

Erecting







10.0 CONCEPT AND PHASING PLAN

Intent

This section illustrates conceptual plans for redevelopment of the Rail Yard site. The concepts contained herein are not compulsory elements of the project and will require further studies and approvals as established by City codes and/or the standard processes that are outlined in the SU-2/HLS zone in the Barelás Sector Development Plan.

10.1 Vision Statement

*There are always planning and building antecedents. We don't start from zero. And there's inevitably a relationship between where we were, where we are, and where we're going. The essential question for the Rails Yards site is how architecture might communicate both an acknowledgement of precedents -- salient built pieces of history -- and simultaneously push forward toward very different purposes, new and adaptively reused buildings, suggesting new directions for the city of Albuquerque's future.*

*Knowing where we've been makes the story of where we're going more legible, more intelligible. At the Rail Yards site, Albuquerque's built record is largely intact. But historic structures like the Boiler Shop, Machine Shop, Tender Repair/Tank Shop, and Flue Shop, though the buildings are extant, no longer fill their original functions. Those*

*functions now belong to Albuquerque's pedigree-heritage. They have for a while. The Master Concept Plan objective is to acknowledge that pedigree-heritage -- the trains, the story of the opening of the American southwest with new transportation, new machines, new energy, and new opportunities for those who came.*

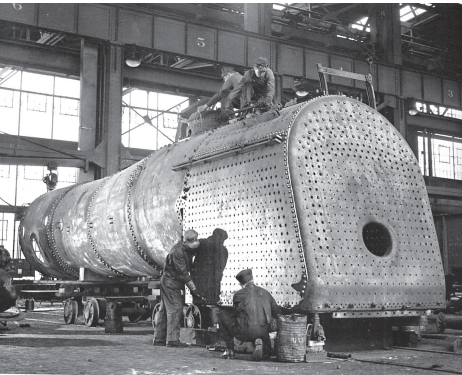
*The Master Concept Plan celebrates the facilities that made the trains and made them run.*

*How does a Master Concept Plan manage that celebration?*

*Not by simply reconstituting those historic buildings [though there's a role for this] whose uses have passed into history, but by giving those buildings a new, vital life, a new role in the burgeoning, evolving community that surrounds the site, and more broadly, an up-dated contemporary definition for urban life in the center of Albuquerque in the first quarter of the 21st century.*

*How do we acknowledge an old life, and simultaneously forecast a new one? We call our Master Concept Planning strategy for the Albuquerque Rails Yards site "Recollecting Forward."*

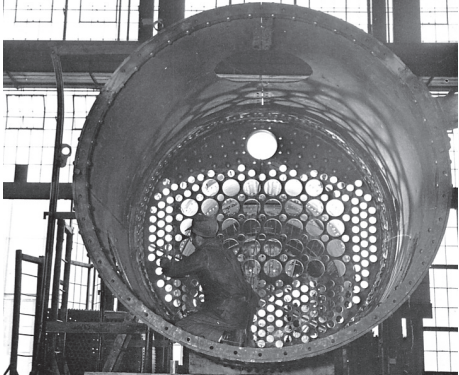
*What the new plan retains in its entirety is the enduring spirit of the*



JOBS



COMMUNITY



ART



ARCHITECTURE

*rail yards, the energy, the optimism, and the reconstituted exteriors of the primary buildings on the site. We rebuild the missing roundhouse, complete the original organizational logic of the site, but assign new uses, new public and private purposes to both old and new buildings. So what's the roundhouse? Is it the original building? Not quite. Is it a new building? Perhaps, but its plan form re-iterates that of the original structure. The [Master Concept Plan](#) intends a hybridization of old and new without insisting on a clear distinction between the two.*

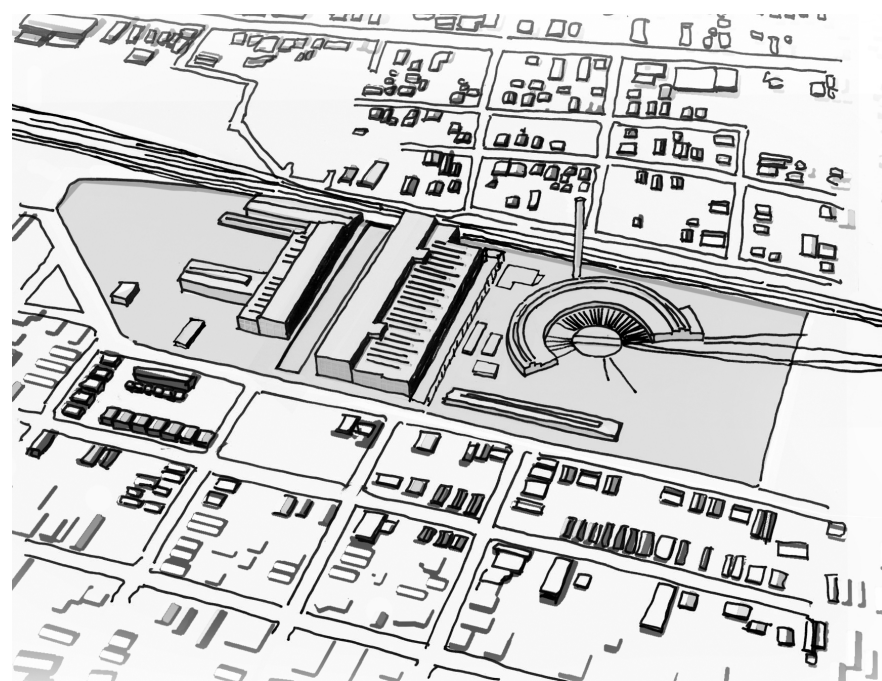
In summary, the primary goal of the [Master Concept Plan](#) Section 6 10 of the MDP document is to provide [illustrative strategies](#) for an organization of the Rail Yards site that will engender a vibrant, cohesive and viable community of mixed users sharing a common vision. The existing structures to be preserved and adaptively reused are the primary and dominant elements of the site; however they are not sufficient to accommodate the myriad uses identified in the Goals & Policies Section 5 and confirmed through the public comment process. New structures and improvements are required to make the site viable for development. The [Master Concept Plan](#) Section 10 6 proposes [guidelines illustrative strategies](#) for the design and integration of such structures so that they both complement the historic structures and provide a unified architectural language across the site. [By contrast, Sections 6 and 7 and 8 of the MDP provides the development regulations and design guidelines regulatory design standards to guide re-development of the site.](#)

The intention of the [Master Concept Plan](#) is to preserve the “integrity” of the site and reinvent the “spirit” of the Rail Yards for a modern age. The intention is to “Recollect Forward.”

To achieve these aspirations, the [Master Concept Plan](#) itself must be a living, working document that is built with sufficient flexibility to accommodate an evolving and unknown future set of conditions. The concepts, recommendations and design features that follow should be



RAIL YARDS, AERIAL PHOTO OF CURRENT SITE CONDITIONS



RAIL YARDS, DIAGRAM MASSING OF KEY HISTORIC RESOURCES TO BE PRESERVED OR REBUILT



understood in this context.

Refer to Section 10.5 for a description on the process for amendments or deviations to the MDP.

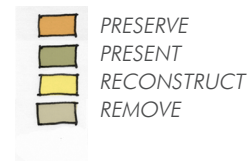
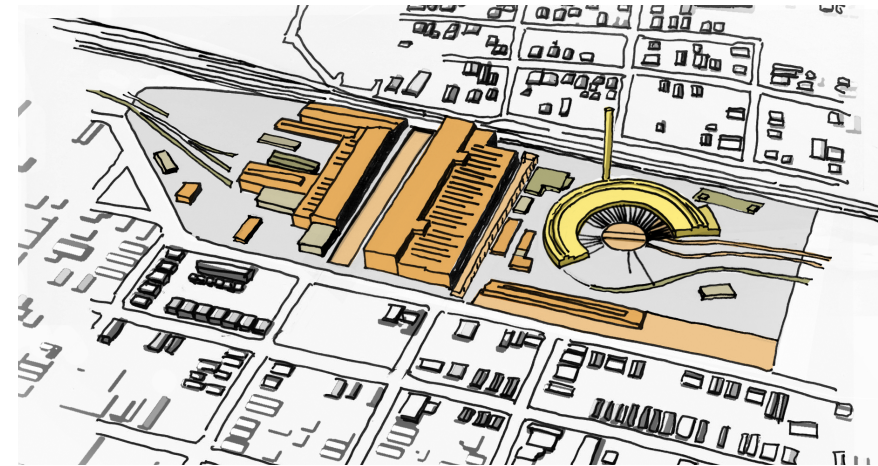
## 10.2 Preservation and Adaptive Reuse Standards

Preservation criteria and considerations are based on the understanding of cultural significance and the cultural values of a property. In the case of the Albuquerque Rail Yards, it should be looked at first as part of the train system in the United States, contributing to the development and creation of the country. The Albuquerque Rail Yards are an important element within that whole line, and one of its cultural values derives from this fact. This criterion puts the Rail Yards at a national and state level of significance, and possibly at a state level as well based on the role the train railroad and the Rail Yards had in the development and history of New Mexico.

In keeping with the goals and policies stated in Section 5, the Master Development Plan seeks to preserve and adaptively reuse the vast majority of historic resources on site. However, while all buildings and structures (site features) tell some part of the story, not all building and site features are equally significant. In addition, the viability of arranging new uses for all existing buildings depends upon their condition and the opportunity to match a building configuration with a suitable reuse. The Master Development Plan requires the preservation of most of the built components of the complex, the re-construction of some important ones which have been demolished and which are crucial to the understanding of the place, the adaptive re-use of the buildings, and suggests the addition of modern facilities, landscaping and other features for optimal use of the site. The plan currently indicates that a few of the smaller buildings may fall into the category of those that are difficult to reuse for a variety of reasons:

### 10.2.1 Preserve and Adaptively Reuse

Keep, consolidate, renovate, maintain – and reuse. It could be just the “envelope” (outside wall), or could include interiors, parts or whole, including windows, doors, fixtures, etc. On the site, elements of the highest cultural



significance that shall be PRESERVED are listed as below (refer to map page \*\*):

- Fire Station (#1 on Map). The only building on the site officially recognized as a City Landmark by the City of Albuquerque at the time of the Master Development Plan's adoption.
- Machine Shop (#2 on Map)
- Bridge Crane (#3 on the Map)
- Boiler Shop (#4 on Map)
- Tank Shop/ Tender Repair Shop (#5 on Map)
- Flue Shop (#6 on the Map)
- Blacksmith Shop (#9 on Map)
- Storehouse (#10 on Map)
- Platform (#11 on Map). The only real platform still existing on the site, therefore representing all platforms, and being



