



# Hickman Trail Master Plan

City of Hickman, Nebraska  
June 2017



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It takes the efforts of many to make a community a better place to live. A special thanks to the City leaders and the steering committee for providing important leadership and valuable feedback throughout the process of the creation of this document.

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## I. INTRODUCTION

The desire for public trails within and around communities in the region continues to grow among the population. A trail system that is interconnected, well designed, and properly maintained provides walkers, joggers, in-line skaters, and bicyclists with the ability to access public amenities and enjoy scenery with improved safety due to separation from vehicular traffic. A good trail system improves the quality of life in a community by encouraging active lifestyles, promoting use of public spaces, raising awareness of the environment, and ensuring the safety of its users.



The City of Hickman, located in southern Lancaster County, has a current estimated population of 1,972. Within the city limits of Hickman exist open civic spaces, restaurants, retail, and residential neighborhoods that have some internal connectivity from the existing trail system and sidewalks. The trail system is very important to the members of the community. This was very evident from feedback received during the comprehensive plan update process that was occurring concurrently with this master plan process. The goal of this master plan is to outline expansions to this existing system which will best serve to connect these destinations within the City.



The community has the geographic benefit of being situated in a locale that is rich in destinations that provide purpose and advantage to a trail system that would connect them. Specific points of interest near Hickman include Nebraska Game and Parks recreation areas, the Norris School District, the adjacent community of Roca with its berry farm tourist destination, and Homestead Trail leading to a national historic landmark. All of these

destinations are close enough to the City that a regional trail system to provide for both short recreational outings and day-long excursions is practical and desirable.

This master plan aims to guide the City in maintaining and expanding its trail system by establishing proposed trail alignments, guiding the process of future development, and providing design guidelines for safe, cost effective, and environmentally friendly trails. It also seeks to establish itself as an invaluable tool in applying for funding for trail projects.

The plan is intended to grow and change through time as projects are completed, development occurs, and conditions in the community change. It is recommended that the City establish a regular schedule for keeping this document up-to-date.

**A. History of Trail Planning for Hickman**

Trail master planning is not a new concept for the City of Hickman. In fact, it has been a focus for the City over the years to guide the trail construction in and around the city. A trails plan was completed in 2002, and a regional trail system master plan was completed in 2009. These documents have served the community well to get trail spaces incorporated within new developments and to extend the existing trail network within the City. In May 2016, a version of this document was finalized and submitted to the City Council. In June 2017, this document was updated based on new information and discussions with City officials. This master plan will continue to serve the community for years to come.

**B. Existing Trail System**

The City of Hickman currently has just under four miles of trails. Much of the existing trail system is a direct result of the planning that the City has completed over the years. This planning has led to funding opportunities to complete trails such as utilizing Federal Transportation Enhancement funds to complete the Hickman Road East link trail. This trail is a 10-foot wide concrete trail along Hickman Road that connects to an existing trail on the east end and extends to the west edge of the City. Construction is anticipated to be started in 2016.



## II. THE PLANNING PROCESS

The planning process started with a kickoff meeting with the steering committee. During this meeting, the previous master plan was reviewed to determine projects that had been completed and to determine areas that required changes/additions to the plan. The overall vision and goals of the master plan were also discussed.

### A. Proposed Trail System Concept

The goals of the trail system outlined in this document are:

- To connect neighborhoods, businesses, and public amenities
- To allow for recreational activities and promote active lifestyles

This master plan seeks to accomplish these goals by using a “wheels-and-spokes” paradigm. This system consists of a town center that is surrounded by concentric rings, or “wheels”, and out from which radial “spokes” emanate. The spokes provide primary interconnectivity, while the wheels provide circular routes that are more suited to use for recreation. Obviously there are many factors in a community that dictate where trails can and should be installed, and this paradigm is an idealistic one. Actual conditions in the community and locations of amenities drive where trails are located. It is important to note that while the trail system described in this document may not appear at first glance to consist of these “wheels” and “spokes”, the location and connectivity of these trails provides the same functionality, while also working around limitations and serving the specific needs of the City of Hickman. It is important that this paradigm is considered when updating the master plan or when planning a new trail.

It is important to note that any community trail system is complemented by a well-maintained sidewalk system. Trail users will use sidewalks to access the trails, so trails do not need to reach every possible destination in the community. Instead, trails should be used where a reasonable volume of mixed modes of non-motorized transportation is expected, and the entire system of trails and sidewalks should work together to meet the needs of the City’s residents and visitors.

### B. Trail Design Considerations

The trail master planning process does not stop at the “wheels-and-spokes” concept. Each proposed trail needs to consider a variety of design variables.

#### 1. Standards

Federal and State requirements, should be taken into account for trail planning and design. Agencies such as the Federal Highway Administration (FHWA) ([www.fhwa.dot.gov](http://www.fhwa.dot.gov)) and the United States Access Board ([www.access-board.gov](http://www.access-board.gov)) contain a wealth of additional information regarding planning and design of trails.

Some of the standards and guidance documents considered during the planning process include:

- The Americans with Disabilities Act (ADA)
- United States Access Board Special Report: Accessible Public Rights-of-Way Planning and Design for Alterations
- United States Access Board Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way
- FHWA Designing Sidewalks and Trails for Access
- FHWA Manual of Uniform Traffic Control Devices (MUTCD)

2. Trail Type

Multiple types of users are considered for the trails shown in this master plan. Pedestrians, cyclists, skaters, and hikers are just a few of the users that are expected to use the trails. To meet the needs of multiple trail users, all trails are considered to be a shared-use path.

3. Trail Width

Current trail design guidance recommends a 10-foot trail width for a shared-use path. In places where fitting a 10-foot trail width is difficult due to limited space and where the volume of users will be limited, an 8-foot trail width may be used. It is also recommended that a 2-foot shoulder width is incorporated on either side of every trail.

4. Trail Surfacing

Concrete trails are recommended because they provide a superior walking and riding surface. Concrete trails also require less maintenance than other alternatives. While asphalt can be cheaper in the short-term, maintenance costs will typically be higher for this type of trails. Aggregate surfacing can be a viable option for the longer, regional trails.

5. Street Crossing

There are various types of crossings that might be encountered along a trail alignment.

- Intersection
- Midblock
- Overpass
- Underpass

Safety is a primary concern at crossings, and the costs of different types of crossings varies dramatically. Overpasses and underpasses provide complete separation of trail and roadway traffic, maximizing safety, but they also have the greatest cost. At-grade crossings can occur at signalized or otherwise-controlled intersections, or at dedicated midblock crossing locations. Dedicated crossings can consist of overhead traffic signals, roadside warning lights, or simple signage. For a given crossing, traffic volume, trail usage, and cost should all be weighed together to determine the right type of crossing for the situation.

Factors to consider when designing a crossing include:

- Visibility and stopping sight distance of vehicles. Crossings should not be placed on curves or other places with poor visibility.
- Traffic speed.
- Traffic patterns. A crossing near a busy intersection or driveway can be more dangerous if drivers are not aware of the crossing.
- Proper identification of crossing with lights, signage, and markings.

#### 6. Location of Trails

Trails should be located within existing rights-of-way or in dedicated outlots when possible. Placement of trails in easements can cause problems with coordination or result in conflict with landowners. In general, it is desirable for trails to be located behind lots or in green spaces, rather than along roadways, because it provides for a safer and more enjoyable environment. When trails are located behind lots, it is important to consider access to the trail. In a new development, outlots should be dedicated at some interval between lots to allow for short trail segments connecting the main trail to the sidewalk.

An ideal location for trails within a community is along drainage channels because this land usually cannot be developed, easements or outlots are usually already present for trunk sewers, and a meandering alignment through trees and vegetation provides a more enjoyable experience for users.

For trails along a roadway, a separation of five feet between the trail and the edge of the roadway is desirable. For trails located in green space or an outlot, a minimum clearance of 10 feet to the property line or obstructions is recommended.



## 7. Trail Signage, Amenities, and other Features

Thought should be given to signage and amenities during the design process of a trail. Items that should be considered during the design of a trail include:

- Directional and regulatory signage to inform users of proper etiquette and rules
- Informational signage that provides historical, environmental, and cultural information
- Safety and security features including lighting and physical separation between the trail and adjacent facilities
- Amenities such as benches, restrooms, and garbage bins

### C. **Public Involvement**

It is essential that the planning process involve the public, therefore opportunities for public involvement were provided during the process of the creation of this trail master plan. The first opportunity was the annual Trick or Treat on the Trail. Olsson Associates operated a booth as part of this fundraising event that the City conducts annually to raise money for the trails. A draft master plan was on display to provide the opportunity for the public to comment on the proposed trail alignments. The comments received were very supportive of expanding the trail network.

