

# BRIDGE ARCHITECTURE

PAUL KINDERMAN PE AIA

STATE BRIDGE AND STRUCTURES ARCHITECT

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

# Bridge Piers

2



Standard



Architectural



Artistic

**Most bridges  
are standard  
'workhorse' types.**

# Standard

## 15 Triangle Project

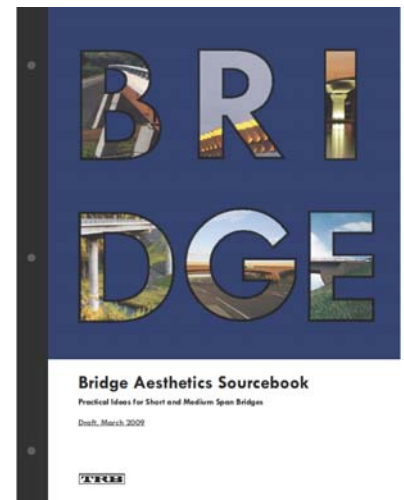
3



**Blend differing  
superstructure  
types.**

**Source Book  
Section D**

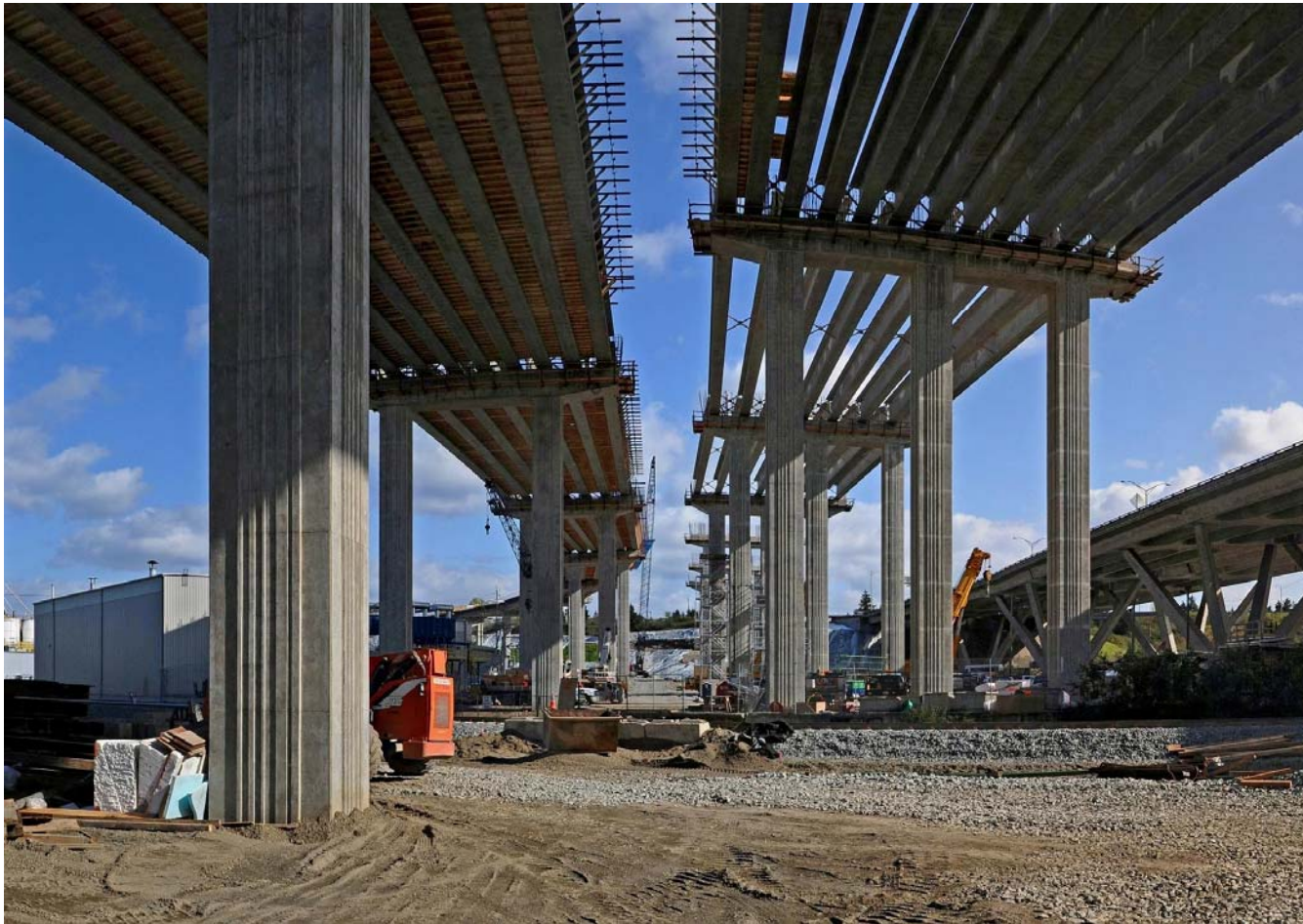
Paul Kinderman PE AIA Bridge Architect WSDOT



