



ADDENDUM 1
Corridor Master Plan - West Extension

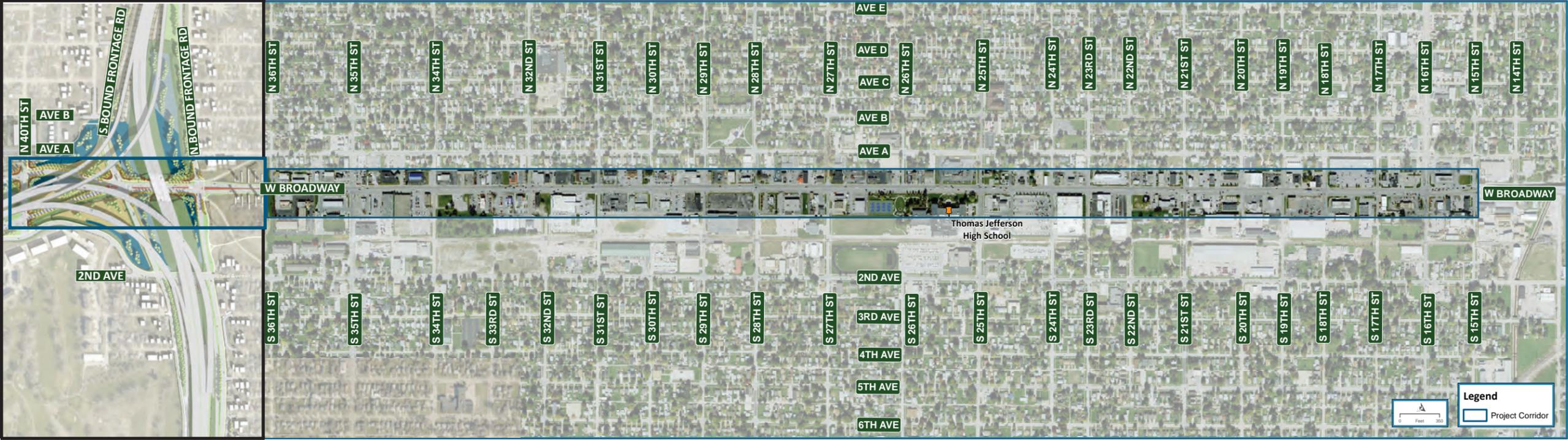


June 2018

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ADDENDUM 1 West Extension



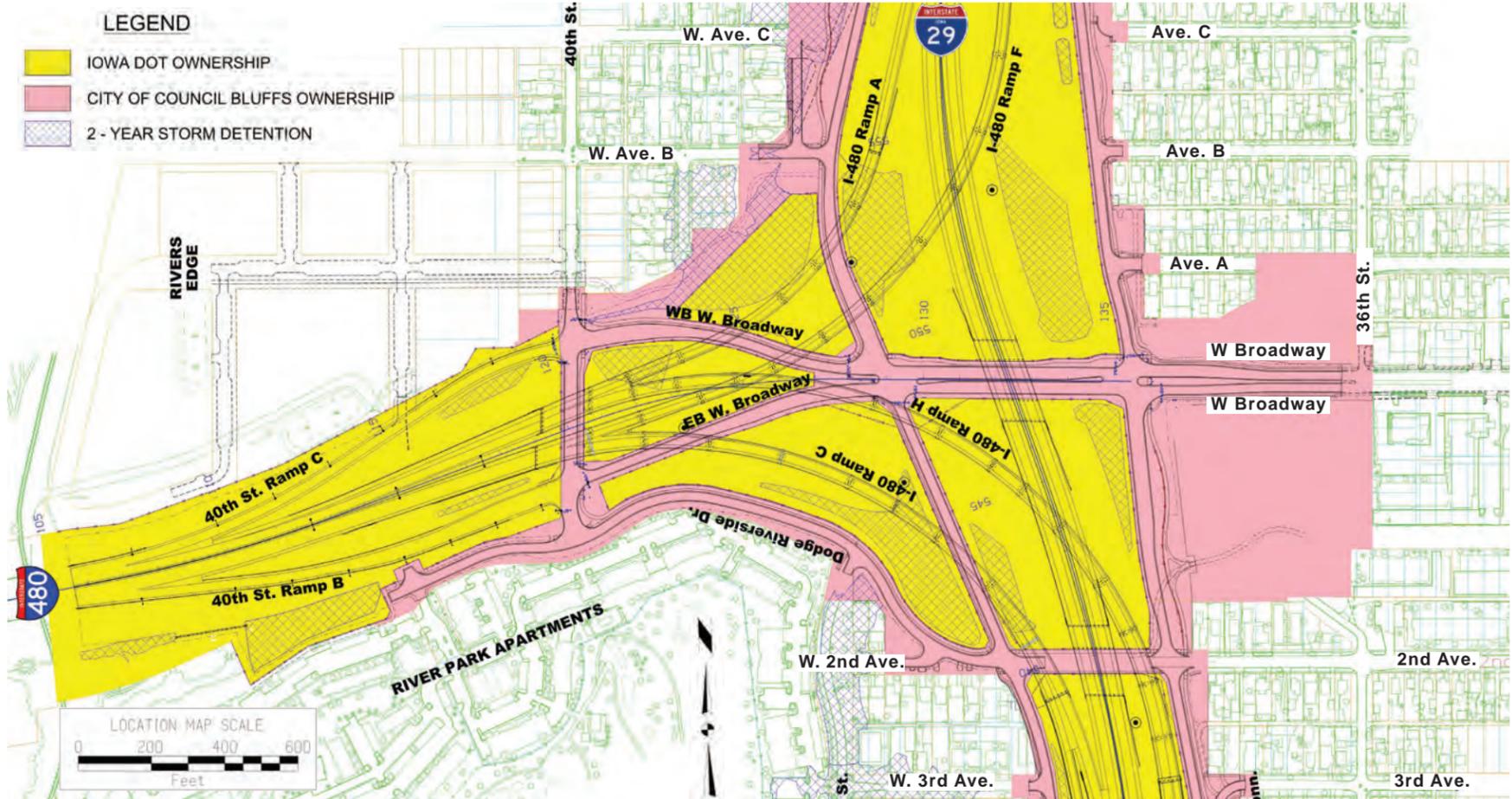
EXECUTIVE SUMMARY

West Broadway - West Extension Master Plan

This addendum to the West Broadway Reconstruction Corridor Master Plan provides a streetscape design for the extension of the West Broadway corridor from N. 36th Street to N. 40th Street. The project addresses the new roadway configuration planned by the Iowa Department of Transportation for the I480 and I29 interchange. The redesigned interchange will provide direct access to both freeways from West Broadway. Proposed city ownership of West Broadway through the interchange provides an opportunity to shape its design into an important civic street, connecting the River's Edge neighborhood to the reconstructed commercial corridor to the east, and downtown Council Bluffs.

The streetscape design for this westernmost threshold to the city will be embedded in a new landscape; one that extends the generous green atmosphere of the existing west city gateway to 40th Street, passing through intersections, under bridges and viaducts and adjacent to the interstate's open space. This project provides a vision and direction for rebuilding the western limits of West Broadway so that they will function as an accessible and attractive 'front door' to the city, uniting the west end of the corridor with the west city gateway and the improved commercial corridor to the east. It will enhance the interstate roadway system with a uniquely attractive landscape that provides multi-modal connections to regional trails, local streets, and public parks.

