BLUE FOLDER ITEM

Blue folder items are additional back up material to administrative reports and/or public comments received after the printing and distribution of the agenda packet for receive and file.

CITY COUNCIL MEETING
JUNE 3, 2025

L.3 PUBLIC HEARING TO CONSIDER THE FISCAL YEAR 2025-26 PROPOSED BUDGET AND 2025-30 FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

CONTACT: STEPHANIE MEYER, FINANCE DIRECTOR

- **PUBLIC COMMUNICATION**

From:	Mark Nelson (Home Gmail)
To:	CityClerk
Cc:	Anneke Blair; Jeffrey Gaul; Alan Klainbaum; Nancy Skiba; Austin Carmichael; daniella.woodnicki@redondo.org; Gilbert M. Escontrias; Cindi Arrata; Candace Nafissi; John Simpson; Andrew Beeli; Jay Tsao; Steven Anderson; Bhuvan Bajaj; Traffic Engineering; Andrew Winje; James Light; Paige Kaluderovic; Zein Obagi; Scott Behrendt; Brad Waller; Chadwick B. Castle
Subject:	Public Comment: RBCC 6/3/25 Agenda Item L3, BRR Item #03 Total Estimated Budget Cost Revision to $617K (likely range $370K (6-ft tall) to $617K (10-ft tall))
Date:	Monday, June 2, 2025 5:03:16 PM
Attachments:	Corrections of 500-600 Soundwall Cost Estimate.xlsx

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SUBJECT LINE - Public Comment: RBCC 6/3/25 Agenda Item L3, BRR Item #03 Total Estimated Budget Cost Revision to $617K (likely range $370K (6-ft tall) to $617K (10-ft tall))

Provided as Public Comment to the Mayor, City Council, PWSC, PSC, Prospect Neighborhood

City Officials and Neighbors:

Below is a revision to the Budget Response Report Item #03 (6/3/25 Agenda Item L3)
"What is the cost to construct a sound wall on the Prospect median between Beryl St and Diamond St.?"
This work supports a revision to $617K (down from $3.13M) for BRR Item #03 using RBPW cost estimation methods with fact-based revised unit cost data and standards manual-based height specification.

SUMMARY

The **Total RBPW Estimated Budget Cost of $3,133,139.94 seemed quite high** based on my experience. As a result, I took a deep dive into the data. (FYI for the new City Attorney: I am a court and agency qualified expert witness, a co-author of the inaugural California Standard Practice Manual for energy costs and standards, and a retired executive with experience reviewing and developing engineering cost estimates for individual projects up to $1B.)

Based on fact-based, documented revisions to the unit cost estimate drawn from CalTrans data and the height range of the wall drawn from the California Highway Design Manual, the **BRR #03 Revised Total Estimated Budget Cost is $617K for a 10-foot tall, 1000-foot long wall.**

UNIT COST ANALYSIS AND REVISION

Unit Cost Estimate Revision (Revised to $32.23 psf down from $68.22 psf)
The unit cost used by RBPW was $68.22 psf (+/- 1 SD interval $4.04 to $132.40 psf)
That 1 Standard Deviation 68% certainty range nearly includes $0 psf, which indicates that unit cost estimate is very low quality.

I reviewed the CalTrans source data and found that RBPW used a simple average of bid costs,

and included a 304 sf wall that was up to 800% more costly than walls at scale. Based on that outlier being removed, the revised cost estimate is $32.23 psf (+/- 1 SD interval $26.16 to $38.40 psf). That is a much higher quality engineering cost estimator.

