXXXX, DATED XXXX/XXXX/2020.
11. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION OF THIS PROJECT. ALL BARRICADES AND SIGNS SHALL BE FURNISHED AND USED BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL/STATE AND CURRENT SPECIFICATIONS.
12. CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING CONSTRUCTION FENCE, SIGN, TO WARN AND KEEP PEOPLE OFF SITE FOR THE DURATION OF THE PROJECT.
13. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING POSTAL DELIVERY METHOD WITH THE LOCAL JURISDICTION. IF A PHYSICAL MAILBOX IS REQUIRED, GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PURCHASE, LOCATION PLACEMENT, AND INSTALLATION.
14. BUILDING DIMENSIONS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. SEE ARCHITECTURAL PLANS FOR ACTUAL DIMENSIONS.
15. SITE CONTRACTOR SHALL FURNISH "AS-BUILT" DRAWINGS INDICATING ALL CHANGES AND DEVIATIONS.
16. SITE WORK CONTRACTOR IS RESPONSIBLE FOR WORK TO WITHIN 5' OF THE BUILDINGS.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATION INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS AND POLES, ETC. GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.

REVISIONS		DESCRIPTION
NO.	DATE	
0'	30'	60'
120'		

SCALE: 1" = 60'

DATE: 10/14/2024

DRAWN BY: BA

CHECKED BY: BA

PROJECT MANAGER: BA

BILL AGUILAR

PROJECT #: 23-220019

SHEET

EX1.0

Presumptive Impact Table

Presumptive Impact Table

Roadway	Segment	Lanes	Median Divided / Undivided	Left Turn Lanes	Functional Classification	Signals Per Mile	Volume of Closest Count (vpd)	Facility LOS Standard	Facility Service Volume @ Standard (vpd)	Adjustments	Adjusted Service Volume @ Standard (vpd)	Trip Distribution	Project Trips Assigned	% Service Volume Consumed	Presumptive Impact (>7%)?
Stacks Rd	Site Driveway to Mallory Rd	2	U	N	Class I (non-state)	0.0	490	D	14,600	-20%	11,680	100%	537	5%	No
Mallory Rd	Stacks Rd to Roosevelt Hwy	2	U	Y	Class I (non-state)	0.7	4,930	D	14,600	0%	14,600	80%	430	3%	No
	Stacks Rd to Kilgore Rd	2	U	Y	Class I (non-state)	0.7	4,930	D	14,600	0%	14,600	20%	107	1%	No
Roosevelt Hwy	Hunter Rd to Mallory Rd	4	U	Y	Class I	0.5	30,400	D	35,000	-5%	33,250	5%	27	0%	No
	Mallory Rd to Welcome All Rd	4	U	Y	Class I	0.5	19,500	D	35,000	-5%	33,250	1%	5	0%	No

Project Trip Gen	
Daily Volume	537

Total (In+Out)

Growth Rate Data

Growth Rate Summary

Source	Year	Past Growth
Stacks Rd	2015 - 2019	12.1%
East of Mallory Rd	2015 - 2017	20.5%
	2017 - 2019	4.3%
Mallory Rd	2015 - 2019	10.4%
South of Stacks Rd	2015 - 2022	4.5%
	2017 - 2019	2.9%
South Fulton, GA	2015 - 2019	1.5%
Google	2017 - 2019	1.6%
Fulton County, Ga	2015 - 2019	1.4%
Google	2017 - 2019	1.2%
Growth Rate for Analysis		1.5%

Parking Adjustment Memo



Project Description

This memo presents a parking analysis for Vantage Data Center D - Stacks Rd located in South Fulton, Georgia. The site encompasses one warehouse building totaling 696,981 square feet (SF) designated for data center use, with a parking area that includes 350 spaces, 8 of which are reserved for handicapped access. The site plan is attached in **Appendix A**. This memo evaluates the building conditions of the Vantage Data Center in order to assess its impact on parking demand and to identify whether additional spaces may be needed. The objective is to determine if the proposed parking will adequately meet the needs of the planned data center. Parking requirements were determined based on three different sources/criteria:

- City of South Fulton Code of Ordinance
- Vantage Data Center Historic Trends
- ITE Parking Generation Manual

City of South Fulton Code of Ordinance

The parking requirements of South Fulton were reviewed to estimate the needs for the proposed data center. Although there are no specific regulations for data centers, they fall under land use categories that resemble warehouses or industrial/manufacturing facilities in terms of use and functionality.