FIREHOUSE



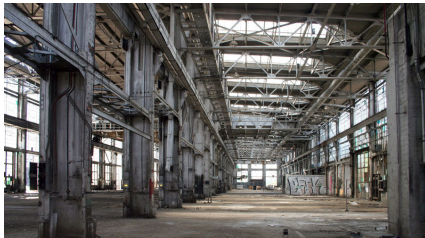
STOREHOUSE



TANK SHOP



TURNTABLE



BOILER SHOP



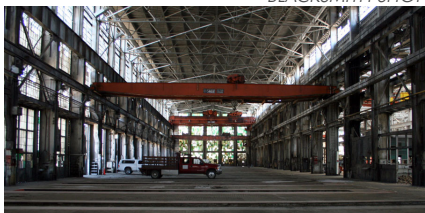
BRIDGE CRANE



BLACKSMITH SHOP



FLUE SHOP



MACHINE SHOP



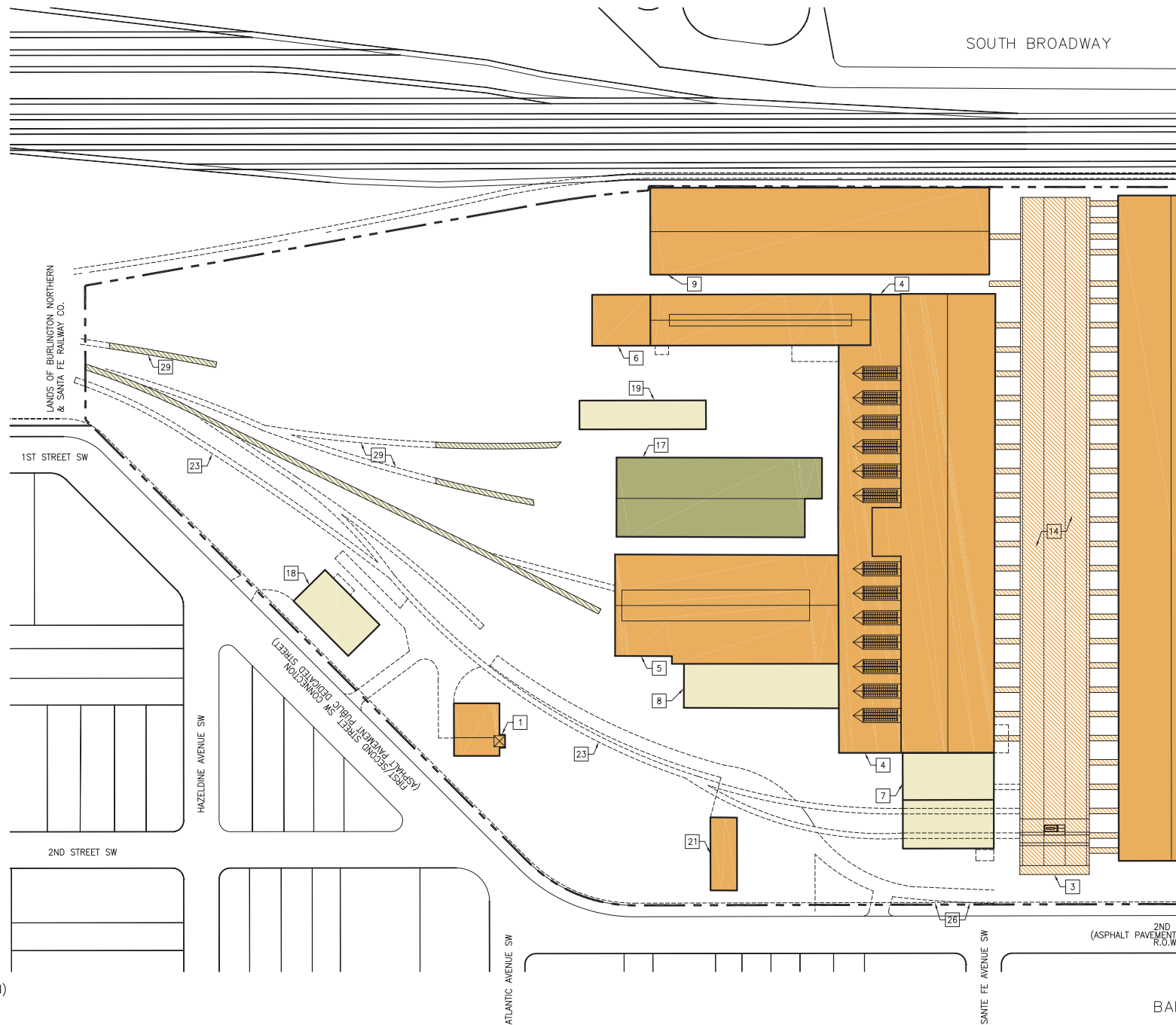
TRANSFER TABLE

a characteristic element of all train stations and rail yards. Since it is a simple concrete slab, which might cause difficulties during the development of the site, it is suggested that it could be dismantled and rebuilt later (at least in part, not necessarily the whole slab), after completion of the work — and partially underground. (In any case it will have to be thoroughly documented prior to any changes being made).

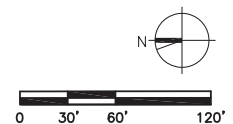
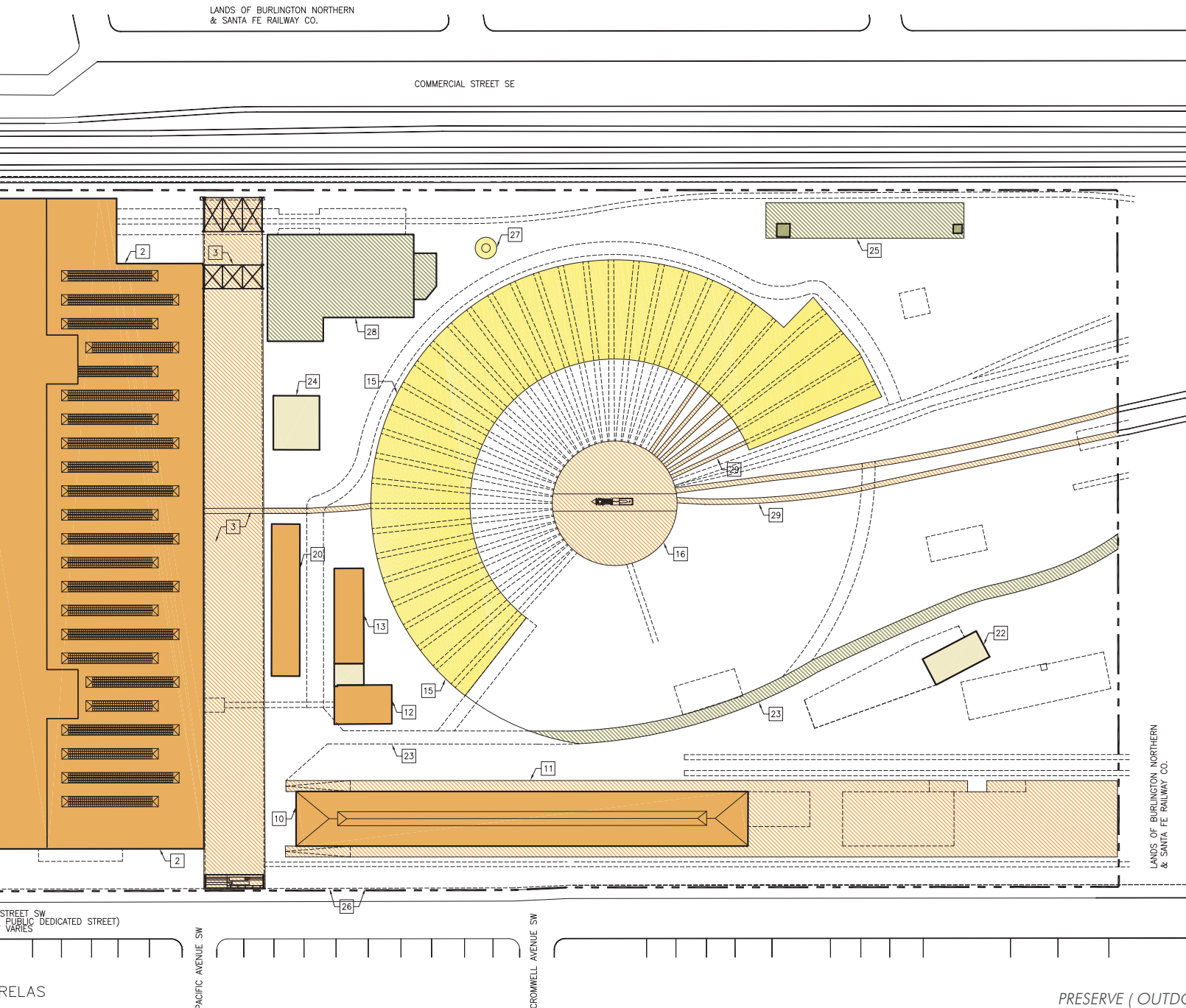
- Transfer Table (#14 on the Map)
- Turntable (#16 on Map), which is still functioning, attractive, and a very important element in every main train station and rail yard. In addition, it is still in use by the BNSF Railroad.
- Significant Train Tracks (#29 and elsewhere on the Map). Although there is nothing special about train tracks, on the contrary, a rail yard without tracks would look strange; they are an important visual and technical element. A selection of the most significant Train Tracks should be PRESERVED on-site (some of those leading from the south to and from the Turntable and Round House, and connecting them with the workshops). Other Train Tracks that also demonstrate the use of the site could potentially be PRESENTED, while a large portion of Tracks could be REMOVED.
- Babbit Shop (#12 on the Map) and Welding Shop (#13 on the Map). These are two modest and small structures, used as different kinds of workshops. They were later connected with each other (the connecting structural element is suggested to be demolished, i.e. REMOVED). The two shops represent smaller-scale activities that took place in buildings other than the larger Machine Shop and Boiler Shop, therefore PRESERVATION is recommended. The two Shops' PRESERVATION is suggested as representatives of the different types of activities that took place at the Rail Yards, and not just in the large, main buildings.
- South Washroom (#20 on the Map). It is recommended that the South Washroom be PRESERVED whereas the North Washroom (#19) be REMOVED (see section \*\*).
- Waste & Paint Room (#21 on the Map). This small building could be PRESERVED and/or PRESENTED (partially or completely, and even if with significant modifications) within the proposed development. Greater latitude is afforded due to its prior function as a storage building rather than a "workshop" building.

## HISTORIC RESOURCE KEY

- 1 FIRE STATION
- 2 MACHINE SHOP
- 3 CRANE RUNWAY  
INCL. LYE VAT SHED
- 4 BOILER SHOP
- 5 TANK SHOP/  
TENDER REPAIR SHOP
- 6 FLUE SHOP
- 7 CANOPY
- 8 CAB PAINT SHOP  
(LATER, CWE SHOPS OFFICE)
- 9 BLACKSMITH SHOP
- 10 STOREHOUSE
- 11 PLATFORM
- 12 BABBIT SHOP
- 13 WELDING SHOP
- 14 TRANSFER TABLE
- 15 ROUNDHOUSE (ORIGINAL LOCATION)
- 16 TURNTABLE
- 17 SHEET METAL HOUSE
- 18 PATTERN HOUSE
- 19 NORTH WASHROOM
- 20 SOUTH WASHROOM
- 21 WASTE & PAINT RMS.
- 22 MOTOR CAR GARAGE
- 23 FIRE RUNWAY
- 24 POWER HOUSE (ORIGINAL LOCATION)
- 25 WATER RESERVOIR
- 26 WELDING GAS LINES
- 27 SMOKESTACK
- 28 HISTORIC POWER HOUSE (ORIGINAL LOCATION)
- 29 TRAIN TRACKS







PRESERVE ( OUTDOOR ELEMENT SHOWN HATCHED)  
 PRESENT ( OUTDOOR ELEMENT SHOWN HATCHED)  
 RECONSTRUCT  
 REMOVE



- “Pissoires” (not indicated on the Map). We also recommend the PRESERVATION of at least one bank of the very unusual metal urinals, since they were especially designed for the site, and represent a human aspect of the place.
- Infrastructure Elements (not indicated on the Map). Since rail yards are not simply architectural heritage, but rather infrastructure and Industrial Age heritage –the architectural elements are not the only ones to be PRESERVED and PRESENTED, as opposed to REMOVED. Therefore, at a phase beyond the new Master Development Plan, PRESERVATION of some of the Infrastructure Elements, such as pipes and cables, along with the structural materials carrying them is recommended. Such Infrastructure Elements, together with the Tracks, connected all the built components, and were the “blood system” of the entire place.

#### 10.2.2 Present

Being an important part of the story, but the element has been removed, or is planned to be removed, for various reasons. Its “presentation” on-site can be through a sign, paved or marked footprint, photo and explanation on a wall, etc. On the site, there are elements of relatively high historic value (for the understanding of the functioning of the site), but either in a very poor state of preservation, or already REMOVED; or else being a later addition that is hiding more important parts of the complex, and there is a desire for it to be REMOVED. Such structures listed below should be PRESENTED:

- Sheet Metal House (#17 on the Map). ~~Interesting, important but technically very difficult to PRESERVE.~~ This wooden shed was used for storage of metal sheets and for moving them mechanically to their work stations.
- Fire Runway (#23 on the Map).
- Water Reservoir (#25 on the Map). This underground storage space and water reservoir is historically significant, being the only source of water on the site. It is therefore suggested for PRESENTATION as a concrete platform, possibly underground.

- Original Power House (#28 on the Map). Although the original structure was previously demolished, due to its functional importance and connection with the proposed RECONSTRUCTED Smokestack (Ref. to Category #3) it is suggested that it be PRESENTED, by its footprint, on the original location (even if completely or partially underground).

#### 10.2.3 Reconstruction

On the site, there are elements of very high cultural value and significance, without which the functioning of the place cannot be understood; and/or the element’s contribution is important to the integrity of the site. These structures were demolished, but have good documentation and sufficient remains on the site to allow for a certain kind of RECONSTRUCTION, while permitting modern interpretation. The reconstruction will be on the original footprint, will have some volume, but will not be identical to the original structure (it is a symbolic reconstruction). Such structures are listed below as:

- Roundhouse (#15 on the Map). The Roundhouse was one of the most important, impressive, and visually strong structures on the site. The reinstatement of its physical existence on the site is very important, and this is why it is suggested for RECONSTRUCTION (it footprint, shape, and volumetric space – not a replication of the original).
- Smokestack (#27 on the Map). The Smokestack was seen from quite a distance and became an iconic symbol of the site. Its reconstruction should mainly represent the idea of a high, vertical element, rather than accurate replication. The Smokestack was part of the Original Power House (Ref. to Category # 2).

#### 10.2.4 Remove

Remove, leaving no physical trace. This applies to a structure or other element that does not contribute significantly to our understanding of the history of the site. Such structures as listed below are:

- Canopy (#7 on the Map). Originally an open structure,

consisting of a roof supported by several columns. The Canopy functioned as the place to test the locomotives, and was later altered by adding partition walls, to become a paint shop. ~~Its REMOVAL, with its PRESENTATION, will contribute significantly to the visibility of the much more important structure behind it (the Boiler Shop), which used to be in clear view of the Barelás neighborhood to the west—and could be again.~~

- Cab Paint Shop/later converted to CWE Shops office (#8 on the Map). ~~This structure is of no cultural significance whatsoever, and at the same time~~ It covers the long (western) façade of one of the important and impressive structures (the Tank Shop/ Tender Repair Shop).
- Pattern House (#18 on the Map). ~~Auxiliary and isolated concrete storage building of low significance.~~
- North Washroom (#19 on the Map). If the South Washroom (#20) is preserved, the North Washroom is recommended to be removed as it is in need of major structural repairs.
- Motor Car Garage (#22 on the Map). A small workshop structure. ~~If #12, 13, and 21 (see above) are PRESERVED, this structure loses its significance and may be REMOVED, especially considering its isolated position within the center of the largest vacant development parcel.~~
- Power House (#24 on the Map). This modern structure replaced the Original Power House which was demolished. It has no cultural significance. (See recommendation for the PRESENTATION of the Original Power House).

