

# WELCOME

## PUBLIC INFORMATION MEETING

MEDORA BUSINESS LOOP AND CITY SECTION

5-094(152)900, PCN 23114

October 5, 2023





# PURPOSE OF THIS MEETING

1. To present the selected Pacific Ave Build Alternative
2. To show the next steps in in the Environmental Process

*Please Note: No formal comments/public input will be requested at this meeting*

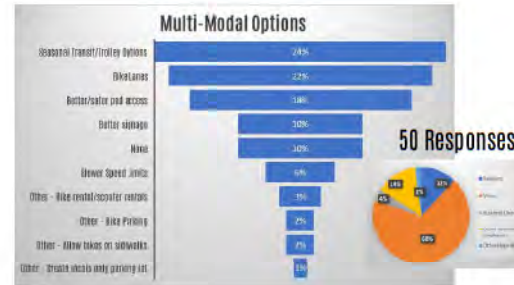


# CONCEPT EVOLUTIONS

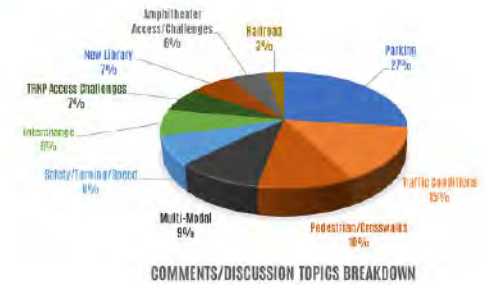
TRANSPORTATION STUDY STAKEHOLDER (4)  
 &  
 ONE-ON-ONE MEETINGS (25)  
 APRIL - OCTOBER 2022  
 AUGUST 8-10, 2022



ON STREET SURVEYS RESULTS (JULY 20 22)  
 ON-LINE SURVEYS RESULTS (MAY TO OCT 2022)



TRANSPORTATION STUDY PI MEETING # 1  
 MAY, 2022 - RESULTS  
 TRANSPORTATION STUDY PI MEETING # 2  
 OCTOBER 2022 - RESULTS



## CONCLUSIONS:

-  Maintain Parking along Pacific Avenue
-  Add parking for Large/RV Vehicles outside of downtown – downtown sight distance/safety concerns
-  Find ways to keep Pedestrians safe, while maintaining downtown character
-  Concerns about roundabouts downtown – see issues including maintenance, train backups, right of way impacts to existing business owners, how to fit western heritage, etc.

-  Need for better/safer pedestrian crosswalks
-  Seasonal Transit/Trolley Options were popular
-  Current traffic conditions are okay, but problems include speed, access for older folks with mobility issues, traffic congestion, hard to turn left, better signage, etc.
-  Downtown parking could be improved (local only parking area)
-  Biking is important to visitors & residents – bike lanes, bike parking, etc. (bike lane not necessary)
-  Some folks didn't want anything to change, like it the way it is

-  There is a need for more/safer/better defined crosswalks
-  Downtown parking is important (Need more)
-  No roundabouts in downtown Medora area
-  Current traffic challenges/problems (speed, congestion, large vehicles, etc.)
-  Preserve the historic nature/unique qualities of Medora