Table 1 outlines the parking requirements based on similar land uses:

Table 1: City of South Fulton Required Parking Spaces

Section	Land Use (City of South Fulton)	Square Feet	Parking Spaces Required – City of South Fulton (Rate by Land Use)	Parking Spaces Needed (Number)
602.02	Warehouse	696,681	1 per 5,000 S.F.	140
602.02	Manufacturing & Industrial	696,681	1 per 1,000 S.F.	697

Since there are no City of South Fulton specific requirements for data centers, similar land uses were used in this analysis. As shown in the table, required parking for a 696,981 S.F. warehouse is 140 spaces and a 696,681 S.F. Manufacturing and Industrial building requires 697 spaces.

In compliance with South Fulton's regulations and Georgia's state rules, the 8 handicapped spaces provided meet the requirement of reserving 1-2% of total parking spaces for accessibility.

Parking Requirements Based on Employee Numbers

The primary parking demand will be driven by the number of employees, contractors, and visitors. Data centers typically employ fewer staff than other facilities due to their automation. For this data center, the

total number of occupants during full operation includes 50 facility employees, 5 contractors, and 5 visitors.

At peak times, the parking demand could reach 60 spaces. However, since the facility operates 24/7 with staggered shifts, actual demand at any given time is expected to be lower, in line with parking demand trends observed at other Vantage Data Centers.

A review of historical data from similar Vantage Data Centers shows that these facilities typically maintain a lower parking demand relative to their size due to the limited number of on-site employees.

Table 2: Vantage Properties Parking Data at other locations

VDC Campus	Location	Acres	No. of data centers	Data Center space	Critical IT load	Parking spots
VA1	Ashburn, Virginia	42	5	1M+ SF	146 MW	209
CA2	Santa Clara, California	9	3	541,000 SF	75 MW	117
QC4	Montreal, QC, Canada	10	3	320,000 SF	48 MW	166

The 350 spaces at the Vantage Data Center in South Fulton exceeds the parking capacities at other Vantage locations, ensuring sufficient room for employees and visitors, even at peak times.

Institute of Transportation Engineers (ITE) Parking Generation Manual

Using the ITE Parking Generation Manual (5th Edition), data center parking demand was determined using the warehousing land use category (Code 150). The definition of a data center shares significant similarities with that of a warehouse, a land use category with established parking standards. This approach improves the accuracy of parking demand forecasts by aligning them with the patterns typically observed with warehouses.

Based on ITE LUC 150, parking demand is forecast as follows:

Table 3: Average Peak ITE Parking Generation

ITE Land Use	ITE Land Use Code	Average Rate	Average number of Employees	Weekday Parking Spaces Estimated – Average ITE Parking Generation (Rate by Land Use)
Warehousing	150	0.78 per employee	50	39

Source: ITE Parking Generation, 5th Edition (Peak Parking Demand per Employee)

Table 4: 85th Percentile Peak Parking Demand - ITE

ITE Land Use	ITE Land Use Code	Average Rate	Average number of Employees	Weekday Parking Spaces Estimated – Average ITE Parking Generation (Rate by Land Use)
Warehousing	150	1.13 per employee	50	57

Source: ITE Parking Generation, 5th Edition (85th Percentile Peak Parking Demand per Employee)

Based on the ITE manual, the estimated parking demand is 39 spaces during average peak periods, rising to 57 spaces at the 85th percentile peak. With 350 spaces available, the facility will have a significant buffer to accommodate fluctuations in staffing or visitor traffic.

ITE Parking demand data summaries and land use code are included in **Appendix B**.

Conclusion and Recommendations

The proposed development is a 696,981 SF warehouse, with 350 parking spaces (including 8 for handicapped access). According to ITE Parking Generation, 5th Edition, estimated number of employees, and comparison with other Vantage Data Center locations, the number of proposed parking spots is adequate to meet the expected demand of VDC-D: Stacks Rd. With projected peak parking demand estimated at 60 spaces, the current allocation provides a substantial surplus, ensuring future flexibility for increases in staff or visitor traffic.

