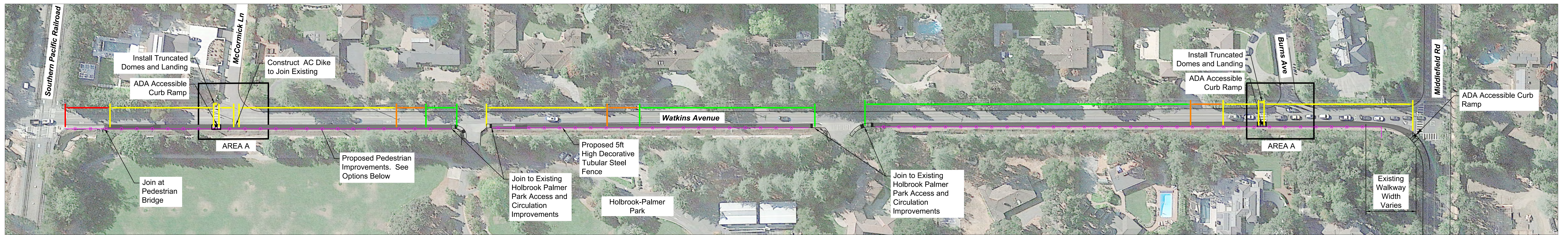


# TOWN OF ATHERTON WATKINS PEDESTRIAN IMPROVEMENTS FROM MIDDLEFIELD RD TO CALTRAIN RIGHT-OF-WAY

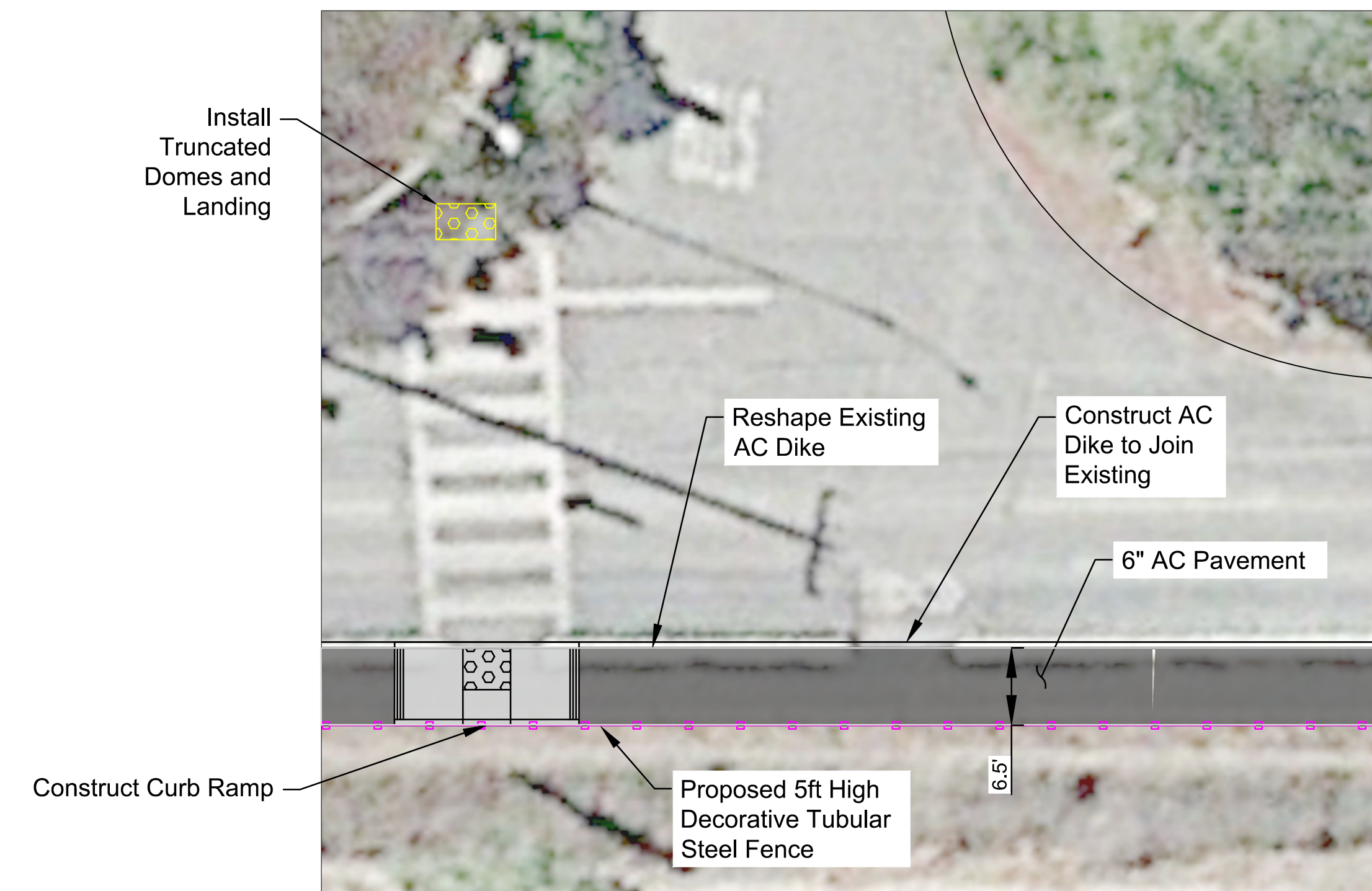