The next opportunity was a town hall meeting that was held as part of the process of updating the City's Comprehensive Plan being completed by another consultant. Information on the update of the trail master plan was also included in this meeting, and public feedback was gathered. The public comments included:

- Ensure that trails are built in outlots and not easements
- A desire to connect to the Homestead Trail via an alignment along Hickman Road to provide connectivity to a longer trail alignment
- A desire to connect to Wagon Train and Stagecoach recreation areas
- Locating trails within green space to create a better overall experience
- Prioritizing safety at crossings, with a focus on those of Hickman Road and 68<sup>th</sup> Street.
- Safe connections to all four quadrants of the City
- Provide a copy of the trail map online

Yet another opportunity for public input was a parks/recreation focus group meeting that was also held as part of the comprehensive plan update. Comments related to the trail master plan from this meeting included:

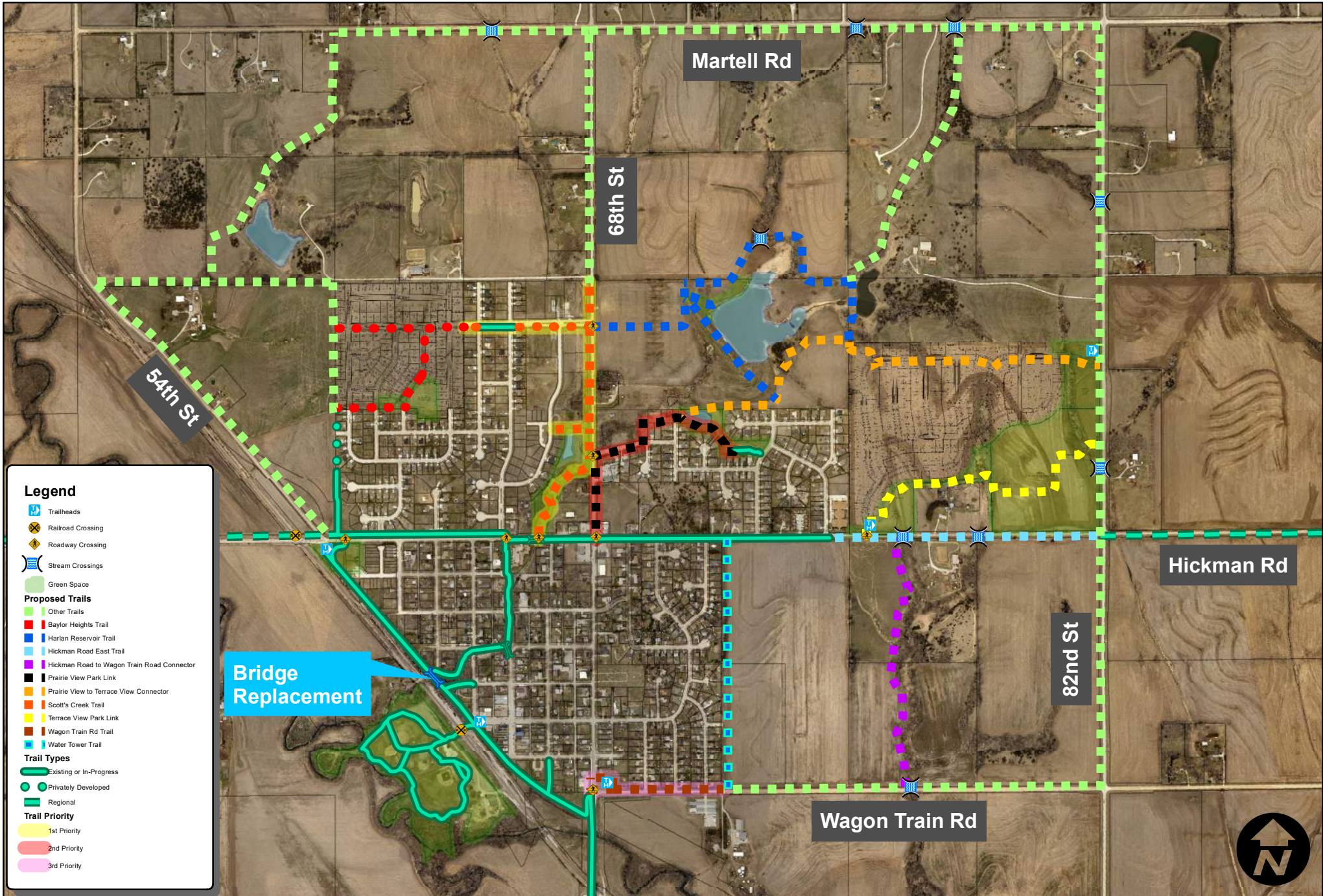
- Making connection to the Homestead Trail a priority
- Installing lights on trails as they are built
- Installing benches along existing and new trails
- Resurfacing the existing asphalt trail that runs adjacent to the RR tracks
- Installing water fountains along trails
- Planting trees along existing trails and ensuring they are part of the design of new trails
- Making a trail connection to the proposed skate park to open possibilities for its funding

**D. Planning Guidance**

This trail master plan is an invaluable tool as the City grows and developers plat additional properties. It should be referenced during the planning of developments to ensure those developments are meeting the City's trail system goals.

**III. CITY OF HICKMAN PROPOSED TRAILS**





# City Trails Trail Master Plan, Hickman, NE

**A. Baylor Heights Trail**

The proposed Baylor Heights Trail would run from the edge of the Baylor Heights development at Woodland Boulevard, where it connects to the Woodland Boulevard Trail, west to Oakview Drive. It would then split off into two branches. One branch would continue west along Woodland Boulevard to the west edge of the development for a future connection to development to the west. The other branch would follow Oakview Drive to the south connecting to a planned City park area. This branch would continue through outlots along the south edge of the development and connect to an in-progress privately developed trail and a potential future trail. This majority of this trail is privately developed with the exception of a cost share for the extra width of sidewalk in front and along the side of lots.

**1. Benefits**

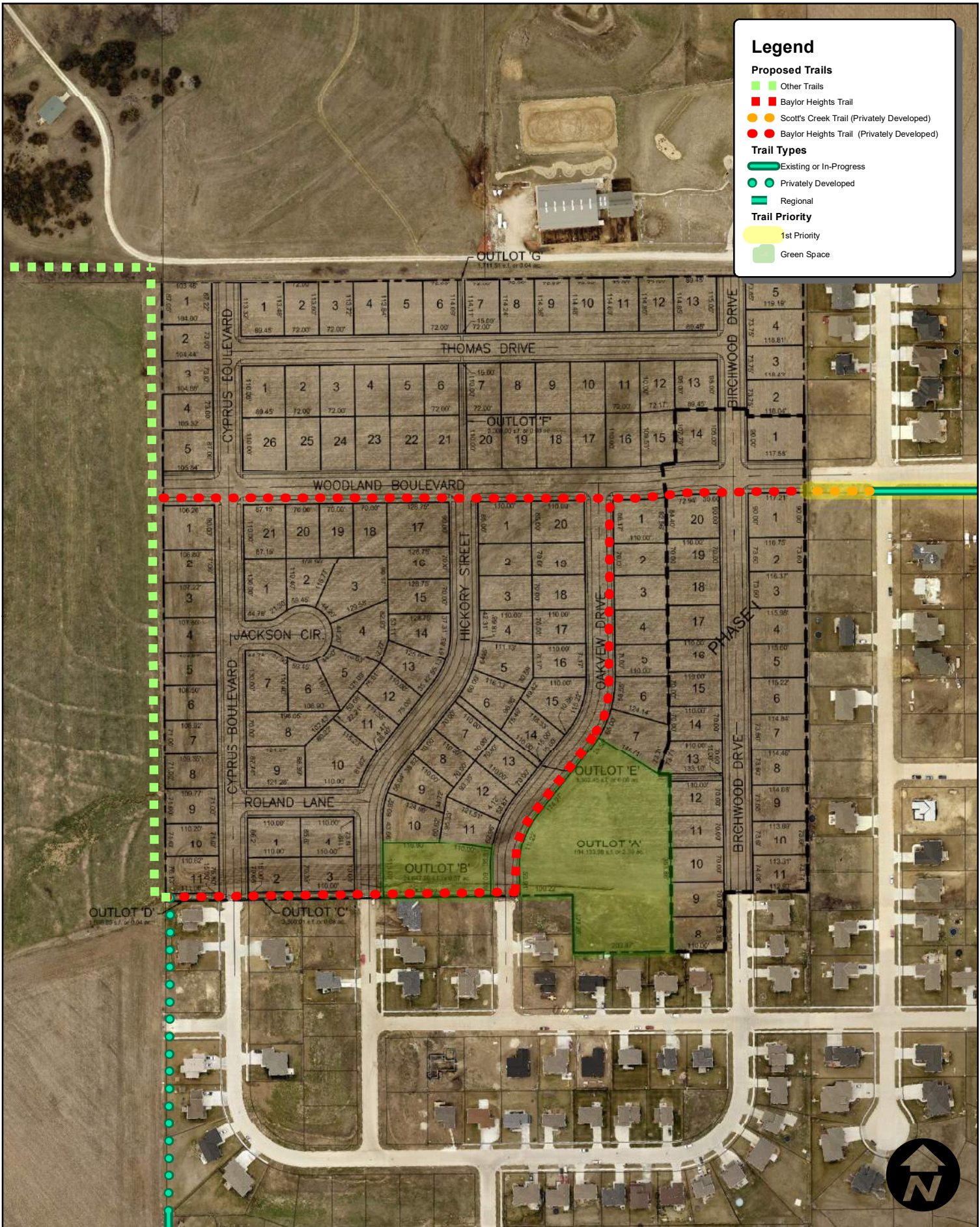
- Connection to park areas and green space within this new subdivision
- Connection to commercial area along Woodland Boulevard
- Provides another section to create a trail loop within the City
- Privately funded

**2. Challenges**

- Completion of trail occurs as homes are built

**3. Opinion of Cost**

- No direct cost to the City; cost for additional width in front and along the side of lots is deducted from the Infrastructure Fee that is required with each building permit



**Legend**

**Proposed Trails**

- Other Trails
- Baylor Heights Trail
- Scott's Creek Trail (Privately Developed)
- Baylor Heights Trail (Privately Developed)

**Trail Types**

- Existing or In-Progress
- Privately Developed
- Regional

**Trail Priority**

- 1st Priority
- Green Space



**B. Harlan Reservoir Trail**

For the purposes of planning, this trail is broken up into two phases.