This document is the result of a three-month process that involved representatives from City of Council Bluffs, IDOT, The Iowa West Foundation, HNTB and HDR engineering firms, and Chroma Design. It has resulted in a master plan that re-imagines this segment of West Broadway as a proud urban street reflecting the community's concern for its image, transportation options, public spaces, and quality of life.



PROPOSED I-480 INTERCHANGE AT W. BROADWAY, HNTB

STREETSCAPE DESIGN

The Challenge

The design intent for the master plan addendum is to capitalize on IDOT's intention to reconstruct West Broadway as a city street that passes through the new interchange. The road is planned to include three signalized intersections and to be edged by public land from N. 36th Street to N. 40th Street. The project presents an opportunity to extend the civic corridor between these intersections with a new character that is compatible with the streetscape proposed for the rest of West Broadway. A multi-use trail is planned on the north side of West Broadway in this segment. It will eventually provide a link from the riverfront to downtown and will connect the neighborhoods in between. This adds a key regional transportation component to the corridor, opening it for use by a wider population that will be using more modes of transportation. The west extension's landscape, with its expansive green setting, complements the hard surfaces and narrow frontages of West Broadway east of the city gateway. The design for the west extension streetscape takes advantage of this environment by offering urban green edges that are well maintained and will create an attractive foreground for the interchange landscape beyond.

