



AGENDA
PLANNING AND ZONING COMMISSION MEETING
CITY OF CREVE COEUR, MISSOURI
TUESDAY, JANUARY 21, 2020
6:30 PM

Pursuant to Section 610.022 RSMo, the Planning and Zoning Commission could, at any time during the meeting, vote to close the public meeting and move to closed session to discuss matters relating to litigation, legal actions and/or communications from the City Attorney as provided under Section 610.021(1) RSMo. and/or personnel matters under Section 610.021(13) RSMo. and/or employee matters under Section 610.021(3) RSMo. and/or real estate matters under Section 610.021(2) or other matters as permitted by Chapter 610.

Reports, documents, plans, and related materials are available for examination at the Creve Coeur Government Center, 300 North New Ballas Road, prior to the meeting.

Special disabled service may be arranged by contacting the Office of the City Administrator in advance.

CALL TO ORDER

ROLL CALL

Ms. Beth Kistner (Chair)
Mr. Tim Carney
Ms. Muriel Hall
Mr. James Myers
Mr. Gene Rovak
Mr. Larry Potashnick
Mr. Todd Streiler
Mr. Carl Lumley, City Attorney
Mr. Jason Jaggi, Director of Community Development
Ms. Whitney Kelly, City Planner
Ms. Jessica Stutte, Planning Assistant/Recording Secretary

ACCEPTANCE OF THE AGENDA

APPROVAL OF MINUTES

- 1. January 6, 2020 Planning and Zoning Commission Draft Meeting Minutes**

PUBLIC COMMENT

An opportunity for members of the public to address the Planning and Zoning Commission regarding issues or concerns not already on the agenda for this meeting. Those wishing to speak will be asked to limit comments to three minutes and to complete a speaker card.

UNFINISHED BUSINESS

None

NEW BUSINESS

1. PUBLIC HEARING. Application #19-043: The Review and Adoption of the 39N Greenway Plan as an Amendment to the 39 North Master Plan and the Creve Coeur 2030 Comprehensive Plan

Jason Jaggi, Director of Community Development, on behalf of the City of Creve Coeur, has submitted the Draft 39N Greenway Plan, developed by the St. Louis Economic Development Partnership and the Great Rivers Greenway, as an amendment to the 39N Master Plan and the City's Comprehensive Plan, Creve Coeur 2030, to provide trail alignments and connectivity within the 39N District and to the regional Centennial Greenway, as recommended within the 39N Master Plan.

2. Applications #19-046 & #19-047: Approval of a Boundary Adjustment and a Site Development Plan for a 20 Unit Apartment Building at 10809-10819 Olive Boulevard

Alvah Levine, of Levine Associates, on behalf of JLA Group, LLC, has submitted an application for Site Development Plan approval for a 20 Unit, 2-bedroom apartment building at 10809-10819 Olive Boulevard. Medium Density Multifamily Residential (up to 20 units per acre) (NAICS-CC814120) Developments are a permitted use in the CB-Core Business District. The Boundary Adjustment will consolidate the three lots into one development for a total of 1.05 acres.

WORK AGENDA

None

DEPARTMENT REPORTS

Director of Community Development

ADJOURNMENT

Posted: _____
Jason W. Jaggi
Director of Community Development



DRAFT MINUTES
PLANNING AND ZONING COMMISSION MEETING
CITY OF CREVE COEUR, MISSOURI
MONDAY, JANUARY 6, 2020
6:30 PM

CALL TO ORDER

Ms. Kistner, Chair, called the meeting to order at 6:30 pm.

ROLL CALL

Larry Potashnick	Commission Member	
Todd Streiler	Commission Member	(Absent)
Beth Kistner	Commission Chair	
Tim Carney	Commission Member	
Gene Rovak	Commission Member	
Muriel Hall	Commission Member	
James Myers	Commission Member	(Absent)

The following staff were also present: Carl Lumley, City Attorney; Jason Jaggi, Director of Community Development; Whitney Kelly, City Planner; and, Jessica Stutte, Planning Assistant/ Recording Secretary.

ACCEPTANCE OF THE AGENDA

Mr. Potashnick made a motion to accept the agenda. Mr. Carney seconded. All in favor.

APPROVAL OF MINUTES

1. November 18, 2019 Planning and Zoning Commission Draft Meeting Minutes

Mr. Rovak made a motion to accept the minutes. Mr. Potashnick seconded. All in favor.

PUBLIC COMMENT

None

UNFINISHED BUSINESS

None

NEW BUSINESS

1. PUBLIC HEARING. Application #19-043: the Review and Adoption of the 39N Greenway Plan as an Amendment to the 39 North Master Plan and the Creve Coeur 2030 Comprehensive Plan

RESULT:	CONTINUED [UNANIMOUS]	Next: 1/21/2020 6:30 PM
MOVER:	Tim Carney, Commission Member	
SECONDER:	Muriel Hall, Commission Member	
AYES:	Potashnick, Kistner, Carney, Rovak, Hall	
ABSENT:	Streiler, Myers	

2. Application #19-044: Site Development Plan Approval for Monument Signs for the Rondelay Subdivision at N. Spoeede Road and Graeser Road

Ms. Linda Scher, trustee of Rondelay Subdivision, said the subdivision would like to update the subdivision signs.

Ms. Kelly said the sign base would stay the same and they would just be switching out the signage. She said the city recommends approval.

Mr. Potashnick asked if raising the sign would cause a sight impairment for drivers.

Ms. Kelly said she spoke with the Director of Public Works and he said he did not foresee the height being an issue.

Motion to approve subject to staff's recommended conditions passed unanimously.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Tim Carney, Commission Member
SECONDER:	Muriel Hall, Commission Member
AYES:	Potashnick, Kistner, Carney, Rovak, Hall
ABSENT:	Streiler, Myers

3. Application #19-045: a Minor Site Plan Approval for Exterior Modification to the Building at 453 N. Lindbergh Boulevard

Mr. Alan Peele, of Cardinal Contractors, said he had submitted plans that were approved in February, but was back before the Commission with a simplified version.

Ms. Kistner asked about the materials.

Mr. Peele went over the material changes and showed the updated brick, shingles and siding samples. He said the proposed changes were similar to what is pre-existing.

Ms. Kistner asked about the siding material.

Mr. Peele said it's vinyl.

Ms. Kelly said vinyl is typically not recommended and the staff report recommends Hardie board.

Mr. Peele said he can do Hardie board.

Mr. Carney recommended a discussion with the neighbors in regard to cross access.

Ms. Kelly said the applicant's submission is quite similar to the previously approved project. She said Hardie board was recommended, but everything else remains the same. She said the brick columns would need a condition if the Commission recommended painting the brick.

Mr. Carney made a motion to approve the application subject to the conditions in the staff report. Mr. Rovak seconded. All in favor.

RESULT:	FIRST READING [UNANIMOUS]
MOVER:	Tim Carney, Commission Member
SECONDER:	Gene Rovak, Commission Member
AYES:	Potashnick, Kistner, Carney, Rovak, Hall
ABSENT:	Streiler, Myers

WORK AGENDA

1. East Olive Corridor—Overlay District and Planned Development Revisions

Ms. Kistner suggested that since two new members were missing tonight that the discussion be postponed.

Mr. Jaggi said it would be beneficial for all members to be present as there was a substantial amount of information to absorb.

After some discussion as to whether they should postpone, they decided to go through the presentation as scheduled due to likely absences at upcoming meetings.

Mr. Jaggi went over the update. He said it would be a 2- tiered approach with an Overlay District and utilizing existing planned development with larger properties.

He showed the East Olive Corridor on the map. He said the Overlay District would only apply to East Olive.

He went over the purpose statement for the Overlay District. He said if this were adopted it would change the zoning map and an amendment would need to be made. He said location of the overlay district would need to be identified on the map and as part of the ordinance.

Mr. Potashnick asked if the overlay district could include the Schnucks. Mr. Jaggi recommended against making changes to the 39 N area.

Mr. Jaggi said when this area was initially discussed there was residents' concern about future development. He said the decision was made to not rezone the residential property on Olive zoned C Single Family at that time, but to revisit it in 5 years.

He went over permitted uses and planned development. He said Planned Development would still require review and approval and would not just be granted automatically. He went over setbacks and said they would be quite different than what is required now. The minimum and maximum would be set to have a consistent building line.

Ms. Kelly said the previous discussion led to the determination that the line would be set at 90 ft with the allowance to be up to 5 ft further or 5 ft closer.

There was some discussion about calculating setbacks.

Mr. Jaggi said they would work on the language to read better. He went over site coverage allowances and suggested the maximum be 60% instead of the previously discussed 50%. Bonuses could be earned up to 70%. He said this would help with looking at large lots with multiple buildings to be consistent.

Mr. Jaggi went over building height and the areas that would currently be affected. He said the sky exposure plane would still be applied to 4 story properties adjacent to residential with CB base zoning. He covered building orientation which would require buildings to be oriented to the street. He went over the suggestions for circulation and elements for incorporation. Cross-access benefits were discussed.

Landscaping, screening and buffering were presented next. He said this would standardize the requirements and alter the buffer area.

Ms. Kistner was concerned that would negatively affect residents. It was determined there weren't any residential homes that weren't already zoned commercially in this area.

Ms. Kelly pointed out that there were still requirements from the fire district that would need to be met. She said they required enough space for their trucks to circulate around the building.

Mr. Jaggi said they could differentiate between the buffer and the building setback which is greater than 20 ft. There was some discussion on buffering and Mr. Jaggi said they would come back with visual examples.

Mr. Jaggi went over building material requirements to ensure durable materials with aesthetic appeal.

He went over the current requirements for planned development in the Overlay District. He suggested changing the eligibility criteria.

He showed properties that could face redevelopment in the near future and went over proposed eligibility requirements.

Mr. Carl Mastay, a resident, asked about 3 properties and potential rezoning that bordered the CB district.

Ms. Kistner said property owners can ask at any time for rezoning to be considered.

Mr. Paul Gada said he was pleased with the presentation and asked for clarification regarding 2 properties.

Mr. Jaggi said the 2 properties were outside the overlay district, but the property owners did have options if they were to combine properties, but it was unlikely. He said the land use could change moving forward.

Mr. Jaggi said they would make some revisions based on tonight's discussion.

DEPARTMENT REPORTS

Mr. Jaggi said there were two items for the next meeting, the proposed Greenway amendment to the 39 North Master Plan and the Creve Coeur 2030 Comprehensive Plan and a site development plan in the East Olive district. He indicated that is Staff is able to prepare changes in time, the discussion can also continue on the proposed East Olive overlay.

ADJOURNMENT

Mr. Rovak made a motion to adjourn. All in favor. Meeting closed at 8:11pm.



city of

CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141
(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

APPLICATION TO PLANNING AND ZONING COMMISSION

#19-043: FOR THE REVIEW AND ADOPTION OF THE 39N GREENWAY PLAN AS AN AMENDMENT TO THE 39 NORTH MASTER PLAN AND THE CREVE COEUR 2030 COMPREHENSIVE PLAN

FOR THE MEETING OF: Monday, January 21, 2020

LOCATION: 39N District, generally the area east of Lindbergh Boulevard and North of Olive Boulevard, with Bayer East and West Campus on the south of Olive Boulevard.

REQUEST: Jason Jaggi, Director of Community Development, on behalf of the City of Creve Coeur, has submitted the Draft 39N Greenway Plan, developed by the St. Louis Economic Development Partnership and the Great Rivers Greenway, as an amendment to the 39N Master Plan and the City's Comprehensive Plan, Creve Coeur 2030, to provide trail alignments and connectivity within the 39N District and to the regional Centennial Greenway, as recommended within the 39N Master Plan. Staff recommends that the Planning and Zoning Commission review the plan and consider adopting it as a component of the City's comprehensive plan. Such action will result in the City's formal endorsement of the plan to support the continued development of the 39N District in the same manner as the 39N Master Plan and Old Olive Great Street Plan for that portion that is under the purview of the City of Creve Coeur

ADDITIONAL INFORMATION: The Draft Plan has been available on the City's website for comments since November 8, 2019. Rietz and Jenz has also sent out the draft to stakeholders, including the City of Olivette, St. Louis Economic Development Partnership, the Missouri Department of Transportation, St. Louis County, and the Great Rivers Greenway and asked for comments to be provided by the end of the year. Therefore, Staff recommends that the Commission conduct the public hearing and accept comments from the public but continue the item until the next Planning and Zoning commission meeting in January.

APPLICANT: Jason W. Jaggi, AICP
Director of Community Development
City of Creve Coeur
300 North New Ballas Road
Creve Coeur, MO 63141

REPORT PREPARED BY: Whitney Kelly, AICP, City Planner
DATE: 1/16/2020
ATTACHMENTS: Draft 39N Greenways Plan-Final, Dated 12-31-2019
Draft Resolution
Prior Staff Report from December 16, 2019

State Regulations:

- The **comprehensive plan** is a critical basis for local zoning regulations. It is exclusively developed and adopted by the planning commission. (89.340-89.370)
- **Zoning regulations** must be made in accordance with a comprehensive plan. (89.040). The plan is considered to only be a guide and not enforceable independent of the zoning ordinance.

Zoning Code References

- Section 405.1030:
Planning and Zoning Commission

OVERVIEW OF THE 39 GREENWAY PLAN FROM THE PRIOR STAFF REPORT

The Draft Greenway Plan is structured into four (4) sections as follows:

- Introduction
- Site Analysis
- Design
- Appendices

As shown on page 43 and 67, the Greenway Plan has been broken down into 8 design segments:

1. Old Bonhomme Road to Danforth Plant Science Center
2. Danforth Center Campus
3. Missouri American Water Property
4. Helix Center Property
5. Research Boulevard South
6. Warson Park to Research Boulevard
7. Baur Boulevard
8. Lindbergh Boulevard crossing

The long-term goal of the 39N Greenway Project is to develop a separated multi-use trail for pedestrian and bicycles connecting the internal nodes and making connections to the regional greenways. However, due to a lack of right-of-way for such a trail, and limited pedestrian sidewalks within the 39N District, on-street pedestrian and bicycle facilities provide opportunities for near-term improvements (p. 42). Pages 60-63 provide for on-street bicycle facilities and expansion opportunities for pedestrian/sidewalk facilities within the district, in addition to the greenway connections within the area.

The stated next steps in the development of the 39 North Greenway on Page 11 include:

- Adoption of the Greenway Plan by the Core Working Team and sponsors. The jurisdictional stakeholders should use this plan to guide future development and redevelopment in the 39 North District while securing property rights for the greenway when possible.
- Develop a schedule for implementation based on possible phasing of work and projected cost estimates. These are not part of this study.
- Secure funding which is likely to include a combination of Federal and State grants, local funding, corporate support and general fundraising.
- Begin surveys and preliminary design in order to determine property requirements.
- Greenway right-of-way acquisition. This will be a long and detailed process due to the number of individual properties involved and the presence of a railroad.
- Pursue design and construction of meaningful segments as opportunities arise. Early opportunities will include on-street bicycle facilities (striping), sidewalks, and a greenway connecting the Danforth Center, Old Olive Street Road and the Helix Center

SUMMARY OF CHANGES FROM THE PRIOR DRAFT

39 North Greenway Plan has been available for viewing on the City's website November 8th. The Design Team have also sought out comments from the Stakeholders. Below is the summary of changes to the Draft report from the November 7, 2019 draft, to the December 31, 2019 final version:

1. Introduction
 - a) Page 9: rewrote the last paragraph.
 - b) Page 10: first paragraph added core working team.
2. Site Analysis
 - a) Page 14: differentiated major stakeholders (listed) vs stakeholders (property owners).
 - b) Page 14: updated list of information included in the Appendix.
 - c) Page 17: MoDOT right-of-way added to the legend.
 - d) Page 24: rewrote some of the Centennial Greenway text.
 - e) Page 35: rewrote caption for MSD map.

3. Design
 - a) Page 42: removed trail centerline stripe. This is not part of GRG's standard section.
 - b) Page 43: add PROWAG to list of design criteria.
 - c) Page 55: added a box at Warson/Gateway saying to coordinate with City of Olivette projects in this area. The City is not sure at this time if aligning the park entrance with Gateway will be pursued. Trail crossing of Warson Rd could end up south of Gateway.
 - d) Page 56: Double image in view was corrected to show Baur Blvd.
4. Appendix
 - a) Added Greenway Data Summary per Design Segment table.
 - b) Added Eliminated Design Options list.
 - c) Clarified crash data dates and added legend.
 - d) Added current and previous bus routes to Metro Reimagined map.
5. General revisions
 - a) Minor text changes have been made throughout the report for spelling/grammar/etc, consistent terminology (greenway vs trail, etc), branding (39 North vs 39 N, etc).
 - b) Some graphic images had text sizes increased and/or labels updated. Some graphics had avatars updated.
 - c) Trail centerline stripe was removed from renderings since it is not part of GRG's standard trail section.

SUMMARY AND CONCLUSION

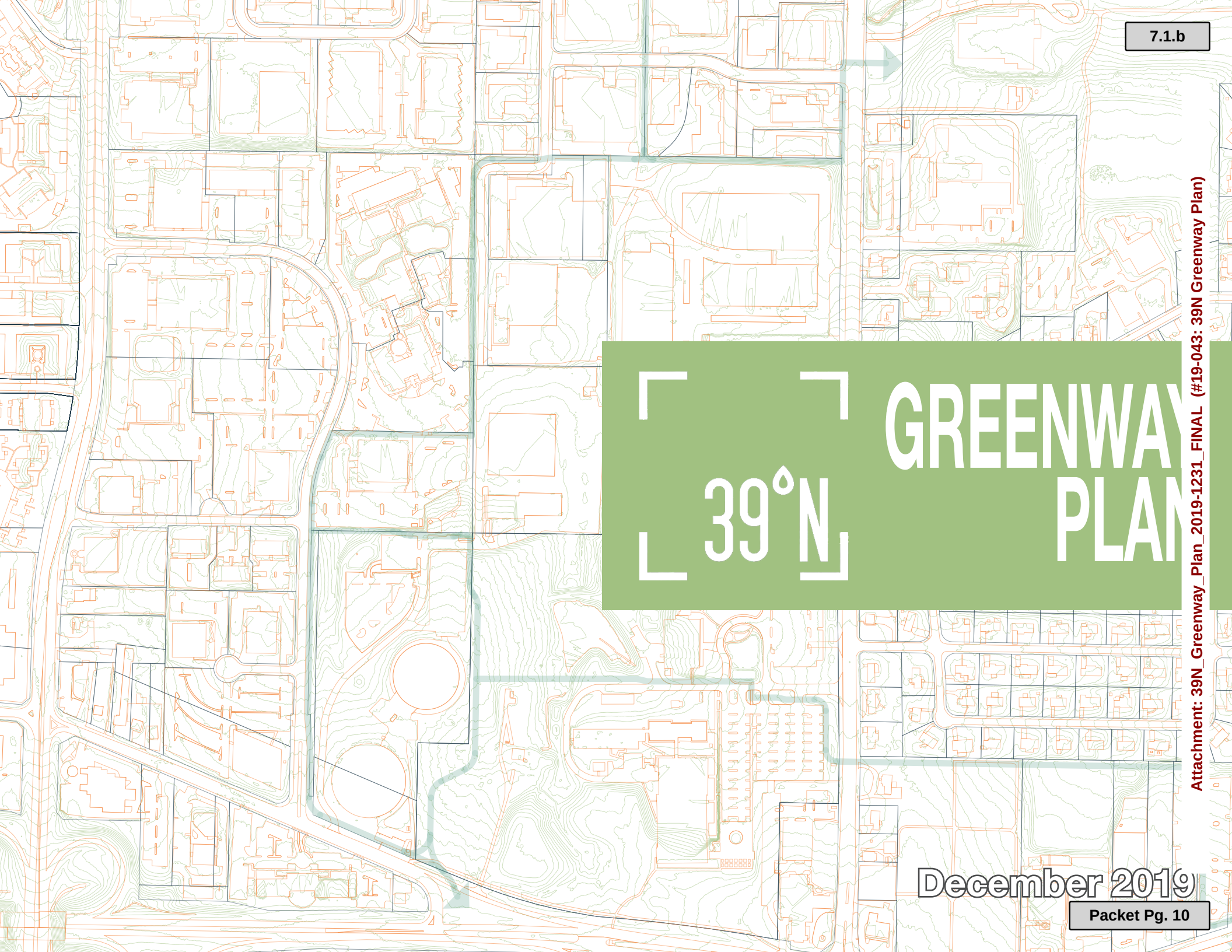
The 39N Greenway Plan includes approximately 0.4 miles of trail within the city of Olivette. The Centennial Greenway Olivette Alignment connects the existing Centennial Greenway at Olive Boulevard and 1-70 to Warson Park. The Greenways plan then makes the connection from Warson Park and throughout the 39N District. The adoption of the plan will only relate to areas that are under the purview of the Planning and Zoning Commission for the City of Creve Coeur.

The Design Team will be available for the presentation and to answer any questions the Commission may have.

ACTION AND MOTION

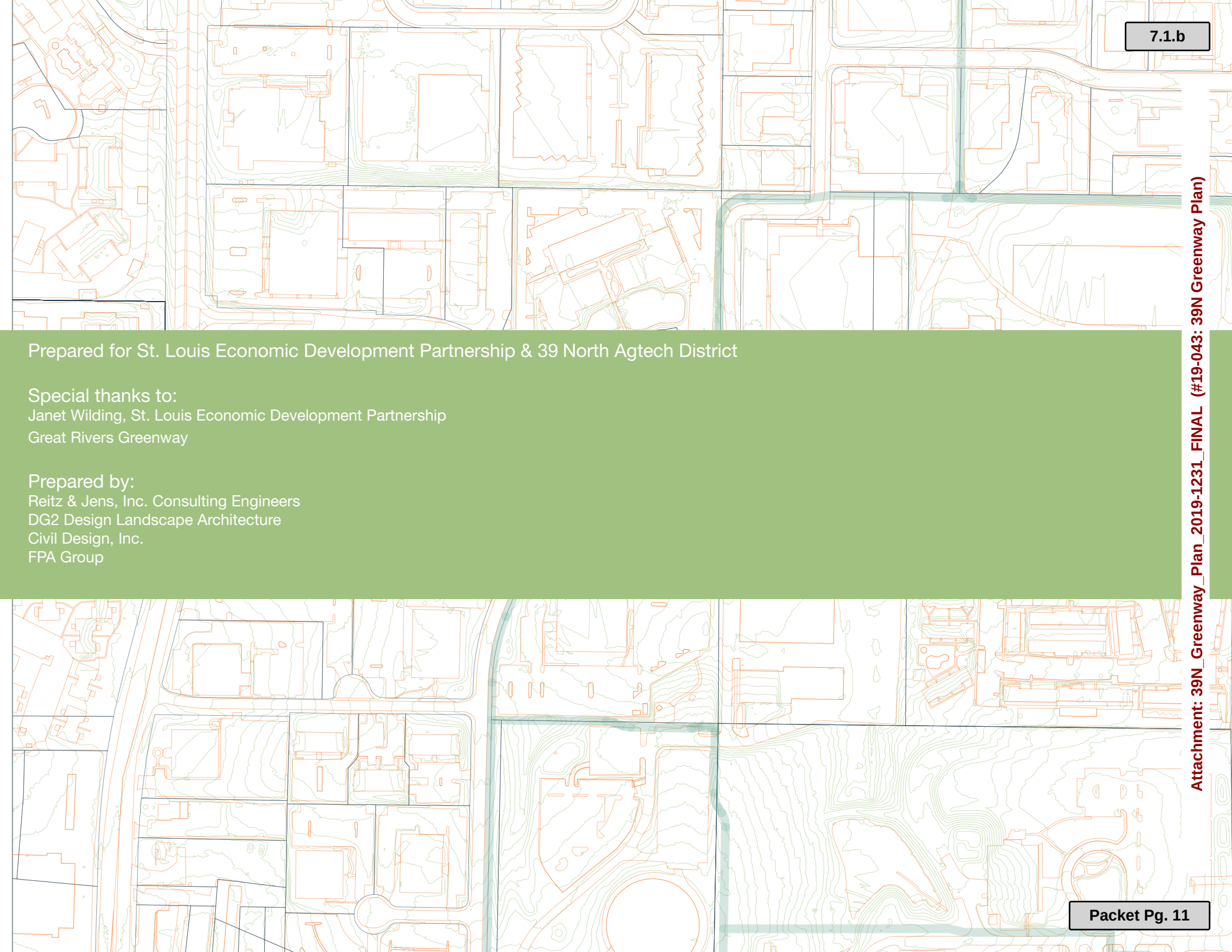
A draft resolution for adoption of the plan has been prepared for consideration at the conclusion of the public hearing and review by the Commission. The following would be an example motion for this application:

““I move to approve Resolution #19-043 to adopt the 39N Greenway Plan dated December 2019, as an amendment to the 39 North Master Plan and the City's Comprehensive Plan, Creve Coeur 2030, the official land use plan of the City as referenced by Application #19-043.”



GREENWAY PLAN 39°N

December 2019



Prepared for St. Louis Economic Development Partnership & 39 North Agtech District

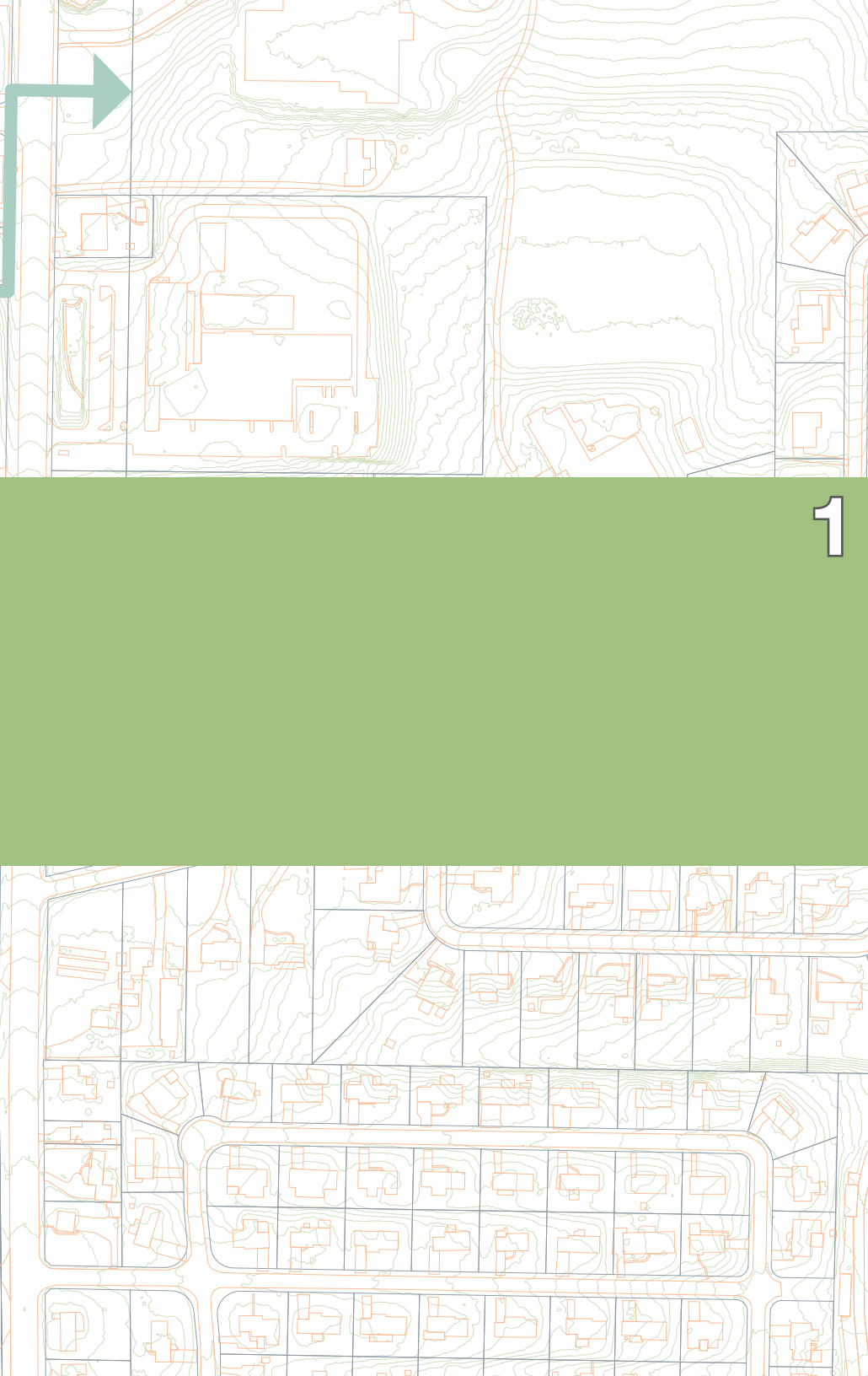
Special thanks to:

Janet Wilding, St. Louis Economic Development Partnership
Great Rivers Greenway

Prepared by:

Reitz & Jens, Inc. Consulting Engineers
DG2 Design Landscape Architecture
Civil Design, Inc.
FPA Group

1	Introduction
2	Site Analysis
3	Design
4	Appendix

A topographic map showing contour lines and property boundaries. A large green arrow points from the left edge towards the center. A large green rectangular area covers the middle-left portion of the map. The number '1' is positioned at the bottom-left corner of this green area.

1 Introduction

39 North Agtech District

In December of 2016, the 39 North District was officially announced by St. Louis County and the St. Louis Economic Development Partnership, to be a global innovation district for plant science and agricultural technology. With the Danforth Plant Science Center, Bio Research & Development Growth (BRDG) Park, Monsanto (now Bayer) and the Helix Center Biotech Incubator as anchors, the district encompasses 600+ acres in the City of Creve Coeur within St. Louis County.

To support the new and expanding agri-business and food industry companies and their work forces, St. Louis County and St. Louis Economic Development Partnership have worked together with the Cities of Creve Coeur and Olivette, Danforth Plant Science Center, BRDG Park, Helix Center, and Bayer to define a bold vision for access and circulation in the district.

The 39 North District Master Plan, completed in 2017, is based on feedback from the community and project partners. The master plan focuses on not only improving traffic pattern circulation, but also on increasing opportunities for multi-modal access around the district while creating a more aesthetically pleasing and environmentally sustainable environment.

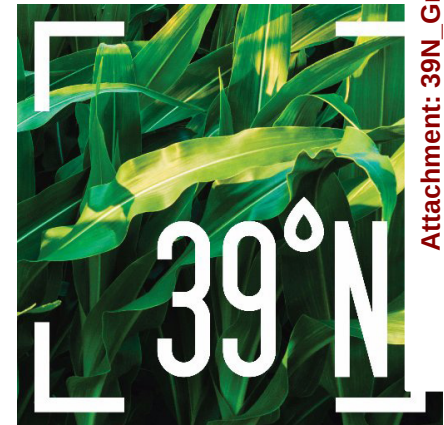
Circulation within the district suffers from significant barriers that have been built up over time. Strengthening connections within the district and to the surrounding communities is critical to defining the district and creating a sense of place.

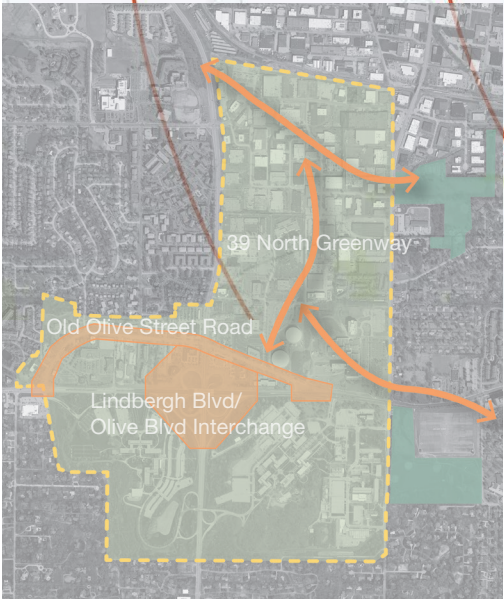
The 39 North District Master Plan identified 5 Transformative Ideas to help define the district as a vibrant and appealing place:

- Strengthen corridors and establish new traffic patterns
- Connect assets and opportunity sites
- Establish a cohesive development framework
- Create a mixed-use center of activity
- Communicate the district

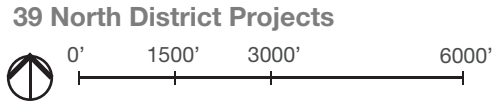
Three initial projects have been identified as priorities in reaching these goals:

- Interchange improvements at Olive Street Road and Lindbergh Blvd
- Implementation of a Great Streets Plan for Old Olive Street Road, including reconnecting the east and west segments across Lindbergh Blvd
- Development of multi-use trails throughout the district that connect to the regional trail system





Legend
39 North District



39 North District Projects

Regional Context
From the 39 North Master Plan Document

NEW WEBSITE: www.39northstl.com

Attachment: 39N_Greenway Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Lindbergh Blvd / Olive Blvd Interchange

Of the priorities identified in the 39 North Master Plan, infrastructure updates to improve traffic patterns were identified as critical for implementation of other projects. St. Louis County, in partnership with the Missouri Department of Transportation and the City of Creve Coeur, funded and designed the partial reconstruction and reconfiguration of the Lindbergh Blvd/Olive Blvd interchange in 2018 – 2019. Estimated to begin construction in early 2020, the improvements include the redesign of the traditional clover leaf interchange to a folded diamond configuration.

The new configuration will concentrate the through traffic on Lindbergh Blvd and Olive Blvd while providing connectivity to local commercial, retail and residential amenities. The Old Olive Street Road Great Streets project, made possible by the interchange improvements, will transform the highway ramps dividing the 39 North District to a pedestrian friendly connection incorporating traffic calming methods.



Old Olive Street Road

As part of improving the 39 North District, area residents, businesses and employees expressed the desire to have better access to all the areas within the District including the retail areas. Part of the vision for the district, reinforced by community engagement, is to transform the Old Olive Street Road corridor from an access ramp to Lindbergh Blvd (US Highway 67) to a vibrant retail district easily accessible for pedestrians and bicyclists.

In early 2018, the St. Louis Economic Development Partnership along with the City of Creve Coeur engaged Christner Inc. to develop a Great Streets Plan for Old Olive, which was formally adopted by the City of Creve Coeur in May of 2019. The planning process involved determining the existing challenges and opportunities in the district and building upon that foundation. Issues such as utility locations, storm water drainage, retail business access, residential access, streetscape character and function, traffic volumes, pedestrian and bicyclist facilities, mass transit access, and aesthetics were considered. With a solid understanding of the current state of the area and the community and City goals identified, it was determined the plan should accomplish 6 main goals:

- connectivity
- creating a recognizable district
- creating safe and efficient infrastructure
- integrating mixed-use development
- generate connector transformation
- provide a multi-modal crossing at Old Olive and Lindbergh

The largest barrier identified to improving connectivity across Lindbergh Blvd was the concrete barrier at its median. The plan calls for the removal of this barrier at Old Olive Street Road and the installation of a fully signalized intersection designed to accommodate pedestrians, bicyclists, and vehicular traffic. This



Old Olive Open House Meeting

intersection provides the east/west link across Lindbergh Blvd, not only connecting businesses and residences, but also connecting to the 39 North Greenway giving access throughout the district and beyond.

Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

39 North Greenway

In early 2018, the St. Louis Economic Development Partnership along with Great Rivers Greenway launched this 39 North Greenway study. A Core Working Team was assembled that includes the St. Louis Economic Development Partnership, Great Rivers Greenway, the Cities of Creve Coeur and Olivette, the Danforth Plant Science Center, Monsanto (Bayer) and the design team. This study is to find a physically viable alignment that meets the Project Goals developed by the Core Working Team. A secondary objective of this study is to meet with each property owner whose property is crossed by the greenway alignment to determine their level of support and, if possible, secure a letter of support for the greenway project. The project will not use eminent domain for property acquisition. Therefore, the willing cooperation of affected property owners is necessary for acquiring any required property rights. The study uses available data, including topographic and utility data, and field measurements without any formal survey. Because the majority of the alignments require property rights from private property owners, public records were reviewed for property ownership, and subdivision plats were collected.

The majority of the 39 North District was developed prior to its annexation by the City of Creve Coeur. Very open vehicular and truck access to roadway frontages was allowed during the original development. This condition makes pedestrian and bicyclist facility improvements difficult within the roadway rights-of-way. The 39 North District is currently not served by pedestrian or bicyclist facilities other than limited sidewalks.

A separated multi-use trail for pedestrian and bicyclist use connecting both the internal nodes and making regional connections is the long-term goal for the 39 North Greenway Project and the Core Working Team. Because there is limited existing right-of-way for the greenway, an interim option using on-street bike lanes

and/or shared lanes is included in this study. Possible sidewalk improvements and obstacles to pedestrian facilities were identified

Great Rivers Greenway, the City of Olivette and the City of Creve Coeur, as likely future partners in the development, construction, operation and maintenance of the greenway, have been involved in vetting proposed alignment options. A grade separated crossing of Olive Blvd had been an early goal of the project but was determined to not be feasible.

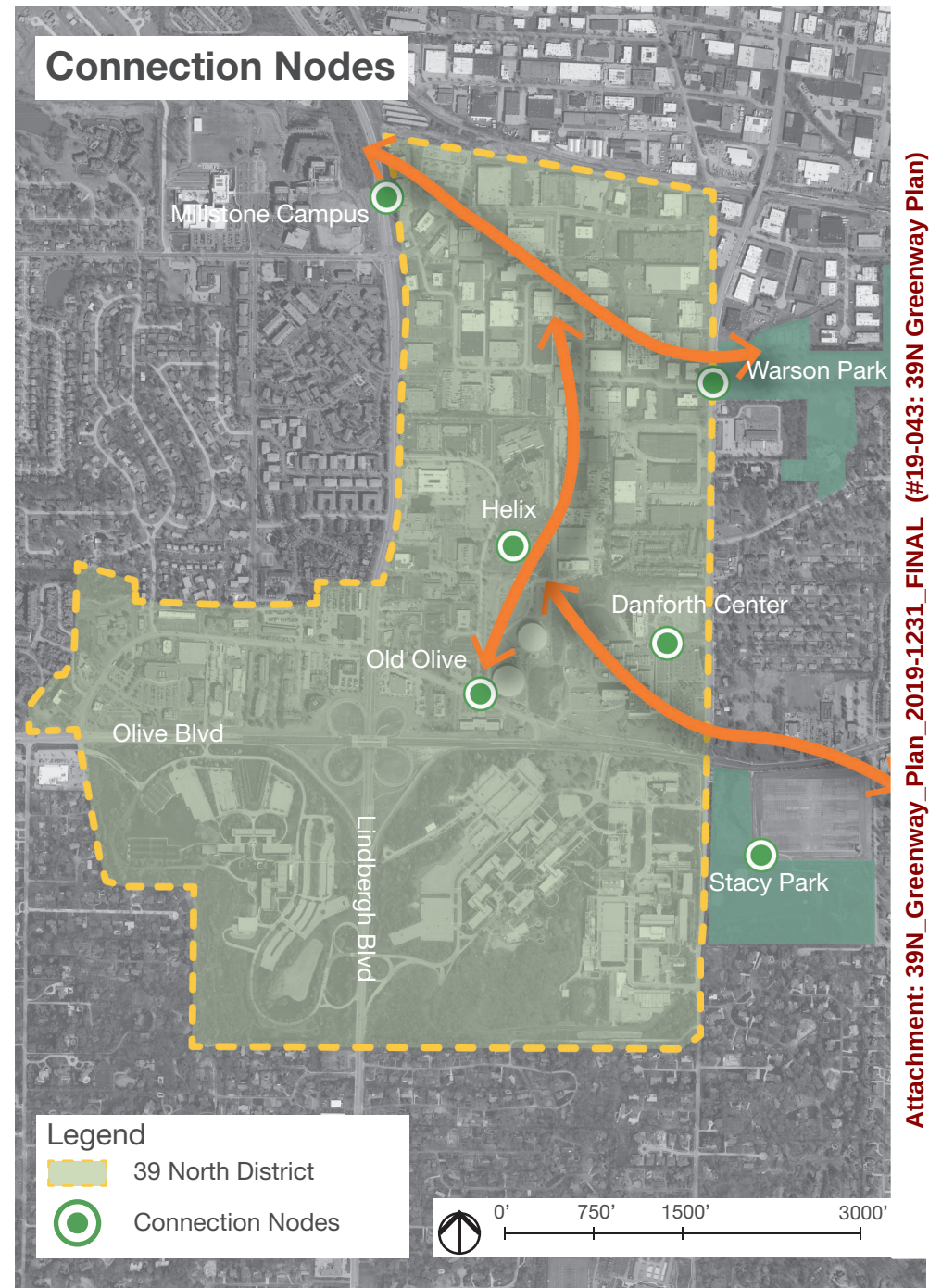
By meeting with affected property owners, we have been able to determine and make note of many of their specific concerns. Where possible, the greenway's alignment has been adjusted to mitigate the impact. As the greenway design continues, additional public outreach should involve adjacent property owners, especially ones that may be affected during construction.

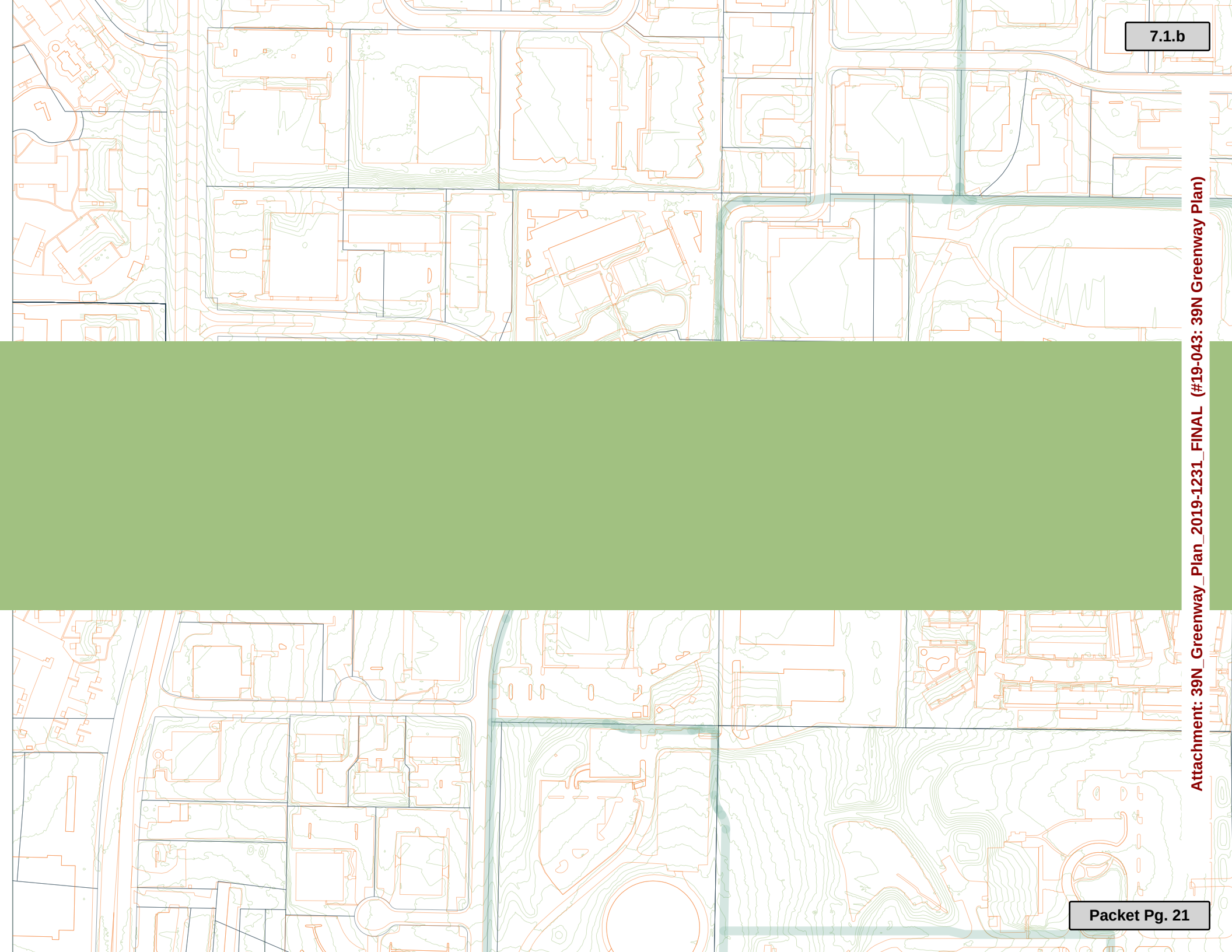
Project Goals:

- Provide internal connections for collaborative working opportunities
- Improve connections for bike commuters
- Provide connection to Old Olive Street Road Great Streets improvements
- Provide connection to and segment of Centennial Greenway

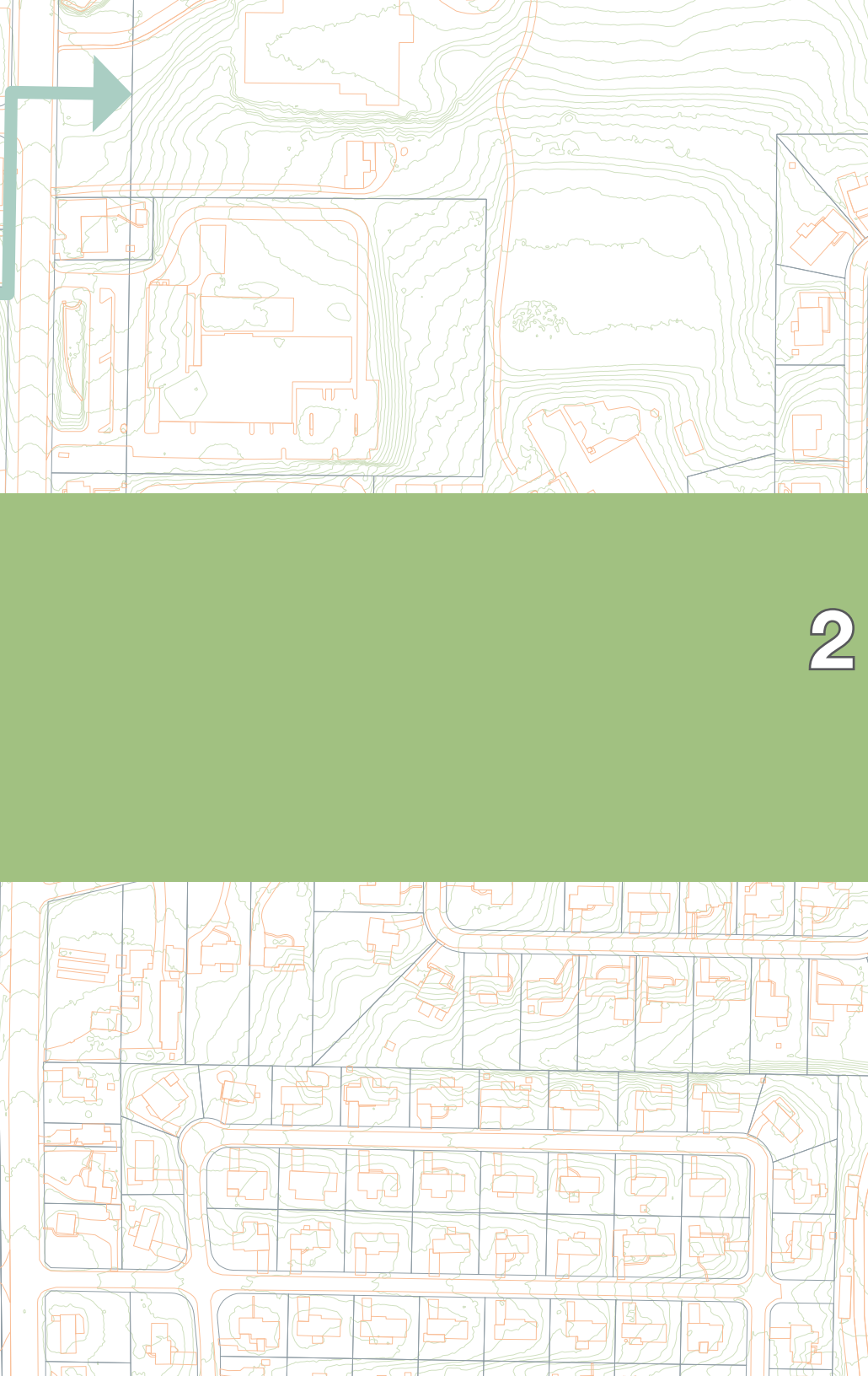
Next steps in the development of the 39 North Greenway include:

- Adoption of the Greenway Plan by the Core Working Team and stakeholders. The jurisdictional stakeholders (see Section 2) should use this plan to guide future development and redevelopment in the 39 North District while securing property rights for the greenway when possible.
- Develop a schedule for implementation based on possible phasing of work and projected cost estimates. These are not part of this study.
- Secure funding which is likely to include a combination of Federal and State grants, local funding, corporate support and general fundraising.
- Begin surveys and preliminary design in order to determine property requirements.
- Greenway right-of-way acquisition. This will be a long and detailed process due to the number of individual properties involved and the presence of a railroad.
- Pursue design and construction of meaningful segments as opportunities arise. Early opportunities will include on-street bicycle facilities (striping), sidewalks, and a greenway connecting the Danforth Center, Old Olive Street Road and the Helix Center.





7.1.b



2 Site Analysis

Stakeholders + Site Conditions

The success of the 39 North Greenway project will be determined by the ability to give life to the vision of the Core Working Team and to meet the needs of the users while addressing the concerns of each affected landowner. The jurisdictional stakeholders will be partners in the funding, development, construction, operation and maintenance of the greenway and on-street pedestrian and bicyclist facilities. The major stakeholders listed are some of the larger landowners and employers within the 39 North District. Several of these stakeholders were integral in the development of the 39 North District and its Master Plan. These major stakeholders have been early supporters of the greenway and have helped guide its vision. All landowners impacted by the greenway are considered stakeholders in the greenway project. This study has tried to contact all stakeholders to determine their level of support for the project as well as any specific concerns they may have. Several landowners have been inspired to conduct their own master planning studies or think about how their development plans may be able to coordinate with this project.

The greenway has been located along the periphery of parcels along the alignment to minimize impact to the parcels including future development options. Unfortunately, these often are the same areas used as utility corridors. An analysis of possible utility conflicts, based on records provided by the utilities with no field locates, is included later in this section. The Lindbergh-Warson Industrial Center was developed with extensive rail service. The existing active rail service is very limited and the greenway project hopes to take advantage of the inactive railroad alignments. More detailed analysis of the railroad impacts is included later in this section. Development of a greenway will require detailed analysis of the stormwater impacts regulated by the Metropolitan St. Louis Sewer District (MSD). These will include water quality and detention requirements for new impervious area and may also include design of new storm sewers or relocation of existing storm or sanitary sewers.

