

# Purple Line Extension

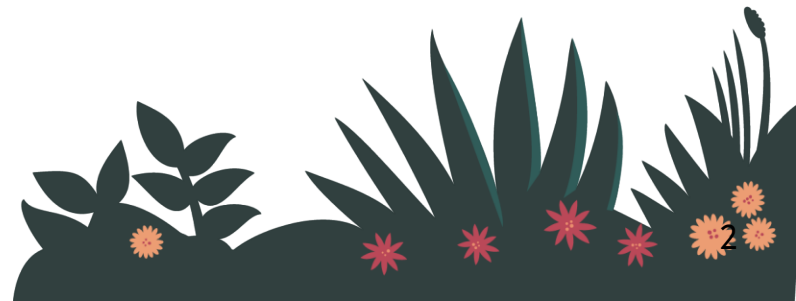
Section 1 Construction Community Meeting

July 20, 2017



# Agenda

- TBM Art and Naming Contest
- Project Construction Updates:
  - Wilshire/Western
    - Tie-In
  - Wilshire/La Brea
    - Excavation
  - Wilshire/Fairfax
    - Steady State
  - Wilshire/La Cienega
    - La Cienega Decking
- Safety
- Eat Shop Play
- Business Interruption Fund
- Metro Art Workshop
- Questions & Answers



# Purple Line Extension

## Project Alignment



# Sections 1, 2 & 3 Status

*\*Subject to change. The PLE project team is working to deliver the project consistent with Measure M*

	Under Construction	Forecasted Schedule	
Section	Section 1	Section 2	Section 3
Length	3.92 Miles	2.59 Miles	2.59 Miles
New Stations	Wilshire/La Brea Wilshire/Fairfax Wilshire/La Cienega	Wilshire/Rodeo Century City/ Constellation	Westwood/UCLA Westwood/VA Hospital
Pre-Construction Activities	Current - 2016	2016 - 2018	2016 – 2018*
Construction	2015 - 2023	2018 – 2024*	2018 – 2024*
Operations	2023	2024*	2024*

\*Metro's goal is to complete the entire Purple Line Extension by 2024 if Federal matching funds for Section 3 are secured.

# Purple Line Extension

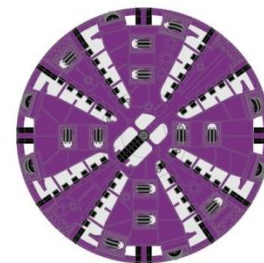
## Section 1 Alignment



# Tunnel Boring Machines Art and Naming Competition

## Two Contests, Two Machines

- The Purple Line Extension Project will be using two tunnel boring machines (TBMs) to create two tunnels between Western Av to La Cienega Bl
- Metro will hold a TBM naming and illustration contest to engage youth
- The public will have a chance to vote for the names and illustrations chosen
- The selected names and illustrations for both contests will be announced at the Purple Line Extension TBM Lowering Ceremony in early 2018
- Initial outreach to schools will begin soon





# TBM Art and Naming Competition

Two TBMs Being Assembled



*Up to 15 people can work in the machine at one time, they enter the machine through here.*



*One of two Purple Line Extension cutter-heads being assembled in Germany*



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# Purple Line Maintenance Facility

## Maintenance Facility

- Located in the Arts District, near 6<sup>th</sup> St Bridge
- 590 S Santa Fe Avenue

## Current Work

- Storm drain relocation continues through August 2017
- West side sidewalk along Santa Fe Av, between Willow St and Palmetto St will be closed intermittently during weekdays
- Work will require intermittent lane shift with assistant from flaggers
- Local access will be maintained at all times



# Purple Line Maintenance Facility



*Example of Benjamin Ball and Gaston Nogues Art concept for MOW Building*

# Schedule

# Schedule

*\*As of July 2017, subject to change*

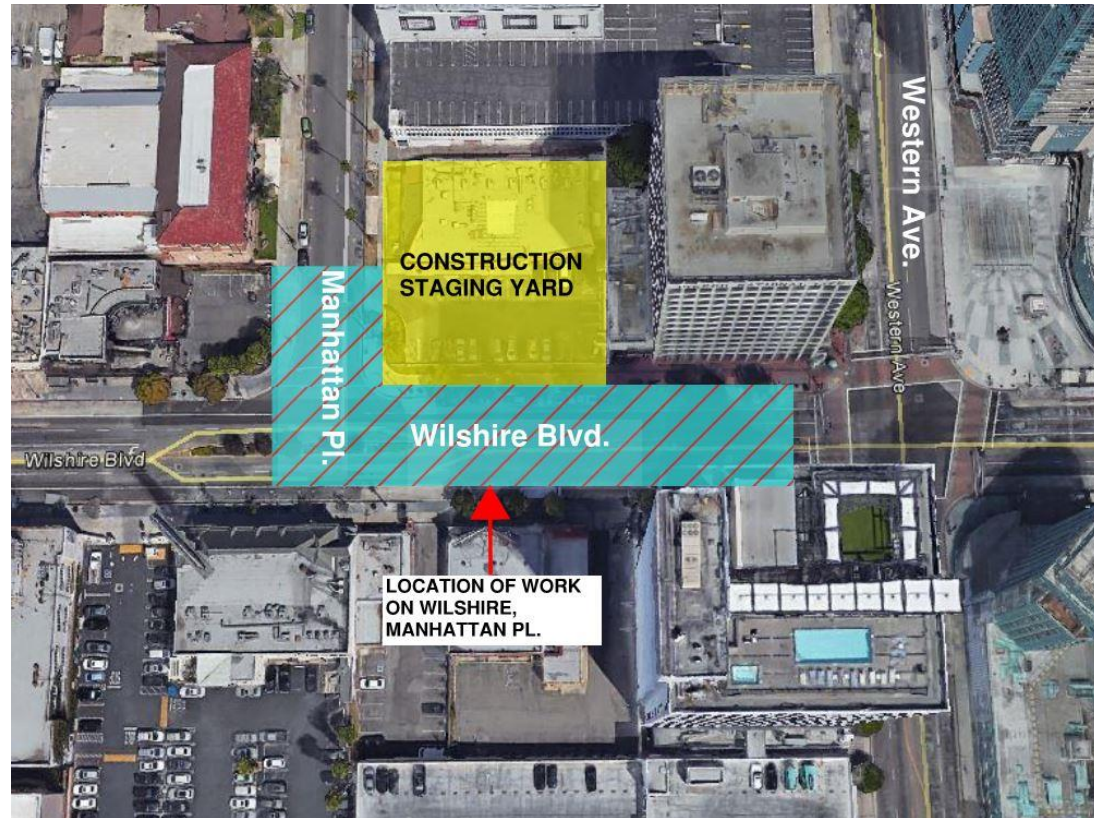
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# Wilshire/Western Tie-In

## Upcoming Work

- Construction activities between Wilshire Bl/Manhattan Pl and Wilshire Bl/Western Av:
  - Utility work
  - Pile installation
  - Jet grouting
  - Decking, excavation
  - Dewatering
  - Instrumentation

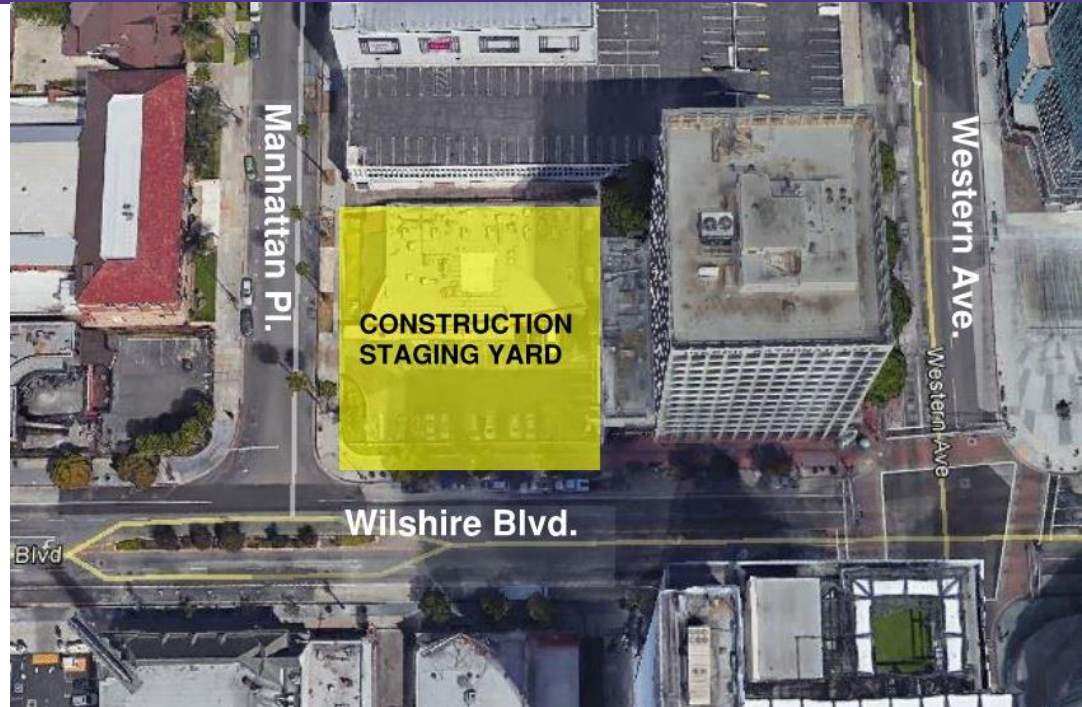


*Location of construction on Wilshire Bl at Western Av. Minor instrumentation and dewatering work will intermittently extend onto Manhattan Pl*