# PREVIOUS TRANSPORTATION STUDY

## WHAT WE HEARD / STUDY RECOMMENDATIONS



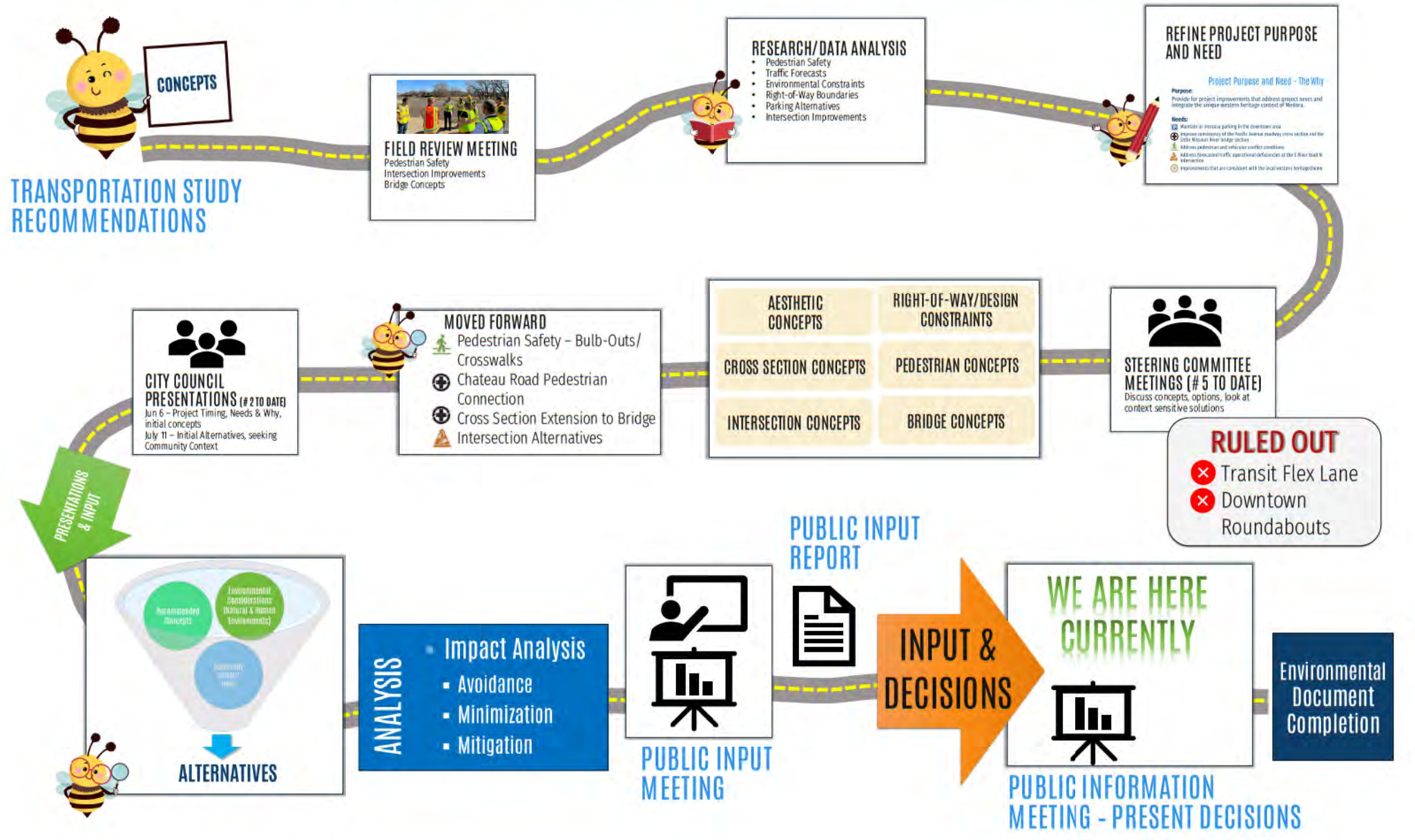
Topic	Comments	Preference
PACIFIC AVENUE CONFIGURATION	No Build (0%)	10
	1a. Roundabouts - 2 Lane Flex Transit Lane (Parking removed north side peak season) (100%)	9
	1b. Roundabouts - 3 Lane, Side-walk, Shared crosswalks (matching existing cross section) (100%)	3
	Two respondents asked to consider 3-lanes with bulb-out crosswalks, but no roundabouts (0%)	2
Common Themes:		
<ul style="list-style-type: none"> <li>No Roundabouts - not needed</li> <li>Roundabouts don't fit in historic area - they look too modern</li> <li>1-lane crosswalk/bulbouts for pedestrian safety</li> <li>No turn-lane needed/required</li> <li>Questions on maintenance of roundabouts</li> <li>Concerns that roundabouts will work with big trucks on what's called</li> <li>Trusts in the lack of a "hot spot" lower - No Roundabout</li> <li>Worst case option, not standard</li> </ul>		



P&N	Goal	Preliminary Concept Result
	Focus on Improved Pedestrian Safety	<ul style="list-style-type: none"> <li>Evaluate safer pedestrian facilities</li> </ul>
	Provide for Parking and Accessibility	<ul style="list-style-type: none"> <li>Add Parking outside downtown</li> </ul>
	Improve Traffic Conditions	<ul style="list-style-type: none"> <li>Intersection Improvements (Roundabouts most efficient type)</li> </ul>