## Legend

- Walkway Below Roadway
- Walkway At Roadway
- Walkway Above Roadway
- Transition



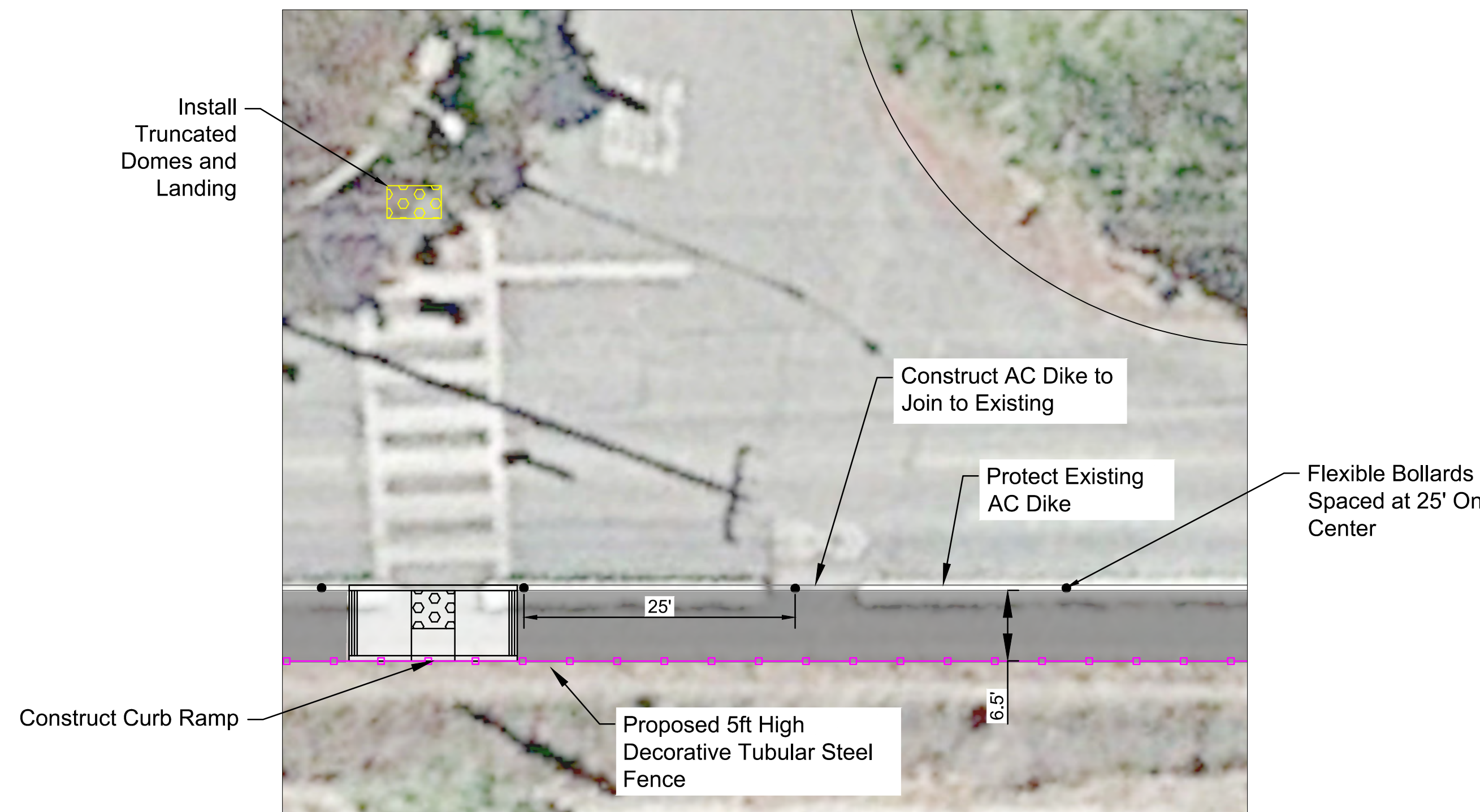
PLAN VIEW  
1"=60'

