

Project Rationale and Overview



Department of Public Works

Andersen School Pedestrian Crossings & Bikeway (SP 141-591-010)

26th Street from 10th Ave to 12th Ave; 28th Street from 10th Ave to 12th Ave;

12th Ave S from 26th – 28th St; 11th Ave South from 28th to 29th St; 10th Ave S from 26th to 28th St

Capital Project Rationale and Overview (30%)

Date (10/20/2016)

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Approvals – Project Status: 0%



Nathan Koster, Manager, Transportation
Planning and Programming



Date

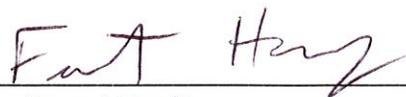
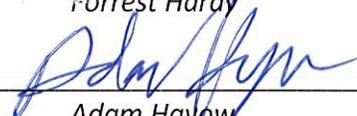
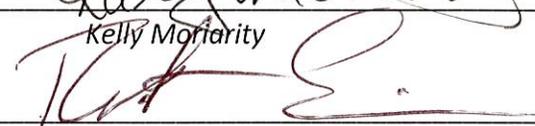


Jeff Handeland, Manager, Street Design
Transportation Engineering & Design



Date

Approvals – Project Status: 30%

 _____ Forrest Hardy	<u>10-20-16</u> Date
 _____ Adam Haypo	<u>10-20-16</u> Date
 _____ Ryan Anderson	<u>10-20-16</u> Date
 _____ Kelly Moriarty	<u>10/27/16</u> Date
 _____ Bob Ervin	<u>10/24/16</u> Date
 _____ Shane Morton	<u>10-20-16</u> Date

Approvals – Project Status: 60%

_____ Core Team Member	_____ Date
_____ Core Team Member	_____ Date

Approvals – Project Status: 90%

_____ Core Team Member	_____ Date
_____ Core Team Member	_____ Date

(Note: Send or deliver final signed copies of the PRO to the Project Sponsor, Customers and Division Director.)

Introduction and Background:

Project Location	10 th Ave S, 11 th Ave S, 12 th Ave S, 26 th Street E, 28 th Street E
Project Limits	10 th Ave S (Andersen Ln – 26 th St E) 11 th Ave S (Midtown Greenway Trailhead – 28 th St E) 12 th Ave S (28 th St E – 26 th St E) 26 th St E at 10 th Ave S, 11 th Ave S & 12 th Ave S 28 th St E (11 th Ave S – 12 th Ave S)
Project Length	0.37 Miles
MSA Designation	26 th St E, 28 th St E (MSA)
ADTs	10 th Ave S: 4,250 ADT south of 28 th St E (2011) 11 th Ave S: 750 ADT south of 28 th St E (2016) 12 th Ave S: 1200 ADT north of Andersen Lane 26 th Street E: 14,200 ADT west of Chicago Ave S (2012) 28 th Street E: 9,750 ADT east of 13 th Ave S (2010)
Year Built	10 th Ave S: 1974 11 th Ave S: 1974 12 th Ave S: 1974 26 th Street E: 1963 28 th Street E: 1960
PCI	10 th Ave S: 62 (2013) 11 th Ave S: 62 (2013) 12 th Ave S: 62 (2013) 26 th Street E: 95 (2015), estimated current PCI 28 th Street E: 95 (2015), estimate current PCI
ROW	10 th Ave S (Andersen Lane – 26 th Street): 66ft 11 th Ave S: (29 th St E – 28 th St E): 60ft 12 th Ave S: (26 th St E – 28 th St E): 60ft 26 th Street E (10 th Ave S – 12 th Ave S): 80ft 28 th Street E (10 th Ave S – 12 th Ave S): 80ft
Street Typology	10 th Ave S: Local Street 11 th Ave S: Local Street 12 th Ave S: Local Street 26 th Street E: Community Connector 28 th Street E: Neighborhood Connector

Project Scope

Map Key

	Off-street Trail Connection (2-way bikeway and separated sidewalk)
	Bicycle Boulevard Markings
	Curb Extension
	Pedestrian Ramps
	Durable Crosswalks
	Durable Pavement Marking



Andersen School Crossing & Bike Trail – Project Limits

Right-of-Way & Existing Design



28th Street E at 12th Ave S showing existing on-street protected bikeway (image date: Sept 2015)

Existing Sample Section

28th St E – (11th Ave S – 12th Ave S) South to North – 44ft Curb to Curb – 80 Ft ROW