Appendix A: Site Plan

Appendix B: ITE Parking Demand Data



SITE LEGEND	
---	EXISTING PROPERTY LINE
---	EXISTING RIGHT-OF-WAY
---	EXISTING SETBACK LINE
---	PROPOSED RIGHT-OF-WAY
---	PROPOSED SETBACK LINE
---	100 YEAR FLOOD PLAIN
---	PROPOSED RETAINING WALL
---	CROSS WALK
STOP	STOP BAR (PAVEMENT MARKING)
YIELD	TRAFFIC FLOW ARROW (PAVEMENT MARKING)
YIELD	"YIELD" (PAVEMENT MARKING)
DIRECTIONAL ARROWS	DIRECTIONAL ARROWS (PAVEMENT MARKING)
ONLY	"ONLY" DIRECTIONAL ARROWS (PAVEMENT MARKING)
HANDICAP	HANDICAP STALL
CONCRETE WHEEL STOP	CONCRETE WHEEL STOP
A.D.A. STD HANDICAP RAMP	A.D.A. STD HANDICAP RAMP
PARKING SPACE COUNT	PARKING SPACE COUNT
SIGN	SIGN
LIGHT POLE	LIGHT POLE
DUMPSTER PAD	DUMPSTER PAD
TRANSFORMER PAD	TRANSFORMER PAD
CONCRETE	CONCRETE
STANDARD DUTY PAVEMENT	STANDARD DUTY PAVEMENT
HEAVY DUTY PAVEMENT	HEAVY DUTY PAVEMENT

KEY NOTES LEGEND	
①	24" CURB & GUTTER, SEE SHEET C9.00 FOR DETAIL
②	24" WHITE STOP BAR, SEE SHEET C9.00 FOR DETAIL
③	CONCRETE PAVEMENT, SEE SHEET C9.00 FOR PAVEMENT SPECIFICATIONS
④	STANDARD DUTY ASPHALT, SEE SHEET C9.00 FOR PAVEMENT SPECIFICATIONS
⑤	HEAVY DUTY ASPHALT, SEE SHEET C9.00 FOR PAVEMENT SPECIFICATIONS
⑥	CONCRETE SIDEWALK, SEE DETAIL SHEET C9.01 FOR DETAIL
⑦	CONCRETE WHEEL STOP, SEE DETAIL SHEET C9.00
⑧	TAPER CURBING FROM 6" TO 0" OVER 5'
⑨	"TYPE A" CURB RAMP, SEE SHEET C9.01 FOR DETAILS
⑩	"TYPE B" CURB RAMP, SEE SHEET C9.01 FOR DETAILS
⑪	"TYPE C" CURB RAMP, SEE SHEET C9.01 FOR DETAILS
⑫	"TYPE D" CURB RAMP, SEE SHEET C9.01 FOR DETAILS
⑬	STOP SIGN (R1-1), SEE DETAIL SHEET C9.01
⑭	LANDSCAPE AREA, SEE SHEET L-1 FOR FURTHER DETAIL
⑮	DIRECTIONAL ARROWS, SEE DETAIL SHEET C9.01
⑯	CROSSWALK, SEE DETAIL SHEET C9.00
⑰	4" WIDE DOUBLE SOLID YELLOW LINE (DSYL)
⑱	4" WIDE SINGLE SOLID WHITE LINE (SSWL)
⑲	CONCRETE TRANSFORMER PAD PER UTILITY OWNER REQUIREMENT.
⑳	CONCRETE BOLLARDS, SEE DETAIL SHEET C9.03.
㉑	RETAINING WALL, DESIGN AND PERMITTED BY OTHERS.
㉒	DO NOT ENTER SIGN
㉓	RIGHT TURN ONLY SIGN
㉔	PROPOSED DUMPSTER ENCLOSURE WITH CONCRETE APRON, SEE ARCHITECTURAL PLANS FOR DETAILS
㉕	ADA PARKING AREA SEE DETAIL SHEET C9.01
㉖	ADA PARKING SIGN SEE DETAIL SHEET C9.01

PARKING SUMMARY	
TOTAL PARKING REQUIRED:	350
TOTAL PARKING PROVIDED:	350
LANDSCAPE REQUIREMENTS	
FRONT LANDSCAPE BUFFER:	FRONT BUFFER
SIDE LANDSCAPE BUFFER:	SIDE BUFFER
REAR LANDSCAPE BUFFER:	REAR BUFFER
PARKING ISLANDS:	LANDSCAPE ISLAND WIDTH

