

**PLANNING COMMISSION REPORT**  
**Regular Agenda – Public Hearing Item:**

PC Staff Report  
08/25/14

**ITEM NO. 1      SPECIAL USE PERMIT FOR PUMP STATION NO. 10 ADDITION; 3055 LOUISIANA ST (SLD)**

**SUP-14-00259:** Consider a Special Use Permit for a pump station, a minor utility, to be located at 3055 Louisiana Street, Pump Station No. 10 Addition. Submitted by the City of Lawrence, property owner of record.

**STAFF RECOMMENDATION:** Staff recommends approval of SUP-14-00259, a Special Use Permit for Pump Station No. 10 located at 3055 Louisiana Street, a *minor utility*, based upon the findings presented in the body of the staff report and subject to the following condition:

1. Approval of a Floodplain Development Permit prior to issuance of a building permit.

**Applicant's Reason for Request:**

*"SUP required for use of property as a pump station site."*

**KEY POINTS**

- This pump station is a *Minor Utility*, that will serve more than one specific development.
- This request is to construct the pump station on property owned by the City of Lawrence.
- The regulatory floodplain encumbers this property. A local floodplain development permit is required.
- The Utilities Department held neighborhood meetings to present the project and to allow public comment on the building design.
- Improvement is included in the City's Capital Improvement Plan.

**ASSOCIATED CASES/OTHER ACTION REQUIRED**

- City Commission approval of the Special Use Permit and adoption of ordinance.
- Administrative review and approval of Floodplain Development Permit for development activity associated with the pump station.

**ATTACHMENTS**

1. Area Map
2. Site Plan
3. Fact Sheet
4. Building Elevations
5. Photo simulation of improvement

**PLANS AND STUDIES REQUIRED**

- *Traffic Study* – Not required for project.
- *Downstream Sanitary Sewer Analysis* – Not required for a pump station project.
- *Drainage Study* – A drainage study is not required for this project because downstream flooding is confined to the regulatory floodplain.
- *Retail Market Study* – Not applicable to project.

## PUBLIC COMMENT

- A neighbor requested information regarding recreation path extensions in the area and connectivity between Naismith Valley Park and Broken Arrow Park. Information was provided to his satisfaction prior to publication of the staff report.

## GENERAL INFORMATION

Current Zoning and Land Use: OS-FP (Open Space-Flood Plain Overlay) District; undeveloped land.

Surrounding Zoning and Land Use: To the north: RS7 (Single-Dwelling Residential) District; Existing Religious Institution with surface parking lot and residence.

To the west: OS-FP (Open Space-Flood Plain Overlay ) District; Naismith Valley Park

To the south: A (Agricultural) District and B-2 (General Business District); realigned 31<sup>st</sup> Street and South Lawrence Trafficway right-of-way and an Assembly Use known as "Steve's Place".

To the east: OS (Open Space) District; Broken Arrow Park and Wakarusa Township Fire Station.

## Summary of Special Use

This pump station is a *Minor Utility*, which serves more than one specific development; therefore, approval is required through a Special Use Permit per Section 20-530 of the Land Development Code. The facility will include a building enclosing the pump station and a substantial area dedicated to open space. The building design features a green roof with berms providing screening between the pump station and the residential uses to the north. The project was included in a community charrette to identify an appropriate building design to complement the character of the area.

This pump station is defined as a *minor utility* in Section 20-1765 of the Land Development Code: "*MINOR UTILITIES: Public utilities that have a local impact on surrounding properties. Typical uses include electrical and gas distribution substations, lift stations, telephone switching boxes, and water towers. Excludes 'Wireless Telecommunication Facilities' use types.*"

The proposed improvements will be located on the north portion of the site. The south portion will remain as open space. The plans show a future connection of the Naismith Valley trail extended to Louisiana Street as shown on the plans.

SITE SUMMARY:		
	Existing	Proposed
Property Area (sq ft):	247,856 SF (5.68 Acres)	247,856 SF (5.68 Acres)
Total Impervious Area (sq ft):	0	30,056 SF
Total Pervious Area (sq ft):	247,856 SF	217,800 SF

### **Landscaping and Screening**

*Street Trees:* Street trees are proposed along Louisiana Street and the realigned 31<sup>st</sup> Street as shown on the site plan.

*Interior and Perimeter Landscaping:* Interior parking lot standards apply to lots with 11 or more parking spaces. Perimeter landscaping standards apply only to lots with 5 or more spaces. This use requires only 1 parking space. These standards are not applicable to this project. The parking space is un-striped and will be accommodated within the paved area surrounding the pump station.