South to North

Next to Lot	Sidewalk	Boulevard	1-way Protected Bikeway	Buffer	Travel Lane	Travel Lane	Parking Lane	Boulevard	Sidewalk	Next to Lot
8	6	4	7	7	11	11	8	4	6	8



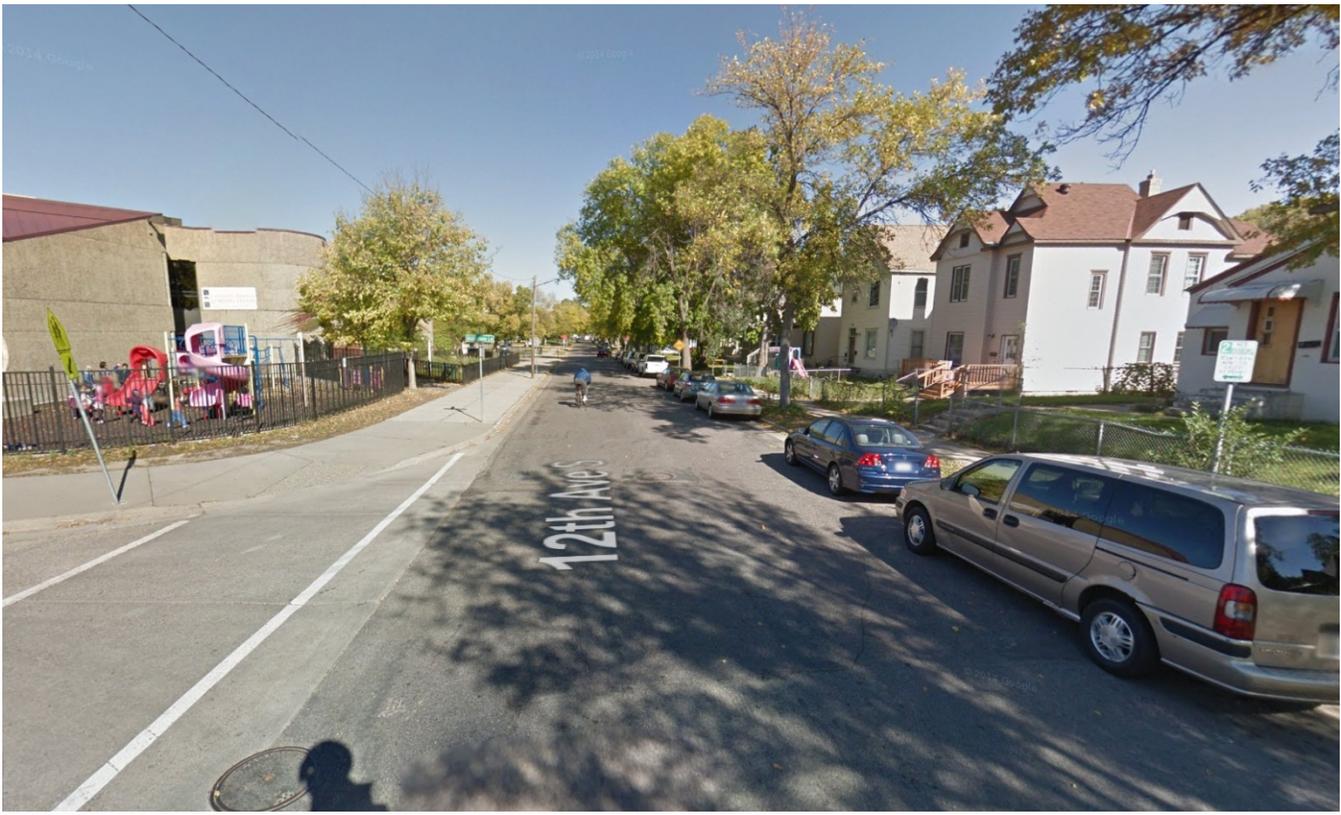
26th Street E showing existing on-street protected bikeway (image date: Sept 2015)

Existing Sample Section

26th St E – (12th Ave S – 10th Ave S) 44ft Curb to Curb – 80 Ft ROW

South to North

Next to Lot	Sidewalk	Boulevard	Parking Lane	Travel Lane	Travel Lane	Buffer	1-way Protected Bikeway	Boulevard	Sidewalk	Next to Lot
8	6	4	8	11	11	7	7	4	6	8



12th Ave S at Andersen Lane adjacent to the school
 (image date Oct 2014 – Google streetview)