Resulting Total Estimated Budget Cost Revision (Revised to $1.48M down from $3.13M)
RBPW uses the industry common unit cost estimation methodology. **That means the $3.13M BRR #03 estimate is reduced to $1.48M for the 24-foot tall x 1000-foot long wall based on the unit cost revision ratio of 47.24%.**

SOUNDWALL HEIGHT ANALYSIS AND REVISION

Soundwall Size Revision (Revised to California standards of 6-feet to 14-feet from 24-feet)

It's unclear where a 24-foot wall height was sourced from, and there's ample question in my mind as to feasibility of a 24-foot tall block wall. Based on a quick AI search, the height of California Highway sound walls varies **from 6-feet to 14-feet tall** based on the California Highway Design Manual (https://up.codes/s/noise-barrier-height-and-position). Specifically the manual states at:

1102.3 Noise Barrier Height and Position:

Minimum Height. Noise barriers should have a minimum height of 6 feet (measured from the top of the barrier to the top of the foundation).

Maximum Height. Noise barriers should not exceed 14 feet in height (measured from the pavement surface at the face of the safety-shape barrier) when located 15 feet or less from the edge of the traveled way, and should not exceed 16 feet in height above the ground line when located more than 15 feet from the traveled way.

Granted, this is a highway scale specification, but 24-feet tall is nearly 50% outside of that range. One would assume that in the City, a barrier height closer to 6-feet would be appropriate. For sake of completeness, the estimated budget cost estimate was revised using both ends of the range, and that provided a reduction to $370K to $863K with a mean for a 10-foot wall at $617K.

CONCLUSION

Based on Revision of Unit Estimated cost and Revision of Wall Size conforming to State standards:

The conservative point estimate for the BRR#03 Revision Total Estimated Budget Cost is recommended at 10-feet tall (mean value of California Highway standards), which results in a

Total Estimated Budget Cost not to exceed $617,706.38, a reduction to 19.7% of the original $3.13M estimate.
This estimate uses 100% of the RBPW unit cost estimation methodology with the adders for Inspection, Design, Contingency and Inflation.
This estimate removes the 304 sf outlier cost data and results in a very good quality engineering cost estimator with a tight interval.
This estimate also allows for any height selection between the minimum of 6-feet and mid-point of 10-feet tall as a conservative estimate for budgeting.

Attachment: Excel calculations spreadsheet and references

RBPW Estimated Cost	**$3.133M**	$ 3,133,139.94		

SOUNDWALL (MASONRY BLOCK)	
Length (LF)	1,050
Height	24
Square foot (Sq ft)	25,200

Price/Sq ft*	$ 68.22	$	1,719,144.00
CM Inspection	10%	$	171,914.40
Design	15%	$	257,871.60
Contingency	10%	$	171,914.40
	Subtotal	$	2,320,844.40
Inflation budgeting factor	35%	$	812,295.54
Total Estimated Budget Cost		**$**	**3,133,139.94**

*2025 Caltrans Cost Data: https://d8data.dot.ca.gov/contractcost/results.php?item=582001&cs=1

RBPW used a unit cost estimate of $ 68.22 per sf per CalTrans
Standard deviation (SD) of $ 64.18 per sf per CalTrans

Based on the standard deviation, RBPW is 68% confident that unit cost will fall between

High	$ 132.40	+1SD	
Low	$ 4.04	-1SD	

Based on that wide bandwidth, the underlying data was re-examined.

The CalTrans data included a 304 sf wall, which is approximately 10-feet by 30-feet
The bid costs on such a small wall were up to 800% higher than walls built at scale

Solutions using the CalTrans bid data include: 1) use of the square foot size weighted average cost or 2) recomputation excluding the small, home sized, 10x30 wall.

Per CalTrans data, the Weighted Average (includes small wall) is 30.38 per sf
Per CalTrans data, the Unic Cost (excludes small wall) is 32.23 per sf
Standard deviation of 6.07

Based on the standard deviation, RBPW is 68% confident that unit cost will fall between

High	$ 38.30	+1SD	
Low	$ 26.16	-1SD	

Removing the statistical outlier of a 304 sf wall provides meaningful results.

Conclusion: Either the Weighted Average of $30.38 psf or the "cleaned up" data Unit Cost average of $32.23 psf are both more appropriate than the CalTrans raw Unit Cost of $68.22 psf

Corrected Calculation of the Estimated Budget Cost

Because the budget estimate is 100% based off of the unit cost, the bottom line can be ratio adjusted by the revised cost.