## Option 1: Raised AC Walkway with Reshaped Curb



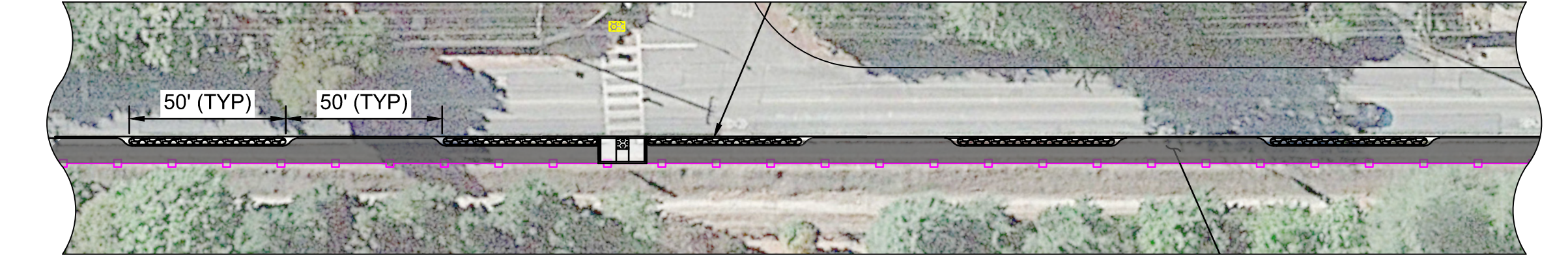
PLAN VIEW OF AREA A  
1"=10'

## Option 2: Flexible Bollards



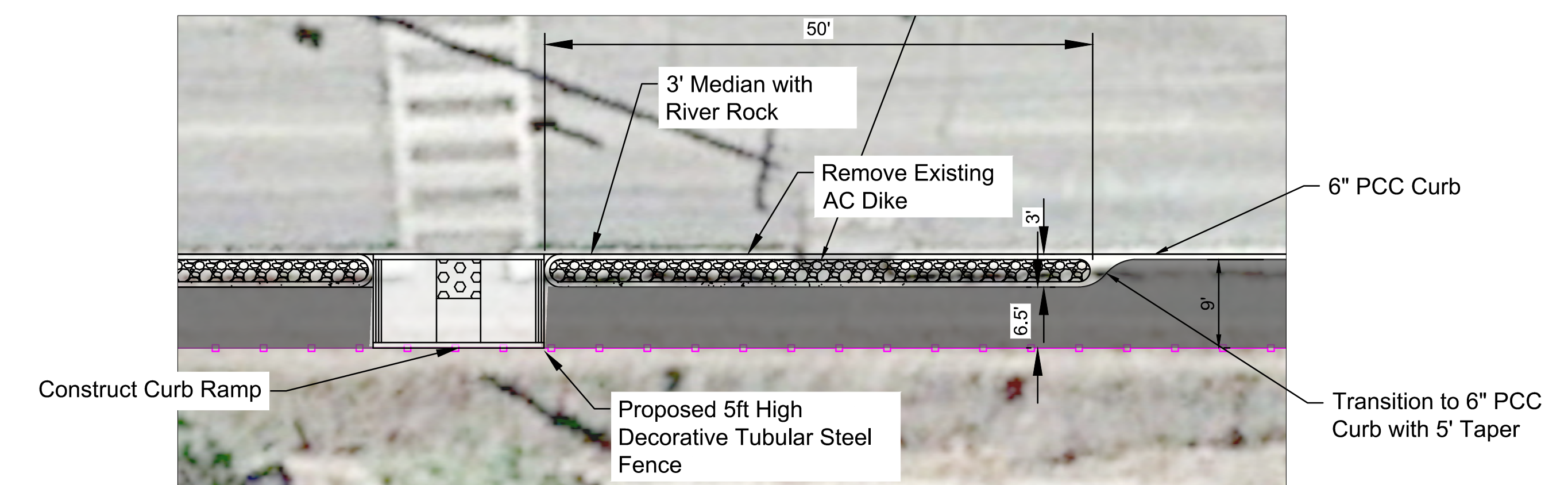
PLAN VIEW OF AREA A  
1"=10'