Jurisdictional Stakeholders:

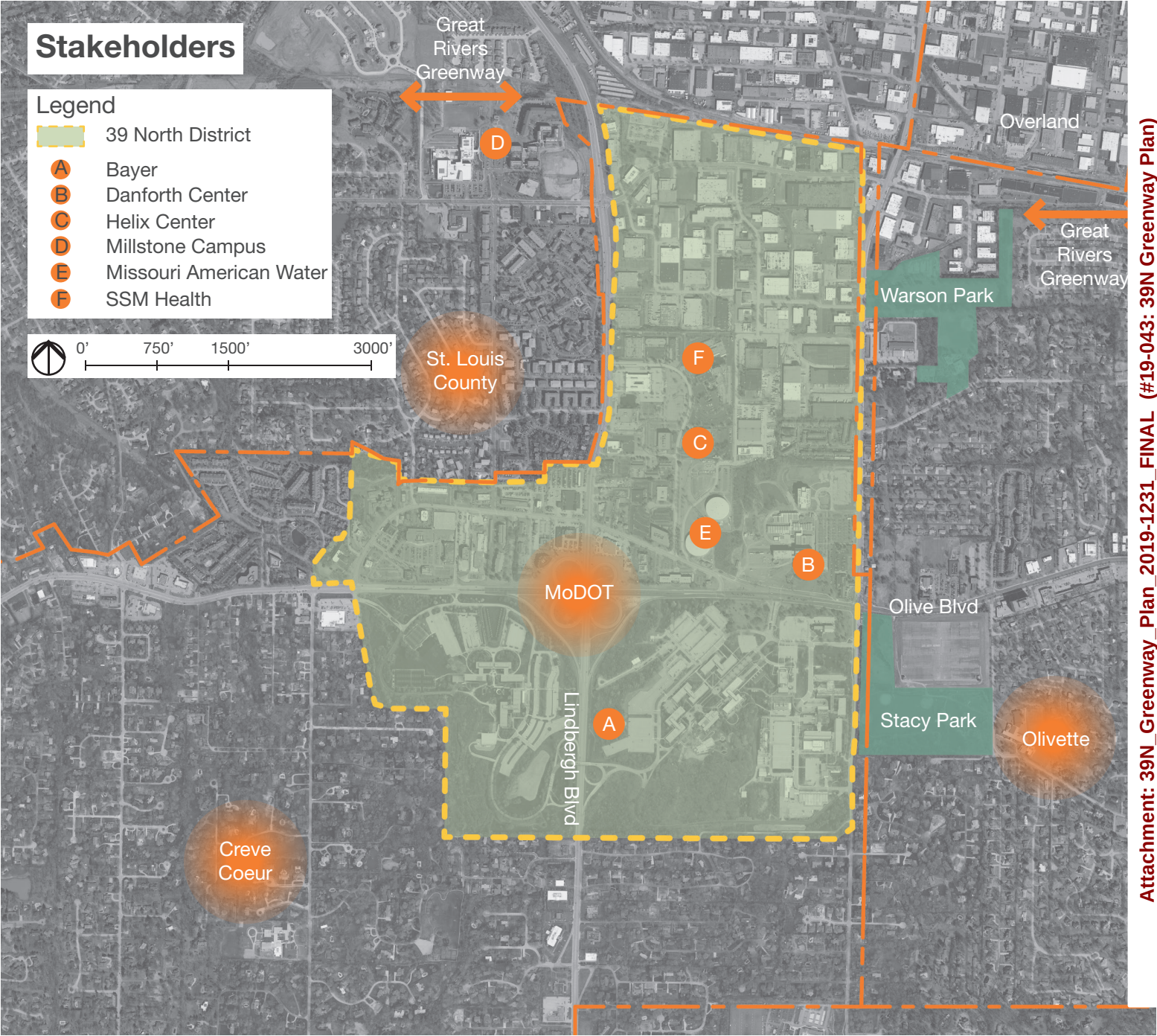
- Missouri Department of Transportation
- City of Creve Coeur
- City of Olivette
- St. Louis County
- Great Rivers Greenway

Major Stakeholders:

- Bayer
- Danforth Plant Science Center
- Helix Center Biotech Incubator
- Jewish Community Millstone Campus
- Missouri American Water
- SSM Health

See Appendix for the following additional information:

- Summary of greenway data by design segment.
- Eliminated design options.
- Full page renderings.
- A copy of Missouri Revised Statute Section 258.100 addressing immunity from civil liability for landowners adjoining a public trail.
- Traffic data for the 39 North District area.
- Crash data for the 39 North District area.
- Metro map for the 39 North District area.



Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Missouri Department of Transportation

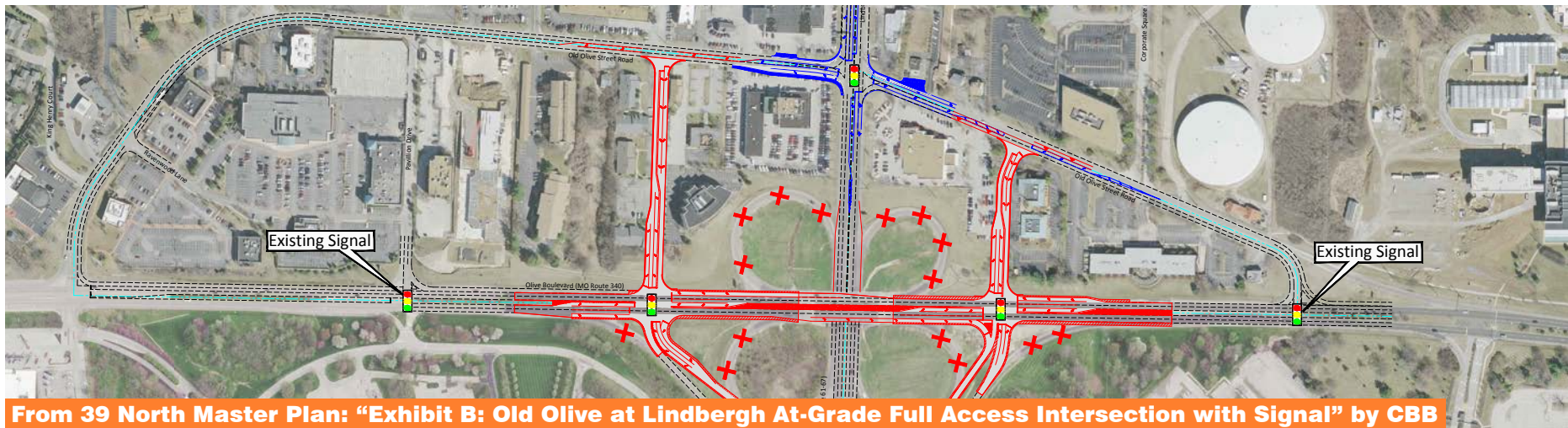
MoDOT maintains three corridors through and within the District:

- Lindbergh Blvd, or US Highway 67, is a four-lane barrier divided highway with a 40 MPH speed limit. The only points of access to cross Lindbergh Blvd are a full cloverleaf interchange at Olive Blvd, which has no pedestrian facilities, and a fully signalized intersection at Schuetz Road/Baur Blvd.
- Olive Blvd, or Missouri Route 340, is a four-lane road with a 40 MPH speed limit. Within the District, Olive Blvd includes a central landscaped median, signalized left turns and right turn deceleration lanes, except for at the entrance to Bayer. Olive Blvd typically has a paved shoulder but no sidewalks.
- Old Olive Street Road has no access across Lindbergh Blvd. Southbound Lindbergh accesses westbound Olive via west Old Olive Street Road which has one lane each way plus a reversible left turn lane with a speed limit of 30 MPH. Westbound Olive accesses northbound Lindbergh via east Old Olive Street Road which has two lanes each way with a speed limit of 40 MPH.

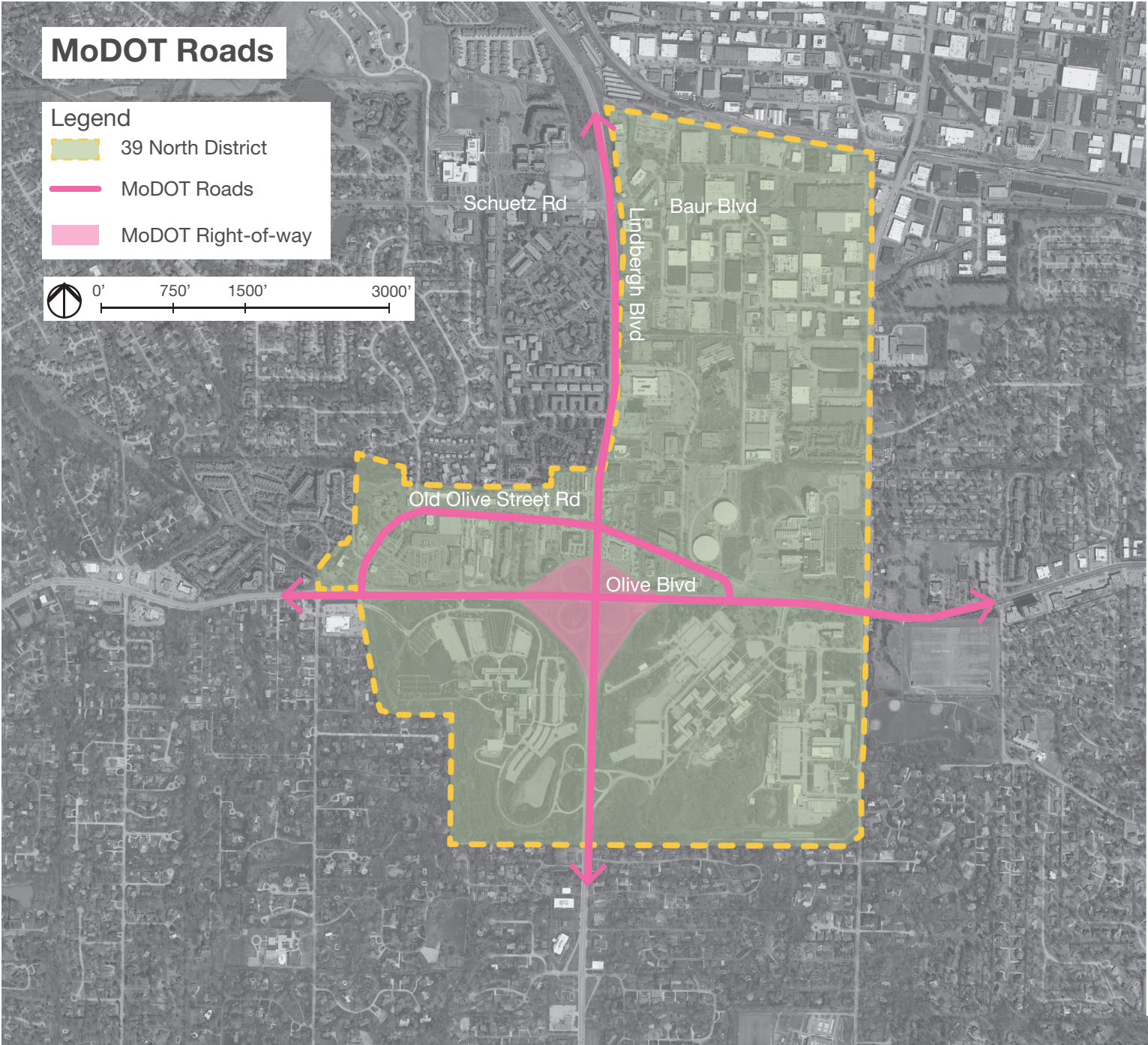
The Missouri Department of Transportation (MoDOT) is an active stakeholder in the 39 North District. MoDOT is working with the City

of Creve Coeur on the interchange project at Lindbergh Blvd and Olive Blvd. The interchange project will transform vehicular traffic patterns through and within the district including removing Old Olive Street Road from acting as access ramps between the two highways. Old Olive Street Road is to be transferred to the City of Creve Coeur which allows the City to pursue the Great Street Project transforming walkable and bike-able connectivity within the 39 North District. The interchange project will also produce two developable parcels with the goal of furthering the 39 North Master Plan objectives. When funding for the 39 North Greenway is pursued, MoDOT may be a source of grant money and also administers many Federal grants.

The 39 North Greenway is looking to make connections across MoDOT corridors at the existing intersection of Olive Blvd and Old Bonhomme and with the grade separated crossing of Lindbergh Blvd north of Schuetz Road/Baur Blvd. Although the bridge would cross a US Highway and coordination with MoDOT would be required, it is anticipated that MoDOT would not become a maintaining partner of the bridge.



From 39 North Master Plan: "Exhibit B: Old Olive at Lindbergh At-Grade Full Access Intersection with Signal" by CBB

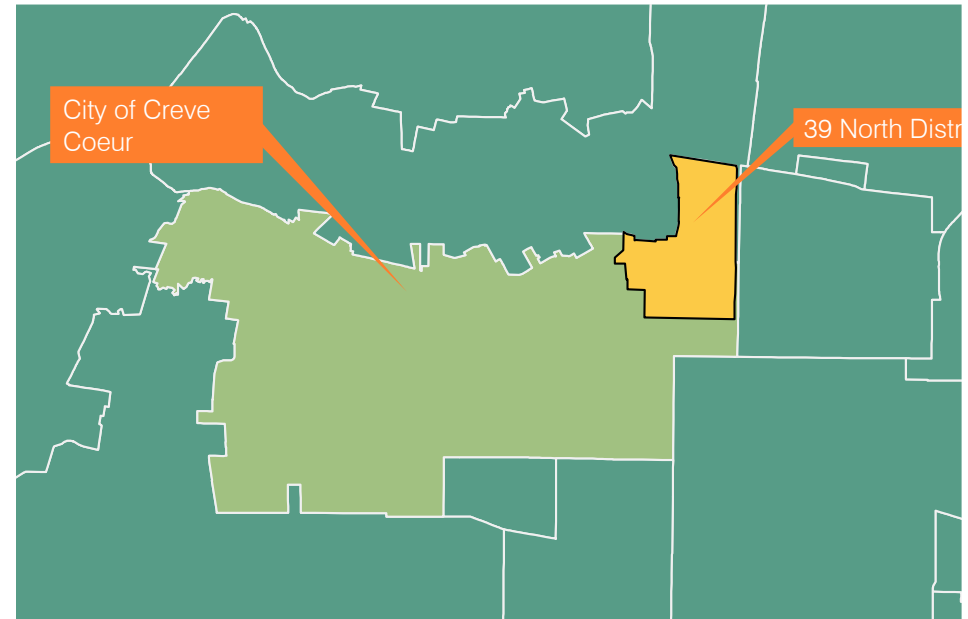


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City of Creve Coeur

The City of Creve Coeur, incorporated in 1949, is a well-established community with a population of just over 17,800. Approximately 75% of the land area in the City is single-family and open space uses, including 154 acres of outdoor parks and recreational spaces. Creve Coeur is part of the Ladue and Parkway School Districts. The City's Comprehensive Plan was adopted in March 2017 and acts as a guide and 20-year vision for the City. Addenda to the Comprehensive Plan include the 39 North Master Plan adopted in June 2017 and the Old Olive Street Road Great Street Plan adopted in August 2019. The Comprehensive Plan established the Mixed-Use Innovation Campus District place type to overlay the 39 North District.

The 39 North District is wholly within the City of Creve Coeur and is currently covered by the following zoning districts. Bayer and the Danforth Center are in the Research and Office District. The northern half is zoned Light Industrial. The Lindbergh Blvd and Old Olive Street Road corridors are in the General Commercial District. There are isolated areas zoned Attached Single-Family Residential



and Core Business District. The City is studying options for a zoning overlay district that would support the goals of the Comprehensive Plan within the 39 North District.

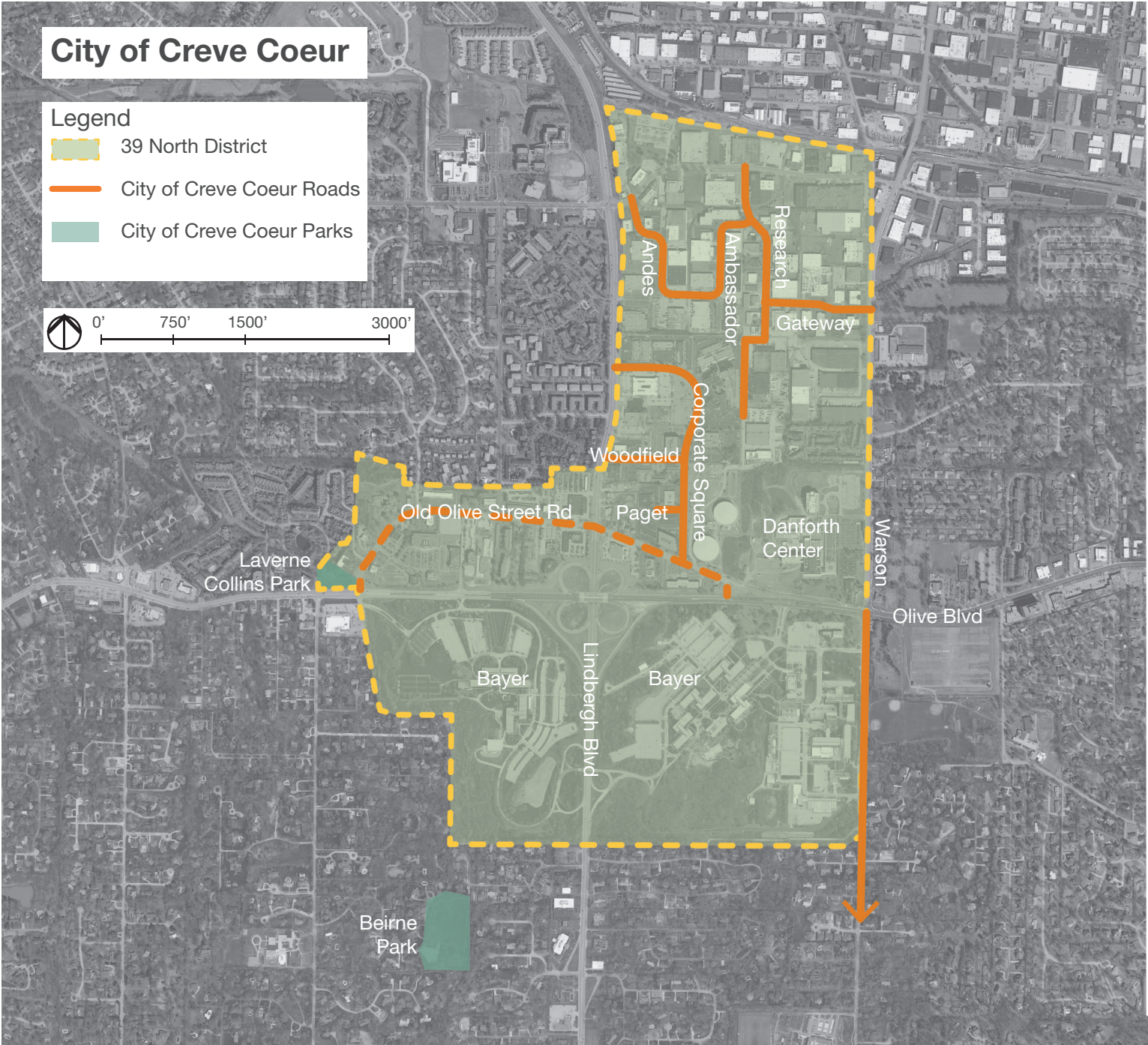
The City of Creve Coeur should use this Plan to leverage opportunities that arise, such as:

- The Missouri American Water pump station project led to an easement for the Great Streets project and began discussions to relocate their entrance from Old Olive to Corporate Square.
- Coordination with the Edge@BRDG project determined that a greenway trail along the east and north sides of the Danforth Center Campus were not feasible due to zoning requirements.
- The developer of 10751 Baur Blvd is willing to coordinate with the greenway trail along Baur Blvd.
- Review of improvements plans for 1100 and 1160 Research Blvd provided opportunities to coordinate with the greenway.

Creve Coeur Roads

	R.O.W.	Pavement Width	Building Line**	Speed Limit
Gateway Blvd.	50'	40'	40'	25 mph
Research Blvd.	50'	30', 36'*	40'	25 mph
Andes Blvd.	50'	34'	40'	25 mph
Ambassador Blvd.	50'	34'	40'	25 mph
Corporate square Dr.	50'	32'	30'	25 mph

*each side of R.O.W; *36' north of Gateway Blvd.



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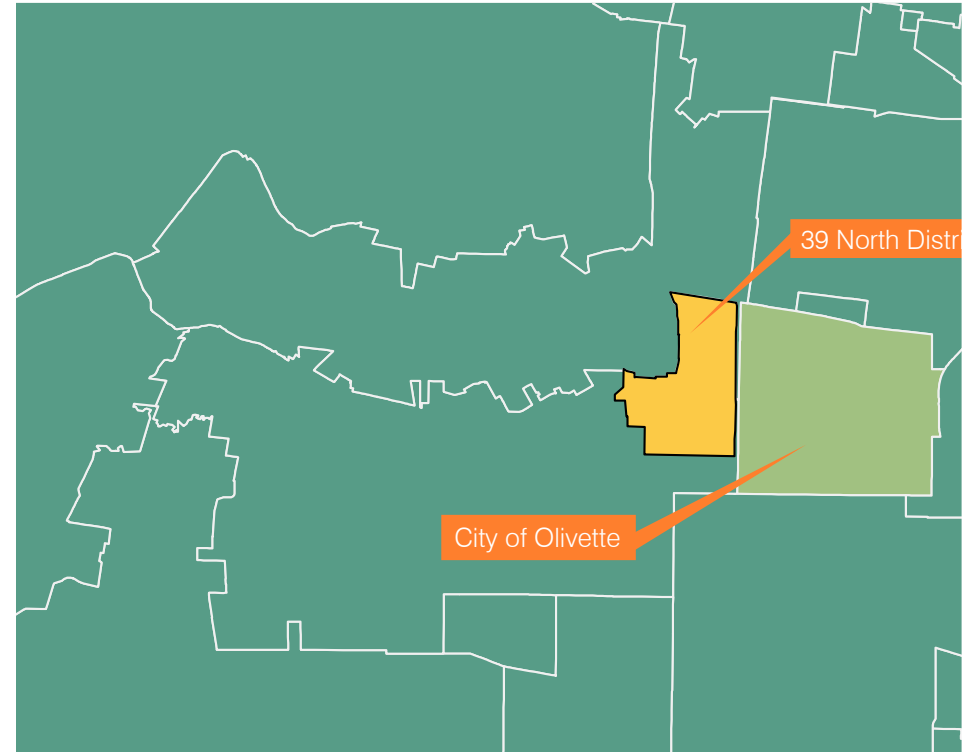
City of Olivette

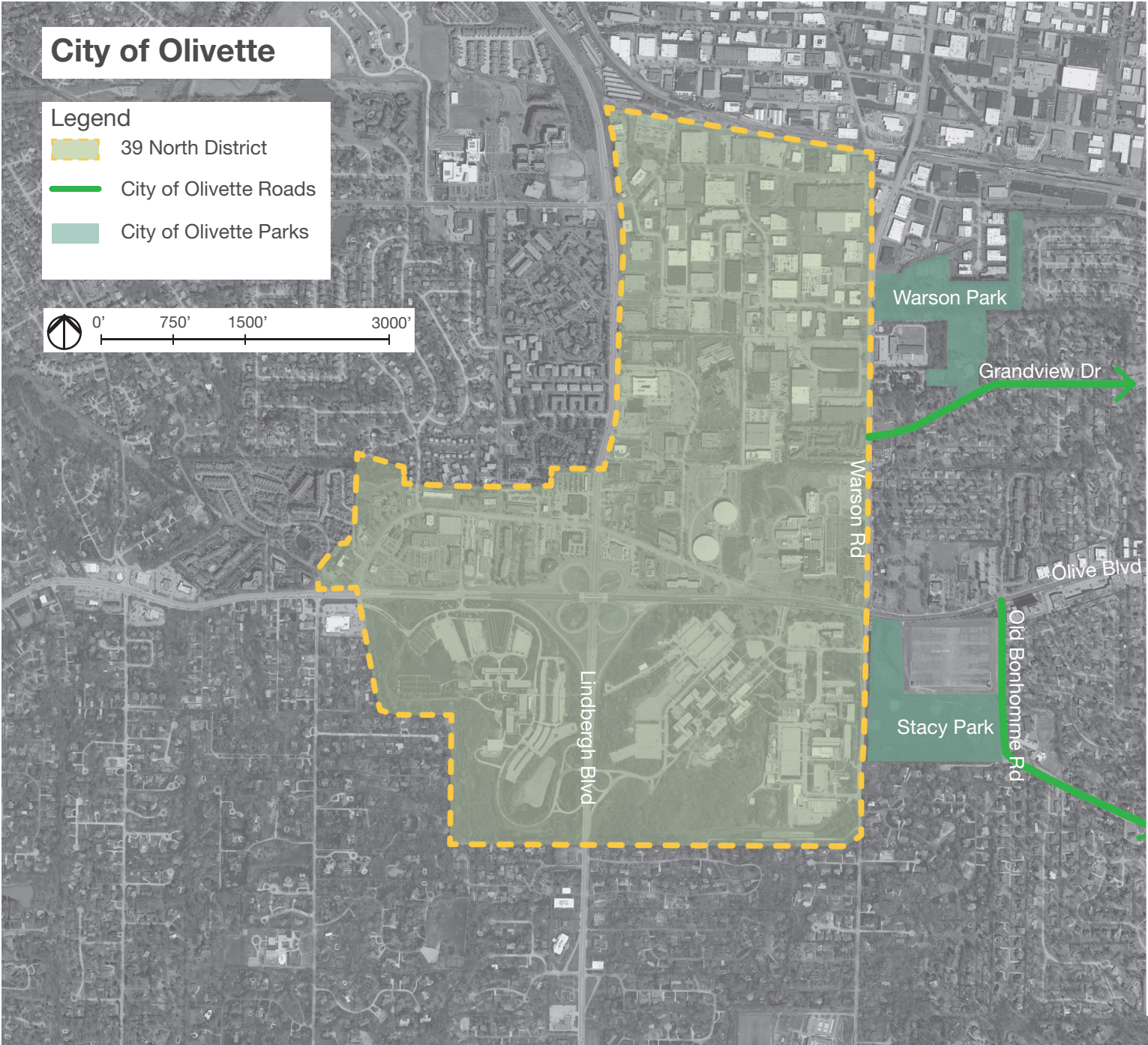
The City of Olivette is a vibrant community incorporated in 1930 with a population of just over 7,800. Land use is divided between 78% residential and community, including over 100 acres of parkland, and 22% commercial and industrial. Olivette is part of the Ladue School District. The City of Olivette's Strategic Plan, adopted in August 2006, outlines their vision for making Olivette an integral part of wide-ranging regional dynamism. The June 2016 Catalyst Strategy for the Economic Enhancement of Olivette gives detailed market analysis to build upon the City's visions.

In June 2018, the City of Olivette adopted a comprehensive parks master plan which is a guide for a current study for improvements to all the City parks and its Community Center. In 2019, the City of Olivette adopted the Olive Boulevard Conceptual Master Plan with goals of improving traffic flow and access control to Olive Blvd and attracting users from the 39 North District. Also in 2019, the City adopted the Centennial Greenway Olivette Alignment Study with the goal of connecting the existing Centennial Greenway at Olive Blvd and I-170 to Warson Park. The City of Olivette is studying options to fund their vision for improvements to their park system and may go to the voters for a bond issue in April 2020.

Coordination of the 39 North Greenway with the City of Olivette's long term vision has touched many aspects of this study.

- This Plan includes approximately 0.4 miles of greenway within the City of Olivette. The City of Olivette is a likely candidate to take on operations and maintenance of this portion of the greenway. The greenway alignment provides a buffer between land zoned commercial/public activity and land zoned residential in the spirit of Chapter 428 of the City Ordinances, the Olive Boulevard Corridor Design Regulations.
- The current park improvement study is reviewing options to reconfigure the Warson Park entrance near Gateway Blvd, and incorporate a greenway crossing of Warson Road.





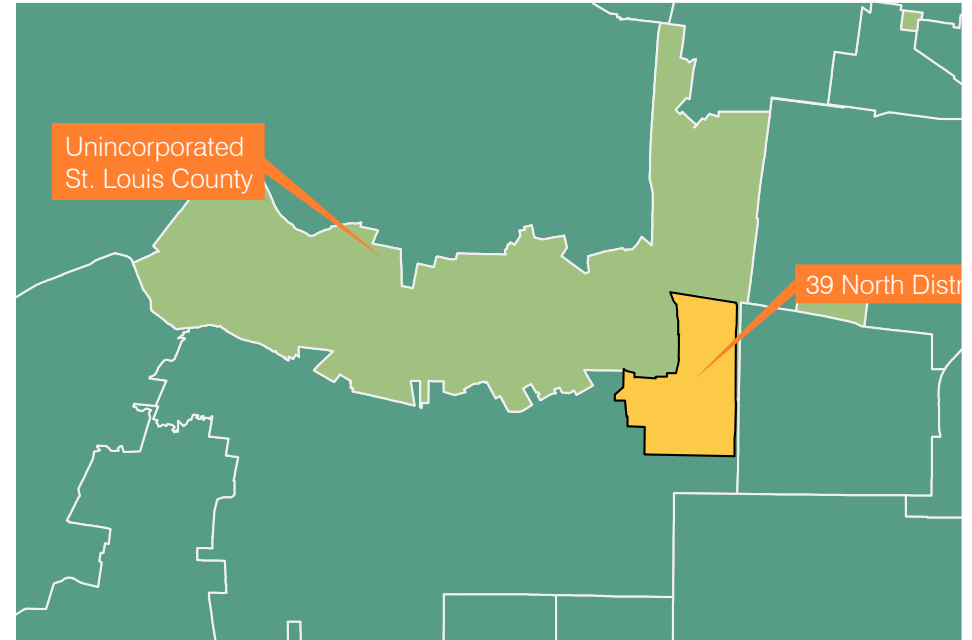
Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

St. Louis County

The 39 North District is located within St. Louis County Council District 2. The St. Louis County Department of Transportation maintains two corridors through and within the District:

- North Warson Road north of Olive Blvd and continuing as Ashby Road north of Baur Blvd is a County arterial road. Warson Road north of Olive Blvd is a four-lane road with a reversible left turn lane, with a speed limit of 35 MPH.
- Baur Blvd from Warson Road to Lindbergh Blvd and continuing to the west as Schuetz Road is a County arterial road. Baur Blvd has one lane each way plus a reversible left turn lane with a speed limit of 35 MPH. Baur Blvd is in a 50' wide right-of-way, and adjoining parcels include a 30' building line.

St. Louis County is an active stakeholder in the 39 North District, especially through the St. Louis Economic Development Partnership which owns and runs the Helix Center Biotech Incubator. The Partnership acts as a lead in the district wide projects including the

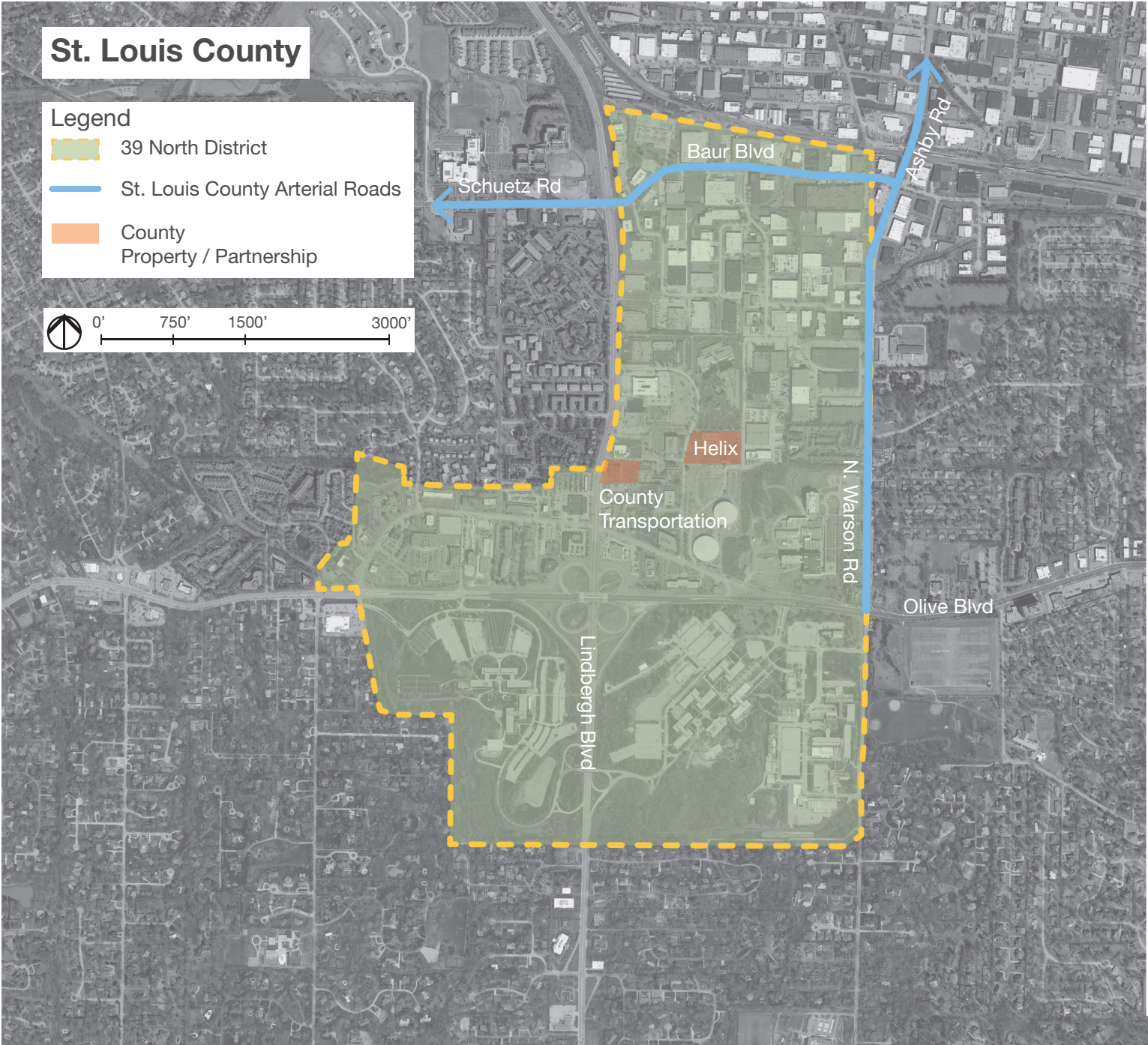


St. Louis County Dept. of Transportation on Lindbergh Blvd.

Lindbergh Blvd/ Olive Blvd interchange, the Old Olive Street Road Great Streets, and the 39 North Greenway.

St. Louis County Parks and Recreation Department generally takes on operation and maintenance responsibility of greenways developed within unincorporated St. Louis County. A future westward extension of the Centennial Greenway, starting at the grade separated crossing of Lindbergh Blvd shown in the 39 North Greenway Plan, would be within unincorporated St. Louis County.

In Spring of 2019, St. Louis County Transportation kicked off their Action Plan for Walking and Biking. The plan aims to improve pedestrian and bicyclist safety, connectivity, and accessibility throughout the county. The plan is currently open for public input and is on schedule to implement a demonstration project in Spring 2020.



Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Great Rivers Greenway

As part of the original Great Rivers Greenway River Ring Plan, the Centennial Greenway is a 17-mile corridor which will ultimately stretch from Forest Park in St. Louis City to St. Charles County. At this time, three segments of the greenway have been completed: Forest Park to Washington University to Vernon Ave, Shaw Park in Clayton to Olive Blvd at I-170 at the edge of Olivette, and Katy Trail to Heritage Museum in St. Charles County.

In the Fall of 2018, the City of Olivette along with Great Rivers Greenway initiated the Olivette Alignment Study, a planning process that engaged the community and planned the continuation of the Centennial Greenway. Goals of the plan include enhancing connectivity to existing and planned infrastructure, such as Warson Park and Indian Meadows Park, foster community and economic development, optimize safety and promote environmental stewardship.

The study identified and weighed multiple alignment options beginning at the existing terminus of Centennial Greenway at Olive Blvd and I-170 that would provide connections to retail areas, neighborhoods and open spaces. The preferred alignment will extend the greenway to Warson Park, providing connectivity to the 39 North District.

The next steps for the Centennial Greenway Development through Olivette include funding, right-of-way acquisition, coordination with County and State agencies as well as the railroads, and design and engineering documents. The study anticipates a 2-5 year schedule to reach construction.





Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Community Outreach



The 39 North District Master Plan, completed in 2017, set a bold vision for access and circulation in the district. The Core Working Team, consisting of the St. Louis Economic Development Partnership, Great Rivers Greenway and the design team along with the City of Creve Coeur, City of Olivette, Danforth Plant Science Center, and Bayer endeavor to develop new facilities and

improve existing facilities that support pedestrian and bicyclist mobility into and throughout the District. Community outreach and involvement are a priority to the Core Working Team in order to design improvements that will best meet user needs. The following Community Outreach Goals were set:

Community Outreach Goals:

- Dialogue with user groups
- Determine user priorities and concerns
- Contact landowners to determine concerns, constraints and level of support

Early outreach activities consisted of a District-wide project notification mailing, participating in the 39 North Venture Café and meeting with established groups such as the Danforth Center bikir community. The early focus was on the connection from Stacy Par to the Danforth Center and to the Helix Center, via Warson Road and Olive Blvd, since the landowners were already supporters of the project. When the grade separated options at Olive Blvd were determined to not be feasible and issues with the at-grade routes could not be overcome, the current route in Olivette was pursued. The design team has participated at the following public venues, several in coordination with presentations for the other District projects:

Community Outreach – Public Venues

- Venture Café (04/17/18) Greenway Project Kickoff
- Danforth Center (05/18/18) National Bike to Work Day
- Venture Café (02/19/19) 39 North Project Update
- Danforth Center (04/30/19) Old Olive Great Streets Design Presentation
- City of Creve Coeur (09/17/19) Lindbergh Blvd/Olive Blvd Interchange Open House

In early 2019, a second project specific notification was delivered to all properties within the Greenway study area and included an invitation to participate in a survey. This online survey has received 25 responses. Additional notifications were sent to select properties along the greenway alignment to encourage participation in the greenway study. By June 2019, the design team began individual meetings with businesses and landowners along the greenway route to establish concerns, constraints and level of support for the project.

The 39 North District, primarily consisting of office and light industrial uses, was developed without internal sidewalks or bike facilities. In order to develop successful facilities that meet the community's needs, the outreach activities determined many priorities of the 39 North District community including:

- Walking/Biking
- Health benefits
- Connectivity to parks, businesses, restaurants
- Commuting improvements
- Collaboration opportunities

The outreach activities have also determined general concerns expressed by the community:

- Accessibility
- Safety, especially with truck traffic
- Operation and maintenance: greenway, litter, landscaping
- Benefit versus impact to private properties



“We are super excited about the plans being developed! Please be sure all plans include accessibility for people with disabilities.”

-Mark A. Keeley, President and CEO St. Louis ARC

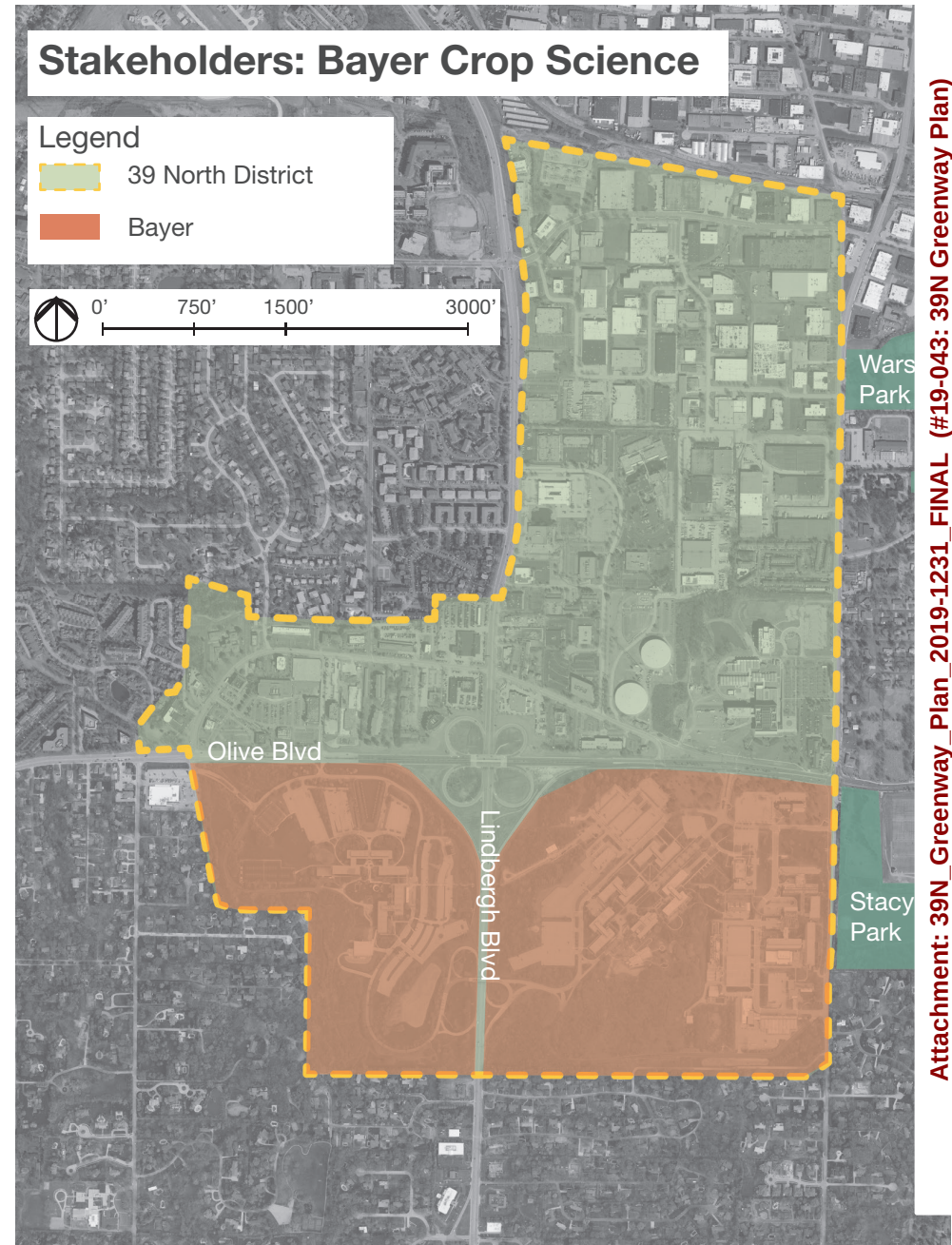
Bayer Crop Science

In June of 2018, Bayer, a German-based life sciences company purchased Monsanto after gaining US and EU regulatory approvals. Before being purchased by Bayer, Monsanto was one of the region's largest locally headquartered employers, and employed about 20,500 employees.

Founded in 1901, Monsanto was founded by John Francis Queeny as a chemical company primarily producing saccharin. Shortly before WWI, Monsanto began to make their own raw materials for their production as well as started producing aspirin. Over the years Monsanto acquired other companies and operated various labs and research facilities. Beginning in the late 1940s the company created several joint venture companies that would later be spun off into fully separate companies.

In 1957 Monsanto moved their headquarters from downtown St. Louis to Creve Coeur and established an agricultural division shortly thereafter on a campus of over 200 acres and bordered on the north by Olive Boulevard. Monsanto later developed an additional Life Sciences Research Center in Chesterfield. Over its history, Monsanto often refocused the business by selling off non-strategic areas of the company, and in the late 80s, early 90s they company committed to focusing its efforts on life sciences, agriculture, pharmaceuticals and food.

The St. Louis region is home to Bayer's Crop Science North American headquarters and the Global headquarters for Seeds and Traits and continues to employee approximately 4,400 employees between the Chesterfield and Creve Coeur campuses, and more than 116,000 globally.

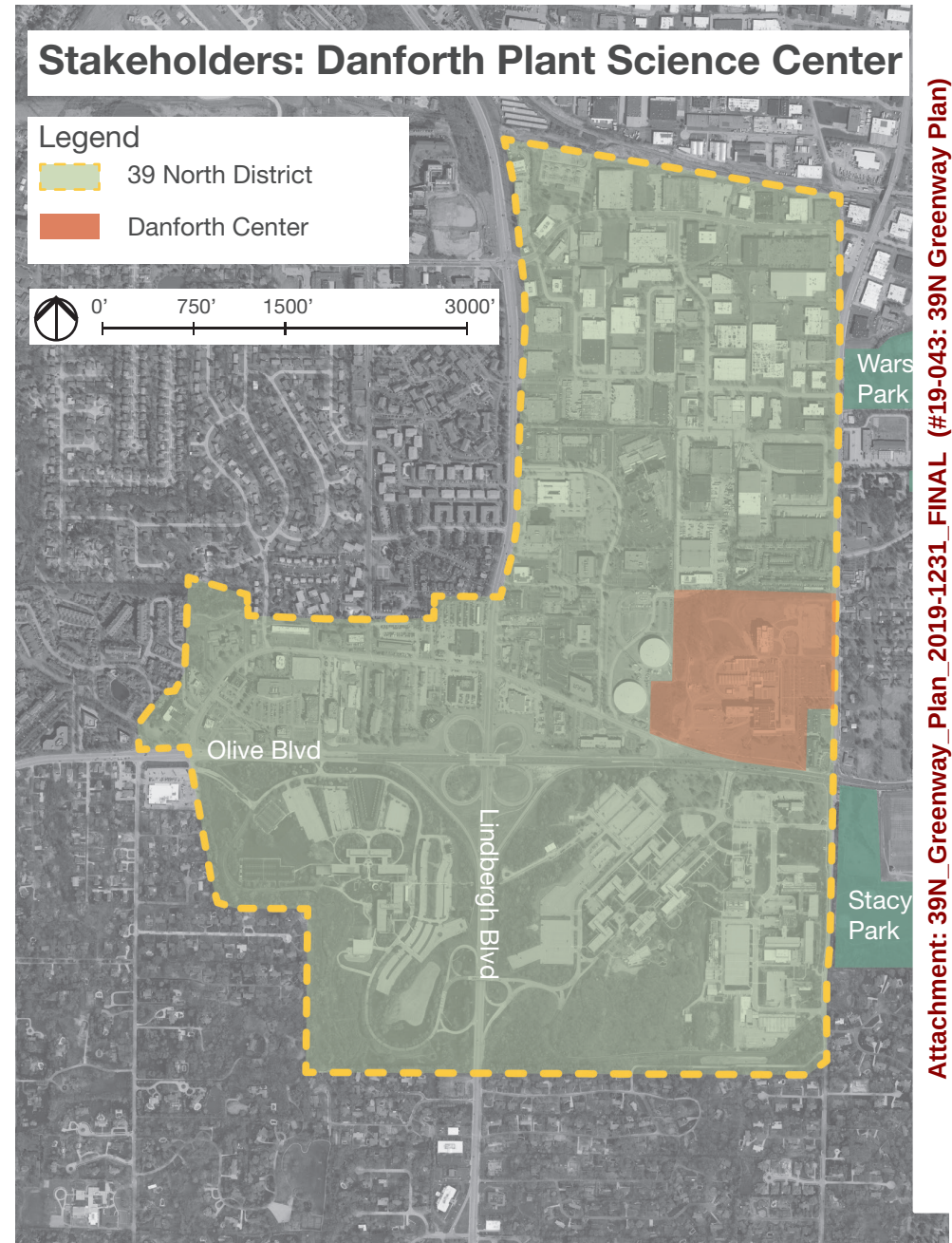


Danforth Plant Science Center

Founded in 1998 through the efforts of William H. Danforth and funded by the Danforth Foundation, Monsanto, and Missouri State contribution for tax credits, the Danforth Plant Science Center is the world's largest nonprofit plant research institute with a mission to "improve the human condition through plant science". The center achieves this by supporting scientific teams which include principal investigators, postdoctoral fellows, graduate students and trainees, all focusing on researching ways to improve the productivity and sustainability of agriculture.

Today the Danforth Plant Science Center employs nearly 300 individuals from over 20 countries. The Center opened in 2001 in Creve Coeur at the corner of Olive Boulevard and Warson Road and is now situated within a six-acre prairie. At the time of the development of the Danforth Center, eight acres of the site were tagged for future development. In 2009, in partnership with Wexford Science + Technology, the first of two buildings opened at the Bio Research and Development Growth (BRDG) Park. The new facility assists startup companies focused on emerging life science and clean-technology by providing the tools and facilities they need to help support growth and success.

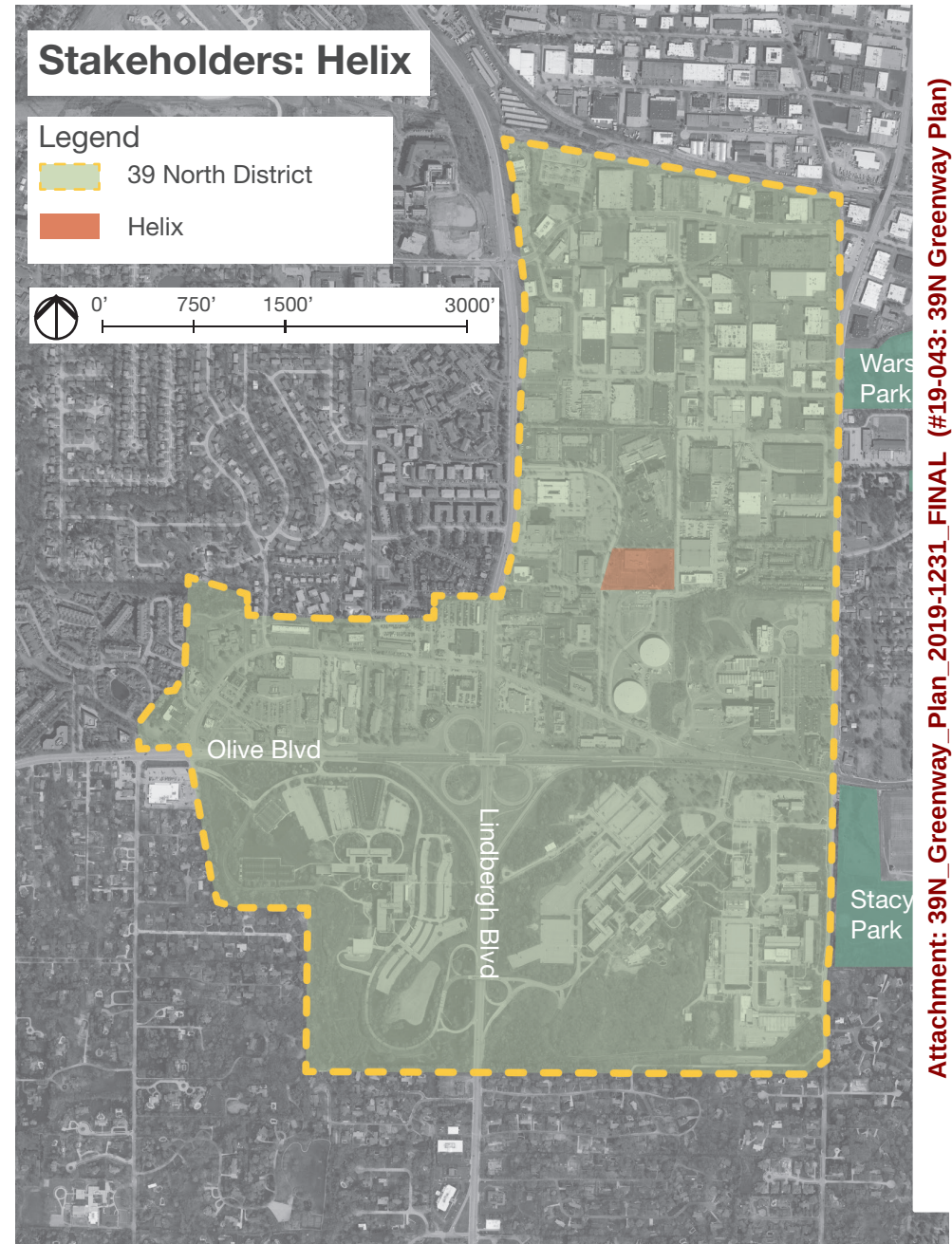
The Danforth Center has recently undertaken a master planning study for the campus through the year 2035. Current expansion projects include the Edge@BRDG Park, construction of additional greenhouses and associated infrastructure improvements. The Danforth Center is a member of the Core Working Team and has worked closely with the design team in the development of the public greenway network through their campus.



Helix

In 2012, St. Louis County purchased an office building located within the Corporate Square office development north of Old Olive Street Rd and east of Lindbergh Blvd. After renovations to the building, the Helix Center celebrated its grand opening in 2016 to act as an incubator for very early startup businesses in the region's bioscience industry.

The Helix Center Biotech Incubator provides more than 33,000 square feet of high quality wet and dry lab spaces as well as office space. Services offered to small business startups also includes financial aid and collaboration opportunities. Its location is in close proximity to the Danforth Plant Science Center campus which offers start-ups access to state-of-the-art greenhouses and specialized equipment.