### 10.3 Historic Preservation and Adaptive Reuse Design Features

In keeping with the goals and policies stated in Section 5 and with ~~conceptual recommendations stated in Section 6~~ the aforementioned Vision Statement, the Master Concept Plan seeks to preserve and adaptively reuse the vast majority of historic resources on site. The successful revitalization of these structures represents the cornerstone of the Master Planning redevelopment effort and is the foundation upon which all the following site organization concepts and design features are based. ~~Refer to Section 8.2 for a complete account of the existing site features and the Historic Preservation and Adaptive Reuse Standards provided to regulate site redevelopment.~~

~~Whereas the preceding section addressed recommendations regarding the existing site resources; By contrast,~~ The following sub-section 6.3 provides design concepts and recommendations for new infill development. The following concepts and diagrammatic sketches represent basic ideas about how to organize the site rather than specific architectural solutions per se. Likewise, images from other locales are used to convey a design sensibility rather than a literal design response.

#### 10.3.1 Rebuild Iconic Structures

*Concept: Important iconic elements of the Rail Yards that had previously been demolished should be rebuilt in order to re-establish the original organization of the site.*

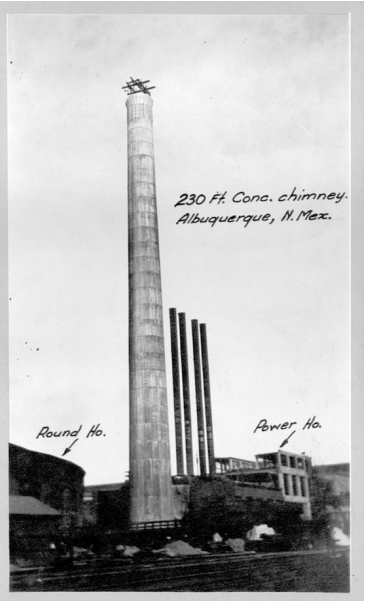
As the first organization strategy for site infill development, the Master Plan advises the rebuilding of the Roundhouse and Smokestack features as important elements to the original conception of the site. The reconstruction will be on the original footprint, will have the same volume, but will not be identical to the original structure. As such, it is intended as a symbolic reconstruction permissive of a modern interpretation.



RAIL YARDS, HISTORIC ROUNDHOUSE AND SMOKESTACK



- Taken from top new stack. Albuq. N.M.
- |                      |                       |
|----------------------|-----------------------|
| 1- New Machine Shop. | 6- Pattern House.     |
| 2- Old "             | 7- Paint Ho.          |
| 3- Cab Paint Shop.   | 8- Elks Bldg.         |
| 4- Fire Dept. Ho.    | 9- Masonic temple.    |
| 5- Office Bldg.      | 10- Rosenwalds Store. |
|                      | 11- Saw mill.         |



230 Ft. Conc. chimney.  
Albuquerque, N. Mex.

Round Ho.

Power Ho.

View from atop SMOKESTACK

SMOKESTACK

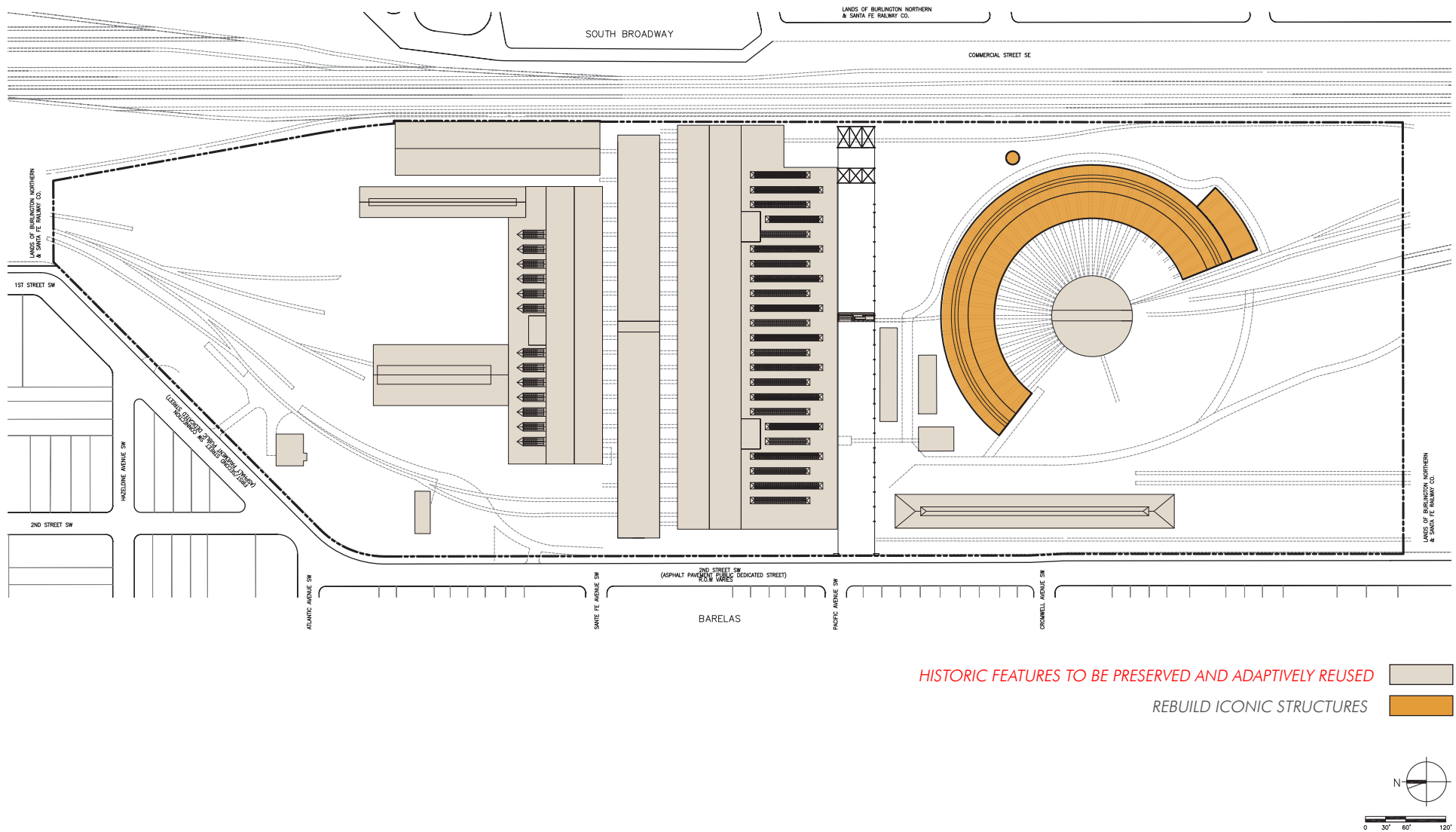


Figure 5: Rebuild Iconic Structures Diagram



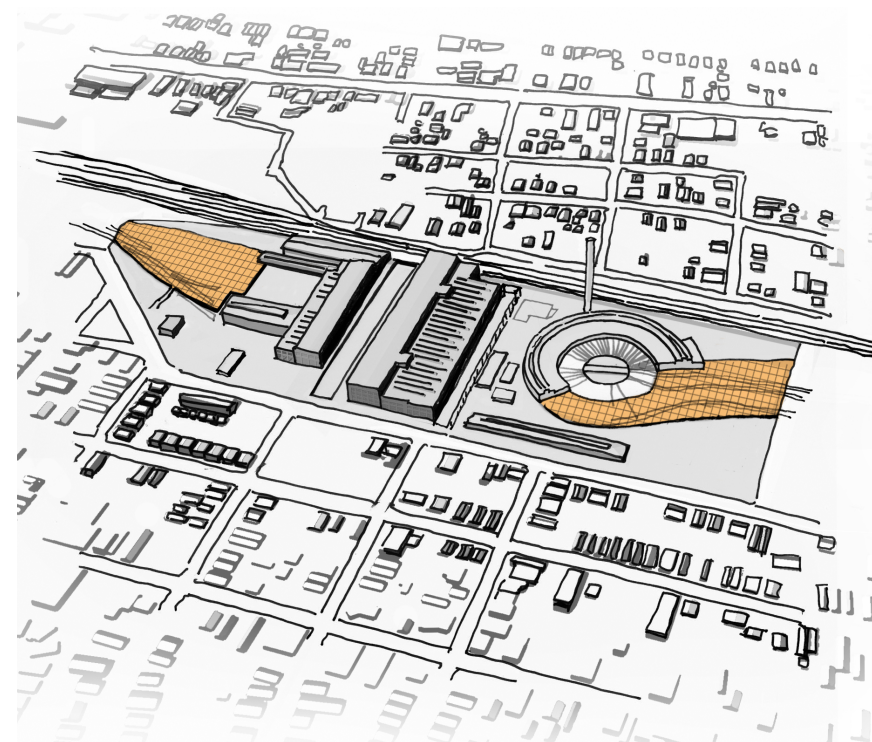
### 10.3.2 Paseo

*Concept: The Rail Yards should be unified into a cohesive and interconnected whole.*

The Paseo is the tissue that unifies the site plan, and integrates the Rail Yards with the city. It is the primary planning component for the new Rail Yards project.

The Paseo is a concept for infill development. It is a low, single volume, building, ~~~14ft~~ approximately 14 feet in height, with a flat roof that doubles as a public plaza. There are 2 two Paseo buildings proposed, North and South, located on the only large areas available for development that do not impact any historic resources recommended for Preservation. Due to their low profile, the Paseo buildings allow for additional buildable area to be created without impacting views to and from the historic structures; they are auxiliary buildings that will increase the technical functionality of the site that might otherwise be limited by use of the historic structures alone. The plan shape of the Paseo buildings is determined by using historic rail lines or fire road. Public access to the Paseo roof decks would be provided via generous stairways and landscaped mounds along 1st and 2nd Streets sidewalks.

The Paseo's conceptual purpose is to inter-connect events and event options on the site, to link existing buildings with new buildings, to facilitate pedestrian movement north/south and east/west on the site and to encourage pedestrian engagement of the myriad new opportunities the Rail Yards project will provide.