The corrected calculation of $32.23 psf was chosen based on consistency with RBPWs methodology, adjusting for the outlier 304 sf wall.

The correction factor will be $32.23/$68.22 = 47.24%

The cost corrected estimated budget cost is: $ 1,480,095.31 for the RBPW-specified 24-foot tall, 1000-foot long wall

Discussion of Specified Wall Height

It's unclear where a 24-foot wall height was sourced from. Based on a quick AI search, the height of soundwalls varies from **6-feet to 14-feet tall** based on the California Highway Design Manual.
https://up.codes/s/noise-barrier-height-and-position

Further Correction of 500-600 N Prospect Ave Soundwall Estimated Cost

Using the full range of 6-feet to 14-feet tall (unknown if a non-highway soundwall should be 14-feet), the estimated budget cost can be corrected by ratio, as with the cost correction. Sound modeling should be conducted for height determinations

Specified Height	24	Ratio Factor		**Revised budget cost estimate (Unit Cost and Wall Size Correction)**			
Low code	6	25%	**$ 370,023.83**				
High code	14	58%	**$ 863,388.93**		**Mean (10-foot)**	**$616,706.38**	19.7% of original
					(8-foot)	**$493,365.10**	
Revised budget cost estimate (Unit Cost Correction)				$ 1,480,095.31			

Note: Metro's Soundwall10 project uses 14-foot height along the 10 freeway

CONCLUSION

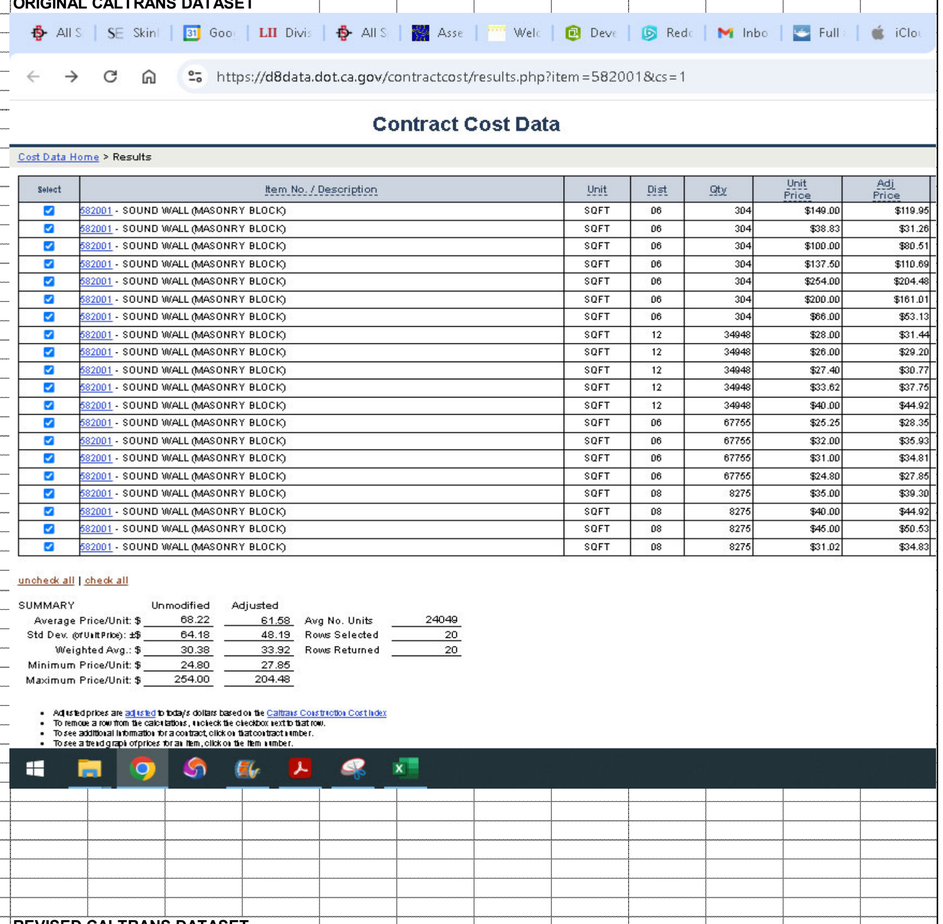
A correction was made to the initial unit cost estimate to reflect the outlier of a 304 sf wall in the costs. It is very likely that most qualfied vendors had no interest in such a small job, but bid anyway out of courtesy. Their mobilization costs alone likely swamped the hard costs of a 304 sf wall.