SITE DATA SUMMARY	
ADDRESS:	4380 STACKS ROAD, SOUTH FULTON, GA
TOTAL PROPERTY AREA:	23.64 AC
DISTURBED AREA:	22.93 AC
IMPERVIOUS AREA:	11.31 AC
PERVIOUS AREA:	12.34 AC
OPEN SPACE PROVIDED:	7.54 AC

ZONING CLASSIFICATION	
ZONING:	M-2
ADJACENT ZONING:	ADJ ZONING
JURISDICTION:	FULTON COUNTY
BUILDING SUMMARY GA-11	
PROPOSED OFFICE AREA:	14,206 SF
PROPOSED DATA MODULE AREA:	143,780 SF
PROPOSED TOTAL BUILDING AREA:	355,662 SF
STORIES OF THE BUILDING:	3-STORIES
FLOOR AREA RATIO (FAR):	2.91
BUILDING SUMMARY GA-12	
PROPOSED OFFICE AREA:	14,206 SF
PROPOSED DATA MODULE AREA:	143,780 SF
PROPOSED TOTAL BUILDING AREA:	355,662 SF
STORIES OF THE BUILDING:	3-STORIES
FLOOR AREA RATIO (FAR):	2.91

- GENERAL SITE NOTES**
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - ALL INTERIOR CURB RADI TO BE 5' UNLESS OTHERWISE NOTED.
 - PARKING LOT AND ROAD STRIPING SHALL BE IN ACCORDANCE WITH GDOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION.
 - ACCESSIBLE PARKING, SIGNAGE, WARNING STRIPES AND STRIPING SHALL BE IN ACCORDANCE WITH CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN.
 - ALL LAND DISTURBANCE TO BE STABILIZED WITH VEGETATION UPON COMPLETION OF DEMOLITION.
 - ALL TREES SHALL HAVE PROPER PROTECTION DURING CONSTRUCTION UNLESS APPROVED PLANS SPECIFY OTHERWISE.
 - TOPOGRAPHIC SURVEY BY LOWE ENGINEERS, DATED OCT 2023.
 - FLOODPLAIN IS PRESENT ON SITE AS DEPICTED BY FEMA FIRM PANEL NUMBER 13121C0456F & 13121C0457F, DATED 9/18/2013.
 - OWNER IS RESPONSIBLE FOR OBTAINING ANY NECESSARY AGREEMENTS FROM ADJACENT PROPERTY OWNERS IN ORDER TO PERFORM THE REQUIRED OFFSITE WORK, INCLUDING STORM DRAINAGE, UTILITY CONNECTIONS, SIDEWALK, CURB AND GUTTER AND PAVEMENT TIE-INS AND GRADING.
 - ALL NEW ASPHALT AND OR PAVEMENT SHALL MEET THE GEOTECHNICAL REPORT RECOMMENDATION, REPORT PREPARED BY XXXXXX DATED XXXX/XX/XX.
 - TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION OF THIS PROJECT. ALL BARRICADES AND SIGNS SHALL BE FURNISHED AND USED BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL/STATE AND CURRENT SPECIFICATIONS.
 - CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING CONSTRUCTION FENCE, SIGN, TO WARN AND KEEP PEOPLE OFF SITE FOR THE DURATION OF THE PROJECT.
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING POSTAL DELIVERY METHOD WITH THE LOCAL JURISDICTION. IF A PHYSICAL MAILBOX IS REQUIRED, GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PURCHASE, LOCATION PLACEMENT, AND INSTALLATION.
 - BUILDING DIMENSIONS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. SEE ARCHITECTURAL PLANS FOR ACTUAL DIMENSIONS.
 - SITE CONTRACTOR SHALL FURNISH "AS-BUILT" DRAWINGS INDICATING ALL CHANGES AND DEVIATIONS.
 - SITE WORK CONTRACTOR IS RESPONSIBLE FOR WORK TO WITHIN 5' OF THE BUILDINGS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATION INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS AND POLES, ETC., GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.