Existing Sample Section

12th Ave S (28th St E – Andersen Lane) - 60 Ft ROW

West to East

Next to Lot	Sidewalk	Boulevard	Local Street Width	Boulevard	Sidewalk	Next to Lot
3	6	6	30 - 31	5.5 - 6	6	3



11th Ave S at Greenway entrance
 (image date Oct 2014 – Google streetview)

Existing Sample Section

11th Ave S (Greenway Entrance – 28th St E) – 60 Ft ROW

West to East

Next to Lot	Sidewalk	Boulevard	Local Street Width	Boulevard	Sidewalk	Next to Lot
2.5	6	7	29	7	6	2.5

Traffic Control

Traffic signals exist within the project limits at

- 28th St E and 12th Ave S
- 26th St E and 12th Ave S
- 26th St E and 10th Ave S

Parking

Both 11th Ave S and 12th Ave S allow parking on either side of the street. 12th Ave S has a posted school hours parking restriction on the west side from Andersen Lane to 26th St E. This is to allow for school bus loading and to open up sight lines adjacent to the school. Portions of 11th Ave S and 12th Ave S also have 2hr daytime parking restrictions and parking by permit. Parking is currently allowed on the south side of 26th St E and the north side of 28th St E within the project limits.

Landscaping & Amenities

11th Ave S and 12th Ave S are residential streets with boulevard trees. 11th Ave S is adjacent to a park like setting that leads into the Midtown Greenway at the former Cepro site. 12th Ave S and 26th St E are adjacent to Stewart Park, which has numerous programmed activities and multiple ball fields.

Lighting

Street lighting exists on wooden Xcel Energy poles only within the project limits.

Transit

There is one regular service bus line, the 27, within the project limits. It has stops on 26th St E and 28th St E at 10th Ave S and 12th Ave S. The 27 route is a Phillips Neighborhood circulator to the Blue Line LRT Lake Street Station. This route typically runs a smaller vehicle than a standard city bus, similar to MTC's Metro Mobility vehicles.

Land Use

The land use surrounding the project is primarily residential. Andersen School, Stewart Park, and the Cepro site park are all active destinations adjacent to the project. Several surface parking lots exist adjacent to the project. These are located at 28th St E and 12th Ave S, and at 12th Ave S and 27th St E. Within two blocks of the project is a large hospital complex, and the Midtown Greenway Center, a historic mid-rise tower that includes offices, residential units and a large market. The Midtown Greenway trail is also a nearby destination that has a high level of activity, especially during events such as outdoor movie nights and the annual Powderhorn 24 Community Bicycle Ride.

General Information:

- **Project Team**

- Project Lead: *Forrest Hardy (TPP) and Adam Hayow (TED)*
- The Project’s core team includes: *Forrest Hardy, Adam Hayow, Ryan Anderson, Shane Morton, Kelly Moriarity, Bob Ervin, - Public Works; Mike Anderson – Alliant Engineering*
- The major stakeholders include: The City of Minneapolis, City Council Ward 9, Minneapolis Park and Recreation Board, MNDOT State Aid, Midtown Phillips Neighborhood, Andersen United School, Minneapolis Public Schools and adjacent residents.

- **Schedule**

- Fall 2015 - Preliminary Design Process Begin
- Spring – Fall 2016 - Stakeholder Meetings
- October 2016 – Environmental Document Submission
- November 2016 - Layout Approval
- Aug 2016 to Jan 2017 - Engineering Design & Bid Preparation
- March 2017 – Bid Award
- Summer 2017 - Construction

- **Funding and Budget**

\$450,000 Safe Routes to School Capital funds are anticipated to be programmed within the 2017 funding year. \$400,000 is expected to be programmed each year thereafter in the 5 year CIP.

*Design & Engineering scheduled for 2016, though funded with 2017 dollars

Funding Sources	2016	2017	Total
Federal Funding	\$0	\$603,200	\$603,200
SRTS Capital	\$0	\$480,083	\$480,083
Total	\$0	\$1,083,283	\$1,083,283

- **Project Cost by Major Expense (in thousands)**

	2017	Total
Design Engineering / Architects	118	118
Construction Costs	747	747
Contingency	75	75
Project Management	15	15
Constr Admin + Lab	60	60
City Administration	68	68
Total Expenses with Admin	1083	1083