Goals and Objectives

Project **Goals** include:

- Building a community legacy for the future
- Addressing the applicable initiatives of the 2015 West Broadway Corridor Plan
- Restating the urban design and transportation framework for this segment of the corridor
- Providing clear direction for the final phase of reconstruction
- Preserving and enhancing the existing gateway
- Complementing the west entrance to the City, and tying the West Broadway corridor to the new River's Edge neighborhood

Project **Objectives** include:

- To reduce the apparent pavement width by adding thematic corner landscapes and corridor edge planting
- To enhance the proposed multi use trail with pedestrian scale lighting and street trees and to emphasize the linear connection between the west end neighborhoods and the riverfront.
- To install a set of "streetscape amenities" that create a welcoming threshold to the city and are compatible with the existing west gateway and West Broadway streetscape.
- To improve pedestrian circulation, meet ADA requirements, and provide neighborhood connections.
- To add significant masses of native trees and shrubs in storm water detention ponds to create an indigenous landscape backdrop.



A set of "Streetscape Amenities"



Multi-modal transportation framework

PUBLIC SAFETY AND ACCESSIBILITY

Recognizing Public Safety

The plan addresses vehicular and pedestrian safety issues by adding signalized intersections at the north and south Frontage Roads and north and south 40th Street. Pedestrian crossings are restricted to the signalized intersections, and median crossings provide a pedestrian refuge. The multi use trail is separated from the roadway with a wide tree lawn that buffers the trail and provides a more comfortable environment for pedestrians and bicyclists. The design provides clear sight distance so that motorists can see oncoming vehicles in time to safely react.

Ensuring Corridor-wide Accessibility

Corridor wide accessibility for all people is a goal. Pedestrian crossings include accessible ramps, signs, pedestrian push button signal controls, and designated crossing routes, all of which play an important role in this effort. Universal access is also provided at bus stops.



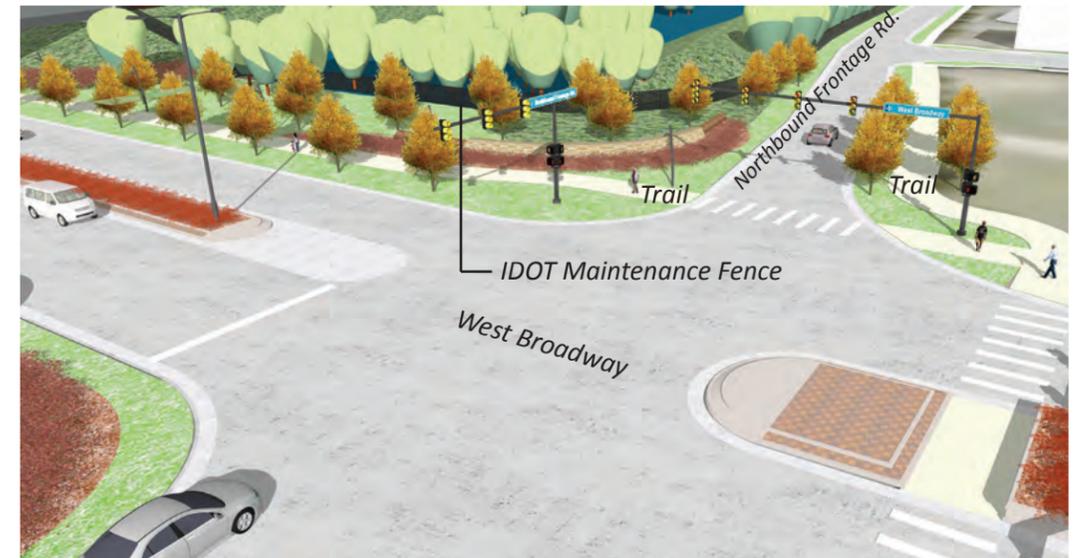
Protected Crosswalks / Planted Medians



Sight Distance / Visibility (facing east)



Key Intersections showing protected crosswalks, planted medians, and sight distance / visibility (facing west)



Pedestrian safety / planned trail connections (facing north)

KIT OF PARTS

Design Palette

A design palette has been prepared to form the character of the proposed reconstruction and create a more cohesive, attractive, and maintainable streetscape. It includes selections for stone veneer walls, raised and planted medians, pedestrian-scale lighting, bus shelters, wayfinding signs, and planting. For consistency of appearance and quality, a single detail is recommended for each item, many of which have already been specifically designed for and installed along West Broadway. Details for new items including stone faced curving corner walls and planted medians, will be developed in future phases of the project.

