



Planning Commission
Notice & Agenda
Wednesday, September 18, 2024

CITY COUNCIL CHAMBERS | 11465 WEST CIVIC CENTER DRIVE | AVONDALE, AZ 85323

REGULAR MEETING

6:00 PM

PHYSICAL ACCESS TO THE COUNCIL CHAMBERS WILL BE AVAILABLE 30 MINUTES PRIOR TO THE MEETING.

1. CALL TO ORDER

2. ROLL CALL

3. APPROVAL OF MINUTES

Approval of the August 21, 2024 Planning Commission Meeting Minutes

4. PUBLIC HEARING ITEMS

a. PREMIER UNDERGROUND – CONDITIONAL USE PERMIT – APPLICATION PL-24-0077

Planning Commission will hold a public hearing and consider a request by Daniel Fox with Realty Asset Advisors for approval of a conditional use permit (CUP) to allow a truck fueling station and truck dispatch. The 6.04-acre subject property is generally located at the northeast corner of Riley Drive and Eliseo C. Felix Jr. Way and is zoned General Industrial (A-1). The Planning Commission will take appropriate action.

Staff Contact: Cole Hunger, Planner

5. COMMISSION ANNOUNCEMENTS

6. PLANNING DIVISION REPORT

7. CALENDAR

October 16, 2024

8. ADJOURNMENT

Individuals with special accessibility needs, including sight or hearing impaired, large print, or interpreter, should contact the City Clerk at 623-333-1200 or TDD 623-333-0010 at least two business days prior to the meeting. Personas con necesidades especiales de accesibilidad, incluyendo personas con impedimentos de vista u oído, o con necesidad de impresión grande o intérprete, deben comunicarse con la Secretaría de la Ciudad at 623-333-1200 o TDD 623-333-0010 cuando menos dos días hábiles antes de la junta del Concejo.

**Wednesday, August 21, 2024
6:00 pm**

A **Regular Meeting** of the Planning Commission of the City of Avondale, Arizona was convened at 11465 West Civic Center Drive in open and public session at 6:00 p.m.

1. WELCOME AND CALL TO ORDER

Chair White called the meeting to order at 6:00 p.m.

2. ROLL CALL

The following members and representatives were present.

COMMISSIONERS PRESENT IN PERSON

Chair Larry White
Commissioner Denise Stanfield
Commissioner Linda Warren
Commissioner Shaun Grimm
Commissioner Alex McBurney

COMMISSIONERS EXCUSED ABSENT

Vice-Chair Julia Jewell
Commissioner Alan Agundez Castillo
Alternate Ryan Benson

CITY STAFF PRESENT

Catherine Lorbeer, Deputy Director of Planning
Arrianna Ramirez, Administrative Assistant
Mary Grace McNear, Attorney II
Marcella Carrillo, City Clerk
Jodie Novak, Development Services Director

3. APPROVAL OF MINUTES

Chair White called for a motion to approve the minutes.

Commissioner Warren made a motion to approve the Planning Commission meeting minutes for June 26, 2024, seconded by Commissioner Stanfield.

Chair Larry White	Aye
Vice-Chair Julia Jewell	N/A
Commissioner Alan Agundez-Castillo	N/A
Commissioner Denise Stanfield	Aye
Commissioner Linda Warren	Aye
Commissioner Alex McBurney	Aye

Commissioner Shaun Grimm
Alternate Ryan Benson

Aye
N/A

Upon vote, the motion passed 5 to 0

4. PUBLIC HEARING ITEMS

a. ZONING ORDINANCE TEXT AMENDMENTS PL-24-0174

Catherine Lorbeer, Deputy Director of Planning, explained the purpose of the text amendments to the Zoning Code related to backyard chickens is in response to recent changes to the State Law and the passage of HB-2325 that allows single-family detached residences to keep up to six chickens in their backyard. The bill becomes effective on September 14, 2024. The Planning Commission reviews proposed changes to the Zoning Ordinance; Chapter 28 and the City Council reviews changes to City Code Chapter 3, specifically related to keeping backyard chickens.