The west phase begins on the southeast side of the intersection of 68<sup>th</sup> & Woodland Boulevard, where it connects to the proposed Scott's Creek Trail. It then continues east along the south side of the future Woodland Boulevard, until it nears the Harlan Reservoir Dam. The trail then turns north, where it splits into three paths. The first continues a short distance north to the property line, where it connects to the east phase. The second runs east to the northwest bank of Harlan Reservoir, a planned future park / recreation area. The third runs southeast on top of the Harlan Reservoir dam, and then connects to the Prairie View to Terrace View Connector Trail.

The east phase begins at the property line northwest of Harlan Reservoir, where it connects to the west phase. It then continues east, turns to the north, crosses a stream, then turns south and east to connect to a potential future trail running to the northeast and the proposed Prairie View to Terrace View Connector Trail.

This proposed trail was modified in June 2017 at the request of City officials.

**1. Benefits**

- Connection to potential future park at Harlan Reservoir
- Scenic route through green space and along drainage ways
- Continuation of trail system to create a loop around the City
- Connection from Terrace View Subdivision to Woodland Subdivision

**2. Challenges**

- Timing of development around Harlan Reservoir
- Land acquisition north of the reservoir along drainage way
- Design, permitting, and construction of trails on dams
- Drainage crossings

**3. Opinion of Cost**

- West Phase: \$304,000.00
- East Phase: \$344,000.00



**Legend**

- Stream Crossings
- Green Space
- Proposed Trails**
- Other Trails
- Harlan Reservoir Trail
- Prairie View Park Link
- Prairie View to Terrace View Connector
- Scott's Creek Trail
- Scott's Creek Trail (Privately Developed)
- Trail Types**
- Existing or In-Progress
- Privately Developed
- Regional
- Trail Priority**
- 1st Priority
- 2nd Priority



Hickman Trail Master Plan  
 June 2017  
 OA Project No. 015-2256

**Harlan Reservoir Trail West Phase**

Trail Length 3,235  
 Trail Width 10  
 ROW Width 30

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	3235	\$ 2.00	\$ 6,470.00
Subgrade Preparation	SY	3594	\$ 2.00	\$ 7,188.00
6" Concrete Trail	SY	3594	\$ 45.00	\$ 161,730.00
Seeding	AC	0.7	\$ 5,000.00	\$ 3,500.00
<b>Construction Subtotal</b>				<b>\$ 178,900.00</b>
<b>Mobilization 8%</b>				<b>\$ 14,300.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 44,725.00</b>
<b>Total Estimated Construction</b>				<b>\$ 237,925.00</b>
<b>Other Costs</b>				
Land Acquisition	54,000	SF @	\$ 0.25	\$ 13,500.00
Preliminary Engineering			10%	\$ 23,792.50
Construction Engineering			12%	\$ 28,551.00
<b>Subtotal</b>				<b>\$ 65,843.50</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 304,000.00</b>
<b>Funding Request</b>				
<b>Federal Funding</b>			<b>80%</b>	<b>\$ 243,200.00</b>
<b>Local Funds</b>			<b>20%</b>	<b>\$ 60,800.00</b>

In providing opinions of probable construction cost, it is recognized that neither the Client nor Olsson has control over the costs of labor, equipment or materials, or over the contractor's methods of determining prices or bidding. The opinion of probable construction costs is based on Olsson's reasonable professional judgment and experience and does not constitute a warranty, express or implied, that the contractor's bids or the negotiated price of the work on the Project(s) will not vary from the Client's budget or from any opinion of probable cost prepared by Olsson.

Hickman Trail Master Plan  
 May 2016  
 OA Project No. 015-2256

**Harlan Reservoir Trail East Phase**

Trail Length 2,988  
 Trail Width 10  
 ROW Width 30

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	2988	\$ 2.00	\$ 5,976.00
Subgrade Preparation	SY	3320	\$ 2.00	\$ 6,640.00
6" Concrete Trail	SY	3320	\$ 45.00	\$ 149,400.00
Drainage Crossing	LS	1	\$ 25,000.00	\$ 25,000.00
Roadway Crossing Upgrade	EA	1	\$ 7,500.00	\$ 7,500.00
Seeding	AC	0.7	\$ 5,000.00	\$ 3,500.00
<b>Construction Subtotal</b>				<b>\$ 198,000.00</b>
<b>Mobilization 8%</b>				<b>\$ 15,800.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 49,500.00</b>
<b>Total Estimated Construction</b>				<b>\$ 263,300.00</b>
<b>Other Costs</b>				
<b>Land Acquisition</b>		<b>89,640</b>	<b>SF @ \$ 0.25</b>	<b>\$ 22,410.00</b>
<b>Preliminary Engineering 10%</b>				<b>\$ 26,330.00</b>
<b>Construction Engineering 12%</b>				<b>\$ 31,596.00</b>
<b>Subtotal</b>				<b>\$ 80,336.00</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 344,000.00</b>

**Funding Request**

**Federal Funding 80% \$ 275,200.00**  
**Local Funds 20% \$ 68,800.00**

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**C. Hickman Road East Trail**

The proposed Hickman Road East Trail is a continuation of the soon-to-be-completed Hickman Road Trail. It begins on the south side of Hickman Rd, near the intersection of Hickman Road and Larkspur Drive, where it would connect to the Terrace View Park Link trail and continue east to 82<sup>nd</sup> St, where it would connect to a potential future trail along 82<sup>nd</sup> Street and a potential future regional trail to Wagon Train Lake.

**1. Benefits**

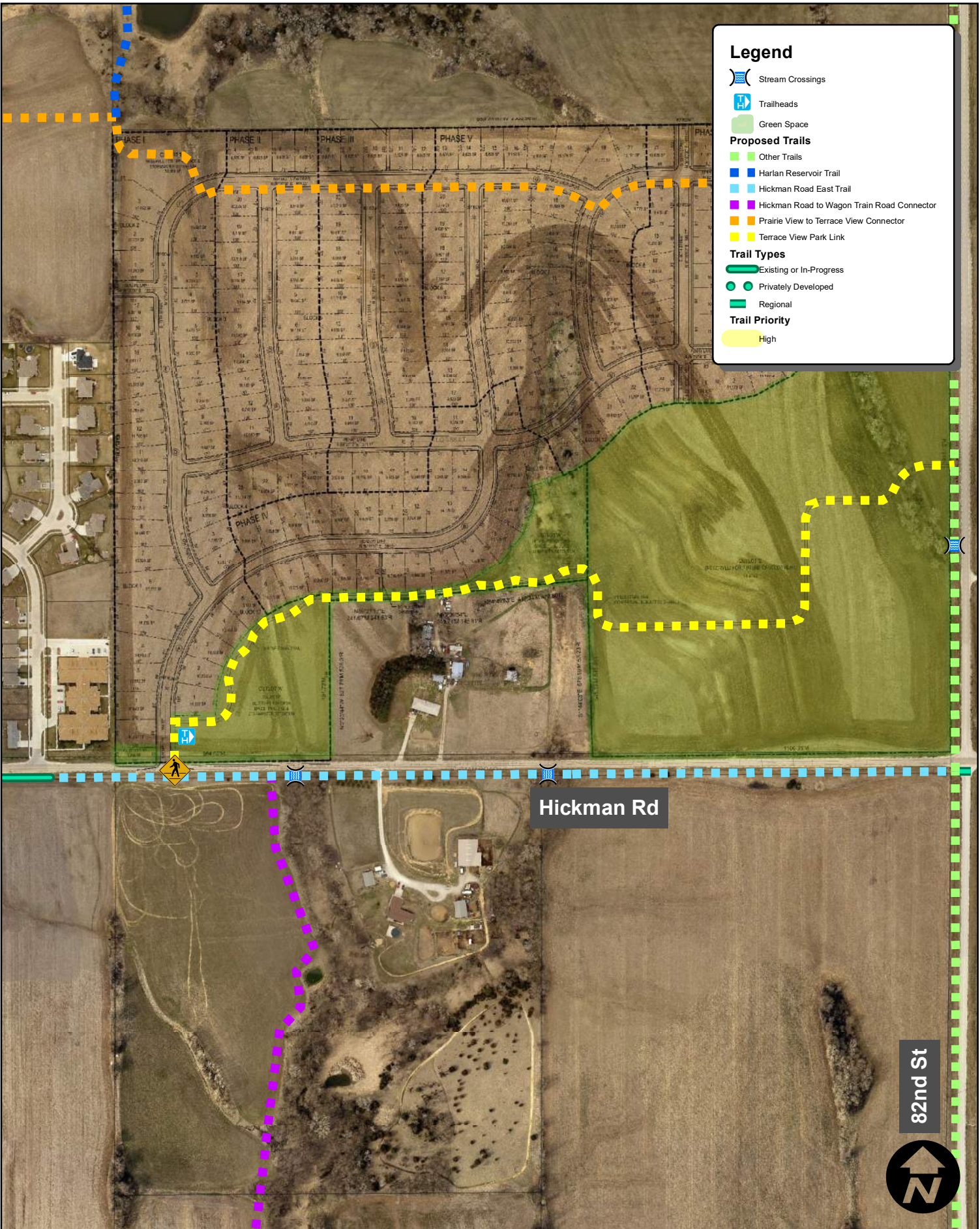
- Extension of soon-to-be-completed Hickman Road Trail
- Connection to potential future regional trail to Wagon Ttrain Lake
- Connection to Terrace View Park Link Trail

