



City of Santa Barbara Historic Landmarks Commission *Staff Report*

HEARING DATE: July 31, 2013

TO: Historic Landmarks Commission Members

FROM:  John Ewasiuk, Principal Civil Engineer
Engineering Division, Public Works Department

SUBJECT: Mason Street Bridge Replacement Project (MST2010-00261), July 31, 2013, HLC Meeting

RECOMMENDATION:

That the Historic Landmarks Commission (HLC) grant Final Design Approval.

INTRODUCTION:

The Mason Bridge Replacement Project (Project) involves replacing the structurally and hydraulically deficient bridge over Mission Creek. The Project is grant funded, and will increase the channel's capacity in accordance with the Council-approved Lower Mission Creek Flood Control Project (LMCFCP), the 2000 Environmental Impact Statement/Environmental Impact Report (EIS/EIR), and the 2008 Coastal Development Permit. In addition, the City prepared an Addendum to the EIS/EIR as the basis for an approval of the LMCFCP Coastal Development Permit.

The primary HLC issues addressed in this report are the 1) bridge rail design, 2) channel wall texture, and 3) sloped creek bank landscaping.

BACKGROUND:

CITY COUNCIL APPROVAL JULY 17, 2012

On July 17, 2012, the City Council confirmed that Kimberly Avenue shall remain a two-way street and approved the Mason Street Bridge width design and roadway geometry to meet city, state, and federal standards, with design exceptions as approved by the City Engineer. Council supported exploring the open bridge rail alternative in an attempt to minimize the bridge width, but also gave the City Engineer the authority to determine the final design width that will meet the city, state, and federal regulatory requirements.

PRIOR HLC ACTION

This Project has been before the HLC on six occasions, the latest being February 13, 2013. To date, the HLC has granted Project Design Approval.

DISCUSSION:

BRIDGE RAIL DESIGN

At the February 13, 2013 meeting the HLC supported a horizontal metal bridge rail-style. Staff proposes a steel bridge rail with the following main features:

1. Varying horizontal member sizes
2. Painted finish
3. Concrete pilaster end treatment

See Attachment 1. Staff proposes the steel bridge rail style labeled as "Preferred Bridge Railing." Staff also provides two alternative steel bridge rail styles labeled as "Bridge Rail Alt 2" and "Bridge Rail Alt 3," respectively.

CHANNEL WALL TEXTURE

One of the Project Design Approval motion items requested a sample of a faux sandstone texture for the channel walls. As a joint effort between staff and the County of Santa Barbara, a test mock-up of a channel wall exhibiting the faux sandstone texture was built. See Attachment 2. The test mock-up was built by concrete artisan, Robert T. Hill & Associates, using an impression mat (or molding) technique. Staff feels at this time that the texture on the test mock-up does not yet exemplify the desired look. However, staff will be working with the concrete artisan in the creation of an impression mat to improve the texture.

CREEK LANDSCAPING

One of the Project Design Approval motion items requested details of the plant spacing for the larger landscape material. As a follow-up to the request, staff incorporated the spacing details as well as estimated quantities of the proposed landscape materials. See Attachment 3.

- Attachments:
1. Steel Bridge Rail
 2. Faux Sandstone Texture Photos
 3. Landscape Plan

JE/ji/sk

cc: Pat Kelly, Assistant Public Works Director/City Engineer
Kathleen Kennedy, Associate Planner, Community Development Department



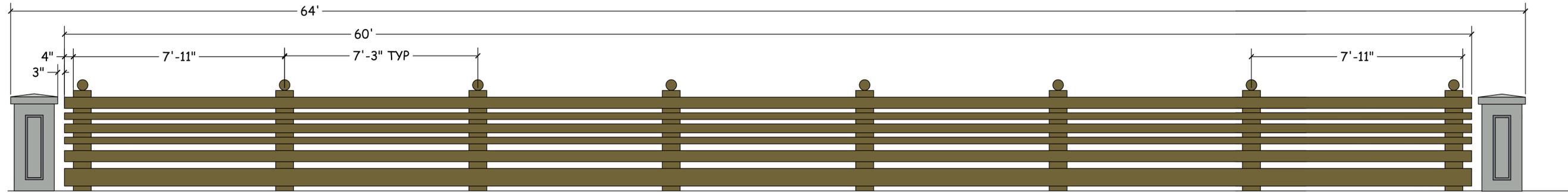
Bengal Engineering
250 Big Sur Dr.
Goleta, CA 93117

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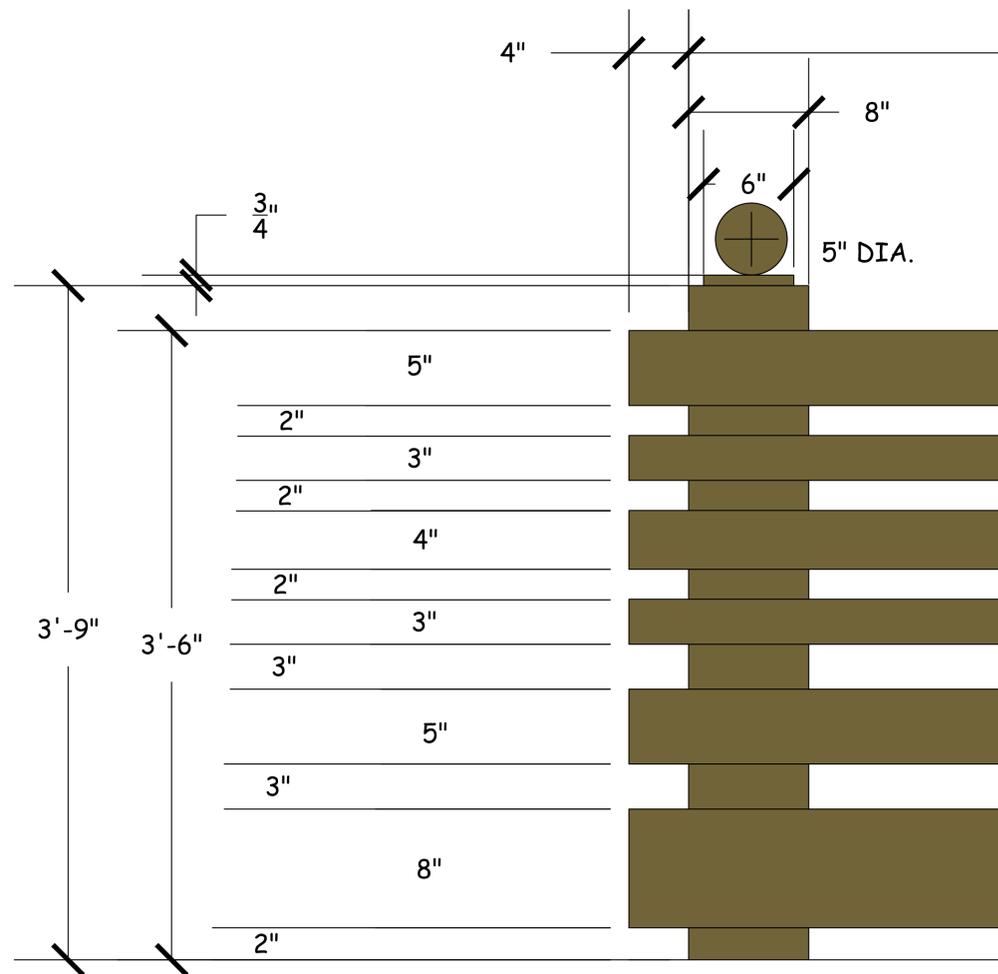
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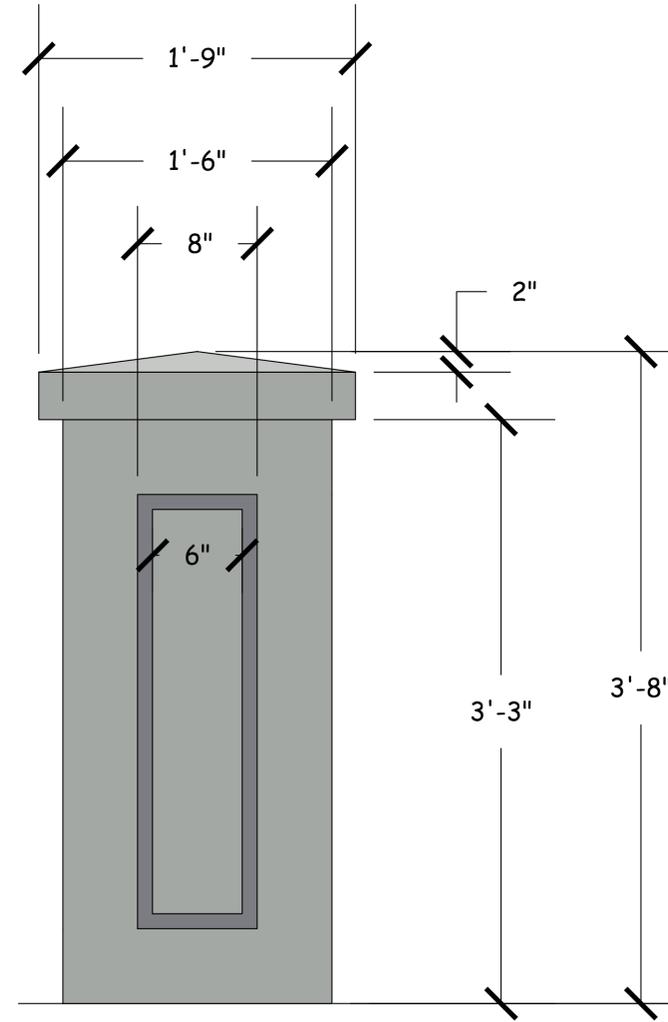
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BRIDGE RAILING
NTS