The proposed changes are:

- ▶ Section 28-15, Definitions – Backyard fowl will be defined consistent with State Law, which excludes roosters. Swine will be removed from the definition of farm animals because the City Code prohibits them.
- ▶ Section 28-33(g), Permitted Uses with Conditions – Farm animals are permitted in certain areas, with conditions—typically the larger lot zoning districts, but specifically by right in the agricultural zones. Backyard fowl will be added to subsection (g) and cross-referenced to City Code Chapter 3, which discusses the keeping of livestock and fowl. Additionally, text about keeping livestock will be removed because it is also contained in Chapter 3.
- ▶ Section 28-133 (e), Detached Accessory Buildings – The word "fowl" will be removed within the height limitation language because the changes to State Law set the max height for a chicken enclosure at 8-feet.

All required notifications were completed and posted on the Avondale Connect webpage. One public comment in support of the changes to be consistent with State Law was received.

Chair White opened public comments. With there being no one wishing to speak, he closed public comments.

Commissioner McBurney made a motion to approve Application PL-24-0174, a request for text amendments to the Zoning Ordinance for the reason set forth in the staff report, seconded by Commissioner Warren.

Chair Larry White
Vice-Chair Julia Jewell
Commissioner Alan Agundez Castillo
Commissioner Denise Stanfield
Commissioner Linda Warren
Commissioner Alex McBurney
Commissioner Shaun Grimm
Alternate Ryan Benson

Aye
N/A
N/A
Aye
Aye
Aye
Aye
Aye
N/A

Upon vote, the motion passed 5 to 0

5. COMMISSION ANNOUNCEMENTS

None

6. PLANNING DIVISION REPORT

Mrs. Lorbeer shared July’s monthly data, noting there were 23 new development applications. A Dunkin Donuts was recently approved within the Coldwater Springs Promenade.

7. CALENDAR

The next Planning Commission meeting is scheduled for September 18, 2024.

8. ADJOURNMENT

There was no further business; Chair White called for a motion to adjourn.

Commissioner Warren made a motion to adjourn, seconded by Commissioner McBurney.

Chair Larry White	Aye
Vice-Chair Julia Jewell	N/A
Commissioner Alan Agundez Castillo	N/A
Commissioner Denise Stanfield	Aye
Commissioner Linda Warren	Aye
Commissioner Alex McBurney	Aye
Commissioner Shaun Grimm	Aye
Alternate Ryan Benson	N/A

Upon vote, the motion passed 5 to 0

The meeting adjourned at 6:08 p.m.

Chair, Larry White

Date

ITEM NUMBER: 4.a.

SUBJECT: Premier Underground – Conditional Use Permit – Application PL-24-0077**MEETING DATE:** 9/18/2024

TO: Planning Commission**FROM:** Cole Hunger, Planner**THROUGH:** Jodie Novak, Director of Development Services**PURPOSE:**

Planning Commission will hold a public hearing and consider a request by Daniel Fox with Realty Asset Advisors for approval of a conditional use permit (CUP) to allow a truck fueling station and truck dispatch. The 6.04-acre subject property is generally located at the northeast corner of Riley Drive and Eliseo C. Felix Jr. Way and is zoned General Industrial (A-1). The Planning Commission will take appropriate action.

BACKGROUND:

The subject property is generally located at the northeast corner of Riley Drive and Eliseo C. Felix Jr. Way (Assessor Parcel Nos. 500-26-007 and 500-26-008) and is approximately 6.04 acres (Exhibits A and B). The current zoning of the property is General Industrial (A-1), which allows for Premier Underground's general office and warehousing uses along with a truck wash and mechanical service area. Approval of a conditional use permit (CUP) is required for the company's proposed truck fueling station and truck dispatch uses. The site is currently two separate parcels. A minor land division request to combine two lots is under review. A condition of the requested CUP is that the minor land division must be approved by the City Council prior to issuance of a building permit.