**2. Challenges**

- Two drainage crossings
- Timing should coincide with development of adjacent property or with improvements to Hickman Road

**3. Opinion of Cost**

- \$327,000



**Legend**

- Stream Crossings
- Trailheads
- Green Space
- Proposed Trails**
- Other Trails
- Harlan Reservoir Trail
- Hickman Road East Trail
- Hickman Road to Wagon Train Road Connector
- Prairie View to Terrace View Connector
- Terrace View Park Link
- Trail Types**
- Existing or In-Progress
- Privately Developed
- Regional
- Trail Priority**
- High

Hickman Rd

82nd St



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 May 2016  
 OA Project No. 015-2256

**Hickman Road East Trail**

Trail Length 2,850  
 Trail Width 10  
 ROW Width 30

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	2850	\$ 2.00	\$ 5,700.00
Large Tree Removal	SY	1167	\$ 5.00	\$ 5,835.00
Subgrade Preparation	SY	3167	\$ 2.00	\$ 6,334.00
6" Concrete Trail	SY	3167	\$ 45.00	\$ 142,515.00
Storm Sewer Pipe	LF	200	\$ 100.00	\$ 20,000.00
Roadway Crossing Upgrade	EA	1	\$ 7,500.00	\$ 7,500.00
Seeding	AC	0.7	\$ 5,000.00	\$ 3,500.00
<b>Construction Subtotal</b>				<b>\$ 191,400.00</b>
<b>Mobilization 8%</b>				<b>\$ 15,300.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 47,850.00</b>
<b>Total Estimated Construction</b>				<b>\$ 254,550.00</b>
<b>Other Costs</b>				
<b>Land Acquisition</b>	<b>85,500</b>	<b>SF @</b>	<b>\$ 0.25</b>	<b>\$ 21,375.00</b>
<b>Preliminary Engineering 8%</b>				<b>\$ 20,364.00</b>
<b>Construction Engineering 12%</b>				<b>\$ 30,546.00</b>
<b>Subtotal</b>				<b>\$ 72,285.00</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 327,000.00</b>

**Funding Request**

**Federal Funding 80%** \$ 261,600.00  
**Local Funds 20%** \$ 65,400.00

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**D. Hickman Road to Wagon Train Road Connector**

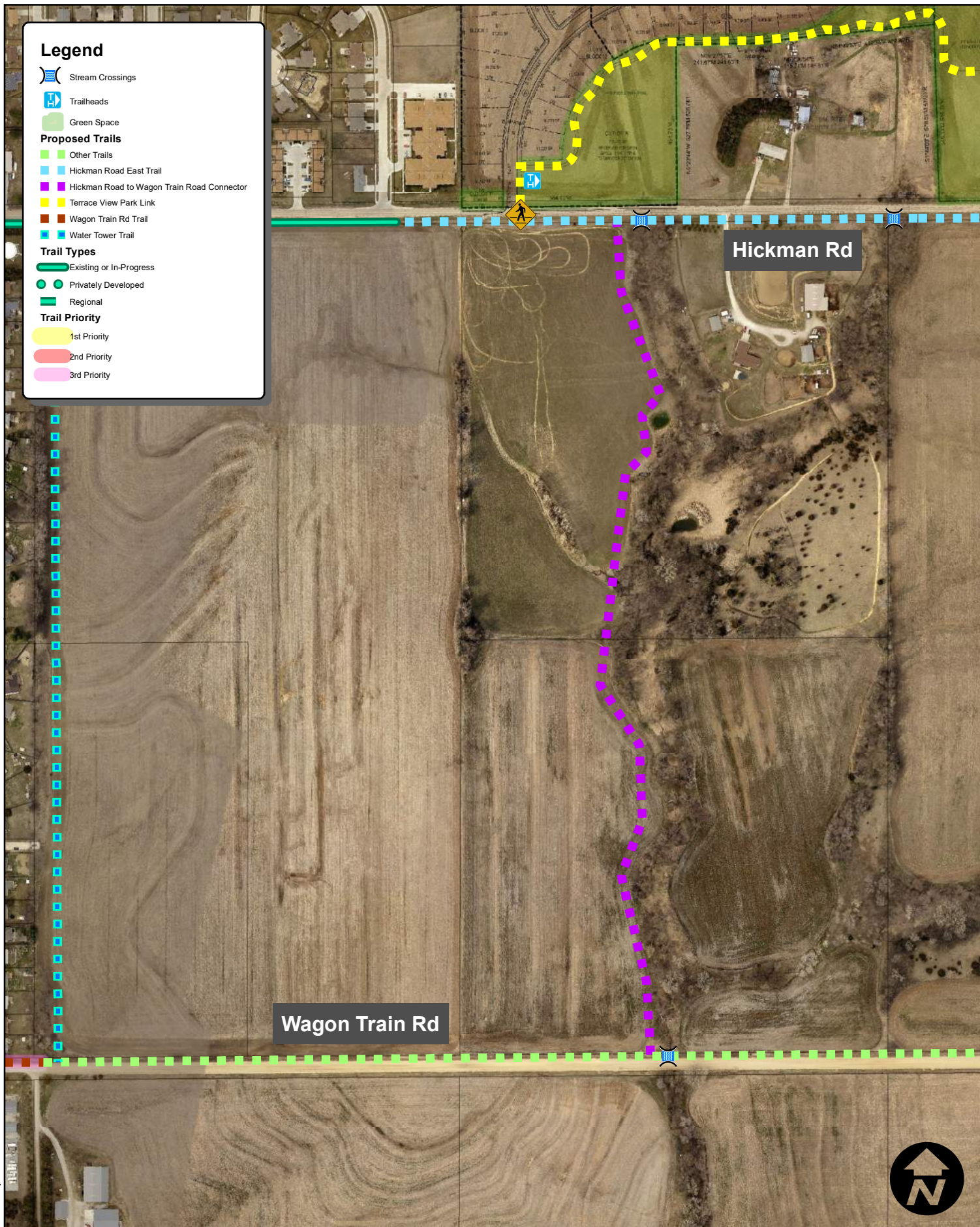
The proposed Hickman Road to Wagon Train Road Connector trail would run from a point on the Hickman Road East Trail south to Wagon Train Road. The trail winds along the west edge of a drainage way.

This trail is important as it would serve as a trail connection between Hickman Road and Wagon Train Road. An alignment along 68<sup>th</sup> Street was considered as part of a study on widening 68<sup>th</sup> Street to a three-lane urban section, and it was determined that constructing a trail in that corridor would not be feasible. However, normal 4' sidewalks on each side of 68<sup>th</sup> Street will allow pedestrians to safely travel along that corridor to access trails in the trail system.

1. Benefits
  - Major connection between north and south halves of City
  - Scenic route along drainage way and possible future green space
2. Challenges
  - Placement of trail and timing of development
  - Connection to Wagon Train Road Trail
3. Opinion of Cost
  - \$259,000

**Legend**

- Stream Crossings
- Trailheads
- Green Space
- Proposed Trails**
- Other Trails
- Hickman Road East Trail
- Hickman Road to Wagon Train Road Connector
- Terrace View Park Link
- Wagon Train Rd Trail
- Water Tower Trail
- Trail Types**
- Existing or In-Progress
- Privately Developed
- Regional
- Trail Priority**
- 1st Priority
- 2nd Priority
- 3rd Priority



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**Hickman Road to Wagon Train Road Connector**

Trail Length 2,705  
 Trail Width 10  
 ROW Width 30

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	2705	\$ 2.00	\$ 5,410.00
Subgrade Preparation	SY	3006	\$ 2.00	\$ 6,012.00
6" Concrete Trail	SY	3006	\$ 45.00	\$ 135,270.00
Seeding	AC	0.6	\$ 5,000.00	\$ 3,000.00
<b>Construction Subtotal</b>				<b>\$ 149,700.00</b>
<b>Mobilization 8%</b>				<b>\$ 12,000.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 37,425.00</b>
<b>Total Estimated Construction</b>				<b>\$ 199,125.00</b>
<b>Other Costs</b>				
Land Acquisition	81,150	SF @	\$ 0.25	\$ 20,287.50
Preliminary Engineering			8%	\$ 15,930.00
Construction Engineering			12%	\$ 23,895.00
<b>Subtotal</b>				<b>\$ 60,112.50</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 259,000.00</b>

<b>Funding Request</b>				
<b>Federal Funding</b>	<b>80%</b>	<b>\$</b>	<b>207,200.00</b>	
<b>Local Funds</b>	<b>20%</b>	<b>\$</b>	<b>51,800.00</b>	

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**E. Prairie View Park Link**

The proposed Prairie View Park Link trail begins at the intersection of 68<sup>th</sup> Street & Hickman Rd, where it would connect to the soon-to-be-completed Hickman Road Trail. It would then cross Hickman Rd, heading north along the east side of 68<sup>th</sup> Street to Prairie View Lane. At this point, a crossing is proposed across 68<sup>th</sup> Street, which would connect this trail to Scott's Creek Trail. The trail then turns east and runs along Prairie View Lane, then north and east again along Scott's Creek. Finally, the trail connects to the Prairie View to Terrace View Connector trail, follows the south bank of the detention cell in Prairie View Park, and ties into the existing trail near the existing tennis court.

The alignment along the south side of the existing detention cell was chosen for a couple of reasons. An eight-foot wide bike path easement does exist on the north and east sides of the detention cell. This width is not sufficient for construction of a trail. In addition, the entire area is now developed and there is significant slopes along the edges of the detention cell.