BRIDGE RAILING - SPACING
SCALE= 1" = 1/2'

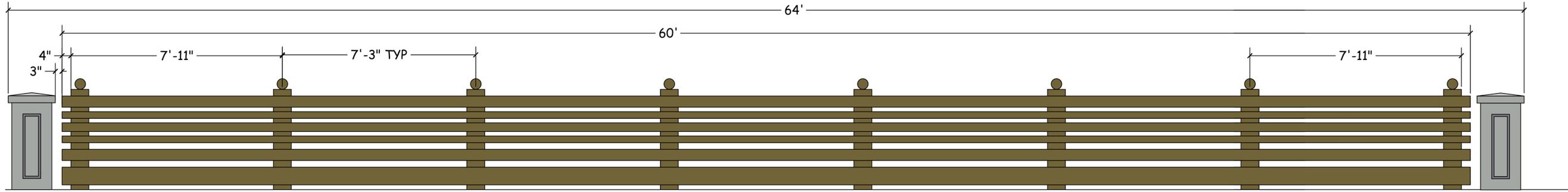


PILASTER DETAIL
SCALE= 1"=1/2'

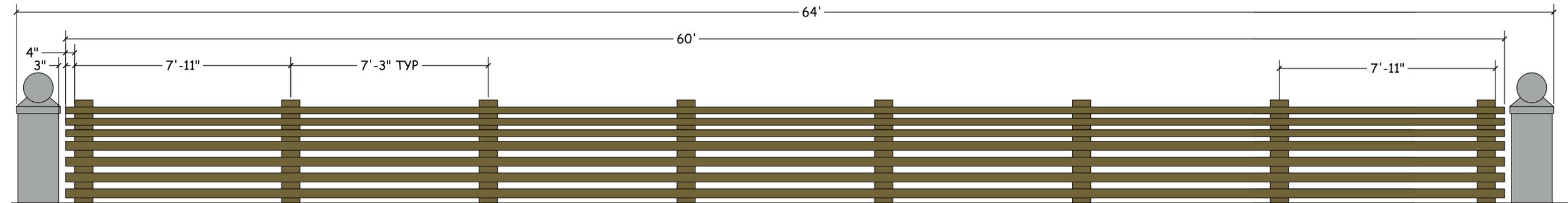


MASON ST. BRIDGE REPLACEMENT PROJECT
PREFERRED
STEEL BARRIER RAIL

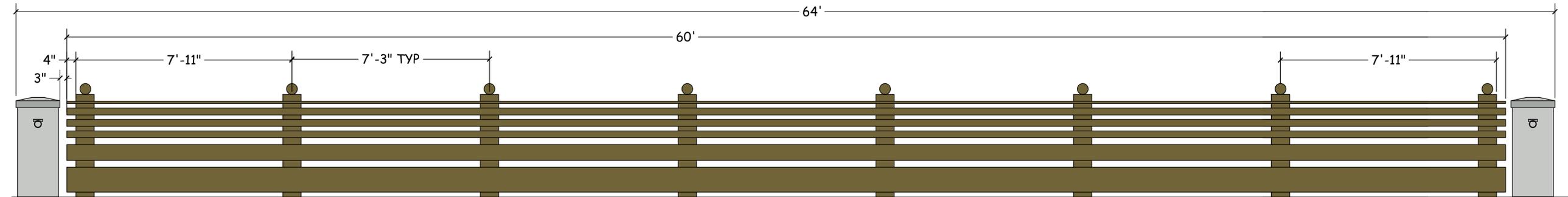
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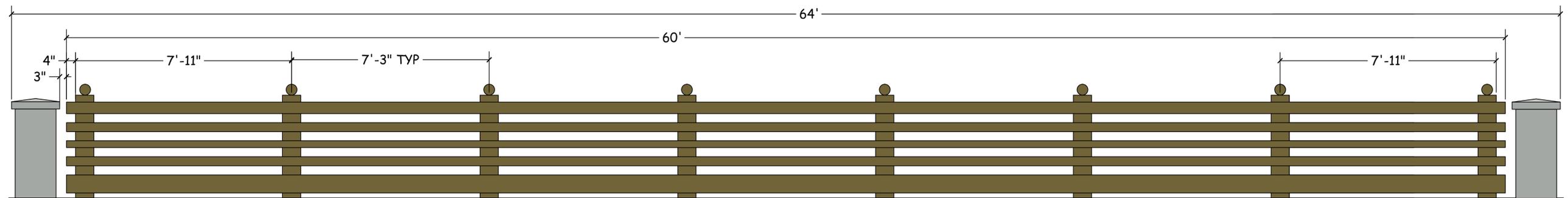
PREFERRED BRIDGE RAILING
NTS



BRIDGE RAILING ALT 2
NTS



BRIDGE RAILING ALT 3
NTS



BRIDGE RAILING ALT 4
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Chk'd _____

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MASON ST. BRIDGE REPLACEMENT PROJECT
STEEL BARRIER RAIL
ALTERNATES

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3588 **ALT**
BID NO. SHT. DES.