That correction resulted in an estimated budget cost of $1.48M for a 24-foot x 1000-foot wall

According to the California Highway Design Manual, a reasonable source of information for soundwalls, the range of heights from minimum to maximum is 6-feet to 14-feet.

These corrections resulted in an estimated budget cost of $370K to $863K (Mean 10-foot wall $617K) using both State manual soundwall height revisions and data-scrubbing cost estimate revisions

ORIGINAL CALTRANS DATASET



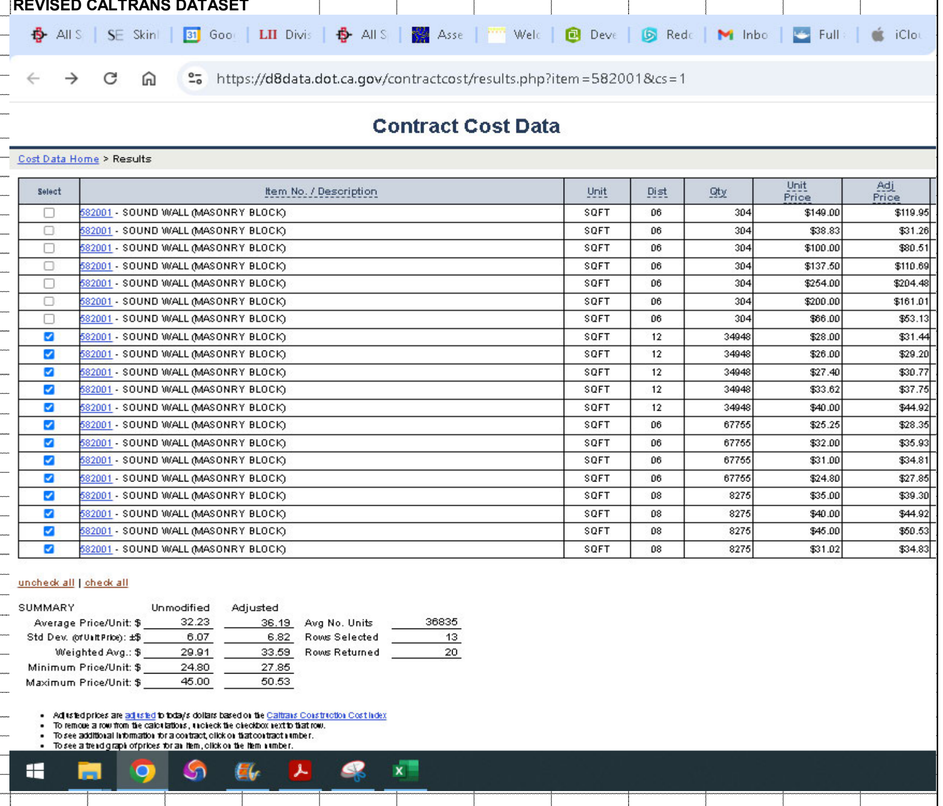
Select	Item No. / Description	Unit	Dist	Qty	Unit Price	Adj Price
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	304	$149.00	$119.95
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	304	$38.83	$31.26
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	304	$100.00	$80.51
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	304	$137.50	$110.69
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	304	$254.00	$204.48
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	304	$200.00	$161.01
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	304	$66.00	$53.13
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	12	34948	$28.00	$31.44
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	12	34948	$26.00	$29.20
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	12	34948	$27.40	$30.77
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	12	34948	$33.62	$37.75
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	12	34948	$40.00	$44.92
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	67755	$25.25	$28.35
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	67755	$32.00	$35.93
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	67755	$31.00	$34.81
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	06	67755	$24.80	$27.85
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	08	8275	$35.00	$39.30
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	08	8275	$40.00	$44.92
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	08	8275	$45.00	$50.53
☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	08	8275	$31.02	$34.83

