



G R E S H A M  
S M I T H   A N D  
P A R T N E R S

## **MEMORANDUM**

TO: Rob Herr — City of Columbus DOSD

FROM: Katie Nolan — Gresham, Smith and Partners

DATE: February 27, 2017

**SUBJECT: PARKING STUDY  
HUDSON-MCGUFFEY PROJECT AREA  
BLUEPRINT LINDEN - COLUMBUS  
GS&P Project No. 40498.00**

As part of the Blueprint Linden 60% plan development, the DOSD has requested that GS&P perform a Preliminary Parking Analysis of the Hudson McGuffey project area to determine the following:

1. The number of available parking spaces in the project area;
2. The number of parking spaces that are occupied by residents on a regular basis; and
3. The number of available parking spaces that would be eliminated by the implementation of the proposed GI features.

The tasks described below were performed as part of the Parking Analysis scope.

### **Task 1: Parking Space Analysis**

#### *Task 1.1 Available Parking Spaces*

The number of available parking spaces within the project area was determined utilizing the criteria provided by the DOSD in the Parking Study Protocol memo dated January 17, 2017, which included the following criteria per the City of Columbus Municipal code for parking in reference to existing on-street parking spaces in the study area:

- Assume a parking spot is 20 feet long
- Do not include areas where parking is restricted, either with a sign or in these locations:
  - Within 5 feet of a driveway
  - Within 10 feet of a fire hydrant
  - Within 20 feet of a crosswalk
  - Within 30 feet of a stop sign



MEMORANDUM

**HUDSON-MCGUFFEY PARKING STUDY**

GS&P Project No. 40498.00

February 27, 2017

Page 2

- Within 50 feet of a railroad crossing
- Within 20 feet of an intersection
- Within 1 foot of an ADA ramp

The north south streets in the study area do not have sidewalks or curbs and many of the streets have both formal (use of gravel or other surface) and informal (rutted lawn areas) parking spaces that have been created within the right of way. Guidance provided by the DOSD on January 20, 2017 indicated that available parking was to include only those spaces that parking is evident through the presence of gravel lots or rutted areas. For example, if there is 40-feet of gravel provided it should be counted as two parking spaces.

The number of available parking spaces is provided in Tables 1 and 2, and on the attached Block by Block Parking Summary maps.

*Task 1.2 Occupied Parking Spaces*

The January 17 DOSD memo included guidance on how and when the count of occupied parking spaces is to be determined. The guidance included:

- Parking needs for the street must be determined by actual surveys, not assumptions based on the availability of a garage or driveway. The presence of garages or driveways may be noted
- Optimal times for conducting the counts:
  - If there is a school in the area, make sure one of the counts is conducted during the day while school is in session
  - Sunday morning
  - Monday evening

The number of parking spaces occupied by residents on a regular basis were counted on three separate occasions:

1. Utilizing Google Maps Streetview imagery of the study area in a desktop analysis.
2. Sunday, February 12, 2017 at approximately 10am.
3. Tuesday, February 14, 2017 at approximately 6pm.

The number of occupied parking spaces is summarized in Tables 1 and 2, and on the attached Block by Block Parking Summary maps.

*Task 1.3 Eliminated Parking Spaces*

The number of parking spaces eliminated by the proposed GI features was determined utilizing the 60% design plans submitted 1/27/2017 regarding the locations and lengths of



MEMORANDUM

**HUDSON-MCGUFFEY PARKING STUDY**

GS&P Project No. 40498.00

February 27, 2017

Page 3

proposed GI features in the study area and the following criteria from the DOSD's Parking Study Protocol:

- Assume a parking spot is eliminated if there is not 4 feet from the edge of curb to the beginning to the bioswale
- Assume a parking spot is eliminated on the street opposite a bump out if the width of the remaining road is less than 19 feet
- Provide actual number of spots lost and the number of lost spots as a percentage of the total available

The number of parking spaces eliminated by the proposed GI features is detailed in Tables 1 and 2, and on the attached Block by Block Parking Summary map. The average use of east-west street parking spots from the collected information is 603 spots out of the 1,766 total available spots. Therefore, 34% of the available spots are used on average. The average use of north-south street parking spots from the collected information is 73 spots with a total of 200 available spots. However, the proposed GI will not cause any loss of parking.

**Conclusions**

Based on the summary information in the Tables, only 3% of the overall available parking spaces will no longer be available. Therefore, there will still be sufficient parking available to residents of the study area once the proposed GI features have been implemented throughout the study area.