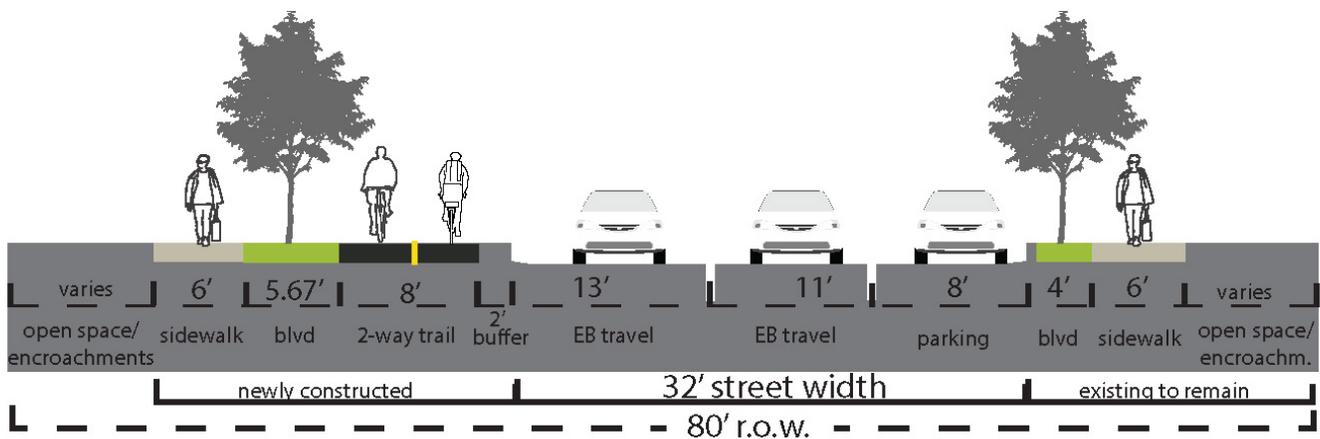
Recommended Design

Project Description:

The project will include pedestrian improvements such as curb extensions and crosswalk markings at multiple intersections along 26th St E and 28th St E. It will also include a bicycle boulevard from the Midtown Greenway access point on 11th Ave S to Andersen School and Stewart Park on 12th Ave S. The bikeway will also include an off-street protected bikeway along one block of 28th St E. This facility will provide a two-way connection between on-street bikeways along 11th Ave S and 12th Ave S.

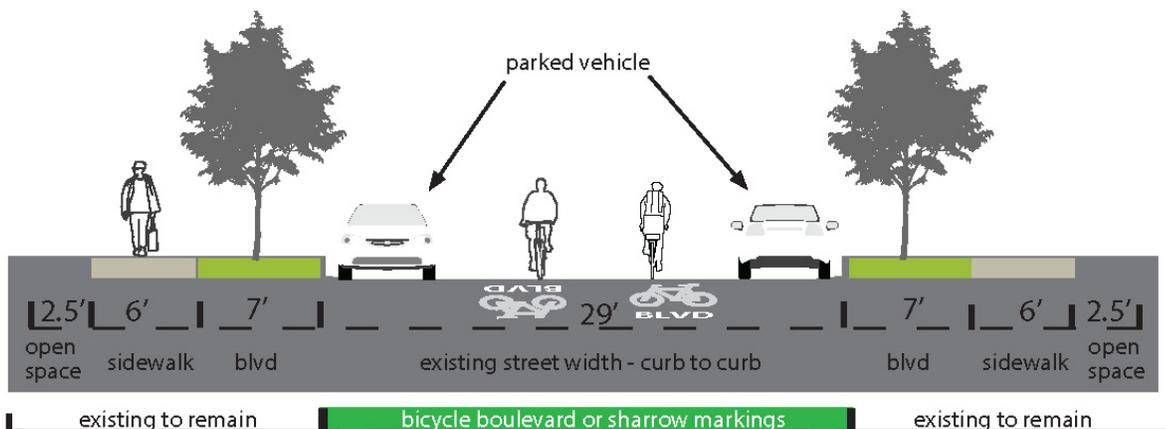
28th St E – (11th Ave S – 12th Ave S), South to North – 32ft Curb to Curb – 80 Ft ROW