# Wilshire/Western Tie-In

## Staging Yard

- Sound wall substantially completed; wall is 20-24 feet
- Driveway widening still required
- Yard used intermittently for storage, and equipment and material maintenance
- Yard will be used to support upcoming activities such as, piling, decking, excavation, tunnel and cross passage access



*Location of construction staging site on Wilshire Bl at Manhattan Pl*



# Wilshire/Western Tie-In

## Sewer Relocation

- Sewer relocation work on Wilshire Bl between Manhattan Pl and Western Av is scheduled to occur in August 2017.
- This work will require temporary sidewalk and crosswalk closures, a temporary bus stop relocation, intermittent lane reductions, and turn restrictions on Wilshire Bl
- Construction notices with closure, pedestrian detour, and work hour details will be available and distributed prior to work



# Wilshire/Western

## Work Zone Set-Up

**What:** A work zone with concrete barriers, fencing and sound blankets

**Why:** To support pile installation, concrete street decking installation, soil improvement (jet grouting), excavation and associated activities (i.e. installing ventilation and dewatering system)

**Where:** North side of Wilshire Bl between Manhattan Pl and Western Av

**How Wilshire Bl will be affected:**

- Reduced to two lanes in each direction between Western Av and St Andrews Pl
- Left turns will be restricted on Wilshire Bl at Western Av
- Extended sidewalk closure between Manhattan Pl and Western Av required

**When:** Starting in September 2017 for approximately one year, through 2018



Wilshire/Western Station will remain in operation during construction



# Wilshire/Western

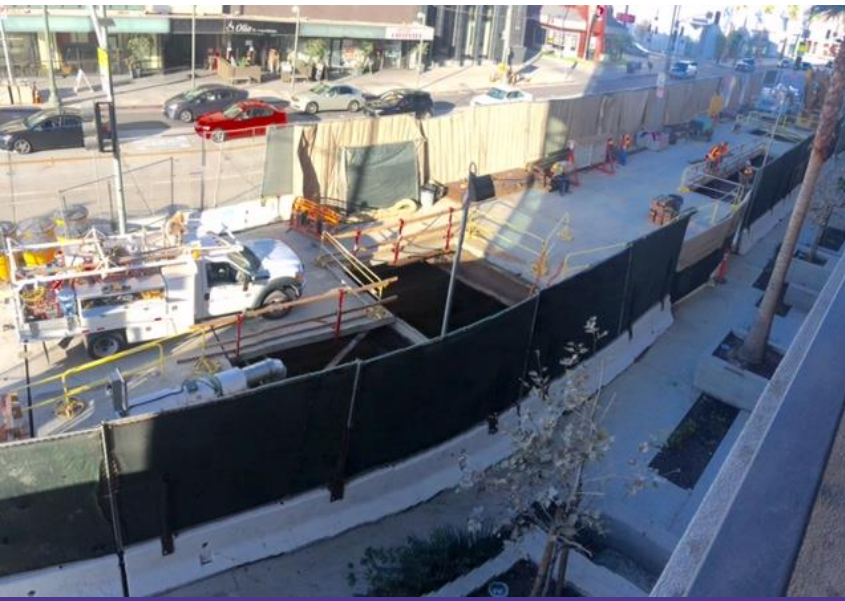
## Work Zones



*Examples of similar work zones/closures at Wilshire/Fairfax*

# Wilshire/Western

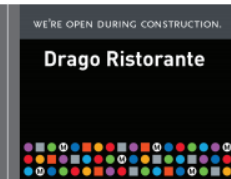
## Temporary Work Zones



*Comparable work zone formerly at Wilshire/La Brea*



*Rendering of work zone showing pile installation*



*Typical Wilshire-facing signage for businesses*

# Wilshire/Western Tie-In

## Pile Installation

*\*Dates subject to change*

Pile installation includes:

- Rig to construct 95-ft (L) deep
- Crane lifting 95-ft (L), 24-in H-piles into holes
- Drilling, pile installation and backfilled concrete completed same day
- Requires pre-trenching and potholing work prior to installing the piles
- Work anticipated September through December 2017



*Typical pile installation west of La Brea Av on Wilshire Bl*

# Wilshire/Western

## Pile Installation Details

### Typical Work Hours:

- 7am-11pm for drilling and setting of piles
- 11pm-7am for support activities

### Lane Reductions and Closures:

- Wilshire will be reduced to two lanes in each direction.
- **Additional weekend full closures of Wilshire Bl will be required starting October 2017**

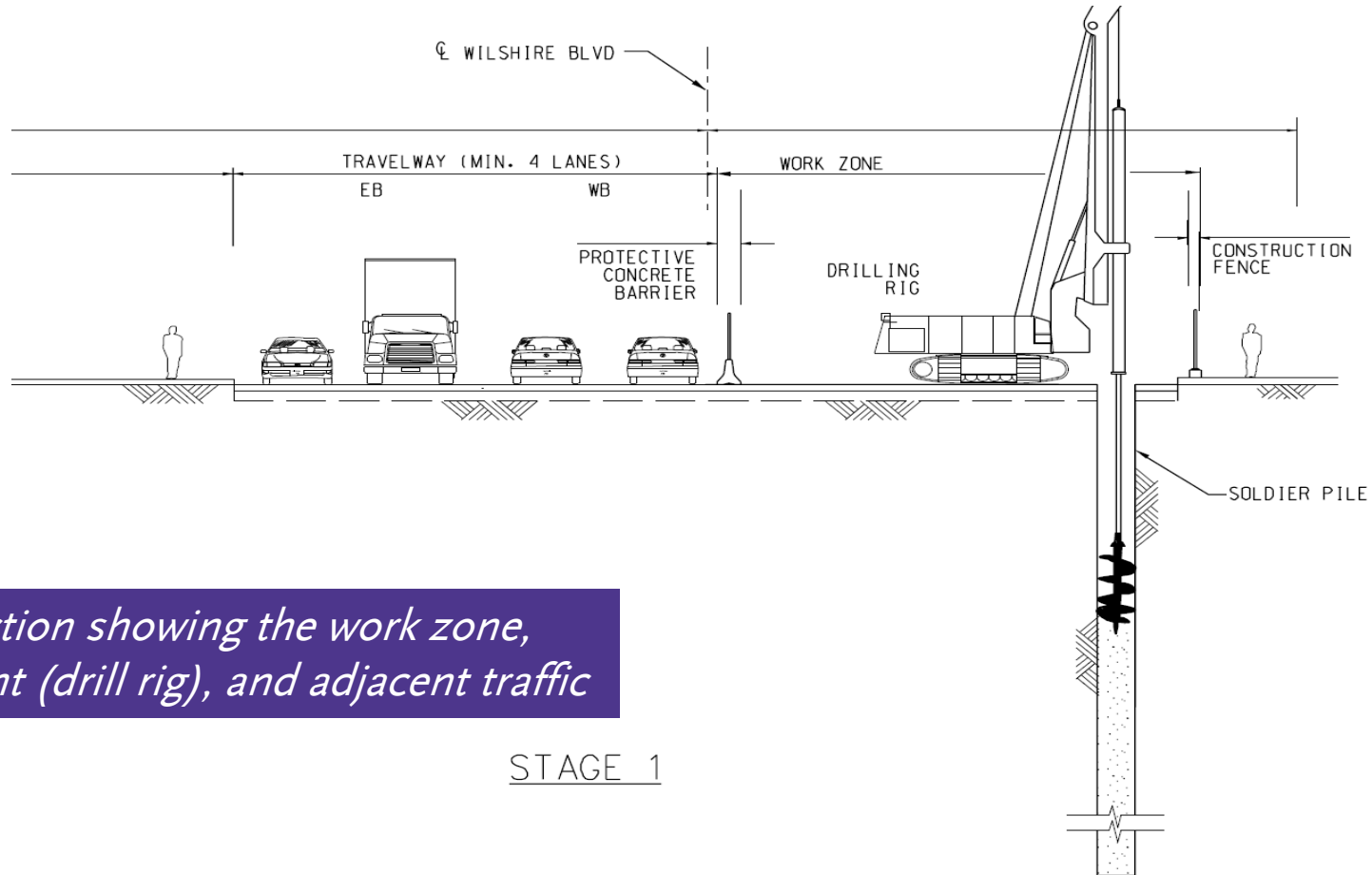
### Sound Mitigation

- Design-builder must comply with City of Los Angeles noise requirements
- Noise control signage
- Low-impact back-up alarms during night work
- Acoustical insulation
- Metro 5-Step Noise Plan