# CURRENT DESIGN PROJECT CONCEPT EVOLUTION TO ALTERNATIVES













# CONCEPT EVOLUTIONS

STEERING COMMITTEE (6) & CITY COUNCIL COORDINATION (4)

MAY - OCTOBER 2023

## CHANGES TO INITIAL CONCEPTS:

-  1. Removed Dedicated Transit Lane – Maintain Downtown Parking
-  2. Removed roundabouts from downtown area
-  3. Removed medians from conflicting with downtown intersections
-  4. Modified Quantity of Danish Offset Crosswalks from downtown area
-  5. Removed the restricted left turn at E River Road N – access to Theodore Roosevelt National Park
-  6. Added pedestrian facilities extending to Chateau Road
-  7. Added parking west of E. River Rd N
-  8. Major intersection improvements at Chateau Road – **Not** in Downtown



# SELECTED IMPROVEMENTS



- **Extend Downtown Cross Section from East River Rd N to Chateau Road**
  - Three lane cross section with shoulders
  - Added pedestrian sidewalk connection (south side) from downtown to Chateau Road
  - Added parking, including area for larger vehicles
- **Bridge Widening (Little Missouri River Bridge)**
  - Three lane cross section with shoulders
  - Added pedestrian connections on south side of Bridge to Chateau Rd
- **Mill & Asphalt Overlay**
  - Throughout project length – including downtown
- **Correct Pedestrian Ramp Deficiencies**
- **Upgrade Existing Lights with more Efficient LED Heads**