uncheck all | check all

SUMMARY	Unmodified	Adjusted		
Average Price/Unit: $	68.22	61.58	Avg No. Units	24049
Std Dev. (of Unit Price): ±$	64.18	48.19	Rows Selected	20
Weighted Avg.: $	30.38	33.92	Rows Returned	20
Minimum Price/Unit: $	24.80	27.85		
Maximum Price/Unit: $	254.00	204.48		

- Adjusted prices are adjusted to today's dollars based on the Caltrans Construction Cost Index
- To remove a row from the calculations, uncheck the checkbox next to that row.
- To see additional information for a contract, click on that contract number.
- To see a trend graph of prices for an item, click on the item number.

REVISED CALTRANS DATASET



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☑	582001 - SOUND WALL (MASONRY BLOCK)	SQFT	08	8275	$31.02	$34.83

uncheck all | check all

SUMMARY	Unmodified	Adjusted		
Average Price/Unit: $	32.23	36.19	Avg No. Units	36835
Std Dev. (of Unit Price): ±$	6.07	6.82	Rows Selected	13
Weighted Avg.: $	29.91	33.59	Rows Returned	20
Minimum Price/Unit: $	24.80	27.85		
Maximum Price/Unit: $	45.00	50.53		

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From:	Darryl Boyd
To:	Mark Nelson (Home Gmail)
Cc:	CityClerk; Anneke Blair; Jeffrey Gaul; Alan Klainbaum; Nancy Skiba; Austin Carmichael; daniella.woodnicki@redondo.org; Gilbert M. Escontrias; Cindi Arrata; Candace Nafissi; John Simpson; Andrew Beeli; Jay Tsao; Steven Anderson; Bhuvan Bajaj; Traffic Engineering; Andrew Winje; James Light; Paige Kaluderovic; Zein Obagi; Scott Behrendt; Brad Waller; Chadwick B. Castle; Brock Rogerson; Nancy Orchard
Subject:	Re: Redondo Beach City Council Meeting 6/3/25 Agenda Item L3:BRR#03, BRR#22
Date:	Tuesday, June 3, 2025 12:44:52 PM

My name is Darryl Boyd, a 32 year homeowner at [redacted] Redondo Beach, CA 90277

I am a California Real Estate Broker of 31 years having owned sales, mortgage, and development companies. My family is involved in private lending and I am an expert witness in property valuation disputes involving Probate and Trust matters.

I have read the data and information that Mr. Nelson has provided and agree with his findings as it applies to the 500-600 N Prospect Ave. situation.

I look forward to addressing the City Council in person this evening.

Thank You for your consideration.

Darryl Boyd

On Tue, Jun 3, 2025 at 11:01 AM Mark Nelson (Home Gmail) <[redacted] wrote:

> My name is Mark Nelson and I am a property owner in the 500 block of North Prospect Ave on the frontage road. I am a state and federal court; local, state and federal agency; and arbitration qualified expert witness. My university education includes Econometrics (Economic Statistics) and Chemical Engineering. I am a retired adjunct professor of economic and business. I am also a retired Fortune 150 executive with experience in $350M annual operating budget management and project planning, permitting, and development for projects up to $1B.
>
> I am attaching comments after review of the real estate economics research studies supporting the comments. It's my opinion that the studies support the conclusion of likely damages to property values on the 500-600 N Prospect frontage road as a result ot the current state of disrepair.

--
Darryl Boyd - Broker/Owner, MRP, SFR, CPTS
Specialized Court Services:
Expert Witness - Probate & Trust Valuation Disputes
Substitute Administration - Probate Cases
DARRYL B. BOYD, BROKER

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