The subject property is designated by the General Plan 2030 Land Use Map as Industrial (Exhibit C). The Industrial land use category is intended to provide employment opportunities for heavy manufacturing within enclosed or partially enclosed structures. This category is typically characterized by uses that may need special consideration and may include refining, assembly, fabrication of products, demolition, solar, or wholesaling. The areas designated for industrial uses have adequate transportation and activity access with an emphasis on minimal conflict with existing adjacent land uses.

The conceptual site plan (Exhibit E) depicts a 25,393 gross square foot, two-story office building with an attached 8,948 square foot warehouse, a 4,262 square foot mechanical service area with three service bays with a truck wash, a 2,048 square foot covered truck fueling station, and associated site improvements. The site will contain 176 total parking spaces including 52 covered spaces with solar carports, and six (6) accessible spaces. There will be six (6) EV-capable charging stations provided on-site. Two of the six (6) spaces will be fully functional charging stations.

The existing uses and zoning of surrounding properties include:

North: Zoned General Industrial (A-1); Warehouse

East: Zoned Agricultural (AG); Agua Fria River

South: Zoned General Industrial (A-1); Industrial Manufacturing

West: Zoned General Industrial (A-1); Vacant Land

SUMMARY OF REQUEST:

The applicant is requesting approval of a conditional use permit (CUP) to allow for the operation of a truck fueling station with truck dispatch for Premier Underground's business on approximately 6.04 acres generally located at the northeast corner of Riley Drive and Eliseo C. Felix Jr. Way. If approved, this CUP request will allow truck fueling and truck dispatch uses.

The proposed site will contain a 25,393 gross square foot, two-story office building with an attached 8,948 square foot warehouse. Additional on-site facilities will include a freestanding mechanical service area with three (3) service bays for mechanical maintenance and repairs, a mechanic's office and break room, and an attached single-bay manually operated truck wash.

A small freestanding covered fueling facility is also proposed within the site. The fueling station will feature three (3) fuel tanks that contain diesel and gas for sole use by Premier Underground. The fueling station will be located in the southeast portion of the site to limit its visibility from surrounding streets and properties. Two (2) tanks will have 2,000-gallon capacities and one (1) with a 1,000-gallon capacity. The tanks will also feature emergency shut-offs. The fueling station will be covered with a shade canopy. Premier Underground does not intend to generate any excessive, unwanted noise, smoke, or dust as a part of its business operations. The truck dispatch will occur at the southeast of the property along Riley Drive, along with all other truck-related uses including fueling, maintenance, washing, and parking. The truck dispatch use entails the movement of materials from the subject property to various Premier Underground job sites.

PUBLIC PARTICIPATION:

A Neighborhood Meeting to discuss the proposal with neighboring property owners and other interested parties was held in person at 6:00 P.M. on Tuesday, August 20. The notification of this meeting was completed in accordance with notification requirements. There were no attendees other than City staff and one council member. The discussion was primarily related to the proposed use of the site and the locations of each activity along with the circulation of vehicles on and off the property. The applicant discussed the site layout, building elevations, and how the trucks would operate on the site.

All required notifications for the Planning Commission public hearing were completed in accordance with notification requirements.

ANALYSIS:

To grant a conditional use permit, five (5) findings must be met as outlined in Avondale Zoning Ordinance Section 28-8. Each finding is presented below along with Staff's analysis.

1. That the proposed use (a) is consistent with the land use designation set forth in the general plan, (b) will further the City's general guidelines and objectives for development of the area, as set forth in the general plan and (c) will be consistent with the desired character for the surrounding area.

The subject property is designated as Industrial by the General Plan 2030 Land Use Map. The Industrial land use category is intended to provide employment opportunities for heavy manufacturing within enclosed or partially enclosed structures. The proposed office and warehouse use, along with the truck fueling station and dispatch are consistent with the desired industrial character of the surrounding area set forth by the General Plan and will further the City's general objective for the development of the vacant industrial lots within this location.

This finding has been met.