VANTAGE DATA CENTERS
200 CLAYTON STREET, SUITE 500
ATLANTA, GA 30303
PHONE: 770-401-6735

PREPARED BY:
LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 500
ATLANTA, GA 30328
770.857.8400

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THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT UNLESS IT IS PROPERLY SIGNED AND SEALED.

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OR PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR ANY OTHER PERSON.

OVERALL SITE PLAN

GA-11 DATA CENTER
4380 STACKS ROAD
SOUTH FULTON, GA 30349

ZONING MAP 2
LAND LOT 0107 OF 15
PARCEL ID: 09P000101070774

REVISIONS	
NO.	DATE
1	10/14/2024
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SCALE: 1" = 60'
DATE: 10/14/2024
DRAWN BY: BA
CHECKED BY: BA
PROJECT MANAGER: BILL AGUILAR
PROJECT #: 23-220019
SHEET
EX1.0

Warehousing (150)

Peak Period Parking Demand vs: Employees

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

Peak Period of Parking Demand: 11:00 a.m. - 4:00 p.m.

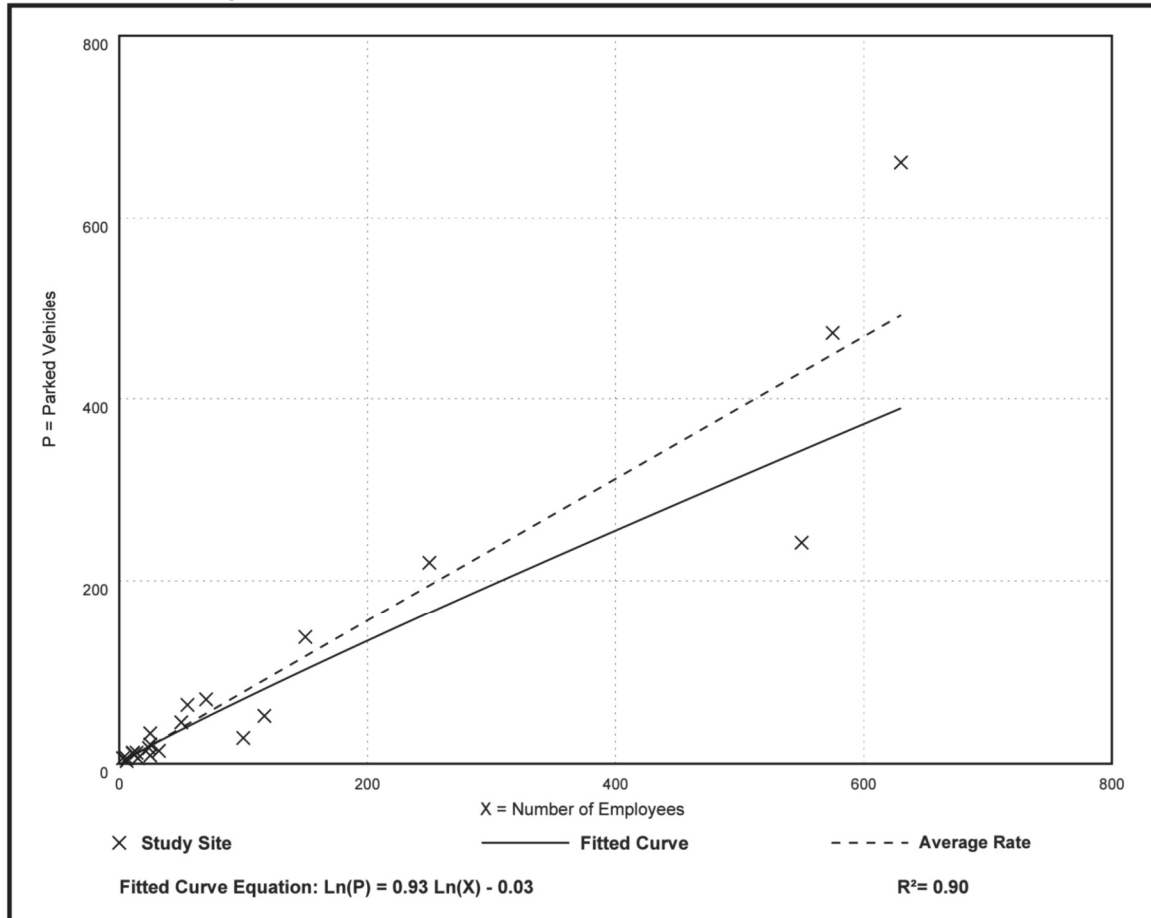
Number of Studies: 22

Avg. Num. of Employees: 125

Peak Period Parking Demand per Employee

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.78	0.28 - 2.00	0.62 / 1.13	0.67 - 0.89	0.27 (35%)