## Option 3: Median with Hardscape

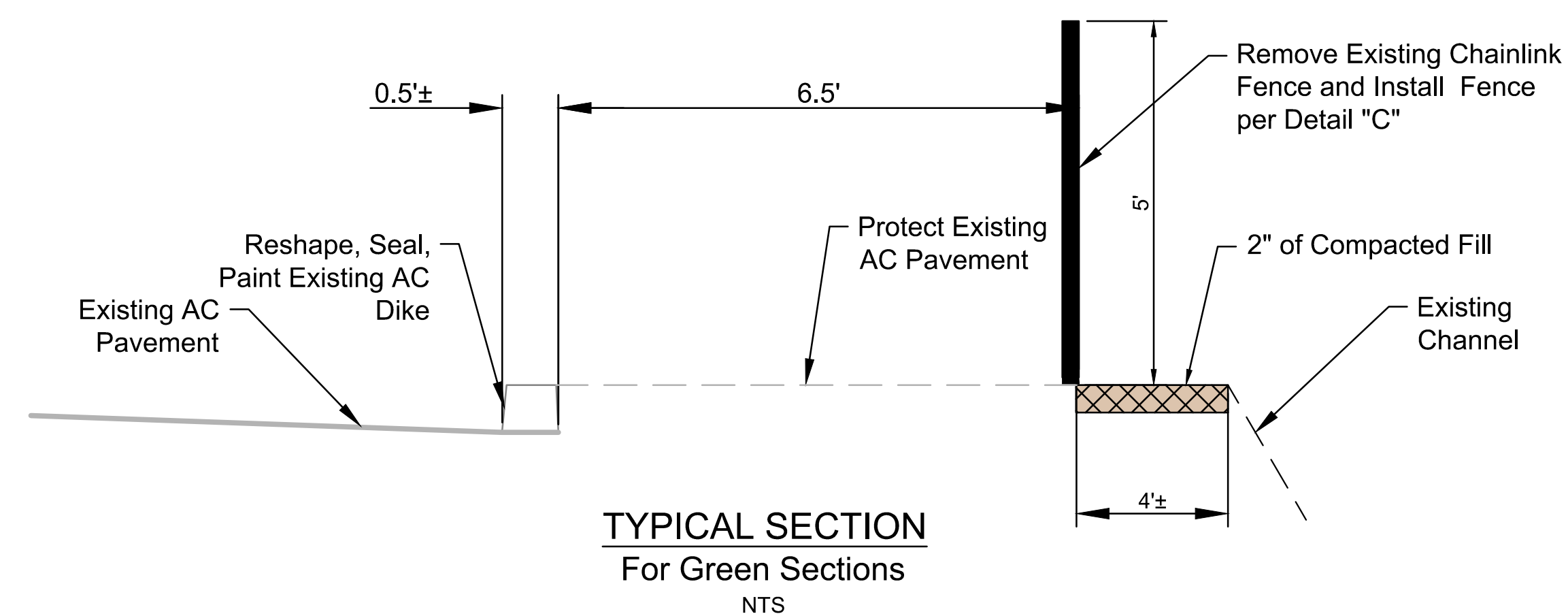


Note: The medians will be 50' long with 50' gaps.

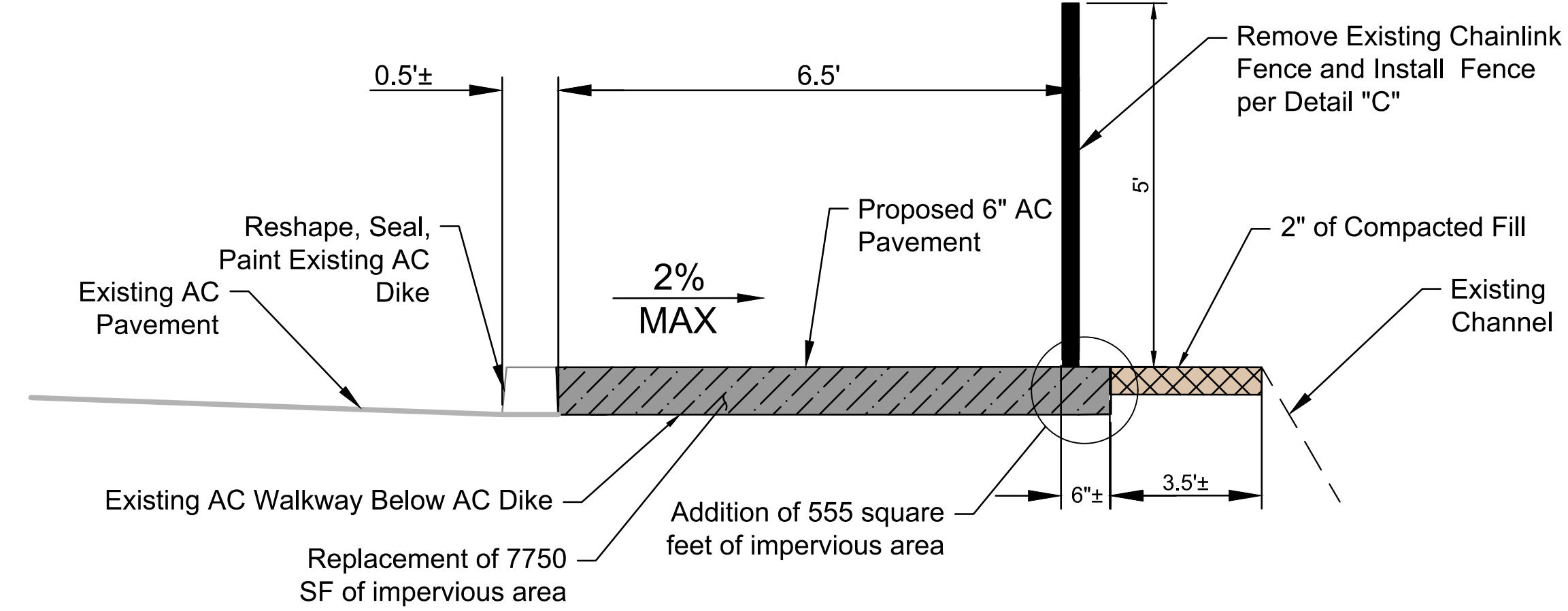
PLAN VIEW  
1"=40'