*Buffer Yard Requirements:* This property is zoned OS (Open Space) District. The property abuts OS zoning to east and west. Residential zoning is located to the north, County Agricultural and General Business zoning is located to the south. There are no buffer yard requirements for the OS Zoning District. However, development of this project specifically addressed the orientation of the development as it relates to both the residential neighborhood to north and the street frontages to the south and west to provide a visually appealing view.

*Mechanical Equipment:* The plan states that all mechanical equipment will be internal to the building.

### **Lighting**

The applicant intends to use building mounted lighting for this site. All lighting fixtures will need to be directed down and be provided with a full cut-off shields. Staff has approved the proposed fixtures intended to be used for this project.

### **Applicable Design Guidelines**

There are no specific design guidelines applicable to this proposed improvement. Building elevations and site landscaping have been developed through a series of public workshops and with input from City Parks and Recreation staff.

The pump station will be surrounded by a concrete drive area to allow full access to the pump station as needed for maintenance.

### **Access**

Vehicular access to this site is provided from a driveway to Louisiana Street.

### **Pedestrian Connectivity**

This pump station site is not intended for public access. The plan shows an extension of the Naismith Valley park recreation path along the southern portion of the property that provides connection to Louisiana Street and the SLT recreation path. Ultimately, this path would connect the existing Naismith Valley park trail to the Baker Wetlands area.

Public sidewalk will be located on both sides of Louisiana Street as well as the north side of 31<sup>st</sup> Street between the Menards Site and Louisiana Street. City staff is working with KDOT to upgrade the sidewalk along the north side of 31<sup>st</sup> Street from a planned 6' sidewalk to a 10' shared use path. It has not yet been confirmed that this upgrade will be made.

The combination of local, state, public and private investments in this area will result in an extended network for both pedestrians and non-motorized vehicles in the immediate vicinity.

### **Floodplain**

This property is located within the regulatory floodplain and is subject to a local floodplain development permit.

### **Review and Decision-Making Criteria (20-1306(i))**

#### **1. WHETHER THE PROPOSED USE COMPLIES WITH ALL APPLICABLE PROVISIONS OF THIS DEVELOPMENT CODE**

Applicant's Response: *Yes.*

The proposed use, a *minor utility* that serves more than one subdivision, is an allowed use in the proposed OS (Open Space) District subject to Special Use Permit approval. As the property is encumbered with the Regulatory Floodplain, a Floodplain Development Permit is required per Section 20-1203 and must be approved prior to the release of building permits.

A minimum of one off-street parking space is required for minor utilities. The site will be accessed by utility trucks for routine maintenance and there will be no employees regularly on site; therefore, only one parking space is required. Access to the site is accommodated via concrete driveway approach from Louisiana Street. Off-street parking is accommodated within the enclosed area.

A point-by-point illumination array lighting plan is not required. Basic site lighting is proposed for this site. Lighting fixtures will be required to have full cut-off shields, as noted on the plans.

**Staff Finding** – The Special Use Permit site plan complies with the requirements set out in the Development Code.

#### **2. WHETHER THE PROPOSED USE IS COMPATIBLE WITH ADJACENT USES IN TERMS OF SCALE, SITE DESIGN, AND OPERATING CHARACTERISTICS, INCLUDING HOURS OF OPERATION, TRAFFIC GENERATION, LIGHTING, NOISE, ODOR, DUST AND OTHER EXTERNAL IMPACTS**

Applicant's Response: *Yes.*

The proposed request is for the construction of a new pump station that includes both below ground and above ground improvements.

The pump station is located on the west side of Louisiana Street. Park and open space uses are located to the east and west of this site. An existing religious institution and residence are located to the north. A county commercial use is located on the south side of 31<sup>st</sup> street to the southwest of the pump station. The facility will not be manned. The design of the building is intended to blend with the surrounding natural and neighborhood elements in the immediate vicinity.

Traffic generated by this site is related to maintenance and upkeep of the site. The proposed use is compatible with the adjacent uses.

**Staff Finding** – The proposed pump station will be compatible with adjacent uses.

**3. WHETHER THE PROPOSED USE WILL CAUSE SUBSTANTIAL DIMINUTION IN VALUE OF OTHER PROPERTY IN THE NEIGHBORHOOD IN WHICH IT IS TO BE LOCATED**

Applicant's Response: *No.*

This pump station is part of a planned improvement that will combine wastewater flow from five existing interceptor sewers and one future interceptor sewer to serve the western and southern parts of Lawrence. The design of the site improvements is specifically intended to blend with the open space uses and residential elements of the neighborhood to the north.