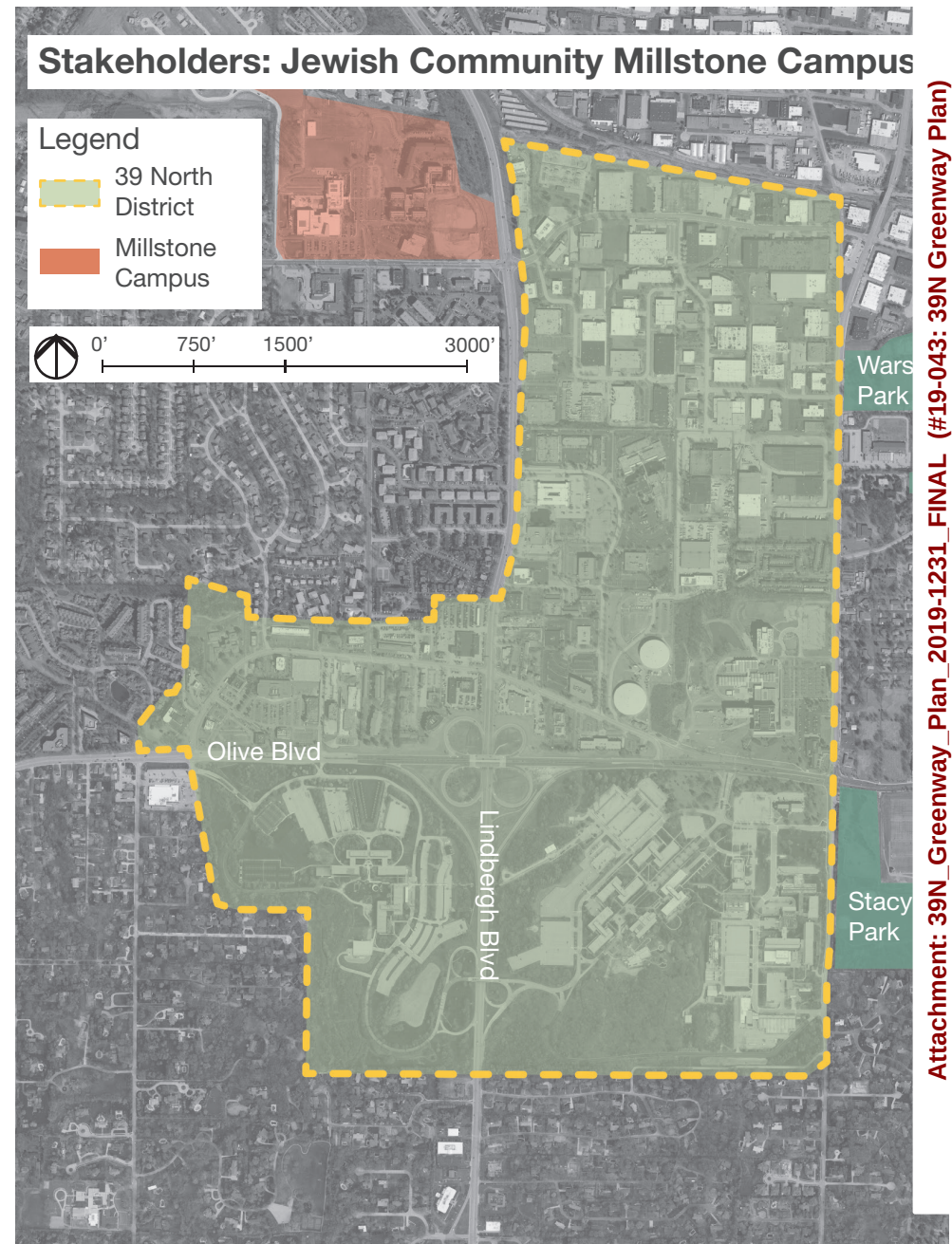
Jewish Community Millstone Campus

Founded in 1901, the Jewish Federation is part of a larger non-profit network of more than 150 Federations across North America. Originally established to help Jewish immigrants in need of social services, today the Federation still offers those and many more services to everyone in the community as well as providing support to over 90 agencies, programs and services around the world.

Located in unincorporated St. Louis County at the corner of Lindbergh Blvd and Schuetz Road, the more than 50 acre Millstone Campus, established in 1961, is home to the Jewish Federation headquarters, the Jewish Community Center including the Staenberg Family Complex, Arts & Education Building (known as “The J”), the Holocaust Museum, the St. Louis Jewish Light newspaper and Covenant Place community for seniors. The Jewish Family and Children’s Services is located across Schuetz Road from the Millstone Campus and its Harvey Kornblum Jewish Food Pantry is located within the 39 North District at 10601 Baur Blvd. The Millstone Campus organizations have more than 300 full time employees plus more than 1,000 part time employees, more than 400 residents, and more than 1,000,000 visitors each year.

The Millstone Campus is the hub of a vibrant community that does not shut down at 5 PM. The Jewish Federation and other Millstone Campus organizations are excited by the opportunities they believe the 39 North Greenway and the extension of the Centennial Greenway can provide. Some of these include:

- Connectivity and accessibility across Lindbergh Blvd
- Developing a connection to the 39 North District could increase participation in fitness programs or other events.
- Improve access to the food pantry on Baur Blvd
- Incorporation of safety and accessibility improvements to the Millstone Campus
- Providing walking opportunities that are not in parking lots
- Better community visibility for the Holocaust Museum



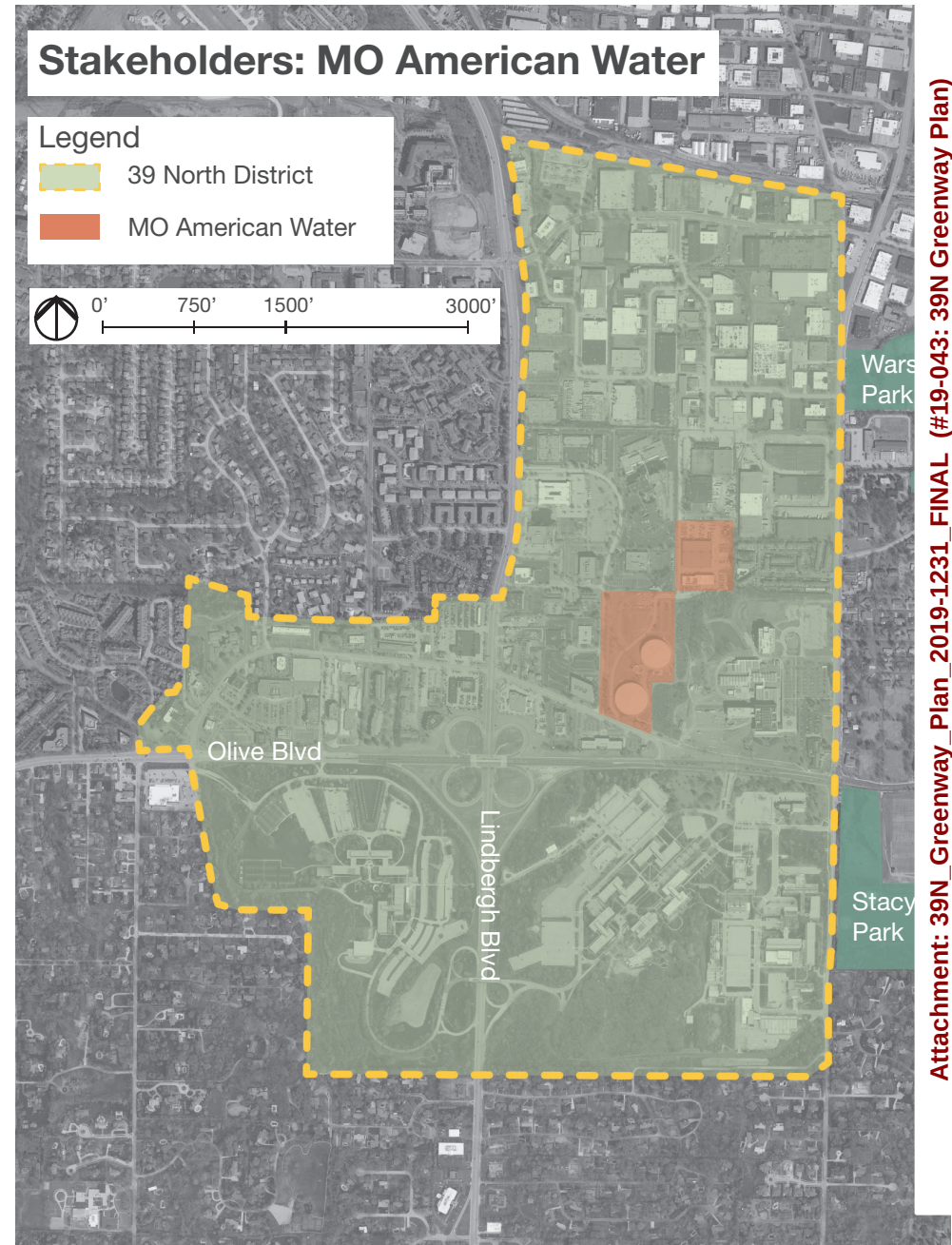
MO American Water

Missouri American Water was founded over a century ago, with the purchase of water system in St. Joseph, Missouri in 1881. Missouri American is a subsidiary of American Water and is the largest water service provider in the state. With over 200 service areas across the State, Missouri American serves over 1.5 million people and employees approximately 700 people.

Missouri American Water's site, sitting on over 18 acres at the corner of Old Olive Street Road and Corporate Square Drive, includes two large storage tanks, a pump house and is the primary service center for St. Louis County. Due to the critical nature of the storage facility and the fact that employees are working from the site 24/7, Missouri American Water has security concerns that must be met for any project impacting the site.

Missouri American Water has several ongoing projects and studies that may impact the 39 North District and its ongoing projects:

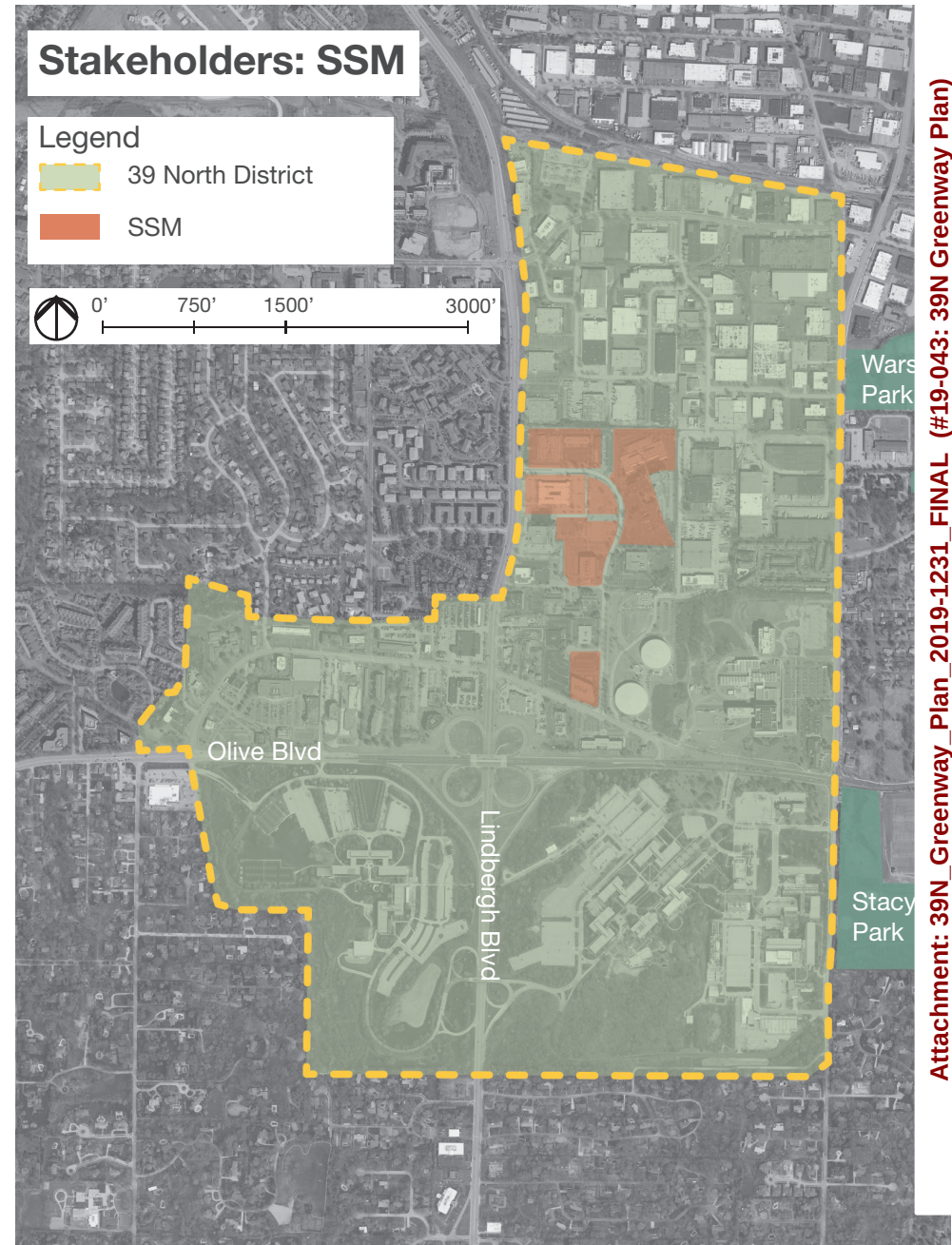
- Missouri American Water is currently replacing their century old pump house. They have coordinated with the Danforth Center, the City of Creve Coeur and the St. Louis Economic Development Partnership to relocate the pump house away from Old Olive Street Road. This relocation provides space for the planned Great Streets improvements.
- Missouri American Water is studying the possibility of relocating their entrance drive from Old Olive Street Road to Corporate Square Drive. Coordination with the relocation of the pump house is critical for this project to be economically viable for Missouri American Water.
- Missouri American Water is currently developing a master plan for future use of the property.



SSM

SSM Health was founded in 1872 by five German nuns who came to St. Louis to help care for the poor and homeless. In 1877 the sisters borrowed money to open their first hospital, St. Mary's Infirmary. Today, SSM Health continues as a Catholic not-for-profit network of doctors and hospitals serving communities throughout the Midwest region, with nearly 40,000 employees and 23 hospitals.

SSM Health has offices in eight buildings throughout the Corporate Square and Corporate Lake office development, including its corporate headquarters located at 10101 Woodfield Lane. Limited pedestrian facilities in the district add to employee safety concerns as they travel between buildings. SSM Health is working to improve employee health and fitness and support improvements to pedestrian and bicyclist facilities in the District.



Metropolitan St. Louis Sewer District (MSD)

The 39 North District sits at a high point in the County. It includes 3 minor watersheds (Deer Creek, Fee Fee Creek, and University City Branch) feeding into 2 major watersheds (Missouri and Mississippi).

Impacts to stormwater drainage or existing sewer systems will be addressed during design of the greenway system, but typical designs attempt to avoid having concentrated stormwater run across the trail itself. This may require drainage improvements on both sides of the trail in some locations. Existing drainage issues can also be addressed and improved. It is also anticipated that some areas north of Missouri American Water and along Research Boulevard may require moving existing sewers. Increased imperviousness from additional pavement may require detention.

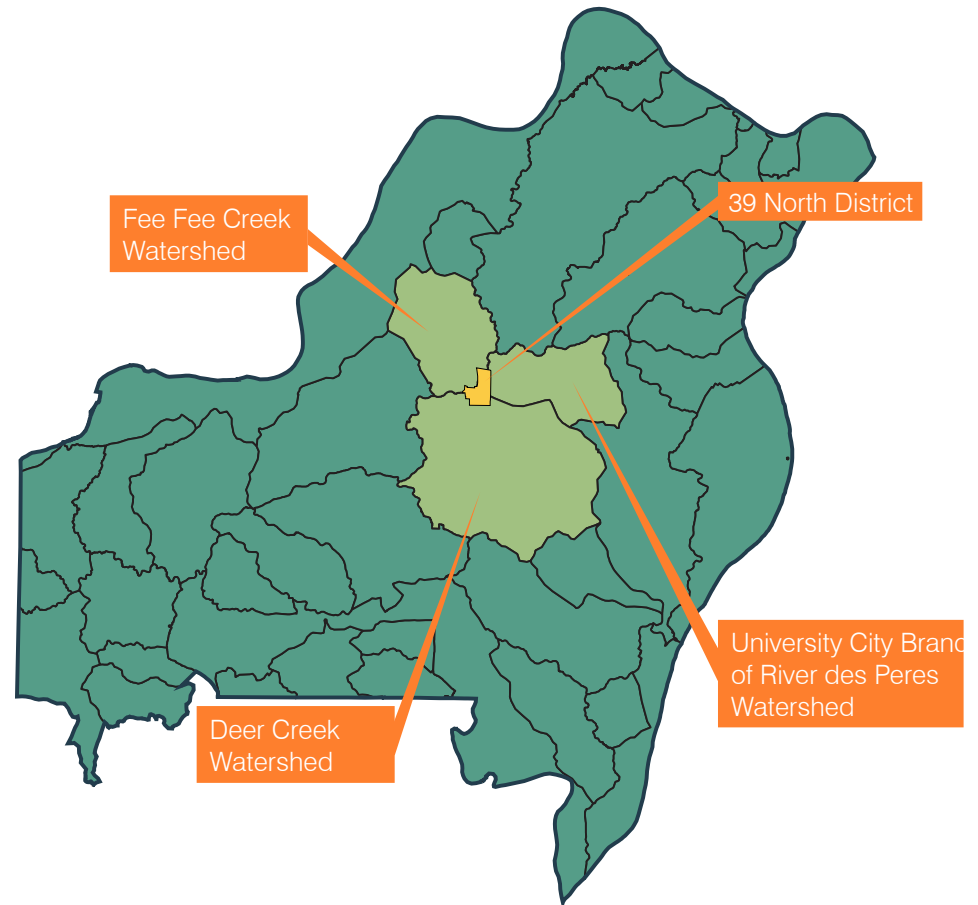
Water quality best management practices (BMP) requirements are anticipated to have a greater impact on the project. All new runoff from impervious surfaces will need to be treated for water quality. Due to the linear nature of greenways, it can be challenging to directly treat all of the trail. Similar projects in St. Louis County have allowed for “swaps” - meaning opportunities will be explored in the vicinity to treat existing runoff that is not currently being treated. These swaps for water quality and detention will be reviewed in each watershed separately. The focus of swaps will be to make improvements that will not impact a property owner’s maintenance.

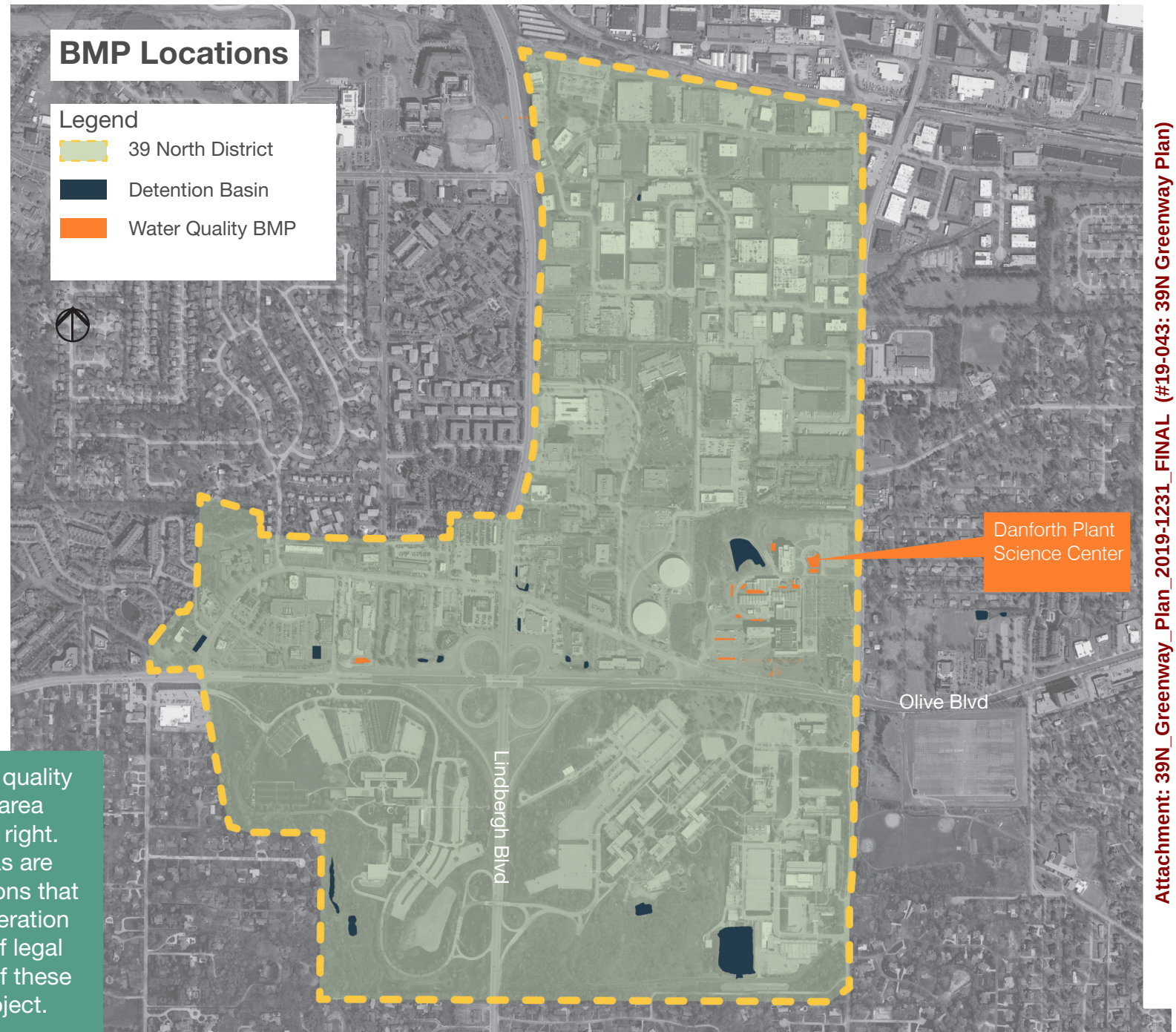
Potential Stormwater BMP's for 39 North Greenway:

- Amended soils: same width as trail, flat, either grass or landscaped
- Grass Channels: flat swales with limitations on dimensions, velocities and depths
- Rain Gardens: important to consider maintenance levels

These BMP's all focus on slowing and treating runoff, and allowing for it to infiltrate into soils.

St. Louis County Watersheds





Existing detention and water quality BMP sites within the project area are shown on the map to the right. It is expected that these areas are covered by property restrictions that would require special consideration during design. The revision of legal easements may be required if these sites are impacted by the project.

Utility Corridors & Conflicts

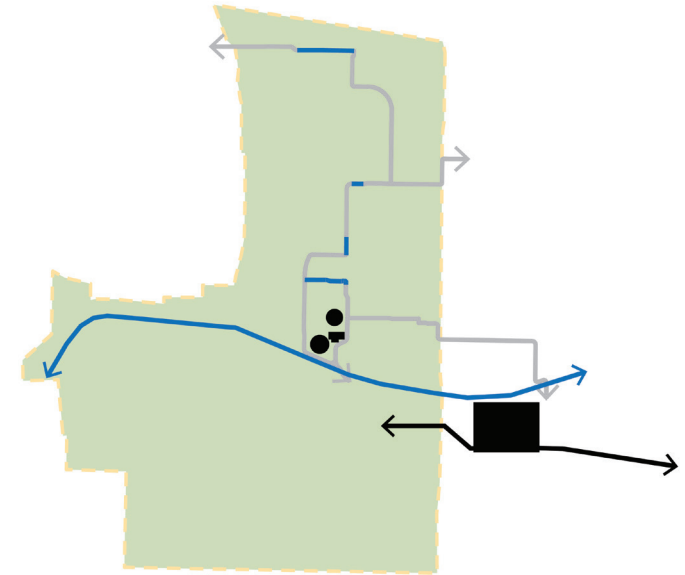
Being at a centrally-located high point, both Missouri American Water and the City of St. Louis have built reservoirs in/or adjacent to the 39 North District.

- The City of St. Louis' reservoir at Stacy Park brings water from the Howard Bend Treatment Facility via three large mains that run under the Laverne Collins Park and parts of the Bayer Campus. The water mains continue east of Stacy Park reservoir under Olivette's bike path to Dielman Road.
- Missouri American Water has two storage tanks located at the corner of Old Olive Street Road and Corporate Square Drive. The mains leading to and from the storage facility run along Old Olive Street Road and Olive Blvd to the west and east of Old Olive Street Rd. There are three mains ranging from 20" to 36" south of the Danforth Center. The location and depth of these mains rendered a tunnel under Olive Blvd infeasible. Missouri American Water is relocating its pump station which is opening up space for the Great Streets project along Old Olive Street Road.

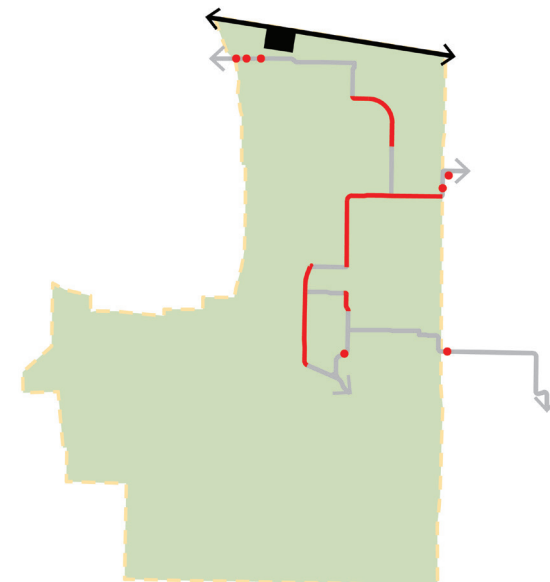
The possible water conflicts shown will primarily be dependent on grade changes and walls required to develop the greenway.

Ameren's Warson Substation and associated transmission lines are located at the north end of the 39 North District. Engineers from the Dorsett Operating Center have indicated that Ameren's Smart Energy Plan will include several projects within the 39 North District, and they will coordinate with the District's projects when possible.

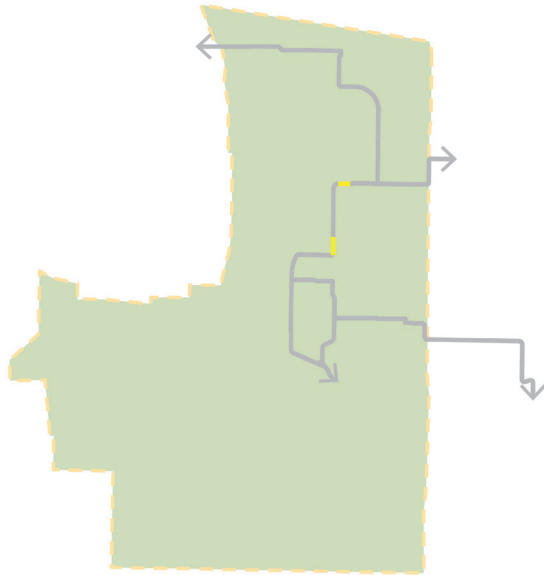
Utility lines are generally buried within the Corporate Square development and aerial within the Lindbergh-Warson Industrial Center. A grade separated crossing of Lindbergh Blvd would conflict with the aerial lines on each side of the highway. The trail will need to meet vertical and horizontal clearance requirements. In some instances, taller or deeper poles can be installed to maintain the utilities alignment. Where the utility alignment requires relocation, new easements may be required.



Water Conflicts

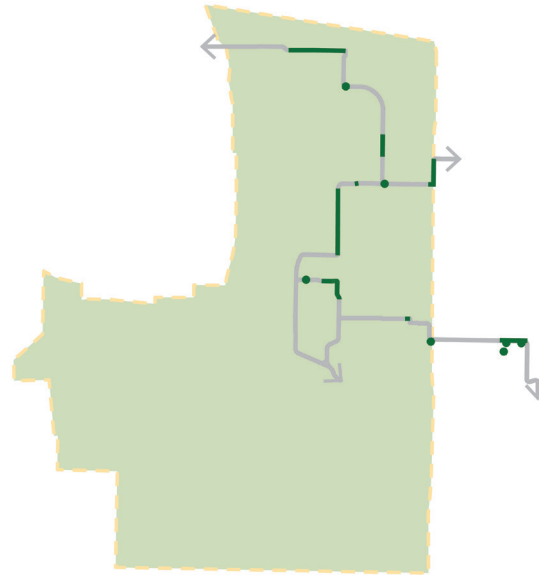


Electric Conflicts



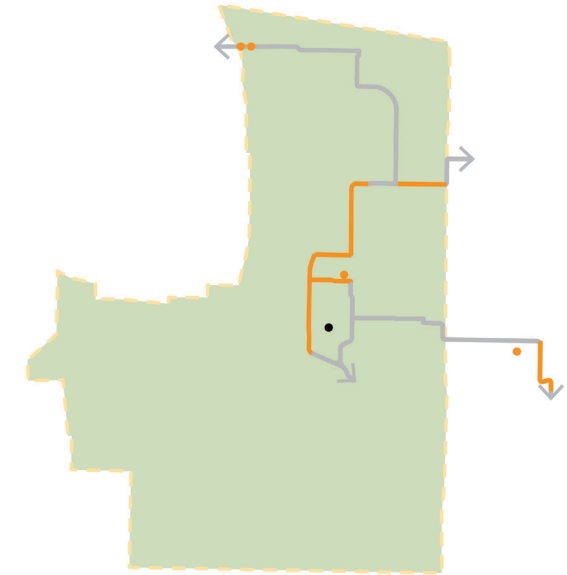
Gas Conflicts

Natural gas infrastructure in this district belongs to Spire. There are minimal conflicts anticipated with gas lines and infrastructure at this time.



Sewer Conflicts

Potential conflicts with existing MSD sanitary and storm sewers are shown above. With the construction of the greenway, several new storm sewers will likely be needed to facilitate changing grades, stormwater conditions, and required water quality BMP's. Several existing detention basins may also be impacted by the project and require improvements. All stormwater and sanitary sewer improvements are regulated by the Metropolitan St. Louis Sewer District (MSD).



Communication Conflicts

Anticipated communication utility conflicts shown above are based on limited information provided by AT&T. The utility lines are generally buried within the Corporate Square development and aerial within the Lindbergh-Warson Industrial Center. There are communication towers located on the Helix Center and Misso American Water properties. A grade separated crossing of Lindbergh Blvd would conflict with the aerial lines on each side of the highway. The trail will need to meet vertical and horizontal clearance requirements.

Railroad Corridors

When the Lindbergh-Warson Industrial Center began development in 1956, the subdivision plats included railroad easements dedicated to the developer, Industrial Properties, Inc. These easements straddled the property lines along the railroad alignment giving rail access to both sides of the tracks. Only a limited section of the original industrial lead track is still active while much of the inactive track is overgrown, paved over, blocked or otherwise inoperable.

The mainline tracks are owned by Union Pacific Railroad (UPRR), and the industrial lead tracks are operated by Central Midland Railway, a division of Progressive Rail, under a lease with UPRR. There are three active crossings listed in the Federal Railroad Administration database: 596307H at Baur Blvd, 596308P at Research Blvd and 596309W at Ambassador Blvd. Although the track crossing Ambassador Blvd is currently inactive, Progressive Rail is working to extend service west of Research Blvd. There is not an active crossing listing at Gateway Blvd. The proposed greenway crosses the active track adjacent to the existing vehicular crossing at Research Blvd.

The status of the easements for the industrial lead track within the 39 North District are unclear. UPRR's Real Estate Department was not able to locate ownership documentation for these easements. Further research is required, primarily by UPRR's Legal Department, to determine how ownership rights were transferred from Industrial Properties, Inc to UPRR and Progressive Rail.

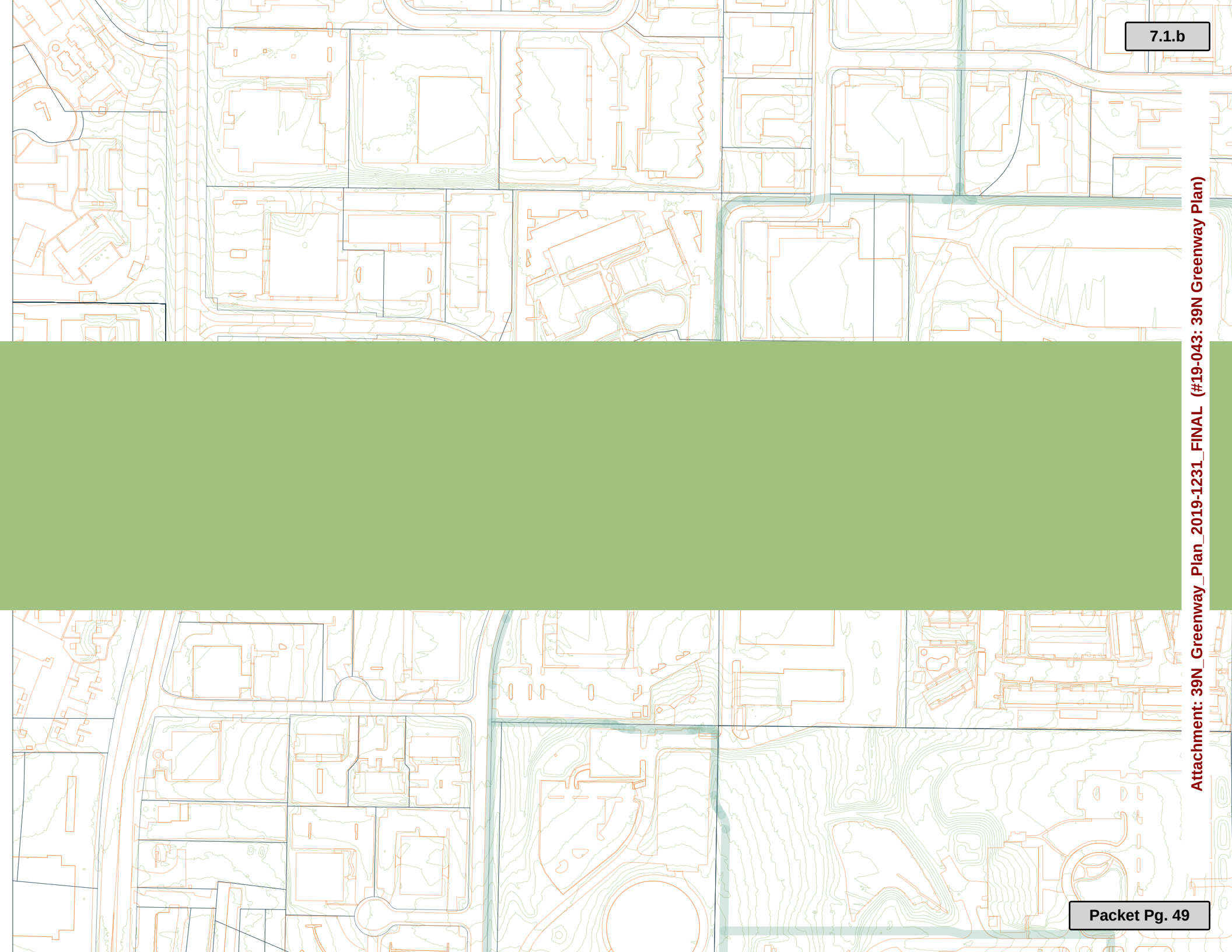
An 1,800-ft section of the greenway trail alignment is shown along the inactive railroad corridor east of Research Blvd. UPRR's policy is to not permit private or public parallel at-grade trails within the railroad's right-of-way. UPRR's Industry and Public Project Group reviews all projects proposing recreational trails. To use the rail corridor for the greenway as proposed, it is anticipated that all

property owners along the alignment and down track will need to give up their rights to rail access; and Progressive Rail, UPRR and possibly Industrial Properties, Inc will need to give up their rights to the railroad easements. Another option may be to use rail-banking under the National Trails System Act. New greenway easements will also be required along this alignment.

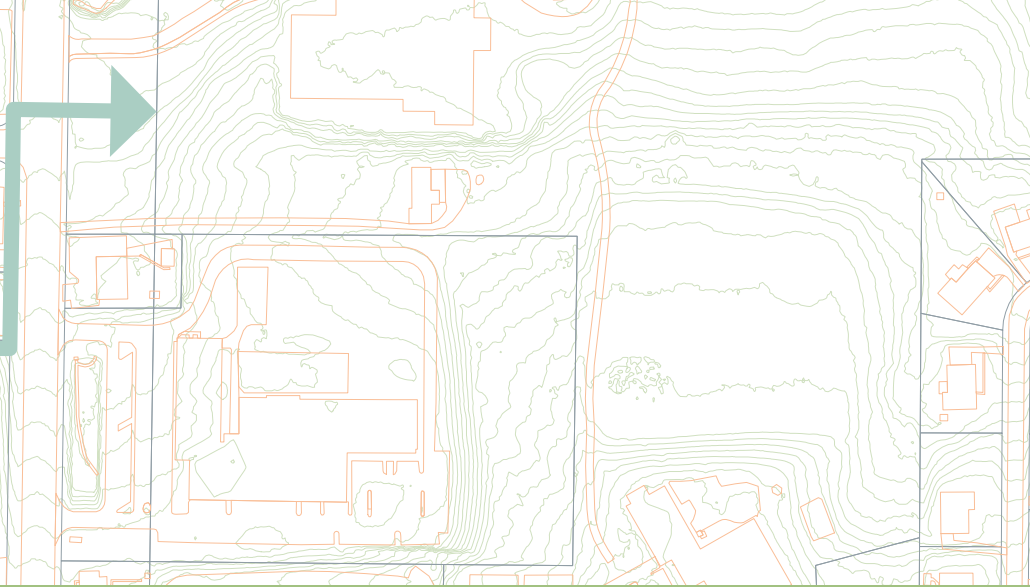


Industrial railroad leads east of Research Blvd.





7.1.b



3 Design



Greenway Alignment



The long-term goal of the 39 North Greenway Project, as determined by the Core Working Team, is to develop a separated multi-use trail for pedestrians and bicyclists connecting the internal nodes and making connections to regional greenways and commuter routes. Due to a lack of right-of-way for a greenway trail, on-street pedestrian and bicyclist facilities provide opportunities for near-term improvements.

Three of the project's nodes provide connectivity to regional greenways and existing bicycle commuter routes. The City of Olivette and Great Rivers Greenway are working on an extension of the Centennial Greenway from Olive Blvd at I-170 to Warson Park. The Centennial Greenway Plan (2006) included on-street facilities along Baur Blvd and Schuetz Road as part of the final alignment. We have had several conversations with the representatives from the Jewish Community Millstone Campus. They have expressed interest in developing an alignment that connects to their campus and would allow for the Centennial Greenway to continue off road west of the 39 North District. The grades north of Baur Blvd allow for a grade-separated crossing of Lindbergh Blvd. The 39 North Greenway plan includes a separated greenway trail to connect these two nodes with near-term on-street options. The Stacy Park node at Old Bonhomme Road connects to the existing Share-the-Road route, on Old Bonhomme Rd, from Centennial Greenway at I-170 through Olivette. Many commuters using this route work at the Danforth Center.

The 39 North District has established several collaborative environments. The Danforth Center, Helix Center and BRDG Park work together but the Helix Center is separated with no pedestrian or bicyclist facilities connecting to the others. The separated greenway trail planned to connect these campuses could also allow for authorized vehicle use for transportation of research materials. SSM Health has offices in eight buildings within Corporate Square but there are limited pedestrian connections between them.

39 North Greenway Alignment

Improvements to both pedestrian and bicyclist facilities are planned. The connection to the Old Olive Street Road Great Streets project allows for connectivity across Lindbergh Blvd and to the retail/dining area to the west.

Planned alignments allow for greenways and other improvements to be designed in accordance with the AASHTO Guide for the Development of Bicycle Facilities and to meet PROWAG and ADA requirements. Estimations of greenway grades have been made in order to plan the scope of grading and retaining walls required. These estimations also developed the anticipated impacts to private property that will require property rights acquisition. Alignments have been kept to the periphery of parcels in order to minimize impacts to those properties.

Legend

- Proposed Greenway
- Existing Road Striping
- Proposed Road Striping
- Proposed Sidewalks
- Connection Nodes

Greenway Segments

The 39 North Greenway has been broken down into 8 design segments:

1. Old Bonhomme Road to Danforth Plant Science Center
2. Danforth Center Campus
3. Missouri American Water Property
4. Helix Center Property
5. Research Boulevard South
6. Warson Park to Research Boulevard
7. Baur Boulevard
8. Lindbergh Boulevard Crossing

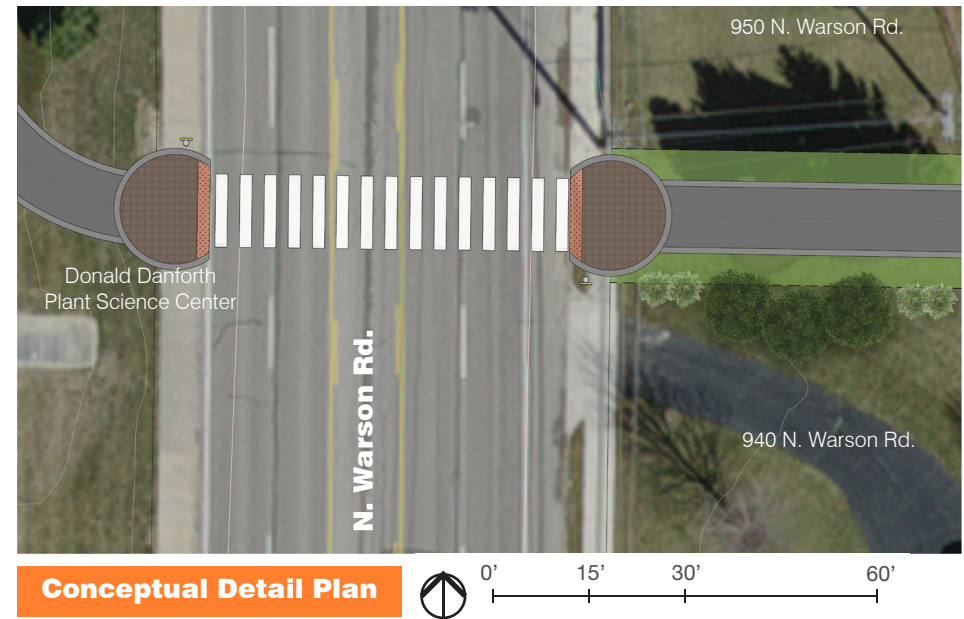
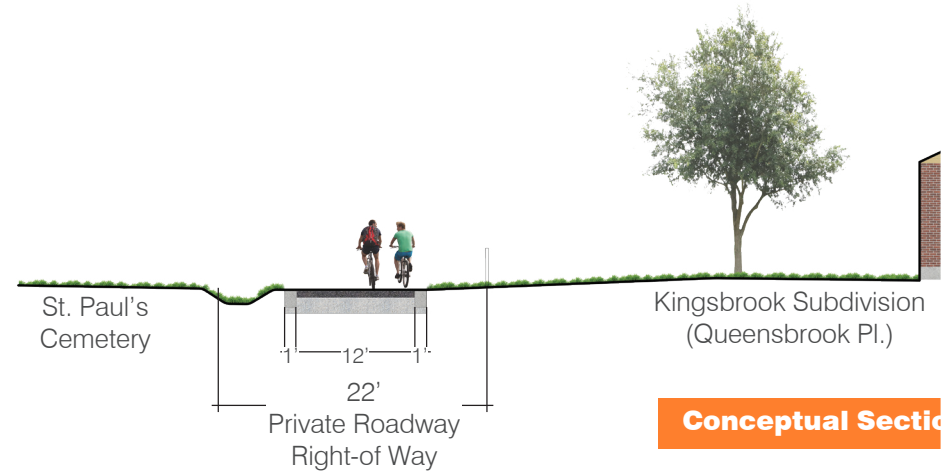


Greenway Segment 1

Old Bonhomme to Danforth Plant Science Center



Old Bonhomme Rd is a primary Share-the-Road route from Centennial Greenway at I-170 through Olivette. Olive Blvd is a major barrier to bike commuters. The southeastern end of the proposed greenway begins at the intersection of Old Bonhomme Rd and Olive Blvd, across from Olivette's Stacy Park. New development anticipated at 9701 Olive Blvd has the opportunity to guide the routing of the greenway to the rear of the commercial lots. As the greenway turns west, it runs behind the commercial properties and Immanuel Lutheran Church and School. The greenway trail through St. Paul's Cemetery would be available for cemetery needs. This segment connects to the Danforth Plant Science Center via a new mid-block crossing of North Warson Road.



Greenway Segment 1 Summary:

- Connects to Old Bonhomme Road / Olive Blvd. intersection near Stacy Park
- Adjacent to Immanuel Lutheran Church and School
- Shares trail path with St. Paul's Cemetery
- Mid-block crossing of North Warson Road



Conceptual Plan

Greenway Segment 2

Danforth Center Campus



After crossing N Warson Rd, the proposed greenway follows an existing green space adjacent to the parking lot at Danforth Plant Science Center. The greenway would connect to existing internal walkways and lead directly to the existing bike commuter facilities. The greenway would continue west along the Campus' main drive between BRDG Park and the expanding greenhouse complex providing easy access to all parts of the Campus.

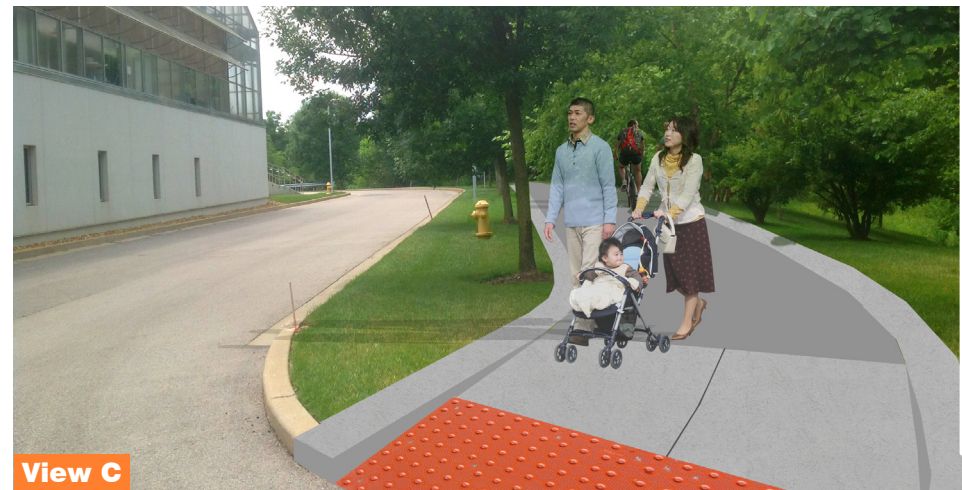
Once the greenway reaches the western edge of the Campus, there are opportunities to go both north and south. The southern segment connects to the Old Olive Street Road Great Streets project amenities including a new intersection at Lindbergh Blvd and connections to points west. The northern segment would provide a more direct route to the Helix Center Biotech Incubator and allow for off-street transportation of research materials between facilities, such as plants from the greenhouses.



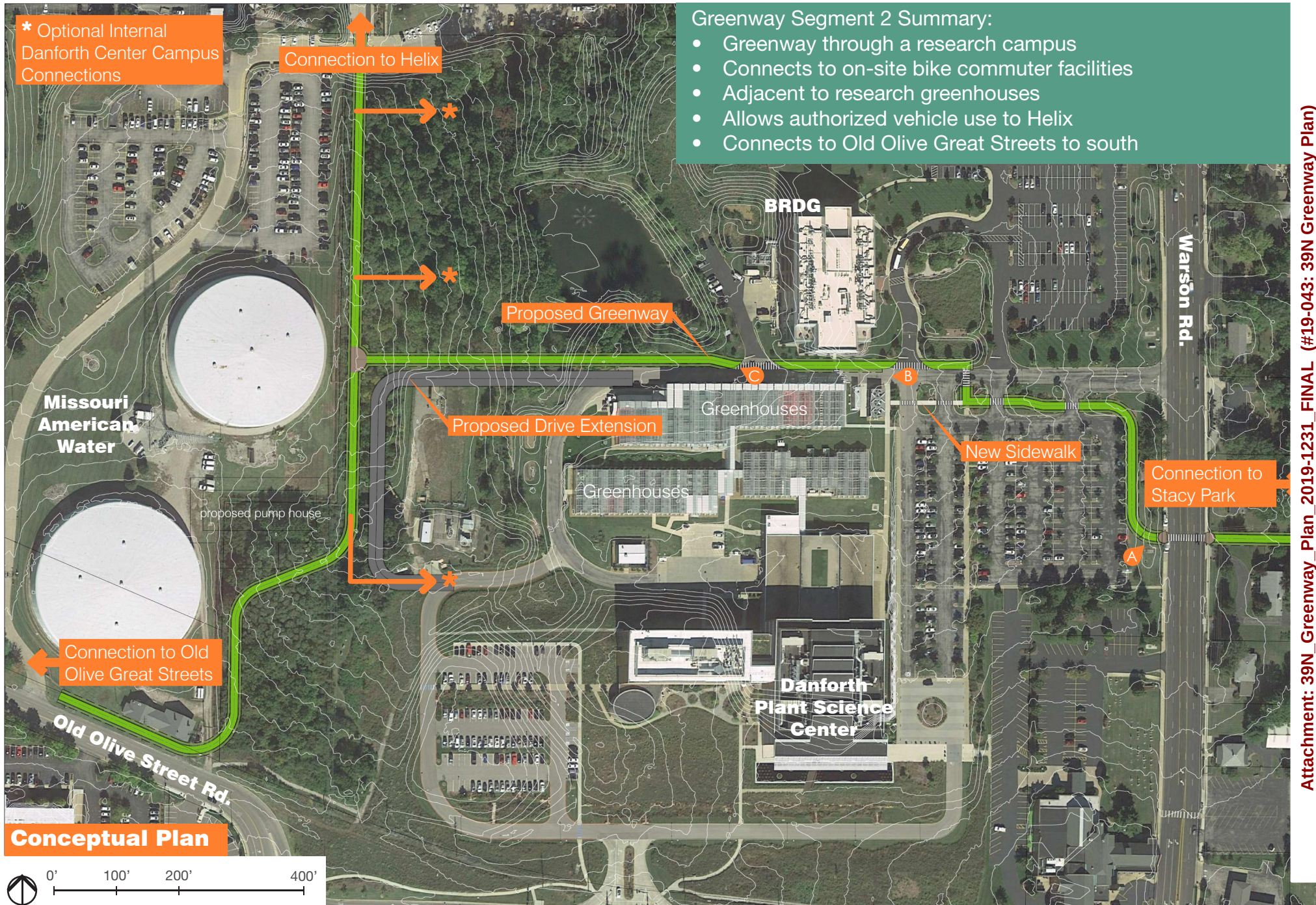
View A



View B



View C



Greenway Segment 3

Missouri American Water Property



Missouri American Water

The Missouri American Water tank site along Old Olive Street Rd provides an opportunity to create a greenway with a local loop approximately 0.6 miles long. The loop incorporates the segments along the western edge of the Danforth Center Campus, portions of the Old Olive Street Road Great Streets, existing green space along Corporate Square Drive, and a bridge crossing the Missouri American Water property. This loop acts as a hub connecting the Corporate Square office park, the Helix Center and the Danforth Center and provides several options for connectivity to the west, east and north.

Missouri American Water has been coordinating with the Danforth Center, the City of Creve Coeur and the St. Louis Economic Development Partnership for the development of their new pump house, future Great Streets improvements and the possible relocation of their entrance drive. If future developments change the requirement to maintain the connection between the two Missouri American Water parcels, a greenway without a bridge crossing and reduced walls may be possible.