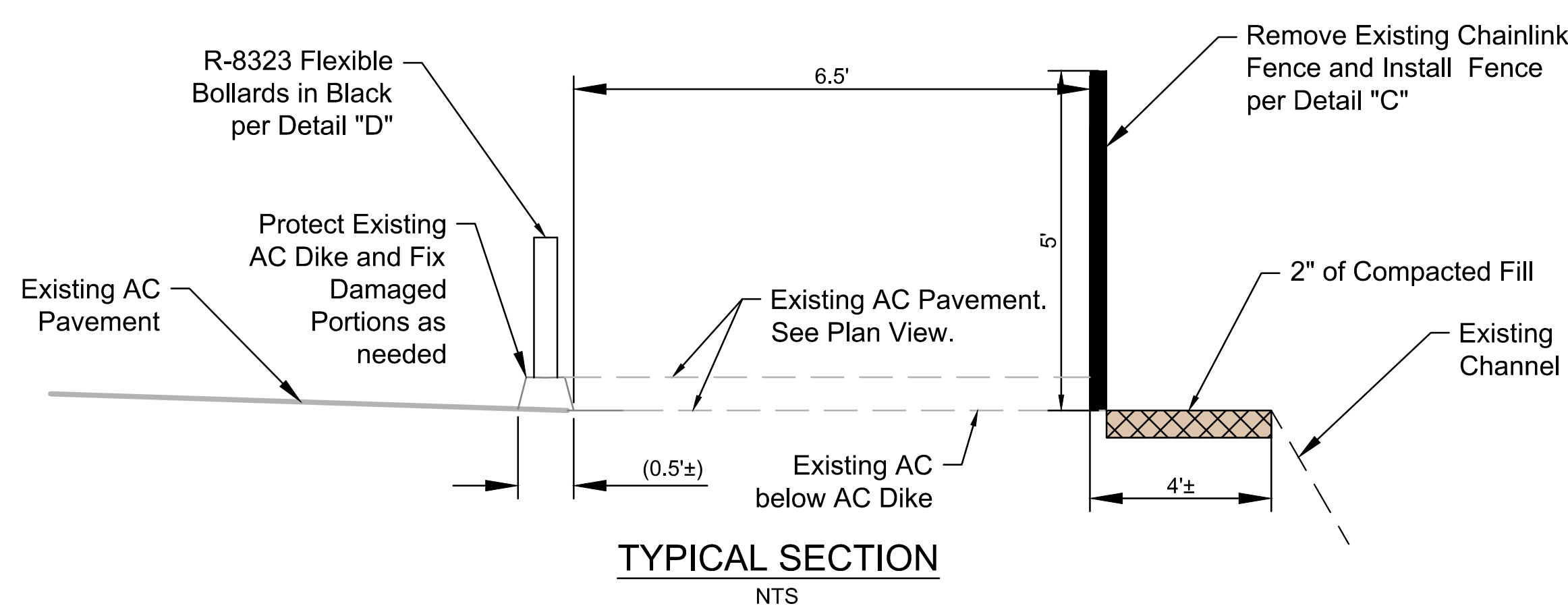
PLAN VIEW OF AREA A  
1"=10'