**Staff Finding** – The construction of this Pump Station is not anticipated to result in any diminution of value of other property in the neighborhood.

**4. WHETHER PUBLIC SAFETY, TRANSPORTATION AND UTILITY FACILITIES AND SERVICES WILL BE AVAILABLE TO SERVE THE SUBJECT PROPERTY WHILE MAINTAINING SUFFICIENT LEVELS OF SERVICE FOR EXISTING DEVELOPMENT**

The pump station is a public facility intended to serve the western and southern portions of Lawrence and to accommodate future growth. The site has been designed to provide access for periodic maintenance.

**Staff Finding** – The proposed use, a *Minor Utility*, is a public service, which would serve the surrounding area. Sufficient safety, transportation and utility facilities will be available to serve the subject property.

**5. WHETHER ADEQUATE ASSURANCES OF CONTINUING MAINTENANCE HAVE BEEN PROVIDED**

This proposed development will be owned and operated by the City of Lawrence. City staff is responsible for continuing site maintenance.

**Staff Finding** – The site plan will function as the enforcement document to assure that maintenance and use of the property is consistent with the approval.

**6. WHETHER THE USE WILL CAUSE SIGNIFICANT ADVERSE IMPACTS ON THE NATURAL ENVIRONMENT**

Applicant's Response: *"No, This is a minor utility use and is regulated and permitted through KDHE."*

This property is subject to review and compliance with the floodplain regulations of the Land Development Code. Adequate oversight will be provided for the protection of the natural environment through the local floodplain management regulations.

**Staff Finding** – The proposed use, as conditioned, should not cause significant adverse impacts on the natural environment.

**7. WHETHER IT IS APPROPRIATE TO PLACE A TIME LIMIT ON THE PERIOD OF TIME THE PROPOSED USE IS TO BE ALLOWED BY SPECIAL USE PERMIT AND, IF SO WHAT THAT TIME PERIOD SHOULD BE.**

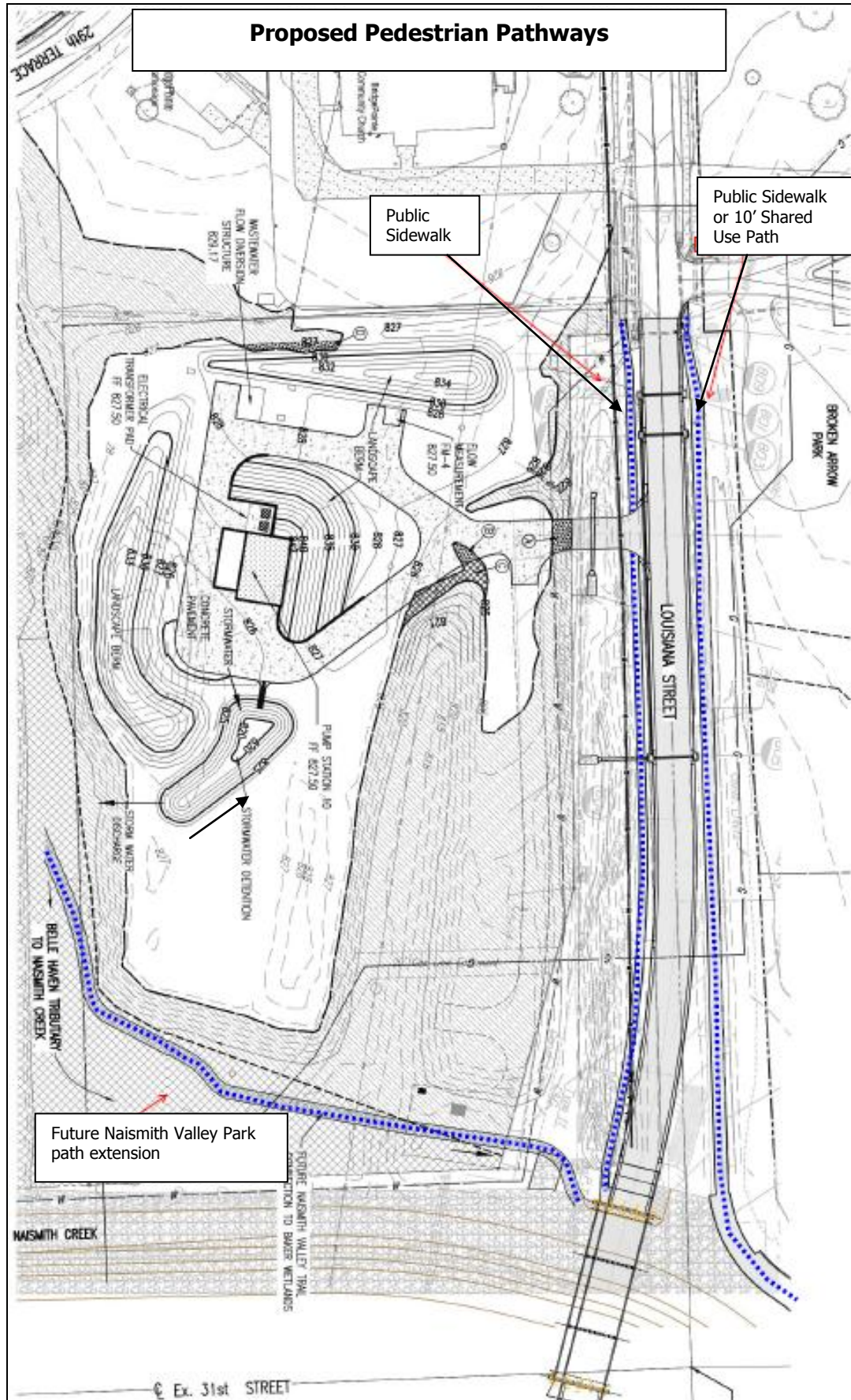
Time limits are established on Special Use Permits to permit a periodic review to determine if the use remains compliant with the area or if a rezoning would be appropriate. A pump station is