Off Street Protected Bikeway, rebuilt curb on south side



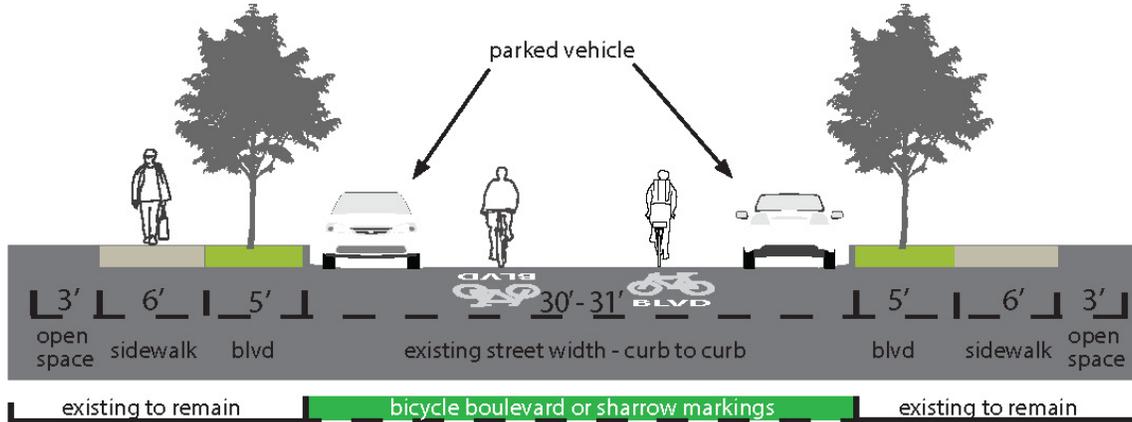
11th Ave S – (Greenway Exit – 26th St), West to East

On Street Bicycle Boulevard. Bicyclists share local street with automobiles. Typical section will remain unaltered.



12th Ave S – (26th St – 28th St), West to East

On Street Bicycle Boulevard. Bicyclists share local street with automobiles. Typical section will remain unaltered.



(See 30% layout in Appendix for street dimensions at curb extension locations along 26th St E and 28th St E)

Additional Items

- *The existing one-way protected bikeway on 28th St E will continue through the proposed 2-way bikeway connection between 11th Ave S and 12th Ave S.*
- *Signal replacements at 12th Ave S at 26th St E, and 12th Ave S at 28th St E and pedestrian level street lighting on 28th St E from 11th Ave S – 12th Ave S will be installed by local forces and coordinated with the project*

Relevant Plans, Guidelines, and Standards

Minnesota State Aid Standards

*{28th St E and 26th St E} are Municipal State Aid Routes (MSA) and therefore design needs to follow (MSA) standards. Important MSA standards for an *urban reconditioning project include:*

- *Minimum 10 foot traffic lanes***
- *Minimum 7 foot parking lanes*
- *Minimum 5 foot bike lanes*

***If a vehicle lane width of less than 11 feet is used, the parking and bikeway lanes shall be at least one foot wider than the minimum widths. See State-Aid Operations Chapter 8820.9951 for more details.*

Minimum State Aid design standards for an off-road bike path include:

- *Minimum 8 foot surface width (two-way)*
- *Minimum 2 foot clear zone (measured from edge of the bicycle travel lanes)*

**Note on State Aid Operations Chapter 8820.0200 Subp. 30:*

Reconditioning projects may entail minor widening or geometric improvements, and normally require little or no additional right-of-way. Reconditioning may include changes in vertical or horizontal alignment involving no more than 20 percent of the length of the project. The state aid project engineer has indicated that the project would qualify for urban reconditioning / bicycle facility design minimums.

Access Minneapolis/Design Guidelines for Streets and Sidewalks

The Minneapolis Citywide Action Plan defines the segment of 26th St E within the study area as a community connector, and the segment of 28th St E within the study area as a neighborhood connector.

Bicycle Master Plan

Portions of the project are reflected within the '11th Ave Trail' as indicated on the City's Bicycle Master Plan. The project also includes improvements along one block of the 28th Street Protected Bikeway which was included in a 2015 update to the plan. The proposed curb extensions along 26th Street and 28th Street will not conflict with the existing protected bikeways.

Street Lighting Policy

The project will reconstruct the southern curb line of 28th St E from 11th Ave S to 12th Ave S. The street lighting policy indicates that the project will pay for new ped-level lighting on the southern half of the roadway.