# Standard

## SR 16 Nalley Valley

4



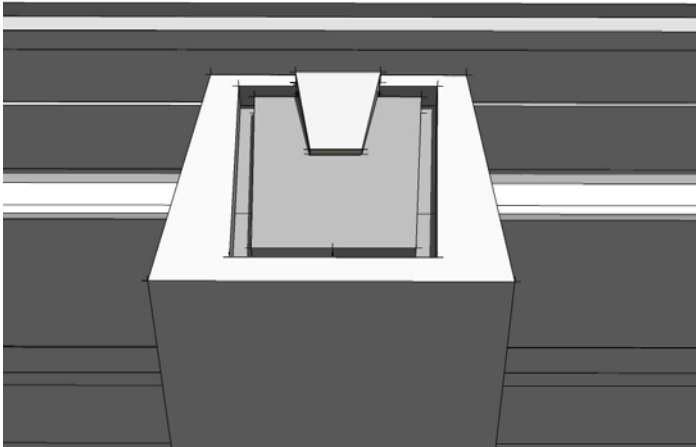
*“Slender elements that reduce the silhouette and are as transparent as possible.....”*

**Sourcebook  
C3**

# Standard

## I 5 Grand Mound

5



**ABC:**  
Precast  
Columns and  
Cap

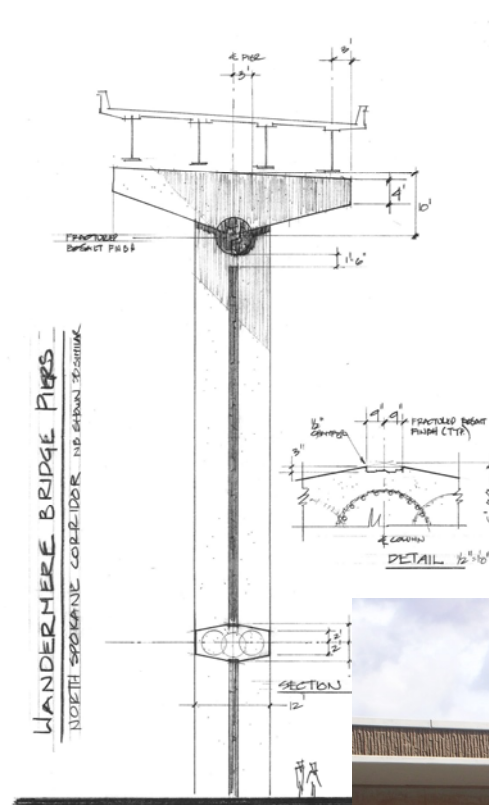
*“If ornament is  
appropriate,  
use it sparingly”*

*Sourcebook  
Section C*

# Standard

## US 395 North Spokane Corridor

6



**“..columns cross section with multiple surface planes...or more complex cross section geometry”**

**Sourcebook Section C6**



# Architectural

## SR 295 West Trent Bridge

7



**Piers Reference Existing  
Historic Bridge:**

***“The new work shall be differentiated for the old....”***

***Secretary of Interiors Standards for Rehabilitation.***

# Architectural

## I 405 Canyon Park

8



*“...use  
curved flares  
at the column  
capitals...”*

*Sourcebook  
Section C6*

Note: HNTB corridor column concept.  
WSDOT final detailing and design.

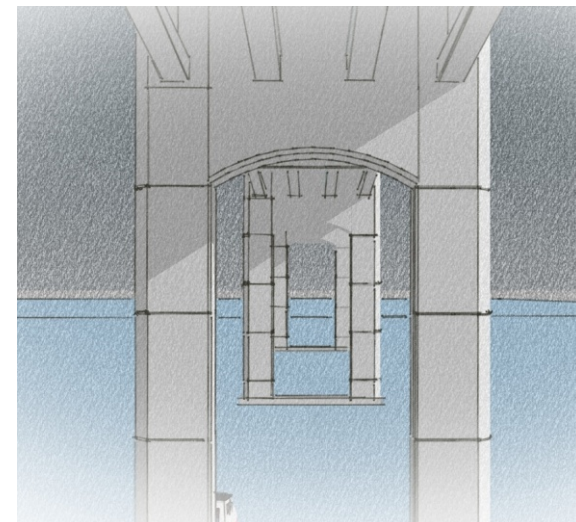
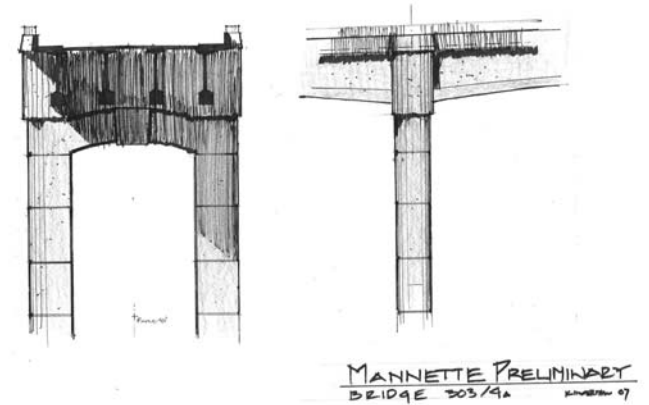
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# Architectural