Maintenance

The proposed palette of materials has been designed to be durable and sustainable. However, yearly maintenance will be necessary for all items. During the development of construction documents, steps will be taken to reduce those requirements as much as possible. The City will be responsible for maintaining proposed improvements within the West Broadway easement.



Street Trees, Turf, and Planted Medians



Enhanced Landscape Edge



Bus Stop Shelters



Wayfinding Signs



Stone Veneer Walls at Intersections



Native Landscape Backdrop

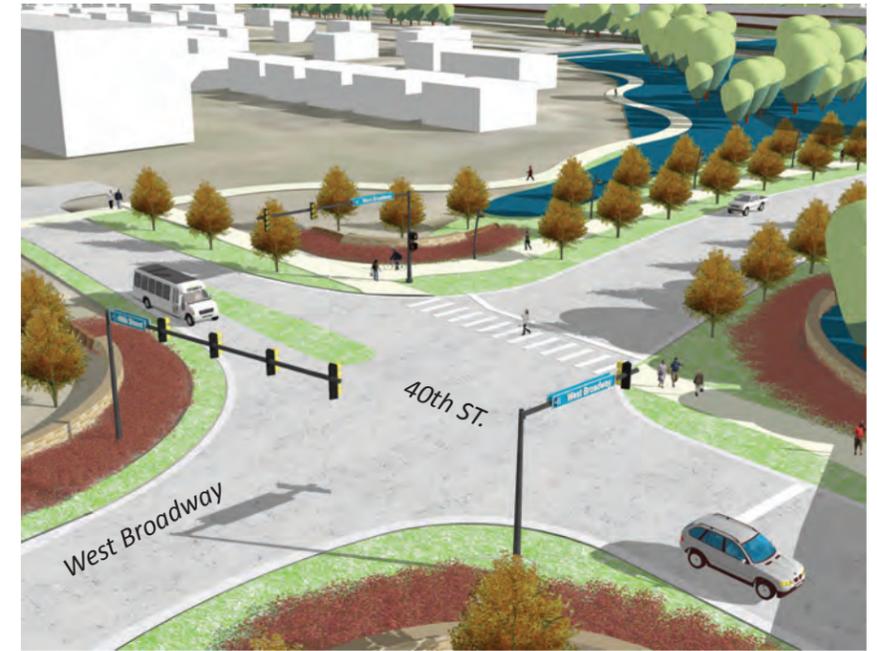
KIT OF PARTS



Multi-Use Trail w/ Pedestrian Lights and Street Trees



Planted Medians, Street Trees, and Turf



Enhanced Landscape Edge



Median brick paving will match existing street edges



Stone Veneer Walls at Intersections and All-America City Sign at 40th St.



Native Landscape along Interstate



WEST EXTENSION MASTER PLAN

The West Extension Master Plan illustrates the final streetscape design that was developed to fulfill the project Vision. The corridor enhancements are illustrated within the context of the interchange roadways and landscape that will be constructed by IDOT. The West Extension streetscape will be constructed and maintained by the City of Council Bluffs. The two project areas are shown separated by a black "IDOT Maintenance Fence." The fence will separate areas to be maintained by the city from those to be maintained by IDOT. The proposed landscape design for the IDOT interchange is documented separately in the 2018 CBIS Landscape Master Plan Addendum No. 1.

The West Extension Master Plan addresses district initiatives such as improving transit and trail access within the context of specific physical improvements to fulfill the streetscape design goals and objectives. A distinctive linear landscape is envisioned that will emerge from the surrounding interchange with special treatments for key intersections, medians, and trails.