Design Changes

% Complete	Date	Design Change	Rationale	Core Team Member
30	<i>9/25/16</i>	<i>Trail segment moved back of curb with boulevard between sidewalk and trail</i>	<i>Utilities; potential pedestrian conflict with bike through movement along 28th St E</i>	<i>Forrest & Adam</i>
	<i>9/25/16</i>	<i>Partial reconstruct of south side of 28th St E (11th Ave S – 12th Ave S)</i>	<i>Necessary in order to make surface water runoff grades work with new trail</i>	<i>Forrest & Adam</i>
	<i>9/25/16</i>	<i>Trail reduced to 8' to allow for 2' buffer/clear zone</i>	<i>Standards require 2' clear zone back of curb</i>	<i>Forrest & Adam</i>
	<i>9/25/16</i>	<i>Pedestrian level street lighting paid by project and installed by local forces</i>	<i>Project is reconstructing the southern curb line which triggers policy</i>	<i>Forrest, Adam, Ryan</i>
	<i>10/03/16</i>	<i>Signal coordination note</i>	<i>Project work creates opportune time to upgrade signals</i>	<i>Forrest, Adam, Ryan</i>
60				
90				
100				

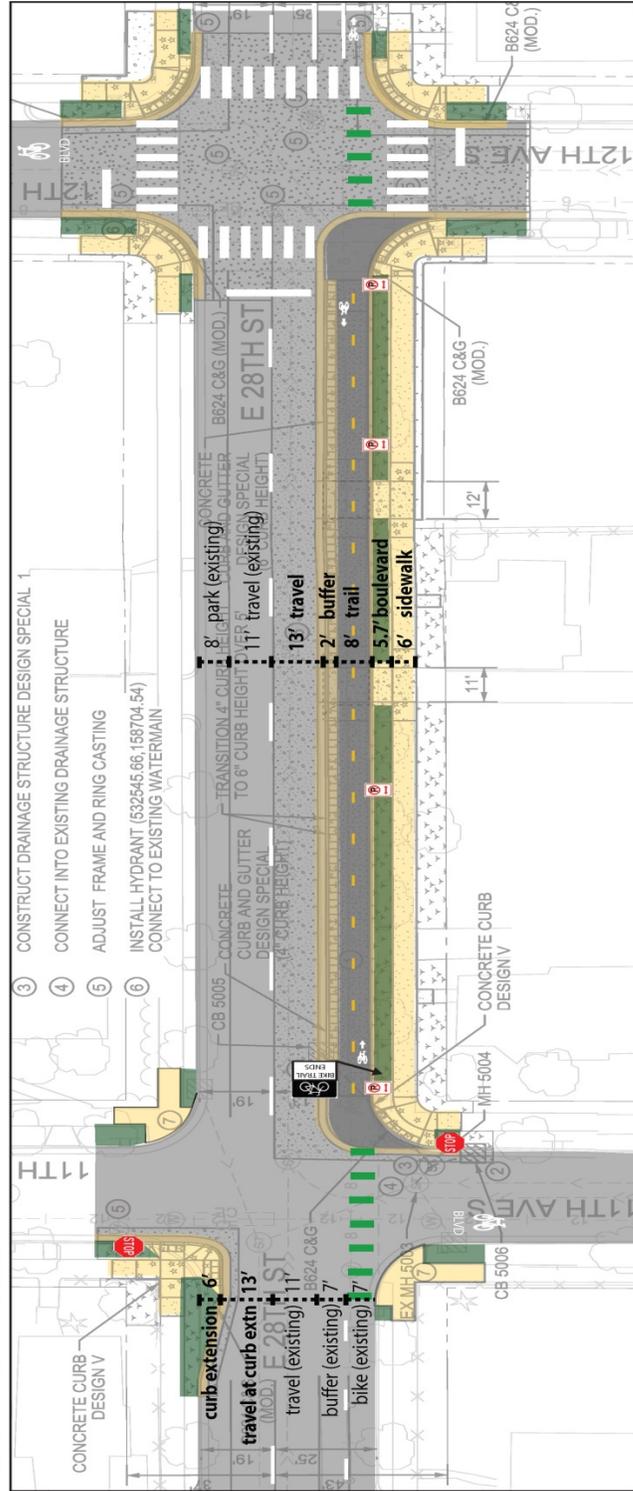
Appendix : 30 Percent Layout

Andersen School Pedestrian Crossings and Bikeway
 30% Layout - 28th St E (11th Ave S - 12th Ave S)
 October 19th, 2016



NACTO Design Guidance - Bicycle Boulevard at Offset Intersection
<http://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/offset-intersections/>

28th St E (11th Ave S - 12th Ave S)



Andersen School Pedestrian Crossings and Bikeway
30% Layout - 26th St E at 12th Ave S
 October 19th, 2016