C-1-4678
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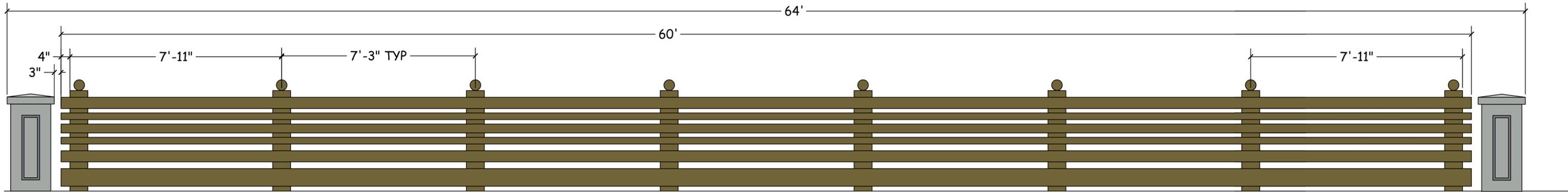
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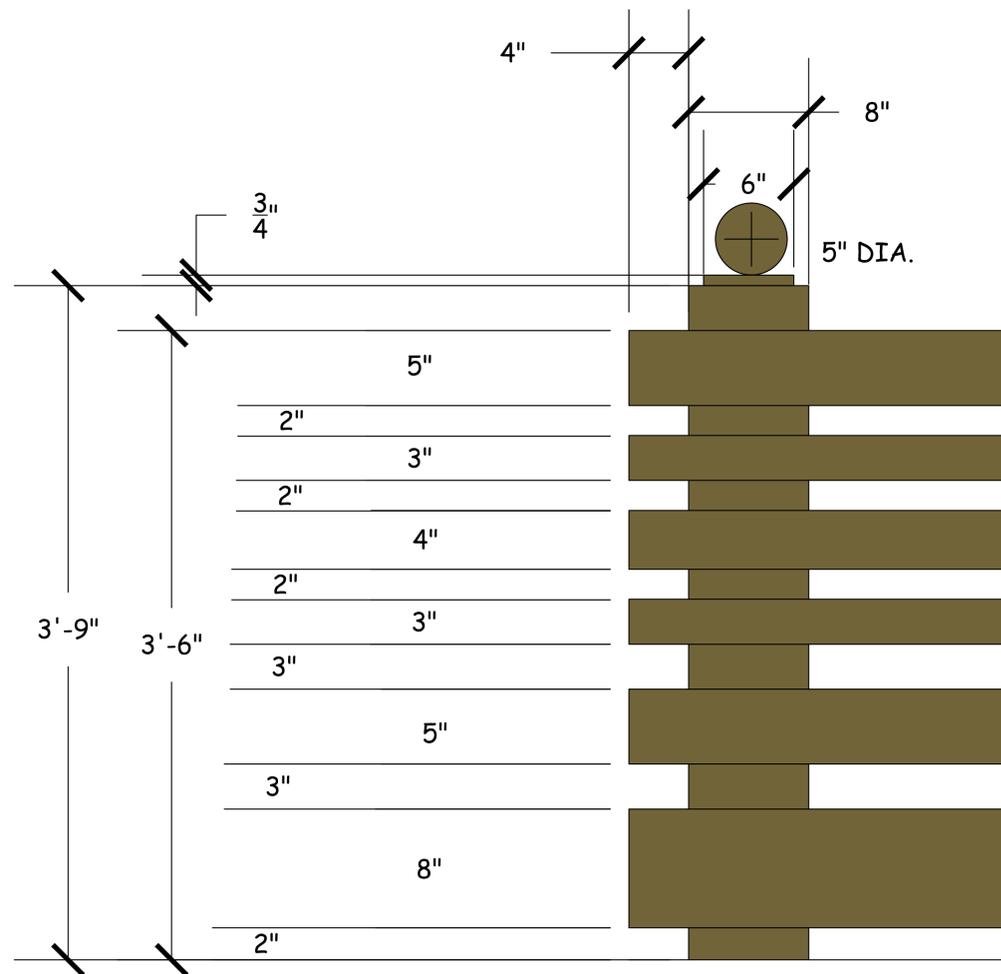
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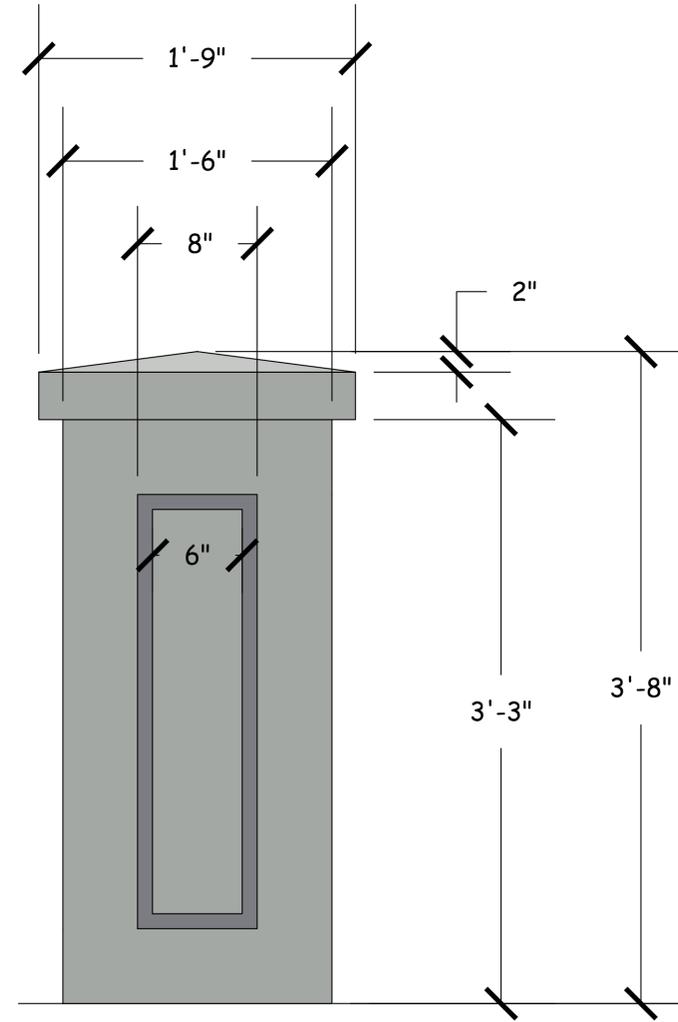
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BRIDGE RAILING - PREFERRED ALTERNATE
NTS



BRIDGE RAILING - SPACING
SCALE= 1" = 1/2'



PILASTER DETAIL
SCALE= 1"=1/2'

MASON ST. BRIDGE REPLACEMENT PROJECT
PREFERRED
STEEL BARRIER RAIL

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DWG. NO.