# Wilshire/Western

## Pile Installation



# Wilshire/Western

## Jet Grouting

*\*Dates subject to change*

- Jet grouting is a soil improvement construction process that will strengthen the soil with concrete to support tunneling
- Work activities include: potholing, street level excavation, drilling, trucking, and use of cement silos, pumps, generators
- Typical work hour: 7am-11pm
- Work (anticipated from January to March 2018) will be done from the work zone on Wilshire Bl on weekdays and will require additional weekend closures of Wilshire Bl



*Example of jet grouting at Wilshire Bl/Highland Av*



# Wilshire/Western Tie-In

## Decking

*\*Dates subject to change*

**Where:** On Wilshire Bl, between Manhattan Pl and Western Av

**What:** Construction of a concrete deck that forms a temporary street on Wilshire Bl  
Similar system used for La Brea and Fairfax stations

**When:** Anticipated March through April 2018

### How:

- Will require full closures of Wilshire Bl
- Schedule, sequence and detour information to be published prior to closures



*Renderings of typical street decking construction*

# Wilshire/Western Tie-In

## Decking

*\*Dates subject to change*

- Traffic will travel on the installed deck panels while the tie-in is constructed underground, anticipated for March through April 2018
- **Western Decking:**
  - Approximately 130 feet long
  - Approximately 100 feet wide
  - Approximately 60 feet deep



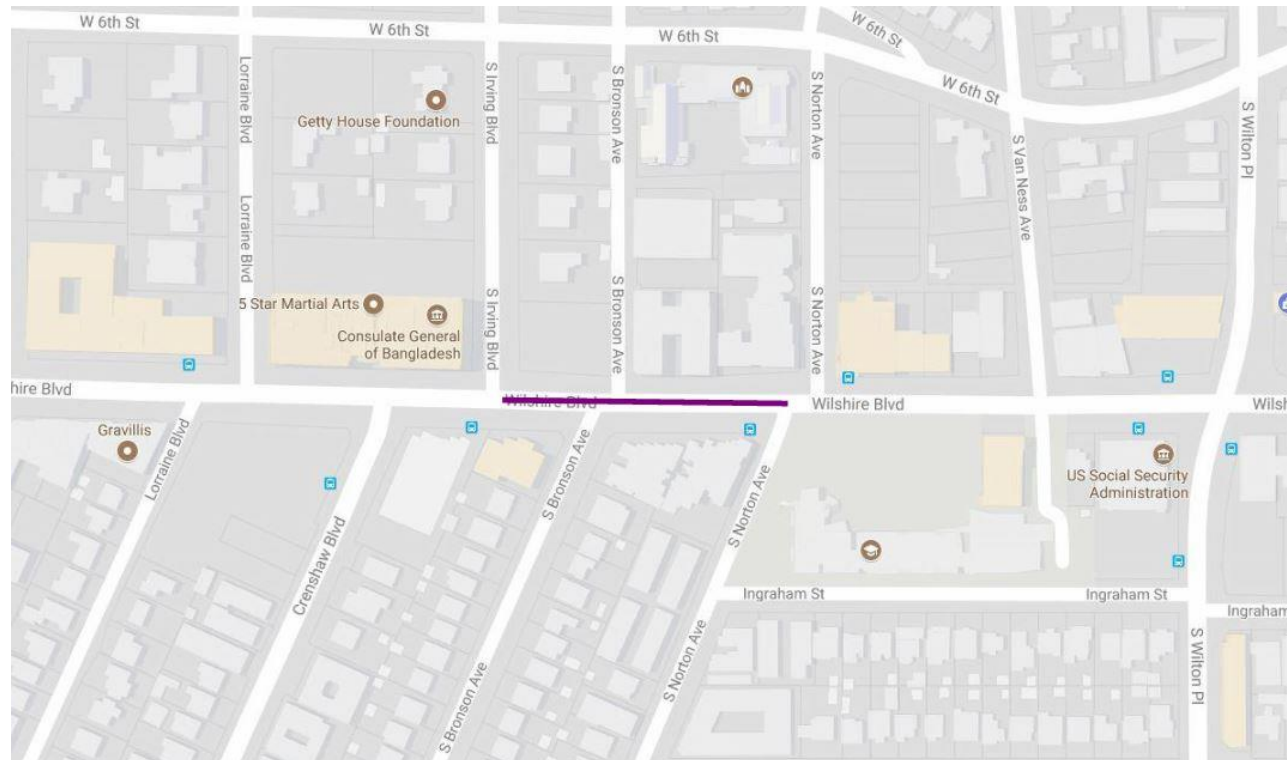
*Example of decking at Wilshire/Fairfax*

# Jet Grouting

## Wilshire Bl/Norton Av

### Jet Grouting Traffic Control

- Work zone set up in two center lanes of Wilshire Bl at Norton Av in Fall/Winter 2017
- Work area separated by K-rail and fences
- Lanes reduced to two lanes each direction at jet grouting locations
- Off-peak weekday closures and weekend directional closures will occur on Wilshire Bl
- Bus stops will be temporarily relocated as required



*Location of jet grouting site at Wilshire Bl/Norton Av  
scheduled for August 2017*



# Wilshire Bl/ Highland Av

Jet Grouting



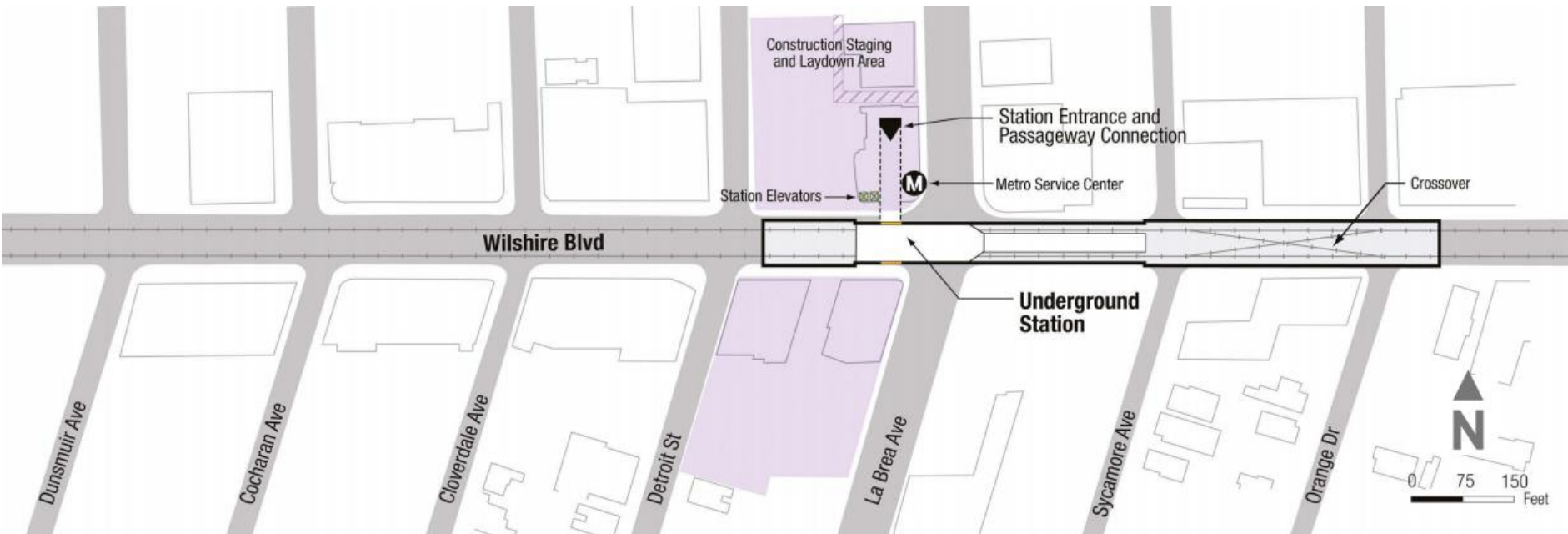
*Jet grout installation at Highland Av/Wilshire Bl*

# Wilshire/La Brea Station





# Wilshire/La Brea Station



*Rendering shows length of the Wilshire/La Brea underground station box on Wilshire Bl from Orange Dr to Detroit St*



# Wilshire/La Brea Station

## Schedule

*\*As of July 2017, subject to change*

Activity Name	2017				2018				2019				2020				2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
STATION EXCAVATION																												
STATION CONSTRUCTION																												
PROJECT-WIDE TUNNELING																												
TESTING																												
REVENUE SERVICE																												