MEMORANDUM  
**HUDSON-MCGUFFEY PARKING STUDY**  
 GS&P Project No. 40498.00  
 February 27, 2017  
 Page 4

Table 1: East-West Street by Street Parking Summary

	Occupied Parking Spaces			Available Parking Spaces	Eliminated Parking Spaces	Percent Parking Removed
	Google Maps	2/12/17	2/14/17			
South side Weber	25	29	24	141	20	14%
North side Manchester	40	66	55	144	5	3%
South side Manchester	48	55	53	139	13	9%
North side Aberdeen	37	55	51	138	4	3%
South side Aberdeen	47	70	47	137	0	0%
North side Minnesota	38	64	57	145	0	0%
South side Minnesota	41	48	35	130	0	0%
North side Genessee	46	62	65	121	6	5%
South side Genessee	1	0	0	0	0	0%
North side Arlington	25	19	18	73	4	5%
South side Arlington	19	19	25	74	2	3%
North side Myrtle	23	30	23	75	0	0%
South side Myrtle	20	6	24	60	2	3%
North side Briarwood	28	20	22	79	0	0%
South side Briarwood	17	22	21	70	0	0%
North side Republic	14	27	24	62	0	0%
South side Republic	11	23	24	70	0	0%
North side Loretta	22	27	31	53	0	0%
South side Loretta	17	25	25	55	0	0%
North side Hudson	0	0	0	0	0	0%
<b>Total</b>	<b>519</b>	<b>667</b>	<b>624</b>	<b>1,766</b>	<b>56</b>	<b>3%</b>



MEMORANDUM  
**HUDSON-MCGUFFEY PARKING STUDY**  
GS&P Project No. 40498.00  
February 27, 2017  
Page 5

Table 2: North-South Street by Street Parking Summary

	Occupied Parking Spaces			Available Parking Spaces	Removed for GI	Percent Parking Removed
	Google Maps	2/12/17	2/14/17			
West side Hamilton	1	1	0	1	0	0%
East side Hamilton	2	0	0	13	0	0%
West side Ontario	3	2	2	11	0	0%
East side Ontario	4	3	7	7	0	0%
West side Medina	6	2	3	10	0	0%
East side Medina	6	3	3	10	0	0%
West side Dresden	9	12	11	21	0	0%
East side Dresden	10	13	9	23	0	0%
West side Bremen	15	4	3	20	0	0%
East side Bremen	9	2	4	23	0	0%
West side Greenwich	17	9	8	36	0	0%
East side Greenwich	15	15	7	25	0	0%
Total	97	65	57	200	0	0%

Attachments: Google Maps Streetview Parking Summary  
February 12, 2017 Parking Summary  
February 14, 2017 Parking Summary