It is anticipated that the intersection of 68<sup>th</sup> Street & Hickman Road will be signalized at some point in the future, at which time the City should work with the signal designers to provide a pedestrian signal phase to increase crossing safety.

Because this trail provides access to businesses along 68<sup>th</sup> St, connects to other important trails in the system, and provides a scenic path to an existing park, the City has designated this trail as being a high priority.

**1. Benefits**

- Connection to retail along 68<sup>th</sup> Street
- Connection to Prairie View Park
- Middle section serves as part of a loop around the City

**2. Challenges**

- Timing of construction with planned widening of 68<sup>th</sup> Street
- Coordination with businesses along 68<sup>th</sup> Street
- Crossing of 68<sup>th</sup> Street. Because of the grades in the area, a safe undercrossing would be difficult to construct without significantly raising the profile of 68<sup>th</sup> Street at this location.

**3. Opinion of Cost**

- \$284,000



Hickman Trail Master Plan  
 May 2016  
 OA Project No. 015-2256

**Prairie View Park Link**

Trail Length 2,780  
 Trail Width 10  
 ROW Width 0

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	2780	\$ 2.00	\$ 5,560.00
Subgrade Preparation	SY	3089	\$ 2.00	\$ 6,178.00
6" Concrete Trail	SY	3089	\$ 45.00	\$ 139,005.00
4" Concrete Sidewalk	SY	20	\$ 55.00	\$ 1,100.00
Detectable Warning Panels	SF	20	\$ 35.00	\$ 700.00
Storm Sewer Pipe	LF	75	\$ 100.00	\$ 7,500.00
Roadway Crossing Upgrade	EA	2	\$ 7,500.00	\$ 15,000.00
Seeding	AC	0.6	\$ 5,000.00	\$ 3,000.00
<b>Construction Subtotal</b>				<b>\$ 178,000.00</b>
<b>Mobilization 8%</b>				<b>\$ 14,200.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 44,500.00</b>
<b>Total Estimated Construction</b>				<b>\$ 236,700.00</b>
<b>Other Costs</b>				
<b>Land Acquisition 0 SF @ \$ 0.25</b>				<b>\$ -</b>
<b>Preliminary Engineering 8%</b>				<b>\$ 18,936.00</b>
<b>Construction Engineering 12%</b>				<b>\$ 28,404.00</b>
<b>Subtotal</b>				<b>\$ 47,340.00</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 284,000.00</b>

<b>Funding Request</b>			
<b>Federal Funding</b>	<b>80%</b>	<b>\$</b>	<b>227,200.00</b>
<b>Local Funds</b>	<b>20%</b>	<b>\$</b>	<b>56,800.00</b>

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**F. Prairie View to Terrace View Connector**

The proposed Prairie View to Terrace View Connector trail begins on the west end of the detention cell in Prairie View Park, where it connects to the Prairie View Park Link trail. It then proceeds east along the north bank of the cell, and then behind the lots to the north of Primrose Lane. It then turns north at Sunflower Drive, runs along the edge of a wooded area, turns east, and connects to the Harlan Reservoir Trail. It then runs southwest, crosses Terrace View Drive, continues east along the south side of Terrace View Drive until it reaches 82<sup>nd</sup> Street, where it connects to a potential future trail.

1. Benefits

- Proposed trailhead at the east end
- Connection to Prairie View Park Link, which connects to trails leading to downtown area
- Connection to Harlan Reservoir Trail

2. Challenges

- Coordination with Terrace View development. A preliminary plat of the development does not show this trail alignment. The preliminary plat was approved by the City Council under the condition that this trail alignment be accommodated.

3. Opinion of Cost

- \$469,000



**Legend**

- Stream Crossings
- Trailheads
- Green Space
- Proposed Trails**
- Other Trails
- Harlan Reservoir Trail
- Hickman Road East Trail
- Hickman Road to Wagon Train Road Connector
- Prairie View Park Link
- Prairie View to Terrace View Connector
- Terrace View Park Link
- Water Tower Trail
- Trail Types**
- Existing or In-Progress
- Privately Developed
- Regional
- Trail Priority**
- 1st Priority
- 2nd Priority

Harlan Reservoir

Hickman Rd

82nd St



**Prairie View to Terrace View Connector**

Trail Length 5,057  
 Trail Width 10  
 ROW Width 0

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	5057	\$ 2.00	\$ 10,114.00
Subgrade Preparation	SY	5619	\$ 2.00	\$ 11,238.00
6" Concrete Trail	SY	5619	\$ 45.00	\$ 252,855.00
Trailhead Development	SY	278	\$ 50.00	\$ 13,900.00
Seeding	AC	1.2	\$ 5,000.00	\$ 6,000.00
<b>Construction Subtotal</b>				<b>\$ 294,100.00</b>
<b>Mobilization 8%</b>				<b>\$ 23,500.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 73,525.00</b>
<b>Total Estimated Construction</b>				<b>\$ 391,125.00</b>
<b>Other Costs</b>				
<b>Land Acquisition 0 SF @ \$ 0.25</b>				<b>\$ -</b>
<b>Preliminary Engineering 8%</b>				<b>\$ 31,290.00</b>
<b>Construction Engineering 12%</b>				<b>\$ 46,935.00</b>
<b>Subtotal</b>				<b>\$ 78,225.00</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 469,000.00</b>

**Funding Request**

**Federal Funding 80%** \$ 375,200.00  
**Local Funds 20%** \$ 93,800.00

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**G. Scott's Creek Trail**

The proposed Scott's Creek Trail begins at Hickman Road just east of Scott's Creek, west of 68<sup>th</sup> Street. From there, it winds north through the wooded area on the east side of Scott's Creek. When it meets 68<sup>th</sup> Street just south of Prairie View Lane it connects to an 8' sidewalk that runs south along the west side of 68<sup>th</sup> Street to Hickman Road, providing access to Dollar General. The trail turns north, connects to the Prairie View Park Link at its crossing of 68<sup>th</sup> Street, and continues across Scott's Creek. A branch of the trail turns west, over a stream crossing, towards Park Drive. The main trail alignment continues north along the west side of 68<sup>th</sup> Street to the City welcome sign north of Woodland Boulevard. At the intersection of 68<sup>th</sup> Street Woodland Boulevard, the trail connects to the Harlan Reservoir Trail, and a branch of the trail goes west along the south side of Woodland Boulevard to connect with the Baylor Heights Trail (this branch will be privately developed, and a portion of it is already complete).

Because of the scenic route of this trail, the fact that it provides a crucial link in the proposed trail system, and because it is a continuation of an existing trail, this trail was designated as a high priority by City staff.

**1. Benefits**

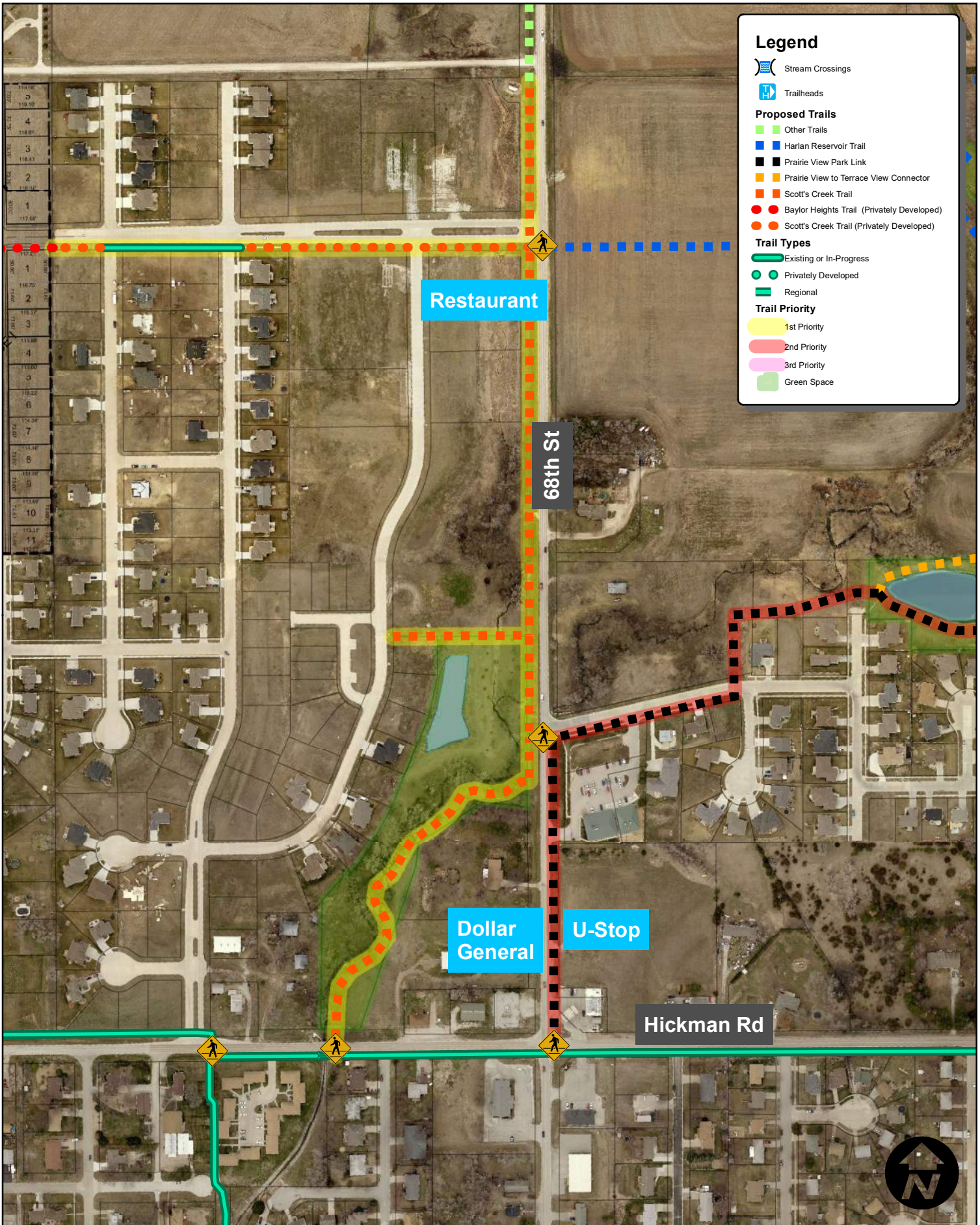
- Scenic route through green space along Scott's Creek, with opportunity for future park just north of Scott's Creek west of 68<sup>th</sup> Street
- Continues existing trail along Scott's Creek which connects north half of City to downtown
- Connects to soon-to-be-completed Hickman Road Trail, Prairie View Park Link, Woodland Boulevard Trail, and Harlan Reservoir Trail
- Provides access to new restaurant, future retail along 68<sup>th</sup> Street, and Dollar General (via an 8' sidewalk extending south along 68<sup>th</sup> Street to Hickman Road)

