



# UNION PARK – LAS VEGAS

## NEVADA BROWNFIELDS PROGRAM



# INTRODUCTION

- 61-acre site just west of downtown
- City Parkway V is the Master Developer
- Newland Communities is development manager, acting as an extension of the Office of Business Development
- Newland also developing seven parcels
- City is managing the installation of the roadway infrastructure



Source: [unionparklasvegas.com/location](http://unionparklasvegas.com/location)

# INTRODUCTION (cont'd)

- Current construction underway at Union Park:
  - Lou Ruvo Brain Institute
  - Phase I Roadways and Infrastructure
    - \$40 million



# INTRODUCTION (cont'd)

- Current developments:
  - The Smith Center for the Performing Arts
  - World Jewelry Center
  - The Charlie Palmer boutique hotel
  - Newland Residential (first Parcel)
  - Forest City Enterprises (hotel/casino)
- Each development is under a development agreement with City Parkway V



# UNION PARK VISION

- Mutually supportive mixed uses
- Pedestrian oriented/walkable blocks/retail energy
- Not dominated by one or two larger uses
- A destination for locals
- Maximize connections to downtown
- Sufficient density to create a destination
- Memorable skyline



# SITE BACKGROUND

- UPRR's maintenance yard since early 1900s
- Fueling and maintenance since 1940s
- Also used for material storage
- Site contained areas unique to locomotive fueling, service, repair, and cleaning
- Site known to be contaminated primarily with total petroleum hydrocarbon (TPH) and lead