Facing East (from Interstate 29 Northbound Overpass)



Facing West (from 36th Avenue)



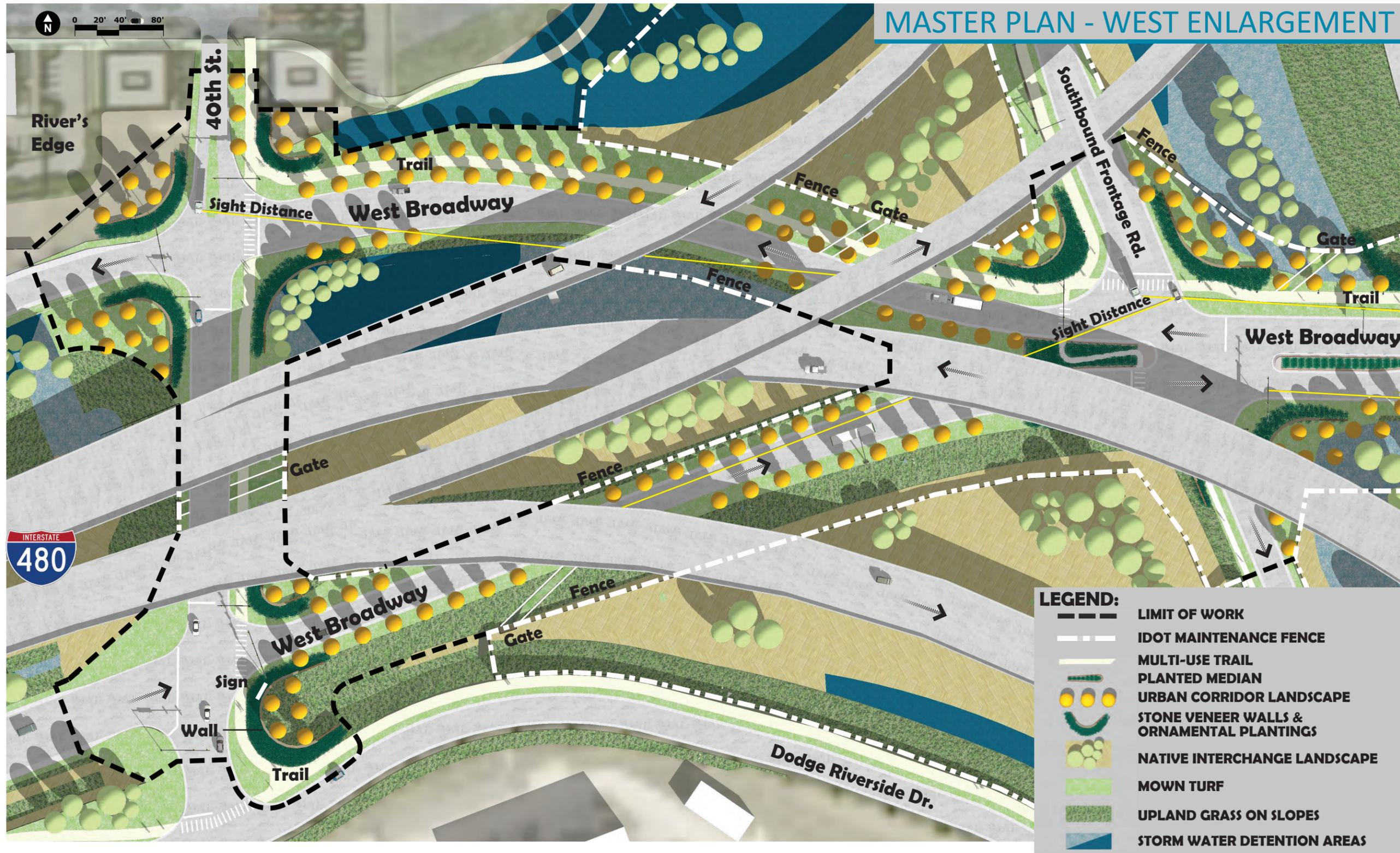
Facing North (from 4th Avenue)



Facing South (from Avenue E)