**2. Challenges**

- Extension of existing box culvert under 68<sup>th</sup> Street required
- Timing with planned widening of 68<sup>th</sup> Street
- Coordination with future businesses along 68<sup>th</sup> Street

**3. Opinion of Cost**

- \$650,000





**Scott's Creek Trail**

Trail Length 4,230  
 Trail Width 10  
 ROW Width 0

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	4230	\$ 2.00	\$ 8,460.00
Subgrade Preparation	SY	4700	\$ 2.00	\$ 9,400.00
6" Concrete Trail	SY	4700	\$ 45.00	\$ 211,500.00
Storm Sewer Pipe	LF	100	\$ 75.00	\$ 7,500.00
Drainage Channel Mitigation	LF	150	\$ 200.00	\$ 30,000.00
CBC Extension	LF	25	\$ 1,000.00	\$ 25,000.00
Bridge (12' x 40')	SF	480	\$ 200.00	\$ 96,000.00
Roadway Crossing Upgrade	EA	1	\$ 7,500.00	\$ 7,500.00
Seeding	AC	1	\$ 5,000.00	\$ 5,000.00
<b>Construction Subtotal</b>				<b>\$ 400,400.00</b>
<b>Mobilization 8%</b>				<b>\$ 32,000.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 100,100.00</b>
<b>Total Estimated Construction</b>				<b>\$ 532,500.00</b>
<b>Other Costs</b>				
<b>Land Acquisition</b>		<b>0</b>	<b>SF @ \$ 0.25</b>	<b>\$ -</b>
<b>Preliminary Engineering 10%</b>				<b>\$ 53,250.00</b>
<b>Construction Engineering 12%</b>				<b>\$ 63,900.00</b>
<b>Subtotal</b>				<b>\$ 117,150.00</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 650,000.00</b>
<b>Funding Request</b>				
<b>Federal Funding</b>			<b>80%</b>	<b>\$ 520,000.00</b>
<b>Local Funds</b>			<b>20%</b>	<b>\$ 130,000.00</b>

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**H. Terrace View Park Link**

The proposed Terrace View Park Link trail begins east of the intersection of Hickman Road & Terrace View Drive, where it crosses Hickman Road to a planned outlot, where a trailhead is proposed. The trail then turns east and winds through Terrace View Park until connects to a potential future trail along 82<sup>nd</sup> Street.

1. Benefits

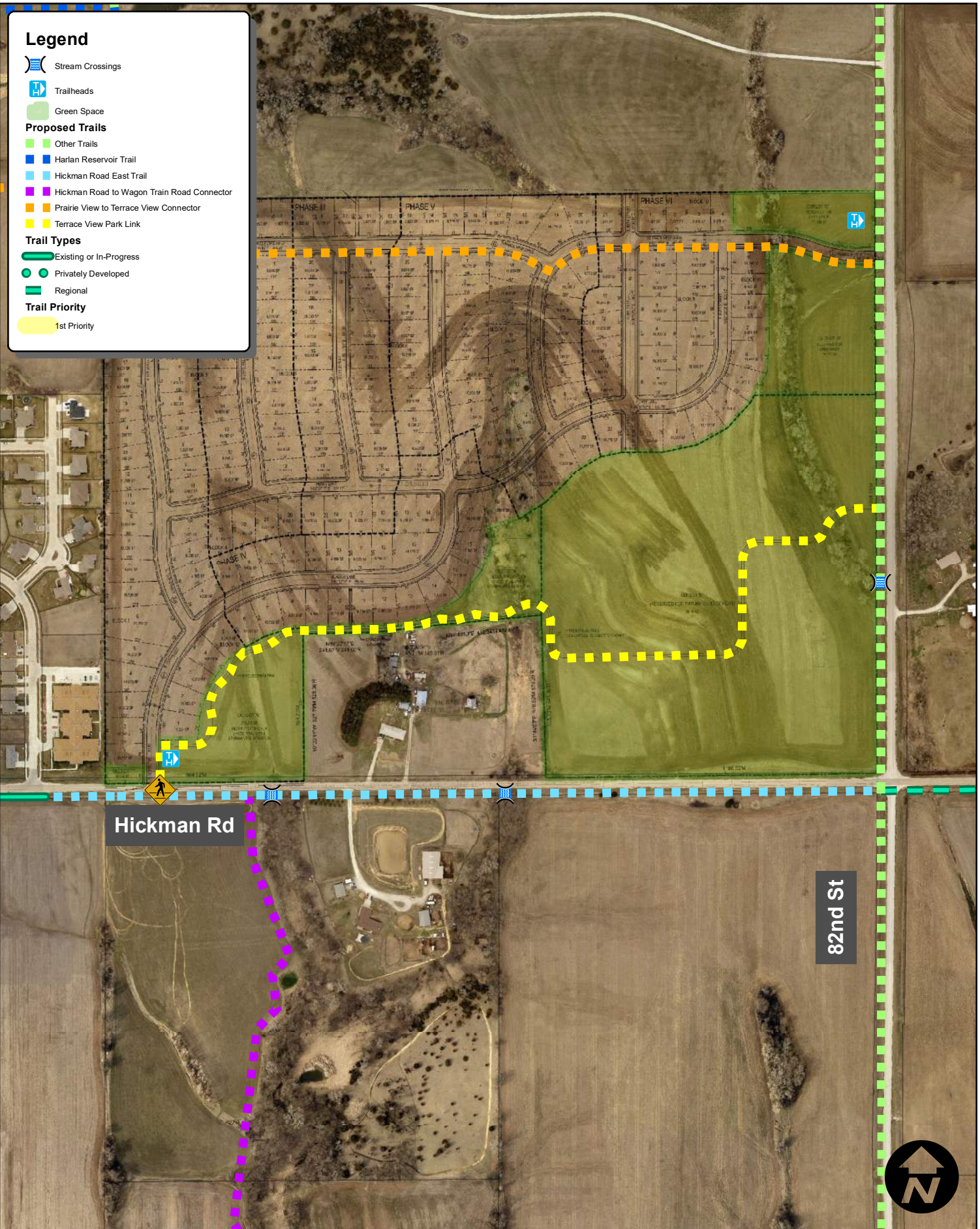
- Proposed trailhead in outlot at Hickman Road & Terrace View Lane
- Scenic route through Terrace View Park

2. Challenges

- Coordination with Terrace View development. A preliminary plat of the development does show a trail in the location shown in this master plan.

3. Opinion of Cost

- \$333,000



**Legend**

- Stream Crossings
- Trailheads
- Green Space
- Proposed Trails**
  - Other Trails
  - Harlan Reservoir Trail
  - Hickman Road East Trail
  - Hickman Road to Wagon Train Road Connector
  - Prairie View to Terrace View Connector
  - Terrace View Park Link
- Trail Types**
  - Existing or In-Progress
  - Privately Developed
  - Regional
- Trail Priority**
  - 1st Priority



**Terrace View Park Link**

Trail Length 3,354  
 Trail Width 10  
 ROW Width 0

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	3354	\$ 2.00	\$ 6,708.00
Subgrade Preparation	SY	3727	\$ 2.00	\$ 7,454.00
6" Concrete Trail	SY	3727	\$ 45.00	\$ 167,715.00
Trailhead Development	SY	600	\$ 50.00	\$ 30,000.00
Seeding	AC	0.8	\$ 5,000.00	\$ 4,000.00
<b>Construction Subtotal</b>				<b>\$ 215,900.00</b>
<b>Mobilization 8%</b>				<b>\$ 17,300.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 53,975.00</b>
<b>Total Estimated Construction</b>				<b>\$ 287,175.00</b>
<b>Other Costs</b>				
<b>Land Acquisition 0 SF @ \$ 0.25</b>				<b>\$ -</b>
<b>Preliminary Engineering 8%</b>				<b>\$ 22,974.00</b>
<b>Construction Engineering 8%</b>				<b>\$ 22,974.00</b>
<b>Subtotal</b>				<b>\$ 45,948.00</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 333,000.00</b>

**Funding Request**

**Federal Funding 80%** \$ 266,400.00  
**Local Funds 20%** \$ 66,600.00

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**I. Wagon Train Road Trail**

The proposed Wagon Train Road Trail begins at the intersection of 68<sup>th</sup> Street & Wagon Train Road, where it connects to an existing trail. It then continues east along the north side of Wagon Train Road until it reaches the city limits.