NOTE: ALL DIAGRAMS ARE CONCEPTUAL



Piazza del Campo, Siena, Italy



Las Ramblas, Barcelona, Spain

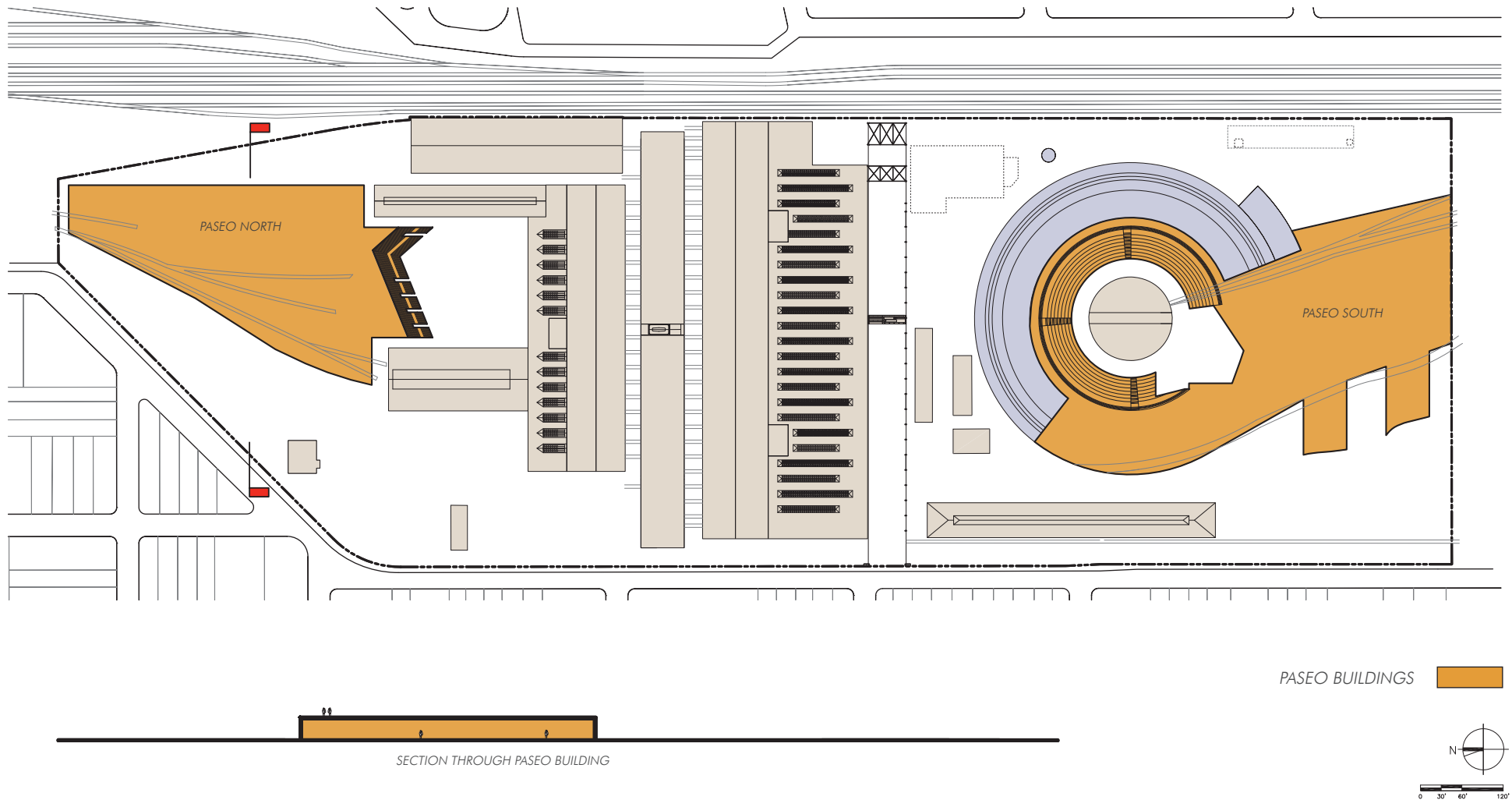


Figure 6: Conceptual Paseo Building Diagram

### 10.3.3 Subterranean Parking

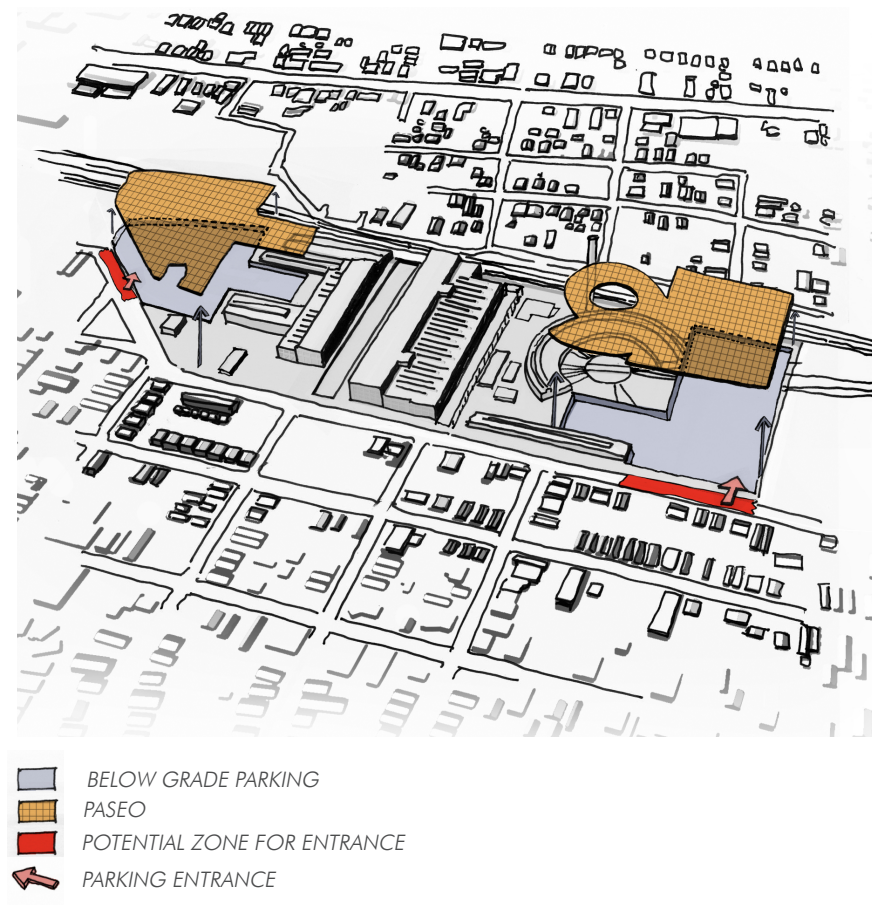
*Concept: The Rail Yards should be free of visible parking.*

The Paseo concept and the subterranean parking concept go hand in hand. Given the historic nature of the site, visible surface parking should be avoided and instead should be contained in a below grade structure.

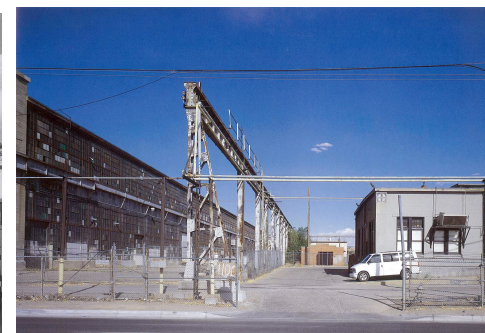
Given the increased cost of subterranean parking and the relative high water table, a one-level only structure is proposed which will result in a site that will be considered underparked by current City parking standards. The provision of parking for the Rail Yards site, however, must seek a balance between satisfying market needs on the one hand and minimizing traffic impacts on the other. Deficiencies in on-site parking should be mitigated by use and encouragement of alternative means of transportation.

The [Rail Yards Master Concept Plan](#) addresses this issue by locating subterranean parking at the North and South ends of the site immediately below the proposed Paseo buildings, leaving the center portion of the site focused on pedestrian, bicycle and transit access. ~~As stated in 10.3.2,~~ The Paseo buildings are located on the only two portions of the site that have open areas sufficient to construct an efficient parking garage. Building the parking garage and the Paseo buildings together will result in an economy of cost and schedule.

The specific location for vehicular ingress/egress to the parking structures should be determined by the ultimate configuration of the Paseo buildings and the use requirements thereof. Access points should be adequately spaced in order to allow proper vehicle queuing and to minimize traffic impacts to the Barelas residential community immediately to the west.

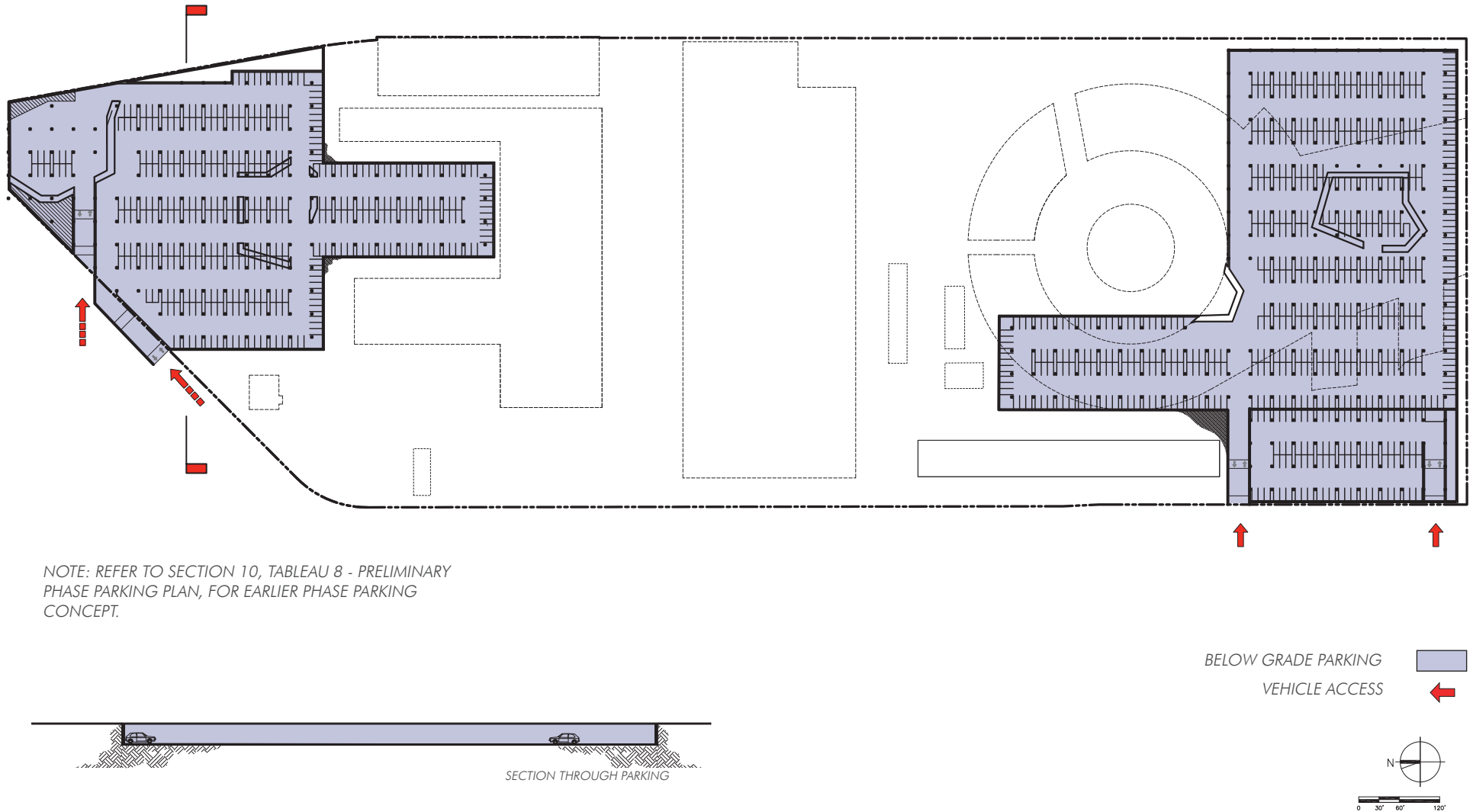


Historic Rail Yards Entrance



Rail Yards Entrance Today

**DRAWING UPDATED TO INCLUDE SECOND ACCESS  
LOCATION TO NORTH GARAGE.**



**Figure 7: Conceptual Below Grade Parking Diagram**



### 10.3.4 Acoustic Mounds

*Concept: The Rail Yards should have an inviting edge that balances the needs of future users with those of the neighboring communities.*

**Summary:** The Acoustic Mounds is one possible concept for how to treat the edges of the Rail Yards site. The Historic edge was once bounded by a wooden fence that limited site access to Rail Yards employees and visitors only. By contrast, the **Master Concept** Plan intends the site grounds to be completely open for public access; however, there remains a need for limited visual and acoustic privacy between potentially disparate and incompatible uses.

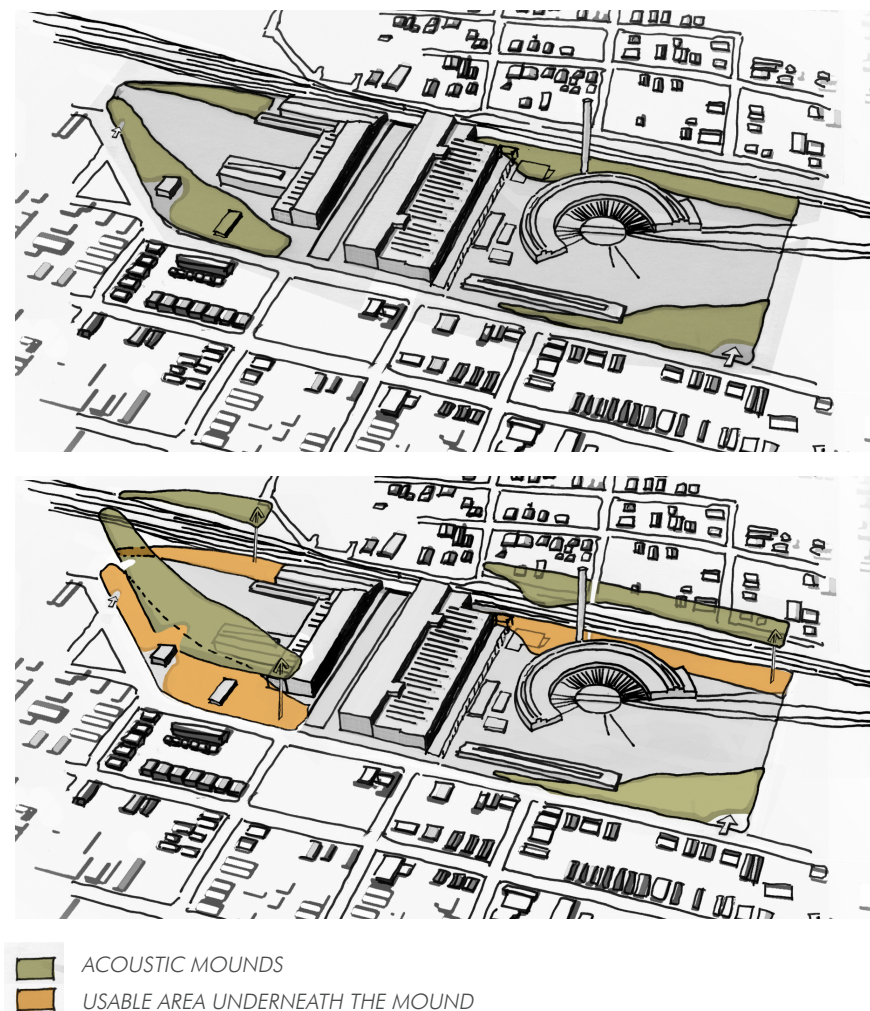
The Acoustic Mounds provide a flexible, 'soft' edge that can be sculpted to achieve desired levels of privacy without creating the effect of a barrier and without impacting views to and from the site.

The Mounds unify the site by use of a common visual language (earthwork, landscape) that does not belong to a 'style' of architecture that might conflict with the historic vocabulary of the buildings.

The Mounds are publicly accessible; they can be walked on, sat upon, hollowed out and inhabited for both public uses (e.g. retail) and infrastructural uses (e.g. screening of mechanical equipment).

The Mounds are positioned just inside the east and west property lines of the site, and run essentially north/south, ascending on the west from the sidewalk perimeter and on the east from the retaining wall adjacent the active rail lines to the Mounds' apex, then down to tree-lined pedestrian walks (Meandering Walk) running north/south at grade, roughly **paralleling** the Mounds.

By virtue of their shape and positioning, the Mounds organize the nearly half mile long frontage of the Rail Yards site by providing directed points of entry and egress.