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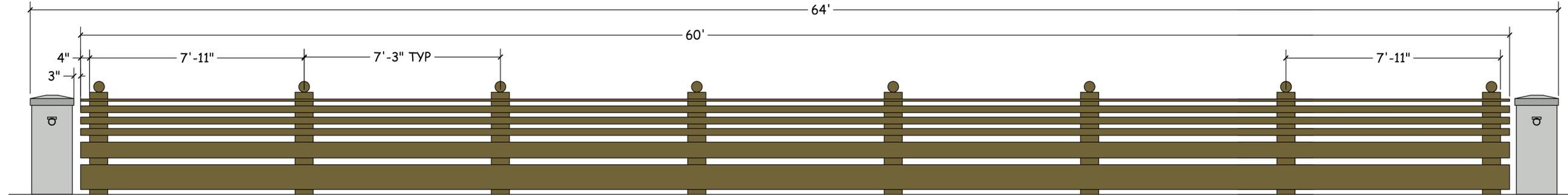
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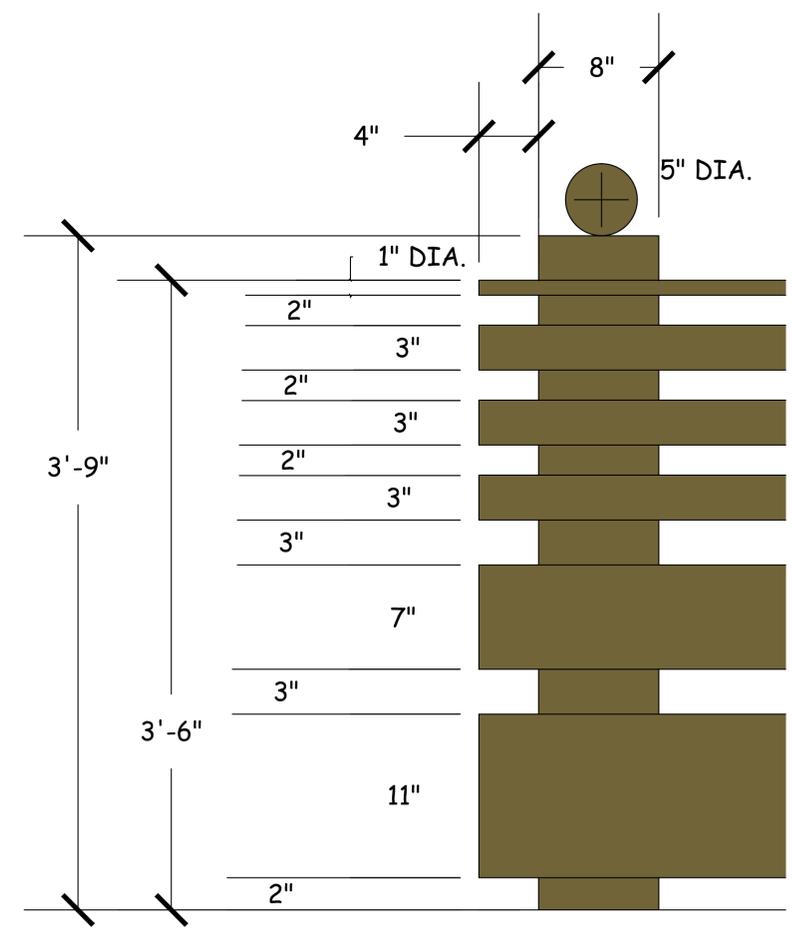
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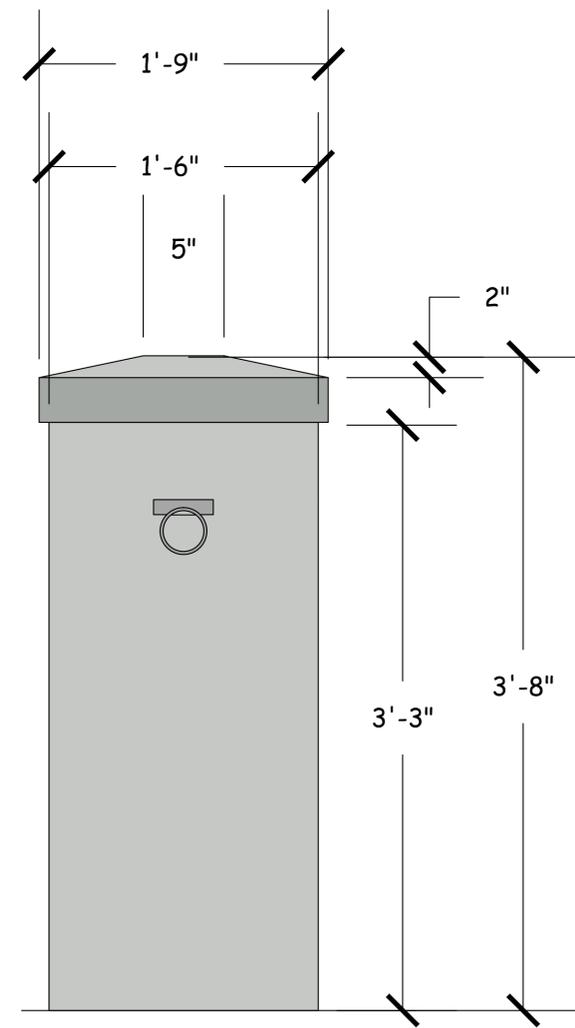
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BRIDGE RAILING - ALTERNATE 3
NTS



BRIDGE RAILING - SPACING
SCALE= 1" = 1/2'



PILASTER DETAIL
SCALE= 1"=1/2'

MASON ST. BRIDGE REPLACEMENT PROJECT
ALTERNATE 3
STEEL BARRIER RAIL

2013-00040
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3588 ALT 3
BID NO. SHT. DES.
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SHT. OF



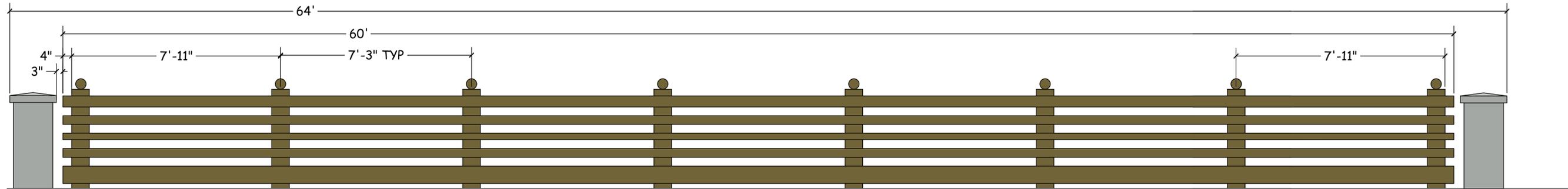
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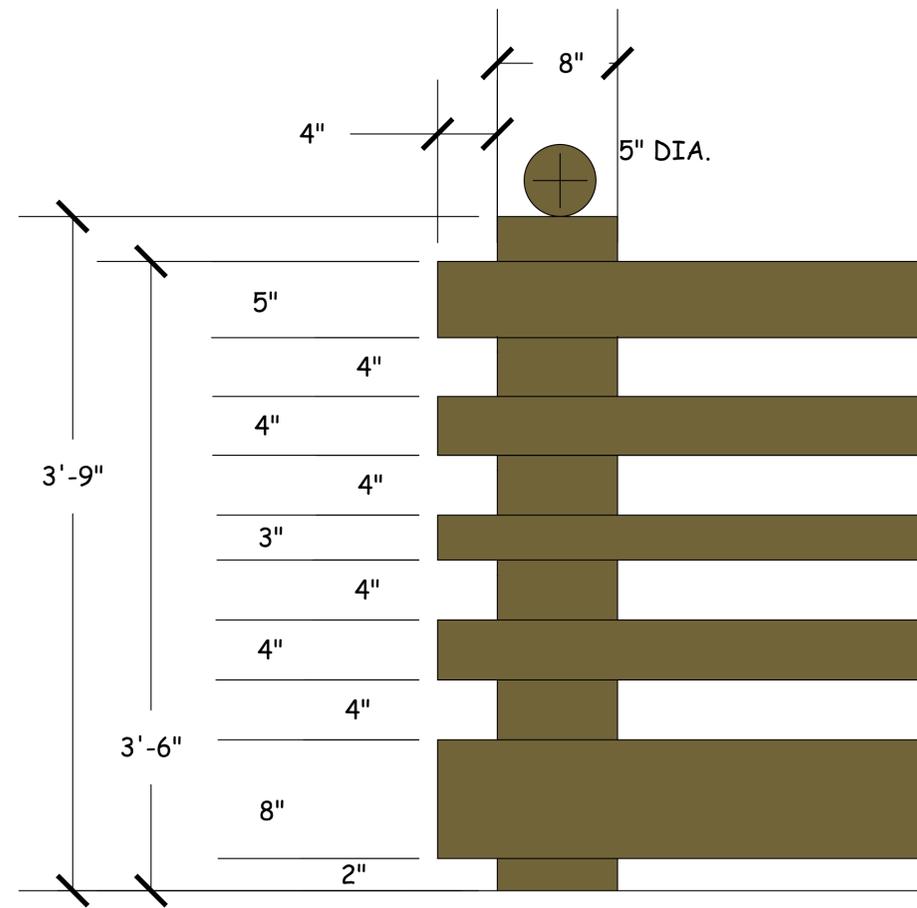
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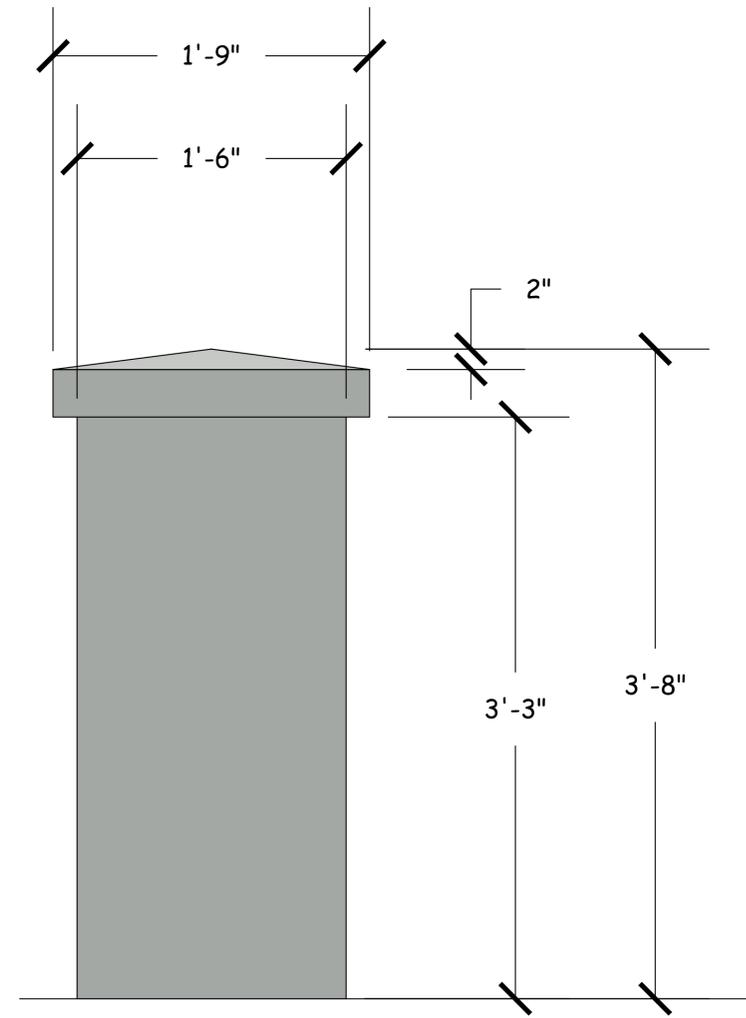
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BRIDGE RAILING - ALTERNATE 4
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BRIDGE RAILING - SPACING
SCALE= 1" = 1/2'