# Wilshire/La Brea Station

## Staging Yards

### Staging Yard Activities and Equipment

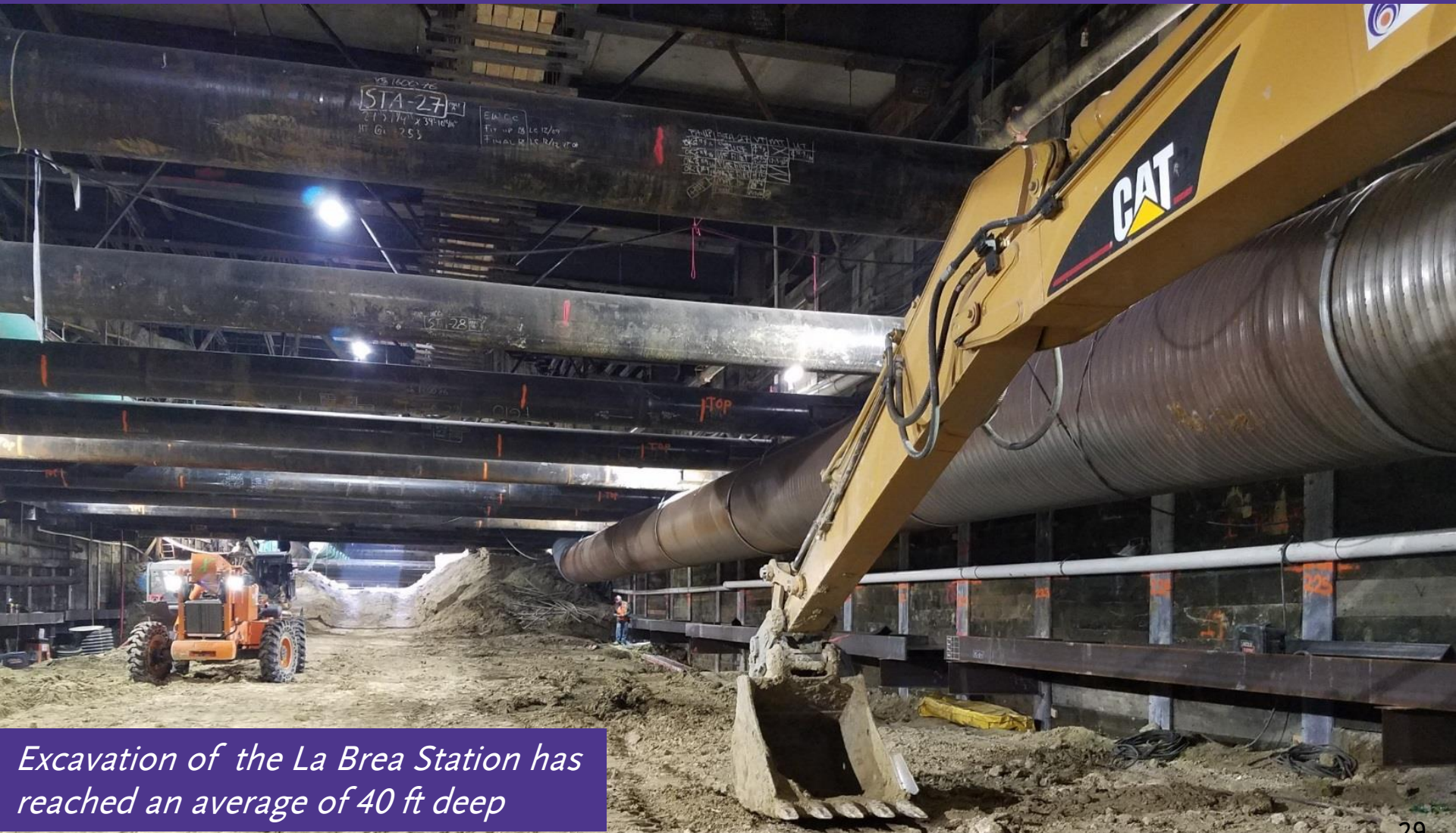
- Yard usage: 24/7
- Sound wall is 20-24 feet high
- Maintenance of equipment
- Deliveries of material
- Removal of excavated soil
- Ventilation equipment for underground construction is in use and located in the staging yard at the southeast corner of Wilshire Bl/Detroit St

### Mitigations

- Must comply with City of Los Angeles noise requirements
- Noise control signage
- Low-impact back up alarms for night work
- Acoustical insulation
- Metro 5 Step Noise Plan

# Wilshire/La Brea Station

## Excavation Continues



*Excavation of the La Brea Station has reached an average of 40 ft deep*



# Wilshire/La Brea Station

## Excavation Continues



*Workers gather soil at the North La Brea Muck shaft for removal into trucks, excavation is approximately 50% complete*

# Wilshire/La Brea Station

## Excavation

### When

- Now through the Fall of 2017
- Work hours are 7am to 11pm, and 11pm to 7am as needed

### What

- Excavation will occur under the concrete deck, with intrinsically safe equipment certified by the State of California
- Work includes hanging utilities underneath Wilshire BI, dewatering system installation, and maintenance of geotechnical instruments and dewatering wells
- To support excavation, deck openings of the street-deck for the purpose of delivering materials for underground construction may occur periodically, as needed



# Wilshire/La Brea Station

## Center Opening

**Now through December 2017**

- A material handling shaft in the Wilshire BI center median between Sycamore Av and Orange Dr
- Regular equipment and truck staging inside the K-rail area



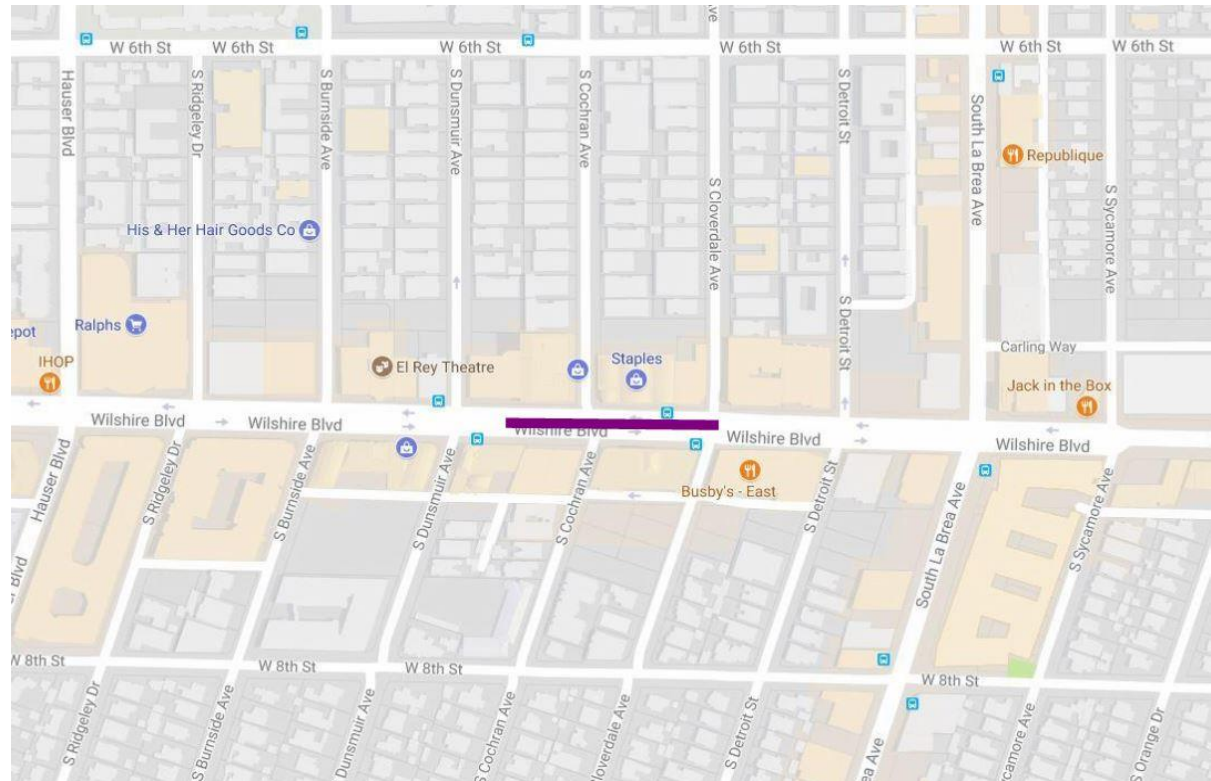
*The center opening in action*

# Jet Grouting

## Wilshire Bl/Cochran Av

### Jet Grouting Traffic Control

- Work zone set up in two center lanes of Wilshire Bl at Cochran Av in August 2017
- Work area separated by K-rail and fences
- Lanes reduced to two lanes each direction at jet grouting locations. Turn restrictions and impacts to north/south thru movements may be required.
- Off-peak weekday closures and weekend directional closures may occur on Wilshire Bl
- Bus stops will be temporarily relocated as required