part of necessary infrastructure whose life span will be determined by demand and operational characteristics. It would not be appropriate to place a time limit on this use.

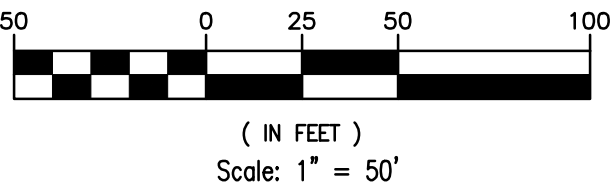
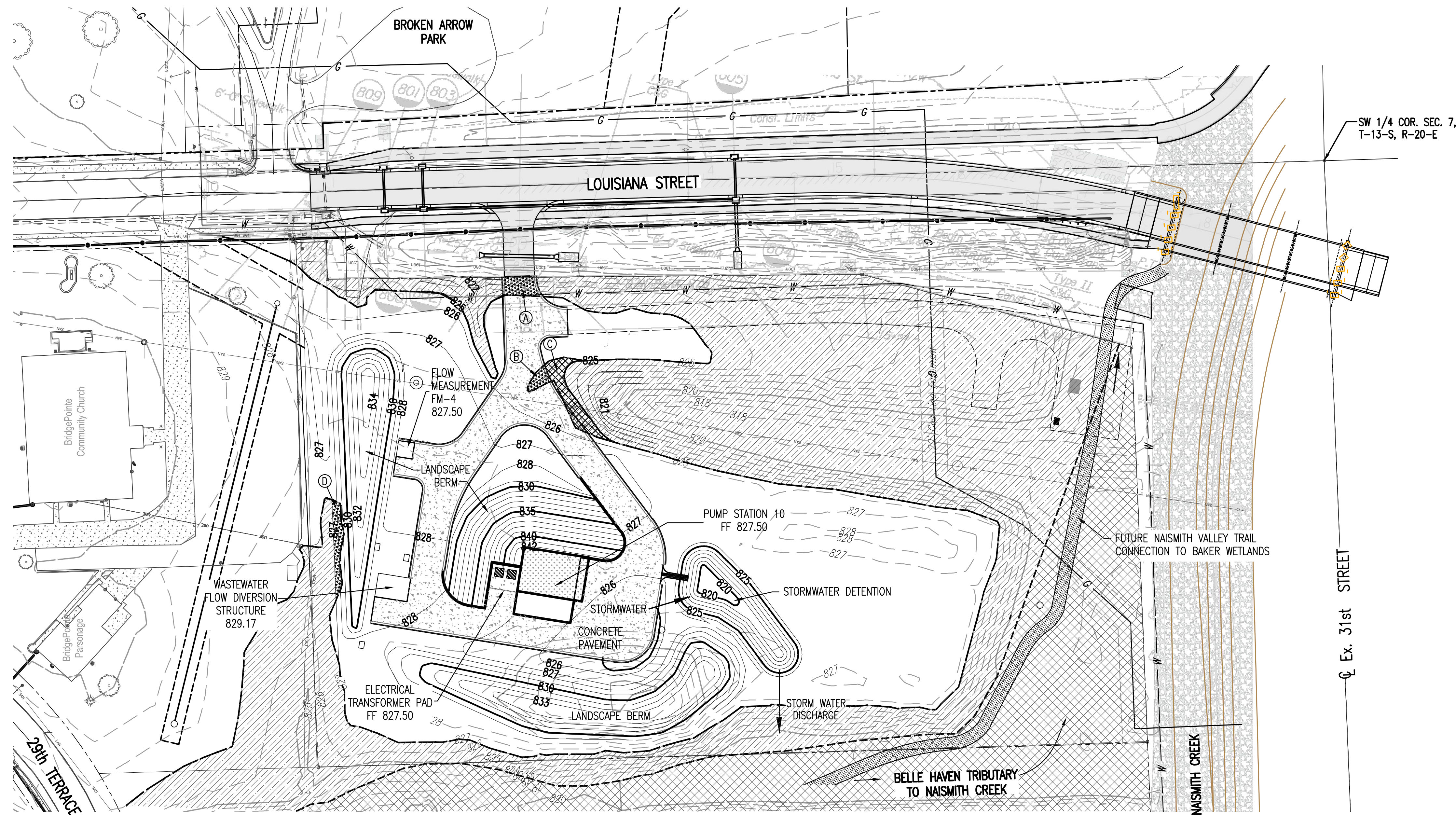
**Staff Finding** – The project is part of a citywide system upgrade; therefore, it would not be appropriate to place a time limit on this use.