## SR 303 Mannette

9



***“Test promising options with 3D views taken from important viewpoints”***

**Sourcebook B3**

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# Architectural

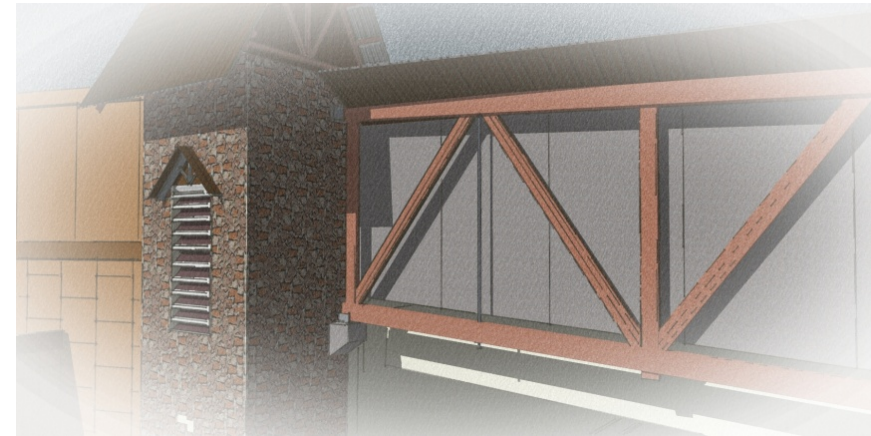
## I 90 Snow Shed Portal

10



**Context: “What is the nature of nearby land use?”**

***Sourcebook  
Section B***



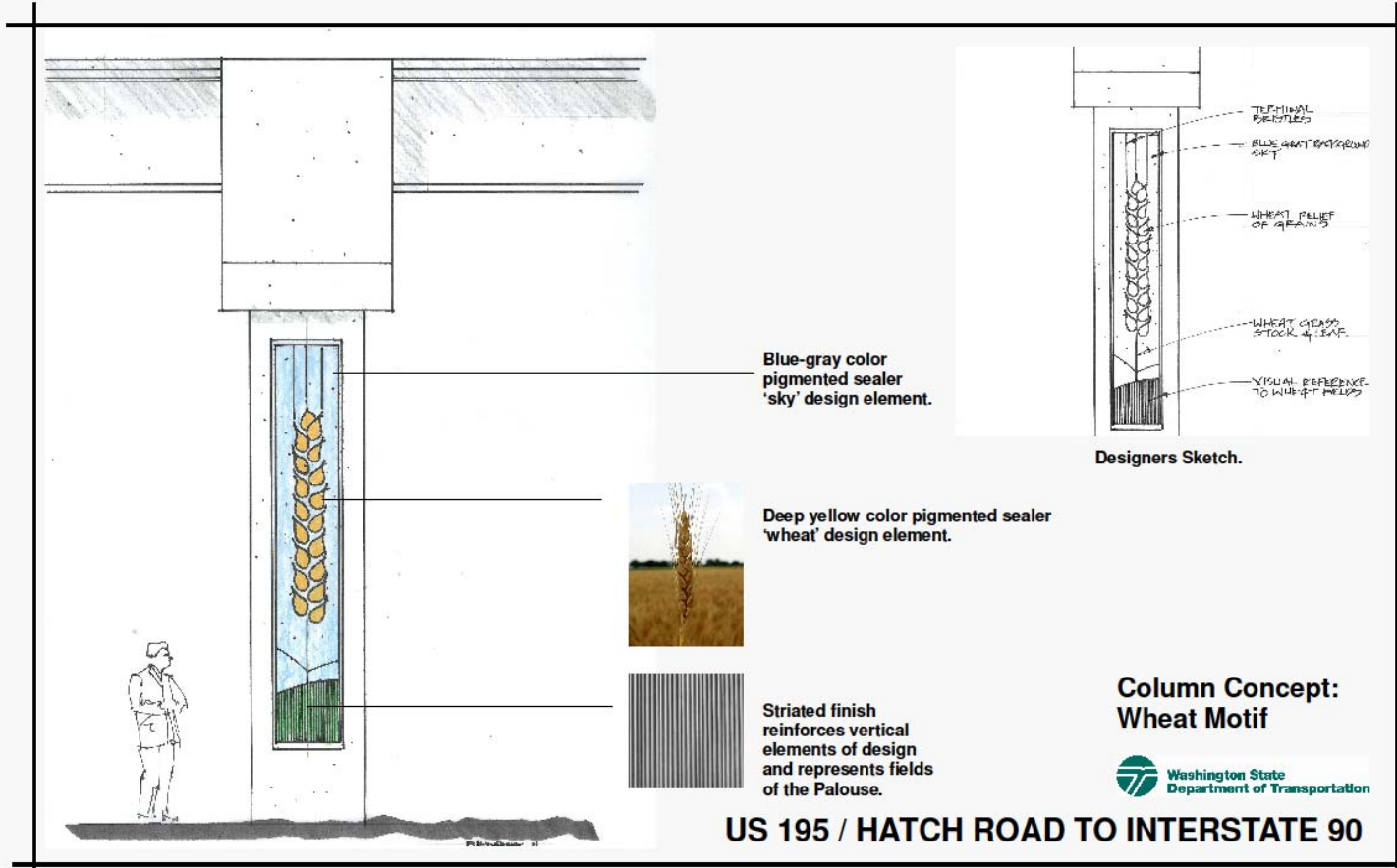
**Cascadian Architecture**



# Artistic

## US 195

11



*"...the elaborate character... must not be contradicted by its parts.."*

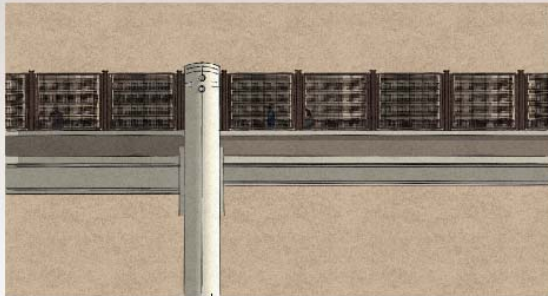
**J.B. Johnson  
1912**

**Sourcebook  
C9**



Pedestrian sidewalk  
Outboard column with curved front and top

Plan View



Elevation View  
Outboard column with subtle diesel engine details.

### CONCEPT:

The pier 2 gateway element features a reference to modern diesel locomotives.