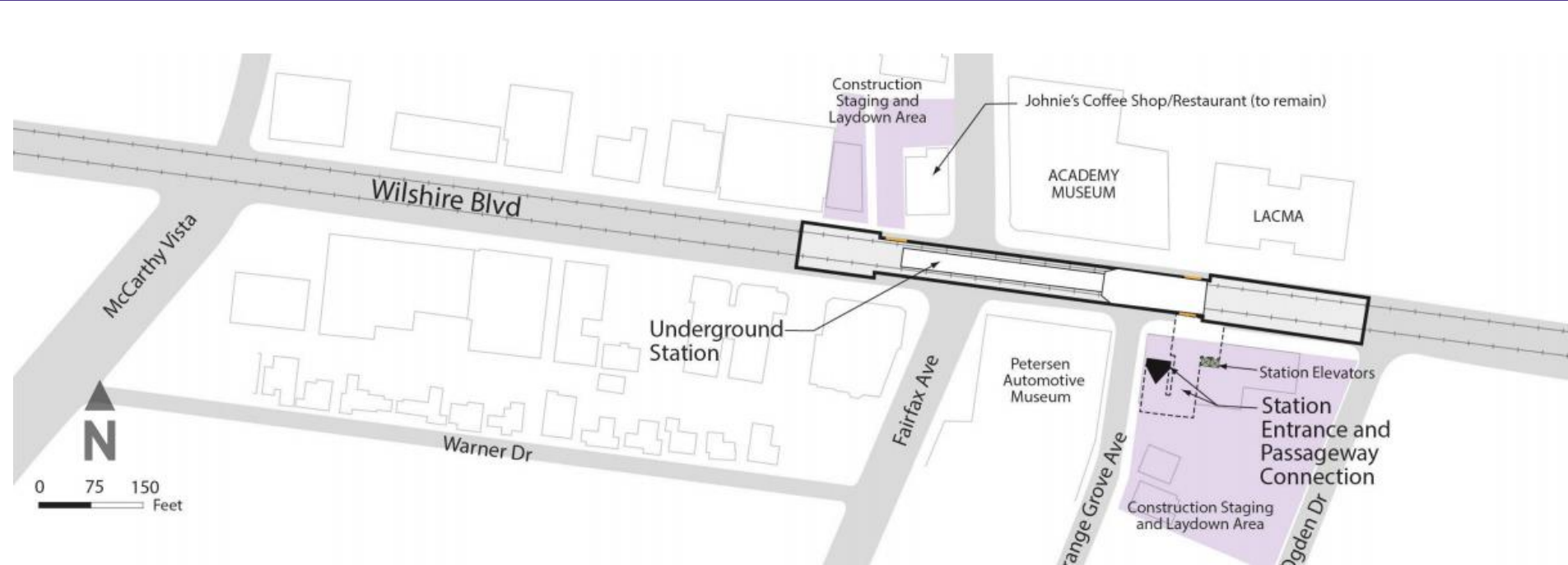
*Location of jet grouting site at Wilshire Bl/Cochran Av  
scheduled for August 2017*



# Wilshire/Fairfax Station



# Wilshire/Fairfax Station



*Rendering shows length of the Wilshire/Fairfax underground station box on Wilshire Bl from west of Fairfax Av to just west of Ogden Dr*



# Wilshire/Fairfax Station Schedule

*\*As of July 2017, subject to change*

Activity Name	2017				2018				2019				2020				2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PILING																												
DECKING																												
STATION EXCAVATION																												
STATION CONSTRUCTION																												
PROJECT-WIDE TUNNELING																												
TESTING																												
REVENUE SERVICE																												



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# Wilshire/Fairfax Station

## Decking and Steady State

### Decking completed in June 2017

- Decking will serve as the temporary street surface during excavation

### Wilshire/Fairfax was restored to a steady state in mid-July 2017

- Wilshire Bl has 3 lanes in each direction
- Left turns at Wilshire/Fairfax, Ogden Dr and Orange Grove Av have been restored
- Parking along Wilshire Bl has been returned between San Diego Wy and Spaulding Av



*Street restoration at  
Wilshire/Fairfax*

# Wilshire/Fairfax Station

## Staging Yard Update

### Staging Yard Activities and Equipment

- Yard usage: 24/7
- Sound wall is 20 to 24 ft high
- Maintenance of equipment
- Deliveries of material
- Removal of excavated soil
- Ventilation equipment for underground construction is in use and located in the staging yard at the northeast corner of Wilshire Bl/Ogden Dr

### Mitigations

- Must comply with City of Los Angeles noise requirements
- Noise control signage
- Low-impact back up alarms for night work
- Acoustical insulation
- Metro 5 Step Noise Plan



*Installing sound wall at  
Ogden Yard post decking*



# Wilshire/Fairfax Station

Rendering



*Landscape rendering to be placed on  
Ogden Staging Yard facing Wilshire Bl*

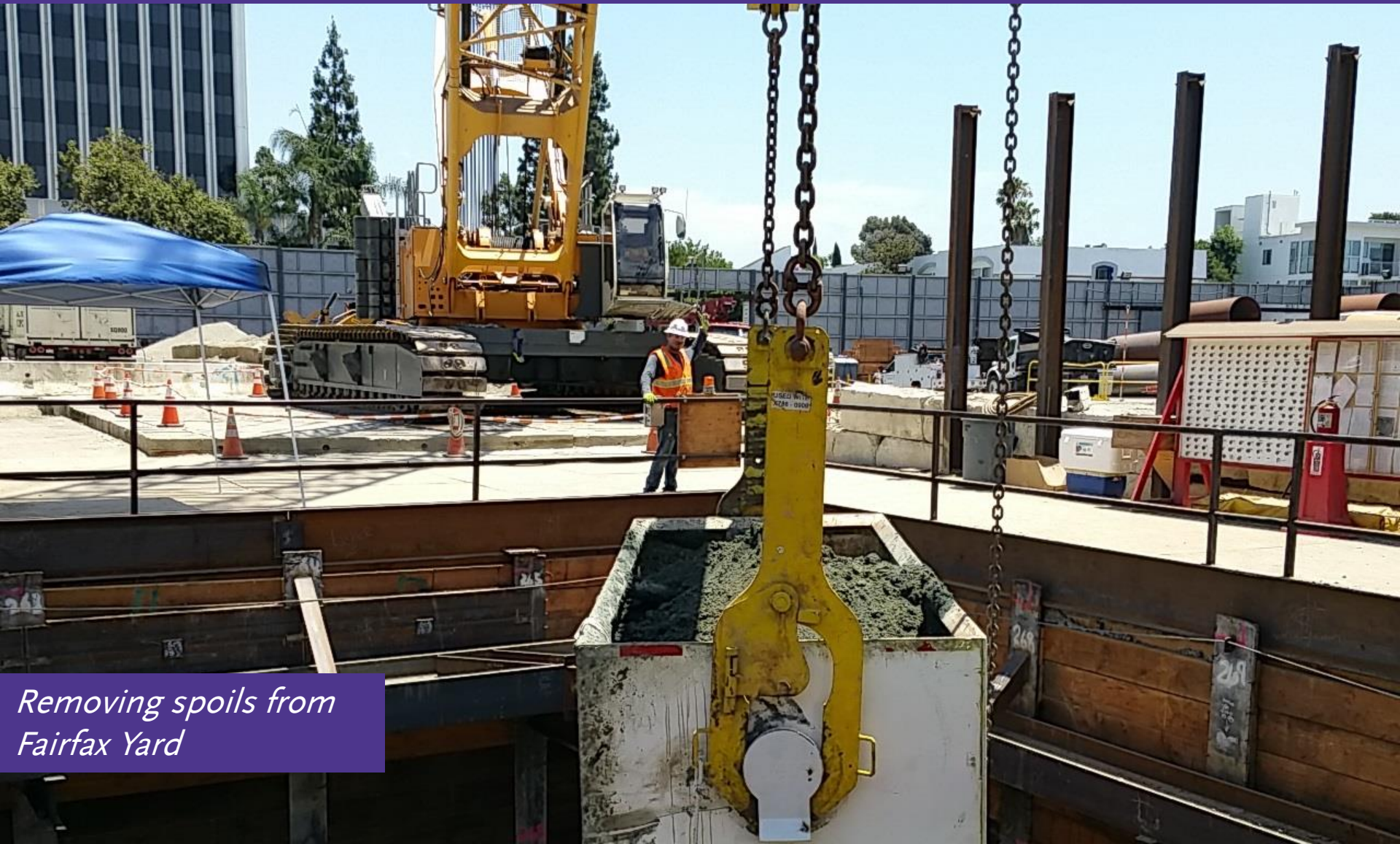
# Wilshire/Fairfax Station

- Excavation will occur under the concrete deck, with intrinsically safe equipment certified by the State of California
- Work includes hanging utilities underneath Wilshire Bl, dewatering system installation, and maintenance of geotechnical instruments and dewatering wells
- To support excavation, deck openings of the street-deck for the purpose of delivering materials for underground construction may occur periodically, as needed