Data Plot and Equation





LETTER OF UNDERSTANDING

October 9th, 2024

Rabih Matar
Vantage Data Centers Management Company, LLC
C/O The Corporation Trust Company
1209 Orange Street
Wilmington, Delaware 19801

RE: **Vantage Data Centers – Stacks Road (DRI#: 4257)**

Dear Rabih Matar,

The purpose of this Letter of Understanding is to document the discussions during the Methodology Meeting held virtually on September 23, 2024 regarding **Vantage Data Centers – Stacks Road** Development of Regional Impact (DRI). The *GRTA DRI Review Procedures*, as well as the inputs and parameters documented in this Letter of Understanding and the revised Methodology Meeting Packet, shall be adhered to in preparing the GRTA required Transportation Study.

PROJECT OVERVIEW

- The proposed site is located at 33° 36' 20.52" N 84° 31' 51.2" W (Stacks Road and Mallory Road, South Fulton, GA).
- The proposed development includes 696,981 square feet of Data Center space. The development is planned to be located on undeveloped land (in the southwest quadrant of the intersection of Stacks Road and Mallory Road, just north of the CSX Railroad).
- The projected build-out is one phase to be completed by 2027.
- The proposed development includes (2) site accesses; (1) full access along Stacks Road and Emergency access along Mallory Road.
- The DRI trigger for this development is a permit issuance.
- The vehicular trip generation is estimated to be 690 net daily trips based on the *ITE Trip Generation Manual 11th edition*.
- The applicant is applying for approval under GRTA's expedited review process.

METHODOLOGY MEETING PACKET INPUTS & PARAMETERS

- The Site Plan shall meet all the applicable requirements in Section 7.1 of the *GRTA DRI Review Procedures*.
- The applicant shall research TIP, STIP, RTP and GDOT's construction work program, as well as any local government and transit operator plans (SPLOST, CIP, etc.), to determine the open date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity.
- If the *GRTA DRI Review Procedures* requires an Enhanced Focus Area for Heavy Vehicles or an Enhanced Focus Area for Dense Urban Environments, the Limited Trip Generation Memo shall incorporate the inputs and parameters agreed to at the Methodology Meeting and documented in the revised Methodology Meeting Packet. These inputs include the CSX Railroad Feasibility Study, as the property is located near a CSX railroad.

DRI REVIEW PACKAGE SUBMITTAL

GRTA will begin reviewing the DRI once the DRI Review Package is submitted and deemed complete. The DRI Review Package includes: the permitting Local Government inputting both Department of Community Affairs (DCA) forms into the DCA DRI website; and the **Traffic Engineer submittal of the GRTA Limited Trip Generation Memo and Site Plan to GRTA staff and ALL stakeholders included in the CC list of this Letter of Understanding.**

All DRI Review Packages shall be submitted electronically via email to all stakeholders in the CC list of the Letter of Understanding. If the DRI Review Package total file size is greater than 10 MB, the DRI Review Package shall be submitted via email with a FTP link provided for downloading the files.

Please contact me if you have any questions about the Letter of Understanding or the *GRTA DRI Review Procedures*.

Sincerely,

Brittany Williams
Program Manager

Cc:

Zane Grennell, DCA
Donald Shockey, ARC
Derrick Peevy, Jr. GRTA
Brittany Williams, GRTA
Sameer Patharkar, Lowe Engineers
Maurice Sims, Vantage
Bill Aguilar, Lowe Engineers
Sarah Parker, Lowe Engineers
Marcela DeLong, Corgan
Erroll Morrow
Rabih Matar, Vantage
Antonio Valenzuela, City of South Fulton

Colum Conner
Allan Price
Jillian Willis, ARC
Denise Brookins, City of Fairburn
Reginald McClendon, City of South Fulton
Liston Mehserle, MARTA
Chakira Johnson, City of South Fulton
Natavis Harris, MARTA
Megan Wilson, GDOT
Matt Reeves, MMP