**Conclusion**

The proposed pump station will positively impact the area by improving wastewater flow and providing system redundancies. Additionally, the system is designed to facilitate future growth of Lawrence consistent with the adopted Utility Master Plan.







- LEGEND**
- Ex. Section Line
  - Ex. Property Line
  - Flow Distribution
  - Manhole (Underground Structure)
  - Concrete Structure
  - Ex. Gas Line
  - Ex. Water Line
  - Ex. Fire Hydrant
  - Ex. Water Meter
  - Ex. Water Valve
  - Ex. Gas Meter
  - Ex. Overhead Electric Line

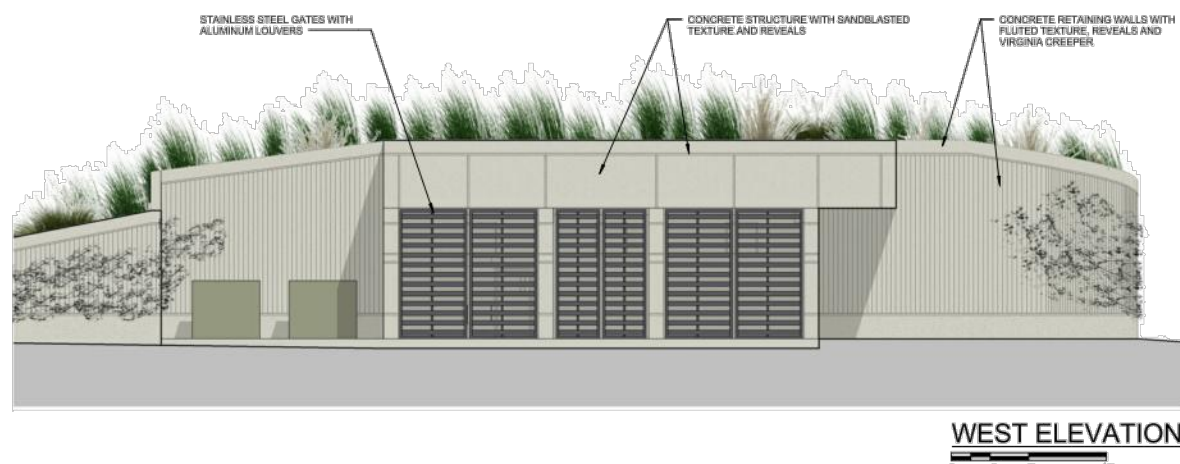
- GENERAL NOTES:**
- See sheet SP-3 for Landscaping Plan.
  - See attached information for "Green" roof details.
  - 100 year Flood Plain elevations vary 825± SE to 827± NW.
  - Flood Plain Fill Remediation for areas A+B+C+D will include stormwater detention volume as indicated.
  - Assumed Flood Plain Control elevation for the site (per City Direction) = 826-826.50 minimum FF elevation set @ 827.50.
  - Future Trail shown for illustration only.