# Wilshire/Fairfax Station

Excavation, Summer 2017



*Removing spoils from  
Fairfax Yard*

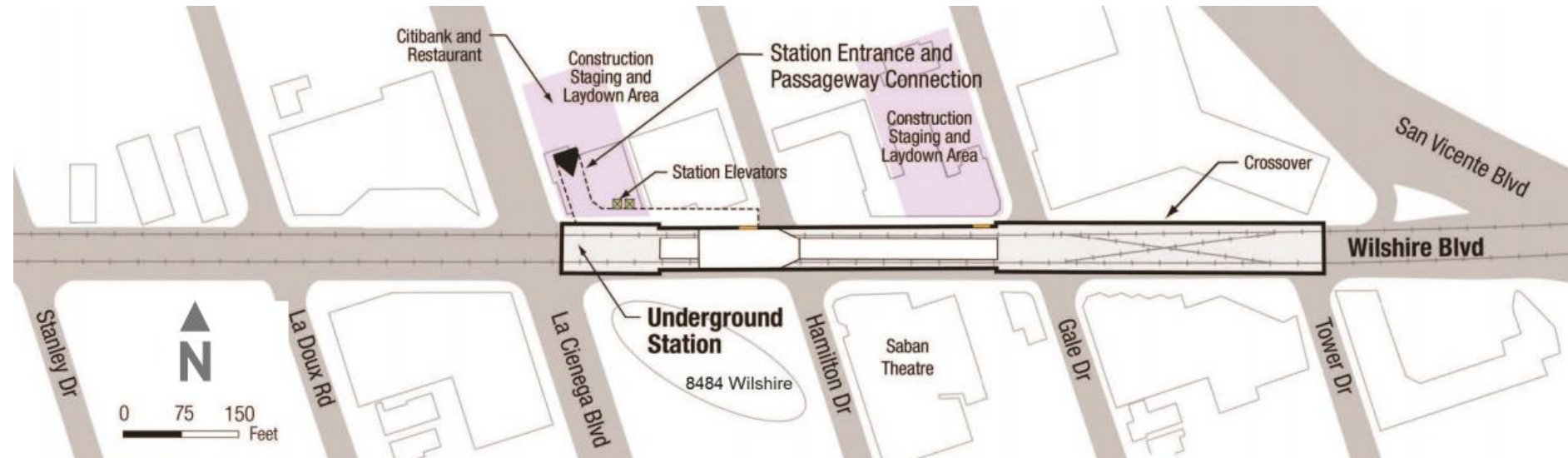


# Wilshire/La Cienega Station





# Wilshire/La Cienega Station



*Rendering shows length of the La Cienega underground station box on Wilshire Bl from La Cienega Bl to Tower Dr*

# Wilshire/La Cienega Station

*\*As of July 2017, subject to change*

Activity Name	2017				2018				2019				2020				2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ADVANCED UTILITY RELOCATION																												
PILING																												
DECKING																												
STATION EXCAVATION																												
STATION CONSTRUCTION																												
PROJECT-WIDE TUNNELING																												
TESTING																												
REVENUE SERVICE																												

# Wilshire/La Cienega Station

## Gale and La Cienega Staging Yards

### Staging Yard Activities and Equipment

- Yard usage: 24/7
- Sound wall is 20-24 feet high
- Maintenance of equipment
- Deliveries of material
- Removal of excavated soil
- Future activities:
  - Decking installation at Wilshire/La Cienega yard.
  - Ventilation equipment installation at Wilshire/La Cienega yard
  - Piling at Wilshire/Gale yard

### Mitigations

- Must comply with City of Beverly Hills noise requirements
- Noise control signage
- Low-impact back up alarms for night work
- Acoustical insulation
- Metro 5 Step Noise Plan



# Wilshire/La Cienega Piling

Work zone, north side of Wilshire Bl



Construction  
Staging Yard

Construction  
Staging Yard

Wilshire Blvd.

**Work Zone on  
N. side of  
Wilshire Blvd.**

*Approximate location of north  
side pile work zones at Wilshire  
Bl/La Cienega Bl*

# Wilshire/La Cienega Station

## Piling Installation Summary

**Pile installation, north side of Wilshire Bl between La Cienega Av and Tower Dr**

- Approximately 470 piles total to be installed – approximately 304 piles on the north side
- Piling will require extended sidewalk closures on the north side of Wilshire Bl, between La Cienega Bl and San Vicente Bl
- Work zone delineated by K-rail and fencing
- **Work hours:** 7am-8pm; drilling and setting of piles; 8pm-10pm; breakdown, cleanup, non-drill activities
- **Pile installation on La Cienega Bl will require full closures of the Wilshire/La Cienega intersection in Fall 2017**



# Wilshire/La Cienega Station

## Pile Installation



*Drilling pile at the La Cienega staging yard*



# Wilshire/La Cienega Station

## Pile Installation



*Placing slurry backfill at La Cienega staging yard*

# Wilshire/La Cienega Station

DRAFT

## Decking

- Construction of a concrete deck on Wilshire Bl, which will serve as a temporary roadway while construction proceeds underground. This construction spans the width of Wilshire Bl
- **Location:** Wilshire Bl between La Cienega Bl and San Vicente Bl, and in the Wilshire/La Cienega intersection
- This work occurs under full weekend closures of Wilshire Bl and La Cienega Bl
- Sidewalks are maintained or pedestrian detours created
- Full closures for this work are scheduled to start in September/October 2017. Additional activities under decking closures include piling, jet grouting and temporary civil improvements
- Work hours are 8pm Friday – 7am Monday, continuous through weekend.



# Wilshire/La Cienega Station

**DRAFT**

## Decking Schedule

### August 2017 through February 2018

Decking will start in the Wilshire/La Cienega staging yard in August 2017 for one month

- Will require sidewalk closures on La Cienega Bl and Wilshire Bl

### La Cienega Decking Schedule

Approximately 17 weekend closures, scheduled in two phases starting in September 2017

**Phase 1 : Wilshire/La Cienega intersection full closures – 4 weekends**

**Phase 2: Wilshire Bl between La Cienega Bl and San Vicente Bl, full closures – 13 weekends**

- Friday 8pm: Full closure Wilshire Bl/La Cienega intersection for phase 1, only Wilshire Bl for phase 2
- Monday 6am: Streets open
- Work occurs continuously throughout weekend





# Wilshire/La Cienega Station

## Decking Construction



*Placing deck beams at Wilshire Bl  
and Fairfax Ave.*

# Phase 1 Wilshire/La Cienega

**DRAFT**

## Intersection Closure, Northbound/Southbound Detour

- Southbound La Cienega Bl will be closed at 3<sup>rd</sup> St
- Northbound La Cienega Bl will be closed at Olympic Bl
- Local access will be maintained to La Cienega Bl
- **Primary detour route:**  
Olympic Bl → Robertson Bl → 3<sup>rd</sup> St



\*Pending City of Beverly Hills approval



# Phase 1 Wilshire/La Cienega

## Intersection Closure, Eastbound/Westbound Detour

- Westbound Wilshire Bl will be closed at San Vicente Bl
- Eastbound Wilshire Bl will be closed at Robertson Bl
- Local access will be maintained to Wilshire Bl
- **Primary detour route:**  
San Vicente Bl → Burton Wy → Doheny Dr