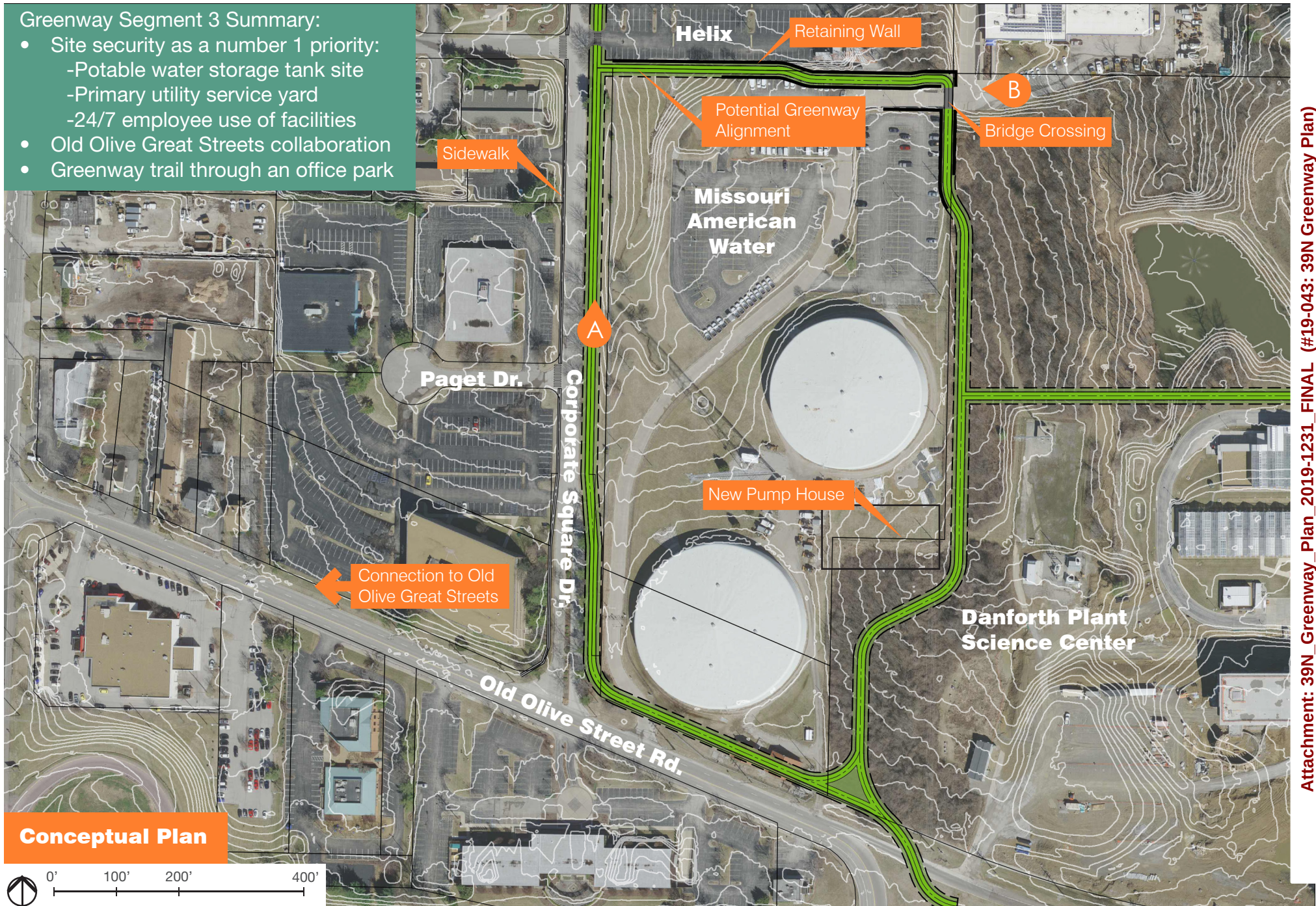
View A



View B

Greenway Segment 3 Summary:

- Site security as a number 1 priority:
 - Potable water storage tank site
 - Primary utility service yard
 - 24/7 employee use of facilities
- Old Olive Great Streets collaboration
- Greenway trail through an office park



Greenway Segment 4

Helix Center Property



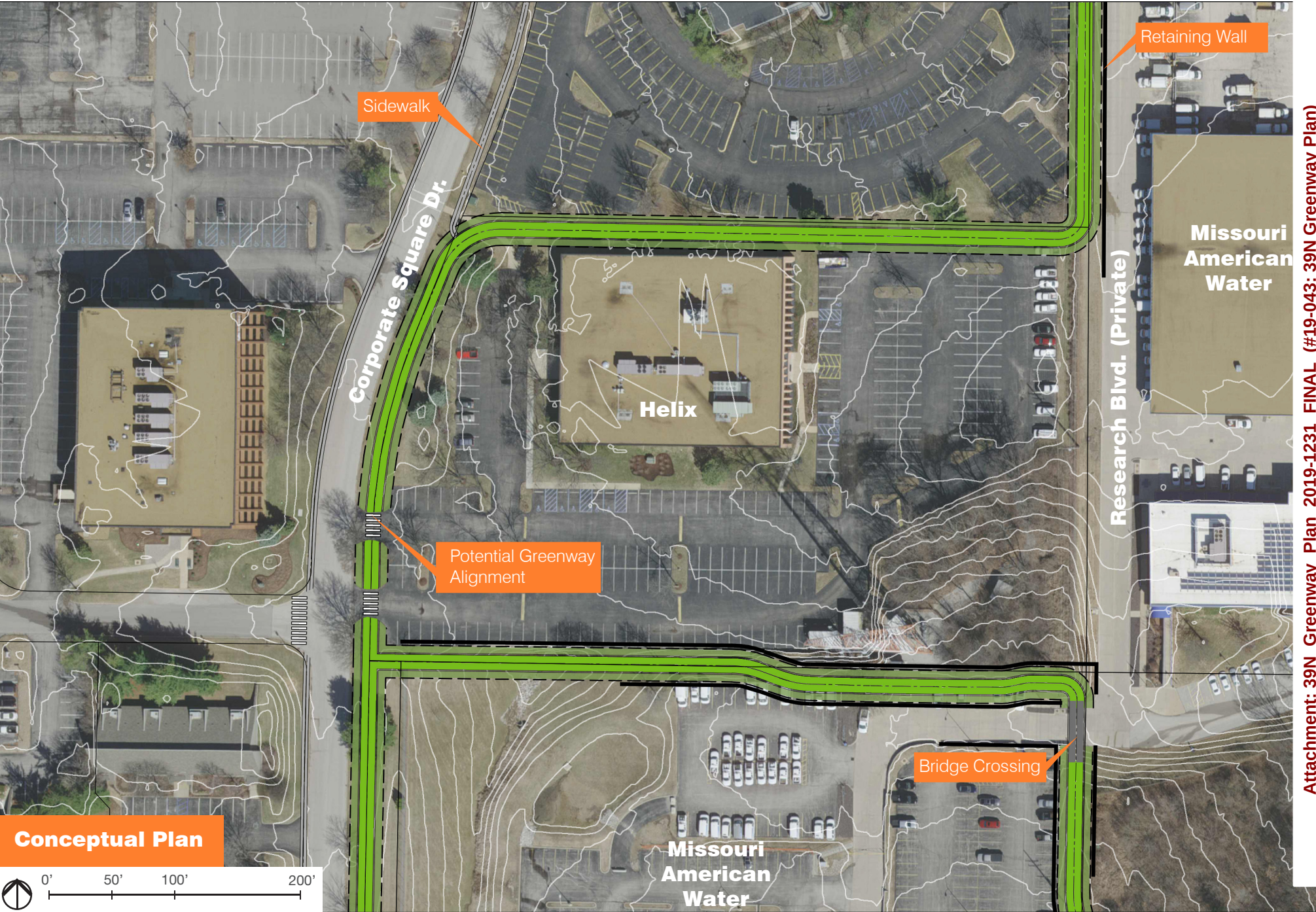
Helix Center

The Helix Center property is centrally located within the 39 North District. Due to this location and its topography, it is a logical location to connect the Corporate Square office park with the Lindbergh-Warson Industrial Center to the north and east. Since the St. Louis Economic Development Partnership owns the property, there is more flexibility in developing the proposed greenway trail around this parcel.

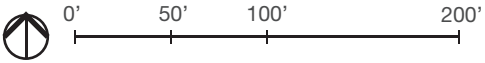
Greenway Segment 4 Summary:

- Greenway trail through an office park
- Allows authorized vehicle use to Danforth Plant Science Center
- Connects Corporate Square Drive to Danforth Plant Science Center
- Connects Corporate Square Drive to Research Blvd

The greenway segment along the south property line transitions from the Missouri American Water bridge crossing down to Corporate Square Drive while maintaining ADA required slopes. As the greenway heads north, it crosses the Helix entrances and enters existing green space along Corporate Square Drive. The greenway then turns east running between adjacent parking lots towards the south end of Research Blvd. As the greenway turns to the north, it must transition from the Corporate Square elevation down to Research Blvd.



Conceptual Plan



Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Greenway Segment 5

Research Boulevard South

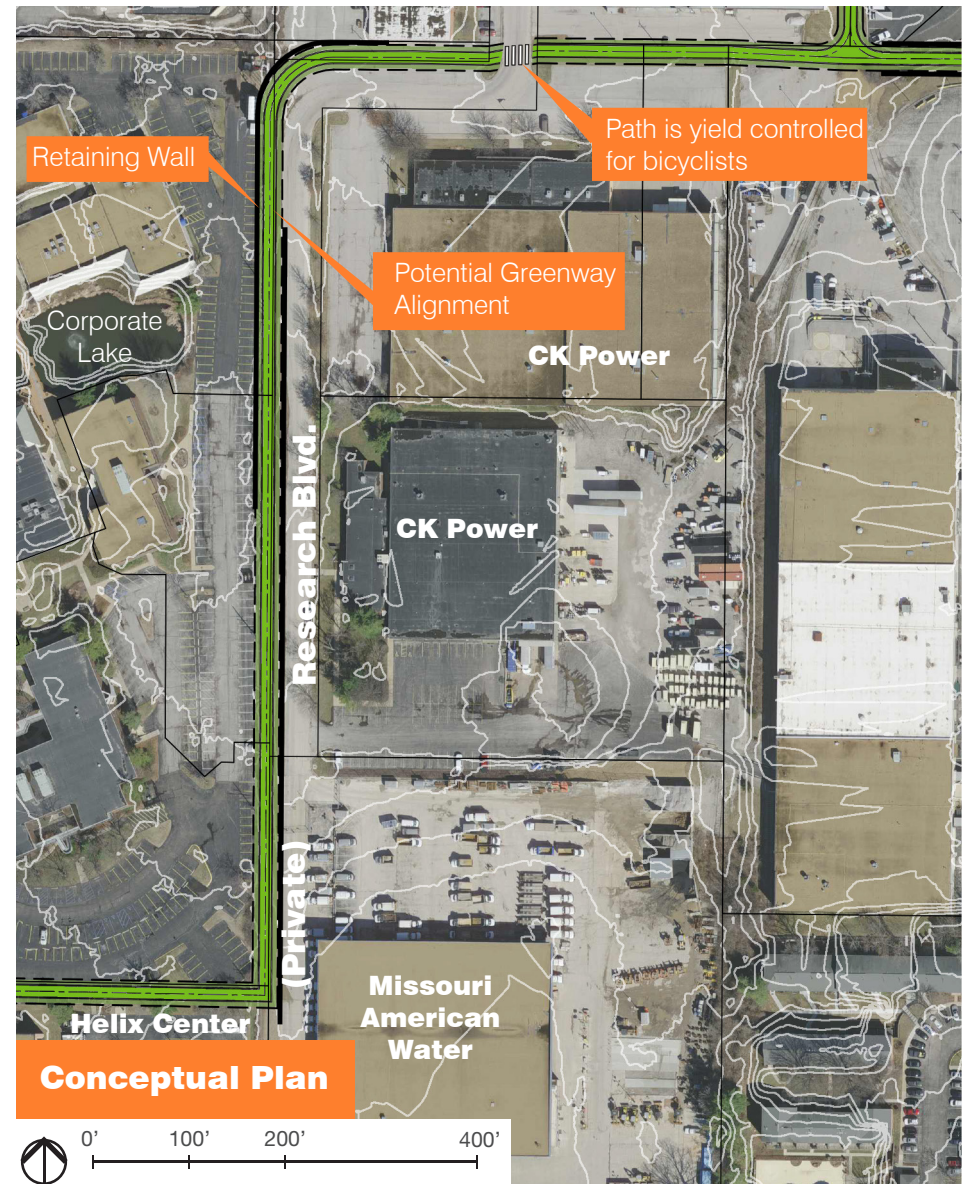


Research Boulevard South

As the greenway turns north from the Helix Center, it transitions grades from the Corporate Lake office development to Research Blvd adjacent to CK Power. Access to the greenway is available along the southern half of the Corporate Lake parking lot and across from the courtyard connecting to additional internal walkways.

Research Blvd south of Gateway Blvd has a high percentage of truck traffic which goes to Missouri American Water and to CK Power. The greenway crosses Research Blvd at a jog in the road. This crossing has vehicular/truck traffic running parallel to the greenway prior to turning across the trail. Design should seek to maintain separation between trail users and vehicular traffic and to increase visibility of trail users. It is anticipated that yield or stop control of the bicyclist will be required at the crossing.

As the greenway continues to the east, it connects to a segment that may become part of the Centennial Greenway.

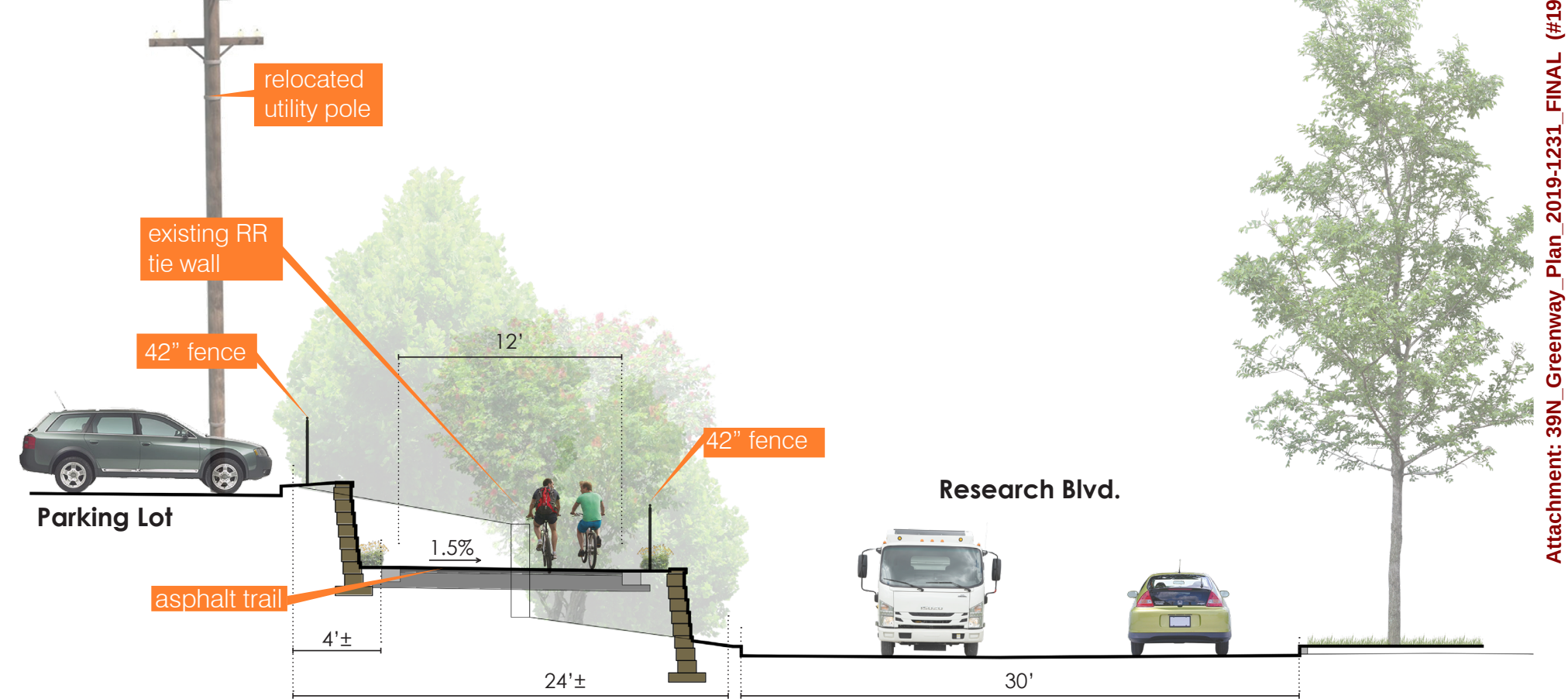


Conceptual Plan

0' 100' 200' 400'

Greenway Segment 5 Summary:

- Connects Helix Center and Corporate Square Drive to Centennial Greenway
- Grade Transition
- Crosses Research Blvd



Greenway Segment 6

Warson Park to Research Boulevard



1177 N. Warson Road

The City of Olivette and Great Rivers Greenway are developing plans to connect the Centennial Greenway with Warson Park. The 39 North Greenway could become a western continuation to the regional Centennial Greenway. When the City of Olivette redevelops Warson Park, the main entrance will be relocated to Warson Road. If this new entrance can be aligned with Gateway Blvd, it is possible that a fully signalized intersection could be developed to include a trail crossing. Otherwise, the greenway would require a mid-block crossing of Warson Road south of Gateway Blvd.

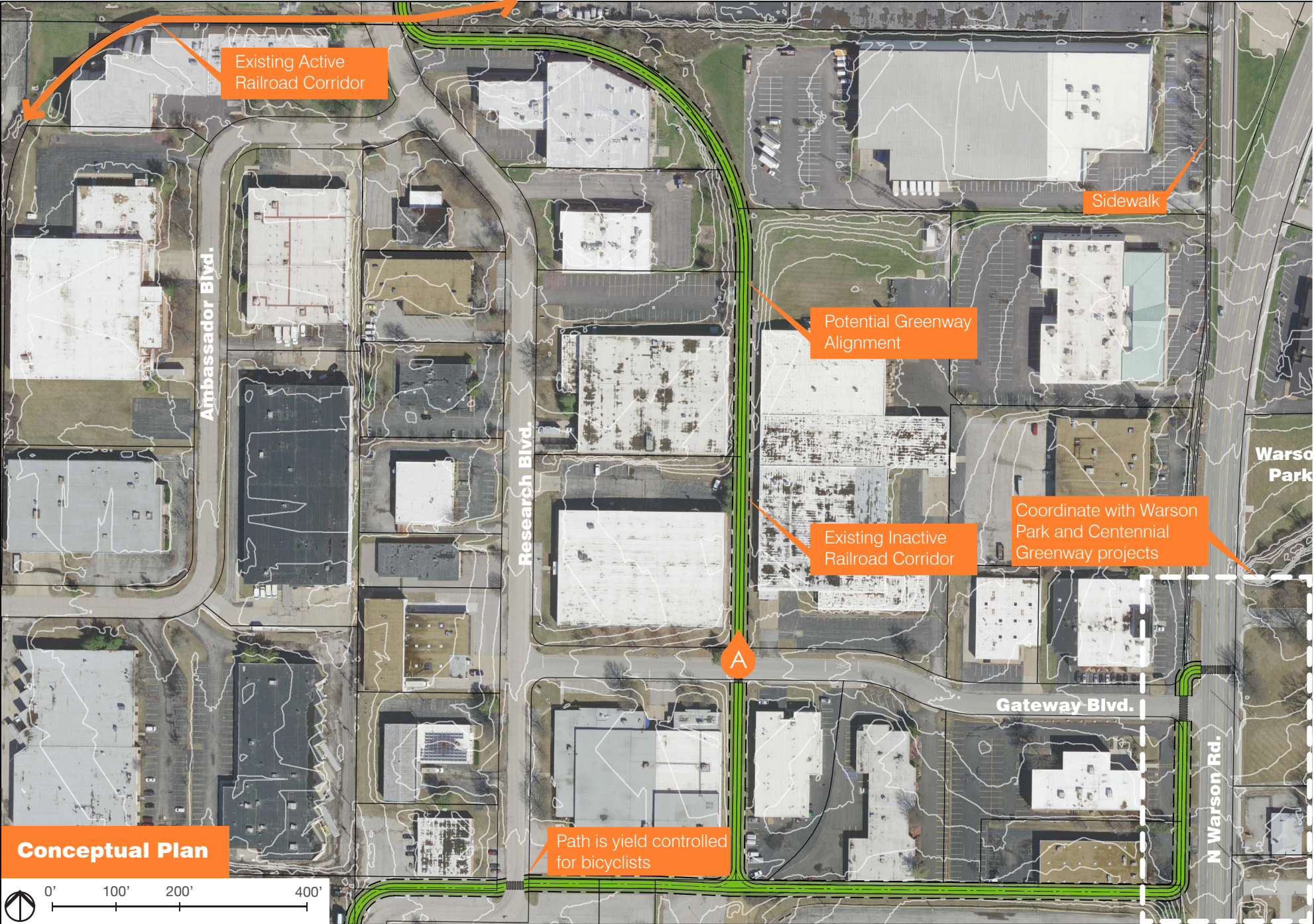
Once across Warson, the proposed greenway would continue west until it connects with Segment 5. The proposed greenway then turns north and follows an existing but inactive railroad corridor for approximately 0.3 mile. Eight properties back to the railroad corridor. The greenway then crosses a set of active railroad tracks adjacent to the Research Blvd railroad crossing and continues north.



Perspective A

Greenway Segment 6 Summary:

- Part of Centennial Greenway
- Runs along inactive railroad easements
- Crosses Gateway Blvd
- Crosses active railroad tracks
- Addition of bike lane striping to Gateway Blvd and Research Blvd



Conceptual Plan

Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Greenway Segment 7

Baur Boulevard



After crossing the active railroad tracks adjacent to the Research Blvd railroad crossing, the proposed greenway continues north to Baur Blvd. A new pedestrian crossing of Baur Blvd will include crosswalk pavement markings and signage. The greenway then turns west and replaces the existing sidewalk along the north side of Baur Blvd as it runs adjacent to the Dierbergs' Florist and Schaefer Autobody properties. This segment would also become a continuation of the regional Centennial Greenway.

Greenway Segment 7 Summary:

- Part of Centennial Greenway
- Separated greenway parallel to Research Blvd
- Crosses Baur Blvd at Research Blvd
- Separated greenway parallel to Baur Blvd
- Addition of bike lane striping to Research Blvd





Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Greenway Segment 8

Lindbergh Boulevard Crossing



As the proposed greenway continues to the west it pulls away from Baur Blvd to cross the drive to Ameren's Warson Substation. The greenway follows the southern edge of the substation property until it launches onto a bridge structure. This bridge structure will cross Lindbergh Plaza Center between the 1305 and 1311 buildings. The grade separated trail continues across Lindbergh Blvd (US Highway 67), likely requiring a center support in the highway median. This segment could become a continuation to the regional Centennial Greenway as the western end of the bridge lands in the Jewish Community Millstone Campus and provides opportunities to continue west.

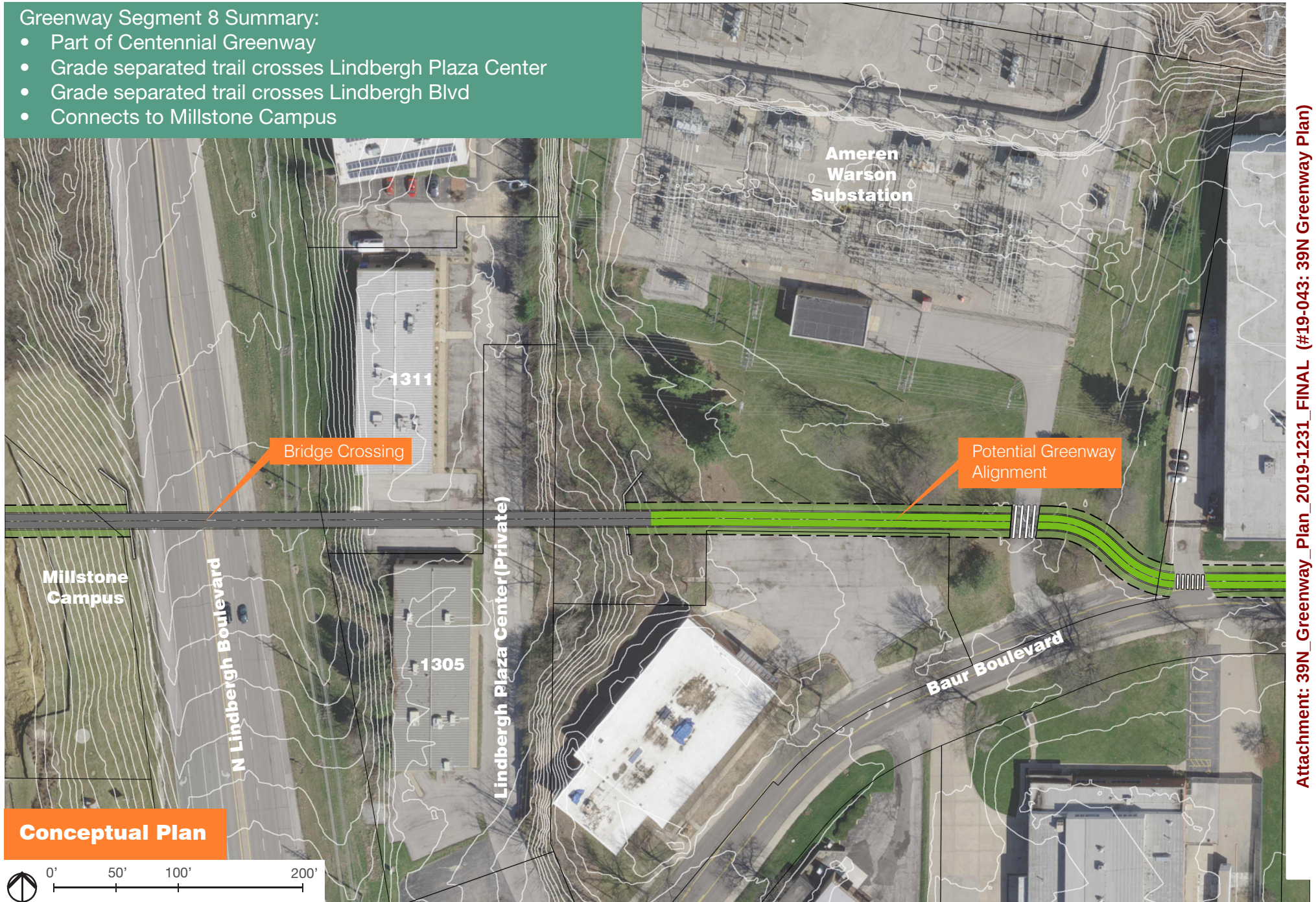
The bridge structure across Lindbergh Blvd also provides an opportunity for a highly visible northern gateway to the 39 North District.



N. Lindbergh Boulevard

Greenway Segment 8 Summary:

- Part of Centennial Greenway
- Grade separated trail crosses Lindbergh Plaza Center
- Grade separated trail crosses Lindbergh Blvd
- Connects to Millstone Campus



Conceptual Plan



0' 50' 100' 200'

On-Street Facilities

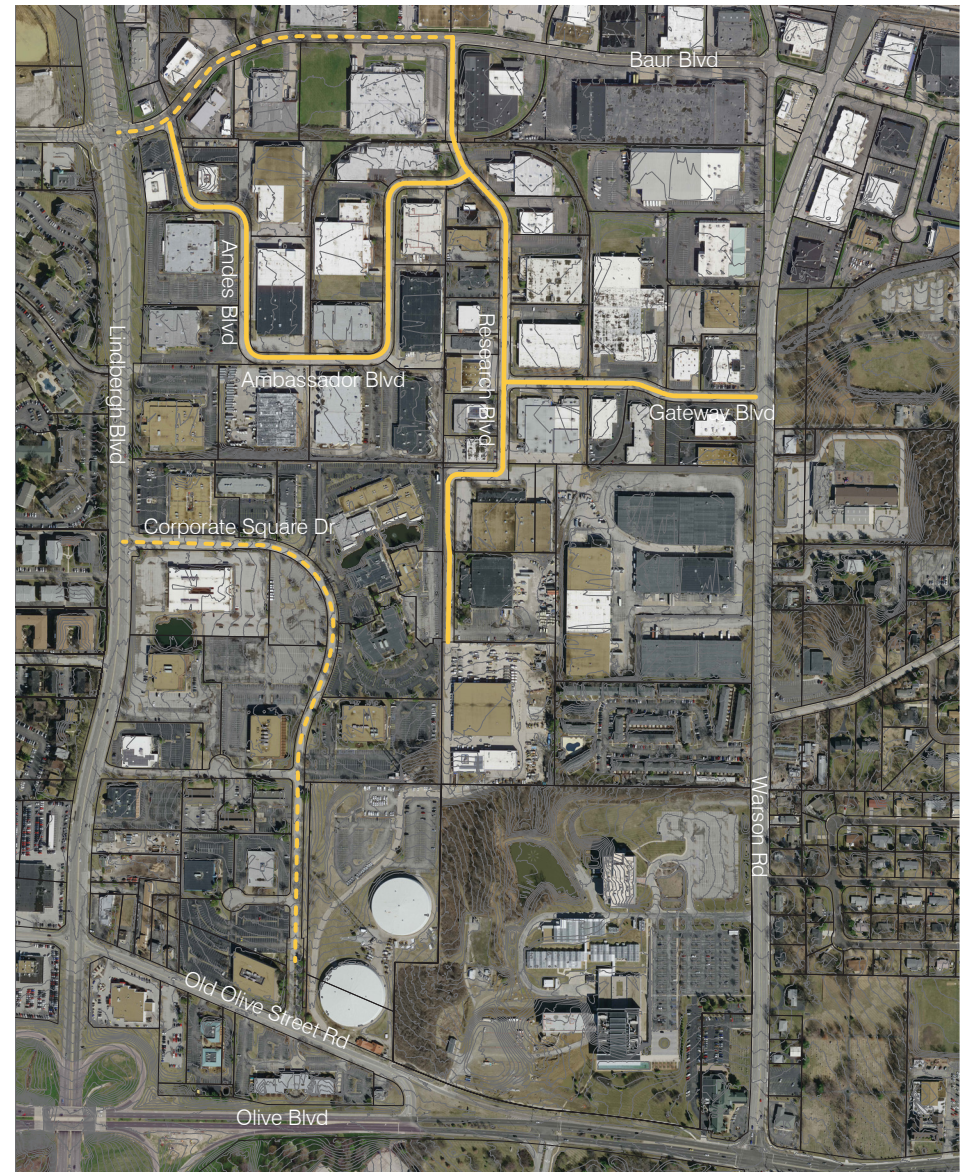
Although a separated multi-use trail for pedestrian and bicyclist use is the long-term goal for the 39 North Greenway Project, the lack of right-of-way will limit how quickly that goal can be achieved. In the interim, on-street facility improvements can be made within existing public right-of-way. Appropriate signage should be provided with any development of on-street facilities. These facilities will continue to provide benefits even after construction of a separated greenway.

On-Street Bicycle Facilities

Many of the streets in the 39 North District are wide and unstriped. These can provide opportunities to add lane striping and bike-lane markings. The industrial streets of Andes, Ambassador, Gateway and N Research Blvd range from 34 to 40 feet wide and could be striped and marked to provide bike lanes. South Research Blvd is only 30 feet wide which does not allow for bike-lanes but the road could be marked for shared lanes.

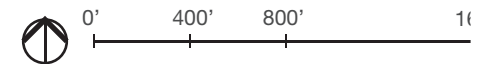
Corporate Square Dr has existing lane striping with white edge striping 5-ft from the curb. This shoulder is currently used by pedestrians. After development of the greenway and sidewalks throughout Corporate Square, these shoulders should be marked as bike lanes.

The Gateway Bike Plan indicates “wide outside lanes” for Baur Blvd and Warson Road in the 39 North District. Both streets are County arterial roads and would be covered by the St. Louis County Bicycle Facilities Plan (2014). This plan calls for “wide shared lanes” to be 13 to 15 feet wide. “Bike Route” guide signs are called for along arterial and collector type roadways with a wide shared outside lane greater than 1/2 mile in length. Spot checks show Baur Blvd having 14-ft wide outside lanes suitable for shared use. Baur Blvd, which is approximately 1/2 mile long, does not have any “Bike Route” signs. Spot checks show that Warson Road does not provide wide shared lanes. A striped shoulder is provided on the east side of Warson Rd between Olive and Grandview but is not marked as a bike lane.



Legend

- Existing Road Striping
- Proposed Road Striping



Typical Sections: Research Blvd.



Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

On-Street Pedestrian Facilities

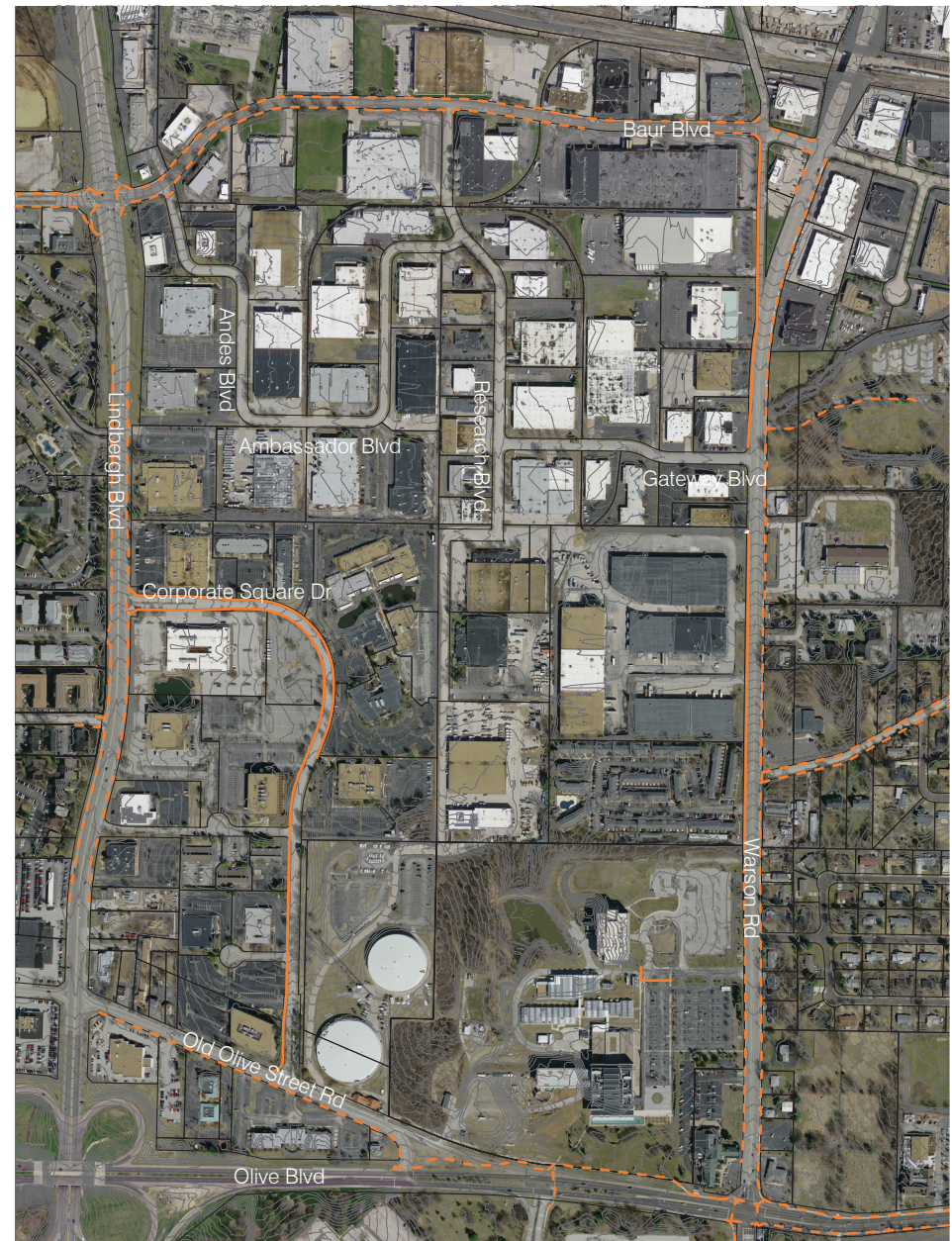


Corporate Square Drive

The 39 North District currently has very limited pedestrian facilities. There are sidewalks along portions of Warson Blvd, Lindbergh Blvd, Old Olive Street Road and Baur Blvd. The Corporate Lake office development has internal walkways with no external connections while the Danforth Center campus has internal walkways that connect to Warson Blvd and Olive Blvd.

Throughout the district, people walk along the streets and cross parking lots for exercise or to get between buildings. SSM Health has offices in eight buildings throughout the Corporate Square and Corporate Lake office developments. Due to concern for employee safety and to facilitate healthy habits, SSM Health worked with the City of Creve Coeur several years ago to provide striped shoulders along Corporate Square Drive. At that time, funding for sidewalks was not available.

The Greenway Plan includes new sidewalks in two primary areas. The addition of sidewalks along the west side of Warson Blvd from the Danforth Center to Baur Blvd would improve the pedestrian path connecting the Danforth Center, the Warson Village Apartments and Warson Park. The addition of sidewalks to both sides of Corporate Square, where no trail is planned, would increase safety and connectivity throughout the office park. Sidewalks within the industrial park should be reviewed more closely due to vehicle access issues.



Legend

- Existing Sidewalks
- Proposed Sidewalks



0' 400' 800' 1600'



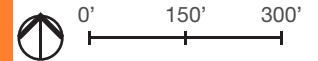
Proposed Sidewalks on Corporate Square Drive



Access Issues

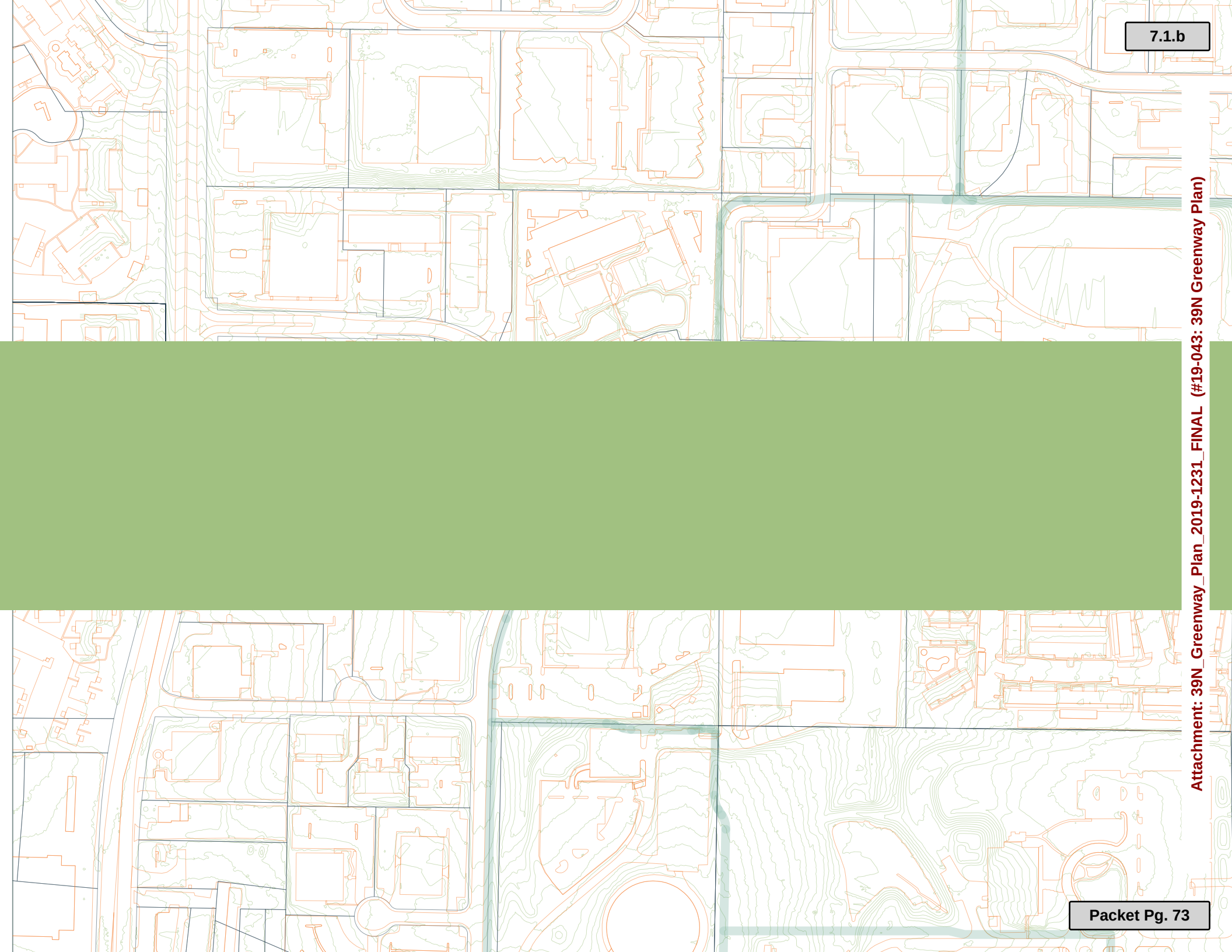


Driveway Access

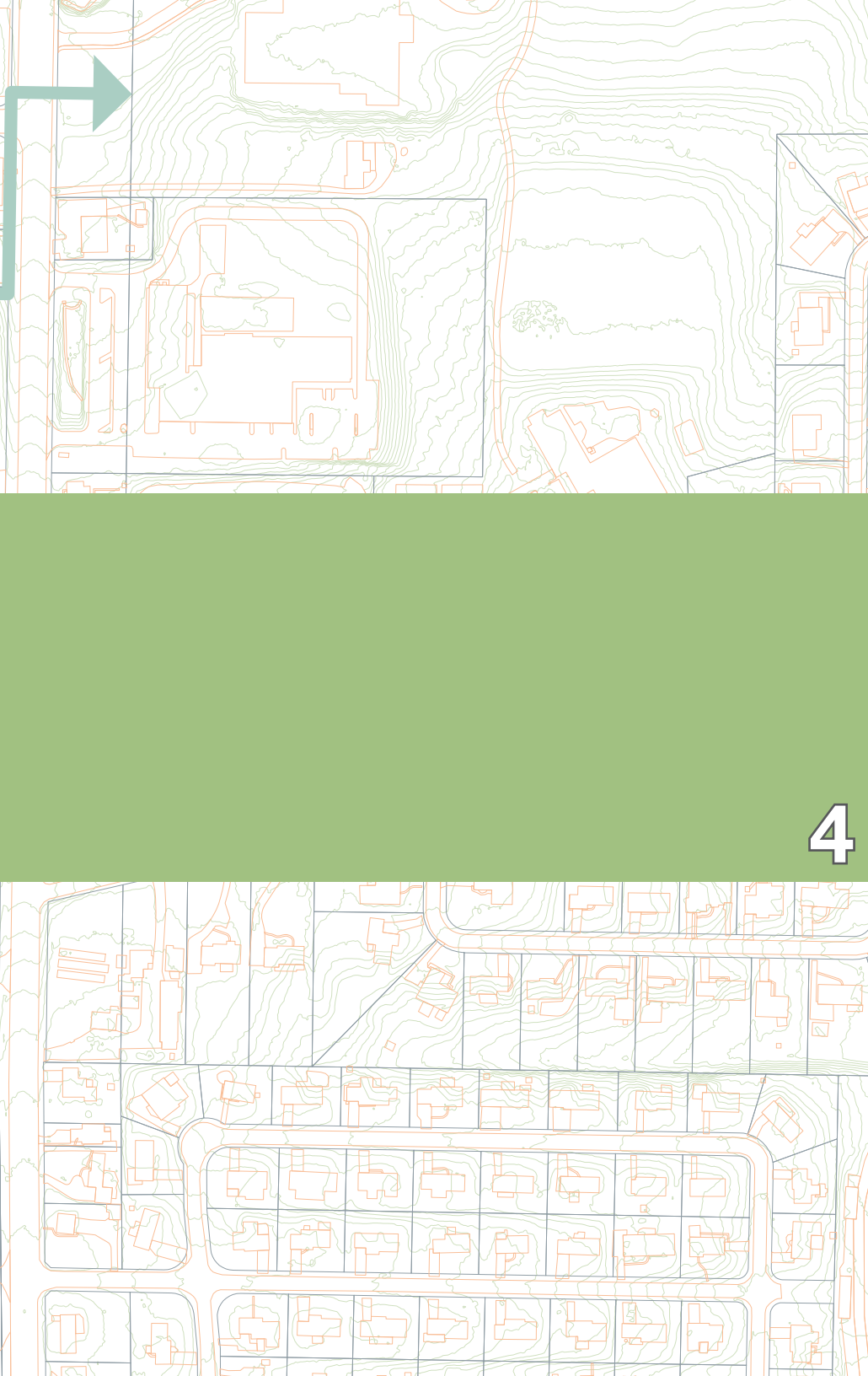


Legend ● Driveway Access

Much of the property within the 39 North District was developed in the 1960s and 1970s prior to annexation by the City of Creve Coeur. Throughout the industrial area, uncontrolled access and parking that backs to the streets are obstacles to safe development of pedestrian and bicyclist facilities within the right-of-way. Within the northern half of the Corporate Square development, the driveways should be reviewed to determine if any can be consolidated or eliminated prior to installing sidewalks.



7.1.b

A topographic map background with contour lines and building outlines. A large green arrow points from the left edge towards the center. A large green rectangular area covers the middle-left portion of the page.

4 Appendix

Greenway Data Summary per Design Segment

Greenway Segments	Length of Trail (miles)	Number of Properties Crossed	Retaining Wall Required	Bridge Required	Railroad Impacts	Conflicts with Existing Utilities Anticipated				
						Water	Electric	Gas	Sewer	Communications
1. Old Bonhomme Road to Danforth Plant Science Center	0.36	6	Yes	No	N/A		Yes		Yes	Yes
2. Danforth Center Campus	0.48	1	Yes	No	Easements		Yes		Yes	
3. Missouri American Water Property	0.43	4	Yes	40-ft	Easements	Yes	Yes		Yes	Yes
4. Helix Center Property	0.16	1	Yes	No	N/A		Yes			Yes
5. Research Boulevard South	0.29	6	Yes	No	N/A	Yes	Yes	Yes	Yes	Yes
6. Warson Park to Research Boulevard	0.59	12	Yes	No	Inactive Rail Spur, Active Rail Crossing		Yes		Yes	Yes
7. Baur Boulevard	0.23	4	Yes	No	N/A	Yes			Yes	
8. Lindbergh Boulevard Crossing	0.18	4	Yes	460-ft	N/A		Yes			Yes
Totals:	2.72	38								

Eliminated Design Options:

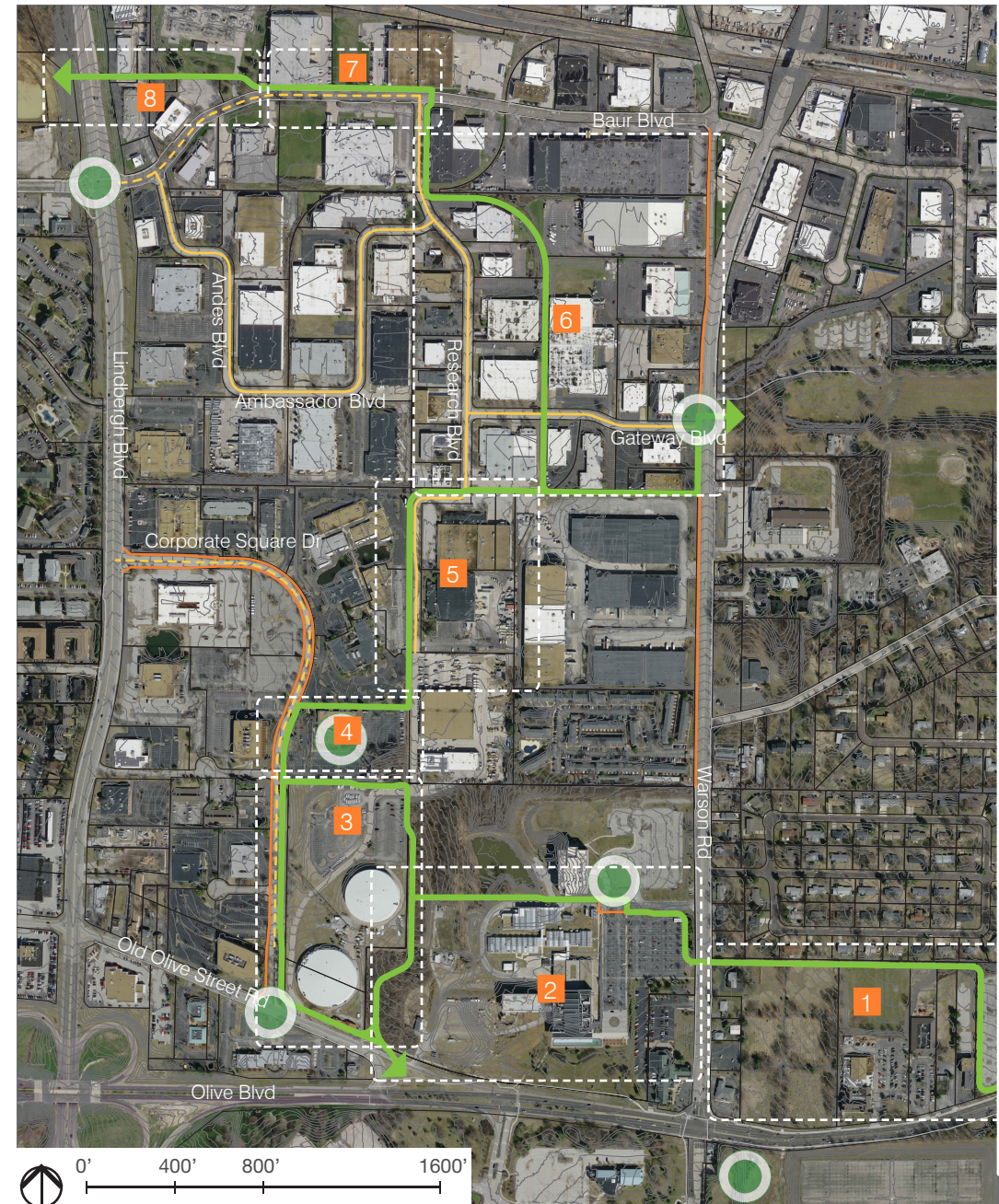
- Tunnel below Olive Blvd - eliminated due to existing utilities.
- Bridge over Olive Blvd - eliminated due to site grades.
- South side of Olive Blvd west of Warson Rd - limited right-of-way for greenway trail. Lindbergh Blvd/Olive Blvd interchange project reviewing sidewalk option.
- Olive Blvd and Warson Rd intersection - eliminated due to limited space and high traffic volumes.
- Mid-block crossing of Olive Blvd east of Warson Rd - MoDOT's preference is to cross at an existing signal, if possible.
- Western and northern boundary of the Danforth Center - eliminated due to zoning restrictions.
- Southern boundary of the Danforth Center - impacts prairie and not as centrally located to campus.
- Rear of properties between Research Blvd and Ambassador Blvd - eliminated due to grades and limited space at the north end of segment.
- Bridge at Missouri American Water property to north along east boundary of Helix property - eliminated due to grades. May be viable if bridge is not required.

The 39 North Greenway has been broken down into 8 design segments

Legend

- | | | | |
|--|------------------------|---|------------------------|
|  | Proposed Greenway |  | Proposed Road Striping |
|  | Existing Road Striping |  | Proposed Sidewalks |
|  | Connection Nodes | | |

39 North Greenway Alignment



Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)



Danforth Center Campus View A



Danforth Center Campus View B



Danforth Center Campus View C



Missouri American Water View A





Helix Center

Attachment: 39N_Greenway Plan 2019-1231_FINAL (#19-043: 39N Greenway Plan)



Research Blvd. South



Warson Park to Research Blvd.

Attachment: 39N Greenway Plan 2019-1231 FINAL (#19-043: 39N Greenway Plan)



Baur Blvd. View A



Baur Blvd. View B

Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)



Baur Blvd. View C



Lindbergh Crossing View A

Attachment: 39N_Greenway Plan 2019-1231_FINAL (#19-043: 39N Greenway Plan)



Lindbergh Crossing View B



Corporate Square Drive

Attachment: 39N Greenway Plan 2019-1231 FINAL (#19-043: 39N Greenway Plan)

Missouri Liability Statute

Missouri Revised Statutes

Chapter 258 Outdoor Recreation Section 258.100

August 28, 2013

Trail, definition--immunity from civil liability for adjoining landowners, when.

258.100. 1. As used in this section, the word "trail" means any land which was acquired or utilized by the state for use as a public hiking, biking or recreational trail or any land or interest therein acquired or utilized hereafter by a political subdivision for use as a public hiking, biking or recreational trail. However, a trail not acquired by the state must be designated by the governing body of the political subdivision as a greenway system of trails or part of a dedicated system of trails, the acquisition conveyance whether by deed, easement agreement, grant, assignment, or reservation of rights to the political subdivision must state the interest in the land is being granted for such purposes, the greenway system or dedicated system of trails must be designed exclusively for the purposes herein designated, and shall not include roads or streets, nor sidewalks, walkways or paths which are intended to connect neighborhoods for pedestrian traffic, such as common sidewalks or walkways.