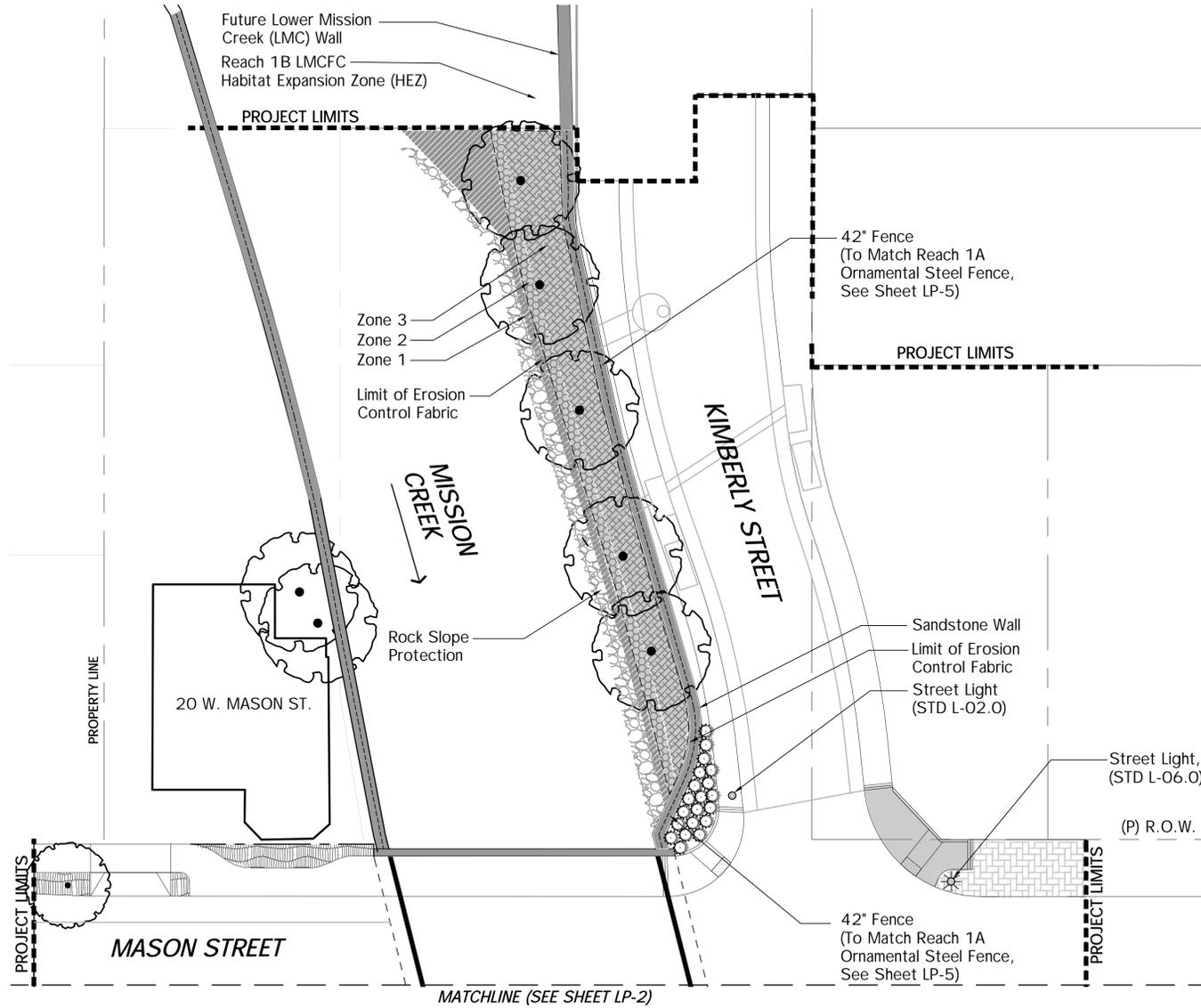
PILASTER DETAIL
SCALE= 1"=1/2'

MASON ST. BRIDGE REPLACEMENT PROJECT
ALTERNATE 4
STEEL BARRIER RAIL

2013-00040
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BID NO. SHT. DES.
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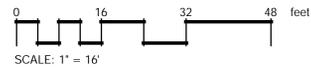
FAUX SANDSTONE TEXTURE



NOTE: SEE CIVIL DRAWINGS FOR TREE REMOVAL PLAN.