\*Pending City of Beverly Hills approval



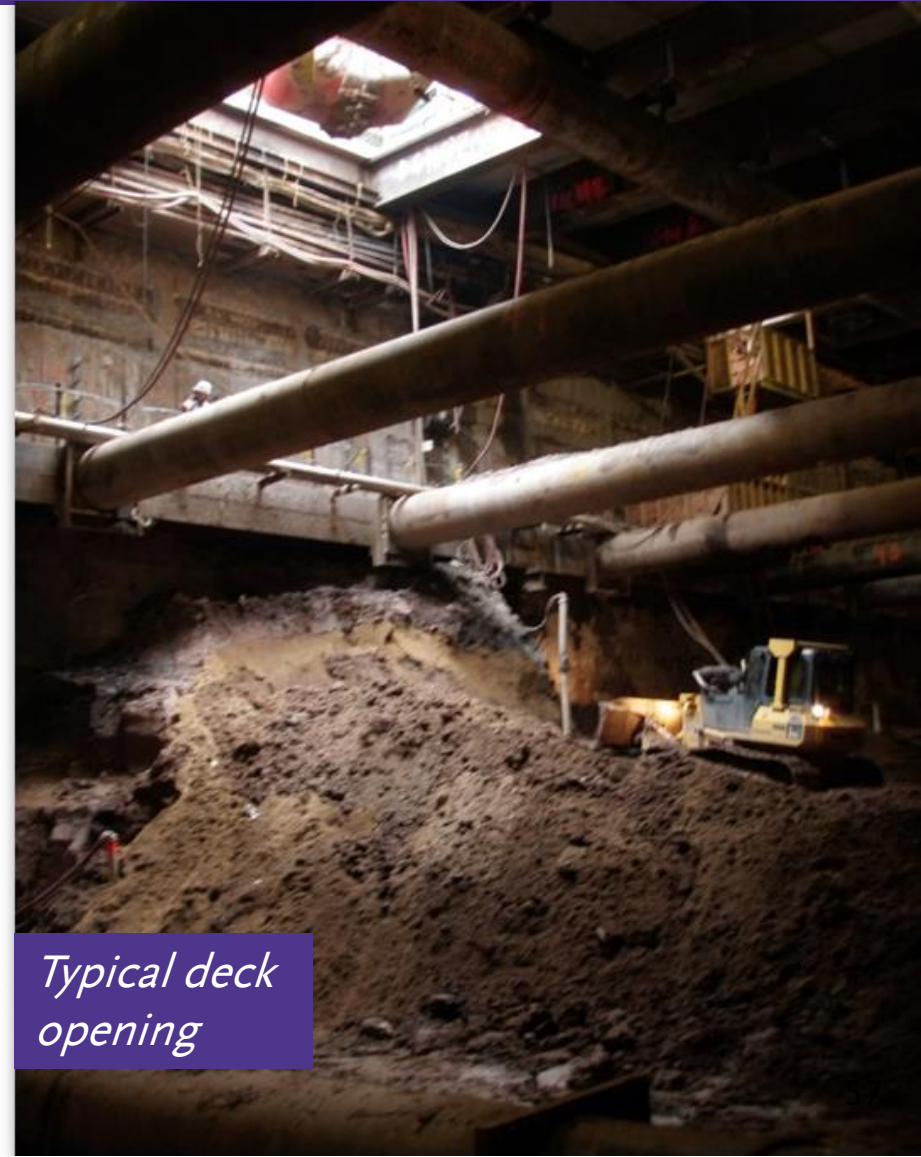


# Station Excavation and Deck Openings

## What:

- Deck openings are openings of the street-deck for the purpose of delivering materials for underground construction
- Deck openings will be done at deck locations designed to open and close
- Deck openings will occur periodically, as needed
- Deck panels are 8 ft by 14 ft

Decking opening will occur at all 3 station areas



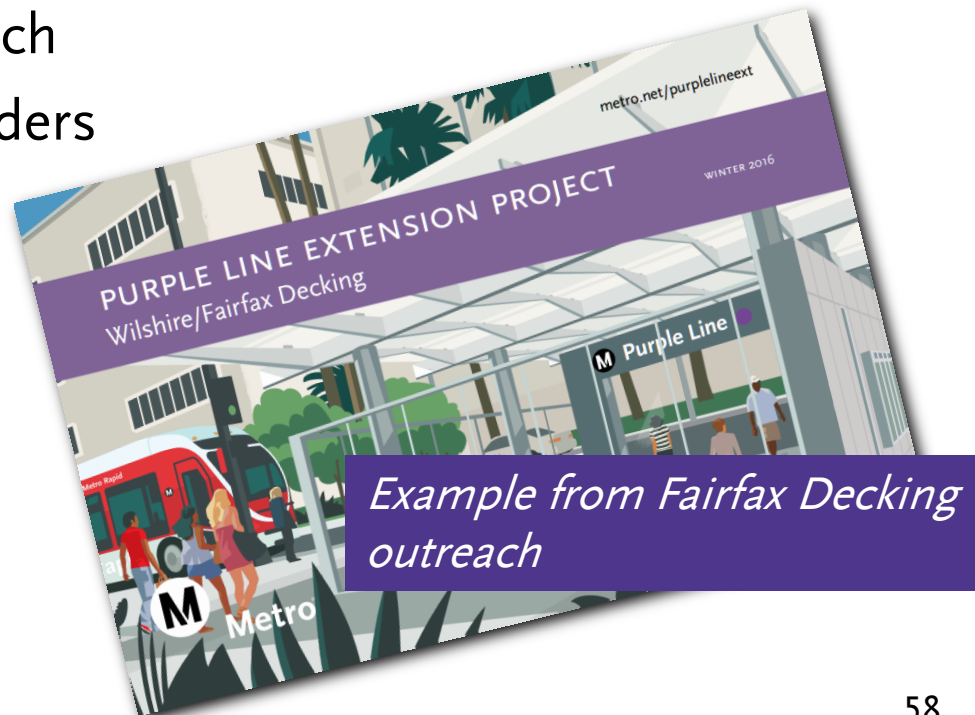
*Typical deck opening*

# Wilshire/La Cienega Station

## Decking Community Outreach

### Robust Marketing Campaign

- Social media: Facebook, Twitter, and Nextdoor
  - Advertising: print, radio, and online
  - Media coverage: press releases
- 
- Business and residential outreach
  - Meetings with local groups, leaders
  - Elected Official Briefings
  - Safety Presentations
  - School Presentations
  - Community Partnerships



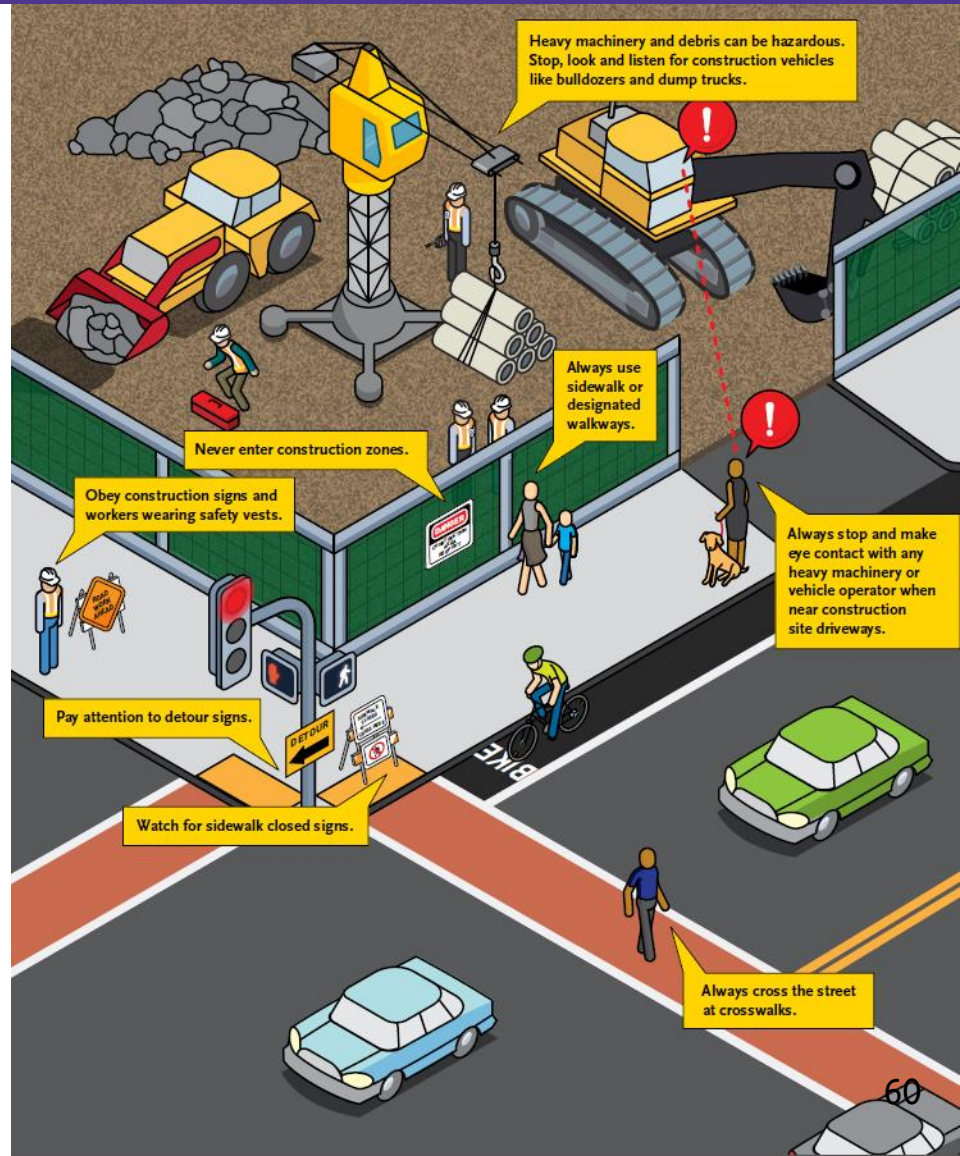


# Bus Stop Relocations

- 720/20 Wilshire bus stops for Wilshire/La Brea, Wilshire/Fairfax and Wilshire/La Cienega have been relocated to temporary locations away from the construction zone and will remain in place until construction is completed
- For information regarding changes to Metro service, please call 323.GoMetro or visit: <https://www.metro.net/service/advisories/>

# Staying Safe Near Construction Sites

- Stop, Look, & Listen
- Be alert and aware of your surrounding
- Avoid distractions
- See and be seen
- Obey construction signage
- Use designated sidewalk or walkways



# Help Us Keep You Safe

## **Purple Line Extension**

24/7 Project Hotline - 213.922.6934

## **On Metro Transit**

See Something, Say Something

888-950-SAFE (7233)

## **Construction Safety Awareness Program**

Glyssa Alcazar, Community Relations Officer

Email: [alcazarg@metro.net](mailto:alcazarg@metro.net)

Phone: 323.900.2192





# EAT SHOP PLAY WILSHIRE



## Win 7-Day Metro TAP Card

Win a free  
7-day Metro Pass

Show your local pride and enter to win!