2. Any person owning land adjoining the trail shall be immune from civil liability for injuries to person or property of persons trespassing or entering on such person's land without implied or expressed permission, invitation, or consent where:

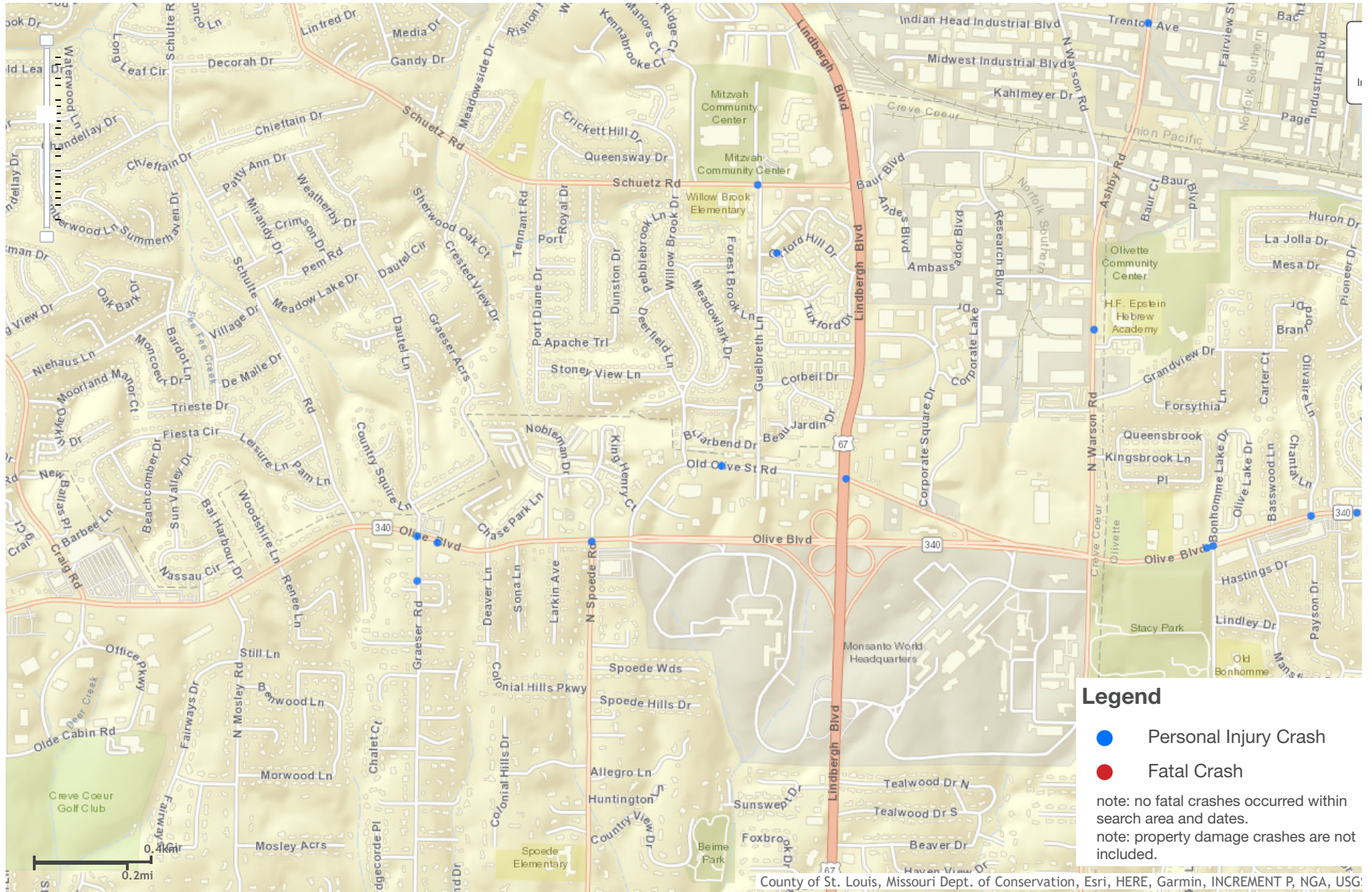
- (1) The person who was injured entered the land by way of the trail; and
 - (2) Such person was subsequently injured on lands adjoining the trail.
3. The immunity created by this section does not apply if the injuries were caused by:
- (1) The intentional or unlawful act of the owner or possessor of such land; or
 - (2) The willful or wanton act of the owner or possessor of such land.

(L. 1990 H.B. 1669 § 1, A.L. 1993 S.B. 221, A.L. 1994 H.B. 1115, A.L. 2004 S.B. 810)

Traffic Data

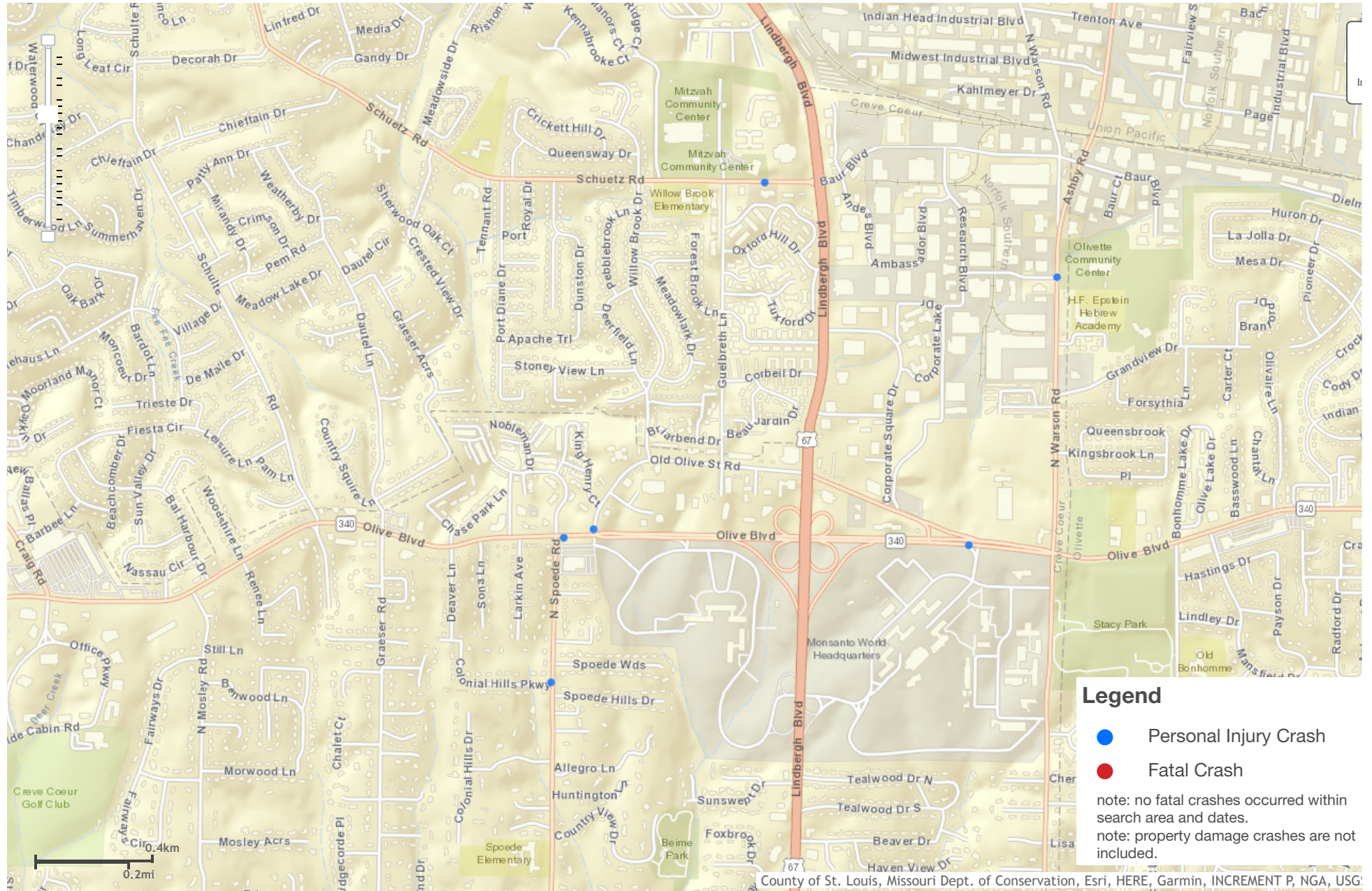
Roadway Segment	Data Year	Average Daily Traffic
St. Louis County		
Warson Road – north of Olive Blvd	2017	9,800
Baur Blvd – west of Research Blvd	2017	6,300
Schuetz Road – west of Lindbergh Blvd	2017	10,600
City of Creve Coeur		
Warson Road – south of County line	2013	14,440
Gateway Blvd	-	-
Research Blvd	-	-
Corporate Square Drive	2015	1,050
Andes Blvd	2015	765
Ambassador Blvd	-	-
Old Olive Street Road (after reversion from MoDOT)	Future	-
City of Olivette		
Old Bonhomme Road	2017	2,125
Warson Park entrance	-	-
MoDOT		
Olive Blvd	2017	28,100
Old Olive Street Road	2017	6,670
Lindbergh Blvd – north of Olive Blvd	2017	28,595

Crash Data (2014-2018): Pedestrian



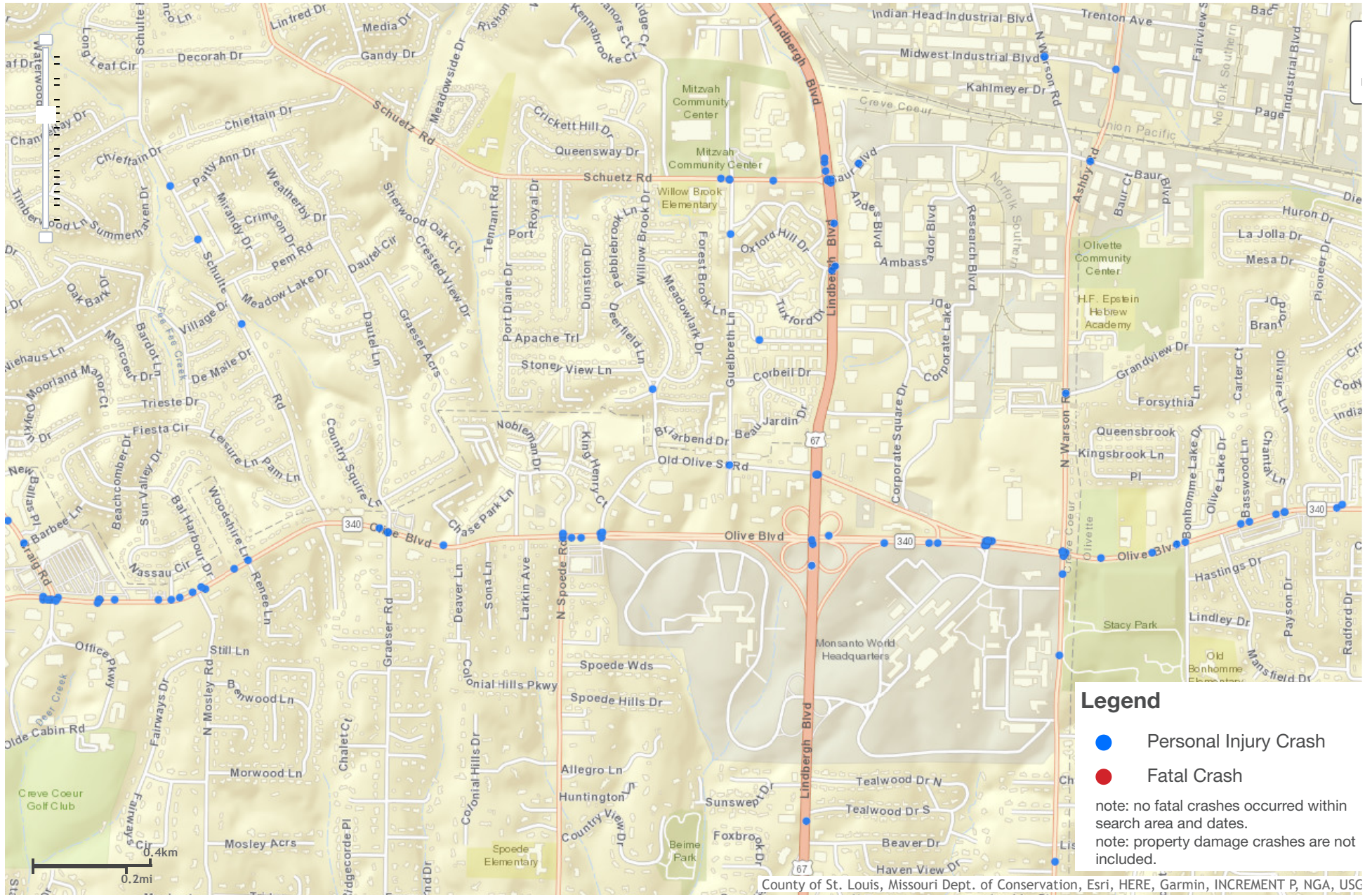
Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Crash Data (2014-2018): Bicycle



Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Crash Data (2014-2018): Motor Vehicle

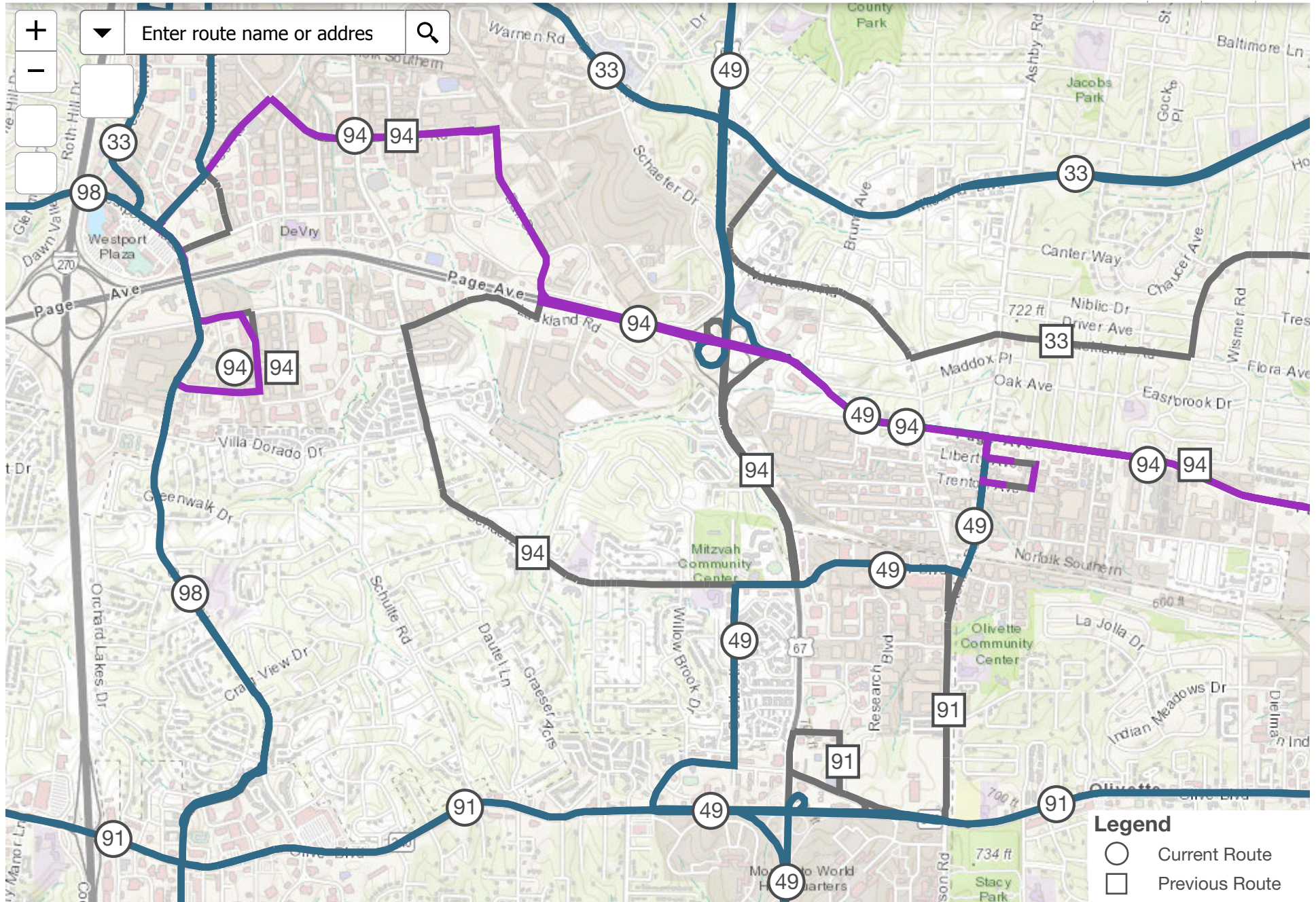


Attachment: 39N_Greenway_Plan_2019-1231_FINAL (#19-043: 39N Greenway Plan)

Crash and Enforcement Data (6/1/2014-5/30/2019): City of Creve Coeur Police Department

- Corporate Square: 5 crashes on the roadway (with 6 additional on private parking lots on Corporate Square). There were also 46 traffic citations written on Corporate Square, most of them (34) for speeding.
- Gateway: 2 crashes on the roadway (with 1 additional on a private parking lot on Gateway). There was only 1 traffic citation which was written in relation to a crash.
- Research: 0 crashes on the roadway (with 4 additional on private parking lots on Research). There were 2 non-moving traffic citations written on Research.
- Ambassador: There were 0 crashes on the roadway, 0 crashes on private parking lots on Ambassador, and 0 traffic citations written on Ambassador.
- Andes: There were 0 crashes on the roadway, 0 crashes on private parking lots on Andes, and 0 traffic citations written on Andes.

Metro Reimagined Routes: changes Effective September 30, 2019



RESOLUTION _____

A RESOLUTION OF THE PLANNING AND ZONING COMMISSION OF THE CITY OF CREVE COEUR, MISSOURI, ADOPTING THE 39 NORTH GREENWAY PLAN AS AN AMENDMENT TO THE 39 NORTH MASTER PLAN AND CREVE COEUR 2030 COMPREHENSIVE PLAN AND THEREBY UPDATE THE OFFICIAL LAND USE PLAN OF THE CITY.

WHEREAS, Sections 89.340 et seq. direct the Creve Coeur Planning and Zoning Commission to make and adopt a plan for the physical development of the City; and

WHEREAS, the Commission adopted such a plan, the Creve Coeur 2030 Comprehensive Plan, in March 2017; and

WHEREAS, the adopted plan includes provisions regarding the Mixed-Use Innovation Campus District, acknowledges the efforts of the St. Louis Economic Development Partnership master planning initiative, and recommends adoption of the master plan developed through that initiative as an amendment to the 2030 Comprehensive Plan, and

WHEREAS, the St. Louis Economic Development Partnership completed its master planning initiative, resulting in the 39 North Master Plan, and

WHEREAS, the Commission amended the Creve Coeur 2030 Comprehensive Plan to include pertinent portions of the 39 North Master Plan in June 2017 and further amended the Plan to include the 39 North Old Olive Great Street plan in August 2019; and

WHEREAS, the St. Louis Economic Development Partnership and the Great Rivers Greenway, with the help of City Staff, have developed the 39 North Greenway Plan as a further proposed amendment; and

WHEREAS, application 19-043 was submitted by the City of Creve Coeur Director of Community Development to make such an amendment; and,

WHEREAS, the Planning and Zoning Commission of the City of Creve Coeur, Missouri, held a public hearing thereon at the Creve Coeur Government Center on January 21, 2020; and,

WHEREAS, notice of said public hearing had previously been published at least 15 days prior to the hearing in the St. Louis Countian, a newspaper of general circulation in the City of Creve Coeur and otherwise posted and published in accordance with City Ordinances; and,

WHEREAS, all persons who presented themselves at said hearing and desiring to be heard were given an opportunity to be heard and a copy of the proposed amendment to comprehensive plan has been made available for public inspection prior to its consideration by the Commission; and,

WHEREAS, the Commission has determined that it is fully and sufficiently informed on the matter and that the proposed amendment to the plan has the general purpose of guiding and accomplishing a coordinated development of the City in the affected area which will, in accordance with existing and future needs, best promote the general welfare as well as efficiency and economy in the process of development;

NOW, THEREFORE, be it resolved by the Planning and Zoning Commission of the City of Creve Coeur, Missouri, as follows:

Section 1: The 39 North Greenway Plan, included in **Exhibit A** attached hereto, is hereby adopted to amend and update the 39 North Master Plan and the Creve Coeur 2030 Comprehensive Plan.

Section 2: The Commission shall continue on with the task of implementing the Comprehensive Plan as hereby amended to the full extent of its authority.

Section 3. This Resolution shall become effective immediately upon adoption.

Section 4: The adopted amendment to the Comprehensive Plan shall be kept on file in the Department of Community Development, which serves as the office of the Commission, and the Director shall cause a copy thereof to be certified to the City Council and City Clerk to be available in the Clerk's office for public inspection during normal office hours, and further the Director shall cause a certified copy thereof to be available in the office of the St. Louis County Recorder of Deeds, all in compliance with Section 89.360 RSMo.

ADOPTED BY VOTE OF ____ OF THE 7 MEMBERS OF THE COMMISSION THIS ____ DAY
OF _____, 2020.

ELIZABETH KISTNER
CHAIRPERSON

SECRETARY

ATTEST:

DEBORAH RYAN, CITY CLERK, MPCC

Attachment: Comp Plan amendment adoption Resolution 12122020 greenway (#19-043: 39N Greenway Plan)



city of

CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141
(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

APPLICATION TO PLANNING AND ZONING COMMISSION

#19-043: FOR THE REVIEW AND ADOPTION OF THE 39N GREENWAY PLAN AS AN AMENDMENT TO THE 39 NORTH MASTER PLAN AND THE CREVE COEUR 2030 COMPREHENSIVE PLAN

FOR THE MEETING OF: Monday, December 16, 2019

LOCATION: 39N District, generally the area east of Lindbergh Boulevard and North of Olive Boulevard, with Bayer East and West Campus on the south of Olive Boulevard.

REQUEST: Jason Jaggi, Director of Community Development, on behalf of the City of Creve Coeur, has submitted the Draft 39N Greenway Plan, developed by the St. Louis Economic Development Partnership and the Great Rivers Greenway, as an amendment to the 39N Master Plan and the City's Comprehensive Plan, Creve Coeur 2030, to provide trail alignments and connectivity within the 39N District and to the regional Centennial Greenway, as recommended within the 39N Master Plan. Staff recommends that the Planning and Zoning Commission review the plan and consider adopting it as a component of the City's comprehensive plan. Such action will result in the City's formal endorsement of the plan to support the continued development of the 39N District in the same manner as the 39N Master Plan and Old Olive Great Street Plan for that portion that is under the purview of the City of Creve Coeur

ADDITIONAL INFORMATION: The Draft Plan has been available on the City's website for comments since November 8, 2019. Rietz and Jenz has also sent out the draft to stakeholders, including the City of Olivette, St. Louis Economic Development Partnership, the Missouri Department of Transportation, St. Louis County, and the Great Rivers Greenway and asked for comments to be provided by the end of the year. Therefore, Staff recommends that the Commission conduct the public hearing and accept comments from the public but continue the item until the next Planning and Zoning commission meeting in January.

APPLICANT: Jason W. Jaggi, AICP
Director of Community Development
City of Creve Coeur
300 North New Ballas Road
Creve Coeur, MO 63141

REPORT PREPARED BY: Whitney Kelly, AICP, City Planner
DATE: 12/11/2019
ATTACHMENTS: Draft 39N Greenways Plan
Draft Resolution

State Regulations:

- The **comprehensive plan** is a critical basis for local zoning regulations. It is exclusively developed and adopted by the planning commission. (89.340-89.370)
- **Zoning regulations** must be made in accordance with a comprehensive plan. (89.040). The plan is considered to only be a guide and not enforceable independent of the zoning ordinance.

Zoning Code References

- Section 405.1030:
Planning and Zoning Commission

BACKGROUND

The formulation of the 39 North Innovation District began in 2015 when St. Louis County was awarded a competitive federal grant in the amount of \$500,000 from the U.S. Department of Commerce, Economic Development Administration (EDA). The grant funded the development of a master plan to create a plant science and innovation hub in the St. Louis area located within the city limits of Creve Coeur. The outcome of the planning process resulted in the establishment of the 39 North District consisting of approximately 575 acres in the northeast quadrant of Creve Coeur. The comprehensive plan, adopted by the Commission in March 2017, encourages the continued development of this area of Creve Coeur into a mixed-use campus innovation district. The 39 North Master Plan was adopted in June 2017 by the Planning and Zoning Commission as an element of the City's comprehensive plan, *Creve Coeur 2030*.

In early 2018, the St. Louis Economic Development Partnership along with the Great Rivers Greenway District commissioned a study to identify possible alignments for the 39N Greenway. The development of a greenway to serve the District and to connect to the surrounding areas, including the Centennial Greenway, was a goal of the 39N Master Plan, which was adopted by the City in 2017. The City did not contribute direct funds for the 39N Greenway plan; however, City staff participated in the development of the plan as a member of the Core Working Group. The plan was funded by the Great Rivers Greenway District.

The 39N Greenway Plan includes approximately 0.4 miles of trail within the city of Olivette. The Centennial Greenway Olivette Alignment connects the existing Centennial Greenway at Olive Boulevard and 1-70 to Warson Park. The Greenways plan then makes the connection from Warson Park and throughout the 39N District. The adoption of the plan will only relate to areas that are under the purview of the Planning and Zoning Commission for the City of Creve Coeur.

PREPARATION OF THE DRAFT PLAN

The development process of the greenway plan followed along with the development of the 39N Master Plan and the Old Olive Great Street Plan, and the plans for the Lindbergh Blvd/Olive Blvd Interchange. The Greenway Plan was developed to meet the goals of the 39N Master Plan for connectivity throughout the district as well as connections to the Centennial Greenway. The Consultants have met with property owners whose property is crossed by the trail alignments to determine the level of support and, when necessary, alignments have been adjusted to avoid some properties that were not interested.

A draft of the plan was presented to the City Council, the Planning and Zoning Commission, and the Parks Committee during the November 4th work session. And the Final Draft was posted on the City's website for public comment on November 8th. Reitz and Jens have also sent out the draft to the Stakeholders, including, the City of Olivette, St. Louis Economic Development Partnership, the Missouri Department of Transportation, and Great Rivers Greenway. Comments from the stakeholders are due by the end of the year.

OVERVIEW OF THE 39 GREENWAY PLAN

The Draft Greenway Plan is structured into four (4) sections as follows:

- Introduction
- Site Analysis
- Design
- Appendices

As shown on page 43 and 67, the Greenway Plan has been broken down into 8 design segments:

1. Old Bonhomme Road to Danforth Plant Science Center
2. Danforth Center Campus
3. Missouri American Water Property
4. Helix Center Property
5. Research Boulevard South

6. Warson Park to Research Boulevard
7. Baur Boulevard
8. Lindbergh Boulevard crossing

The long-term goal of the 39N Greenway Project is to develop a separated multi-use trail for pedestrian and bicycles connecting the internal notes and making connections to the regional greenways. However, due to a lack of right-of-way for such a trail, and limited pedestrian sidewalks within the 39N District, on-street pedestrian and bicycle facilities provide opportunities for near-term improvements (p. 42). Pages 60-63 provide for on-street bicycle facilities and expansion opportunities for pedestrian/sidewalk facilities within the district, in addition to the greenway connections within the area.

The stated next steps in the development of the 39 North Greenway on Page 11 include:

- Adoption of the Greenway Plan by the Core Working Team and sponsors. The jurisdictional stakeholders should use this plan to guide future development and redevelopment in the 39 North District while securing property rights for the greenway when possible.
- Develop a schedule for implementation based on possible phasing of work and projected cost estimates. These are not part of this study.
- Secure funding which is likely to include a combination of Federal and State grants, local funding, corporate support and general fundraising.
- Begin surveys and preliminary design in order to determine property requirements.
- Greenway right-of-way acquisition. This will be a long and detailed process due to the number of individual properties involved and the presence of a railroad.
- Pursue design and construction of meaningful segments as opportunities arise. Early opportunities will include on-street bicycle facilities (striping), sidewalks, and a greenway connecting the Danforth Center, Old Olive Street Road and the Helix Center

SUMMARY AND CONCLUSION

The 39N Greenway Plan includes approximately 0.4 miles of trail within the city of Olivette. The Centennial Greenway Olivette Alignment connects the existing Centennial Greenway at Olive Boulevard and 1-70 to Warson Park. The Greenways plan then makes the connection from Warson Park and throughout the 39N District. The adoption of the plan will only relate to areas that are under the purview of the Planning and Zoning Commission for the City of Creve Coeur.

Staff recommends hearing from the Design Team and taking comments from the public. As Reitz and Jens has asked from comments for the stakeholders by the end of the year, the public hearing should be continued to the meeting in January for the preparation of the final draft.

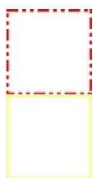
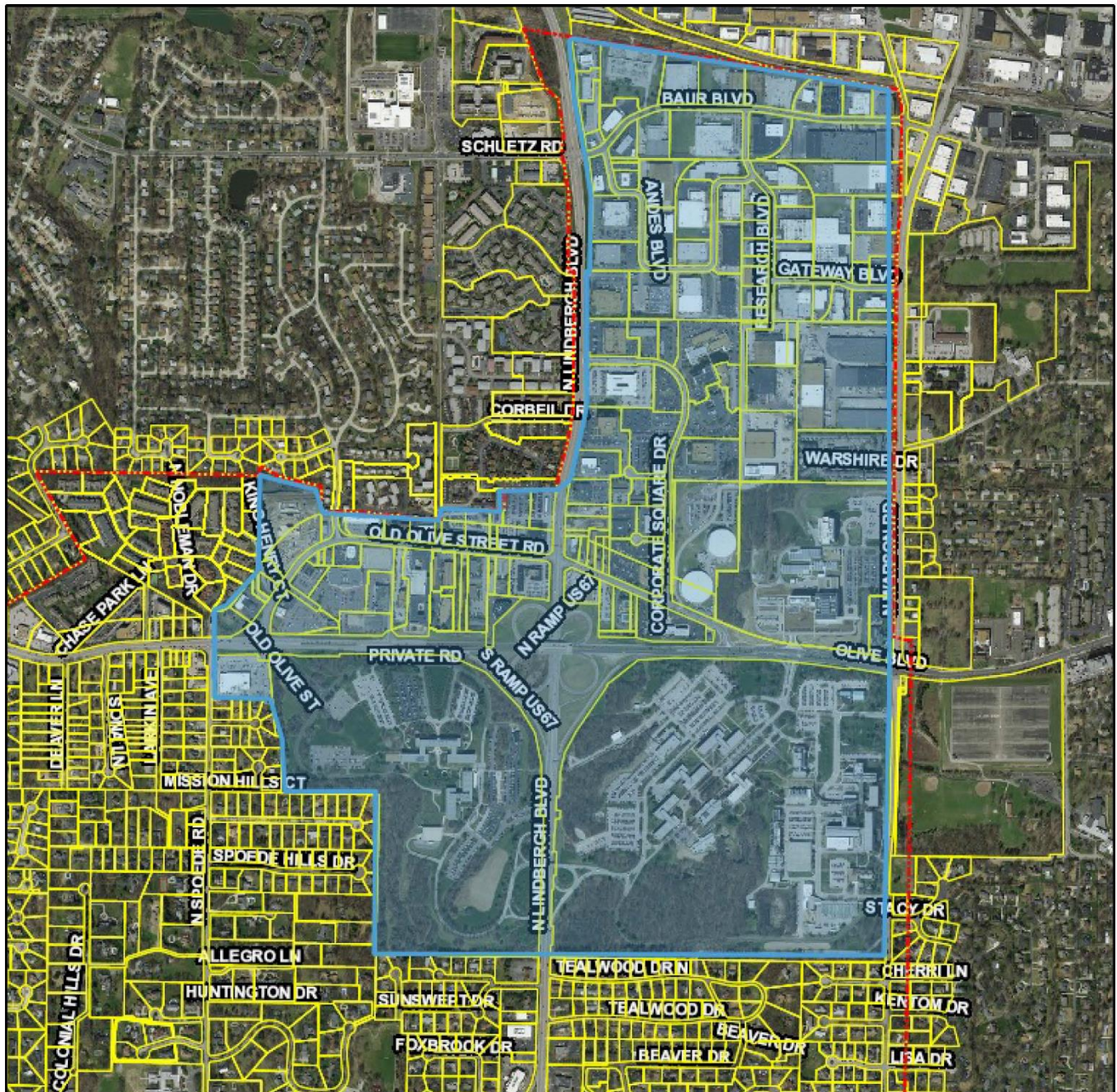
ACTION AND MOTION

A draft resolution for adoption of the plan has been prepared for consideration at the conclusion of the public hearing and review by the Commission. The following would be an example motion for this application to continue:

“I move to continue the public hearing to the January 21st Planning and Zoning Commission for additional comments and preparation of the final draft.

APPENDIX 1: AERIAL PHOTO

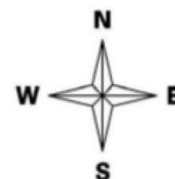
39 North Plant Science District/Mixed-Use Innovation Campus District



City Limits

Parcels

May 1, 2017



Prepared By

HORNER SHIFRIN



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(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

**APPLICATIONS TO PLANNING AND ZONING COMMISSION
#19-046 & #19-047: APPROVAL OF A BOUNDARY ADJUSTMENT AND
A SITE DEVELOPMENT PLAN FOR A 20 UNIT APARTMENT BUILDING
AT 10809-10819 OLIVE BOULEVARD**

FOR THE MEETING OF: Tuesday, January 21, 2020

LOCATION: 10809-10819 Olive Boulevard, Zoned Core Business District

REQUEST: Alvah Levine, of Levine Associates, on behalf of JLA Group, LLC, has submitted an application for Site Development Plan approval for a 20 Unit, 2-bedroom apartment building at 10809-10819 Olive Boulevard. Medium Density Multifamily Residential (up to 20 units per acre) (NAICS-CC814120) Developments are a permitted use in the CB-Core Business District. The Boundary Adjustment will consolidate the three lots into one development for a total of 1.05 acres.

ADDITIONAL INFORMATION: Section 405.1080 requires site plan approval by the Planning and Zoning Commission for any project which includes the development of a parcel of land that contains no buildings or for which the existing buildings are to be removed and a new building or buildings constructed. City Council action is not required. The existing structure on the properties are 2 original pre-existing homes with a detached garage from 1950 & 1959.

Key Issues:

- Does the request integrate with the existing surrounding uses?
- Does the request further or implement the goals of the Comprehensive Plan?

**Creve Coeur 2030
Comprehensive Plan
References**

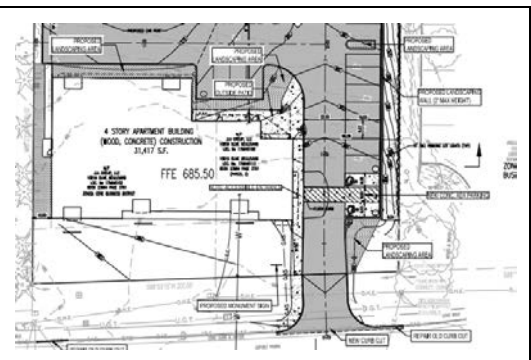
- East Olive Corridor Neighborhood Commercial District

Zoning Code References

- Table A: Permitted and Conditional Uses
- Section 405.370: CB-Core Business District
- Section 1080: Site Concept, Site Development and Minor Site Plan Approval.

APPLICANT: AJ Adewunmi
JLA Group, LLC
1917 Rutger Street
St. Louis, MO 63104

**APPLICANT'S
REPRESENTATIVE:** Alvah Levine
Levine Associates
830 Delmar Suite 220
St. Louis, MO 63124



REPORT PREPARED BY: Whitney Kelly, AICP, City Planner
DATE: 1/16/2020
ATTACHMENTS: Applicant's Materials received January 10, 2020

PROPOSAL

The Applicant is seeking to consolidate the three lots into one 1.05 parcel with site development plan approval for a 4 story, 20-unit apartment building. A 680 square foot, roof top deck is provided along the east end of the building on the fourth floor as an amenity for the residents. The apartments are two-bedroom, 1,133 square foot each, and 40 parking spaces are provided with 20 of those located within covered carports.



Figure 1: South Front Elevation



Figure 2: North Rear Elevation



Figure 3: East and West Elevations

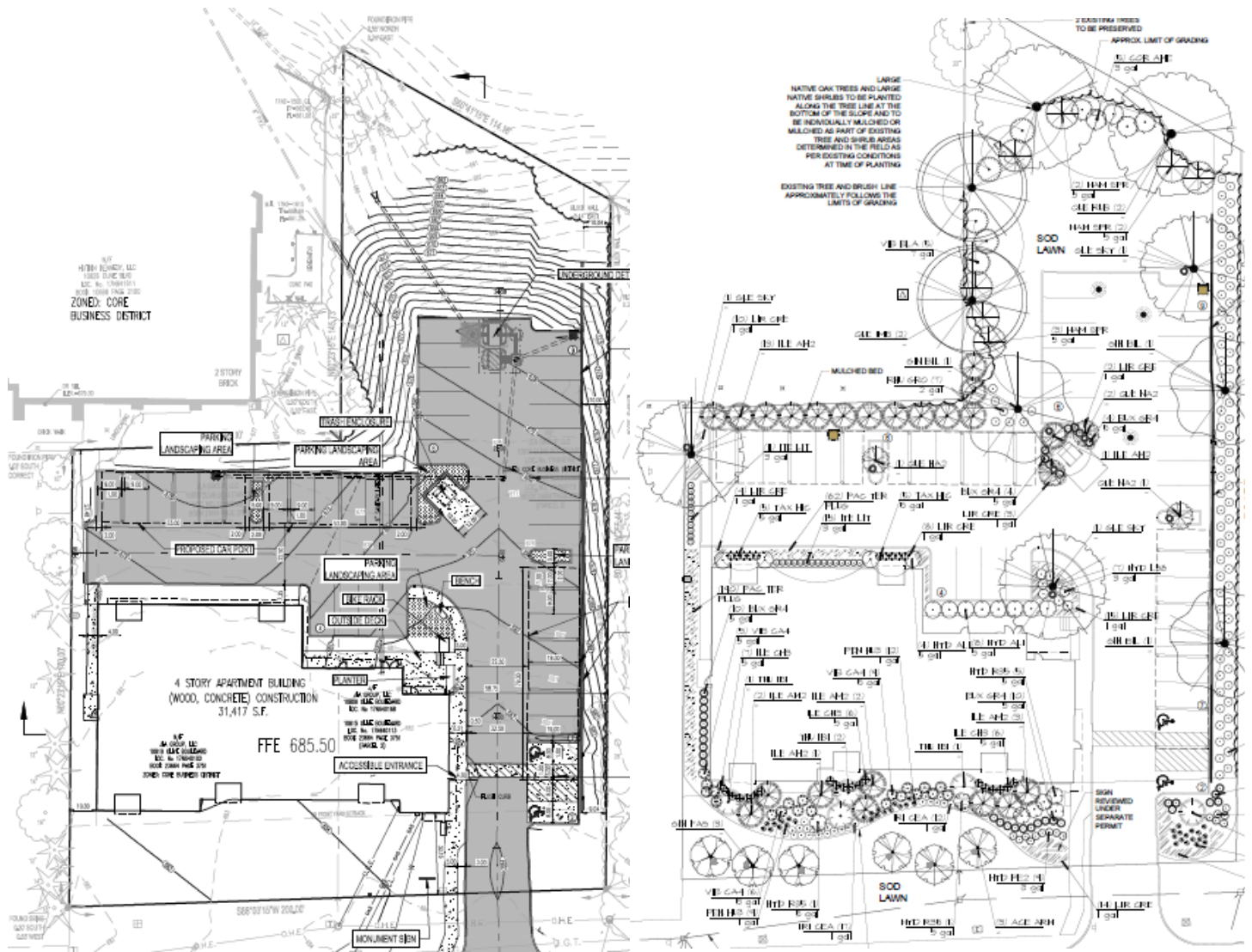


Figure 4: Applicant's Site Development Plan and Landscape Plan.

LAND USE AND ZONING OF SURROUNDING PROPERTIES

The adjacent zoning and land uses are as follows:

DIRECTION	USE	ZONED	SEPARATED BY
North	Briarcliff Condominiums Common Ground	Un-zoned	NA
South	Residential/Office	C-Single Family Residential	Olive Boulevard
East	Office Development	CB-Core Business District	NA
West	Office Development	CB-Core Business District	NA



Figure 5: GIS Image of Zoning District in Surrounding Area.

COMPREHENSIVE PLAN REVIEW

The *Creve Coeur 2030 Plan*'s vision for the East Olive Corridor consists of the Neighborhood Commercial District place type, that supports the development of a variety of medium-to-low-density commercial, retail, office, neighborhood service business, and residential development in a commercial corridor with shallow lot depths. Recommendations include locating the majority of parking behind the building, establish pedestrian facility requirements to encourage walkable access, including 1) the provision of walkways between building and the public sidewalk; 2) walkways that provide pedestrian cross-access between neighboring lots; and 3) walkways connecting parking facilities to buildings. Additionally, the Plan includes a strategy to provide opportunities for greater diversity of housing options through the City to attract changing market demographics-including seniors, young professionals, and families. Consistent landscaping standards should be developed along Olive Boulevard to provide year-round interest with street trees, lighting and pedestrian amenities. As the use is permitted within the Zoning District and adds new housing to the East Olive Corridor where such development was recommended, the proposed use is consistent with the Comprehensive Plan.

Design Guidelines

Site Design

The proposal is well situated on the site, with the parking to the side and rear, and with significant landscaping throughout and along the front of the building. The Design Guidelines call for high quality, pedestrian scale and walkable environments. Site and building design should address pedestrian needs and develop creative approaches to improving pedestrian interest, access and enjoyment. Building frontages should provide at least one public entrance from the street. Frontage design and signage locations should be coordinated with streetscape landscaping and street trees. Active building fronts with large window openings at ground level with transparent non-reflective, minimally tinted glass are strongly encouraged. The main entrance is located to the side on the east elevation to serve the accessible parking, and the entrance is accentuated with a metal canopy that is carried around to the front. The lobby entrance is located on the north elevation for the parking lot.

The Design Guidelines recommend provision of outdoor spaces such as covered walkways, courtyards, and plazas, including providing outdoor seating and benches. The Pedestrian connections from the

parking to the north elevation to the lobby/entrance need to provide better connections as opposed to just ending at the parking lot, and the placement of a single bench within the landscaping seems poorly placed. A better integrated outdoor amenity space in this area would elevate the overall design of the area.

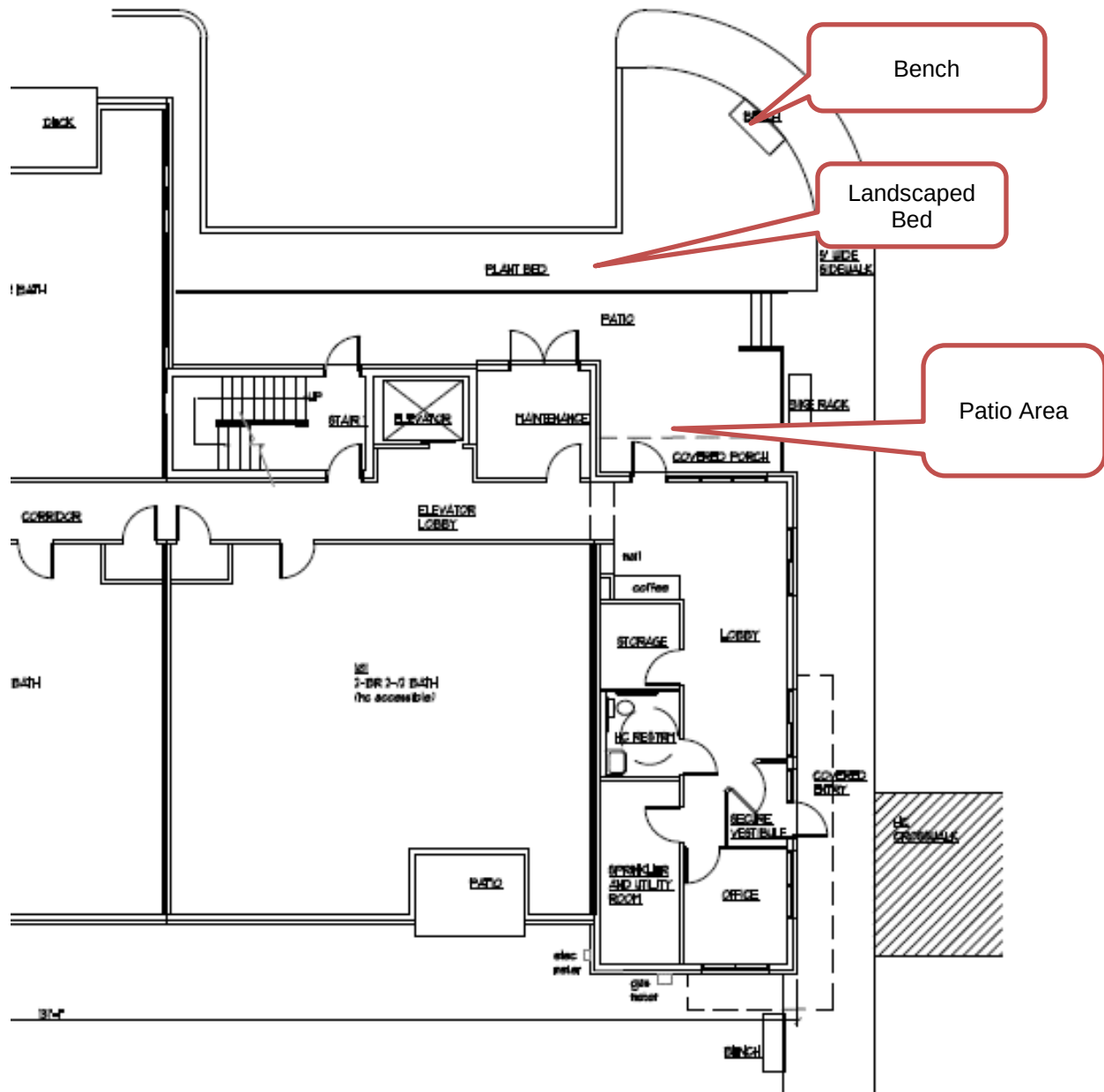


Figure 6: Close-up of the site plan where greater pedestrian interest needs to be provided.

Building Design and Materials

The City's Design Guidelines recommend a diversity of high-quality architectural design. Building design should incorporate a clear and well-articulated design concept. (C-Design, p. 8) Further, Architectural design should be compatible with the developing character of the neighborhood area. Design Compatibility includes complementary building style, form, size color and materials. (D. Relationship to Neighboring Development, p. 9). Materials should have good architectural character, be durable, and be selected for their compatibility with adjoining buildings and properties. Natural, traditional building materials are encouraged. A preference should be given toward "Green" building materials that can be recycled. Highly reflective and/or synthetic materials are discouraged. Material or color changes should occur at a change of plane. Material or color changes at the outside corners of structures that give the impression of "thinness" and artificiality of the material are discouraged.

Inconsistent adornment and frequent changes in material should be avoided (E. Materials/ Colors, p. 9 and 10). Both the adjacent buildings are all brick structures that are 2-3 story buildings, with a darker brick on the west and a grey brick structure to the east.

Specific recommendations within the Design Guidelines for Multiple-Family/Attached Residential Developments are also provided, that include that new multi-family residential developments are to respect the scale and character of any adjacent residential neighborhood. Attention to views, building scale and orientation, proximity to adjacent uses, location of driveways, noise, lighting, topography and landscape should be respected, and that building facades should be articulated by using color, arrangement, or change in materials to emphasize the façade element. The planes of the exterior walls may be varied in height, depth or direction. Extremely long facades should be designed with sufficient building articulation and landscaping to avoid a monotonous or overpowering institutional appearance; and individual dwelling units should be architecturally expressed. Such expression shall help reduce the apparent scale of the building and shall increase the feeling of individual identity of each unit. (page 13).

The proposal utilizes four different materials on the building, with a reddish tone brick on the lower portion, Nichia siding in a wood-cedar color, plain cement building siding w/4" battens in a light grey with white trim, and cement building lap siding in a grey color with white trim. The overall design resembles The Vue at Creve Coeur Apartments, on Old Olive Street Road. While a repetitive design of a building is inherent for multi-family developments, Staff recommends that the Planning and Zoning Commission members review the design in context with the surrounding development and discuss any adjustments to the design; which may include increasing the amount of the brick to the overall structure, to eliminate some of the competing materials.

Material Samples were not provided in advance; the Applicant will bring the samples to the meeting. The Commission should review the proposed materials and colors with the Applicant and provide direction. Additionally, Staff could not tell if the brick was carried into the space for the balcony. Therefore, Staff has included a condition that the bricks are to be carried into the inside corners to be consistent with the Design Guidelines.

Accessory Structures Design

Additionally, the City's Design Guidelines strongly encourages high quality landscaping that accentuates the building and site. Accessory Buildings and Facilities are to be designed to directly relate in material, character and detail to the primary building on the site, as well as the design of fencing, sound walls, trash enclosures, and similar site elements is to be compatible with the architecture of the main buildings and should use similar materials. The Design Guidelines state that Multi-Family Developments shall provide underground parking or parking within a basement garage for at least 50% of the required vehicular parking (p. 13). This also cross references a prior Zoning Ordinance, for the conditional uses for multi-family developments which now states that at a minimum, seventy percent (70%) of the required vehicular parking shall be provided within a parking garage or structure that is aesthetically integrated into and incorporates architectural features of the principal structure. While the proposal is not a conditional use, and thus the 70% of parking within a parking garage is not required, the Applicants are providing 50% of the parking under carports, that are appropriately placed to the rear and side of the building, behind the front building line. However, the proposed carports lack the design consideration relating to the basic structure. Greater design consideration should be provided to the column, instead of the painted steel post and beams on a concrete base. As an alternative, Staff recommends that the posts be wrapped in a durable material similar to the building and have a darker tone to blend into the site, for a smoother appearance. An example of this recommendation is provided in Figure 8, below.

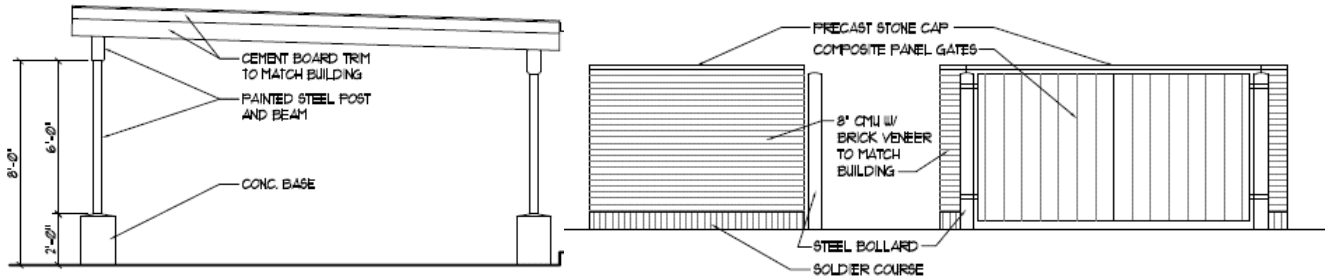


Figure 7: Applicant's Carport and Trash Enclosure Elevations



Figure 8: Google image of carport design that shows a consistent smooth column as suggested by Staff.

Significant evergreen landscaping has been provided to block the parking from the adjacent office building to the north, but on the east property line the planting are low ground cover, and upright evergreens should be incorporated to match elsewhere, to aid in screening the structures from view from Olive Boulevard for those carports along the east property line. The Commission should discuss with the Applicant greater design consideration to the carports to further the proposal toward the intent of the Design Guidelines recommendations.

The trash enclosure is a CMU with brick veneer to match the building and is also surrounded with landscaping. The site plan does indicate a retaining wall along the east property line for the new parking area that is approximately 9.04 feet from the property line, with the carports at 10 feet from the property line. The retaining wall will be between 2 and 3 feet, and the Applicant has indicated that it will be an interlocking masonry wall. However, no details or materials was provided. The Commission should review the materials and color for consistency with the building elements.

ZONING REVIEW

As previously stated, the property is zoned CB-Core Business District where Medium Density Multi-Family Developments (20 units per acre or less) are a permitted use. Maximum height allowed on lots that are smaller than three (3) acres, is four (4) stories or sixty (60) feet in height. The proposal is a four-story building with an overall height of 48 feet. Maximum site coverage is 63% in the CB-Core Business District, the proposal is showing overall site coverage of 54.8%. Building Setbacks are 10 ft for the side and rear yards, while the front has a maximum of 80-foot front yard setback for from Olive Boulevard. The Building sits at 30.16 feet to approximately 35.5 feet on the west from the front property line, and

approximately 60 feet from the curb for Olive Boulevard, and 10 feet from the west property line and approximately 57.75 feet from the east property line. The floor area ratio is 0.69, where the maximum floor area ratio allowed is one square foot of floor area per square foot of site. Therefore, the proposal meets with the requirements for the CB District. Accessory Uses and Structures such as carport, also must maintain the same side yard setback, and can be up to 5 feet from the rear property line per Section 405.460(D) Location. The carports are located 10 feet from the east property line and the north property line behind the building.

Landscaping

The Landscape Plan is well designed throughout the site, with the appropriate amount of street trees and parking lot landscaping, to comply with Section 405.540(F) of Landscaping Section within the Zoning Ordinance. The large existing trees front portion of the property need to be removed due to underground utilities interference, demo activities, and grading. The plans include that an underground irrigation system is to be provided to comply with this Section. A variety of two different street trees has been provided to address City Council's prior comments regarding greater variety of plant materials along the frontages to aid in disease resistance.