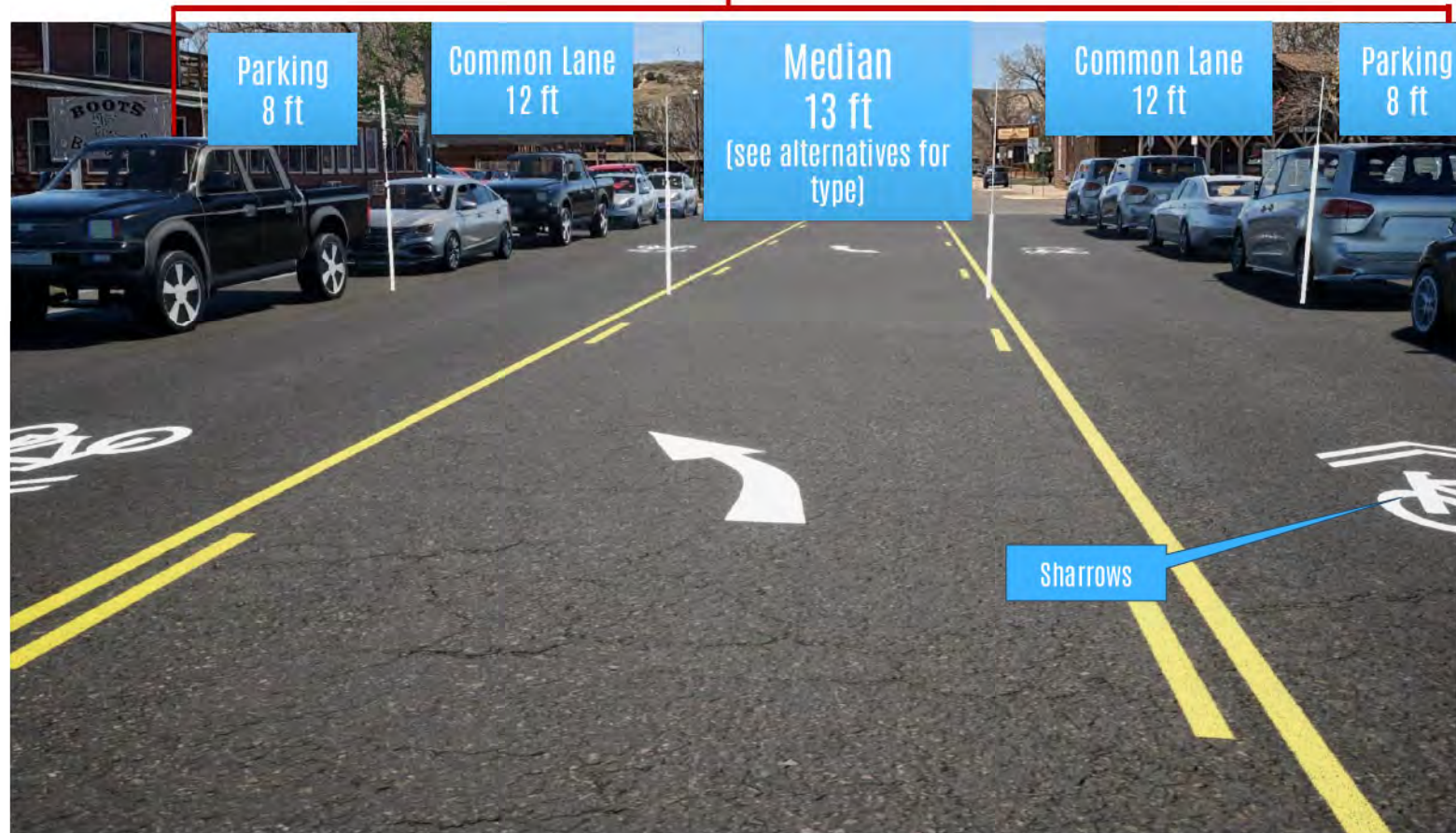
# PACIFIC AVENUE CROSS SECTION

## 12 FOOT TRAVEL LANES WITH SHARROWS

*Note: Proposed improvements are only within the existing roadway (asphalt) area*

### Overview:

- **Match** current cross section and lane widths
- **Sharrows:** Pavement markings that indicate bicycles and cars share the road
- **Multi-modal** - Bikes will share roadway, other (scooters, segways, etc.) would stay the same