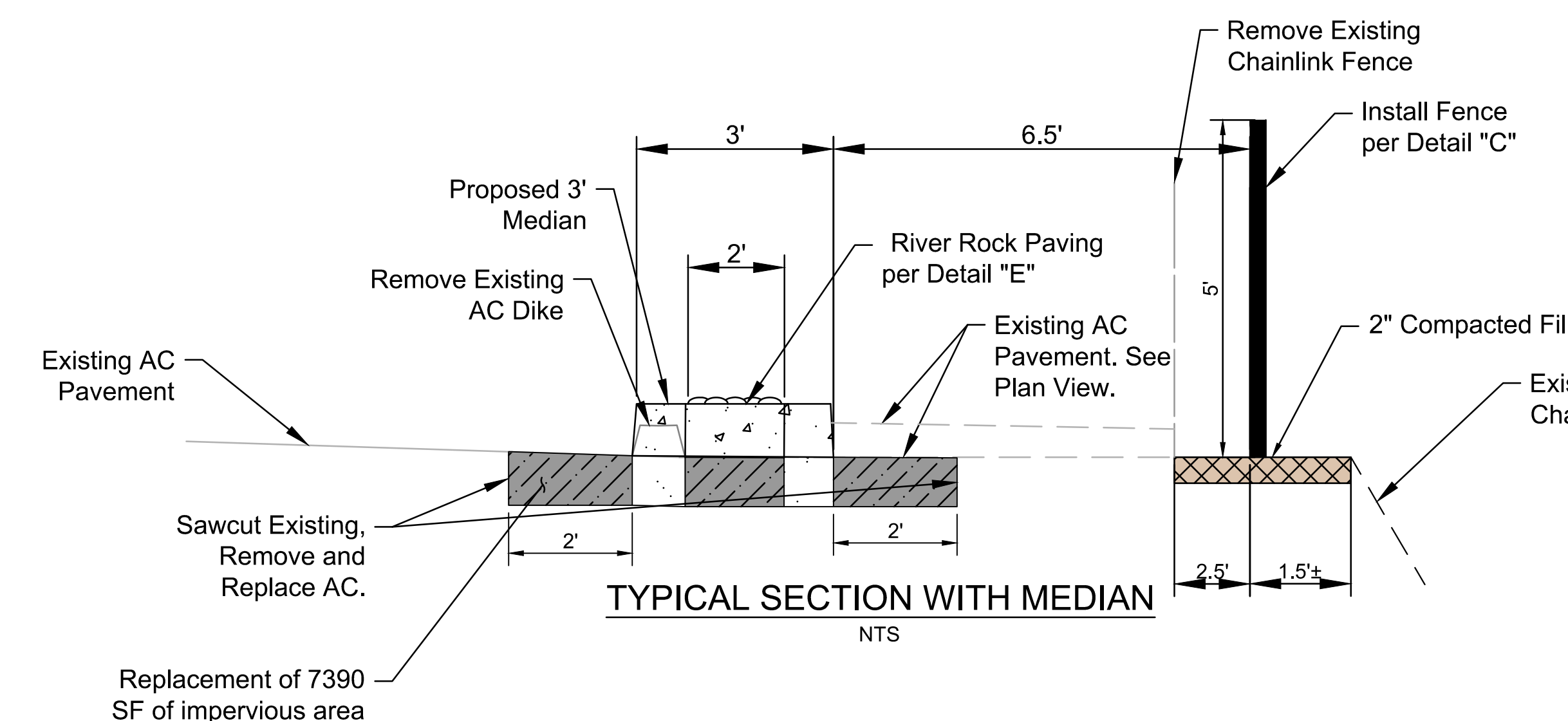
TYPICAL SECTION  
For Green Sections  
NTS