- LEGEND**
- 100 YEAR FLOOD PLAIN
  - FLOODWAY
  - CONCRETE PAVEMENT

**PROPOSED SITE GRADING**



SOUTH ELEVATION



WEST ELEVATION



VIEW FROM W29th TER.

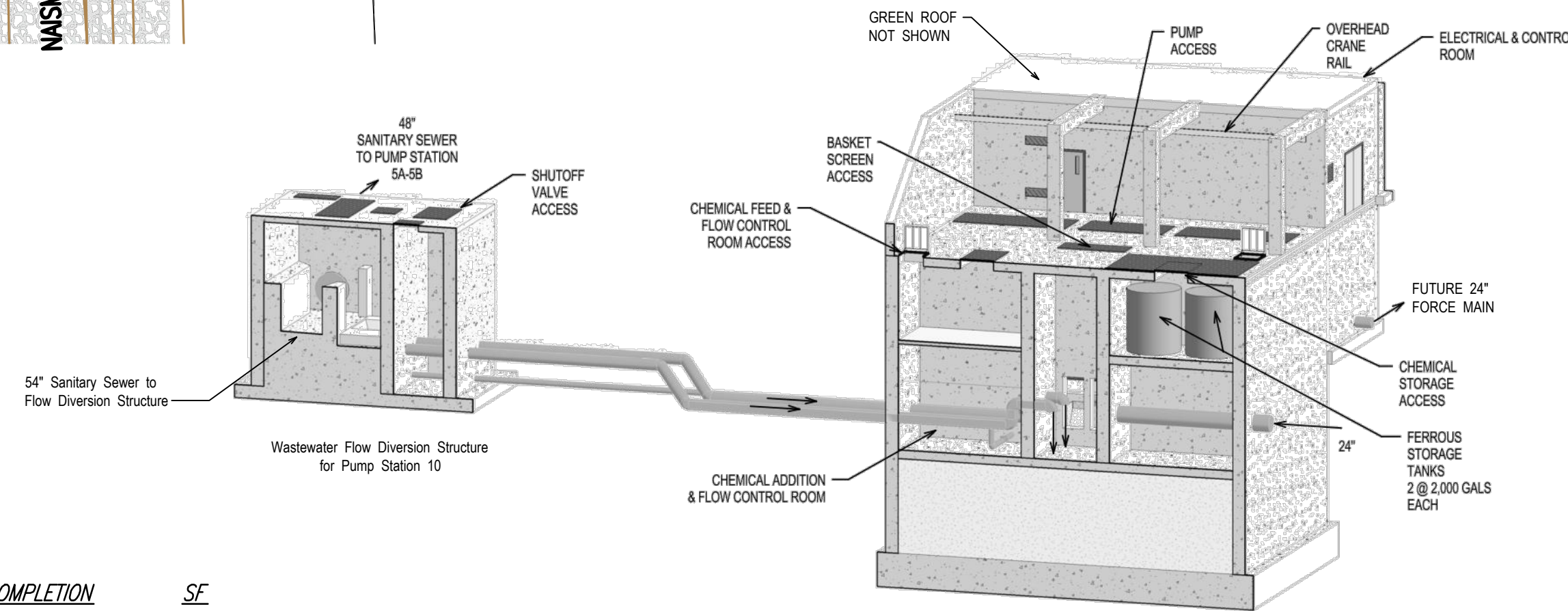


VIEW FROM CHURCH



VIEW FROM 31st & LA

**PRELIMINARY CONCEPT VIEWS**



BELOW GROUND SECTIONAL CONCEPT VIEW

**PROPERTY SURFACE SUMMARY:**


EXISTING	SF	AFTER PROJECT COMPLETION	SF
Total Buildings	0	Total Buildings	1,406
Total Pavement	0	Total Pavement	26,486
Total Impervious	0	Total Impervious	27,892
Total Pervious	247,856	Total Pervious	219,964
Total Property Area	247,856	Total Property Area	247,856

Total Area within 100 year Floodplain (existing) 111,058 SF (2.55 Acres)  
Impervious Area within Floodplain (existing) 0 SF

Total Area within 100 year Floodplain (proposed) 109,215 SF (2.51 Acres)  
Impervious Area within Floodplain (proposed) 540 SF (0.01 Acres)

- NOT FOR CONSTRUCTION -  
- PLANNING DOCUMENT -

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No.	Revision	By	Date
CITY OF LAWRENCE UTILITIES WAKARUSA CONVEYANCE SYSTEM  SPECIAL USE SITE PLAN - GRADING PUMP STATION NO. 10 ADDITION			
 PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 1263 SW TOPEKA BLVD., TOPEKA, KS 66612 785-233-8300 www.pec1.com			
Designed by	JLM	Job No.	13A14-002
Drawn by	DMS/BRM	Date	JUNE 2014
			SP-2