Etowah Mounds, Dahlonega, GA



Lascaux Caves, Dordogne Valley, France



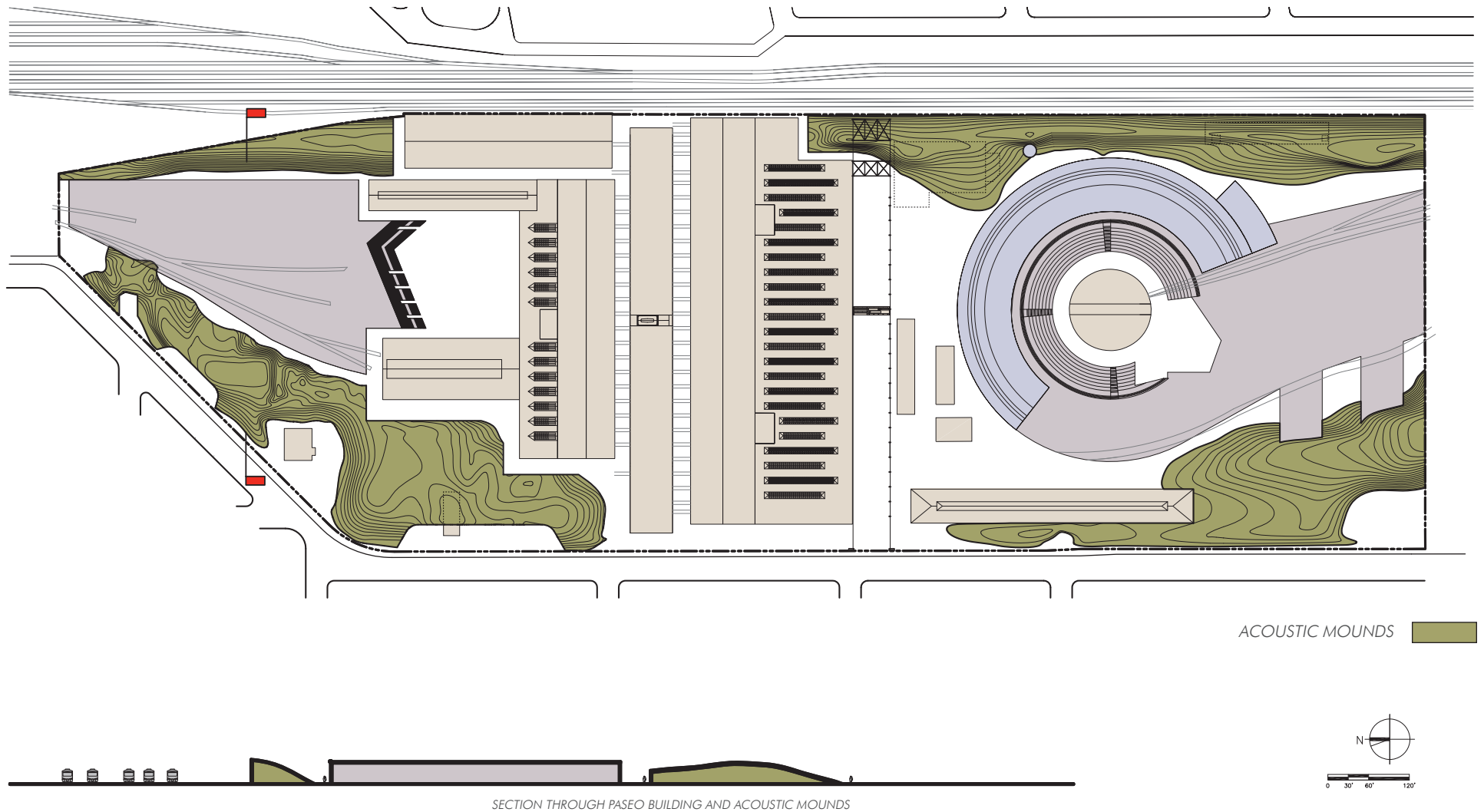


Figure 8: Conceptual Acoustic Mounds Diagram

**Details:** The Acoustic Mounds demonstrate one possible edge treatment concept for framing the Rail Yards boundaries and providing a buffer from the surrounding uses in an interesting and playful manner. The mounds should have flexibility of being either planted, hardscape, or a mixture of both. The mounds may be planted with mostly drought-resistant species to provide recreational spaces, as well as enhance their visual screening function. Deep-rooted native and naturalized plants are preferred for infiltration and reduced maintenance. Including native and naturalized grasses with fibrous root systems will help alleviate erosion concerns along the steep slopes that may occur on the mounds. Depending on design, there may be an opportunity to provide turfgrass in areas with slopes that are amenable to mower access. The use of grasses should signal the transition from more manicured to wilder areas of the landscape. Low and high water use turfgrasses should be defined separately from each other with a shrub buffer. Plant materials on the Acoustic Mounds should be kept below eye-level to accentuate the rolling line of the mounds. The only exception on plant heights is on the down slope of the Acoustic Mounds where trees may line the edges. Trees will follow the meandering path on the interior side, but will serve to frame and enhance views on the 2nd Street side. Seating opportunities may be provided via slopes as well as fixed or movable furnishings. Some slopes on the mounds may be terraced to provide integrated seating. The slopes should generally follow the City of Albuquerque's design standards for slope requirements for safety and erosion control. Where the edges of the Acoustic Mounds meet grade (typically hardscape), swales should be identified as needed to address water harvesting drainage, as well as to supplement the irrigation for plants.

Accessibility of the Acoustic Mounds would vary across the site dependent on their internal use (when applicable) and the grading necessary to transition safely to surrounding hardscape areas. Terracing is encouraged to soften slopes and provide seating opportunities near activity centers. Slopes will require vegetation to prevent erosion and beautify the landscape. However, steep areas are difficult to mow (turfgrasses) and maintain. Heavy ornamental grass cover is encouraged as it is better at slowing water runoff than is

turfgrass, but both are acceptable means for binding soil to the slope.

Although 1.5% slope is preferred to maximize recreational uses, turfgrass may be installed on landscapes up to 5:1 slope for areas to be used for passive seating and similar uses. In addition, irrigation sprinklers that typically serve turfgrass areas should be kept at least five feet from walls, windows and other architectural structures to prevent alkali staining on surfaces.

#### ~~9.4.6 Noise~~

**Noise:** Given its proximity to neighboring residential areas and the intention for the Rail Yards to become a vibrant mixed-use community with a significant public presence, noise mitigation is a critical design concern for the project. The proposed Acoustic Mound design feature ~~described in Section 6~~ is a direct response of this need to control potential noise pollution emanating *from* the site and likewise to control noise pollution emanating *to* the site from outside sources such as the active BNSF railway immediately to the east. The Acoustic Mound is a buffering and absorptive mechanism.

~~The City of Albuquerque's noise ordinance provides a baseline standard that states noise levels shall not exceed 50dba at any noise sensitive property line between 10pm and 7am. Where ambient levels exceed 50dba, the criteria shall be ambient plus 5dba.~~

~~During normal operation, the Rail Yards shall operate within all such established standards, however, there will likely be times when special event programs may require alternative measures. For example, the Roundhouse Amphitheater Turntable Commons may someday accommodate outdoor public events which could include music concerts with amplified sound. Master Plan noise standards must therefore be designed with sufficient flexibility to accommodate sound levels above those defined under the Ordinance under special circumstances. Exceptions for short-term special events may be allowed on a case-by-case basis under a temporary permit through the Environmental Health~~

Department. If approved, this would allow limited, short duration, non-compliance with the Noise Ordinance standards. The event operator would be responsible for monitoring noise levels to ensure it meets the special provisions afforded it by said permit.

For additional consideration, the proposed rebuilt Smokestack may be designed to include an analogue “whistle” that references back to its historic functionality. The “whistle” may be used to coincide with special events occurring at the Rail Yards.

#### 9.4.7 Air Quality

**Air Quality:** During the Master Planning planning process, community concerns were voiced regarding the potential for the Acoustic Mounds proposed along the east side of the site to exacerbate existing air quality problems associated with rail traffic along the BNSF rail lines. Specifically it was mentioned that BNSF trains are often left idling on the tracks adjacent to residential communities in South Broadway and San Jose neighborhoods, leaving the diesel exhaust to accumulate. The concern is that the Acoustic Mounds will create a tunnel effect that further traps these fumes from escaping, thereby worsening an already significant problem.

The Master Plan It is recommends that further analysis of the existing problem be undertaken and the potential effects of the Acoustic Mounds be studied, including the possibility that the Mounds might

ameliorate the condition by creating a landscape edge that can absorb harmful pollutants. It might also be determined that existing practices by the BNSF rail line need further review and evaluation.

The Mounds remain a conceptual idea only for treatment of the project edges. They are designed and intended to be a positive community asset that help solve many different site considerations. If they are determined to have negative air quality impacts, alternative edge concepts will be explored.



*Tiguex Park, Albuquerque, smaller scale precedent for Acoustic Mound concept*



### 10.3.5 Connectors

*Concept: The Rail Yards should be stitched into the fabric of the community.*

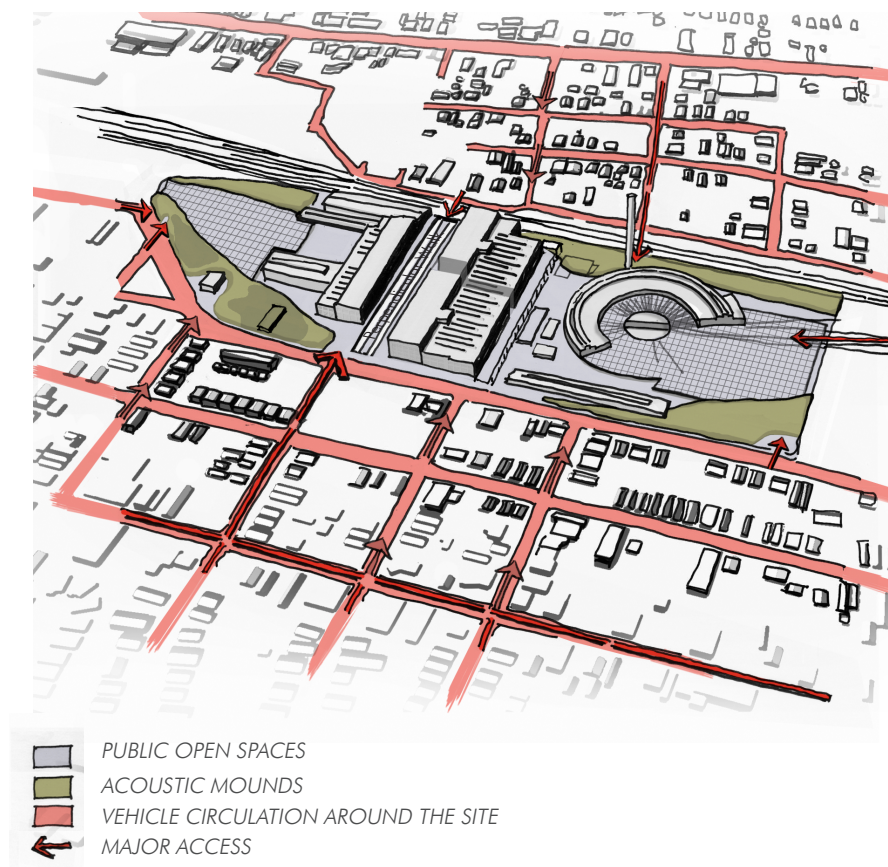
Primary points of access are located by extending the existing city street grid onto the project site. At each location where east/west running streets terminate along the project north/south boundary, a Connector is created. The Connector takes many forms depending on the specific site condition, as follows:

The Perpendicular Walk is the primary east-west Connector that extends Santa Fe Avenue onto and through the Rail Yards site, adjacent the historic Transfer Table, and on into the South Broadway neighborhood via a proposed pedestrian bridge over the active rail lines. Conversely, the Santa Fe extension also provides a pedestrian connection west, from South Broadway through the site to historic Route 66 along 4th street in the Barelás neighborhood. The Perpendicular Walk provides an operational synopsis of the area's history; trains, rail yards, cars, diverse sociologies; unified along a single axis. It is the conceptual heart of the project.

The proposed Transit Plaza is a north-south Connector that runs between Santa Fe and Pacific Avenues along the western edge of the site fronting the Machine Shop.

The Fire House Plaza is a Connector created at the intersection of Atlantic Avenue and 2nd Street that provides Public Open space surrounding the historic Fire House building. This Connector is likely to increase in size due to the abandonment of 1st Street between Atlantic and Hazeldine Avenues.

The proposed Cromwell Avenue at-grade pedestrian rail crossing is a second Connector for the South Broadway community that will align with the proposed rebuilt Smokestack and connect to the rebuilt Roundhouse.