From US 395 it presents itself as a recognizable dignified geometric shape.

'Outboard' column .



Section View

***“Place the exterior column at the outside face of the cap...to emphasize the vertical lines.....”***

**Sourcebook C6**

## NORTH SPOKANE CORRIDOR FRANCIS AVENUE GATEWAY CONCEPT

### PIER TWO DETAILS

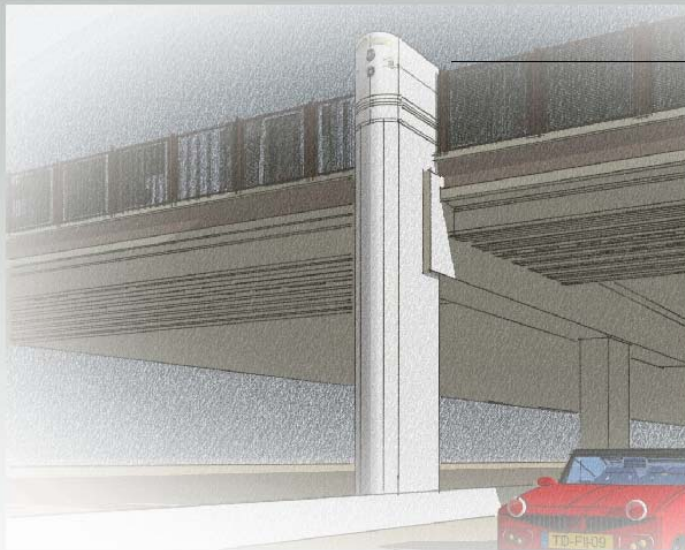


DRAFT

# Artistic

## US 395 North Spokane Corridor

13



Outboard column with diesel locomotive reference.



Inspirational Images

US 395 VIEW

Washington State  
Department of Transportation



Perspective View

**NORTH SPOKANE CORRIDOR  
FRANCIS AVENUE GATEWAY CONCEPT**

DRAFT



***“Develop alternatives... give a range of possibilities....”***

**Sourcebook  
D3**

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