Section 405.540(F)(1) requires one street tree for every 30 lineal feet or part thereof and such trees are to be located on the subject property at least 2.5 feet but not more than 12 feet back from the curb, unless additional setback is necessary to accommodate planned road widening, overhead utility line or some other condition identified by the Director of Planning. The new street trees along Olive Boulevard are pushed farther back from the curb, due to the overhead utilities are present in this. 175' of frontage (not including drive isle) requires 6 street trees and 6 trees are provided (3 columnar ginkgo and 3 columnar maple). The columnar trees are set back from the overhead utilities between to provide minimum clearance of future canopy.

Dense evergreen plantings are provided to screen the carports from the adjacent building to the north. However, the Landscape Plan along the east property line is showing a gro-low sumac. Staff recommends that similar plantings screening the north carports should be included along the east to provide similar screening of the carport structures.

Lighting

Section 405.680 states all lighting shall be downcast and fully shielded and that lighting shall not be cast upon an adjacent property or right-of-way nor shall glare be emitted from an illuminant source. Lighting standards for non-residential districts have a maximum height of 24 feet. Lighting underneath the carports have been provided. The photometric plan shows an average illumination of 0.11 at the property line, and 2.04 within the site. Section 405.810(4) and Section 405.680(B)(5) Lighting have a minimum illumination level of not less than an average of one (1) foot-candle of illumination. The Planning and Zoning Commission may require lighting to be dimmed or connected to a motion detector between the hours of 10:00 P.M. and 6:00 A.M., but not less than an average of one (1) foot-candle of illumination. The parking lot light fixtures will be a LED, that are downcast and shielded to meet with these requirements.

Sidewalks

The sidewalks shown on the drawings have a variety of depth from 5 feet to 6.21 adjacent to the building. Section 405.730(A)(2) requires that the minimum width of internal sidewalks in non-residential developments shall be at least six (6) feet or eight (8) feet if used as a curb stop. While the proposal is a residential development, it is in a commercial zoning district within a walkable area, and given that the use is 20 units, versus a single family residence, Staff recommends that all of the sidewalks have a consistent walkway of 6 feet throughout the development. The site plan does indicate that the accessible aisle is a textured concrete to differentiate it from the drive aisle, to comply with Section 405.730(A)(1)(c) that calls for the use of textured or tinted materials for pedestrian crossings shall be

utilized where pedestrian circulation paths cross a vehicular route as determined by the Planning and Zoning Commission.

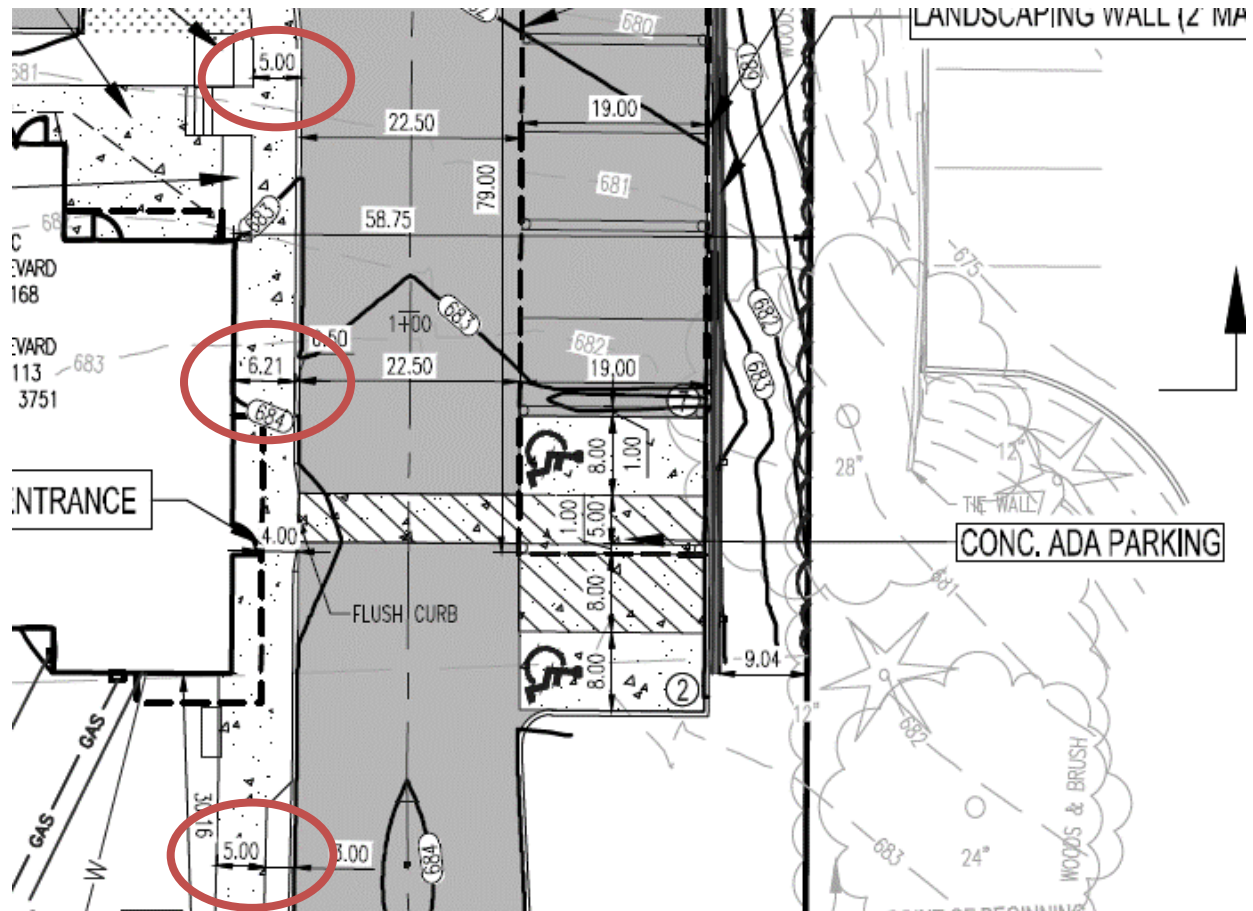


Figure 9: Close-up of the site plan showing the sidewalks with the sidewalk depth circled.

Traffic Impacts

MoDOT has performed an initial review of the proposed development and finds the site plan to be feasible. MoDOT is not requiring a traffic impact study at this time due to the number of units being below their threshold for trips to require a TIS. MoDOT has a back to back left turn project at Old Olive that may be affected by this development, but those details can be worked through during their review of the detailed plans with the permit. Final approval will be in the form of a permit issued from MoDOT after review of detailed plans.

Parking

Section 405.820(B)(2)(b) of the Required Off-Street Parking Spaces provides that multi-family uses shall provide two (2) parking spaces per dwelling unit for the first (1st) fifty (50) dwelling units; one and three-quarter ($1\frac{3}{4}$) spaces per dwelling unit for the second (2nd) fifty (50) dwelling units; and one and one-half ($1\frac{1}{2}$) spaces per dwelling unit for all units in excess of one hundred (100) units. As the development consists of 20, two-bedroom units, thus 40 parking spaces are required and 40 have been provided. Additionally, parking spaces within parking garages, parking space width shall be measured from the base of structural columns rather than from the center of such columns, per Section 405.830(C), and 90 degree parking the usable space is to be 9 feet by 19 feet, per Section 405.810(A)(1)(a). The Applicant has extended the width of the parking stalls to provide for the measuring of the parking stall at the base of the carport.

plat; provided, however, that certification by the Planning and Zoning Commission shall be required prior to such sale or transfer. This certification shall be recorded with the title of the property by the St. Louis County Recorder of Deeds.

This appears to be the case with the current application. Properties zoned CB-Core Business District require a minimum of 1/2 acre or 21,780 square feet of lot area, and a minimum lot of width and lot depth of 100 feet, and there are no non-conformities being created with the consolidation of the existing properties. The drawings are technically accurate, and the adjustment does not create any additional non-conformities at this time. Staff concludes that the adjustment should be approved by the Planning Commission, subject to the conditions in the example motion.

SUMMARY AND RECOMMENDATION ON THE PROPOSED DEVELOPMENT

Based on the above analysis, below is the list of issues that Staff believes need further discussion and revisions:

- Greater design consideration of the pedestrian amenity space along the north side of the entrance.
- Increase the use of brick, and thereby decrease number of competing materials on the building.
- Review the color scheme to ensure consistency with the surrounding buildings.
- Greater Design consideration of the carports
- Additional upright evergreen plantings along the east property lines to screen the carports from view.

Once the Commission has discussed these elements with the Applicant, Staff recommends that the item be continued for revisions. However, if the Commission feels that discussions with the Applicant adequately address the issues and wishes to move forward with a vote below are the recommended conditions of approval discussed within the report are below; additional conditions will need to be included to address the items above:

1. The Applicant is required to submit a Building Permit application, as required by Article II of the Building Code. Building Elevations shall be in substantial compliance with the Elevations presented to the Planning and Zoning Commission received on January 10, 2020 as bound together and submitted in conjunction with Application #19-046, and as amended by the Commission.
2. The Applicant is required to submit Grading and Site Improvement Plans, showing all exterior improvements, for the repair, resurfacing and striping of the parking lot, as required by Section 410.380 of the Subdivision and Land Development Regulations (Subdivision Code). The Grading and Site Improvement Plans shall be in substantial conformance with the Site Plan information received on January 10, 2020 as bound together and submitted in conjunction with Application #19-046, and as amended below.
3. All lighting shall be in conformance with Section 405.680, Lighting, of the Zoning Code, and Section 405.810 of the Parking Ordinance, and shall be a maximum of 24 feet in height, as discussed in the Staff Report.
4. All landscaping shall be permanently maintained in good condition with at least the same quality and quantity of landscaping as initially approved. Vegetation that is totally or predominantly dead and/or disfigured due to disease or injury shall be replaced as needed and in a prompt manner. Additional upright evergreen shall be provided along the east property line to provide additional screening of the carports.
5. All internal sidewalks shall have a minimum width of 6 feet, and comply with Section 405.730
6. Any mechanical equipment installed for the site shall be properly screened with approved materials.
7. All signs shall submit for a permit and all signs and banners shall be in conformance with Article VII, Sign Regulations, of the Zoning Code.

8. Any future enlargement, extension, expansion or alteration in the use of the structures or site must be approved by the City Council upon receipt of the recommendation of the Planning and Zoning Commission as an amendment to the Conditional Use Permit before a Building Permit for the enlargement, expansion or alteration may be issued. Should the school wish to utilize additional square footage within the building, the Zoning Administrator may authorize such additional square footage without the need to revise the Ordinance, provided there were no significant alterations to the exterior of the building or site, and based upon a review of parking, and that all other Zoning Code and Building Code requirements are met.
9. Failure to comply with any one or all of the conditions of this permit shall be adequate cause for the revocation of said permit by the City Council, provided, however, no permit shall be revoked without prior notice to the owner of the intention of the City Council to revoke this permit and reasonable time granted to the owner to correct or remedy any such breach of conditions, except for repeated breaches or violations.
10. No site development plan or minor site plan approval shall be valid for a period longer than twelve (12) months from the date it is approved, unless within such period a building permit is obtained, and substantial construction is commenced. Substantial construction shall be deemed to consist of clearing the site, completion of footings, basement or building slab and inspection of such work. The Planning and Zoning Commission and the City Council, when required, may grant extensions not exceeding twelve (12) months each upon written request of the original applicant prior to the expiration of such period and resubmission of the application if the application as resubmitted is substantially the same as the initially approved application. However, the Commission and the Council, as applicable, have the power in such cases to attach new conditions to their re-approval or to disapprove the reapplication. Where the application for re-approval contains changes which the Zoning Administrator concludes materially alter the initial application, the Zoning Administrator shall initiate a new site development plan review procedure as stated in Section 405.1080 or a new minor site plan review procedure as stated in Section 405.1080.

ACTION AND MOTION ON THE BOUNDARY ADJUSTMENT/CONSOLIDATION PLAT

If the members of the Planning Commission are satisfied that the requested boundary adjustment meets the applicable requirements of the Subdivision Code and is otherwise appropriate, the Planning Department staff request that a final decision be voted upon; no action by the City Council is required.

Should the Commission wish to move forward with the Boundary Adjustment, in conjunction with the approval of the site plan, two separate motions are needed. The following is an example of a motion for the Boundary Adjustment/Consolidation Plat:

“I move to approve the Lot Consolidation Plat Part of Lot 4 of M.B. O’Reilly Farm Subdivision Plat Book 9 page 19 City of Creve Coeur, St. Louis County, MO, as described in the staff report on application #19-047 for the meeting of January 21, 2020 subject to the condition that a final drawing be prepared for signature and recording, and a copy of the recorded plat be provided to the City.”

ACTION AND MOTION ON THE SITE DEVELOPMENT PLAN

If the Commission wishes to continue the item for further revisions and discussion, the following is an example of an appropriate motion for this application

“I move to continue Application #19-046 to the February 6th Planning and Zoning Commission meeting for further revisions”

The following is an example of an appropriate motion for this application, should the Commission wish to move forward with a vote:

“I move to approve Application #19-046 for a 20-Unit apartment building located at 10809-10819 Olive Boulevard as shown in the site development plans and subject to the conditions discussed in the Staff Report for the meeting of January 21, 2020” (conditions may be added, eliminated, or modified by preceding motion).

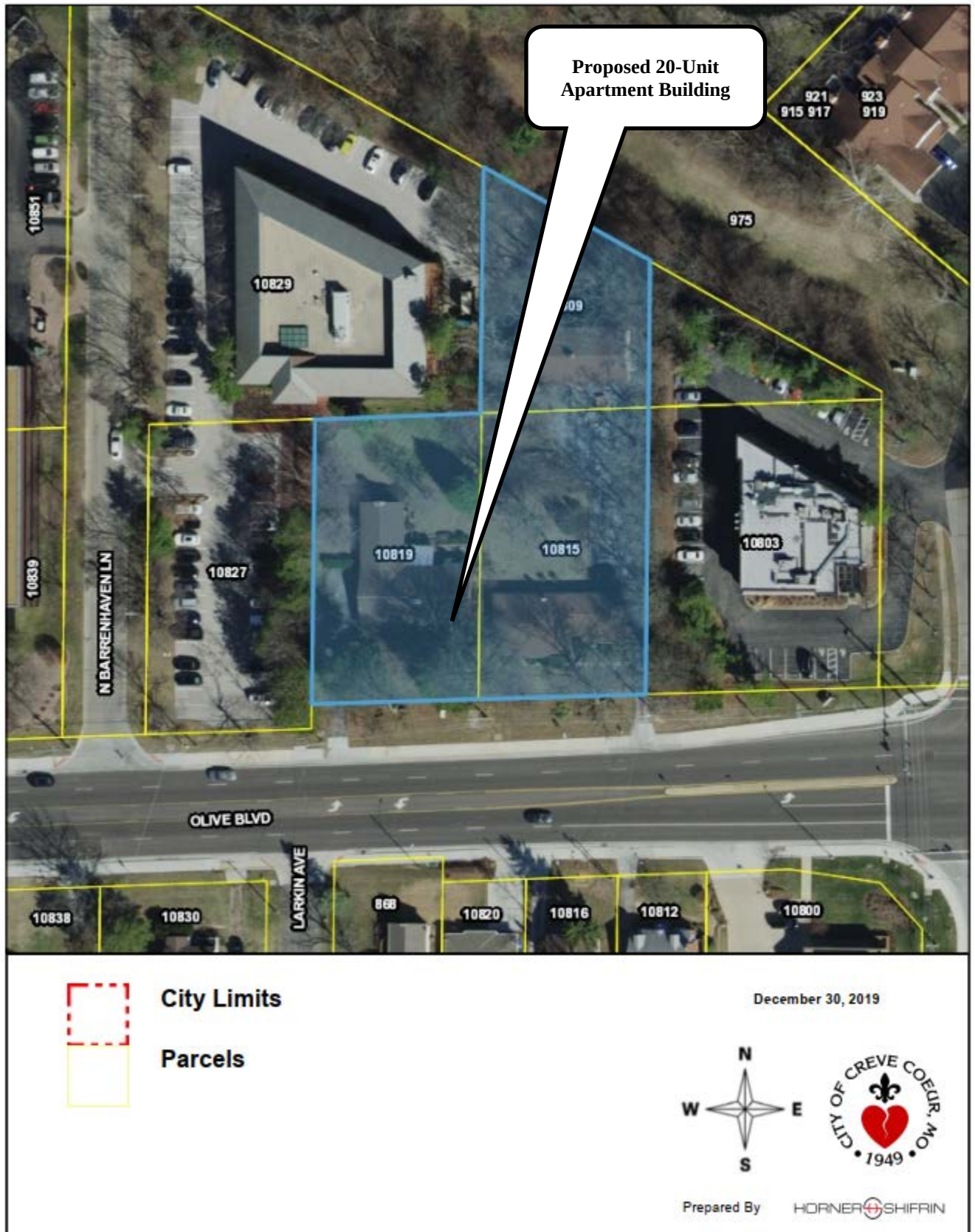
APPENDIX 1: COMPREHENSIVE PLAN, INCLUDING DESIGN GUIDELINES

Included and attached by reference. See body of report for specific excerpts.

APPENDIX 2: ZONING CODE

Included and attached by reference. See body of report for specific excerpts.

APPENDIX 3: AERIAL PHOTO



APPENDIX 4: SITE PHOTOGRAPHS

Photo Date:1/16/2020



Description: View of the subject property looking northeast from Olive Boulevard



Description: View of the subject property looking northwest from Olive Boulevard



Description: View looking north from Olive Boulevard at the existing office development at 10829 Olive Boulevard adjacent to the subject property on the west.



Description: View of the existing office development at 10839 Olive Boulevard west of the subject property



Description: View looking north from Olive Boulevard at the existing office development at 10803 Olive Boulevard adjacent to the subject property on the east.



Description: View of the office buildings looking southeast across from the subject property.



Description: View of the existing homes looking south across from the subject property.



JLA GROUP
LLC

1917 Rutger Street St. Louis MO 63104

Planning and Zoning Commission
City of Creve Coeur
300 North New Ballas Road
Creve Coeur, Missouri 631421

RE: 10809-19 Olive
Site Plan Review Submission

JLA Group is pleased to submit site development drawings for a new 20-unit apartment project at this address. I have lived in Creve Coeur for most of my adult life, and I have looked at this property as a great location for multi-family apartments.

The parcel consists of two lots (to be combined), originally single family homes, but used for business operations recently. The parcel is zoned CB Core Business District. This zoning permits medium density residential up to 20 units per acre. The parcel is just over an acre in area, and we are proposing 20 two-bedroom apartments.

Two parking spaces are required per dwelling. The project includes 40 parking spaces, with half of the parking located under carports. There will be two handicap accessible parking spaces.

The project meets all of the requirements for this zoning district. Additionally, the building has been designed to conform to the requirements of the city Design Guidelines.

The building is set back from the Olive Right-of-Way a minimum of 30 feet. However there is a wide green space in the right of way, which sets the building about 55 feet from the curb. The front area is to be heavily planted, including new shade trees. (While there are several existing trees in the front yard, these are impacted by existing utility lines and cannot be saved.) The building foundation is screen by shrubbery, including larger elements to mask private patios on the first floor. Additional trees and other landscaping is provided around the parking and trash areas.

The four-story building is oriented so the mass of the building fronts on Olive, with easy pedestrian access from the street. All parking is set back from the building line, and generally screened by the building itself. The building elevation includes a varied massing, setbacks, and bays. The elevation is generally brick, with several elements using cement board siding. The color palette of the elevation is smooth red brick, and light gray siding with white trim. Distinctive prefinished wood color siding is used on projecting bays.

The building includes common areas for residents. There will be a secure entry, adjacent to the building office. The open lobby includes a sitting area, mail area and coffee bar. The lobby is open to a rear patio. On upper floors there will be a meeting room, workout room and a rooftop terrace. Interior corridors are heated and cooled.

10809-19 Olive

Page 2

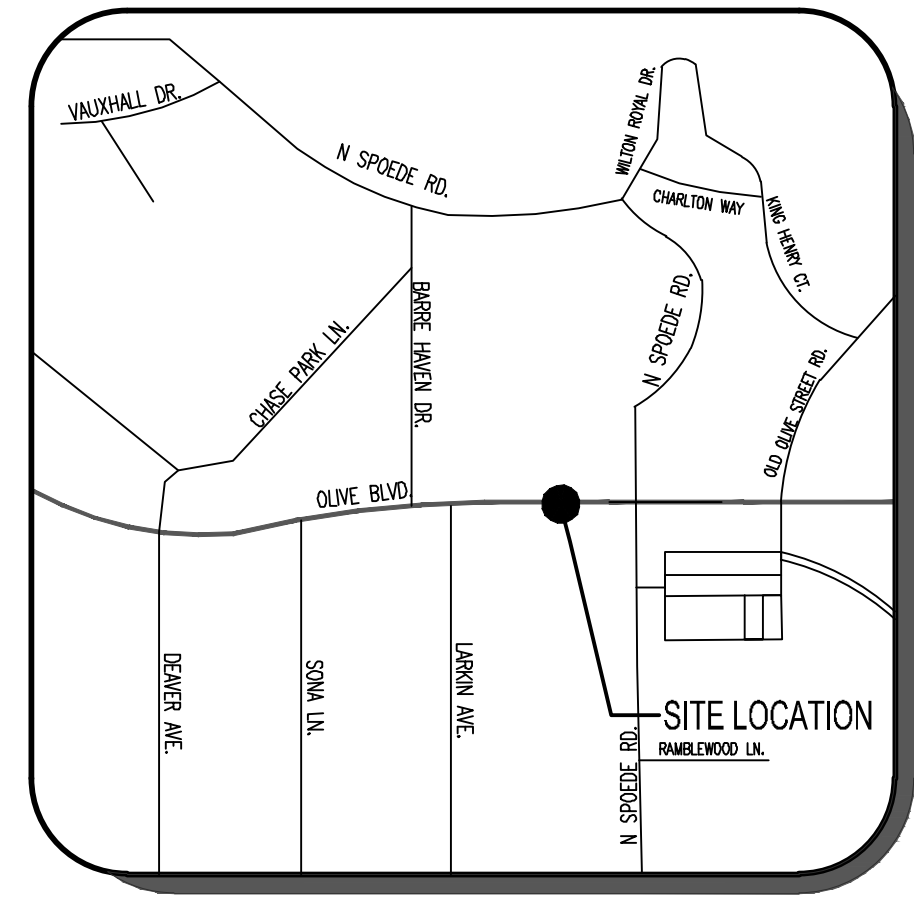
The dwellings are all large—about 1138 sf each, and includes a private patio or deck. Each two bedroom unit is designed for Type “B” handicap accessibility, with one Type “A” fully handicap accessible unit in the project. Each bedroom includes walk-in closet and a private bathroom, and the apartment also includes a powder room. The open kitchen includes an island with a breakfast bar. Side by side washer and dryer will fit in the laundry room. Each apartment has a separate furnace and water heater.

We are excited about the opportunity to present the project to the Planning and Zoning Commission.

Sincerely,

AJ Adewunmi
JLA Group LLC

Attachment: Applicant's Materials Received 1-10-2020 (#19-046 & #19-047: 10809-10819 Olive Blvd Apartments)



SITE LOCATION MAP
SCALE: N.T.S.

SERVICES & UTILITIES	
COMPANIES	ADDRESS
ELECTRIC	AMEREN UE 4440 NORTH UNION ST. LOUIS, MO. 63115 TEL: (314) 324-1111
GAS	SPIRE ENERGY 700 MARKET STREET ST. LOUIS MO. 63101 TEL: (314) 342 0500
SEWER	M.S.D. 2350 MARKET ST. LOUIS, MO. 63103 TEL: (314) 768-6200
TELEPHONE	AT & T COMMUNICATIONS 14780 MANCHESTER ROAD ST. LOUIS, MO. 63131 TEL: (314) 505-1486
WATER	MISSOURI AMERICAN WATER 535 NORTH NEW BALLAS ROAD ST. LOUIS, MO. 63141 TEL: (314) 991-0333
CABLE	CHARTER COMMUNICATIONS 941 CHARTER COMMONS DRIVE TOWN & COUNTRY, MO. 63017 TEL: (636) 207-7044
FIRE	CREVE COEUR FIRE DISTRICT 11221 OLIVE BLVD. CREVE COEUR, MO. 63141 TEL: (314) 432-5570
SCHOOL	LADUE SCHOOL DISTRICT 9703 CONWAY RD. ST. LOUIS, MO. 63124 TEL: (314) 994-7080

SITE DATA TABLE		
	EXISTING	PROPOSED
USE	2 - SINGLE FAMILY RESIDENCES	APARTMENT BUILDING
ZONING	CORE BUSINESS DISTRICT	CORE BUSINESS DISTRICT
ADJACENT ZONING	CORE BUSINESS DISTRICT	CORE BUSINESS DISTRICT
TOTAL SITE AREA	45,570 S.F. (1.05 ACRES)	45,570 S.F. (1.05 ACRES)
PERVIOUS AREA	28,941 S.F.	17,824 S.F.
IMPERVIOUS AREA	16,629 S.F.	27,746 S.F.
SITE COVERAGE	36.5%	54.8%
PARKING	REQUIRED PARKING = 20 UNITS @ 2 SPACES/ UNIT = 40 SPACES REQUIRED PARKING = 40 SPACE W/ 2 SPACES BEING ADA COMPLIANT.	
LANDSCAPE RATIO	PARKING AREA	= 15,855 SF
	REQUIRED LANDSCAPE = 15,855 SF/ 350 X 10	= 453 SF
	PARKING LANDSCAPE PROVIDED	= 504 SF
	58' SF EACH PARKING LOT ISLAND 181 SF AROUND TRASH ENCLOSURE 207 SF AT INTERSECTION	
LOT INFO	SITE AREA = 45,570 SF; FLOOR AREA RATIO = 68.9%; LOT COVERAGE: 25,000 SF = 54.8%	
BUILDING INFO	1 BUILDING; 4 STORIES = 48' HIGH; NUMBER OF UNITS: 20 DWELLING UNITS TOTAL; UNIT TYPE: 2-BEDROOM 2-1/2' BATH	
BUILDING INFO	8,014 SF PER FLOOR, 7226 SF ON FLOOR 4 GROSS BUILDING AREA = 31,268 SF EACH UNIT = 1,133 SF	
TOTAL SITE AREA	45,570 S.F. (1.05 ACRES)	

NO SLOPES SHALL EXCEED 3:1
PRIVATE OPEN SPACE = 1,245 SF

PROPERTY DESCRIPTION PER TITLE COMMITMENT:

PARCEL 1:
PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION IN SECTION 2, TOWNSHIP 45 NORTH, RANGE 5 EAST, FRONTING 100 FEET ON THE NORTH LINE OF OLIVE STREET ROAD BY A DEPTH NORTHWARDLY BETWEEN PARALLEL LINES OF 200 FEET AND BOUNDED EAST BY WEST LINE OF PROPERTY CONVEYED TO ERNEST C. LANDERS AND WIFE BY DEED RECORDED IN BOOK 2625 PAGE 544 OF THE ST. LOUIS COUNTY RECORDS, EXCEPTING THEREFROM THAT PART CONVEYED TO THE STATE OF MISSOURI, ACTING BY AND THROUGH THE STATE HIGHWAY COMMISSION OF MISSOURI ACCORDING TO INSTRUMENT RECORDED IN BOOK 3927 PAGE 547.

PARCEL 2:
PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION IN SECTION 2, TOWNSHIP 45 NORTH, RANGE 5 EAST, AND DESCRIBED AS HAVING A FRONTAGE 100 FEET ON THE NORTH LINE OF OLIVE STREET ROAD BY A DEPTH NORTH, BETWEEN PARALLEL LINES TO THE SOUTHWEST LINE OF THE CITY OF ST. LOUIS WATER CONDUIT RIGHT OF WAY, BOUNDED EAST BY WEST LINE OF PROPERTY CONVEYED TO JOSEPH METZLER AND WIFE BY DEED RECORDED IN BOOK 2129 PAGE 72 OF THE ST. LOUIS COUNTY RECORDS, EXCEPTING THEREFROM THAT PART CONVEYED TO THE STATE OF MISSOURI, ACTING BY AND THROUGH THE STATE HIGHWAY COMMISSION OF MISSOURI ACCORDING TO INSTRUMENT RECORDED IN BOOK 3927 PAGE 547.

15yr 20MIN STORM EVENT

SITE AREA

45,570 SF

1.05 AC

AREA

SF

AC

PI CFS/AC*

TQ CFS

EXISTING CONDITIONS

BUILDINGS (NOT DIRECTLY CONNECTED TO SEWER)

00.003.540.00

BUILDINGS (DIRECTLY CONNECTED TO SEWER)

7,4450.174.200.72

PAVEMENT

9,1840.213.540.75

POROUS PAVEMENT

00.001.70

LANDSCAPE

28,9410.661.701.13

TOTALS =

45,5701.052.59

% IMPERVIOUS =

36.49%

PROPOSED CONDITIONS

BUILDINGS (NOT DIRECTLY CONNECTED TO SEWER)

00.003.540.00

BUILDINGS (DIRECTLY CONNECTED TO SEWER)

8,7130.204.200.84

PAVEMENT

19,0330.443.541.55

POROUS PAVEMENT

00.001.700.00

LANDSCAPE

17,8240.411.700.70

TOTALS =

45,5701.053.08

% IMPERVIOUS =

60.89%

DIFFERENTIAL RUNOFF =

0.49 CFS

< 2 CFS, FLOOD PROTECTION NOT REQUIRED BY MSD

DIFFERENTIAL RUNOFF STORAGE

0.49 CFS x 60s x 20MIN = 588 CF

PER CITY REQUIREMENTS

760 CF

PROVIDED STORAGE =

DEVELOPER/OWNER:

JLA GROUP, LLC

ADDRESS:

1917 RUTGER AVE, ST. LOUIS, MO 63104

PHONE:

314-602-9030

EMAIL:

AJADEWUNMI@GMAIL.COM

ARCHITECT:

ALVAH LEVINE

ADDRESS:

8630 DELMAR AVE, SUITE 220

ST. LOUIS, MO 63124

PHONE:

314-991-5600

EMAIL:

ALVAH@LEVINEARCH.NET

20

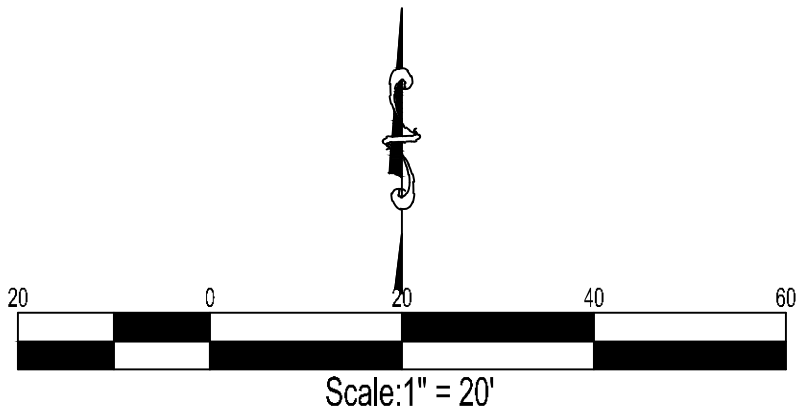
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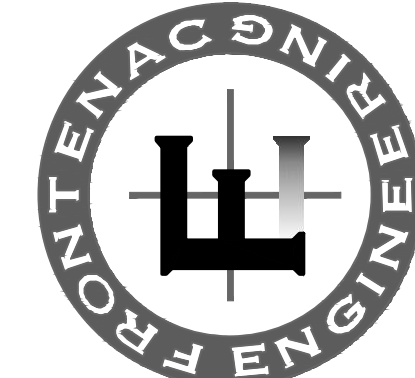
40

60

Scale: 1" = 20'



FRONTENAC ENGINEERING GROUP
CIVIL / STRUCTURAL / LAND SURVEYING
2725 SUTTON BLVD.
ST. LOUIS, MISSOURI 63143
PHONE: (314) 644-2220 FAX: (314) 644-0645
WWW.FE-STL.COM
MO CERTIFICATE OF AUTHORITY:
CIVIL / STRUCTURAL ENGINEERING: 001225
LAND SURVEYING: 000282

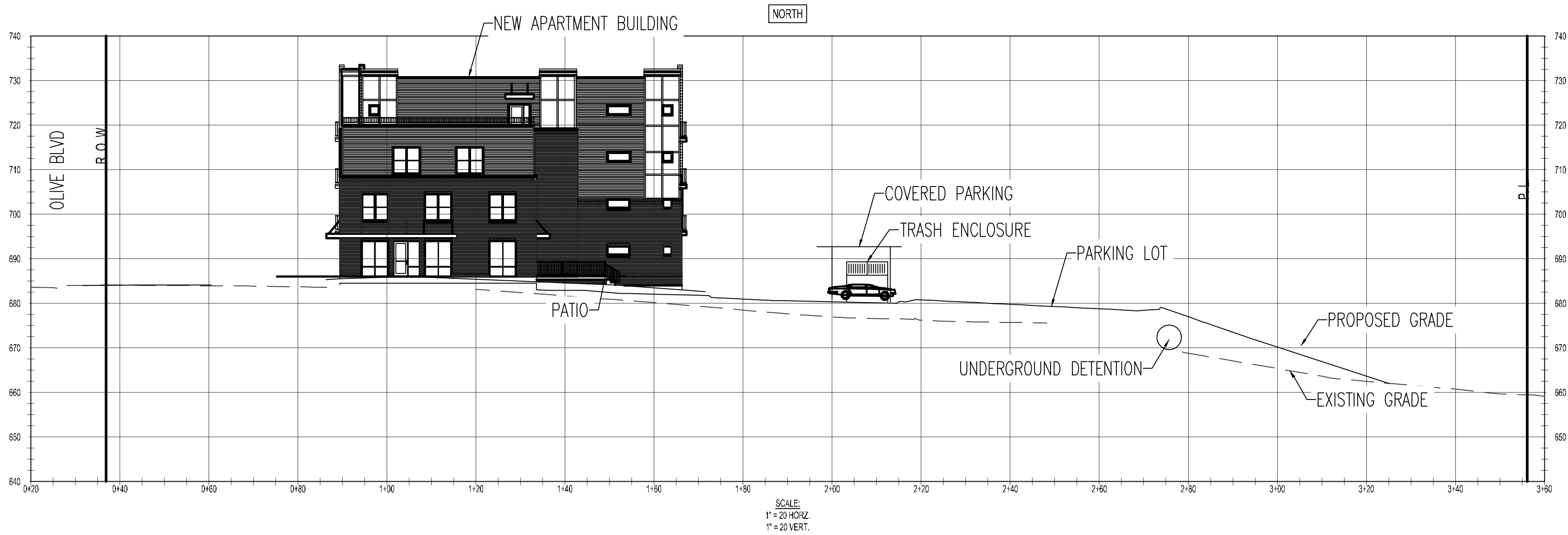


DATE: 12/19/19	CHECKED: JB	DRAWN: ML	SCALE: 1" = 20'
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SITE DEVELOPMENT PLAN

JLA GROUP, LLC
NEW 20 UNIT APARTMENT BUILDING
10809-10819 OLIVE BLVD.
CREVE COEUR, ST LOUIS COUNTY, MO 63141

SDP1.0



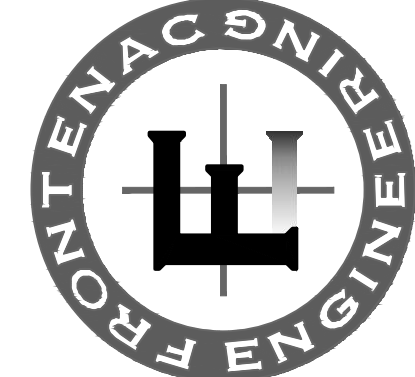
FACING WEST



FACING NORTH

SHEET NO.	SITE SECTIONS			
	JLA GROUP, LLC NEW 20 UNIT APARTMENT BUILDING 10809-10819 OLIVE BLVD. CREVE COEUR, ST LOUIS COUNTY, MO 63141			
SDP2.0		DATE: 12/19/19	CHECKED: JB	DRAWN: ML
2 OF 2		SCALE: 1" = 20'		

FRONTENAC ENGINEERING GROUP
CIVIL / STRUCTURAL / LAND SURVEYING
2725 SUTTON BLVD.
ST. LOUIS, MISSOURI 63143
PHONE: (314) 644-2200 FAX: (314) 644-0645
WWW.FESTL.COM
MO CERTIFICATE OF AUTHORITY:
CIVIL / STRUCTURAL ENGINEERING: 001225
LAND SURVEYING: 000552



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DAVID G. WELTON, PROFESSIONAL ENGINEER
LICENSE # PE-000618804

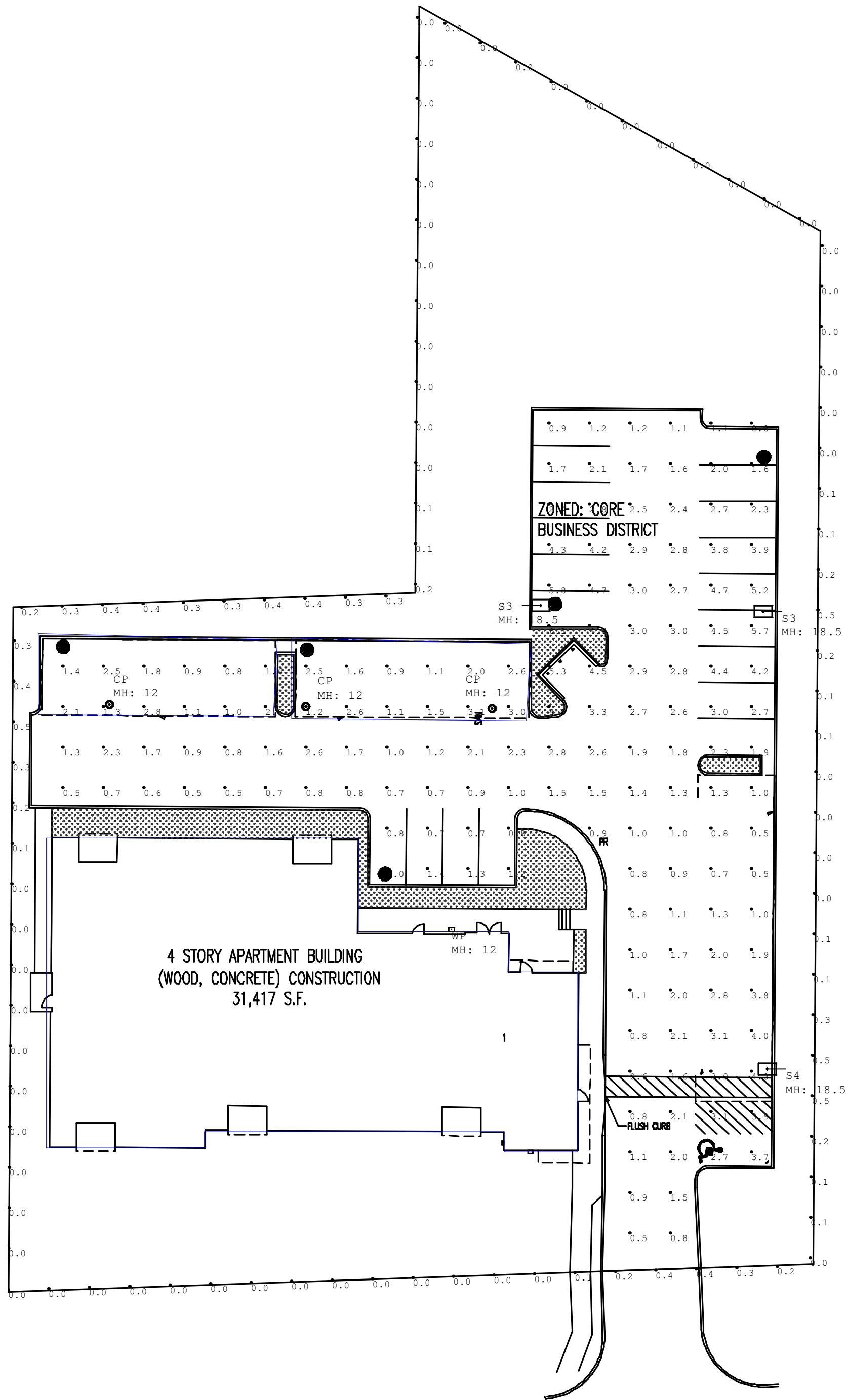
NO.	DATE	REMARKS
ISSUE / REVISION DESCRIPTIONS		



#	Date	Comments
Revisions		

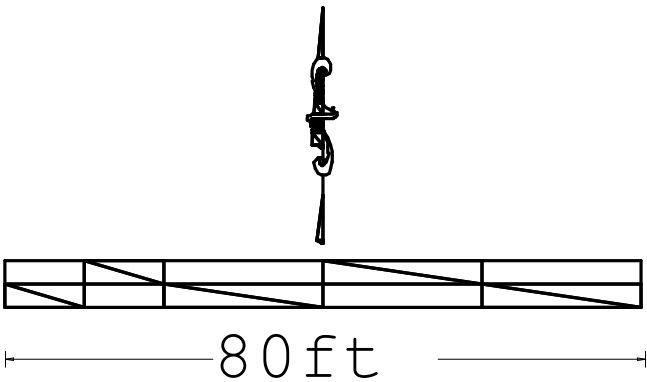
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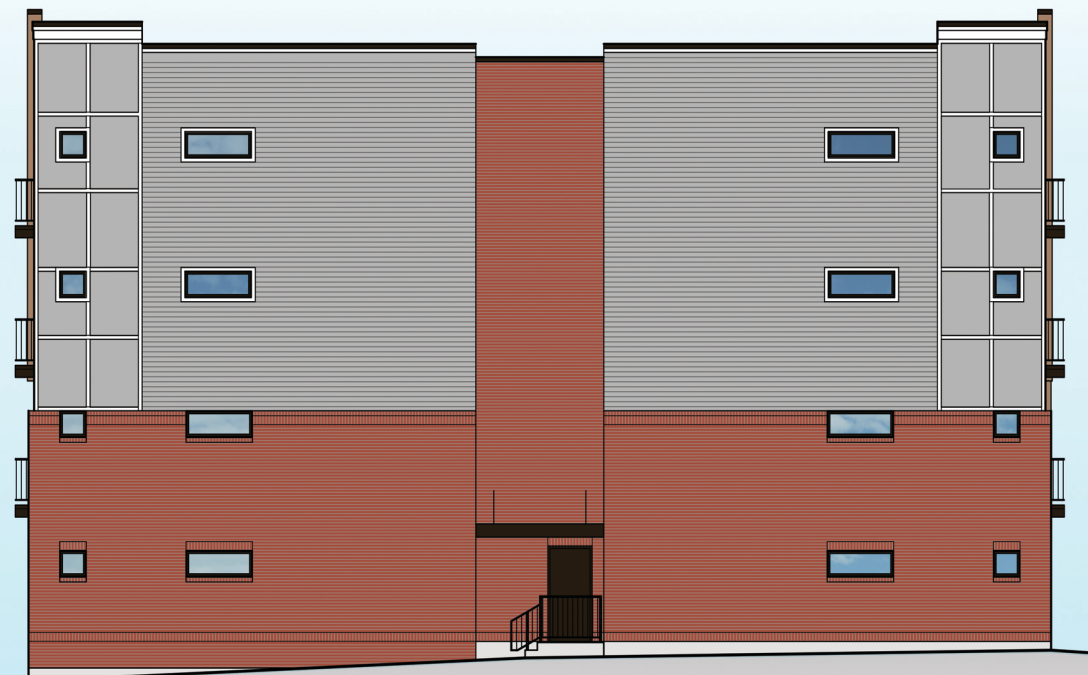
OLIVE 20 UNIT APARTMENT BLDG.AGI



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROPERTY LINE	Illuminance	Fc	0.11	0.5	0.0	N.A.	N.A.
SITE LIGHTING	Illuminance	Fc	2.04	6.1	0.5	4.08	12.20

Luminaire Schedule							
Symbol	Qty	Label	Description	Lum. Lumens	LLF	Lum. Watts	Total Watts
	3	CP	BEACON SRT1-35-4K7-5QW-UNV-DB	3769	0.900	34.6	103.8
	2	S3	BEACON VP-S-60L-136-4K7-3-UNV-A-DB-BC/SSS-B-16-40-A-1-B4-DB	10544	0.900	133.427	266.854
	1	S4	BEACON VP-S-60L-136-4K7-4W-UNV-A-DB-BC/SSS-B-16-40-A-1-B4-DB	9537	0.900	133.506	133.506
	1	WP	HUBBELL TRP1-12L20-4K7-4-UNV-DB	2151	0.900	19.9	19.9





WEST SIDE ELEVATION



SOUTH FRONT ELEVATION



CARPORT SIDE ELEVATION



EAST SIDE ELEVATION



NORTH REAR ELEVATION

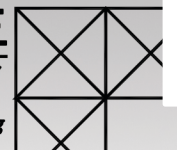
20 APARTMENTS
10809-10819 OLIVE BOULEVARD
CREVE COEUR, MISSOURI 63141
JLA GROUP, DEVELOPER

PROJECT: 1939.01
1-7-20

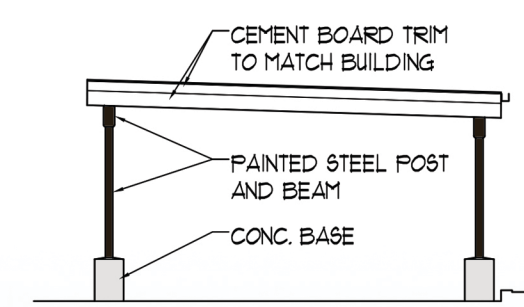
LEVINE
associates

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8630 Delmar Boulevard, Suite 220
Saint Louis, Missouri 63124
Phone 314-991-5600 Fax 314-991-4420



Packet Pg. 127



CARPORT SIDE ELEVATION



SOUTH FRONT ELEVATION

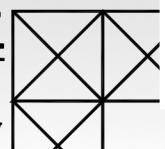
20 APARTMENTS
10809-10819 OLIVE BOULEVARD
CREVE COEUR, MISSOURI 63141
JLA GROUP, DEVELOPER

PROJECT: 1939.01
1-7-20

LEVINE
associates

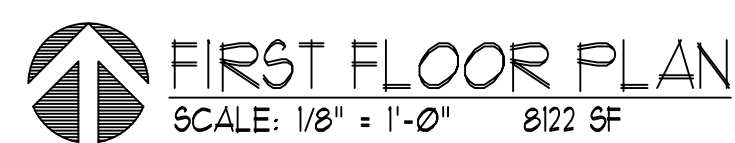
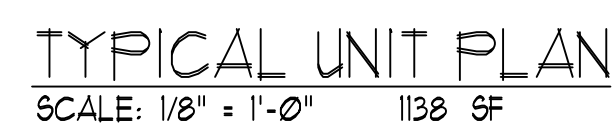
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Saint Louis, Missouri 63124
Phone 314-991-5600 Fax 314-991-4420



Packet Pg. 128

Attachment: Applicant's Materials Received 1-10-2020 (#19-046 & #19-047: 10809-10819 Olive Blvd Apartments)



LEVINE
associates
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8630 Delmar Boulevard, Suite 220
Saint Louis, Missouri 63124
Phone 314-991-5600 Fax 314-991-4420

ARCHITECT: ALVAH M. LEVINE
MO LICENSE A-4246

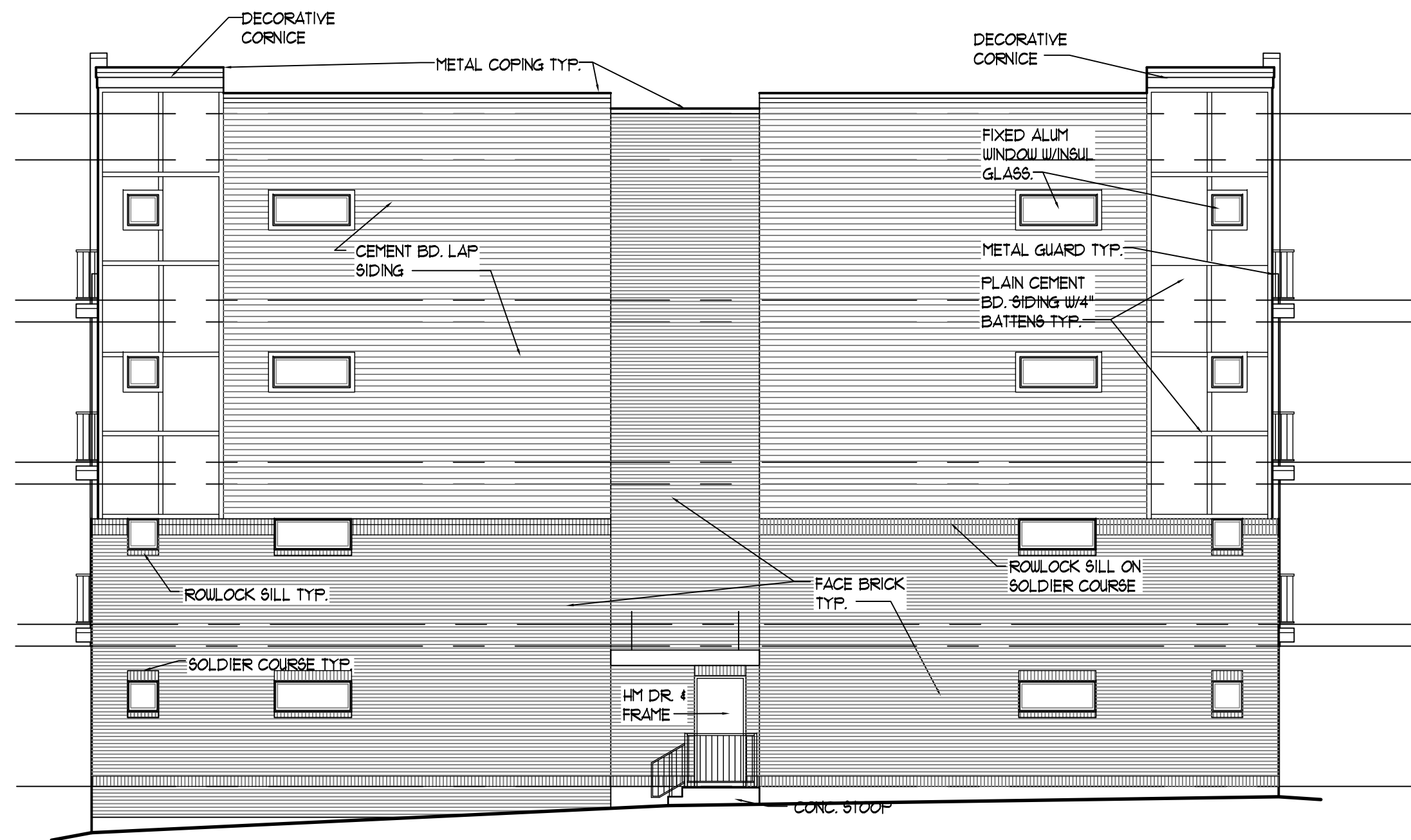
ALVAH M. LEVINE, INC.
DBA LEVINE ASSOCIATES