*IN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 13 SOUTH, RANGE 19 EAST  
OF THE SIXTH PRINCIPAL MERIDIAN, IN THE CITY OF LAWRENCE, DOUGLAS COUNTY, KANSAS*




**PUMP STATION 10 ADDITION, LOT 1 DESCRIPTION:**

Commencing at the Southeast corner of said Section 12; thence along the East line of the Southeast Quarter of said Section 12 North 01 degree 46 minutes 06 seconds West (bearing based on Warranty Deed recorded in Book 1100, Page 3990, to the Secretary of Transportation of the State of Kansas for procurement of right-of-way for the South Lawrence Trafficway Project) 800.00 feet; thence along the North and East lines of said Secretary of Transportation Deed the following 5 courses: South 88 degrees 13 minutes 54 seconds West 40.00 feet to the Point of Beginning; thence continuing South 88 degrees 13 minutes 54 seconds West, 30.00 feet; thence South 0 degrees 30 minutes 16 seconds East, 427.68 feet; thence South 15 degrees 06 minutes 04 seconds West, 223.40 feet; thence South 87 degrees 41 minutes 23 seconds West, 315.75 feet; thence parallel to the East line of the Southeast Quarter of said Section 12 North 01 degree 46 minutes 06 seconds West, 663.78 feet to the Southwest corner of Lot 1, Indian Hills Church of God, a subdivision in the said City of Lawrence; thence along the South line of said Lot 1, North 88 degrees 13 minutes 54 seconds East, 420.00 feet to the Southeast corner of said Lot 1 and the West right of way line of Louisiana Street, a city street in the City of Lawrence; thence along the West right of way line of said Louisiana Street South 01 degree 46 minutes 06 seconds East, 19.43 feet to the Point of Beginning. Said tract contains 5.69 acres, more or less.

*Existing Zoning OS-FP*

Robert J. Borsick LS-1180  
Bartlett & West Inc.  
544 Columbia Dr.  
Lawrence, KS. 66049  
785-749-9452  
785-749-5961 (Fax)



No.	Revision	By	Date
<p>CITY OF LAWRENCE UTILITIES WAKARUSA CONVEYANCE SYSTEM</p> <p>SPECIAL USE SITE PLAN PUMP STATION NO. 10 ADDITION</p>			
		<p>PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 1263 SW TOPEKA BLVD. TOPEKA, KS 66612 785-233-8300 <a href="http://www.pec1.com">www.pec1.com</a></p>	
Designed by	JLM	Job No.	13A14-002
Drawn by	DMS/LDS/BRM	Date	JUNE 2014
			SP-1

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## **Wakarusa Wastewater Treatment Plant and Conveyance System**

### **Pump Station 10 Fact Sheet**

#### **Why is this Project Essential to the Future of Lawrence?**

The 2012 Wastewater Facilities Master Plan identified Pump Station 10 as necessary to combine the wastewater flow from five existing interceptor sewers and one future interceptor sewer to serve the western and southern portions of Lawrence. The site chosen for this pump station is at the northwest corner of 31<sup>st</sup> and Louisiana Streets. The new pump station will split wastewater flow between the Kansas River Wastewater Treatment Plant and the new Wakarusa Wastewater Treatment Plant, currently under design and located on the Wakarusa River. The pump station is also being designed to accommodate future growth.

The pump station will be a state of the art facility, providing for flexibility, redundancy, and reliability of operation and transporting of wastewater flows. Although the pump station will be unmanned on a normal basis, it will be continuously monitored through the City's electronic control systems.

#### **The design and construction of the pump station addresses the following:**

**Noise** – Pump Station noise will be minimal with most mechanical equipment installed below ground level.

**Odor** – Chemical addition for odor control at the pump station and other future technologies are being designed into the current project.

**Reliability** – Multiple sources of electrical power, including the ability to utilize a generator unit, are included in the design to provide the most reliable service. The pump station will be tornado resistant to ensure continued emergency operations.

**Exterior Appearance** – Pump Station aesthetics will blend into the existing neighborhood and adjacent land uses.

**Coordination with South Lawrence Trafficway (SLT)** – All pump station and force main design and construction activities are being coordinated carefully with the design and ongoing construction of the KDOT SLT project.