LINETYPE LEGEND

--- Limit of Erosion Control Fabric
1,100 Square Feet



*NOTE: Native Plants shall be from local native stock.
Plant sources could include Growing Solutions & Santa Barbara Natives.
Verify seed and plant source with George Tomson @ the City of Santa Barbara
gthomson@santabarbara.gov

PARKWAY PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT
	Koelreuteria bipinnata / Chinese Flame Tree	24"box
	Stenocarpus sinuatus / Firewheel Tree	24" box
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT
	Leymus condensatus `Canyon Prince` / Native Blue Rye	1 gal
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT
	Phormium tenax `Jack Spratt` / New Zealand Flax	1 gal@ 18" oc

NATIVE PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT
	Platanus racemosa / California Sycamore	15 gal
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT
	Leymus condensatus `Canyon Prince` / Native Blue Rye	1 gal

Scientific Name	Common Name	Size	Quantity
Upstream Zone #1: High Brackish Marsh - Open Lagoon			
Estimated Area: 600 sq. ft.			
Elevation: 3.7ft.-6.7ft. (Intergrading with Zone #2)			
Schoenoplectus americanus	Olney's three-square bulrush	1-gal	75
Bolboschoenus robustus	Seacoast bulrush	1-gal	50
Juncus acutus subsp. leopoldii	Spiny Rush	1-gal	10
Juncus effusus	Bog Rush	1-gal	10
Upstream Zone #2: High Brackish Marsh - Closed Lagoon			
Estimated Area: 325 sq. ft.			
Elevation: 6.8 ft.-8.2 ft. (Intergrading with Zone #1)			
Anemopsis californica	Yerba Mansa	1-gal	50
Arthrocnemum subterminale	Parish's Glasswort	1-gal	30
Baccharis douglasii	Salt Marsh Baccharis	1-gal	20
Baccharis salicifolia	Mulefat	1-gal or livestakes	10
Distichlis spicata	Saltgrass	1-gal	50
Frankenia salina	Alkali Heath	1-gal	20
Jaumea carnosa	Jaumea	1-gal	20
Juncus acutus subsp. leopoldii	Spiny Rush	1-gal	10
Juncus effusus	Bog Rush	1-gal	10
Juncus patens	Common Rush	1-gal	10
Leymus triticoides	Alkali Ryegrass	1-gal	30
Salix exigua	Sandbar Willow	1-gal	10
Upstream Zone #3: Riparian Mixed Woodland			
Estimated Area: 590 sq.ft.			
Elevation: 8.3 ft. - 10.5 ft.			
Acmispon glaber	Deerweed	1-gal	30
Alnus rhombifolia	White Alder	5-gal	5
Atriplex lentiformis	Quail Bush	1-gal	3
Baccharis salicifolia	Mulefat	1-gal or livestakes	10
Encelia californica	Coast Sunflower	1-gal	15
Eriogonum parvifolium	Coast Buckwheat	1-gal	30
Isocoma menziesii	Goldenbush	1-gal	30
Leymus triticoides	Alkali Ryegrass	1-gal	30
Platanus racemosa	Western Sycamore	15-gal	4
Quercus agrifolia	Coast Live Oak	15-gal	1
Rosa californica	California Wild Rose	1-gal	25
Salix exigua	Sandbar Willow	1-gal	5
Salix lasiolepis	Arroyo Willow	1-gal or livestakes	3
Sambucus mexicanus	Mexican Elderberry	5-gal	2
193			

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LANDSCAPE ARCHITECTURE
URBAN DESIGN
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MASON ST. BRIDGE REPLACEMENT PROJECT
PLANTING PLAN
July 19, 2013

FA No.
BRLS-5007(044)
BRIDGE NO. 51C-246

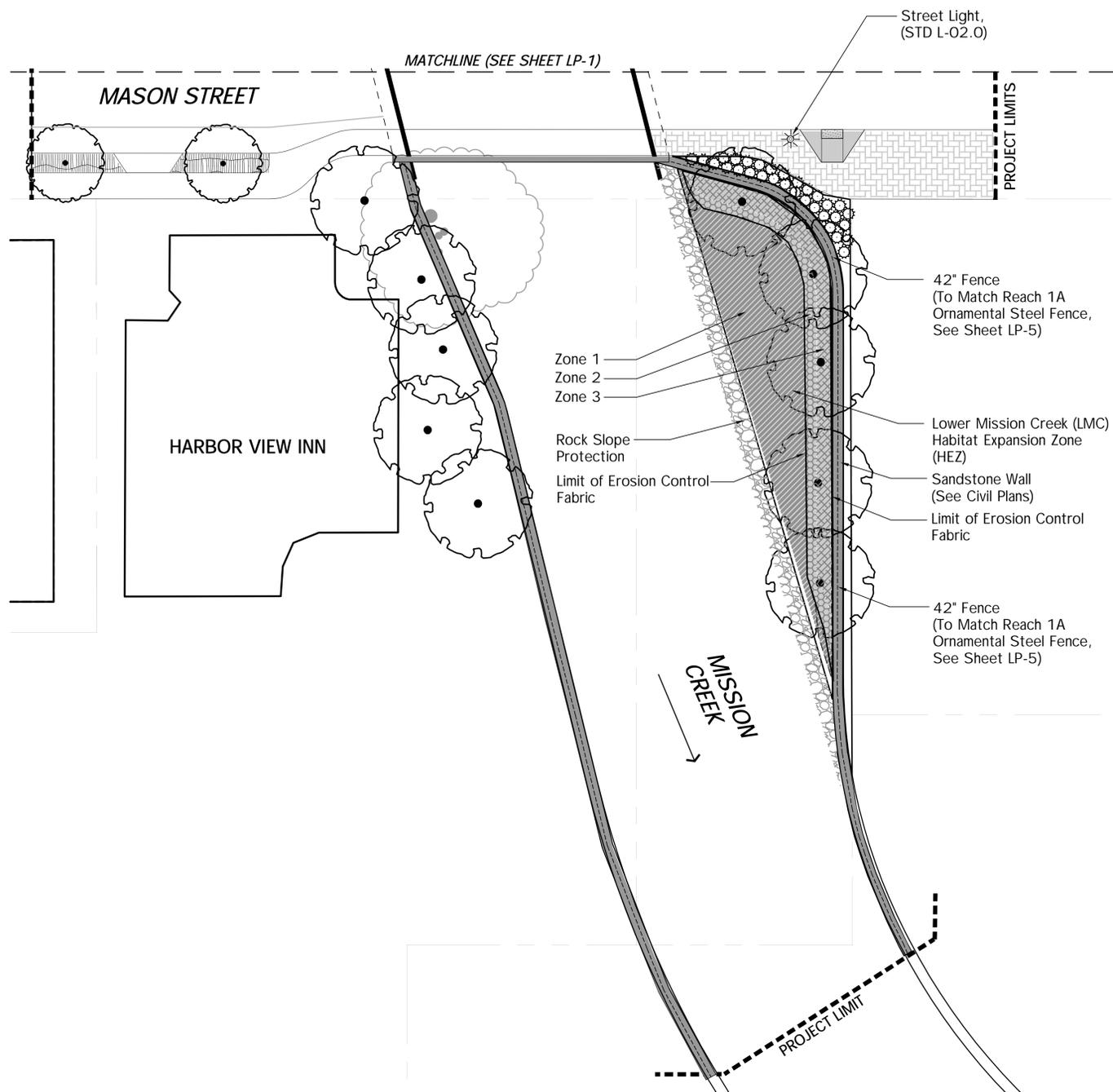
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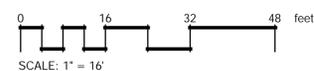




NOTE: SEE CIVIL DRAWINGS FOR TREE REMOVAL PLAN.

LINETYPE LEGEND

----- Limit of Erosion Control Fabric
1,950 Square Feet



*NOTE: Native Plants shall be from local native stock. Plant sources could include Growing Solutions & Santa Barbara Natives. Verify seed and plant source with George Tomson @ the City of Santa Barbara gthomson@santabarbaraca.gov

PARKWAY PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT
	Stenocarpus sinuatus / Firewheel Tree	24" box
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT
	Leymus condensatus `Canyon Prince` / Native Blue Rye	1 gal
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT
	Phormium tenax `Jack Spratt` / New Zealand Flax	1 gal@ 18" oc

NATIVE PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT
	Platanus racemosa / California Sycamore	15 gal
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT
	Leymus condensatus `Canyon Prince` / Native Blue Rye	1 gal

Downstream Zone #1: High Brackish Marsh - Open Lagoon
Estimated Area: 1765 sq. ft.
Elevation: 3.5 ft. - 6.7 ft.