Spanish Steps, Rome, Italy



Ponte Vecchio, Florence, Italy

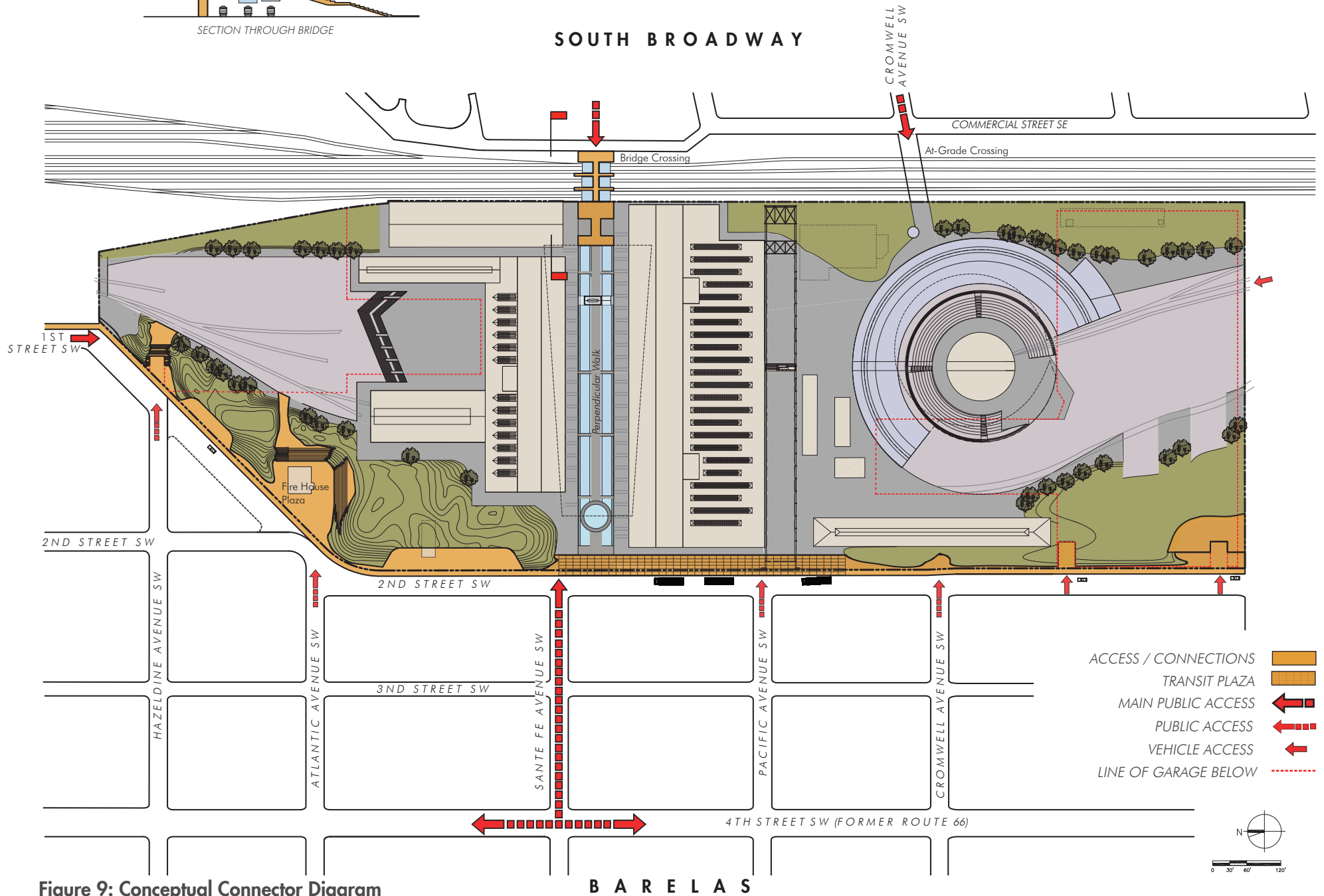
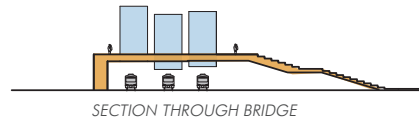


Figure 9: Conceptual Connector Diagram



### 10.3.6 Public Open Space

Concept: The Rail Yards ~~shall~~ *should* provide ample and varied opportunities for public open space.

The Concept Plan provides for a significant amount of public open space in a variety of different spatial configurations: broad and open public paseos, tree-lined meandering paths, vertical courtyards, long pedestrian promenades, circular amphitheater, etc. The concept is to offer different ways of interacting with the site that yields flexibility in public programming.

Visitors should be able to traverse the site freely in order to view the various historic structures and understand their original purposes and interrelationship.

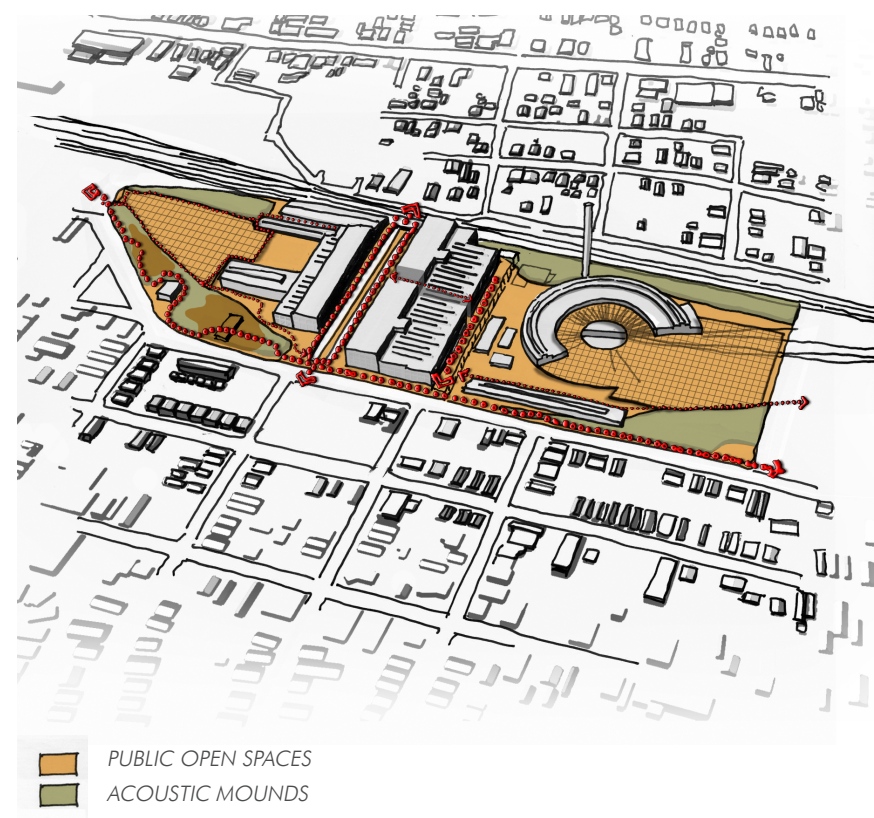
Public spaces are connected by two North-South walks; the Edge Walk that follows along the 1st and 2nd Street sidewalk and the tree-lined Meandering Walk that follows the space created between the Paseo Building and Acoustic Mound.

In addition to the Paseo and Perpendicular Walk spaces previously referenced, additional public spaces are as follows;

**Quadrangle:** A new event space formed by the conjunction of the Flue Shop on the east, the Boiler Shop on the south and the Tank Shop on the west with the new Paseo on the north. The Quad opens to the Paseo and center city with a large public stair/seating which descends south from the Paseo Level to the Quad floor.

**Machine Shop Plaza:** Extending south from the Machine Shop and useable for exhibits and/or open air markets. The current plan proposes to re-use the Bridge Crane apparatus attached to a steel frame that extends across the south elevation of the building. The crane and steel frame support a retractable Glass Canopy.

**Turntable Amphitheater Commons:** South of the Machine Shop, the new Roundhouse intersects with Paseo South to form an enclosed and partly covered performance courtyard, with ramps and stairs to the public Amphitheater seating and Turntable stage area.



Bosque, Albuquerque, NM



Public Arcade, Milan, Italy

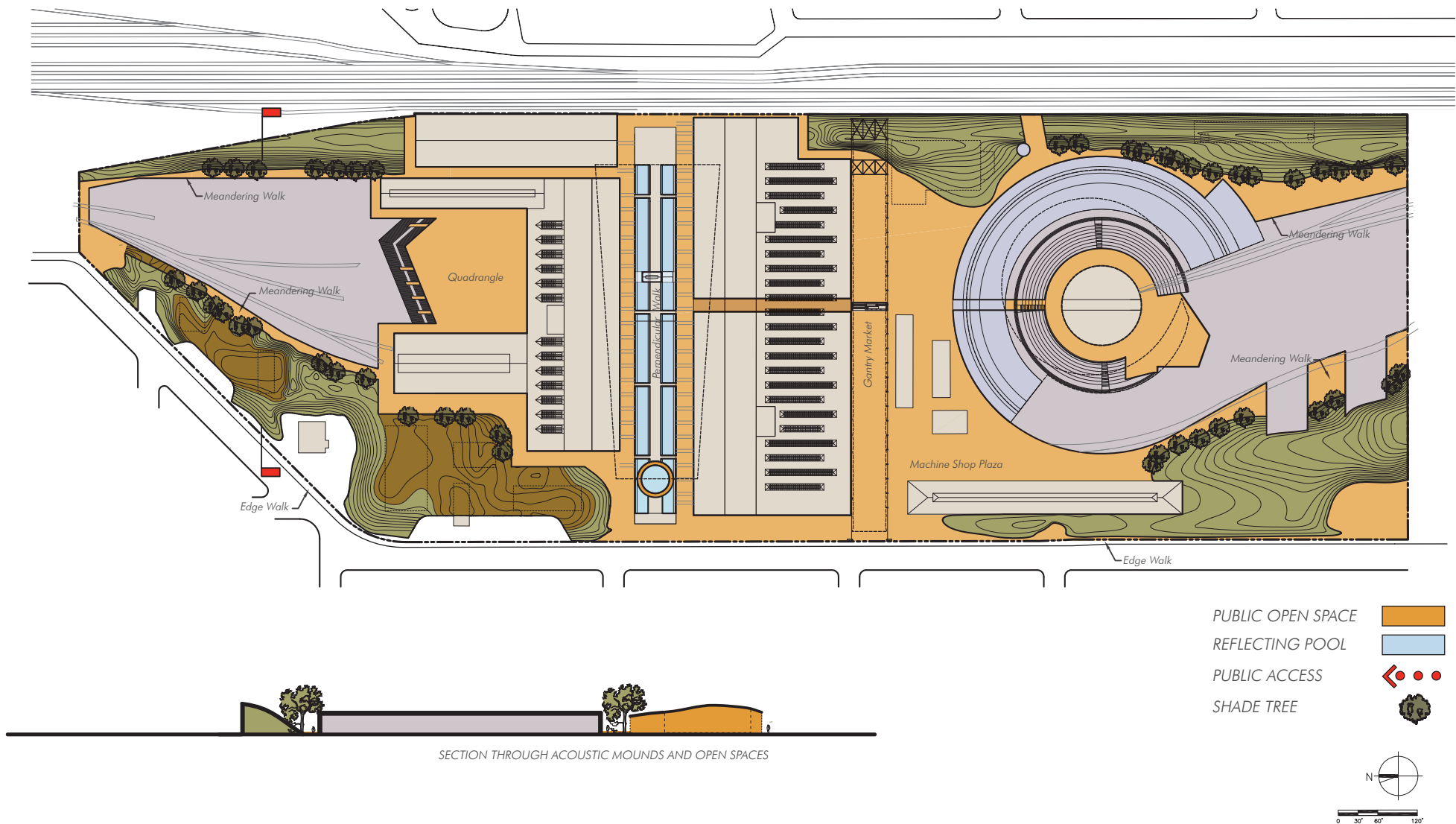


Figure 10: Conceptual Public Open Space Diagram



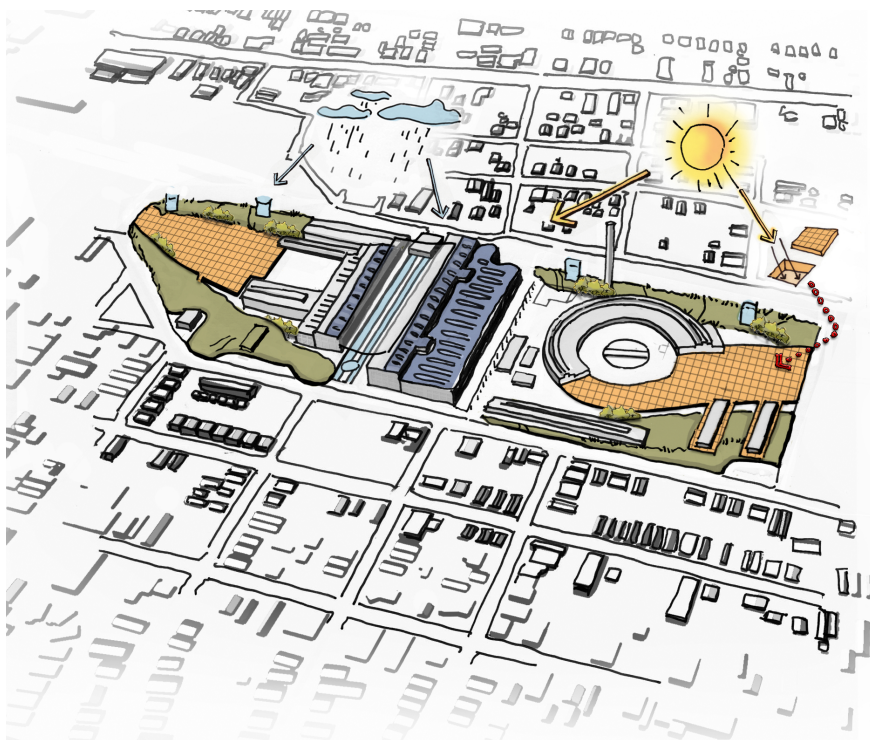
10.4 Sustainability

*Concept: The Rail Yards should be a model for sustainable design practices.*

New construction should be designed to meet or exceed U.S. Green Building Council (USGBC) standards and where possible, the retrofit of the existing structures should accommodate green building features as well. Specific concepts for the introduction of sustainable design features and practices into the Master Concept Plan are as follows;

10.4.1 On-site Power Generation (Photovoltaic Panels)

The Master Concept Plan recommends that all south facing roofs of existing historic structures be retrofitted to include arrays of Photovoltaic (PV) panels capable of generating on-site electricity. As evidenced by the growing PV market in the area, Albuquerque has an ideal climate for PV generation due to a high number of clear sunny days coupled with a lack of extreme summer temperatures found in other desert type communities at lower elevations. PV generated electricity is valuable because it is most efficient during times of peak electricity demand (A/C requirements during hot summer days) thus shaving peak loads. Careful attention will be required to ensure the panels are well integrated into the roof lines. Finally, electrical vehicle charging stations located in the subterranean garages may be able to utilize on-site electrical generation.