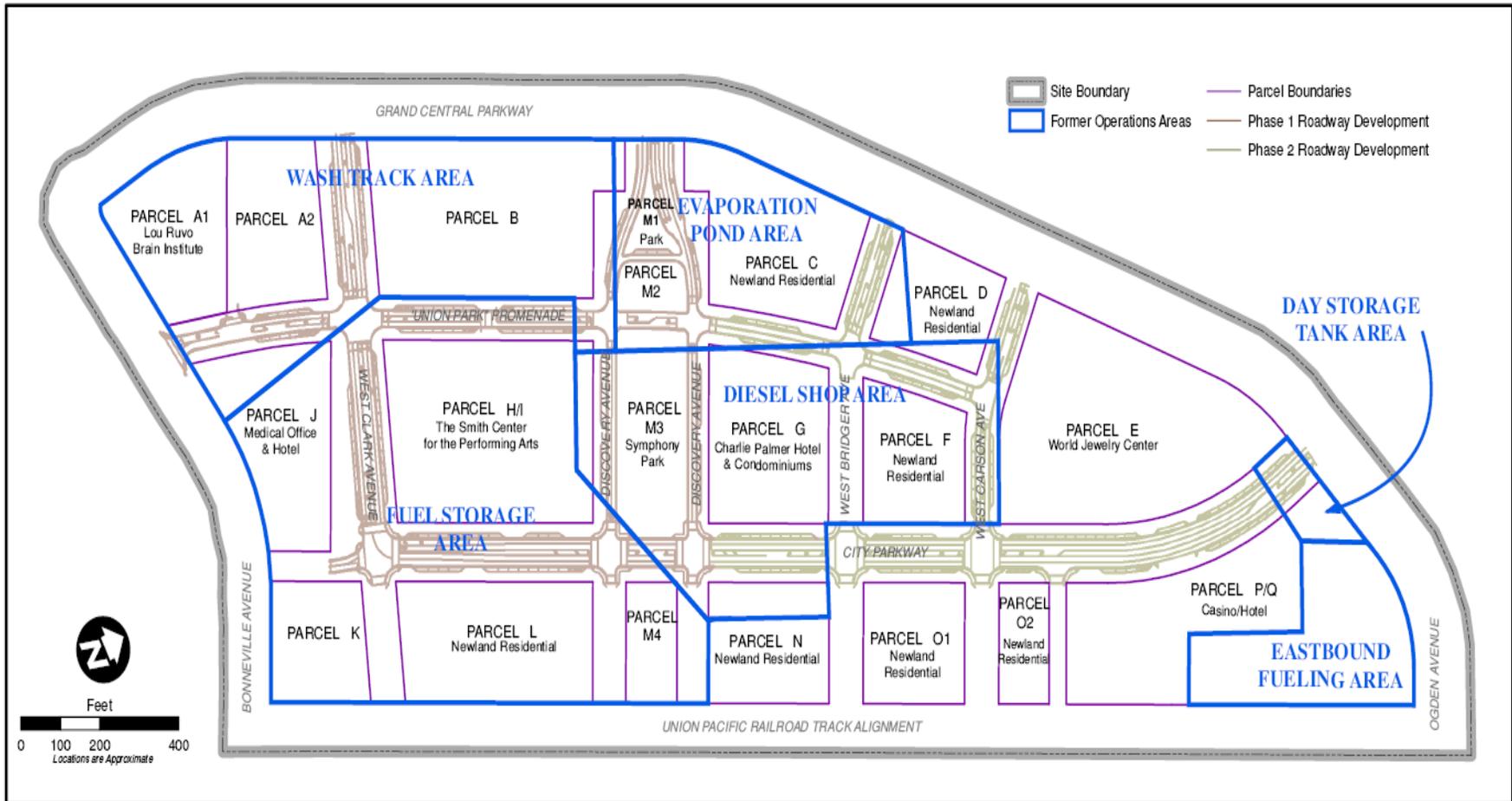


Rail Yard Circa 1940; Source: UNLV Special Collections

# SITE BACKGROUND (cont'd)

- Began remedial activities at the site per a NDEP-approved Remedial Action Plan (RAP)
- UPRR negotiated cleanup standards under the RAP:
  - Remove all TPH impacted soil >100 mg/kg for 0 to 2.5 feet bgs
  - Remove all TPH impacted soil >10,000 mg/kg
  - Remove all lead-impacted soil >1,400 mg/kg
  - Recover free phase TPH from perched groundwater to a thickness of <0.5 inches in the formation
- TPH-impacted soils thermally treated and placed back
- Lead-impacted soils were transported offsite for disposal





Site Layout Showing UPRR Former Operating Areas and Union Park Planned Development

# CURRENT SITE CONDITIONS

- Contaminated soils, soil vapor, and groundwater still remain onsite
- Some parcels more contaminated than others (i.e., former fuel storage area)
- As part of their due diligence, each developer required to evaluate the environmental and human health impacts posed on their development projects
- City taking a proactive approach for soil and groundwater management for all 61 acres



# SOIL MANAGEMENT PROBLEM

- Many development projects in the works, including infrastructure
- Lots of soil to be removed and handled that is potentially contaminated with TPH
- Need consistency and good communication
- City desired to create one comprehensive plan
- Plan should be guide for developers and construction teams to properly handle the contaminated soil

# ASSISTANCE FROM NDEP BROWNFIELDS PROGRAM

- Kleinfelder under contract with NDEP for Brownfields program support
- City requested NDEP Brownfields funding for development of soil and groundwater management plan for entire 61 acre site
- Kleinfelder retained to develop and implement plan

# SOIL AND GROUNDWATER MANAGEMENT PLAN (SMP)

- SMP provides guidelines for soil and groundwater management at Union Park
- Part of bid specifications for construction (i.e., Phase I roadways project)
- Classification system for soil developed for regulatory compliance and tracking purposes
- Decision tree matrix for classifying soil

# SMP SOIL CLASSIFICATION

- Clean – no detection of constituents of concern
- Legally Clean – detection but less than site specific action limits
- Contaminated, Non-hazardous – above action limits but less than RCRA limits for hazardous waste designation
- RCRA Hazardous – above RCRA limits (i.e., TCLP limits)

# SMP ACTION LEVELS

- NDEP Action Level for TPH = 100 mg/kg
- EPA Region 9 Preliminary Remediation Goals (PRGs, 2004 version)
- Background Arsenic above PRG
- Established higher action limit for Arsenic based on previous study (15 mg/kg)
- RCRA TCLP criteria from 40 CFR 261.24

# SAMPLING AND ANALYSIS PLAN

- Separate SAP was compiled to support the SMP
- City of Las Vegas paid for SAP
- SAP provides common procedure for collection and evaluation of samples
- SAP also establishes criteria for collection, number of samples, compositing of samples based on pile size, and quality assurance
- Rationale established for stockpile sampling and pre-excavation sampling (if no room for stockpiles)

# CEM OVERSIGHT

- Part of work scope under NDEP Brownfields
- CEM ensures proper designation, marking, handling, and placement of soil piles in containment area
- CEM documents origination of excavated soils
- Communication with construction crews, containment area crew, and City
- Provide periodic reports on soil pile designations and excavation details related to contaminated piles



Photo of Union Park Site Taken From Molasky Building, July 31, 2008

Source: Jay Officer, SNWA



Photos of the Lou Ruvo Site Excavation (Parcel A1)





Photos of the Phase I Roadways Site Work



# GROUNDWATER MANAGEMENT

- Some history of contaminated groundwater on site
- Case by case depending on groundwater quality and site-specific construction needs
- Potential for free product and VOCs
- Storage and disposal guidance
- NPDES discharge permitting requirements

# MORE INFORMATION

Union Park and Newland Communities

[www.unionparkvegas.com](http://www.unionparkvegas.com)

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