Scientific Name	Common Name	Size	Quantity
Bolboschoenus maritimus	Maritime Bulrush	1-gal	100
Juncus acutus subsp. leopoldii	Spiny Rush	1-gal	10
Juncus effusus	Bog Rush	1-gal	10
Schoenoplectus americanus	Olney's Three-square	1-gal	200
Schoenoplectus pungens	Common Three-square	1-gal	100
			420

Downstream Zone #2: High Brackish Marsh - Closed Lagoon
Estimated Area 285 sq ft.
Elevation: 6.8 ft.-8.2 ft.

Scientific Name	Common Name	Size	Quantity
Arthrocnemum subterminale	Parish's glasswort	1-gal	40
Baccharis salicifolia	Mulefat	1-gal or livestakes	3
Frankenia salina	Alkali heath	1-gal	40
Jaumea carnosa	Jaumea	1-gal	40
Juncus acutus subsp. leopoldii	Spiny Rush	1-gal	10
Juncus effusus	Bog Rush	1-gal	10
Juncus patens	Common Rush	1-gal	10
Leymus triticoides	Alkali Ryegrass	1-gal	40
Rosa californica	California Wild Rose	1-gal	20
Salix exigua	Sandbar Willow	1-gal	20
Suaeda taxifolia	Woolly Sea-Blite	1-gal	5
			238

Downstream Zone #3: Riparian Mixed Woodland
Estimated Area: 420 sq. ft.
Elevation: 8.3 ft. - 10.5 ft.

Scientific Name	Common Name	Size	Quantity
Alnus rhombifolia	White Alder	5-gal	7
Atriplex lentiformis	Quail Bush	1-gal	5
Baccharis salicifolia	Mulefat	1-gal or livestakes	15
Encelia californica	Coast Sunflower	1-gal	20
Eriogonum parvifolium	Coast Buckwheat	1-gal	20
Isocoma menziesii	Goldenbush	1-gal	20
Salix exigua	Sandbar Willow	1-gal	5
Platanus racemosa	Western Sycamore	15-gal	2
Leymus triticoides	Alkali Ryegrass	1-gal	40
			134

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NO.	DATE	APPROVED	REVISIONS

MASON ST. BRIDGE REPLACEMENT PROJECT
PLANTING PLAN
July 19, 2013

FA No. BRLS-5007(044)
BRIDGE NO. 51C-246

2013-00040
PBW. NO.

3588
BID. NO.

LP-2
DWG. NO.

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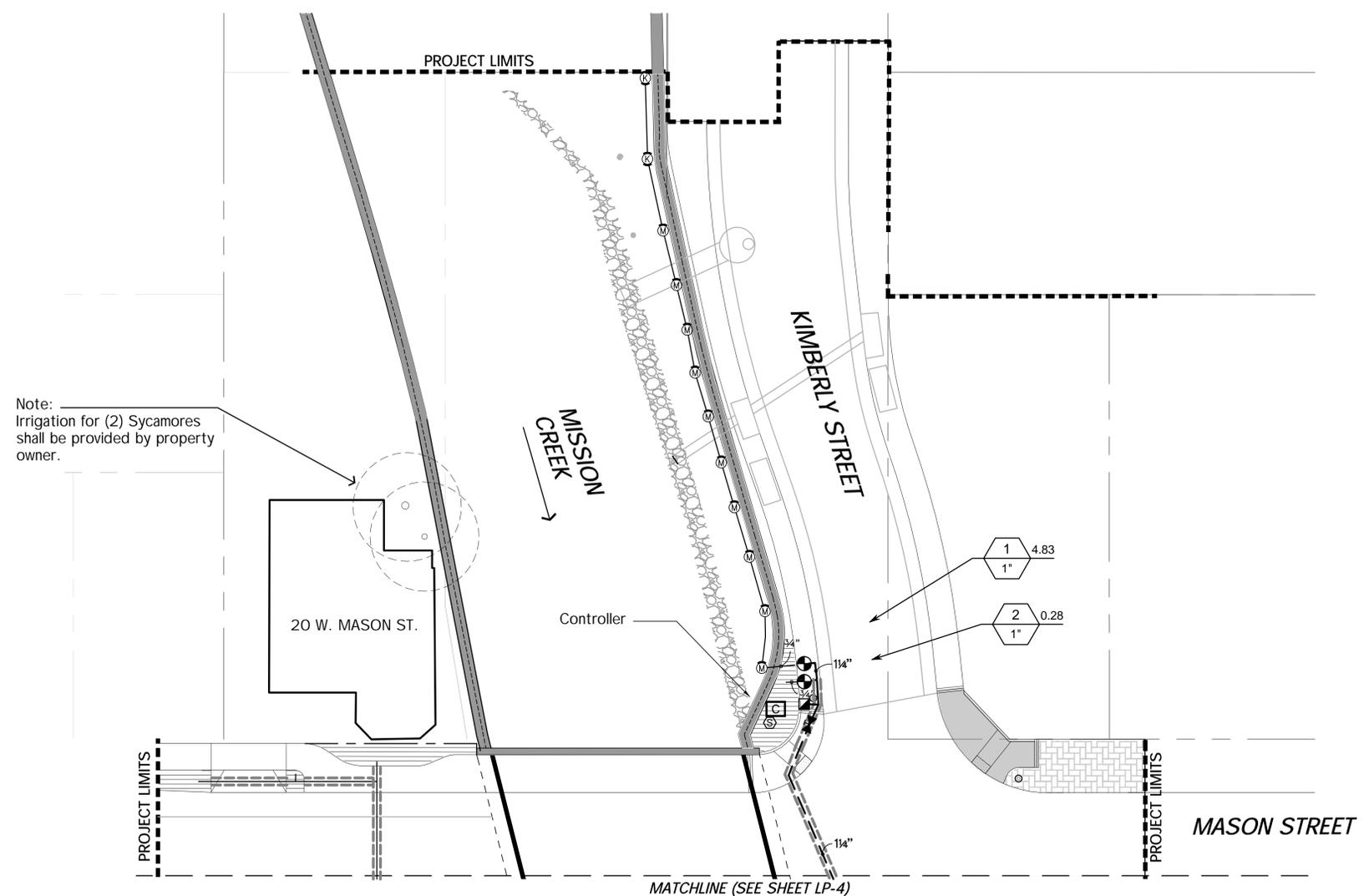
MASON ST. BRIDGE REPLACEMENT PROJECT
IRRIGATION PLAN
July 19, 2013

2013-00040
PBW. NO.

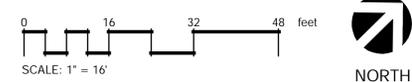
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DWG. NO.

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Note:
Irrigation for (2) Sycamores
shall be provided by property
owner.