RJ

Copy Josh Reinicke – GS&P  
Dempsey Ballou – GS&P

Hudson McGuffey Parking Study - Google Maps Streetview

	Hamilton	Ontario	Medina	Dresden	Bremen	Greenwich	Alley	Cleveland
<b>Weber</b>	4/21/2 1/1/0	0/0/0 5/16/4 1/5/0	1/3/0 2/18/4 4/4/0	0/3/0 3/22/0 1/0/0	0/2/0 1/18/4 1/1/0	3/3/0 7/27/3 3/4/0	3/3/0 3/19/3	0/0/0
Alley	0/0/0 6/16/0 0/0/0	0/2/0 8/24/0 0/0/0	0/0/0 2/24/0 1/3/0	2/5/0 7/25/0 0/0/0	0/4/0 10/27/0 0/0/0	0/0/0 7/21/5	0/1/0	
<b>Manchester</b>	0/0/0 10/18/0 1/3/0	0/0/0 6/27/3 1/4/0	0/0/0 8/24/5 0/0/0	0/0/0 7/22/0 1/0/0	0/0/0 10/26/0 0/0/0	0/0/0 7/22/5	0/0/0	
Alley	0/1/0 7/18/0 0/0/0	1/0/0 7/23/0 1/2/0	3/2/0 8/25/0 1/3/0	0/0/0 2/22/0 0/0/0	0/1/0 6/26/4 0/0/0	1/2/0 7/21/0	0/3/0	
<b>Aberdeen</b>	0/4/0 10/16/0 1/2/0	0/0/0 4/24/0 0/0/0	1/1/0 10/27/0 0/0/0	0/0/0 7/24/0 0/0/0	0/0/0 9/23/0 0/0/0	3/4/0 7/20/0	0/3/0	
Alley	0/2/0 6/20/0 0/0/0	1/0/0 6/25/0 0/0/0	1/2/0 9/25/0 0/0/0	1/3/0 7/25/0 0/0/0	2/1/0 7/24/0 0/0/0	0/0/0 3/23/0	0/3/0	
<b>Minnesota</b>	2/1/0 7/22/0 0/1/0	0/0/0 5/21/0 0/0/0	1/2/0 9/18/0 0/2/0	0/0/0 6/25/0 0/0/0	2/0/0 9/24/0 1/5/0	0/5/0 5/17/0	0/2/0	
Alley	0/2/0 5/17/0 0/0/0	0/0/0 8/22/0 0/0/0	0/0/0 5/22/0 0/0/0	1/2/0 7/20/0 1/5/0	0/4/0 19/25/4 0/5/0	2/5/0 2/15/2	0/0/0	
<b>Genessee</b>	0/3/0 0/0/0 0/0/0	1/2/0 0/0/0 0/0/0	0/0/0 0/0/0 0/0/0	0/0/0 0/0/0 0/0/0	0/0/0 0/0/0 2/5/0	1/4/0 0/0/0 1/3/0	0/0/0 1/0/0	0/0/0
Alley				2/13/0 0/2/0	0/0/0 5/17/0 0/0/0	0/0/0 5/22/0 0/0/0	0/0/0 7/16/4	6/5/0
				0/10/0 0/0/0	2/3/0 4/21/0 0/0/0	0/0/0 6/22/0 2/3/0	1/3/0 5/16/0	5/5/2
				0/13/0 0/0/0	1/1/0 10/23/0 0/0/0	0/0/0 10/21/0 0/0/0	0/0/0 3/17/0	0/1/0
				6/12/0 0/3/0	0/3/0 3/16/0 1/0/0	0/0/0 8/14/0 0/0/0	0/0/0 3/17/2	0/1/0
				7/13/0 1/2/0	0/0/0 8/21/0 0/0/0	0/0/0 7/27/0 0/0/0	0/1/0 6/18/0	0/0/0
				2/14/0 0/0/0	1/0/0 7/23/0 0/3/0	0/2/0 6/22/0 0/0/0	2/3/0 2/9/0	0/2/0
				5/18/0 0/0/0	2/2/0 7/17/0 0/3/0	0/0/0 2/20/0 0/0/0	0/0/0 0/7/0	0/0/0
				2/12/0 0/0/0	0/0/0 5/27/0 0/0/0	0/0/0 2/25/0 1/3/0	0/0/0 2/6/0	0/0/0
				10/12/0 1/0/0	0/0/0 5/10/0 3/0/0	0/2/0 6/24/0 1/3/0	0/0/0 1/2/0	0/5/0
				8/16/0 4/5/0	0/2/0 7/9/0 0/0/0	1/0/0 2/23/0	0/1/0	0/6/0
				0/0/0 0/1/0	0/0/0 0/0/0 6/3/0	0/2/0 0/0/0	8/1/0	0/0/0
							4/1/0	
								0/0/0

Legend

- Permeable Pavement
- Bump Outs/Ins
- Bioswales

NS: Not Surveyed

X/X/X:

(Occupied) / (Available) / (Removed with GI)