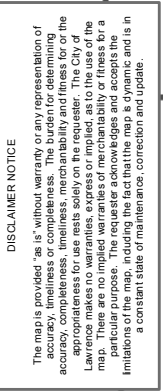
**Local Access** – Local access to Broken Arrow Park, W. 29<sup>th</sup> Terrace, and adjacent church facilities at W. 29<sup>th</sup> Terrace and Louisiana shall be maintained at all times except for short periods of time necessary to connect new underground piping for pump station operations.

**Construction Phase Impacts** – Sanitary sewer service will continue uninterrupted throughout the immediate area during construction.

**Schedule** – The Design Phase to be completed December 2014. Construction completion and startup will occur in late 2015 to early 2016.

For additional information or questions concerning this project contact Melinda Harger, P.E., Utilities Engineer, through e-mail at [mharger@lawrenceks.org](mailto:mharger@lawrenceks.org) or by phone at (785) 832-7880.

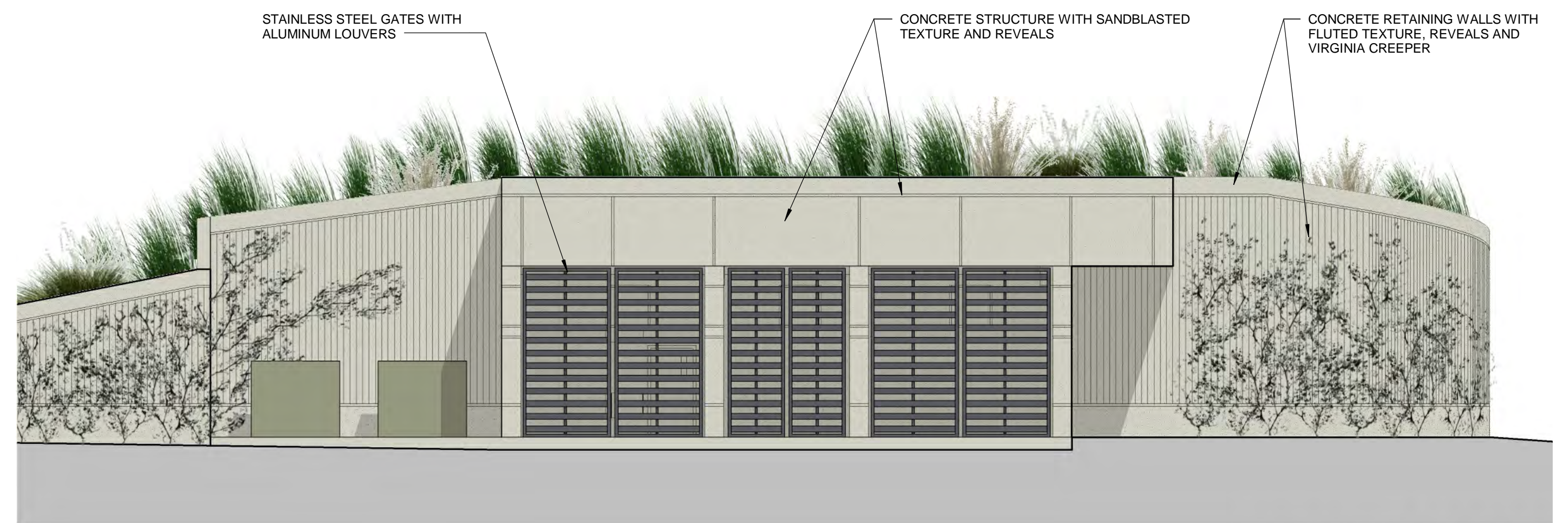
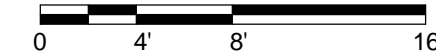




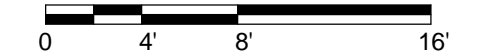




**SOUTH ELEVATION**



**WEST ELEVATION**



VIEW FROM W29th TER.



VIEW FROM CHURCH



VIEW FROM 31st & LA

## Pump Station No. 10

WAKARUSA CONVEYANCE SYSTEM

06/16/14



**Existing View – W. 29<sup>th</sup> Terrace**



**Proposed View – W. 29<sup>th</sup> Terrace**



**Existing View - Louisiana Street at south end of Church Property**



**Proposed View – Church Parking Lot**





**Existing View - 31<sup>st</sup> ST. and Louisiana Street Intersection**



**Proposed View - 31<sup>st</sup> ST. and Louisiana Street Intersection**








**SUP-14-00259: Special Use Permit for the City of Lawrence Sanitary Sewer Pump Station No. 10, Located at 3055 Louisiana Street**

Lawrence-Douglas County Planning Office  
August 2014

 Subject Property