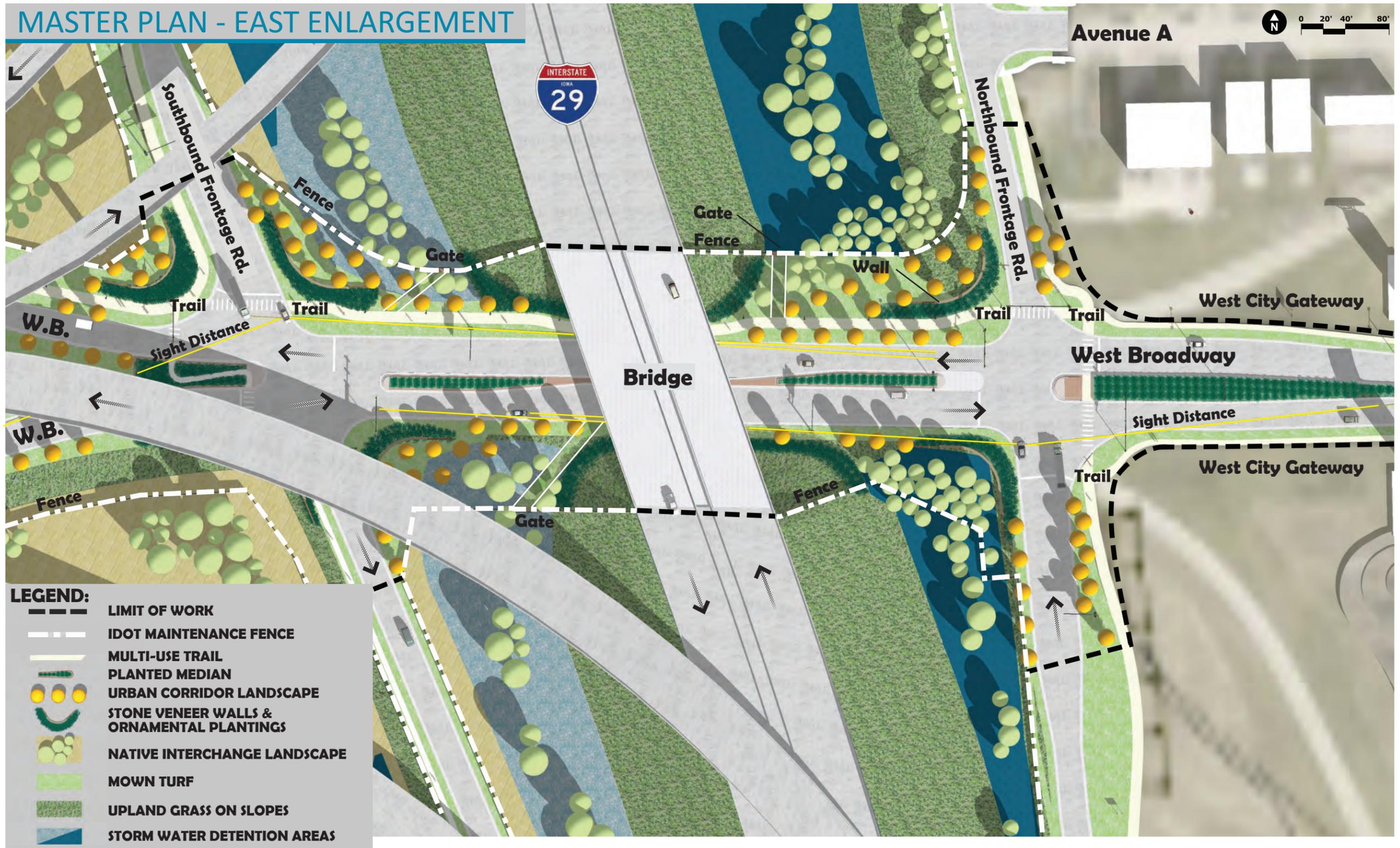
MASTER PLAN - WEST ENLARGEMENT



LEGEND:

	LIMIT OF WORK
	IDOT MAINTENANCE FENCE
	MULTI-USE TRAIL
	PLANTED MEDIAN
	URBAN CORRIDOR LANDSCAPE
	STONE VENEER WALLS & ORNAMENTAL PLANTINGS
	NATIVE INTERCHANGE LANDSCAPE
	MOWN TURF
	UPLAND GRASS ON SLOPES
	STORM WATER DETENTION AREAS

MASTER PLAN - EAST ENLARGEMENT





Proposed West Broadway facing east from 40th Street

The typical West Broadway cross section is taken at the east side of the Southbound Frontage Road intersection and illustrates the layout of the vehicular lanes and roadway edges, including the multi use trail, median, planting, lighting, and the associated grading. The city's proposed easement width along West Broadway varies but typically includes a mown turf shoulder, tree planting edge, and a wider strip of adjacent landscape to provide

an attractive backdrop. Pedestrian lights are set behind the trail to separate them from the roadway. Street trees are set back from the curb where they will align with street lights and traffic signs wherever possible.

There are two types of medians proposed: the West Gateway's decorative barrier planted median and the lower brick-edged medians west of that location.

The west gateway median will be replaced in kind. The new lower medians will be edged with red brick and planted where space allows. Elsewhere, their full width will be paved with red brick. The ends of all medians, will be paved with concrete.