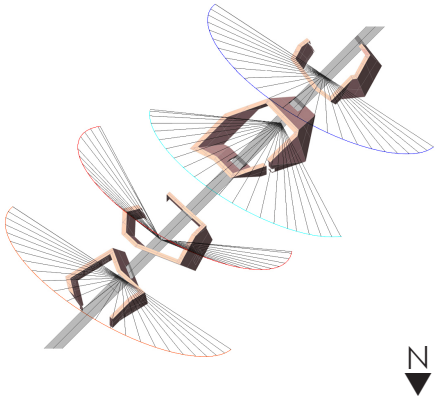
- DAYLIGHTING OPPORTUNITIES (COURTYARDS)
- GREEN ROOFS (ACOUSTIC MOUNDS)
- POWER GENERATION (PV PANELS)
- WATER COLLECTION (CISTERNS)



Cantalloc Aqueducts, Nazca, Peru



Acequia, White Mountains, NM



COURTYARDS,  
Daylighting defined by the path of the sun



Anasazi Kiva, Mesa Verde, CO

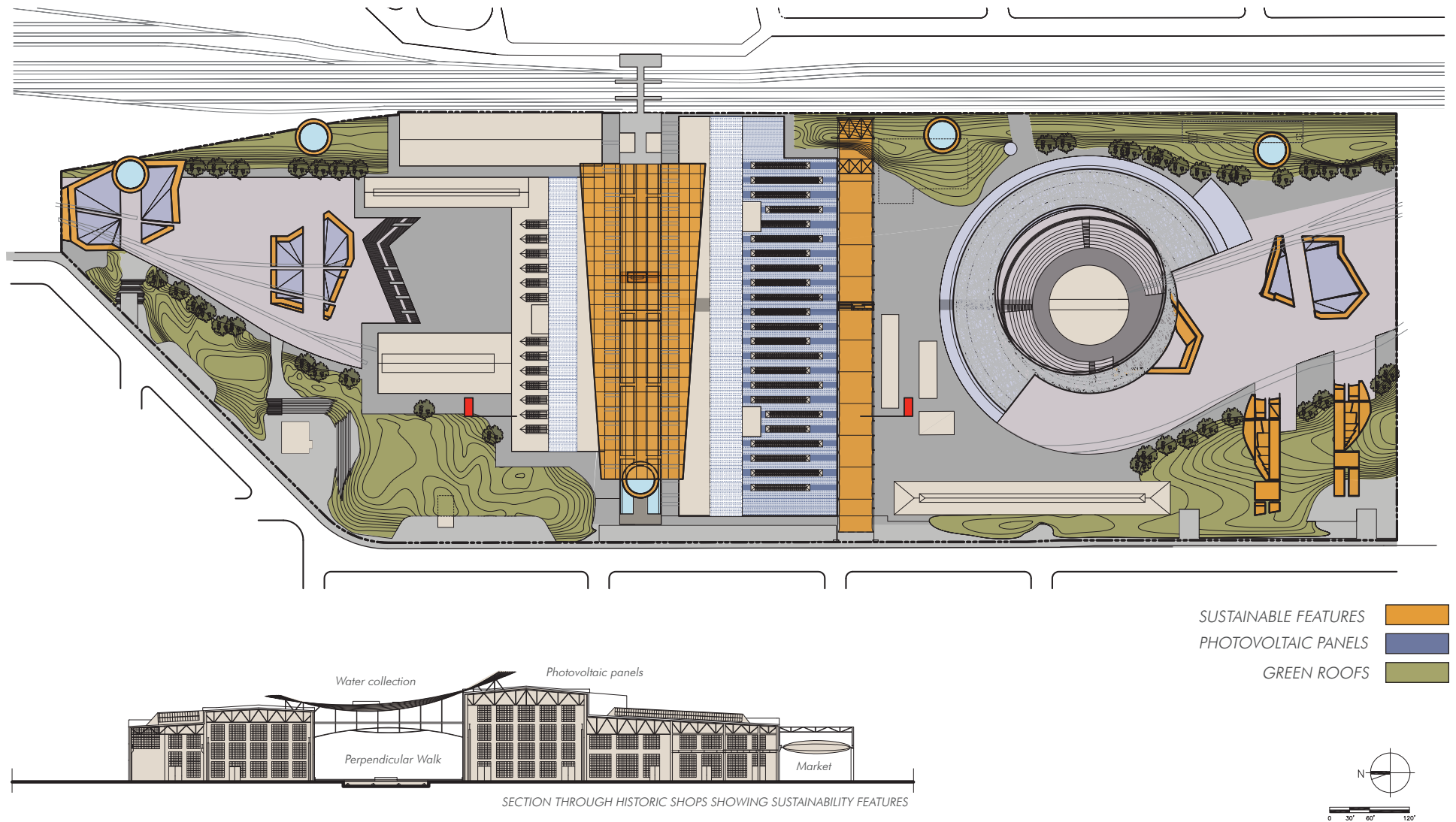


Figure 11: Conceptual Sustainability Features Diagram

#### 10.4.2 Water Conservation

Given Albuquerque's low precipitation of approximately 9" of rain per year, it is critical that water conservation be a major consideration in all future development. Accordingly, the [Master Concept](#) Plan recommends the collection and retention of on-site water into cisterns that may be used for future irrigation of drought tolerant landscaping atop the Acoustic Mounds and along the tree-lined Meandering Walks. Given a total site area of 27.3 acres, there is potential for a large catchment area. The cisterns themselves may become design elements for the project thereby reinforcing the importance of water conservation. In addition to catchment, all plumbing fixtures shall utilize the least amount of water allowable by code and where permitted, the collection and use of grey water for irrigation purposes shall be encouraged.

In order to facilitate collection of roof water and to provide cover over the Perpendicular Walk, a design feature called the "Glass Canopy" is proposed between the Machine and Boiler Shop buildings. The Canopy is an all-glass canopy supported by a light weight cable truss that will collect and distribute water to a proposed cistern and surrounding pool located in the trough of the Transfer Table.

#### 10.4.3 Energy Efficient Construction/Green Roofs

All new construction should be designed to minimize heat loss/gain through building envelopes. Note that this is especially pertinent with regard to the rehabilitation of the historic structures which are largely clad in small single-pane glass windows set into steel window frames. In such cases, the requirements for energy conservation will need to be balanced with the historic preservation aspects of the project. For example, it may be necessary to create new building envelopes within the historic envelope thereby avoiding its poor thermal performance.

Along the lines of envelope performance, the [Master Concept](#) Plan recommends the use of Green Roof structures over the retail components along 2nd Street. A Green Roof is essentially a well-insulated roof that contains a vegetated outer layer that outperforms

traditional roofing in terms of its ability to absorb and slowly re-radiate heat energy without creating the "Heat Island" effect found in many urban areas. Careful attention will be required to select plantings that are well suited to the particular Albuquerque climate.

#### 10.4.4 Natural light & Ventilation

During the time of their original construction, the historic structures of the Rail Yards were considered pioneering achievements in the use of natural light and ventilation to provide superior working conditions. In keeping with this tradition, all new construction should be designed to maximize availability of natural light and ventilation in order to reduce power consumption and increase the quality of the working environment. The [Master Concept](#) Plan recommends the use of Courtyards to provide natural light and ventilation to spaces that would otherwise be too deep to achieve from perimeter access alone. The proposed Paseo buildings will be designed with perimeter glazing and operable windows.

#### 10.4.5 Alternative Transportation

The [Master Concept](#) Plan is organized to prioritize pedestrian, bicycle, and transit connections to the project. Vehicle access to below grade parking structures is purposely relegated away from the center of the site such that these other forms of transportation can be unimpeded. Accordingly, a large transit plaza is proposed along 2nd Street immediately adjacent to the Perpendicular Walk between the historic Machine and Boiler Shop buildings, and may contain bike lockers, bike racks, benches, and other pedestrian amenities. Finally, in order to further encourage the use of alternative forms of transportation, the Master Plan recommends decreased parking requirements for anticipated uses and will encourage ride sharing.



- INFILTRATION SYSTEM  
(PERMEABLE HARDSCAPE)
- COLLECTION SYSTEM  
(SWALE/CISTERN)
- FIRE SYSTEM (TRANSFER  
TABLE POOL)