Two options for crossing 68<sup>th</sup> Street are shown. Considerations for the 68<sup>th</sup> Street crossing include:

- Site distance and speed of traffic coming over the viaduct may require moving it to a location where traffic along 68<sup>th</sup> Street will be moving at a lower speed.
- The cost of extending the box culvert under Wagon Train Road.

Because this trail connects to an existing trail which leads to the downtown area and a potential future regional trail that would lead to Norris Public School, and because pedestrian and bike traffic is frequently observed on this section of roadway and no sidewalk or shoulder is present, this trail is designated by the City as being a high priority.

**1. Benefits**

- Increased safety for pedestrians and cyclists who currently have no sidewalk or shoulder on which to travel
- Connection to existing trails leading downtown and eventually to Norris Public School

**2. Challenges**

- Purchase of land and design for proposed mini-park/trailhead
- Storm drain modifications along Wagon Train Road

**3. Opinion of Cost**

- \$251,000



Hickman Trail Master Plan  
 May 2016  
 OA Project No. 015-2256

**Wagon Train Road Trail**

Trail Length 1,670  
 Trail Width 10  
 ROW Width 0

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	1670	\$ 2.00	\$ 3,340.00
Subgrade Preparation	SY	1856	\$ 2.00	\$ 3,712.00
6" Concrete Trail	SY	1856	\$ 45.00	\$ 83,520.00
4" Concrete Sidewalk	SY	60	\$ 55.00	\$ 3,300.00
Detectable Warning Panels	SF	140	\$ 35.00	\$ 4,900.00
Storm Sewer Pipe	LF	100	\$ 100.00	\$ 10,000.00
Storm Inlets	EA	4	\$ 3,500.00	\$ 14,000.00
CBC Extension	LF	1000	\$ 25.00	\$ 25,000.00
Roadway Crossing Upgrade	EA	1	\$ 7,500.00	\$ 7,500.00
Seeding	AC	0.4	\$ 5,000.00	\$ 2,000.00
<b>Construction Subtotal</b>				<b>\$ 157,300.00</b>
<b>Mobilization 8%</b>				<b>\$ 12,600.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 39,325.00</b>
<b>Total Estimated Construction</b>				<b>\$ 209,225.00</b>
<b>Other Costs</b>				
<b>Land Acquisition 0 SF @ \$ 0.25</b>				<b>\$ -</b>
<b>Preliminary Engineering 8%</b>				<b>\$ 16,738.00</b>
<b>Construction Engineering 12%</b>				<b>\$ 25,107.00</b>
<b>Subtotal</b>				<b>\$ 41,845.00</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 251,000.00</b>

**Funding Request**

**Federal Funding 80%** \$ 200,800.00  
**Local Funds 20%** \$ 50,200.00

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**J. Water Tower Trail**

The proposed Water Tower Trail begins on the south side of Hickman Road between Conestoga Avenue and Sunflower Drive, where it connects to the existing Hickman Road Trail. It then continues south along the west edge of the current Soden property (east of the Wagon Train Heights Subdivision) to the north side of Wagon Train Road, where it connects to Wagon Train Road Trail. The City's desire is to have this trail located in a 30-foot-wide outlot in the location shown.

This trail was added to this master plan in June 2017 at the request of City officials.

**1. Benefits**

- Connection between the newly constructed Hickman Rd Trail and the high priority Wagon Train Rd Trail, which together would complete a loop around the south part of the City.
- Safety of trail users, since it is not positioned alongside a roadway.

**2. Challenges**

- Acquisition of right-of-way if constructed before development occurs.
  - Cost of acquisition included in Opinion of Cost. If trail is constructed during development, this cost would not be applicable
- Grading of trail at Wagon Train Road.

**3. Opinion of Cost**

- \$241,000.00





3th St

Wagon Train Rd



Hickman Trail Master Plan  
 June 2017  
 OA Project No. 015-2256

**Water Tower Trail**

Trail Length 2,595  
 Trail Width 10  
 ROW Width 30

Item	Unit	Qty	Unit Cost	Total
Clearing and Grubbing	LF	2595	\$ 2.00	\$ 5,190.00
Subgrade Preparation	SY	2883	\$ 2.00	\$ 5,766.00
6" Concrete Trail	SY	2883	\$ 45.00	\$ 129,735.00
Seeding	AC	0.6	\$ 5,000.00	\$ 3,000.00
<b>Construction Subtotal</b>				<b>\$ 143,700.00</b>
<b>Mobilization 8%</b>				<b>\$ 11,500.00</b>
<b>Construction Contingency 25%</b>				<b>\$ 35,925.00</b>
<b>Total Estimated Construction</b>				<b>\$ 191,125.00</b>
<b>Other Costs</b>				
Land Acquisition	77,850	SF @	\$ 0.25	\$ 19,462.50
Preliminary Engineering			8%	\$ 15,290.00
Construction Engineering			8%	\$ 15,290.00
<b>Subtotal</b>				<b>\$ 50,042.50</b>
<b>Total Estimated Project Costs</b>				
<b>Total Estimated Project</b>				<b>\$ 241,000.00</b>
<b>Funding Request</b>				
<b>Federal Funding</b>			<b>80%</b>	<b>\$ 192,800.00</b>
<b>Local Funds</b>			<b>20%</b>	<b>\$ 48,200.00</b>

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**K. Future Conceptual Trails**

Beyond the trails described in the preceding pages, some additional conceptual trail alignments are shown on the map in light green. These are highly conceptual, but indicate the desired connectivity and general location of trails that are consistent with this master plan's vision for the City's trail system.

As trail projects are completed, and as developments are planned and built, these trails will need to be adjusted accordingly, keeping the design criteria and objectives of this master plan in mind. Section II.B.6 on Page 5 of this report outlines some of the criteria to be considered when choosing an alignment for a trail. The City's Comprehensive Plan should also be referenced to determine future growth areas so that trail connectivity to these areas can be accommodated.

#### **IV. PROPOSED REGIONAL TRAILS**

Hickman is located in close proximity to many amenities and attractions. Homestead Trail, Wagon Train Lake, Stagecoach Lake, Norris Public School, and Roca are all within a few miles of the City. A regional trail system would be a natural extension of the City's trail system, and would provide access to the aforementioned attractions.

Future improvements to the corridors where regional trails are located influence the timing and steps required to complete these trails. For example, when Lancaster County plans improvements to roadway corridors, it is essential the City consider if a regional trail within the same corridor should be considered into the roadway improvements.

Consideration should be given to the ownership and maintenance responsibilities for regional trails. The regional trails may require significant maintenance activities throughout the life of the trail and this needs to be considered during the planning process. The nearby Homestead Trail is owned and maintained by the Lower Platte South Natural Resource District (LPSNRD). When planning new regional trails, the City should inquire with the Natural Resource District about potential partnerships for ownership and maintenance of regional trails.

A map of potential regional trails was prepared as a part of this master plan. All regional trails are planned to be a 10-foot wide, aggregate surfaced trail.

##### **A. Homestead Trail Regional Connector**

The previous master plan included a regional trail located along 54<sup>th</sup> Street, traveling through the Village of Roca to connect to the Homestead Trail. This trail alignment includes significant challenges of a railroad crossing, a stream crossing, and traveling through the Village of Roca. These challenges will add significant cost so an alternate connection to the Homestead Trail was determined.

This alternate would run along Hickman Road from the west edge of the City to halfway between 25<sup>th</sup> and 38<sup>th</sup> Streets, where it turns north to connect to the existing Homestead Trail and eliminate an additional stream crossing. This alignment is shorter than the previous alignment along 54<sup>th</sup> Street which reduces the potential cost. The planning of this trail should be timed to coincide with potential future improvements to Hickman Road west of the City in order to streamline right-of-way acquisition and potentially reduce cost.