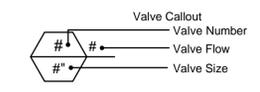


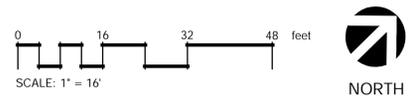
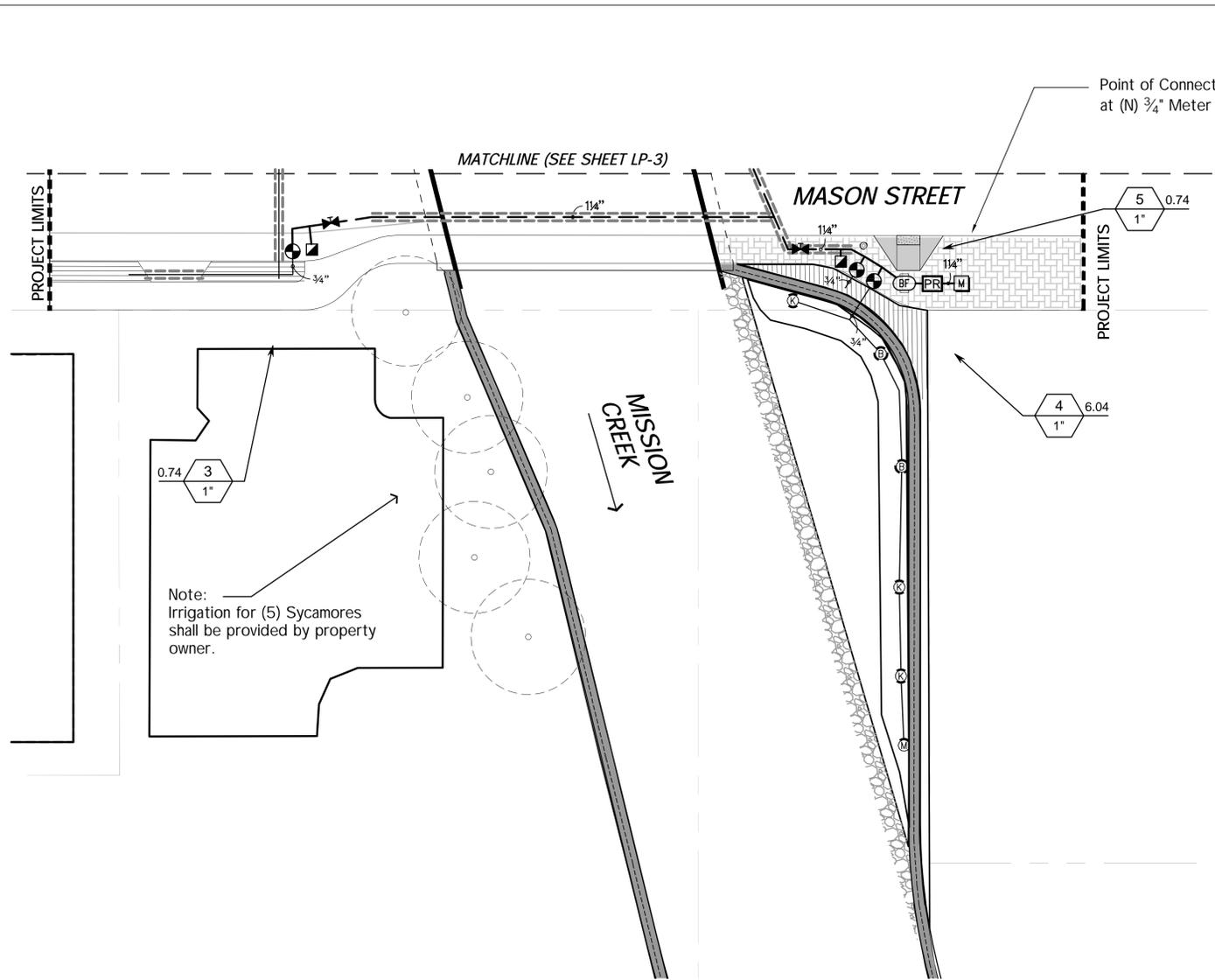
IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
⊙	Hunter MP1000 PROS-00 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. M=Maroon adj arc 90 to 210, L=Light Blue 210 to 270 arc, O=Olive 360 arc on PRS40 body.	10	40
⊙⊙	Hunter MP2000 PROS-00 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. K=Black adj arc 90-210, G=Green adj arc 210-270, R=Red 360 arc on PRS40 body.	2	40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
[Hatched Box]	Area to Receive Dripline Netafim TLCV-26-18 (18) Techline Pressure Compensating Landscape Dripline with Check Valve. 0.26GPH emitters at 18.0" O.C. Dripline laterals spaced at 18.0" apart, with emitters offset for triangular pattern. 17mm.	724.5 s.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
[Square]	Hunter IC-0600-SS Modular Controller, 6 stations, Outdoor Model, Stainless Steel Cabinet. No Module Required. Commercial Use.	1
⊙	Hunter Solar-Sync Solar, rain freeze sensor with outdoor interface, connects to Hunter PCC, Pro-C, and I-Core Controllers, install as noted. Includes 10 year lithium battery and rubber module cover, and gutter mount bracket. Wireless.	1
⊕	Weathermatic 11024FCR Plastic Remote Control Valve, 1"	2
(Not Shown)	Drip Y Filter Amiad (line size)	
(Not Shown)	Drip Pressure Regulator Senninger (line size) or approved equal	
■	Rain Bird 33-DLRC with Key 3/4" Brass Quick-Coupling Valve	1
⊗	PVC Ball Valve (line size) Spears or approved equal.	1
—	Irrigation Lateral Line: PVC Class 200	354.7 l.f.
- - -	Irrigation Mainline: PVC Schedule 40	68.6 l.f.
≡≡≡	Pipe Sleeve: PVC Class 200 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	146.2 l.f.



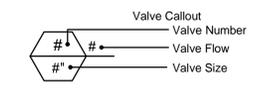


IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	Hunter MP1000 PROS-00 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. M=Maroon adj arc 90 to 210, L=Light Blue 210 to 270 arc, O=Olive 360 arc on PRS40 body.	2	40
	Hunter MP2000 PROS-00 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. K=Black adj arc 90-210, G=Green adj arc 210-270, R=Red 360 arc on PRS40 body.	3	40
	Hunter MP3000 PROS-00 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. B=Blue adj arc 90-210, Y=Yellow adj arc 210-270, A=Gray 360 arc on PRS40 body.	2	40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Area to Receive Dripline Netafim TLCV-26-18 (18) Techline Pressure Compensating Landscape Dripline with Check Valve. 0.26GPH emitters at 18.0" O.C. Dripline laterals spaced at 18.0" apart, with emitters offset for triangular pattern. 17mm.	548.5 s.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Weathermatic 11024FCR Plastic Remote Control Valve, 1"	3
(Not Shown)	Drip Y Filter Amiad (line size)	
(Not Shown)	Drip pressure Regulator Senninger (line size) or approved equal.	
	Rain Bird 33-DLRC with key 3/4" Brass Quick Coupling Valve	2
	Bronze Ball Valve (line size) Spears or approved equal. Install in round valve box.	2
	Febco 825Y 1" Reduced Pressure Backflow Preventer. Install in Strongbox expanded Metal Backflow Enclosure. Model: BC-30CR.	1
	Pressure Regulator Honeywell-Braukman (1" w/ 0-100 psi gauge)	1
	Point of Connection 1"	1
	Irrigation Lateral Line: PVC Class 200	224.7 l.f.
	Irrigation Mainline: PVC Schedule 40	204.6 l.f.
	Pipe Sleeve: PVC Class 200 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	197.0 l.f.



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PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

Approved: _____ DATE _____
 CITY ENGINEER Original Signed Date

Design Drawn: _____
 Checked: _____

95% SUBMITTAL

NO.	DATE	APPROVED	REVISIONS

MASON ST. BRIDGE REPLACEMENT PROJECT
IRRIGATION PLAN
 July 19, 2013

FA No. BRLS-5007(044)
 BRIDGE NO. 51C-246

2013-00040
 PBW. NO.

3588
 BID NO. SHT. DES.

LP-4
 DWG. NO.

SHT. OF