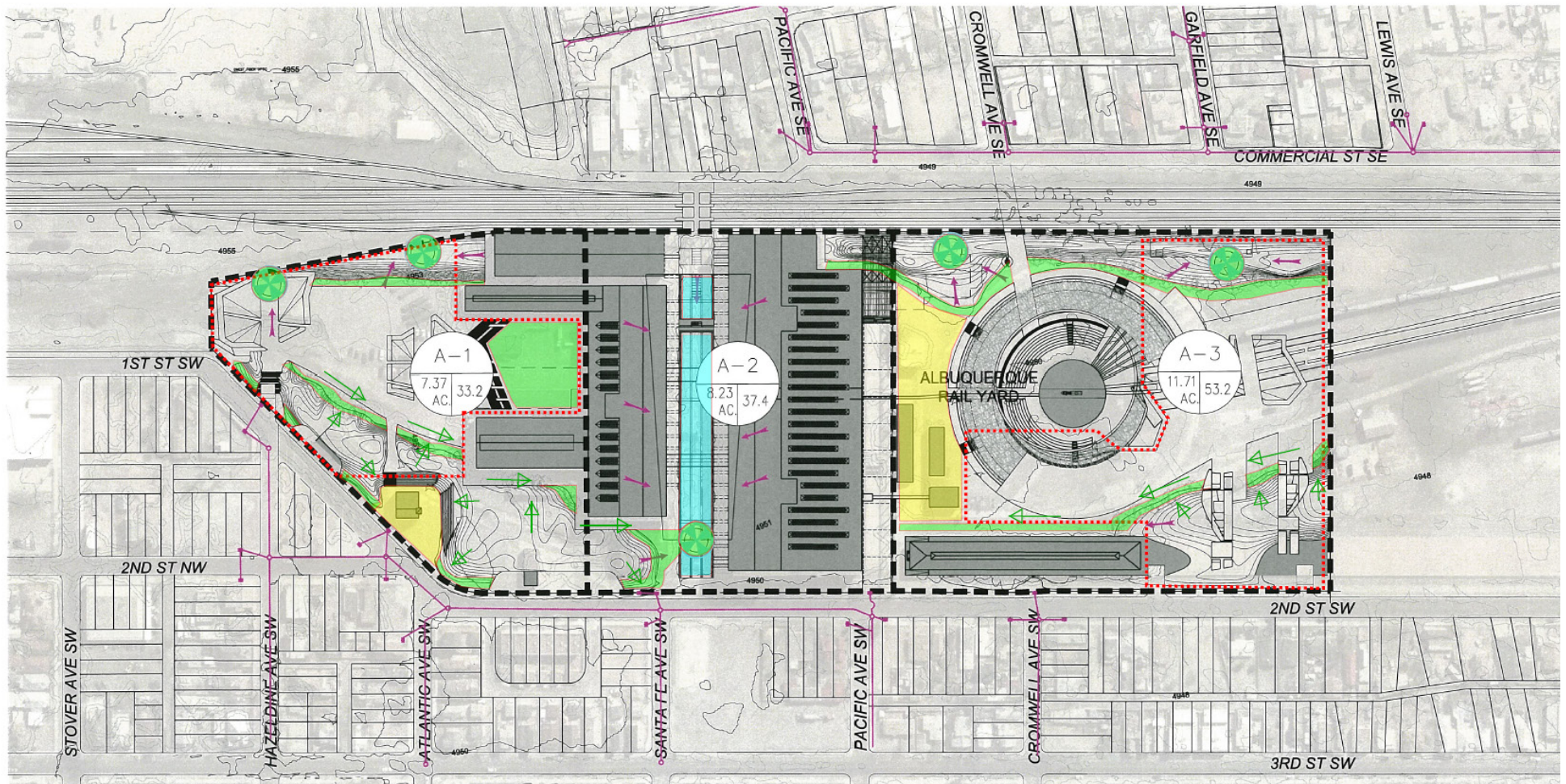


Figure 12: Conceptual Water Conservation Diagram

**NOTE: BLANK PAGES ADDED TO ACCOMMODATE TEXT  
REVISIONS ONLY, WILL BE REMOVED ONCE TEXT IS FINALIZED.**

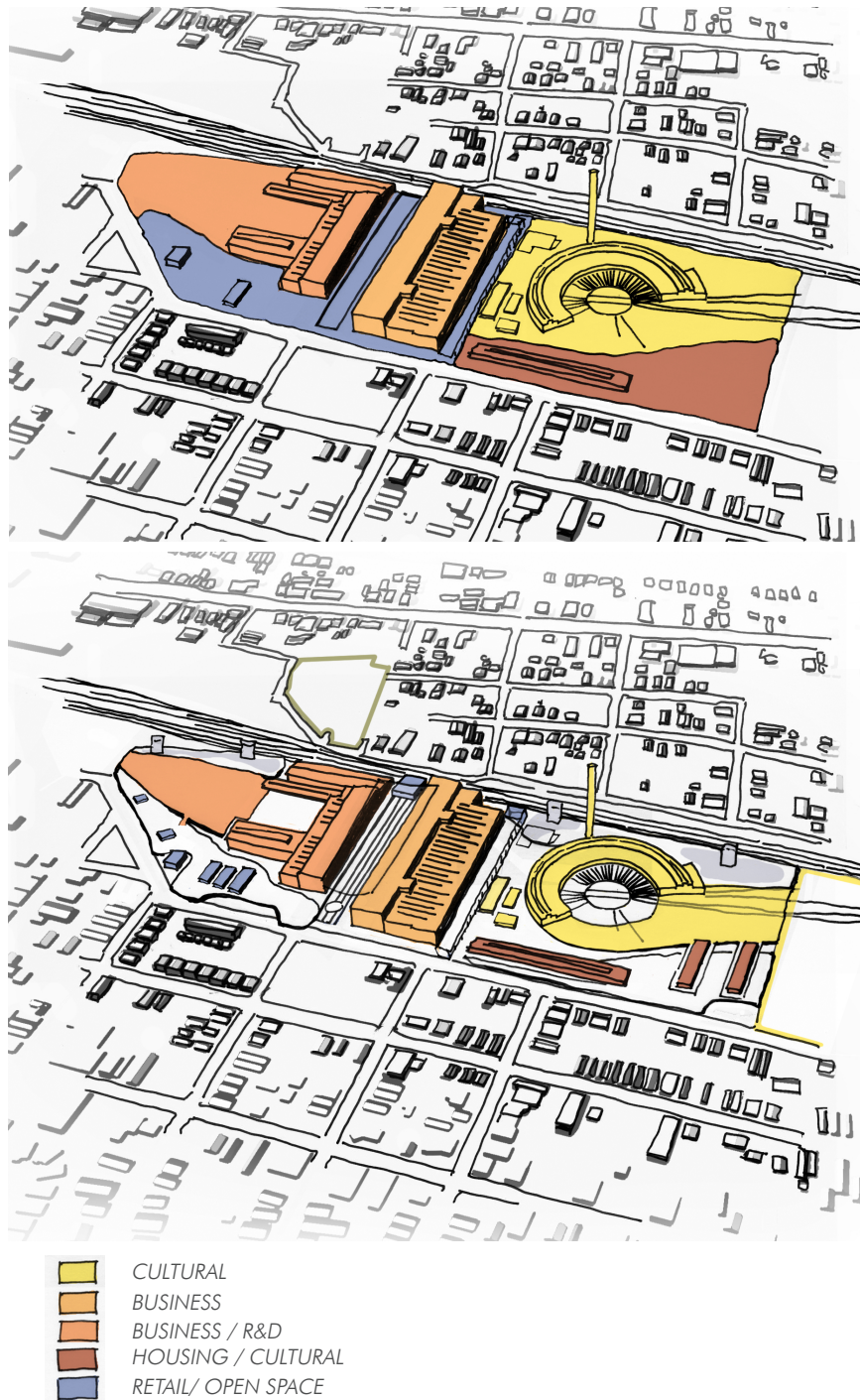


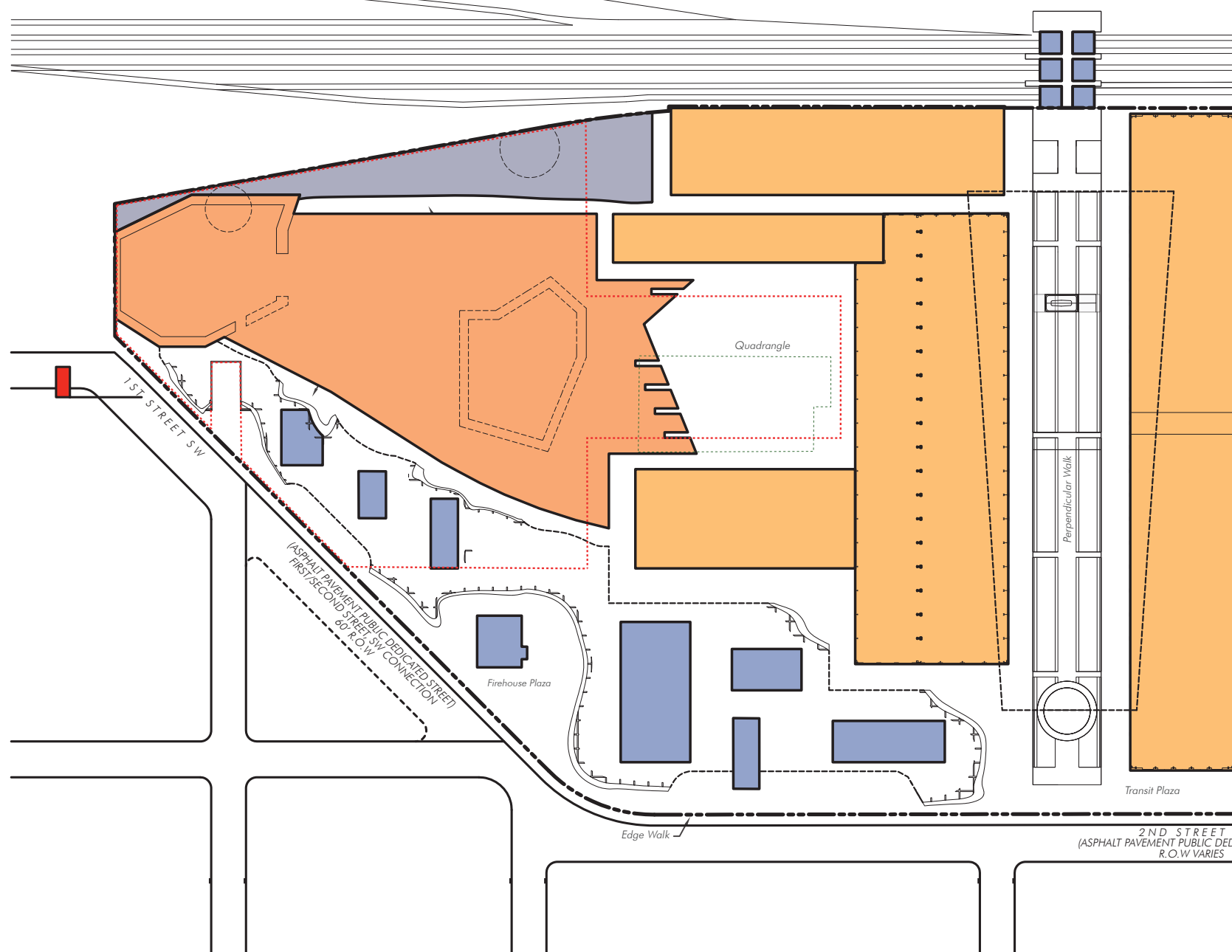
## 10.5 Parcel / Land Use Recommendations

Given the large size of the Rail Yards site (27.3 acres), the complexities involved in adaptively re-using the **existing** historic buildings, and the resulting need to construct the project in a phased approach, the **Concept Plan recommends** **assumes** the creation of 10 distinct parcels that each will have their own design features and land use recommendations. The resulting parcelization will enable distinct parcels to be developed and permitted according to the schedule requirements of a particular tenant need, thereby making the process more nimble and responsive to market conditions. Parcelization will also allow distinct use types, (e.g. Workforce Housing or Public Open Space), to be broken off from the larger project in order to be executed by a different development entity as may be desired.

## 10.6 Land Use Characterizations

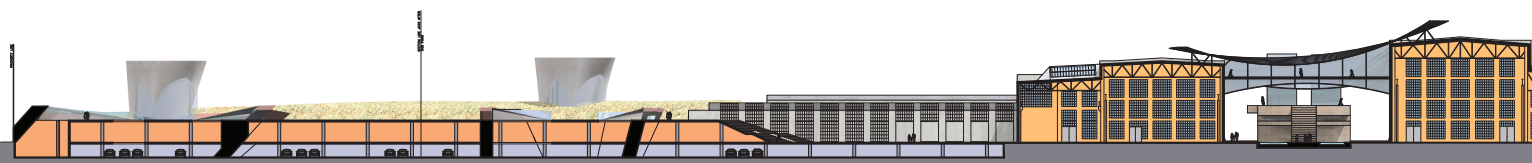
Creating a vibrant and successful mixed-use community on the Rail Yards site will in large measure depend on the type, location and organization of uses on the site. Accordingly, the **Master Concept Plan provides recommendations for** **identifies** preferred land use types and locations based on a thorough analysis of project goals, site context, and community input. ~~Land use designations are not intended to restrict the existing approved land uses of the underlying SU-2/HLS zone.~~



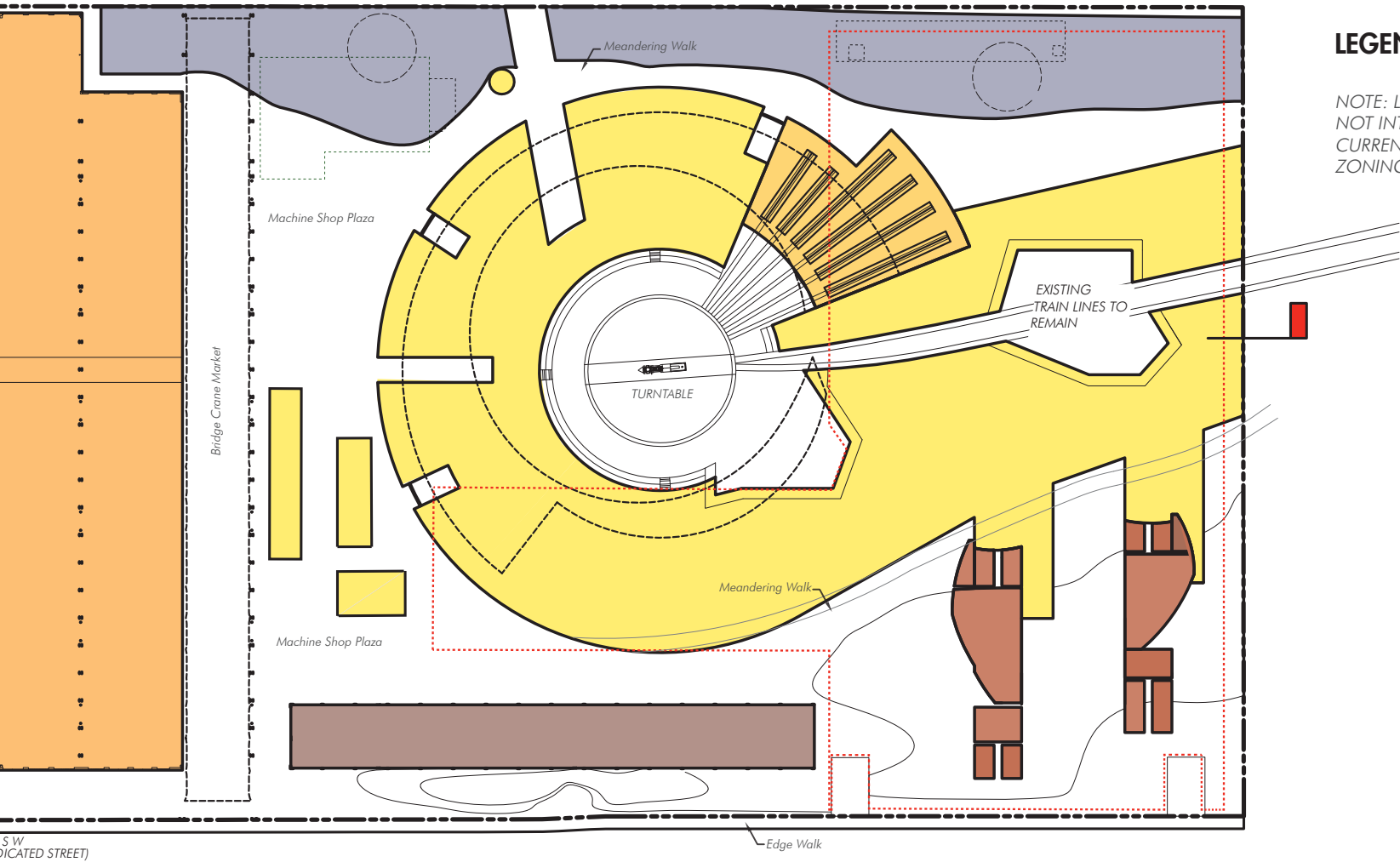


**NOTE:**  
Design Features shown are for illustrative purposes only and are not regulatory features of the MDP document.

TABLEAU 21: Land Use Diagram







LEGEND

NOTE: LAND USE RECOMMENDATIONS ARE NOT INTENDED TO RESTRICT LAND USES CURRENTLY APPROVED BY THE UNDERLYING ZONING DESIGNATION FOR THE SITE, SU-HLS.

BUSINESS USES	
CULTURAL USES	
WORKFORCE HOUSING	
RETAIL	
OPEN SPACE	
UTILITY BUILDING	
LINE OF GARAGE BELOW	