##### **B. Wagon Train Regional Connector**

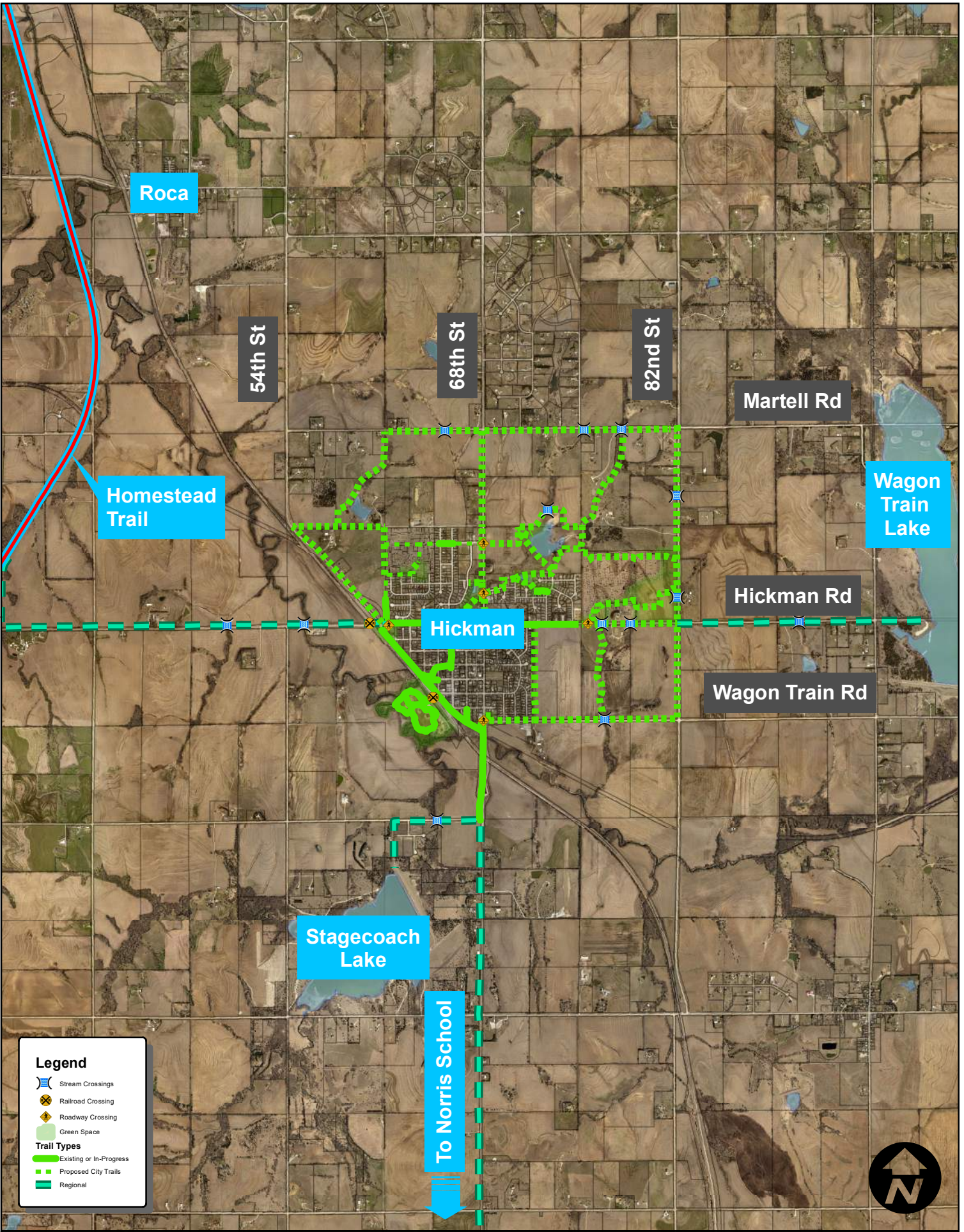
This regional trail would run east along the southern right-of-way of Hickman Road to the Wagon Train Lake State Recreation Area.

##### **C. Stagecoach Regional Connector**

This regional trail would connect to the existing trail over the 68<sup>th</sup> Street viaduct. It then runs west along southern right-of-way of Stagecoach Road and turns south to connect to Stagecoach Lake State Recreation Area.

**D. Norris Regional Connector**

This regional trail would connect to the existing trail over the 68<sup>th</sup> Street viaduct and continue south along the western right-of-way of 68<sup>th</sup> Street to Norris Public School.



**Legend**

- Stream Crossings
- Railroad Crossing
- Roadway Crossing
- Green Space
- Trail Types**
- Existing or In-Progress
- Proposed City Trails
- Regional



Hickman Trail Master Plan  
 May 2016  
 OA Project No. 015-2256

Regional Trail Project	Length (ft)	Width (ft)	Drainage/RR Crossing Cost	Trail Cost (per LF)	Total Construction Cost	Engineering @ 20%	Contingency @ 25%	Total Land Acquisition	Total Project Cost
Norris Connector	16000	10	\$ -	\$ 40.00	\$ 776,000.00	\$ 155,200.00	\$ 194,000.00	\$ 136,000.00	\$ 1,261,000.00
Stagecoach Connector	3610	10	\$ 50,000.00	\$ 40.00	\$ 225,085.00	\$ 45,017.00	\$ 56,271.25	\$ 30,685.00	\$ 357,000.00
Homestead Trail Connector	11415	10	\$ 305,000.00	\$ 40.00	\$ 858,627.50	\$ 171,725.50	\$ 214,656.88	\$ 97,027.50	\$ 1,342,000.00
Wagontrain Connector	9700	10	\$ 45,000.00	\$ 40.00	\$ 515,450.00	\$ 103,090.00	\$ 128,862.50	\$ 82,450.00	\$ 830,000.00
									\$ 3,790,000.00

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## V. MAINTENANCE AND MISCELLANEOUS PROJECTS

### A. Bridge Replacement

In the spring of 2015, the Hickman area experienced flood events that damaged a variety of assets throughout the community. One of those assets is a wooden pedestrian bridge that spans an unnamed tributary to the Hickman Branch Tributary of Salt Creek, which was subsequently closed. An inspection of this structure in June 2015 showed that the substructure had failed which caused the bridge deck to move laterally and drop downward. Recommendations were included in the inspection report that ranged from repair of the damaged area to full replacement of the bridge.



This bridge is a very important link for the City's trail system. The public is very supportive of keeping this asset to the trail system. Replacement of this bridge could cost as much as \$200,000 for a single-span bridge spanning the tributary. Other options that may be viable would be a concrete box culvert or even pipe culverts at the crossing. At the time of the creation of this master plan, a hydraulic analysis was being performed to determine the viability of the various options. The initial finding is that the culvert options would involve substantial earthwork, have a larger environmental impact, and have a much more involved permitting process. For these reasons, replacement of the existing bridge with a new single-span bridge is the recommended option. At the time of this study, design of a new bridge had begun.

### B. Maintenance of Trails

Maintenance is an important part of a good trail system. It is important that the City budget for regular maintenance tasks such as mowing and weed removal, replacing cracked concrete panels, and re-grading uneven areas on aggregate trails. In addition to setting aside budget for maintenance of the existing trail system, the City should consider the added maintenance cost of new trails before they are built.



## VI. FINANCING

The total cost of all the proposed city trails included in the master plan is \$3,462,000. There are simply not enough financial resources to accomplish everything on the plan at once. Prioritization and financing are two key items that were considered during the master planning process.

The steering committee considered various factors when prioritizing proposed trail projects. Among the factors were:

- Safety
- Ownership of property to construct trails
- Connectivity
- Project Cost

### A. Funding Opportunities

To accomplish the projects included in this master plan and to meet the desire of the community to enhance the existing trail system, financing is a key consideration. There is not a single source of financing to accomplish these goals, but rather partnerships and various sources of financing are needed.

#### 1. Partnerships

Partnerships are a key component of accomplishing a big goal such as a trail project or executing a trail master plan. Key organizations to consider for partnerships include:

- Lower Platte South Natural Resources District (LPSNRD)
- Nebraska Department of Roads (NDOR)
- Nebraska Game and Parks Commission (NGPC)
- Lancaster County

#### 2. Federal and State Funding

There are sources of federal funding that are managed by state agencies. The following is a list of those funding opportunities.

- Transportation Alternatives Program (TAP)  
TAP is a competitive grant offered periodically. TAP is funded by FHWA and administered by the (NDOR). Federal assistance up to 80% for TAP is allowed to match a project's cost. Project may include trail development and sidewalk improvements depending on the nature of the project. NDOR should be consulted prior to any grant application to determine project eligibility. Federal funds come with various requirements and mandates that may increase project cost, scope of work, or timeline. The TAP program is currently full through Fiscal Year 2021, so NDOR will not be conducting a competitive selection process until 2018 or 2019.

- **Recreational Trails Program (RTP)**  
RTP is a competitive grant offered annually. RTP is funded by the FHWA and administered by the NGPC. Federal assistance up to 80% from the RTP is allowed to match a project's cost or up to \$250,000. NGPC should be consulted prior to any grant application to determine project eligibility. Federal funds come with various requirements and mandates that may increase project cost, scope of work, or timeline.
  - **Land and Water Conservation Funds (LWCF)**  
LWCF is a competitive matching grant offered periodically. LWCF is administered by NGPC and are federal funds allocated from the National Parks Service (NPS). These federal funds are available for municipal owned outdoor recreation projects. The Statewide Comprehensive Outdoor Recreational Plan (SCORP) identifies priority project for the NGPC for a given timeframe. Hickman could utilize this funding source for priority projects for recreation projects related to trails. The funding amount is not set but a 50% match is required and grant awards are typically less than \$200,000. NGPC should be consulted prior to any grant application to determine project eligibility. Federal funds come with various requirements and mandates that may increase project cost, scope of work, or timeline.
3. Local Funding  
Through proper planning and budgeting, local sources of funding could also be utilized for trail projects. One method could be the City budgeting a certain amount on an annual basis for a set timeframe to use for a trail project. Another method could be the County budgeting an amount for a trail to be included as part of a county roadway improvement.
4. Private Funding  
Local organizations, private foundations, and individuals are all sources of potential funding for trails. If the goals of a trail project match with the goals of a private funding source, they may be willing to contribute to the project. This master plan can serve as a starting point to seek out private funding by communicating the goals of the community with the trail system.

**B. Next Steps**

Listed below is an outline of steps the City can take in order to realize the priorities set forth in this master plan.

Short term (0-5 years)

- Replace flood damaged pedestrian bridge with a new bridge or culverts
- Select the next trail project to apply for TAP funding
- Budget the 20% cost share and apply to the TAP
- Start discussions with the county, NRD, and NGPC regarding regional trails
- Construct trail along 68<sup>th</sup> Street in conjunction with roadway improvements

Intermediate Term (5-10 years)

- Select the next trail project to apply for federal funding and budget the required cost share
- Design and construct a regional trail

Long Term (10-20 years)

- Update the trail master plan to reflect completed projects and plan for future trails
- Select the next trail project to apply for federal funding and budget the required cost share
- Have a trail loop in place