Hudson McGuffey Parking Study - February 12, 2017

	Hamilton	Ontario	Medina	Dresden	Bremen	Greenwich	Alley	Cleveland
<b>Weber</b>	4/21/2 1/1/0	NS/0/0 2/16/4 1/5/0	0/3/0 1/18/4 1/4/0	1/3/0 6/22/0 1/0/0	0/2/0 4/18/4 0/1/0	0/3/0 12/27/3 1/4/0	0/3/0 NS/19/3	NS/0/0
Alley		NS/0/0 5/16/0 0/0/0	3/2/0 9/24/0 0/0/0	0/0/0 8/24/0 3/3/0	3/5/0 9/25/0 0/0/0	0/4/0 18/27/0 0/0/0	0/0/0 17/21/5	NS/1/0
<b>Manchester</b>		NS/0/0 4/18/0 0/3/0	0/0/0 13/27/3 0/4/0	0/0/0 10/24/5 0/0/0	0/0/0 9/22/0 0/0/0	0/0/0 9/26/0 0/0/0	0/0/0 10/22/5	NS/0/0
Alley		NS/1/0 4/18/0 0/0/0	0/0/0 7/23/0 0/2/0	0/2/0 11/25/0 2/3/0	0/0/0 11/22/0 0/0/0	0/1/0 10/26/4 0/0/0	3/2/0 12/21/0	NS/3/0
<b>Aberdeen</b>		NS/4/0 8/16/0 1/2/0	0/0/0 9/24/0 0/0/0	0/1/0 14/27/0 0/0/0	0/0/0 15/24/0 0/0/0	1/0/0 15/23/0 0/0/0	5/4/0 9/20/0	NS/3/0
Alley		NS/2/0 5/20/0 0/0/0	0/0/0 13/25/0 0/0/0	0/2/0 12/25/0 0/0/0	0/3/0 14/25/0 0/0/0	0/1/0 13/24/0 0/0/0	2/0/0 7/23/0	0/3/0
<b>Minnesota</b>		NS/1/0 1/22/0 0/1/0	0/0/0 12/21/0 0/0/0	2/2/0 7/18/0 0/2/0	0/0/0 11/25/0 0/0/0	0/0/0 12/24/0 3/5/0	0/5/0 5/17/0	NS/2/0
Alley		NS/2/0 11/17/0 0/0/0	0/0/0 8/22/0 0/0/0	0/0/0 15/22/0 0/0/0	0/2/0 4/20/0 0/5/0	0/4/0 18/25/4 0/5/0	1/5/0 6/15/2	NS/0/0
<b>Genessee</b>		NS/3/0 0/0/0 0/0/0	0/2/0 0/0/0 1/0/0	0/0/0 0/0/0 0/0/0	0/0/0 0/0/0 0/5/0	1/4/0 0/0/0 1/3/0	0/0/0 0/0/0	0/0/0
Alley				5/13/0 0/2/0	1/0/0 6/17/0 0/0/0	0/0/0 5/22/0 0/0/0	0/0/0 3/16/4	NS/5/0
<b>Arlington</b>				0/10/0 0/0/0	2/3/0 6/21/0 0/0/0	0/0/0 9/22/0 0/3/0	0/3/0 4/16/0	NS/5/2
Alley				1/13/0 0/0/0	0/1/0 15/23/0 0/0/0	0/0/0 9/21/0 0/0/0	0/0/0 5/17/0	0/1/0
<b>Myrtle</b>				12/12/0 1/3/0	4/3/0 8/16/0 0/0/0	0/0/0 5/14/0 0/0/0	0/0/0 5/17/2	0/1/0
Alley				5/13/0 3/2/0	1/0/0 6/21/0 0/0/0	0/0/0 5/27/0 0/0/0	1/1/0 4/18/0	NS/0/0
<b>Briarwood</b>				1/14/0 0/0/0	1/0/0 8/23/0 1/3/0	0/2/0 8/22/0 3/0/0	2/3/0 5/9/0	NS/2/0
Alley				8/18/0 0/0/0	1/2/0 6/17/0 0/3/0	0/0/0 12/20/0 0/0/0	0/0/0 1/7/0	NS/0/0
<b>Republic</b>				5/12/0 0/0/0	0/0/0 6/27/0 0/0/0	0/0/0 11/25/0 0/3/0	0/0/0 1/6/0	NS/0/0
Alley				6/12/0 0/0/0	0/0/0 3/10/0 0/0/0	0/2/0 6/24/0 0/3/0	0/0/0 11/2/0	1/5/0
<b>Loretta</b>				10/16/0 3/5/0	0/2/0 5/9/0 0/0/0	0/0/0 3/23/0	1/10/0 7/1/0	0/6/0
Alley				NS/0/0 0/1/0	0/0/0 NS/0/0 3/3/0	0/2/0 NS/0/0	1/1/0 NS/0/0	NS/0/0
<b>Hudson</b>								

Legend

- Permeable Pavement
- Bump Outs/Ins
- Bioswales

NS: Not Surveyed

X/X/X:

(Occupied) / (Available) / (Removed with GI)