### ADVANTAGES:

- Maintains current parking
- Better identification of bicycle use

### DISADVANTAGES:

- None

### SAFETY

#### ACCESSIBILITY

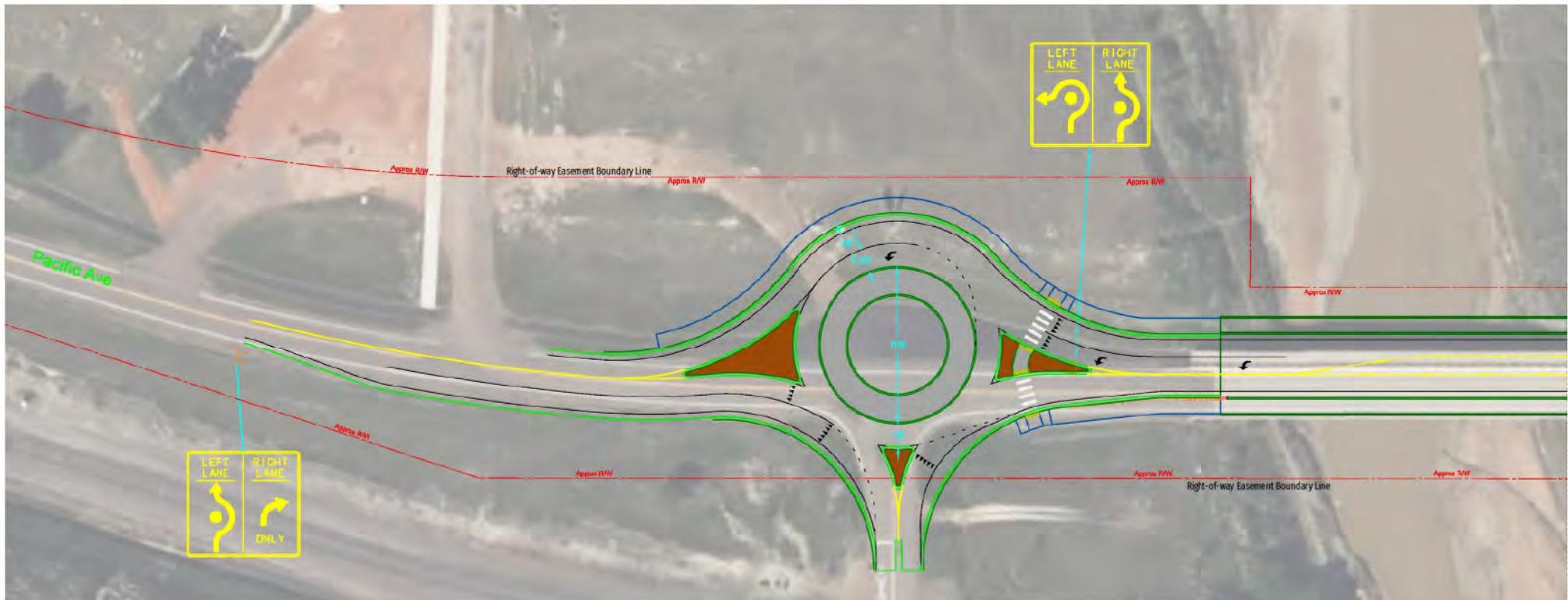






# INTERSECTION IMPROVEMENTS

## CHATEAU RD 2-LANE ROUNDABOUT



### ADVANTAGES:

- Reduces left turn stacking at E River Road N
- Eliminates main traffic flow delays when trains come through

### DISADVANTAGES:

- Impact to BNSF Railroad Property

**\*Note: Roundabout location and orientation to be further refined as part of final design.**



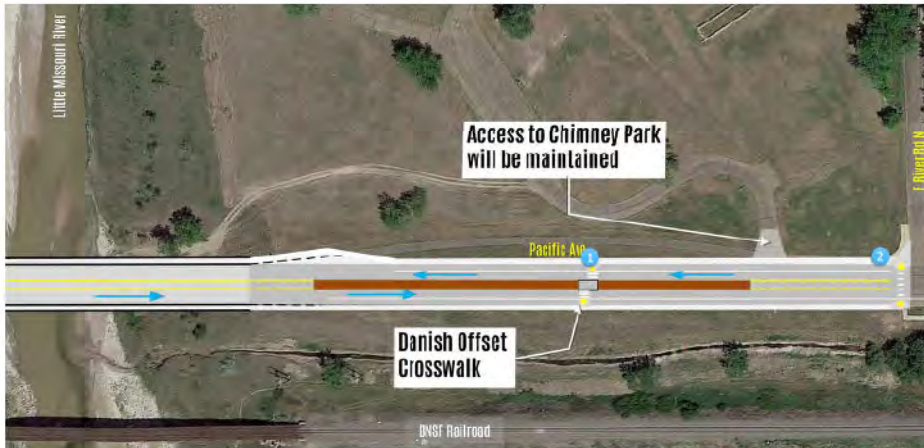


# PEDESTRIAN CROSSINGS

## MODIFIED ALTERNATIVE

### PEDESTRIAN IMPROVEMENTS

- Alternative 1 - No Build
- Alternative 2, Option 1 – Mid-Block (3) & Corner Pedestrian Crossings (3)
- Alternative 2, Option 2 – Mid-Block (2) & Corner Pedestrian Crossings (4)
- Alternative 2, Option 3 – Mid-Block (3) & Corner Pedestrian Crossings (3))
- Alternative 3 – Mid-Block Danish Offset Crosswalks/Bulb-Outs/Center Raised Median
- **Modified Pedestrian Alternative - Post City Coordination**



(See adjacent strip map for additional detail)



# ENVIRONMENTAL PROCESS

Prepare Decision Document -  
Alternatives/Options from  
Public Input Mtg

Internal NDDOT  
Coordinating  
Meeting

**Decisions &  
Direction**



Environmental  
Document Completed -



Oct 5 - Public  
Information Meeting

Oct 3 - City Council  
Presentation #3

NDDOT FINAL BUILD /  
NO BUILD DECISION

**FINAL DESIGN**

Feb 6 - Steering  
Committee Mtg

Feb 6 - City Council  
Presentation #4

**DESIGN  
COMPLETED  
SPRING 2024**



# Stormwater and the Construction Industry

## Protect Natural Features



- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

## Construction Phasing



- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before any grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

## Vegetative Buffers



- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

## Silt Fencing



- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don't place silt fences in the middle of a walkway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

## Construction Entrances



- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

## Slopes



- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

## Dirt Stockpiles



- Cover or seed off dirt stockpiles.