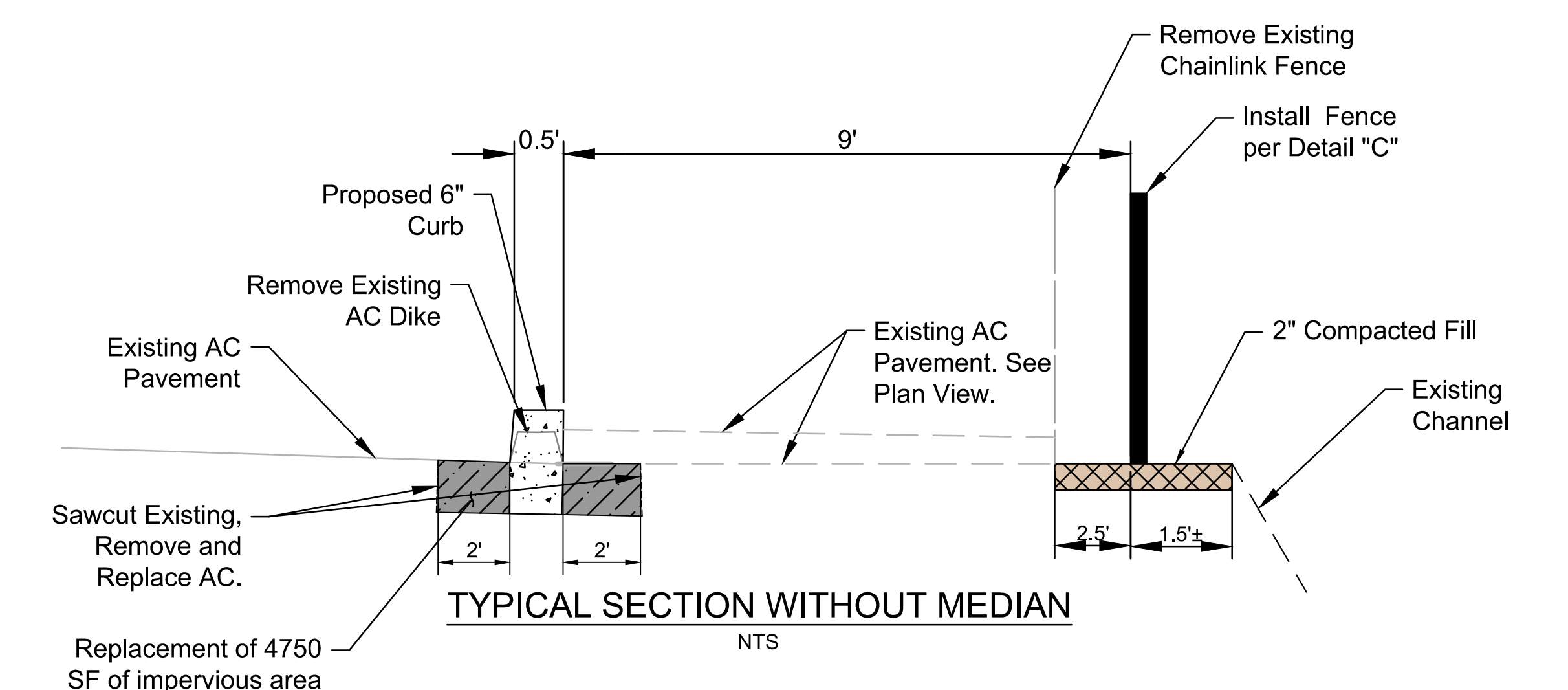
TYPICAL SECTION  
For Yellow and Orange Sections  
NTS



TYPICAL SECTION  
NTS



TYPICAL SECTION WITH MEDIAN  
NTS



TYPICAL SECTION WITHOUT MEDIAN  
NTS



- Decorative Tubular Steel Fence**
- Quantity: 2100 LF
  - Height: 5'
  - Surface mount installation on new AC Pavement or in-ground installation on existing AC pavement

FENCE DETAIL "C"  
NTS



- Flexible Bollard**
- Quantity: 87
  - Height: 34"
  - Diameter: 3-7/8"
  - Designed to bend without losing shape
  - White reflective strip to provide visibility
  - Easy installation

BOLLARD DETAIL "D"  
NTS



RIVER ROCK PAVING DETAIL "E"  
NTS



**Town of Atherton  
Watkins Pedestrian Improvements  
Engineering Cost Estimates**

Option 1: Raised AC Walkway with Reshaped Curb		Quantity	Unit	Unit Price	Cost	
Item	Description				Option 1a	Option 1b
1	Reshape, Seal, Paint Existing AC Dike	2100	LF	\$ 12	\$ 25,200	\$ 25,200
2	Remove Existing Chainlink Fence	2100	LF	\$ 10	\$ 21,000	\$ 21,000
3	2" Compacted Fill from Fence to Channel	52	CY	\$ 100	\$ 5,200	\$ 5,200
4	Construct 6" AC	270	TN	\$ 160	\$ 43,200	\$ 43,200
5	Construct Curb Ramp	3	EA	\$ 6,500	\$ 19,500	\$ 19,500
7	Install Truncated Domes and Landing	2	EA	\$ 1,200	\$ 2,400	\$ 2,400
8a	Furnish and Install Decorative Tubular Steel Fence	2100	LF	\$ 225	\$ 472,500	
8b	Furnish and Install Chainlink Fence with Black Coating	2100	LF	\$ 90		\$ 189,000
		Estimated Construction Total			\$ 589,000	\$ 305,500
		Estimated Design/CM Costs (20%)			\$ 117,800	\$ 61,100
		Estimated Total			\$ 706,800	\$ 366,600