CERTIFICATE OF AUTHORITY
LICENSE NUMBER A-201804032

20 APARTMENTS
10809-10819 OLIVE BOULEVARD
CREVE COEUR, MISSOURI 63141
JLA GROUP, DEVELOPER

SHEET NO.
A-1

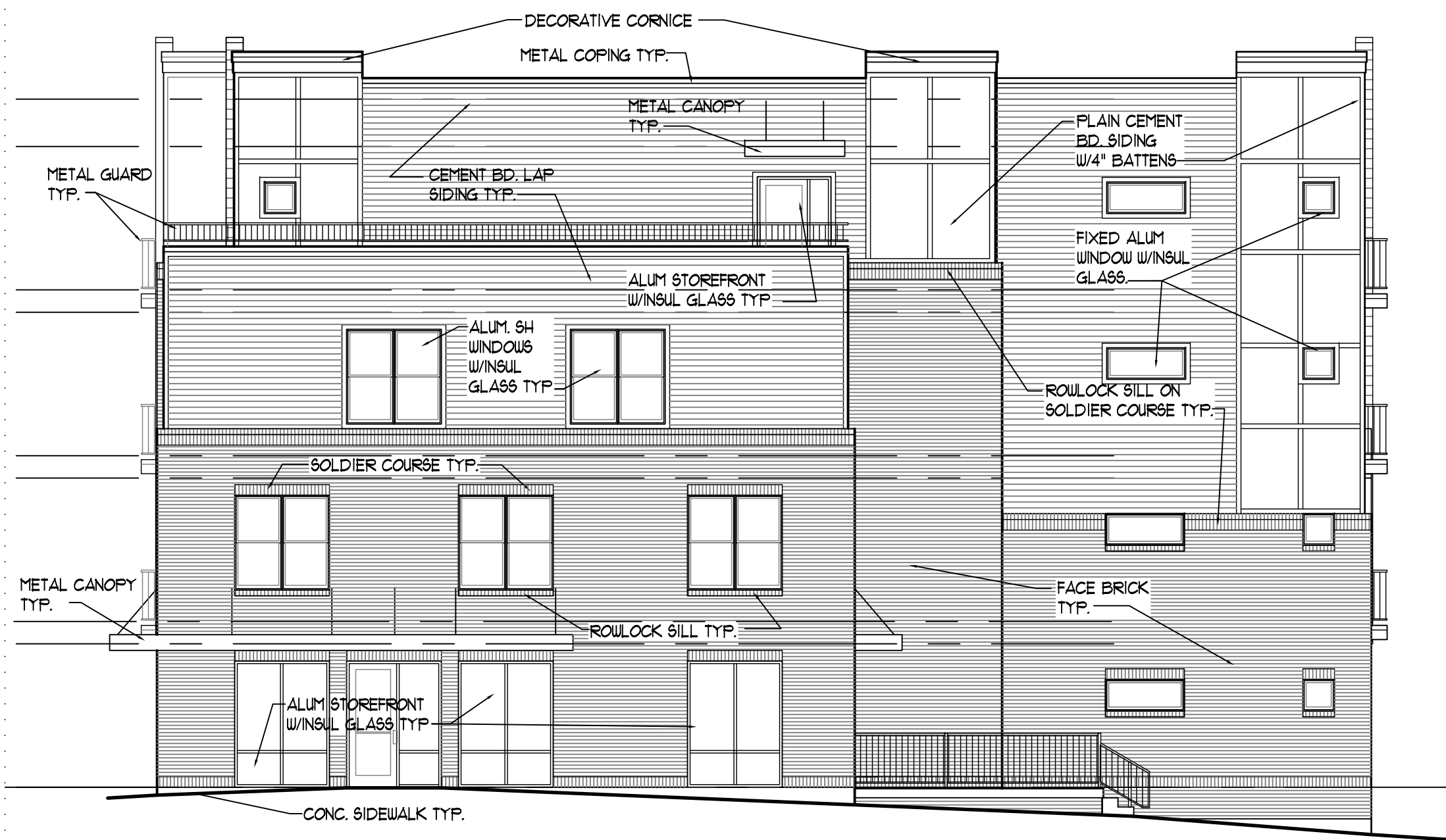
ISSUE DATE: 12-19-19
PROJECT #: 1939.01
DRN. CMC CHK. AML



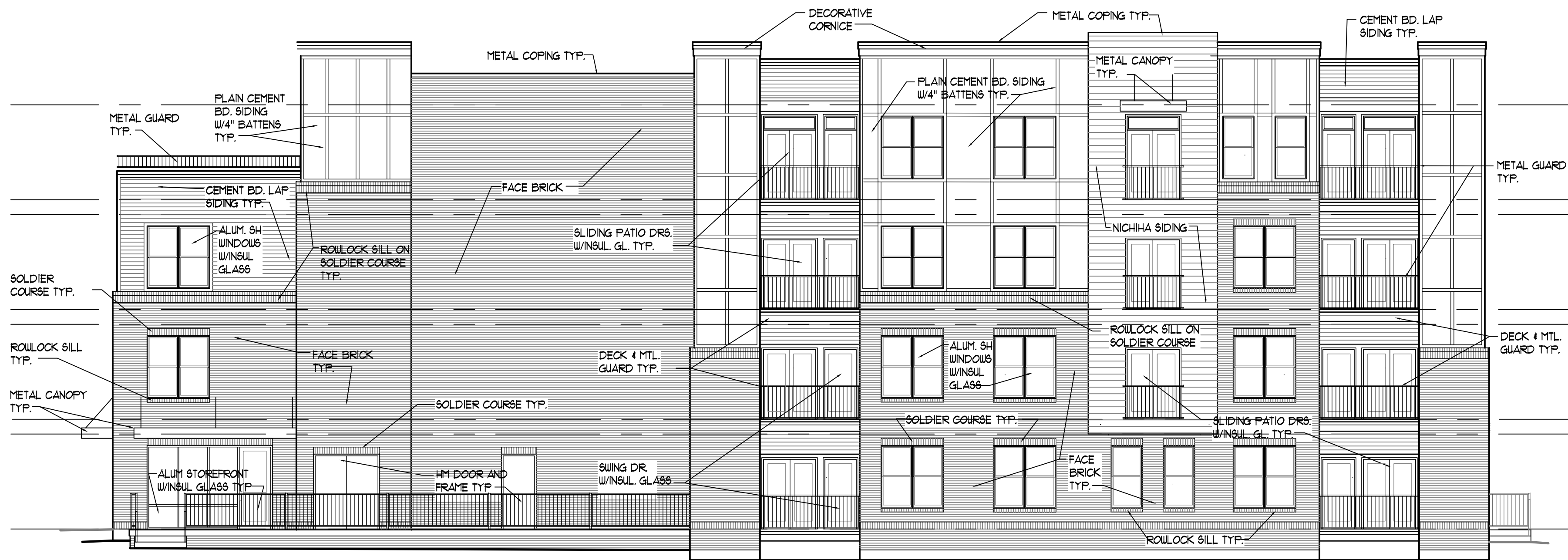
WEST SIDE ELEVATION
SCALE: 1/8" = 1'-0"



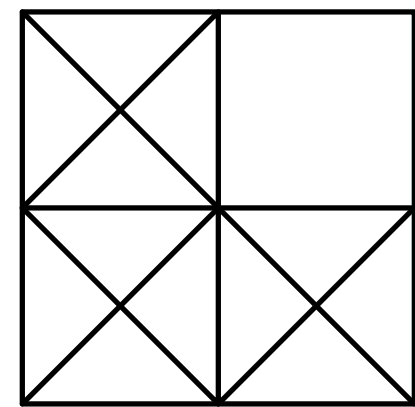
SOUTH FRONT ELEVATION
SCALE: 1/8" = 1'-0"



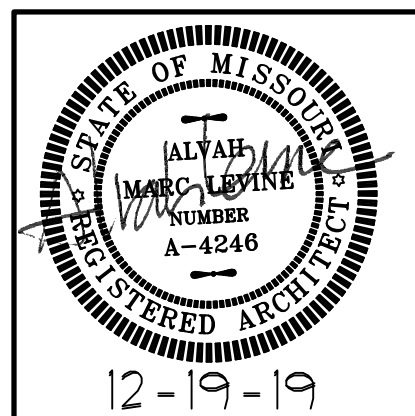
EAST SIDE ELEVATION
SCALE: 1/8" = 1'-0"



NORTH REAR ELEVATION
SCALE: 1/8" = 1'-0"



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ARCHITECT: ALVAN M. LEVINE
MO LICENSE A-4246
ALVAN M. LEVINE, INC.
DBA LEVINE ASSOCIATES
CERTIFICATE OF AUTHORITY
LICENSE NUMBER A-2018040328

preliminary building plan, unit plan and front elevation

20 APARTMENTS
10809-10819 OLIVE BOULEVARD
CREVE COEUR, MISSOURI 63141
JLA GROUP, DEVELOPER

REVISIONS		
NO.	DATE	ITEM
-	1-9-20	revised comments

SHEET NO.
A-2

ISSUE DATE: 12-19-19
PROJECT #: 1939.01
DRN. CMC CHK. AML

PRECAST STONE CAP
 COMPOSITE PANEL GATES
 8" CMU W/ BRICK VENEER TO MATCH BUILDING
 STEEL BOLLARD
 SOLDIER COURSE

Diagram illustrating the dimensions and materials for a gate structure:

- Overall width: 13'-0"
- Overall height: 8'-0"
- Materials and components:
 - STEEL BOLLARD
 - 8" CMU w/ BRICK VENEER TO MATCH BUILDING
 - CONC. PAD
 - COMPOSITE PANEL GATES

8'-0"

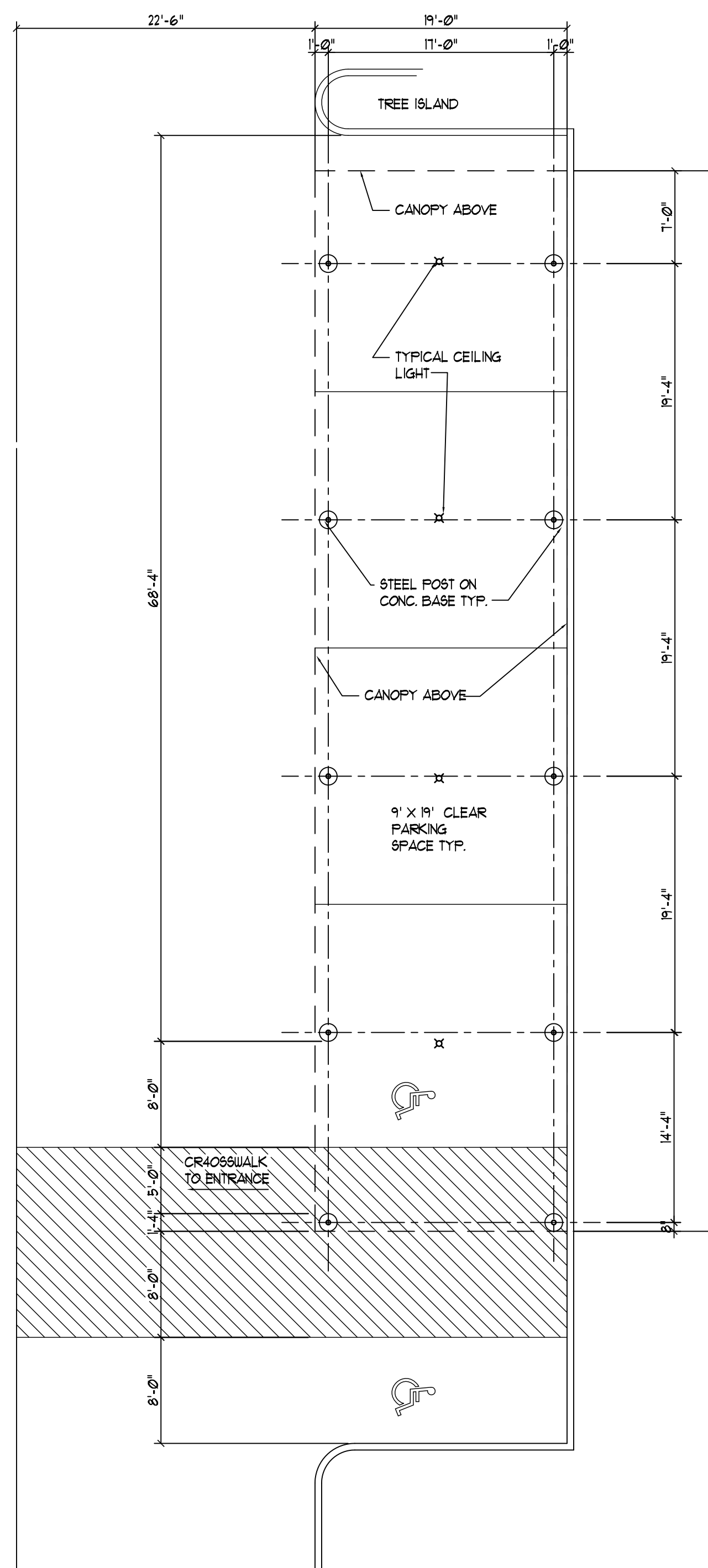
6'-0"

CEMENT BOARD TRIM TO MATCH BUILDING

PAINTED STEEL POST AND BEAM

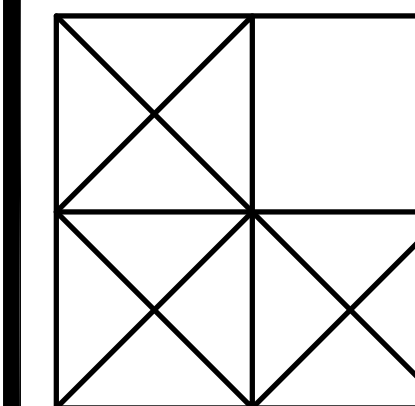
CONC. BASE

COVERED PARKING ELEVATION
SCALE: 1/4" = 1'-0"

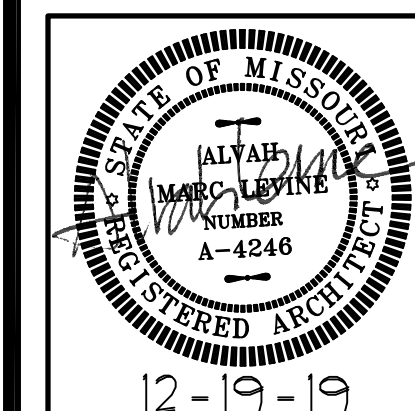


EAST COVERED PARKING PLAN

SCALE: 1/8" = 1'-0"



LEVINE
associates
architecture · interiors · planning
8630 Delmar Boulevard, Suite 220
Saint Louis, Missouri 63124
Phone 314-991-5600 Fax 314-991-4420



ARCHITECT: ALVAH M. LEVINE
MO LICENSE A-4248

ALVAH M. LEVINE, INC.
DBA LEVINE ASSOCIATES

CERTIFICATE OF AUTHORITY
LICENSE NUMBER A-2018040325

covered parking and trash enclosure

20 APARTMENTS
10809-10819 OLIVE BOULEVARD
CREVE COEUR, MISSOURI 63141
JLA GROUP DEVELOPER

REVISIONS		
NO.	DATE	ITEM
-	1-9-20	review comments

SHEET NO.	
-----------	--

A-3

ISSUE DATE: 12-19-19
PROJECT #: 1939.01
DRN. CMC CHK. AM

Scale: 1" = 20'



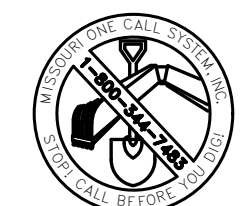
<u>EVERGREEN TREES</u>	<u>BOTANICAL / COMMON NAME</u>	<u>CONT</u>	<u>CAL</u>	<u>SIZE</u>	<u>QTY</u>
ILE AM2	Ilex opaca / American Holly	-		6' tall	22
THU IB1	Thuja x 'Green Giant' / Green Giant Arborvitae			6' tall	5
<u>DECIDUOUS TREES</u>	<u>BOTANICAL / COMMON NAME</u>	<u>CONT</u>	<u>CAL</u>	<u>SIZE</u>	<u>QTY</u>
ACE ARM	Acer rubrum 'Armstrong' / Armstrong Red Maple	-	3'cal		3
GIN BIL	Ginkgo biloba / Maidenhair Tree	-	3'cal		3
GIN FAS	Ginkgo biloba 'Fastiglata' / Fastigiate Maidenhair Tree	-	3'cal		3
GLE SKY	Gleditsia triacanthos 'Skyline' / Skyline Honey Locust	-	3'cal		3
QUE IMB	Quercus imbricaria / Shingle Oak	-	3'cal		2
QUE RUB	Quercus rubra / Red Oak	-	3'cal		2
QUE NA2	Quercus x narsii 'Nadler' TM / Kindred Spirit Oak	-	3'cal		4
<u>SHRUBS</u>	<u>BOTANICAL / COMMON NAME</u>	<u>CONT</u>			<u>QTY</u>
BUX GR4	Buxus x 'Green Mountain' / Boxwood	5 gal			35
COR AME	Corylus americana / American Hazelnut	3 gal			5
HAM SPR	Hamamelis vernalis / Spring Blooming Witchhazel	5 gal			7
HYD PE2	Hydrangea arborescens 'Pee Wee' / Pee Wee Oakleaf Hydrangea	3 gal			15
HYD L58	Hydrangea paniculata 'Little Lime' / Little Lime Hydrangea	3 gal			7
HYD R35	Hydrangea paniculata 'Renhy' / Vanilla Strawberry Hydrangea	5 gal			7
HYD AL1	Hydrangea quercifolia 'Alice' / Alice Oakleaf Hydrangea	5 gal			12
ILE CH3	Ilex x meserveae 'China Girl' TM / China Girl Holly	5 gal			19
ITE LIT	Itea virginica 'Little Henry' TM / Virginia Sweetspire	3 gal			26
RHU GRO	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	2 gal			20
TAX HIC	Taxus x media 'Hicksii' / Hicks Yew	5 gal			10
VIB CA4	Viburnum dilatatum 'Cardinal Candy' / Cardinal Candy Viburnum	5 gal			20
VIB BLA	Viburnum prunifolium / Blackhaw Viburnum	7 gal			5
<u>ANNUALS/PERENNIALS</u>	<u>BOTANICAL / COMMON NAME</u>	<u>CONT</u>			<u>QTY</u>
IRI CEA	Iris sibirica 'Caesar's Brother' / Caesar's Brother Siberian Iris	1 gal			29
PEN HUB	Penstemon digitalis 'Husker Red' / Beardtongue	1 gal			37
<u>GROUND COVERS</u>	<u>BOTANICAL / COMMON NAME</u>	<u>CONT</u>		<u>SPACING</u>	<u>QTY</u>
LIR CRE	Liriope spicata / Creeping Lily Turf	1 gal		30" o.c.	20
PAC TER	Pachysandra terminalis / Japanese Spurge	PLUG		16" o.c.	252

	REQUIRED	PROVIDED
INTERIOR PARKING LOT TREES	7.5	8
STREET TREES REQUIRED	6	6
EXTRA TREES TO BE PLANTED	0	33
EXISTING TREES TO BE PRESERVED	0	2
TOTAL TREES	13.5	47

NOTES:

1. ALL LANDSCAPE AREAS WITHIN GRADING LIMITS, INCLUDING TURF, TO BE IRRIGATED WITH AN INSTALLED **PERMANENT IN GROUND IRRIGATION SYSTEM.**
2. ALL GREENSPACE AREAS OUTSIDE OF MULCHED LANDSCAPE BEDS, BUT WITHIN THE GRADING LIMITS TO BE SODDED TURF. IN AREAS OUTSIDE OF THE GRADING LIMITS, EXISTING UNDISTURBED DENSE SHRUB AND TREES WILL BE PRESERVED.
3. SEE L3 FOR PLANTING DETAILS AND SPECIFICATIONS

Parking area 15,855 sf
 Required landscape 15,855 sf/ 350 x 10 = 453 sf
 Parking landscape provided = 504 sf
 58 sf each parking lot island
 181 around trash enclosure
 207 south of trash enclosure



CALL BEFORE
YOU DIG!
1-800-DIG-RITE

SITE BENCHMARK:
"BENCHITE" INSTALLED ON THE SOUTH SIDE OF UTILITY POLE APPROXIMATELY 11 FT SOUTH AND 1 FT EAST OF THE SOUTHWESTERN CORNER OF THE SUBJECT PROPERTY. SURVEY ELEV. = 685.33
BENCHMARK:
STATION SL-23 DATUM: NAVD 88
ELEV. = 621.30 SURVEY ELEV. = 621.35

MARY F DEWEESE, LANDSCAPE ARCHITECT
LICENSE #: 2003001615

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[illegible]

ACORN



LANDSCAPES

MARY F. DEWEESE - LANDSCAPE ARCHITECT
13 FORRESTER DR. Manchester, MO 63011
636-394-0255
www.acornlandscapes.com

DATE: 12/19/19
CHECKED: MD
DRAWN: MD
SCALE: 1" = 20'

M.S.D. # M.S.D. BASE MAP 17N	LANDSCAPE PLAN
SHEET NO. L1.0	JLA GROUP NEW 20 UNIT APARTMENT BUILDING 10809-10819 OLIVE BLVD. CREVE COEUR, ST LOUIS COUNTY, MO 63141

1 OF 2



VIPER S

SMALL VIPER LUMINAIRE

FEATURES

- Small size companion to Viper Large
- Wide choice of different LED wattage configurations
- Nine optical distributions
- Designed to replace HID lighting up to 400W MH or HPS
- Suitable for wet locations



*3000K and warmer CCTs only

CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Manufactured with die cast aluminum
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements
- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3,000-hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds
- External hardware is corrosion resistant

OPTICS

- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one-piece optical system
- One-piece silicone gasket ensures a weatherproof seal around each individual optic
- One-piece optical cartridge system consisting of an LED engine, optics, gasket and stainless steel bezel

INSTALLATION

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included

ELECTRICAL

- Luminaire accepts 100V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)
- Power factor is $\geq .90$ at full load
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components and a push-button terminal block for AC power connections
- Optional 7-pin ANSI C136.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices
- Ambient operating temperature -40°C to 25°C
- Surge protection: 20kA
- Lifeshield™ Circuit ([see Electrical Data](#))

CONTROLS

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if

STRIKE



RELATED PRODUCTS

[Viper Large](#)

project requirements vary from standard configuration

- Available with [Energeni](#) for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night
- In addition, Viper can be specified with [SiteSync™ wireless control system](#) for reduction in energy and maintenance costs while optimizing light quality 24/7

CERTIFICATIONS

- DLC® (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 8750
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. [Separate spec available online](#)

WARRANTY

- 5 year warranty
- See [HLI Commercial and Industrial Outdoor Lighting Warranty](#) for additional information

KEY DATA	
Lumen Range	5400–16,216
Wattage Range	55–136
Efficacy Range (LPW)	100–124
Reported Life (Hours)	L70>377,000
Input Current Range (Amps)	0.1–1.1



VIPER S

SMALL VIPER LUMINAIRE

DATE: _____ LOCATION: _____
TYPE: _____ PROJECT: _____
CATALOG #: _____

ORDERING GUIDE

Example: VPS-24L-55-4K7-4W-UNV-A-DB-TL-GENI-04-BC

CATALOG # _____

VPS Series	LED Engine	CCT/CRI ¹	Distribution	Rotation	Voltage
VPS Viper Small	24L-55 55W, LED array 36L-65 65W, LED array 36L-80 80W, LED array 48L-110 110W, LED array 60L-136 136W, LED array	3K7 3000K, 70 CRI 4K7 4000K, 70 CRI 5K7 5000K, 70 CRI	FR Type 1/Front Row 2 Type 2 3 Type 3 4 Type 4 4W Type 4 Wide 5QM Type 5QM 5R Type 5R (rectangular) 5W Type 5W (round wide) TC Tennis Court	Blank No rotation L Optic rotation left ⁵ R Optic rotation right ⁵	UNV 120-277V 347 347V 480 480V

Mounting	Color	Control Options	Options
A Rectangular Arm (formerly RA) for square or round pole MAF Mast Arm Fitter (formerly SF2) for 2 3/8" OD horizontal arm K Knuckle (formerly PK2) limit to 30° tilt or 2 3/8" OD horizontal arm or vertical tenon WB Wall Bracket AD Universal Arm for square pole AD3 Adapter for 2.4"-4.1" round pole AD4 Adapter for 4.2"-5.3" round pole AD5 Adapter for 5.5"-5.9" round pole AD6 Adapter for 6.0"-6.5" round pole	BL Black Textured DB Dark Bronze Textured GYS Light Gray Smooth PS Platinum Silver Smooth WH White Textured CC Custom Color	7PR 7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others) 7PR-SC 7-Pin Receptacle w/Shorting Cap 7PR-TL 7-Pin Receptacle w/Twist-Lock® photo control SCP_F Programmable Occupancy Sensor w/ daylight control ^{1,2,6} GENI-XX ENERGENI ³ SWP SiteSync Pre-Commission ^{1,4} SWPM_F SiteSync Pre-Commission w/ Sensor ^{1,2,4}	F Fusing BSP Bird Spikes BC Backshield (available for FR, 2, 3, 4, 4W Optics)

House Side Shield Accessories	Mounting Accessories
☐ HSS/VP-S/90-FB/XXX 90° shield front or back ☐ HSS/VP-S/90-LR/XXX 90° shield left or right ☐ HSS/VP-S/270-FB/XXX 270° shield front or back ☐ HSS/VP-S/270-LR/XXX 270° shield left or right ☐ HSS/VP-S/360/XXX Full shield	☐ VPL-AD-RPA3 2.4"-4.1" Round Pole Adapter for AD arm ☐ VPL-AD-RPA4 4.2"-5.3" Round Pole Adapter for AD arm ☐ VPL-AD-RPA5 5.5"-5.9" Round Pole Adapter for AD arm ☐ VPL-AD-RPA6 6.0"-6.5" Round Pole Adapter for AD arm

Replace XXX with notation for desired finish color. Refer to page 8 for shield images.

Notes:

- Not available with other wireless control or sensor options
- Specify mounting height; 8 = 8' or less, 40 = 9' to 40'
- Specify routine setting code (example GENI-04). See [ENERGENI brochure and instructions](#) for setting table and options. Not available with sensor or SiteSync options
- Specify group and zone at time of order. See [www.hubbelllighting.com/sitesync](#) for further details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node
- Only available with FR, 2, 3, 4, 4W and 5R distributions
- Order at least one SCP-REMOTE per project location to program and control the occupancy sensor

Accessories and Services (Ordered Separately)

- ☐ **SCP-REMOTE** Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor
- ☐ **SWUSB*** SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
- ☐ **SWTAB*** Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node
- ☐ **SWBRG** SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested
- ☐ **SW7PR+** SiteSync 7-Pin on fixture module On/Off/Dim, Daylight Sensor 120-480VAC

* When ordering SiteSync at least one of these two interface options must be ordered per project.
+ Available as a SiteSync retrofit solution for fixtures with an existing 7-pin receptacle.

Hubbell Control Solutions — Accessories (Sold Separately)

NX Distributed Intelligence™

- ☐ **NXOFM-1R1D-UNV** On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120-480VAC

wiSCAPE® Lighting Control

- ☐ **WIR-RME-L** On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110-480VAC

For additional information related to these accessories please visit [www.hubbellcontrolsolutions.com](#). Options provided for use with integrated sensor, please view specification sheet ordering information table for details.





VIPER S

SMALL VIPER LUMINAIRE

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

DELIVERED LUMENS

# of LEDs	DRIVE CURRENT (mA)	SYSTEM WATTS	DISTRIBUTION TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
				LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G
24	700 mA	55W	FR	6357	118	1	0	1	6486	120	1	0	1	5804	107	1	0	1
			2	6132	114	1	0	1	6257	116	1	0	2	5599	104	1	0	1
			3	6015	111	1	0	2	6137	114	1	0	2	5492	102	1	0	2
			4	5921	110	1	0	2	6034	112	1	0	2	5400	100	1	0	2
			4W	5793	108	1	0	2	5909	110	1	0	2	5272	98	1	0	2
			5QM	6022	112	2	0	1	6145	114	2	0	1	5499	102	2	0	1
			5R	6063	112	3	0	3	6187	115	3	0	3	5536	103	3	0	3
			5W	5908	109	3	0	1	6028	112	3	0	1	5908	102	3	0	1
			TC	6183	113	1	0	1	6309	118	1	0	1	5645	105	1	0	1
			FR	7864	121	1	0	1	8041	124	1	0	1	7189	111	1	0	1
36	560 mA	65W	2	7586	117	1	0	2	7757	119	1	0	2	6934	107	1	0	2
			3	7441	114	1	0	2	7609	117	1	0	2	6802	105	1	0	2
			4	7317	110	1	0	2	7482	112	1	0	2	6688	100	1	0	2
			4W	8690	108	1	0	2	8864	110	1	0	2	7908	98	1	0	2
			5QM	7450	115	3	0	1	7618	117	3	0	1	6810	105	3	0	1
			5R	7501	115	3	0	3	7670	118	3	0	3	6857	105	3	0	3
			5W	7309	112	3	0	2	7473	115	3	0	2	6681	103	3	0	1
			FR	9535	118	1	0	1	9730	120	1	0	1	8706	107	1	0	1
			2	9197	114	1	0	2	9385	116	1	0	2	8398	104	1	0	2
			3	9022	111	1	0	2	9206	114	1	0	2	8238	102	1	0	2
36	700 mA	80W	4	8871	110	1	0	2	9052	112	1	0	2	8100	100	1	0	2
			4W	11587	108	1	0	3	11819	110	1	0	3	10544	98	1	0	3
			5QM	9033	112	3	0	1	9217	114	3	0	1	8248	102	3	0	1
			5R	9095	112	3	0	3	9280	115	3	0	3	8304	103	3	0	3
			5W	8861	109	3	0	2	9043	112	3	0	2	8092	100	3	0	2
			TC	9275	115	1	0	1	9464	118	1	0	1	8468	105	1	0	1
			FR	12713	118	1	0	1	12973	120	2	0	1	11608	107	1	0	1
			2	12263	114	2	0	2	12513	116	2	0	2	11197	104	2	0	2
			3	12029	111	2	0	2	12275	114	2	0	2	10984	102	2	0	2
			4	11828	110	1	0	3	12069	112	1	0	3	10800	100	1	0	2
48	700 mA	110W	4W	14484	108	2	0	4	14774	111	2	0	4	13180	98	2	0	3
			5QM	12044	112	3	0	2	12290	114	3	0	2	10997	102	3	0	1
			5R	12126	112	3	0	3	12374	115	3	0	3	11072	103	3	0	3
			5W	12126	109	4	0	2	12057	112	4	0	2	10789	100	4	0	2
			TC	12366	115	1	0	2	12619	118	1	0	2	11290	105	1	0	2
			FR	15891	117	2	0	2	16216	120	2	0	2	14511	107	2	0	1
			2	15329	113	2	0	2	15642	116	2	0	2	13997	103	2	0	2
			3	15037	111	2	0	3	15344	113	2	0	3	13730	101	2	0	3
			4	14784	109	1	0	3	15086	111	1	0	3	13500	100	1	0	3
			4W	14802	109	2	0	3	15104	112	2	0	3	13515	100	2	0	3
60	700 mA	136W	5QM	15055	111	3	0	2	15362	114	3	0	2	13747	102	3	0	2
			5R	15158	112	4	0	4	15469	114	4	0	4	13841	102	4	0	4
			5W	14781	109	4	0	2	15083	111	4	0	2	13495	100	4	0	2
			TC	15458	115	1	0	2	15834	118	1	0	2	14113	105	1	0	2

Attachment: Applicant's Materials Received 1-10-2020 (#19-046 & #19-047: 10809-10819 Olive Blvd Apartments)





LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:

VPS-60L-136-4K7-3-UNV-A-DB-BC/
SSS-B-16-40-A-1-B4-DB

Notes:

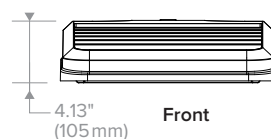
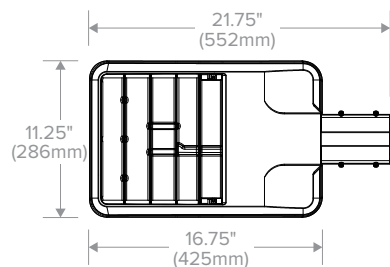
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SMALL VIPER LUMINAIRE

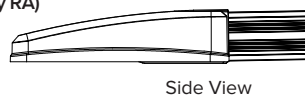
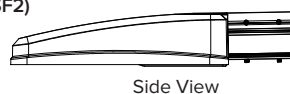
DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

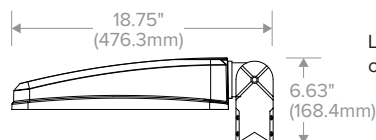
CATALOG #: _____

DIMENSIONS

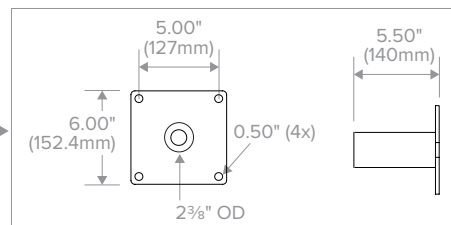
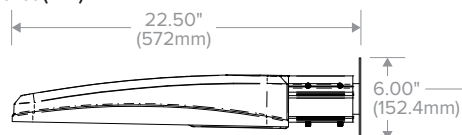
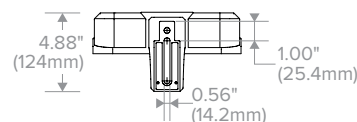
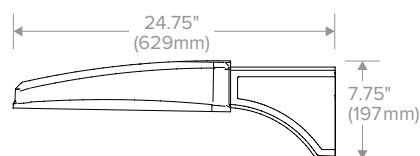
Weight	15.0 lbs (6.8 kg)
EPA	.67 ft ²

A Arm (formerly RA)**MAF (formerly SF2)**

Accepts 2 3/8" OD tenon, min 5" long.

2 3/8" Adjustable Knuckle (K) (formerly PK2)

Limit to 30° tilt. Sensor, photocell and wireless controls should not be tilted above horizontal.

Wall Bracket (WB)**AD Decorative Arm**See [page 9](#) for mounting details.



LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:

VPS-60L-136-4K7-3-UNV-A-DB-BC/
SSS-B-16-40-A-1-B4-DB

Notes:

Type:

7.2.b

S3**VIPER S**

SMALL VIPER LUMINAIRE

DATE:

LOCATION:

TYPE:

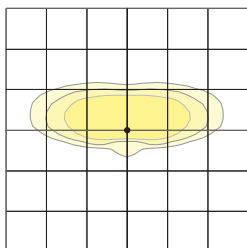
PROJECT:

CATALOG #:

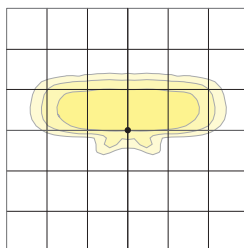
PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

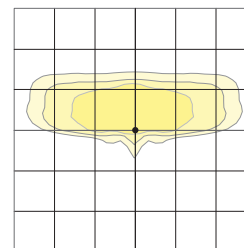
Type FR – Front Row/Auto Optic



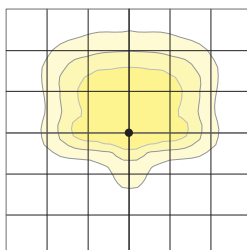
Type 2



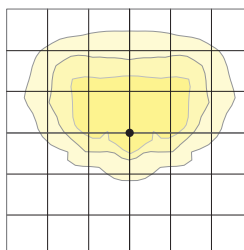
Type 3



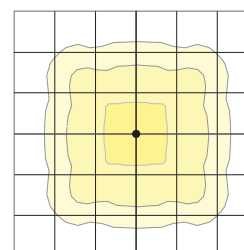
Type 4



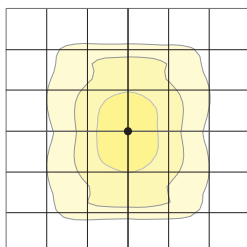
Type 4 Wide



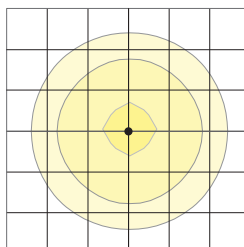
Type 5QM



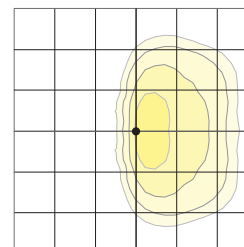
Type 5R (rectangular)



Type 5W (round wide)



Type TC



Submitted by LEC - Ward Burton		Catalog Number: VPS-60L-136-4K7-3-UNV-A-DB-BC/ SSS-B-16-40-A-1-B4-DB Notes:	Type: S3	7.2.b
 LEC-Ward Burton & Co. Lighting Manufacturers Representatives St. Louis, MO		Job Name: OLIVE 20 APARTMENT BLDG		



VIPER S

SMALL VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
24	1	700 mA	120	55	0.5
			277		0.2
			347		0.2
			480		0.1
36	1	525 mA	120	65	0.65
			277		0.28
			347		0.22
			480		0.16
		700 mA	120	80	0.7
			277		0.3
			347		0.2
			480		0.2
48	1	700 mA	120	110	0.9
			277		0.4
			347		0.3
			480		0.2
60	1	700 mA	120	136	1.1
			277		0.5
			347		0.4
			480		0.3

PROJECTED LUMEN MAINTENANCE						
Ambient Temp.	0	25,000	50,000	TM-21-11 60,000 ¹	100,000	Calculated L70 (HOURS)
25°C / 77°C	1	0.97	0.95	0.95	0.92	>377,000

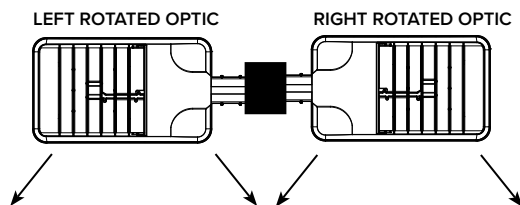
¹ Projected per IESNA TM-21-11.
Data references the extrapolated performance projections for the 60 LED base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

LIFESHIELD™ CIRCUIT

Protects luminaire from excessive temperature. The device activates at a specific, factory-preset temperature and progressively reduces power over a finite temperature range. Operation is smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply or faulty wiring connection to the drivers. The device can co-exist with other 0–10V control devices (occupancy sensors, external dimmers, etc.)

ADDITIONAL INFORMATION

ROTATION OPTIONS





LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:

VPS-60L-136-4K7-3-UNV-A-DB-BC/
SSS-B-16-40-A-1-B4-DB

Notes:

Type:

7.2.b

S3



VIPER S

SMALL VIPER LUMINAIRE

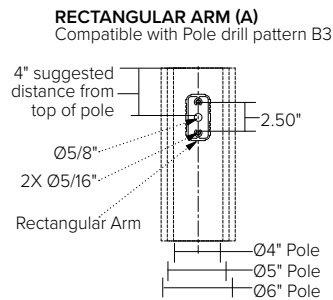
DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

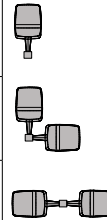
ADDITIONAL INFORMATION (CONTINUED)

DRILL PATTERN

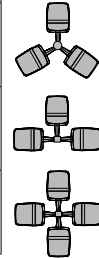


EPA

Config.	EPA
1	.67
2 @ 90°	1.06
2 @ 180°	1.34



Config.	EPA
3 @ 120°	1.68
3 @ 90°	1.73
4 @ 90°	2.12



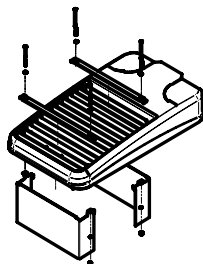
TENON TOP POLE BRACKET ACCESSORIES (ORDER SEPARATELY)

(2 3/8" OD tenon)

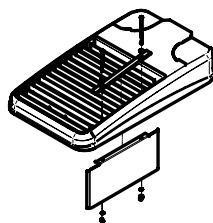
TENON TOP POLE BRACKET ACCESSORIES (Order Separately)

- ☐ **SETAVP-XX** Square tenon adapter (4 at 90°) for A - Rectangular Arm mounting option only
- ☐ **RETAVP-XX** Round tenon adapter (4 at 90°) for A - Rectangular Arm mounting option only
- ☐ **SETA2XX** Square tenon adapter (4 at 90°) for AD - Universal Arm mounting option only
- ☐ **RETA2XX** Round tenon adapter (4 at 90°) for AD3 - Universal Arm mounting option only
- ☐ **TRETA2XX** Hexagonal tenon adapter (3 at 120°) for AD - Universal Arm mounting option only

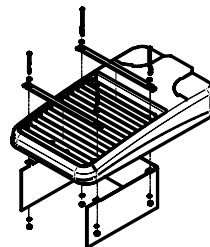
HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES



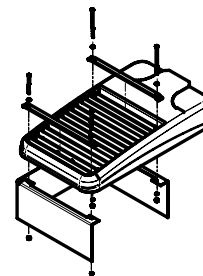
HSS/VP-S/90-FB/XXX
90° shield front or back
(2 shields shown)



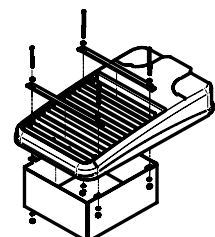
HSS/VP-S/90-LR/XXX
90° shield left or right
(1 shield shown in left orientation)



HSS/VP-S/270-FB/XXX
270° shield front or back
(1 shield shown in back orientation)



HSS/VP-S/270-LR/XXX
270° shield left or right
(1 shield shown in right orientation)



HSS/VP-S/360/XXX
Full shield
(1 shield shown)



LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:

VPS-60L-136-4K7-3-UNV-A-DB-BC/
SSS-B-16-40-A-1-B4-DB

Notes:

Type:

7.2.b

S3



VIPER S

SMALL VIPER LUMINAIRE

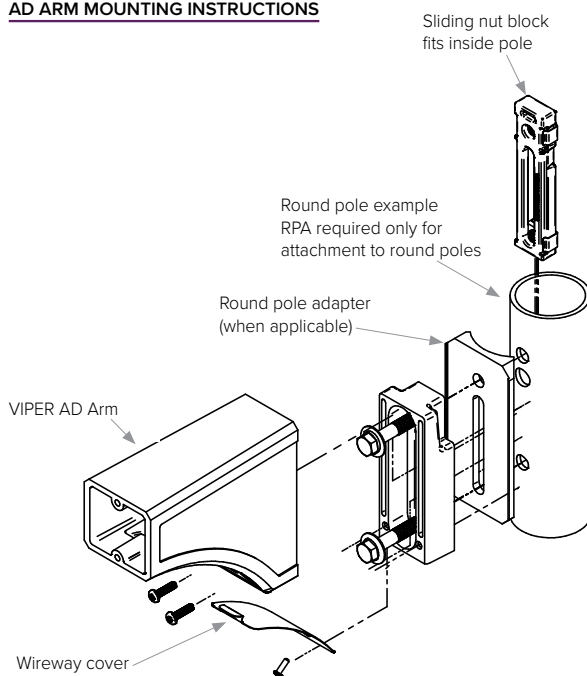
DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

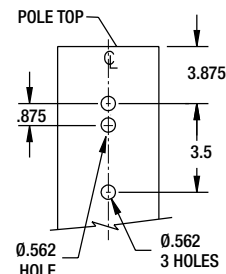
CATALOG #: _____

ADDITIONAL INFORMATION (CONTINUED)

AD ARM MOUNTING INSTRUCTIONS



DECORATIVE ARM (AD) Compatible with pole drill pattern S2



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VIPER S

SMALL VIPER LUMINAIRE

FEATURES

- Small size companion to Viper Large
- Wide choice of different LED wattage configurations
- Nine optical distributions
- Designed to replace HID lighting up to 400W MH or HPS
- Suitable for wet locations



*3000K and warmer CCTs only

CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Manufactured with die cast aluminum
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements
- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3,000-hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds
- External hardware is corrosion resistant

OPTICS

- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one-piece optical system
- One-piece silicone gasket ensures a weatherproof seal around each individual optic
- One-piece optical cartridge system consisting of an LED engine, optics, gasket and stainless steel bezel

INSTALLATION

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included

ELECTRICAL

- Luminaire accepts 100V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)
- Power factor is $\geq .90$ at full load
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components and a push-button terminal block for AC power connections
- Optional 7-pin ANSI C136.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices
- Ambient operating temperature -40°C to 25°C
- Surge protection: 20kA
- Lifeshield™ Circuit ([see Electrical Data](#))

CONTROLS

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if

STRIKE



RELATED PRODUCTS

[Viper Large](#)

project requirements vary from standard configuration

- Available with [Energeni](#) for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night
- In addition, Viper can be specified with [SiteSync™ wireless control system](#) for reduction in energy and maintenance costs while optimizing light quality 24/7

CERTIFICATIONS

- DLC® (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 8750
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. [Separate spec available online](#)

WARRANTY

- 5 year warranty
- See [HLI Commercial and Industrial Outdoor Lighting Warranty](#) for additional information

KEY DATA	
Lumen Range	5400–16,216
Wattage Range	55–136
Efficacy Range (LPW)	100–124
Reported Life (Hours)	L70>377,000
Input Current Range (Amps)	0.1–1.1



VIPER S

SMALL VIPER LUMINAIRE

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

ORDERING GUIDE

Example: VPS-24L-55-4K7-4W-UNV-A-DB-TL-GENI-04-BC

CATALOG # _____

VPS	LED Engine	CCT/CRI ¹	Distribution	Rotation	Voltage
VPS Viper Small	24L-55 55W, LED array 36L-65 65W, LED array 36L-80 80W, LED array 48L-110 110W, LED array 60L-136 136W, LED array	3K7 3000K, 70 CRI 4K7 4000K, 70 CRI 5K7 5000K, 70 CRI	FR Type 1/Front Row 2 Type 2 3 Type 3 4 Type 4 4W Type 4 Wide 5QM Type 5QM 5R Type 5R (rectangular) 5W Type 5W (round wide) TC Tennis Court	Blank No rotation L Optic rotation left ⁵ R Optic rotation right ⁵	UNV 120-277V 347 347V 480 480V

Mounting	Color	Control Options	Options
A Rectangular Arm (formerly RA) for square or round pole MAF Mast Arm Fitter (formerly SF2) for 2 3/8" OD horizontal arm K Knuckle (formerly PK2) limit to 30° tilt or 2 3/8" OD horizontal arm or vertical tenon WB Wall Bracket AD Universal Arm for square pole AD3 Adapter for 2.4"-4.1" round pole AD4 Adapter for 4.2"-5.3" round pole AD5 Adapter for 5.5"-5.9" round pole AD6 Adapter for 6.0"-6.5" round pole	BL Black Textured DB Dark Bronze Textured GYS Light Gray Smooth PS Platinum Silver Smooth WH White Textured CC Custom Color	7PR 7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others) 7PR-SC 7-Pin Receptacle w/Shorting Cap 7PR-TL 7-Pin Receptacle w/Twist-Lock® photo control SCP_F Programmable Occupancy Sensor w/ daylight control ^{1,2,6} GENI-XX ENERGENI ³ SWP SiteSync Pre-Commission ^{1,4} SWPM_F SiteSync Pre-Commission w/ Sensor ^{1,2,4}	F Fusing BSP Bird Spikes BC Backshield (available for FR, 2, 3, 4, 4W Optics)

House Side Shield Accessories
☐ HSS/VP-S/90-FB/XXX 90° shield front or back ☐ HSS/VP-S/90-LR/XXX 90° shield left or right ☐ HSS/VP-S/270-FB/XXX 270° shield front or back ☐ HSS/VP-S/270-LR/XXX 270° shield left or right ☐ HSS/VP-S/360/XXX Full shield Replace XXX with notation for desired finish color. Refer to page 8 for shield images.

Mounting Accessories
☐ VPL-AD-RPA3 2.4"-4.1" Round Pole Adapter for AD arm ☐ VPL-AD-RPA4 4.2"-5.3" Round Pole Adapter for AD arm ☐ VPL-AD-RPA5 5.5"-5.9" Round Pole Adapter for AD arm ☐ VPL-AD-RPA6 6.0"-6.5" Round Pole Adapter for AD arm

- Notes:
- Not available with other wireless control or sensor options
 - Specify mounting height; 8 = 8' or less, 40 = 9' to 40'
 - Specify routine setting code (example GENI-04). See [ENERGENI brochure and instructions](#) for setting table and options. Not available with sensor or SiteSync options
 - Specify group and zone at time of order. See [www.hubbelllighting.com/sitesync](#) for further details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node
 - Only available with FR, 2, 3, 4, 4W and 5R distributions
 - Order at least one SCP-REMOTE per project location to program and control the occupancy sensor

Accessories and Services (Ordered Separately)
☐ SCP-REMOTE Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor ☐ SWUSB* SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node ☐ SWTAB* Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node ☐ SWBRG SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested ☐ SW7PR+ SiteSync 7-Pin on fixture module On/Off/Dim, Daylight Sensor 120-480VAC

* When ordering SiteSync at least one of these two interface options must be ordered per project.
 + Available as a SiteSync retrofit solution for fixtures with an existing 7-pin receptacle.

Hubbell Control Solutions — Accessories (Sold Separately)
NX Distributed Intelligence™ ☐ NXOFM-1R1D-UNV On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120-480VAC wiSCAPE® Lighting Control ☐ WIR-RME-L On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110-480VAC

For additional information related to these accessories please visit www.hubbellcontrolsolutions.com. Options provided for use with integrated sensor, please view specification sheet ordering information table for details.



Submitted by LEC - Ward Burton		Catalog Number: VPS-60L-136-4K7-4W-UNV-A-DB-BC/ SSS-B-16-40-A-1-B4-DB Notes:	Type: S4	7.2.b
 Job Name: OLIVE 20 APARTMENT BLDG				



VIPER S

SMALL VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

DELIVERED LUMENS

# of LEDs	DRIVE CURRENT (mA)	SYSTEM WATTS	DISTRIBUTION TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
				LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G
24	700 mA	55W	FR	6357	118	1	0	1	6486	120	1	0	1	5804	107	1	0	1
			2	6132	114	1	0	1	6257	116	1	0	2	5599	104	1	0	1
			3	6015	111	1	0	2	6137	114	1	0	2	5492	102	1	0	2
			4	5921	110	1	0	2	6034	112	1	0	2	5400	100	1	0	2
			4W	5793	108	1	0	2	5909	110	1	0	2	5272	98	1	0	2
			5QM	6022	112	2	0	1	6145	114	2	0	1	5499	102	2	0	1
			5R	6063	112	3	0	3	6187	115	3	0	3	5536	103	3	0	3
			5W	5908	109	3	0	1	6028	112	3	0	1	5908	102	3	0	1
			TC	6183	113	1	0	1	6309	118	1	0	1	5645	105	1	0	1
			FR	7864	121	1	0	1	8041	124	1	0	1	7189	111	1	0	1
36	560 mA	65W	2	7586	117	1	0	2	7757	119	1	0	2	6934	107	1	0	2
			3	7441	114	1	0	2	7609	117	1	0	2	6802	105	1	0	2
			4	7317	110	1	0	2	7482	112	1	0	2	6688	100	1	0	2
			4W	8690	108	1	0	2	8864	110	1	0	2	7908	98	1	0	2
			5QM	7450	115	3	0	1	7618	117	3	0	1	6810	105	3	0	1
			5R	7501	115	3	0	3	7670	118	3	0	3	6857	105	3	0	3
			5W	7309	112	3	0	2	7473	115	3	0	2	6681	103	3	0	1
			FR	9535	118	1	0	1	9730	120	1	0	1	8706	107	1	0	1
			2	9197	114	1	0	2	9385	116	1	0	2	8398	104	1	0	2
			3	9022	111	1	0	2	9206	114	1	0	2	8238	102	1	0	2
36	700 mA	80W	4	8871	110	1	0	2	9052	112	1	0	2	8100	100	1	0	2
			4W	11587	108	1	0	3	11819	110	1	0	3	10544	98	1	0	3
			5QM	9033	112	3	0	1	9217	114	3	0	1	8248	102	3	0	1
			5R	9095	112	3	0	3	9280	115	3	0	3	8304	103	3	0	3
			5W	8861	109	3	0	2	9043	112	3	0	2	8092	100	3	0	2
			TC	9275	115	1	0	1	9464	118	1	0	1	8468	105	1	0	1
			FR	12713	118	1	0	1	12973	120	2	0	1	11608	107	1	0	1
			2	12263	114	2	0	2	12513	116	2	0	2	11197	104	2	0	2
			3	12029	111	2	0	2	11275	114	2	0	2	10984	102	2	0	2
			4	11828	110	1	0	3	12069	112	1	0	3	10800	100	1	0	2
48	700 mA	110W	4W	14484	108	2	0	4	14774	111	2	0	4	13180	98	2	0	3
			5QM	12044	112	3	0	2	12290	114	3	0	2	10997	102	3	0	1
			5R	12126	112	3	0	3	12374	115	3	0	3	11072	103	3	0	3
			5W	12126	109	4	0	2	12057	112	4	0	2	10789	100	4	0	2
			TC	12366	115	1	0	2	12619	118	1	0	2	11290	105	1	0	2
			FR	15891	117	2	0	2	16216	120	2	0	2	14511	107	2	0	1
			2	15329	113	2	0	2	15642	116	2	0	2	13997	103	2	0	2
			3	15037	111	2	0	3	15344	113	2	0	3	13730	101	2	0	3
			4	14784	109	1	0	3	15086	111	1	0	3	13500	100	1	0	3
			4W	14802	109	2	0	3	15104	112	2	0	3	13515	100	2	0	3
60	700 mA	136W	5QM	15055	111	3	0	2	15362	114	3	0	2	13747	102	3	0	2
			5R	15158	112	4	0	4	15469	114	4	0	4	13841	102	4	0	4
			5W	14781	109	4	0	2	15083	111	4	0	2	13495	100	4	0	2
			TC	15458	115	1	0	2	15834	118	1	0	2	14113	105	1	0	2





LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:

VPS-60L-136-4K7-4W-UNV-A-DB-BC/
SSS-B-16-40-A-1-B4-DB

Notes:

Type:

7.2.b

S4



VIPER S

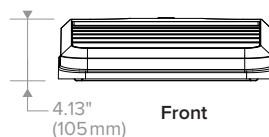
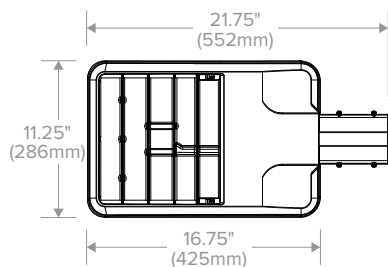
SMALL VIPER LUMINAIRE

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

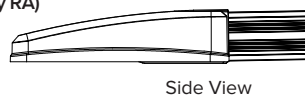
CATALOG #: _____

DIMENSIONS

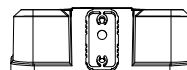


Weight	15.0 lbs (6.8 kg)
EPA	.67 ft ²

A Arm (formerly RA)



Side View

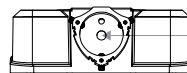


Back View

MAF (formerly SF2)



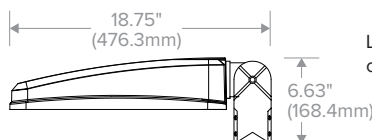
Side View



Back View

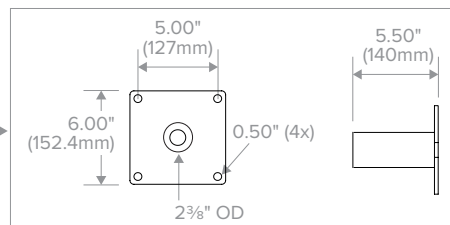
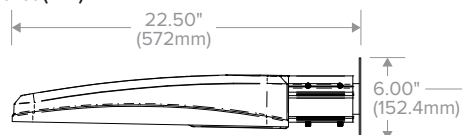
Accepts 2 3/8" OD tenon, min 5" long.