## Site Stabilization



- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land stabilizers have been completed.

# Maintain your BMPs!

[www.epa.gov/npdes/menuofbmps](http://www.epa.gov/npdes/menuofbmps)

# Stormwater and the Construction Industry

## Planning and Implementing Erosion and Sediment Control Practices

The construction industry is a critical participant in the nation's efforts to protect streams, creeks, lakes, wetlands, and estuaries. Through the use of best management practices (BMPs), construction site operators can help reduce erosion and sedimentation.

As stormwater flows over a construction site, it picks up pollutants like sediment, silt, and chemicals. High volumes of stormwater can cause erosion, bank erosion, and destroy downstream aquatic habitat. Preventing soil erosion and sedimentation is an important responsibility at all construction sites.

In addition to the environmental impacts, uncontrolled erosion can have a significant financial impact on a construction project. It costs money to take time to repair gullies, replace vegetation, clean sediment-charged streams, restore property, install BMPs, and mitigate damage to other projects in nearby areas or to natural resources.

**Best Management Practices (BMPs)**  
A BMP is a method used to prevent or reduce erosion and the discharge of pollutants, including sediment, to the land, waterways, air, streams, and wetlands. BMPs are a critical part of any construction site's stormwater management plan.

As an operator, you have the responsibility to develop a stormwater management plan and to implement it. This plan should include the following:

- Site evaluation and design development.
- Assessment.
- Control selection and plan design.
- Certification and notification.
- Implementing and maintaining a plan.

## Developing and Implementing a Plan

Developing and implementing a plan is the first step in ensuring that the stormwater management plan will be successful. This involves site evaluation, assessment, control selection, and plan design.

The first step in developing a plan is to evaluate the characteristics of the site and the type of activities that will occur. This involves evaluating the site's erosion and sedimentation potential, the type of activities that will occur, and the type of controls that will be needed to prevent erosion and sedimentation.

### 1. Site Evaluation and Design Development

- Collect site information.
- Develop site plan design.
- Prepare pollution abatement site map.

The first step in developing a plan is to evaluate the characteristics of the site and the type of activities that will occur. This involves evaluating the site's erosion and sedimentation potential, the type of activities that will occur, and the type of controls that will be needed to prevent erosion and sedimentation.

### 2. Assessment

- Measure the site area.
- Determine the drainage area.
- Calculate the runoff coefficient.

The site area is the total area of the site that will be disturbed. The drainage area is the area of the site that will contribute runoff to a particular control. The runoff coefficient is a measure of the site's erosion and sedimentation potential.

### 3. Control Selection and Plan Design

- Review local regulatory codes for local requirements.
- Select control and address controls.
- Select control location.
- Detail stormwater management controls.
- Indicate the location of controls on the site map.
- Prepare site map and implementation plan.
- Coordinate permit applications and construction activity.
- Prepare schedule of major activities.

The site map and implementation plan are the final products of the site evaluation and design development process. They provide a detailed description of the site's erosion and sedimentation potential and the controls that will be needed to prevent erosion and sedimentation.

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## 4. Certification and Notification

- Notify the permit authority.
- Obtain a permit.

The permit authority is the agency that issues permits for construction activities. The permit authority will review the site map and implementation plan and issue a permit if the site meets the requirements of the permit program.

## 5. Implementing and Maintaining a Plan

- Implement controls.
- Monitor and maintain controls.
- Update the site map.

Implementing and maintaining a plan involves installing and maintaining the controls that were selected during the site evaluation and design development process. It also involves monitoring the site and updating the site map as needed.

## 6. Completing the Project: Final Stabilization and Termination of the Permit

- Final stabilization.
- Notify the permit authority.
- Obtain a permit.

Final stabilization involves installing and maintaining the controls that were selected during the site evaluation and design development process. It also involves notifying the permit authority and obtaining a permit to terminate the permit.

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## What's the best way to prevent runoff?

The best way to prevent runoff is to use BMPs. BMPs are a critical part of any construction site's stormwater management plan.

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For more information visit - [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater) or [www.dot.nv.gov/divisions/environmental/storm-water/storm-water-management.htm](http://www.dot.nv.gov/divisions/environmental/storm-water/storm-water-management.htm)