Option 2: Flexible Bollards		Quantity	Unit	Unit Price	Cost				
Item	Description				Option 2a	Option 2b	Option 2c	Option 2d	Option 2e
1	Remove Existing Chainlink Fence	2100	LF	\$ 10	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,000
2e	Construct 6" AC	270	TN	\$ 160					\$ 43,200
3ab	Remove Existing AC Dike	2100	LF	\$ 3	\$ 6,300	\$ 6,300			
4ab	Construct AC Dike	40	TN	\$ 250	\$ 10,000	\$ 10,000			
5cde	Construct AC Dike to Join Existing and Repair Existing Dike	27	TN	\$ 250			\$ 6,750	\$ 6,750	\$ 6,750
6	2" Compacted Fill from Fence to Channel	52	CY	\$ 100	\$ 5,200	\$ 5,200	\$ 5,200	\$ 5,200	\$ 5,200
7e	Construct Curb Ramp	3	EA	\$ 6,500					\$ 19,500
8ae	Furnish and Install R-8323 Flexible Bollards Shown on Exhibit	87	EA	\$ 200	\$ 17,400				\$ 17,400
8b	Furnish and Install K71 Flexible Traffic Posts	87	EA	\$ 100		\$ 8,700			
8cd	Furnish and Install Flexible Delineator Posts	87	EA	\$ 60			\$ 5,220	\$ 5,220	
9	Install Truncated Domes and Landing	2	EA	\$ 1,200	\$ 2,400	\$ 2,400	\$ 2,400	\$ 2,400	\$ 2,400
10abc	Furnish and Install Decorative Tubular Steel Fence	2100	LF	\$ 225	\$ 472,500	\$ 472,500	\$ 472,500		
10de	Furnish and Install Chainlink Fence with Black Coating	2100	LF	\$ 90				\$ 189,000	\$ 189,000
		Estimated Construction Total			\$ 534,800	\$ 526,100	\$ 513,070	\$ 229,570	\$ 304,450
		Estimated Design/CM Costs (20%)			\$ 106,960	\$ 105,220	\$ 102,614	\$ 45,914	\$ 60,890
		Estimated Total			\$ 641,760	\$ 631,320	\$ 615,684	\$ 275,484	\$ 365,340

Option 3: Median with Hardscape		Quantity	Unit	Unit Price	Cost		
Item	Description				Option 3a	Option 3b	Option 3c
1	Remove Existing AC Dike and AC Walkway	9450	SF	\$ 8	\$ 75,600	\$ 75,600	\$ 75,600
2	Remove Existing Chainlink Fence	9450	LF	\$ 10	\$ 94,500	\$ 94,500	\$ 94,500
3c	Construct 6" AC	270	TN	\$ 160			\$ 43,200
4	2" Compacted Fill from Fence to Channel	52	CY	\$ 100	\$ 5,200	\$ 5,200	\$ 5,200
5	Construct 6" PCC Street Side Curb	2100	LF	\$ 70	\$ 147,000	\$ 147,000	\$ 147,000
6	Construct 6" PCC Median Curb (Adjacent to Walkway)	1050	LF	\$ 70	\$ 73,500	\$ 73,500	\$ 73,500
7ac	Construct River Rock on Median Shown on Exhibit	2100	SF	\$ 25	\$ 52,500		\$ 52,500
7b	Construct Stamped Concrete on Median	2100	SF	\$ 15		\$ 31,500	
8c	Construct Curb Ramp	3	EA	\$ 6,500			\$ 19,500
9	Install Truncated Domes and Landing	2	EA	\$ 1,200	\$ 2,400	\$ 2,400	\$ 2,400
10	Furnish and Install Decorative Tubular Steel Fence	2100	LF	\$ 225	\$ 472,500	\$ 472,500	\$ 472,500
		Estimated Construction Total			\$ 923,200	\$ 902,200	\$ 985,900
		Estimated Design/CM Costs (20%)			\$ 184,640	\$ 180,440	\$ 197,180
		Estimated Total			\$ 1,107,840	\$ 1,082,640	\$ 1,183,080

Options	Option a	Option b	Option c	Option d	Option e
Option 1: Raised AC Walkway with Reshaped Curb	\$ 706,800	\$ 366,600			
Option 2: Flexible Bollards	\$ 641,760	\$ 631,320	\$ 615,684	\$ 275,484	\$ 365,340
Option 3: Median with Hardscape	\$ 1,107,840	\$ 1,082,640	\$ 1,183,080		