TYPICAL STREET CROSS SECTION (facing east)

Scale : 1/4" = 1-0"
0 2' 4' 8'
NORTH

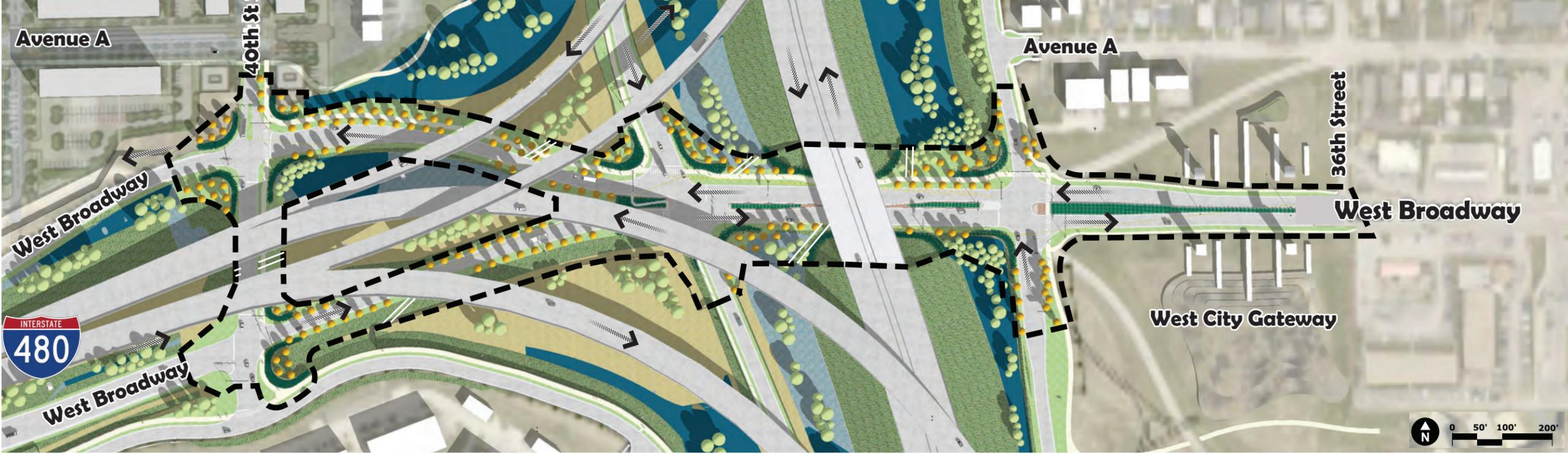


IMPLEMENTING THE PLAN

The City of Council Bluffs will use this master plan to guide the upcoming design phase of this project. Based on the current IDOT project schedule, the I480 interchange will be complete in late 2023. Construction of the streetscape, as a separate follow up project, could begin in early 2024. Funding must be secured for implementation. Once it is confirmed, this master plan will be developed into more detailed plans and construction documents.

LEGEND:

-  LIMIT OF WORK
-  MULTI-USE TRAIL
-  PLANTED MEDIAN
-  URBAN CORRIDOR LANDSCAPE
-  STONE VENEER WALLS & ORNAMENTAL PLANTINGS
-  NATIVE INTERCHANGE LANDSCAPE
-  MOWN TURF
-  UPLAND GRASS ON SLOPES
-  STORM WATER DETENTION AREAS



ESTIMATE OF PROBABLE COSTS

The following estimate of probable construction costs is provided for project budgeting and fund raising purposes. It is based on the master plan and provides items and quantities as shown herein. However, the design will change as it is developed, quantities will be adjusted, updated unit costs will be applied, and new items may be added. A contingency is included in the total to account for these changes and inflation.

<i>Item Description</i>	<i>Cost</i>
Site Preparation & Earthwork	\$ 43,000
Topsoil & Drainage	\$ 175,000
Brick & Concrete Paving and Edging	\$ 135,000
Irrigation	\$ 177,000
Planting	\$ 395,000
Walls & Signs	\$1,063,000
Lighting & Electrical	\$ 417,000
Subtotal	\$2,405,000
25% Contingency	\$ 601,250
General Conditions of the Contract	\$ 56,000
Contractor Overhead & Profit	\$ 240,500
Soft Costs: Project Design / Const. Admin.	\$ 350,000
TOTAL	\$3,652,750

Project Size = 200,000 Square Feet
Estimated Cost / SF = \$18.26