2 3/8" Adjustable Knuckle (K) (formerly PK2)

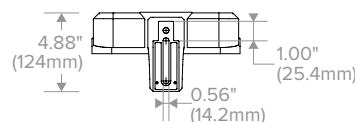
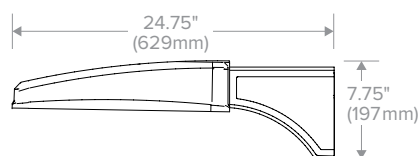


Limit to 30° tilt. Sensor, photocell and wireless controls should not be tilted above horizontal.

Wall Bracket (WB)



AD Decorative Arm



See [page 9](#) for mounting details.



LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:

VPS-60L-136-4K7-4W-UNV-A-DB-BC/
SSS-B-16-40-A-1-B4-DB

Notes:

Type:

7.2.b

S4**VIPER S**

SMALL VIPER LUMINAIRE

DATE:

LOCATION:

TYPE:

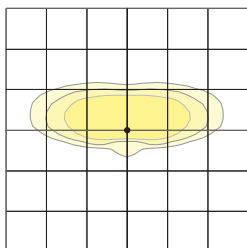
PROJECT:

CATALOG #:

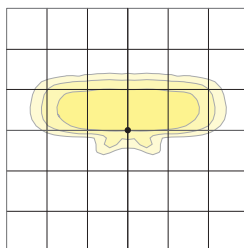
PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

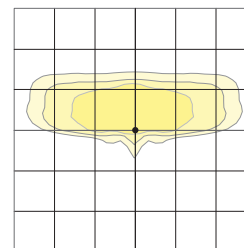
Type FR – Front Row/Auto Optic



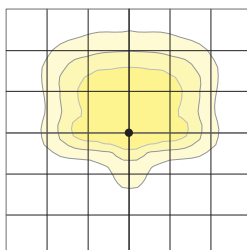
Type 2



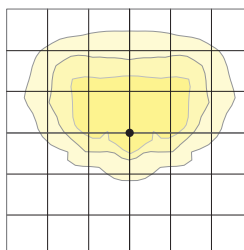
Type 3



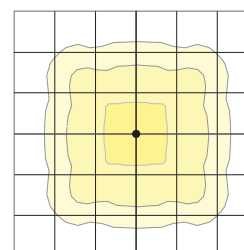
Type 4



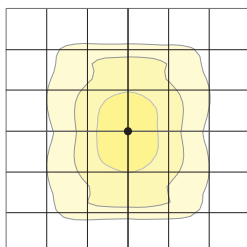
Type 4 Wide



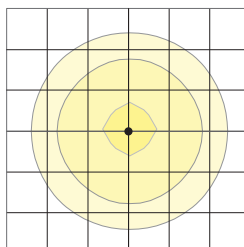
Type 5QM



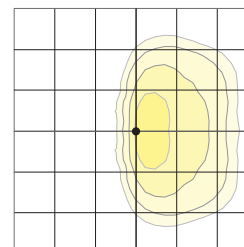
Type 5R (rectangular)



Type 5W (round wide)



Type TC





VIPER S

SMALL VIPER LUMINAIRE

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
24	1	700 mA	120	55	0.5
			277		0.2
			347		0.2
			480		0.1
36	1	525 mA	120	65	0.65
			277		0.28
			347		0.22
			480		0.16
		700 mA	120	80	0.7
			277		0.3
			347		0.2
			480		0.2
48	1	700 mA	120	110	0.9
			277		0.4
			347		0.3
			480		0.2
60	1	700 mA	120	136	1.1
			277		0.5
			347		0.4
			480		0.3

PROJECTED LUMEN MAINTENANCE						
Ambient Temp.	0	25,000	50,000	TM-21-11 60,000 ¹	100,000	Calculated L70 (HOURS)
25°C / 77°C	1	0.97	0.95	0.95	0.92	>377,000

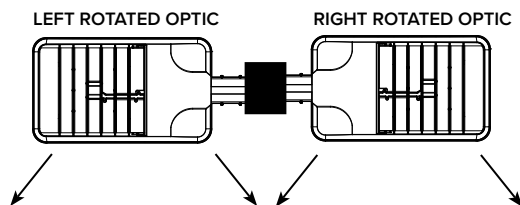
1 Projected per IESNA TM-21-11.
 Data references the extrapolated performance projections for the 60 LED base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

LIFESHIELD™ CIRCUIT

Protects luminaire from excessive temperature. The device activates at a specific, factory-preset temperature and progressively reduces power over a finite temperature range. Operation is smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply or faulty wiring connection to the drivers. The device can co-exist with other 0–10V control devices (occupancy sensors, external dimmers, etc.)

ADDITIONAL INFORMATION

ROTATION OPTIONS





LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:

VPS-60L-136-4K7-4W-UNV-A-DB-BC/
SSS-B-16-40-A-1-B4-DB

Notes:

Type:

7.2.b

S4**VIPER S**

SMALL VIPER LUMINAIRE

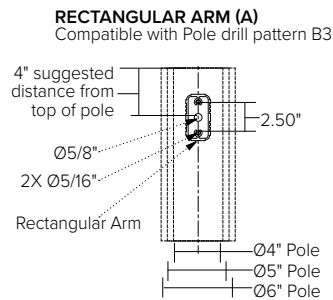
DATE:

LOCATION:

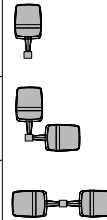
TYPE:

PROJECT:

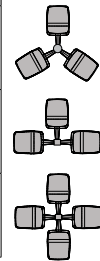
CATALOG #:

ADDITIONAL INFORMATION (CONTINUED)**DRILL PATTERN****EPA**

Config.	EPA
1	.67
2 @ 90°	1.06
2 @ 180°	1.34



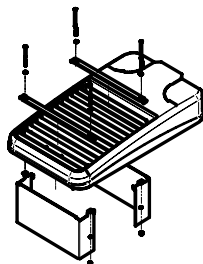
Config.	EPA
3 @ 120°	1.68
3 @ 90°	1.73
4 @ 90°	2.12

**TENON TOP POLE BRACKET ACCESSORIES (ORDER SEPARATELY)**

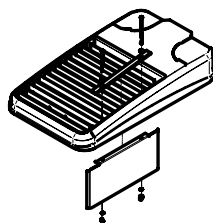
(2 3/8" OD tenon)

TENON TOP POLE BRACKET ACCESSORIES (Order Separately)

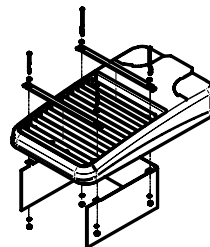
- ☐ **SETAVP-XX** Square tenon adapter (4 at 90°) for A - Rectangular Arm mounting option only
- ☐ **RETAVP-XX** Round tenon adapter (4 at 90°) for A - Rectangular Arm mounting option only
- ☐ **SETA2XX** Square tenon adapter (4 at 90°) for AD - Universal Arm mounting option only
- ☐ **RETA2XX** Round tenon adapter (4 at 90°) for AD3 - Universal Arm mounting option only
- ☐ **TRETA2XX** Hexagonal tenon adapter (3 at 120°) for AD - Universal Arm mounting option only

HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES

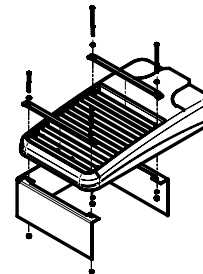
HSS/VP-S/90-FB/XXX
90° shield front or back
(2 shields shown)



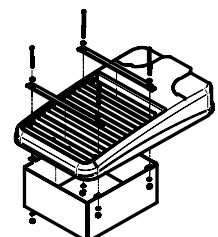
HSS/VP-S/90-LR/XXX
90° shield left or right
(1 shield shown in left orientation)



HSS/VP-S/270-FB/XXX
270° shield front or back
(1 shield shown in back orientation)



HSS/VP-S/270-LR/XXX
270° shield left or right
(1 shield shown in right orientation)



HSS/VP-S/360/XXX
Full shield
(1 shield shown)



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SSS-B-16-40-A-1-B4-DB
Notes:

Type:

7.2.b

S4



VIPER S

SMALL VIPER LUMINAIRE

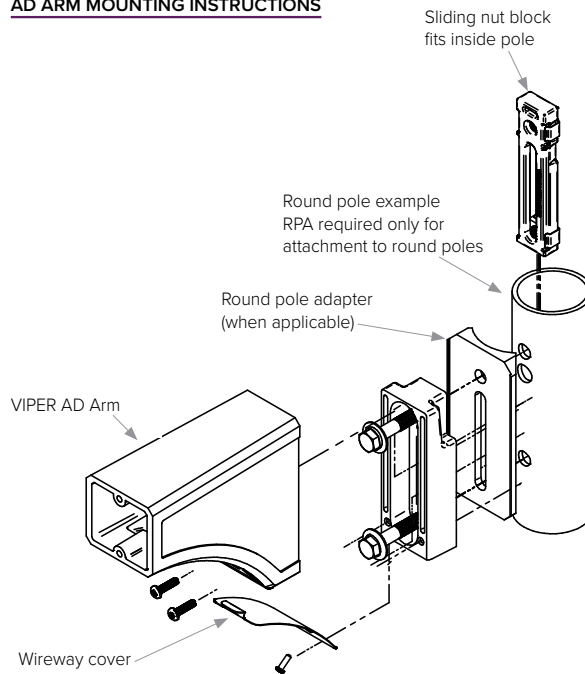
DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

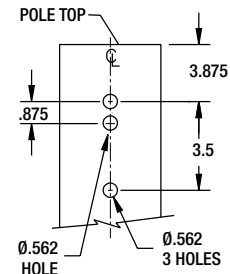
ADDITIONAL INFORMATION (CONTINUED)

AD ARM MOUNTING INSTRUCTIONS



DECORATIVE ARM (AD)

Compatible with pole drill pattern S2



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SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

FEATURES

- For ceiling mount and parking garage applications from an 8–15 foot mounting height
- Edge-lit flat lens for optimal visual comfort and uniformity across the lens
- Two optical distributions specifically design for parking garage and canopy applications are available making the Beacon Edge-Lit luminaire both versatile and functional
- UL/cUL listed for wet locations, IP65 and 3G vibration rated
- Occupancy sensor available for complete on/off and dimming operation

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____



RELATED PRODUCTS

8 [Drive Edge-Lit SRT2](#) 8 [Orbeon](#) 8 [Viper Small](#)

SPECIFICATIONS

HOUSING

- Die-cast aluminum housing ensures long electrical component life and luminaire performance
- Corrosion resistant powder coat finish both protects and provides architectural appearance
- One piece molded silicone gasket ensures weather proof seal
- Thermally isolated driver mounted to dedicated bracket reduces operating temperatures and increases driver life and reliability

OPTICS

- Edge-lit acrylic light guide provides blended non-pixelated light for unprecedented visual comfort
- Choice of multiple light outputs with lumen range of 2500–6000
- Two distribution types: Type 5 Square Wide, Type 5 Concentrated
- Wide variety of CCT's and CRI's offered: 3000K (70CRI), 3000K (80CRI), 3500K (80CRI), 4000K (70CRI), 4000K (80CRI) or 5000K (70 CRI) CCT

ELECTRICAL

- 120V–277V 50/60Hz available
- 0–10V dimming drivers are RoHS compliant
- Surge protection – Standard 10kA with optional end of life LED indicator

INSTALLATION

- Standard quick mount plate over standard 4" junction box or octagonal junction box and allows for simplified fixture installation.
- Standard luminaire accepts a rigid or free-swinging 3/4" NPT stem for pendant mounting via wet location j-box (by others)
- Optional bird deterrent shroud available for field installation

OPTIONS/CONTROLS

- Standalone occupancy sensor available for on/off or dimming operation
- Uplight option provides approximately 800 lumens and consumes only 8 additional watts
- Vandal resistant wire guard available as an option for factory installation or as an accessory for field installation.

CERTIFICATIONS

- Listed to UL1598 for use in wet location, listed for -40°C to 40°C applications
- IDA approved with zero uplight for 3000K and warmer CCTs
- IP65

WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	2500–6000
Wattage Range	20–55
Efficacy Range (LPW)	99–118
Reported Life (Hours)	L70>60K
Weight lbs. (kg)	8 (3.6)

Submitted by LEC - Ward Burton

LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:
SRT1-35-4K7-5QW-UNV-DB

Type:
CP

Notes:



SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

ORDERING GUIDE

Example: SRT1-35-3K7-5QW-UNV-BL-WG

CATALOG #

Series	Engine	CCT	Distribution	Voltage	Color/Finish	Options
SRT1 Edge-Lit Parking Garage Size 1	20 20W Nominal 2500 lm	3K7 3000K, 70 CRI	5QW Type 5 Square Wide 5C Type 5 Concentrated	UNV 120V- 277V 120 120V 208 208V 240 240V 277 277V	BL Textured Black DB Textured Dark Bronze GT Graphite Textured GYS Smooth Gray PS Smooth Plat. Silver WH Textured White CC Custom Color	CD Continuous Dimming ⁴ WG Wire Guard UD Uplight Module ³ F Single Fuse (120, 277) ¹ LD3 36" Lead Length ² LD6 72" Lead Length ² LD9 108" Lead Length ² SP10K 10kA Surge Protection with End of Life LED Indicator ³ LMB Less Mounting Bracket
	35 35W Nominal 4000 lm	3K8 3000K, 80 CRI				
	55 55W Nominal 6000 lm	35K7 3500K, 80 CRI				
		4K7 4000K, 70 CRI				
		4K8 4000K, 80 CRI				
		5K7 5000K, 70 CRI				

Control Options

NX Standalone

NXOS12F NX Distributed Intelligence™, PIR Occ. Sensor, Dimming Daylight Harvesting, up to 12' MH

Sensor Controls

SCP-8F Remote control programmable line voltage sensor (8-12' recommended mounting height)

SCP-20F Remote control programmable line voltage sensor (12-20' recommended mounting height)

Notes:

- 1 Must specify voltage
- 2 Standard wire lead length 24"
- 3 SP10K LED indicator not available with uplight
- 4 Specify when using external 0-10V dimming system

Accessories (Order Separately)

- ☐ **SRT1-WG** Wire Guard
- ☐ **SRT-MB** Mounting bracket for pre-installation
- ☐ **SRT1-BRD** Bird deterrent shroud for SRT1 version, not available with uplight
- ☐ **SCP-REMOTE** Remote control for SCP option; order at least on per project to program and control

PERFORMANCE DATA

Nominal Watts	Nominal Lumens	Distribution	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
20	2500	5QW	2446	113	1	0	1	2434	113	1	0	1	2312	107	1	0	1
		5C	2539	118	1	0	1	2527	117	1	0	1	2400	111	1	0	1
35	4000	5QW	3783	109	2	0	1	3769	109	2	0	1	3578	103	2	0	1
		5C	3929	114	2	0	1	3913	113	2	0	1	3714	107	2	0	1
55	6000	5QW	5726	104	3	0	1	5698	104	3	0	1	5413	99	3	0	1
		5C	5945	108	2	0	1	5915	108	2	0	1	5619	102	2	0	1

ELECTRICAL DATA

Nominal Watts	System Watts	Line Voltage		AMPS AC				Dimming Range	Absolute Voltage Range on 0-10V (+)	
		VAC	HZ	120	208	240	277		VAC	HZ
20	21.6	120-277	50/60	0.18	0.10	0.09	0.08	10% to 100%	0V	10V
35	34.6	120-278	50/61	0.29	0.17	0.14	0.12	10% to 100%	0V	10V
55	54.9	120-279	50/62	0.46	0.26	0.23	0.20	10% to 100%	0V	10V



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Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:
SRT1-35-4K7-5QW-UNV-DB

Notes:

Type:

7.2.b

CP



SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

DATE: LOCATION:

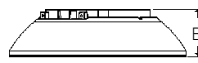
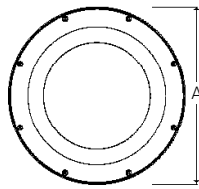
TYPE: PROJECT:

CATALOG #:

PROJECTED LUMEN MAINTENANCE

TM-21 Lifetime Calculations - Projected Lumen Maintenance (25°C/77°F)							
Hours	0	25,000	36,000	50,000	100,000	Reported L70	Calculated L70
Project Lumen Maintenance	100%	0.97	0.94	0.93	0.88	> 60,000	> 262,000

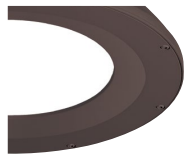
DIMENSIONS



A	B	Weight
12" (304mm)	3.1" (78mm)	8lbs (3.6kg)

ADDITIONAL INFORMATION

FINISH OPTIONS



DB Dark Bronze Textured



BL Black Textured



PS Platinum Silver Smooth



GYS Gray Smooth



WH White Textured



GT Graphite Textured

ACCESSORIES AND SERVICES



Wire Guard

An optional wire guard can be specified at the factory or as an accessory for field installation.



Bird Deterrent

An optional bird shroud deterrent can be specified at the factory or as an accessory for field installation.



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St. Louis, MO

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Notes:

Type:

7.2.b

CP



SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

ADDITIONAL INFORMATION (CONT'D)

MOUNTING



Surface Mount

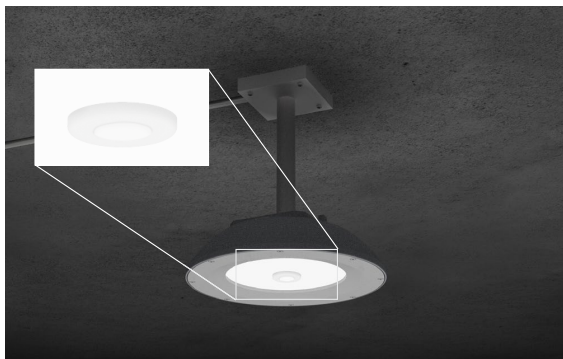
Mounting plate with "quick mount" hanger for one person simple installation.



Pendant Mount

Standard 3/4" threaded entry for pendant applications.

CONTROLS



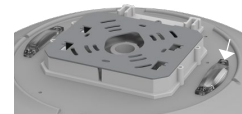
Standalone Controls

Optional passive infrared sensors are available for basic occupancy and daylight sensing. Programmable via remote or Bluetooth® phone app.

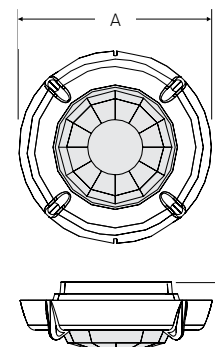
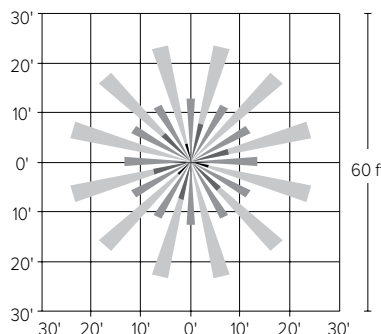
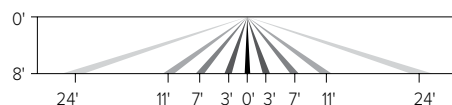


Uplight

Optional uplight module provides 800 lumens of indirect illumination for improved visual quality while eliminating cave effect.



SCP-8F



A	B
2.3" (59mm)	.8" (20mm)



LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:
SRT1-35-4K7-5QW-UNV-DB

Notes:

Type:

7.2.b

CP



SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

DATE: _____ LOCATION: _____

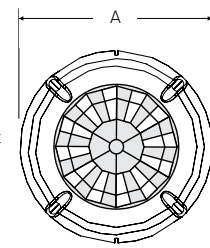
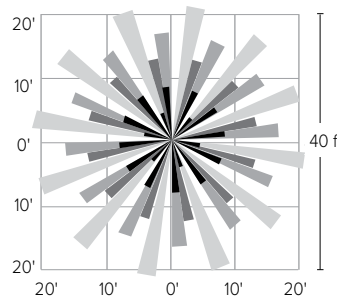
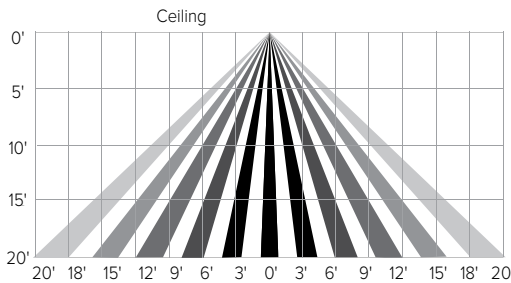
TYPE: _____ PROJECT: _____

CATALOG #: _____

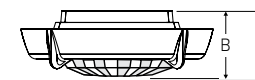
ADDITIONAL INFORMATION (CONT'D)

CONTROLS (CONT'D)

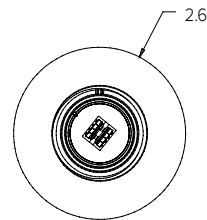
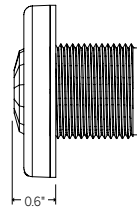
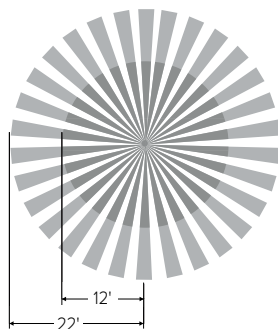
SCP-20F



A	B
2.3" (59mm)	.8" (20mm)



NXOS12F



Minor Motion
Major Motion

NXSMP-OMNI Range

USE OF TRADEMARKS AND TRADE NAMES

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GEOPAK SERIES SIZE 1 LED Architectural Wallpack TRP1/RD11/QSP1	Cat.#	 HUBBELL Outdoor Lighting	
	Job		Type
	Approvals		

SPECIFICATIONS

APPLICATIONS

- Small sized architectural wallpacks in three stylish shapes with molded contours to accentuate building architecture. Provides excellent illumination in energy-saving LED systems.
- Back box accessory available for surface conduit application.

Construction:

- Housing is made from die-cast aluminum with a hinged back-plate for ease of installation and maintenance.
- The LED bezel and trim-plate are made of stainless steel.
- Five powder coat standard finishes, plus custom color options.
- Wet Location Listed to UL924 and UL1598 Standard.

LED:

- 12 high power LEDs delivering up to 3,000 lumens.
- Up to 118 lumens per watt
- Type II, III and IV distributions for a wide variety of applications.
- Zero uplight (UO), dark sky, neighbor friendly

Electrical:

- 120-277 operation, 50/60Hz
- 0-10V dimming driver standard
- 10kA surge protector
- Photocell and occupancy sensor options available for complete on/off and dimming control

Battery Backup:

- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress.
- Includes a long-life Lithium Iron Phosphate battery with optional battery heater for cold temperature application.
- Utilizes 4 LEDs in emergency mode with 657 lumens. Each of the 4 LEDs in emergency are designed to function independently in the unlikely event of a single LED malfunction
- Spectron® self-testing/self-diagnostic electronics are included standard
- Independent dedicated driver and LED array for battery/emergency mode operation.

Installation:

- Universal plate for mounting to standard 3 1/2" and 4" square electrical boxes. All connections are made from connections at the rear of the unit.
- Optional back-box accessory available for surface conduit application. See BB-Geo accessories.

Listings:

- UL 1598 listed for use in wet locations
- Drivers IP66 and RoHS compliant
- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org

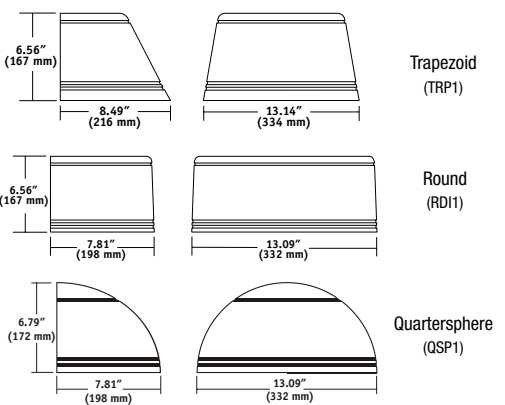
Warranty:

- For more information visit: <http://www.hubbelloutdoor.com/resources/warranty/>

PRODUCT IMAGE(S)



DIMENSIONS



SHIPPING INFORMATION

Catalog Number	Weight (lbs)	Carton Dimensions		
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)
TRP1	11.5	17.0	9.9	10.0
RD11	11.5	18.0	11.0	9.25
QSP1	10.5	17.0	9.6	10.5

CERTIFICATIONS/LISTINGS



*3000K and warmer CCTs only



ORDERING INFORMATION

ORDERING EXAMPLE: TRP-12L-20-4K-3-1-BL-SCP-EH

HOUSING	VERSION	WATTAGE	CCT/CRI	DISTRIBUTION	VOLTAGE	FINISH	CONTROL OPTIONS	OPTIONS
TRP1 Trapezoid	12L 12 LEDs	15 15 watts	3K7 3000K, 70CRI	2 Type II	U 120-277	BL Black	PCU Button Photocell	F ¹ Fusing (only available with STD fixture configuration, 120-277V only)
RD11 Radius		20 20 watts	4K7 4000K, 70CRI	3 Type III	1 120	DB Bronze	SCP ^{2,3} Programmable Motion Sensor	E ¹ Battery Pack (0°C)
QSP1 Quartersphere		30 30 watts	5K7 5000K, 70CRI	4 Type IV	2 208	GR Gray	SPECIFY SCP HEIGHT	EH ¹ Battery Pack (-30°C) with heater
					3 240	PS Platinum		
					4 277	WH White		
						CC Custom	8F Up to 8ft mount height	
							20F Up to 20ft mount height	

¹ Voltage specific (120 or 277V only)

² Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120-277V only

³ PCU option not applicable, included in sensor

⁴ Must specify input voltage (120, 208, 240 or 277)



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TRP1/RD11/QSP1-SPEC
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LEC-Ward Burton & Co.
Lighting Manufacturers Representatives
St. Louis, MO

Job Name:
OLIVE 20 APARTMENT BLDG

Catalog Number:
TRP1-12L20-4K7-4-UNV-DB

Notes:

Type:

7.2.b

WP

ACCESSORIES - Order separately

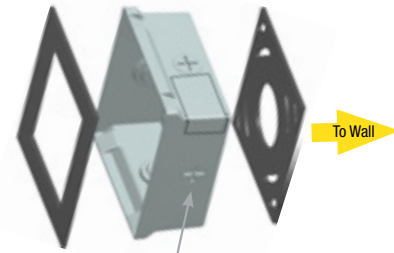
Catalog Number	Description
SCP-REMOTE ²	Remote control for SCP option. Order at least one per project to program and control.
BB-GEO-XX	Back box with 4 - 1/2" threaded conduit holes, specify finish by replacing "XX" with finish selection, eg. Dark Bronze "DB"

² Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120V-277V only



BB-GEO-XX - Mounted to luminaire

BB-GEO-XX



Fixture gasket 4 - 1/2" conduit entries Wall gasket

PERFORMANCE DATA (AC/Standard Configurations)

# OF LEDS	DRIVE CURRENT	SYSTEM WATTS	DIST. TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
				LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G
12	350mA	13.9	2	1635	118	1	1	1	1577	113	1	1	1	1497	108	1	1	1
			3	1613	116	1	0	1	1556	112	1	0	1	1477	106	1	0	1
			4	1607	116	0	0	1	1550	111	0	0	1	1471	106	0	0	1
			2	2268	114	1	1	1	2176	109	1	1	1	2077	104	1	1	1
	500mA	19.9	3	2245	113	1	0	1	2140	108	1	0	1	2049	103	1	0	1
			4	2229	112	0	0	1	2150	108	0	0	1	2041	103	0	0	1
			2	2942	104	1	1	1	2885	102	1	1	2	2721	96	1	1	1
			3	2912	103	1	0	1	2836	101	1	0	1	2685	95	1	0	1
			4	2892	103	1	0	1	2789	99	1	0	1	2674	95	1	0	1
	700mA	28.2	2	2942	104	1	1	1	2885	102	1	1	2	2721	96	1	1	1
			3	2912	103	1	0	1	2836	101	1	0	1	2685	95	1	0	1
			4	2892	103	1	0	1	2789	99	1	0	1	2674	95	1	0	1

Electrical Data

Input Power Consumption

Drive Current (mA)	Input Voltage (V)	System Power (w)	Current (Amps)
350mA	120	13.9	0.12
	277		0.05
500mA	120	19.9	0.17
	277		0.07
700mA	120	28.2	0.24
	277		0.10

Battery backup units consume additional power during charging (maximum 32.2 watts for E, 50.7 watts for EH)

Projected Lumen Maintenance

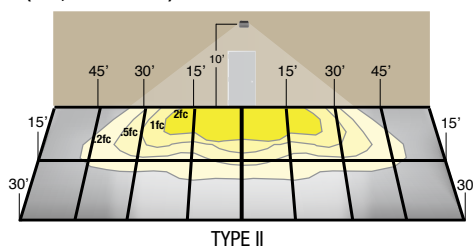
Ambient Temp.	Operating Hours						L70 (hours)
	0	25,000	50,000	TM-21-11 ¹	60,000	100,000	
25°C/77°F	1.00	0.98	0.97	0.95	0.91	>345,000	
40°C/104°F	1.00	0.96	0.95	0.92	0.87	>268,000	

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

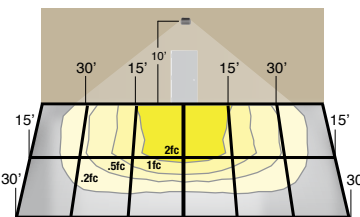
AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0° C	32° F	1.02
10° C	50° F	1.01
20° C	68° F	1.00
25° C	77° F	1.00
30° C	86° F	1.00
40° C	104° F	0.99
50° C	122° F	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

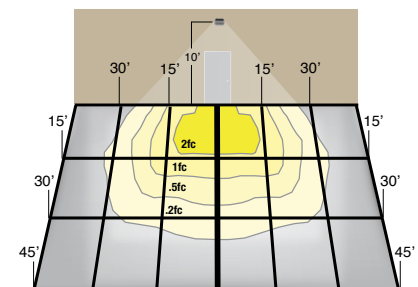
PHOTOMETRIC REPORTS (30w, 4000K shown)



TYPE II



TYPE III



TYPE IV (Forward throw)



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**GeoPak - Battery Back Up**

Functional Circuitry: Transient surge protection device on AC input. Upon failure of the normal utility power, an LED driver is automatically activated to power the emergency LEDs. Upon resumption of normal utility power, the LED driver is turned off, and the battery is recharged through a micro-controller based 3-stage charger. The battery is a maintenance-free Lithium Iron Phosphate (LiFePo) type. A low voltage battery disconnect (LVD) feature protects the battery from severe damage during prolonged power failures. Manual testing is available at any time using the push-to-test button. The optional heater features a heating wrap and thermostat to maintain optimal battery temperature during charge or discharge. The GeoPak includes the following features:

- Battery re-charge within 24 hours
- AC Lock-out circuit
- Self-diagnostics monitors LED status, LED driver circuit, battery capacity and charger function and displays any fault detection by means of a flashing code.

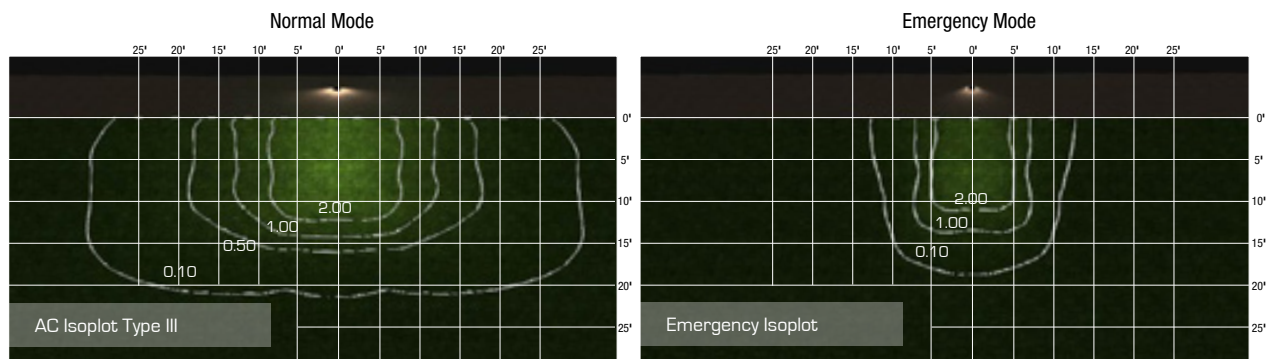
- Self-Test feature runs a 1 minute test once a month and an alternating 30 or 60 minute test once every 6 months. Multi-color LED indicator provides visible fault detection and charging status.
- User initiated 1, or 90-minute system test feature
- 15 minute re-transfer delay
- Automatic unit transfer in brown-out conditions (below 80% of nominal AC input voltage).
- Battery backup units consume 6 watts when charging a dead battery and 2 watts during maintenance charging. EH (units with a heater) consume up to an additional 8 watts when charging if the battery temp is lower than 10°C

Emergency Photometric Performance (1 fc average .1 fc minimum)

28' multi-unit spacing at 10' MH with 0/30/10 reflectances on a 6' path

26' x 10' single unit coverage at 10' MH with 0/30/10 reflectances

6' x 19' forward throw coverage at 10' MH with 0/30/10 reflectances



Provides Life Safety Code average illuminance of 1.0 fc. Assumes open space with no obstructions.

Diagrams for illustration purposes only, please consult factory for application layout.

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JUNE 1, 2018 8:51 AM**Packet Pg. 157**











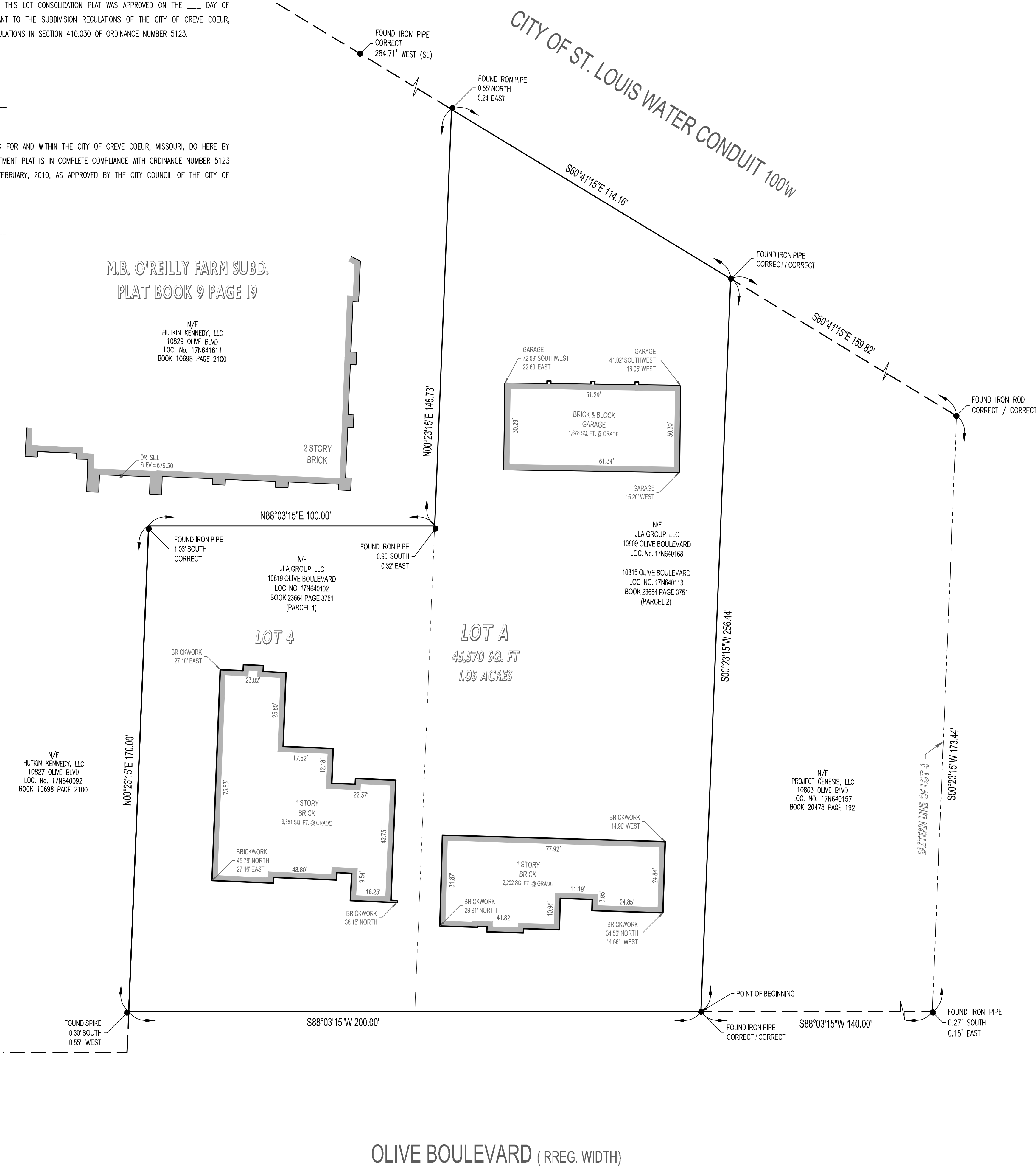
IT IS HEREBY CERTIFIED THAT THIS LOT CONSOLIDATION PLAT WAS APPROVED ON THE ____ DAY OF _____, 2020, PURSUANT TO THE SUBDIVISION REGULATIONS OF THE CITY OF CREVE COEUR, MISSOURI, AS OUTLINED IN SAID REGULATIONS IN SECTION 410.030 OF ORDINANCE NUMBER 5123.

PLANNING AND ZONING COMMISSION
CITY OF CREVE COEUR, MISSOURI

PLANNING AND ZONING CHAIR

I, DEBORAH RYAN, CITY CLERK FOR AND WITHIN THE CITY OF CREVE COEUR, MISSOURI, DO HERE BY CERTIFY THAT THIS BOUNDARY ADJUSTMENT PLAT IS IN COMPLETE COMPLIANCE WITH ORDINANCE NUMBER 5123 APPROVED ON THE 22ND DAY OF FEBRUARY, 2010, AS APPROVED BY THE CITY COUNCIL OF THE CITY OF CREVE COEUR.

DEBORAH RYAN, MPCC
CITY CLERK



OWNERS CERTIFICATION:

THE UNDERSIGNED OWNER OF THE PARCEL OF GROUND DESCRIBED IN THE FOREGOING SURVEYORS CERTIFICATE, HAS CAUSED SAID PARCEL TO BE SURVEYED IN THE MANNER AS SHOWN ON THIS PLAT, AND THE SUBDIVISION IS HEREAFTER TO BE KNOWN AS:

"LOT CONSOLIDATION PLAT OF PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION"

BY: _____
NAME: _____
TITLE: _____

STATE OF MISSOURI }
CITY/COUNTY OF ST. LOUIS } S.S.

ON THIS ____ DAY OF _____, 20____, BEFORE ME APPEARED _____, TO ME PERSONALLY KNOWN, WHO, BEING BY ME DULY SWORN, DID SAY THAT _____ IS THE AUTHORIZED MEMBER OF JLA GROUP, L.L.C., A LIMITED LIABILITY COMPANY OF THE STATE OF MISSOURI, AND THAT SAID INSTRUMENT WAS SIGNED ON BEHALF OF SAID LIMITED LIABILITY COMPANY, BY AUTHORITY OF ITS MEMBERS, AND SAID SOLE OWNER ACKNOWLEDGED SAID INSTRUMENT TO BE THE FREE ACT AND DEED OF SAID LIMITED LIABILITY COMPANY.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL AT MY OFFICE IN THE COUNTY AND STATE AFORESAID, THE DAY AND YEAR FIRST ABOVE WRITTEN.

MY TERM EXPIRES _____ NOTARY PUBLIC

PETITIONER:

JLA GROUP, LLC
ATTN: MR. A.J. ADEWUNMI
1917 RUTGER STREET
SAINT LOUIS, MO 63104

E - AJADEWUNMI@GMAIL.COM
T - (314) 602-9030

DEED DESCRIPTION (BOOK 23664 PAGE 3751):

PARCEL 1:
PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION IN SECTION 2, TOWNSHIP 45 NORTH, RANGE 5 EAST, FRONTING 100 FEET ON THE NORTH LINE OF OLIVE STREET ROAD BY A DEPTH NORTHWARDLY BETWEEN PARALLEL LINES OF 200 FEET AND, BOUNDED EAST BY WEST LINE OF PROPERTY CONVEYED TO ERNEST C. LANDERS AND WIFE BY DEED RECORDED IN BOOK 2625 PAGE 544 OF THE ST. LOUIS COUNTY RECORDS, EXCEPTING THEREFROM THAT PART CONVEYED TO THE STATE OF MISSOURI, ACTING BY AND THROUGH THE STATE HIGHWAY COMMISSION OF MISSOURI ACCORDING TO INSTRUMENT RECORDED IN BOOK 3927 PAGE 547.

PARCEL 2:
PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION IN SECTION 2, TOWNSHIP 45 NORTH, RANGE 5 EAST, AND DESCRIBED AS HAVING A FRONTAGE 100 FEET ON THE NORTH LINE OF OLIVE STREET ROAD BY A DEPTH NORTH, BETWEEN PARALLEL LINES TO THE SOUTHWEST LINE OF THE CITY OF ST. LOUIS WATER CONDUIT RIGHT OF WAY, BOUNDED EAST BY WEST LINE OF PROPERTY CONVEYED TO JOSEPH METZLER AND WIFE BY DEED RECORDED IN BOOK 2129 PAGE 72 OF THE ST. LOUIS COUNTY RECORDS, EXCEPTING THEREFROM THAT PART CONVEYED TO THE STATE OF MISSOURI, ACTING BY AND THROUGH THE STATE HIGHWAY COMMISSION OF MISSOURI ACCORDING TO INSTRUMENT RECORDED IN BOOK 3927 PAGE 547.

OUT-BOUNDARY LEGAL DESCRIPTION:

A TRACT OF LAND BEING PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION, RECORDED IN PLAT BOOK 9 PAGE 19, ST. LOUIS COUNTY RECORDER'S OFFICE, IN SECTION 2, TOWNSHIP 45 NORTH, RANGE 5 EAST, CITY OF CREVE COEUR, ST. LOUIS COUNTY MISSOURI MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTHERN LINE OF OLIVE BOULEVARD, IRREGULAR WIDTH, SAID POINT BEING SOUTH 88 DEGREES 03 MINUTES 15 SECONDS WEST 140.00 FEET, FROM THE EASTERN LINE OF SAID LOT 4;
THENCE SOUTH 88 DEGREES 03 MINUTES 15 SECONDS WEST 200.00 FEET, ALONG THE NORTHERN LINE OF SAID OLIVE BOULEVARD, TO A POINT IN THE EASTERN LINE OF HUTKIN KENNEDY, LLC PROPERTY, RECORDED IN BOOK 10698 PAGE 2100, ST. LOUIS COUNTY RECORDER'S OFFICE;
THENCE ALONG THE EASTERN LINE OF SAID HUTKIN KENNEDY, LLC PROPERTY, THE FOLLOWING COURSES AND DISTANCES, NORTH 00 DEGREES 23 MINUTES 15 SECONDS EAST 170.00 FEET, TO A POINT, NORTH 88 DEGREES 03 MINUTES 15 SECONDS EAST 100.00 FEET, TO A POINT AND NORTH 00 DEGREES 23 MINUTES 15 SECONDS EAST 145.73 FEET, TO A POINT IN THE SOUTHERN LINE OF CITY OF ST. LOUIS WATER CONDUIT, 100 FEET WIDE;
THENCE SOUTH 60 DEGREES 41 MINUTES 15 SECONDS EAST 114.16 FEET, ALONG THE SOUTHERN LINE OF SAID CITY OF ST. LOUIS CITY WATER CONDUIT, TO A POINT;
THENCE SOUTH 00 DEGREES 23 MINUTES 15 SECONDS WEST 256.44 FEET, ALONG A LINE PARALLEL WITH THE EASTERN LINE OF SAID LOT 4, TO A POINT IN THE NORTHERN LINE OF SAID OLIVE BOULEVARD TO THE POINT OF BEGINNING AND CONTAINING 45,570 SQUARE FEET OR 1.05 ACRES AS PREPARED BY PITZMAN'S COMPANY.

SURVEYORS NOTES:

- SOURCE OF TITLE: NO TITLE WAS PROVIDED AT TIME OF THE SURVEY.
- BEARING BASIS: MISSOURI STATE PLANE GRID NORTH
STATION: SL-23 DATE: JUNE 2012
NORTH: 1,031,978.85 (F) EAST: 834,662.04 (F)
- STATE PLANE NOTE: THE HORIZONTAL STATE PLANE GRID COORDINATES SHOWN HEREON WERE REESTABLISHED AND VERIFIED BY GPS OBSERVATIONS. THESE OBSERVATIONS WERE CONDUCTED USING OF CELLULAR EQUIPPED TRIMBLE R6 GNSS ROVER AND A TRIMBLE TSC2 DATA COLLECTOR.
THE DATA WAS OBTAINED UTILIZING THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION GLOBAL NAVIGATION SATELLITE REAL TIME NETWORK FOR CONTINUOUS OPERATING STATIONS. THIS INFORMATION WAS ADOPTED AND CHECKED BY FIELD GPS OBSERVATION USING ONE (1) NAD83 (2011) ADJUSTED POINT AS REFERENCED ABOVE.
- ZONING DISTRICT: "CB"- CORE BUSINESS DISTRICT PER THE CITY OF CREVE COEUR ZONING MAP, DATED SEPTEMBER 20, 2019
- ADJOINING OWNERSHIPS SHOWN HEREON, ARE BASED UPON PUBLIC RECORD RESEARCH COMPLETED ON OCTOBER 23, 2019.
- MONUMENTS TO BE SET AFTER PLAT HAS BEEN APPROVED.

JLA GROUP, LLC:

THIS IS TO CERTIFY THAT PITZMAN'S CO. OF SURVEYORS & ENGINEERS, IN NOVEMBER 2019, BY THE ORDER OF JLA GROUP, LLC, HAS EXECUTED A LAND SURVEY AND LOT CONSOLIDATION PLAT OF THE PARCELS OF GROUND DESCRIBED HEREON, BEING IN THE CITY OF CREVE COEUR, SAINT LOUIS COUNTY, MISSOURI AND THE RESULTS ARE CORRECTLY SHOWN ON THIS PLAT. THIS SURVEY WAS PERFORMED IN ACCORDANCE WITH THE MISSOURI STANDARDS FOR PROPERTY BOUNDARY FOR "URBAN" SURVEYS (20 CSR 2030-16.040).

THE FIELD WORK WAS COMPLETED ON NOVEMBER 11, 2019.

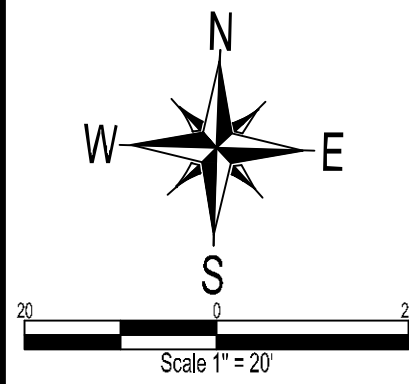
IN WITNESS WHEREOF, IT HAS SIGNED & SEALED THE FOREGOING.

WILLIAM K. BERTHOLD, MOPLS 2619
PITZMAN'S CO. OF SURVEYORS & ENGINEERS
CORPORATE LICENSE NO. 10-D

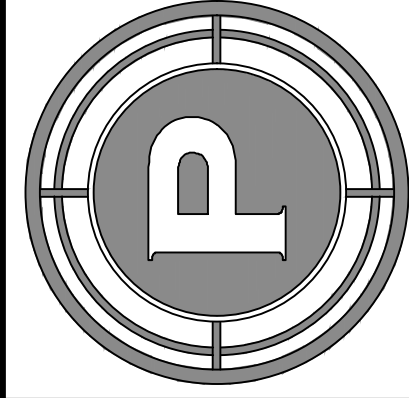
#2725-R SUTTON BOULEVARD
SAINT LOUIS, MISSOURI 63143
T: 314-781-5665
F: 314-781-1801
E: BILL@PITZMANS.COM



LOT CONSOLIDATION PLAT
PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION
PLAT BOOK 9 PAGE 19
CITY OF CREVE COEUR
ST. LOUIS COUNTY, MISSOURI.



Pitzman's Co.
of Surveyors & Engineers
2725 Sutton Blvd.
St. Louis, MO 63143
P (314) 781-5665 F (314) 781-1801
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est. 1859



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ORDER#: 19-637SUB
C.B. OR F.P.#:
DRAWN BY: A K B
DEPUTY: B R W
REVIEWED BY: W K B
DATE: DEC 18, 2019

LOCATOR #
17N640102
SHEET
1 of 1



**LEGAL DESCRIPTION
LOT CONSOLIDATION PLAT
PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION
10809-19 OLIVE BOULEVARD**

A TRACT OF LAND BEING PART OF LOT 4 OF M.B. O'REILLY FARM SUBDIVISION, RECORDED IN PLAT BOOK 9 PAGE 19, ST. LOUIS COUNTY RECORDER'S OFFICE, IN SECTION 2, TOWNSHIP 45 NORTH, RANGE 5 EAST, CITY OF CREVE COEUR, ST. LOUIS COUNTY MISSOURI MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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THENCE ALONG THE EASTERN LINE OF SAID HUTKIN KENNEDY, LLC PROPERTY, THE FOLLOWING COURSES AND DISTANCES, NORTH 00 DEGREES 23 MINUTES 15 SECONDS EAST 170.00 FEET, TO A POINT, NORTH 88 DEGREES 03 MINUTES 15 SECONDS EAST 100.00 FEET, TO A POINT AND NORTH 00 DEGREES 23 MINUTES 15 SECONDS EAST 145.73 FEET, TO A POINT IN THE SOUTHERN LINE OF CITY OF ST. LOUIS WATER CONDUIT, 100 FEET WIDE;
THENCE SOUTH 60 DEGREES 41 MINUTES 15 SECONDS EAST 114.16 FEET, ALONG THE SOUTHERN LINE OF SAID CITY OF ST. LOUIS CITY WATER CONDUIT, TO A POINT;
THENCE SOUTH 00 DEGREES 23 MINUTES 15 SECONDS WEST 256.44 FEET, ALONG A LINE PARALLEL WITH THE EASTERN LINE OF SAID LOT 4, TO A POINT IN THE NORTHERN LINE OF SAID OLIVE BOULEVARD TO THE POINT OF BEGINNING AND CONTAINING 45,570 SQUARE FEET OR 1.05 ACRES AS PREPARED BY PITZMAN'S COMPANY.

#

December 20, 2019