Hudson McGuffey Parking Study - February 14, 2017

	Hamilton	Ontario	Medina	Dresden	Bremen	Greenwich	Alley	Cleveland
<b>Weber</b>	2/21/2 NS/1/0	NS/0/0 2/16/4 NS/5/0	NS/3/0 3/18/4 3/4/0	0/3/0 4/22/0 NS/0/0	NS/2/0 4/18/4 0/1/0	2/3/0 4/27/3 0/4/0	0/3/0 5/19/3	0/0/0
Alley		NS/0/0 3/16/0 0/0/0	4/2/0 7/24/0 0/0/0	0/0/0 10/24/0 3/3/0	3/5/0 7/25/0 0/0/0	0/4/0 16/27/0 0/0/0	0/0/0 12/21/5	0/1/0
<b>Manchester</b>		NS/0/0 8/18/0 1/3/0	0/0/0 10/27/3 0/4/0	0/0/0 10/24/5 0/0/0	0/0/0 8/22/0 0/0/0	0/0/0 5/26/0 0/0/0	0/0/0 12/22/5	0/0/0
Alley		NS/1/0 6/18/0 0/0/0	1/0/0 7/23/0 0/2/0	0/2/0 8/25/0 1/3/0	0/0/0 12/22/0 0/0/0	0/1/0 9/26/4 0/0/0	1/2/0 9/21/0	NS/3/0
<b>Aberdeen</b>		NS/4/0 6/16/0 0/2/0	0/0/0 7/24/0 0/0/0	1/1/0 11/27/0 0/0/0	0/0/0 9/24/0 0/0/0	1/0/0 9/23/0 0/0/0	1/4/0 5/20/0	NS/3/0
Alley		NS/2/0 8/20/0 0/0/0	0/0/0 11/25/0 0/0/0	1/2/0 12/25/0 0/0/0	0/3/0 9/25/0 0/0/0	0/1/0 11/24/0 0/0/0	0/0/0 6/23/0	0/3/0
<b>Minnesota</b>		NS/1/0 4/22/0 1/1/0	2/0/0 4/21/0 0/0/0	1/2/0 4/18/0 0/2/0	0/0/0 10/25/0 0/0/0	0/0/0 9/24/0 3/5/0	1/5/0 4/17/0	0/2/0
Alley		NS/2/0 11/17/0 0/0/0	0/0/0 7/22/0 0/0/0	0/0/0 11/22/0 0/0/0	0/2/0 11/20/0 1/5/0	0/4/0 18/25/4 0/5/0	1/5/0 7/15/2	NS/0/0
<b>Genessee</b>		NS/3/0 0/0/0 NS/0/0	NS/2/0 0/0/0 0/0/0	0/0/0 0/0/0 0/0/0	1/0/0 0/0/0 0/5/0	1/4/0 0/0/0 1/3/0	0/0/0 0/0/0	NS/0/0
Alley				4/13/0 0/2/0	1/0/0 6/17/0 0/0/0	0/0/0 3/22/0 0/0/0	0/0/0 5/16/4	NS/5/0
<b>Arlington</b>				0/10/0 0/0/0	2/3/0 7/21/0 0/0/0	0/0/0 13/22/0 1/3/0	0/3/0 5/16/0	NS/5/2
Alley				4/13/0 0/0/0	0/1/0 12/23/0 0/0/0	0/0/0 7/21/0 0/0/0	0/0/0 0/17/0	0/1/0
<b>Myrtle</b>				9/12/0 3/3/0	1/3/0 7/16/0 0/0/0	0/0/0 5/14/0 0/0/0	0/0/0 3/17/2	0/1/0
Alley				8/13/0 1/2/0	0/0/0 5/21/0 0/0/0	0/0/0 5/27/0 0/0/0	1/1/0 4/18/0	NS/0/0
<b>Briarwood</b>				1/14/0 0/0/0	0/0/0 9/23/0 1/3/0	0/2/0 5/22/0 3/0/0	1/3/0 6/9/0	NS/2/0
Alley				6.5/18/0 0/0/0	1/2/0 6/17/0 1/3/0	0/0/0 10/20/0 0/0/0	0/0/0 1/7/0	0/0/0
<b>Republic</b>				6/12/0 0/0/0	0/0/0 8/27/0 0/0/0	0/0/0 9/25/0 0/3/0	0/0/0 1/6/0	0/0/0
Alley				7/12/0 0/0/0	0/0/0 6/10/0 0/0/0	0/2/0 9/24/0 0/3/0	0/0/0 9/2/0	NS/5/0
<b>Loretta</b>				6/16/0 3/5/0	0/2/0 7/9/0 0/0/0	0/0/0 6/23/0	0/10/0 6/1/0	NS/6/0
Alley				NS/0/0 0/1/0	0/0/0 NS/0/0 0/3/0	0/2/0 NS/0/0	0/10/0 NS/0/0	NS/0/0
<b>Hudson</b>								

Legend

Permeable Pavement

Bump Outs/Ins

Bioswales

NS: Not Surveyed

X/X/X:

(Occupied) / (Available) / (Removed with GI)