**STEP 1**

Mention a local business on Instagram, Twitter or Facebook by posting a photo.

**STEP 2**

Include #EatShopPlay, #WILSHIRE and/or #BEVERLYHILLS in your post.

**STEP 3**

Set your post to "public" so we can find you.



**Metro Purple Line Extension**

June 27 at 11:00am · 🌐

Phở from Pho Saigon Pearl Los Angeles hits the comfort spot. Visit and tag #EatShopPlay #Wilshire to win a Metro 7-Day TAP Pass! <http://mtro.la/s1IN30cEyFK>



👍 Like    💬 Comment

Phuong T. Hoang, Ltaiti Faiai, Isabel Cassandra Silva and 653 others like this. [Top Comments ▾](#)

# EAT SHOP PLAY

## WILSHIRE



### Fun Summer Activities



Relax with free jazz music every Friday this summer at the **Los Angeles County Museum of Art (LACMA)**  
5905 Wilshire Bl  
Los Angeles, CA 90036



**Metro®**

Catch a show or go  
dancing at **The Wiltern**  
3790 Wilshire Bl  
Los Angeles, CA 90010



# EAT SHOP PLAY

## BEVERLY HILLS

### Fun Summer Activities



Learn and play at the  
**Zimmer Children's Museum**  
6505 Wilshire Bl  
Los Angeles, CA 90048

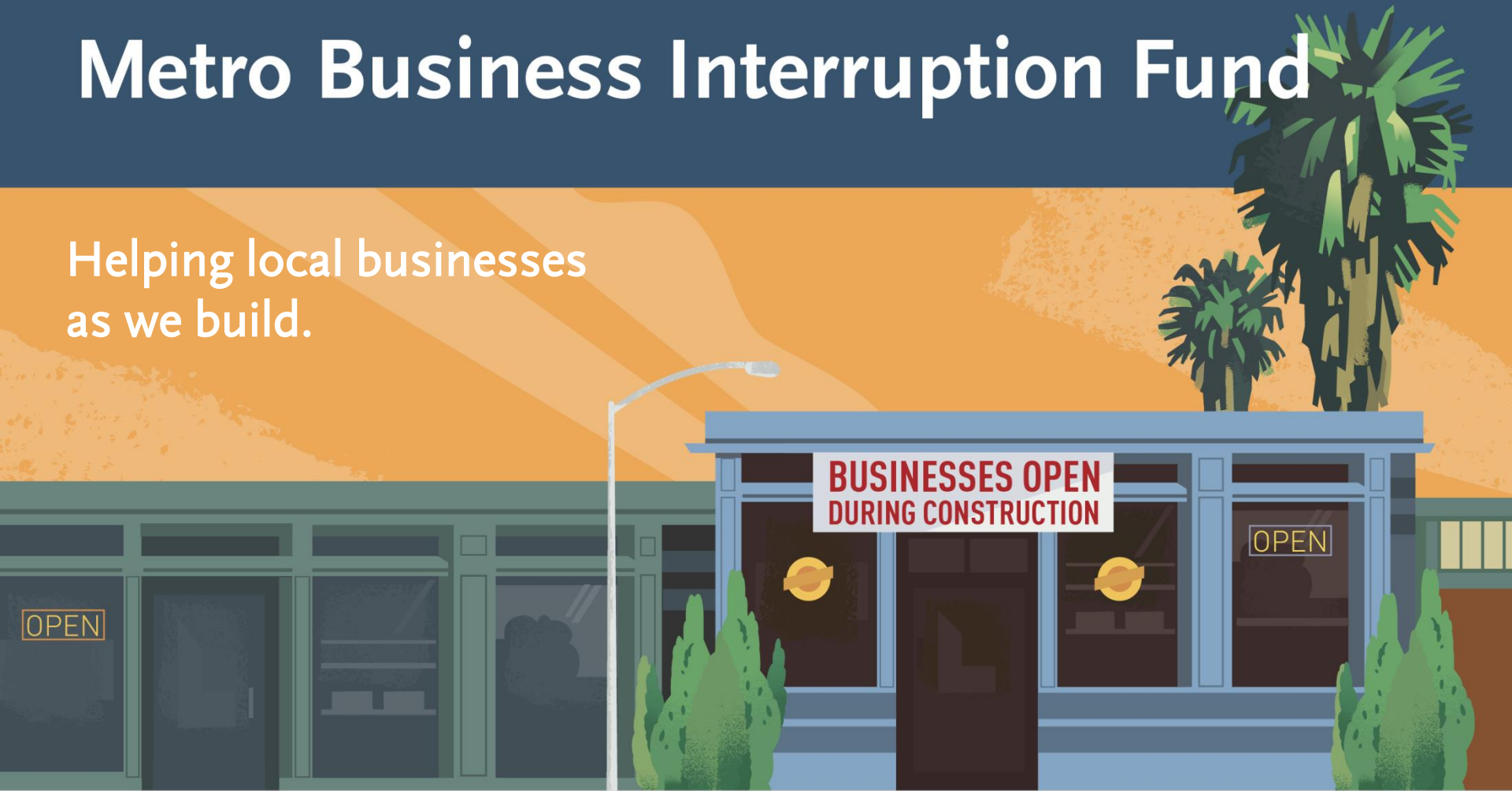


Rock out at a concert at  
**The Saban**  
8440 Wilshire Bl  
Beverly Hills, CA 90211



# Metro Business Interruption Fund

Helping local businesses  
as we build.



# BIF Program

- > Financial assistance to small “mom & pop” businesses impacted by Metro rail construction along three project areas
- > Businesses must be located adjacent to the rail corridor and meet other eligibility requirements
- > Grant amount determined by loss of business revenue related to period of construction disruption
- > BIF Business Advisor for PLE, Section 1
  - > Brian Lazo, PCR at 213.739.2999, ext. 240

# BIF Grant Award Update

- > Purple Line Extension, Section 1 (as of 7/7/17)
  - > BIF Grants Awarded: 99
  - > BIF Grant Amount Awarded: \$2,218,535.26
  - > Number of small businesses awarded: 46
- > Noteworthy Information:
  - > 28 businesses have received two or more grants
  - > Average amount per grant: \$22,409.44
  - > Maximum annual grant amount per program guidelines: \$50,000.00



# Upcoming Meetings

## La Cienega Decking Weekend Closures Update

*PLE Section 1 & City of Beverly Hills*

August 23, 2017

6:30pm – 8pm

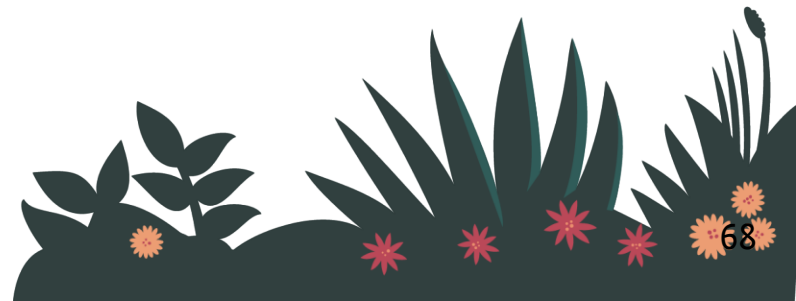
La Cienega Park Community Center

8400 Gregory Wy

Beverly Hills, CA 90211



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# Upcoming Meetings

## **Beverly Hills Construction Update**

*PLE Section 1 & 2 and City of Beverly Hills  
Monthly Community Meeting*

September 13, 2017

6:30pm – 8pm

Beverly Hills City Hall

455 N Rexford Dr

Beverly Hills, CA 90210



Metro



# Upcoming Meetings

## **Section 1: Construction Community Meeting**

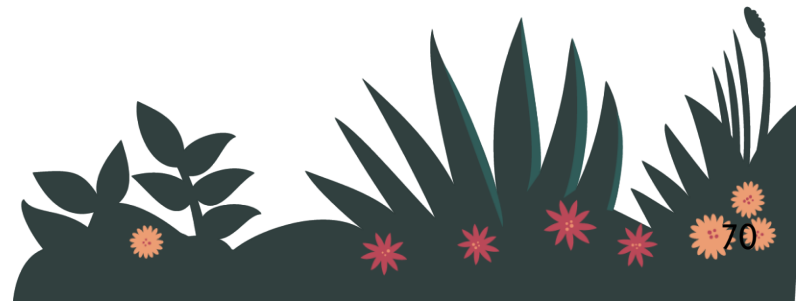
Thursday, September 21, 2017

6pm – 7:30pm

SAG/AFTRA

5757 Wilshire Bl

Los Angeles, CA 90036





# Stay in Touch



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