2. That the use will be (a) compatible with other adjacent and nearby land uses and (b) will not be detrimental to persons residing or working in the area, adjacent property, the neighborhood or the public welfare in general.

The site is located within an industrial area that contains uses that are similar in scale to the proposed project. The entire site will be enclosed and screened on all sides of the property with little to no visibility from the surrounding properties or streets. The truck fueling and truck dispatch are located on-site to not be visible from any public right of way. The entire site will be screened and secured with a seven (7) foot high CMU wall on the north, south, and east property boundaries. Parking along the Eliseo C. Felix Jr. Way frontage will be screened by a minimum three and a half (3.5) foot high CMU wall.

This finding has been met.

3. That the site is adequate in size and shape to accommodate the proposed use, allow safe on-site circulation, and meet all required development standards including, but not limited to, setbacks, parking, screening, and landscaping.

The project is designed to adhere to all the requirements of the A-1 zoning district with regard to setbacks, parking, screening and landscaping, and lighting. As proposed, the truck fueling station will be located in the southeast portion of the property, where proper space is supplied for the trucks' on-site circulation and all truck-related activities, including fueling and dispatch, can adequately take place.

This finding has been met.

4. That the site has appropriate access to public streets with adequate capacity to carry the type and quantity of traffic generated by the proposed use.

The project site has public street access from the northwest onto Eliseo C. Felix Jr. Way via a shared access with the property to the south, and from the southeast onto Riley Drive. The northern access will provide access for employee parking primarily for the office and warehouse building located on the northern portion of the site. The Riley Drive access will serve as the truck entrance and exit, providing truck access to the fueling station, mechanical bay, and washing station. Based upon the review of the applicant's Traffic Impact Statement (TIS), the City Traffic Engineer has determined that the proposed project will function in a safe and efficient manner.

This finding has been met.

5. That adequate conditions have been incorporated into the approval to ensure that any potential adverse effects will be mitigated.

Conditions of approval are recommended, which are standard for this type of development, as provided in the "Recommendation" section below.

This finding has been met.

DISCUSSION:

Staff recommends approval of the request for the following reasons:

- The proposed land use meets the five (5) required findings for a conditional use permit (CUP) per the Zoning Ordinance.
- Approval of the proposal will result in development compatible with the General Plan's Industrial land use designation, the General Industrial (A-1) zoning district, and existing development in the area.
- The proposed land use will not be detrimental to persons residing or working in the area, on adjacent properties, or to the public welfare in general.

BUDGET IMPACT:

No Budget Impact

RECOMMENDATION:

The Planning Commission will conduct a public hearing and **APPROVE** Application PL-24-0077 Premier Underground, a request for a conditional use permit to allow a truck fueling station and truck dispatch on an approximately 6.04-acre site generally located at the northeast corner of Riley Drive and Eliseo C. Felix Jr. Way in the General Industrial (A-1) zoning district, subject to the following five (5) conditions of approval:

1. Development and use of the site shall conform to the Premier Underground Conditional Use Permit Narrative (Exhibit D), Site Plan (Exhibit E), and Landscape Plan (Exhibit F) dated September 18, 2024.

2. Administrative approval of a Site Plan and Design Review application is required prior to issuance of a building permit.
3. Council approval of a lot combination application is required prior to issuance of a building permit.
4. Grandfathered Groundwater Rights for the property must be extinguished and pledged to the City of Avondale's assured water supply account (26-002003.0000) prior to the issuance of any construction permits for any portion of the project.
5. In accordance with Section 28-8(d) of the Avondale Zoning Ordinance, the Conditional Use Permit shall expire two (2) years from the date of Commission approval if the use has not commenced.

PROPOSED MOTION:

I move that the Planning Commission **APPROVE** Application PL-24-0077 Premier Underground, a request for a conditional use permit to allow a truck fueling station and truck dispatch on an approximately 6.04-acre subject property generally located at the northeast corner of Riley Drive and Eliseo C. Felix Jr. Way in the General Industrial (A-1) zoning district, subject to five (5) conditions of approval as listed in the staff report.

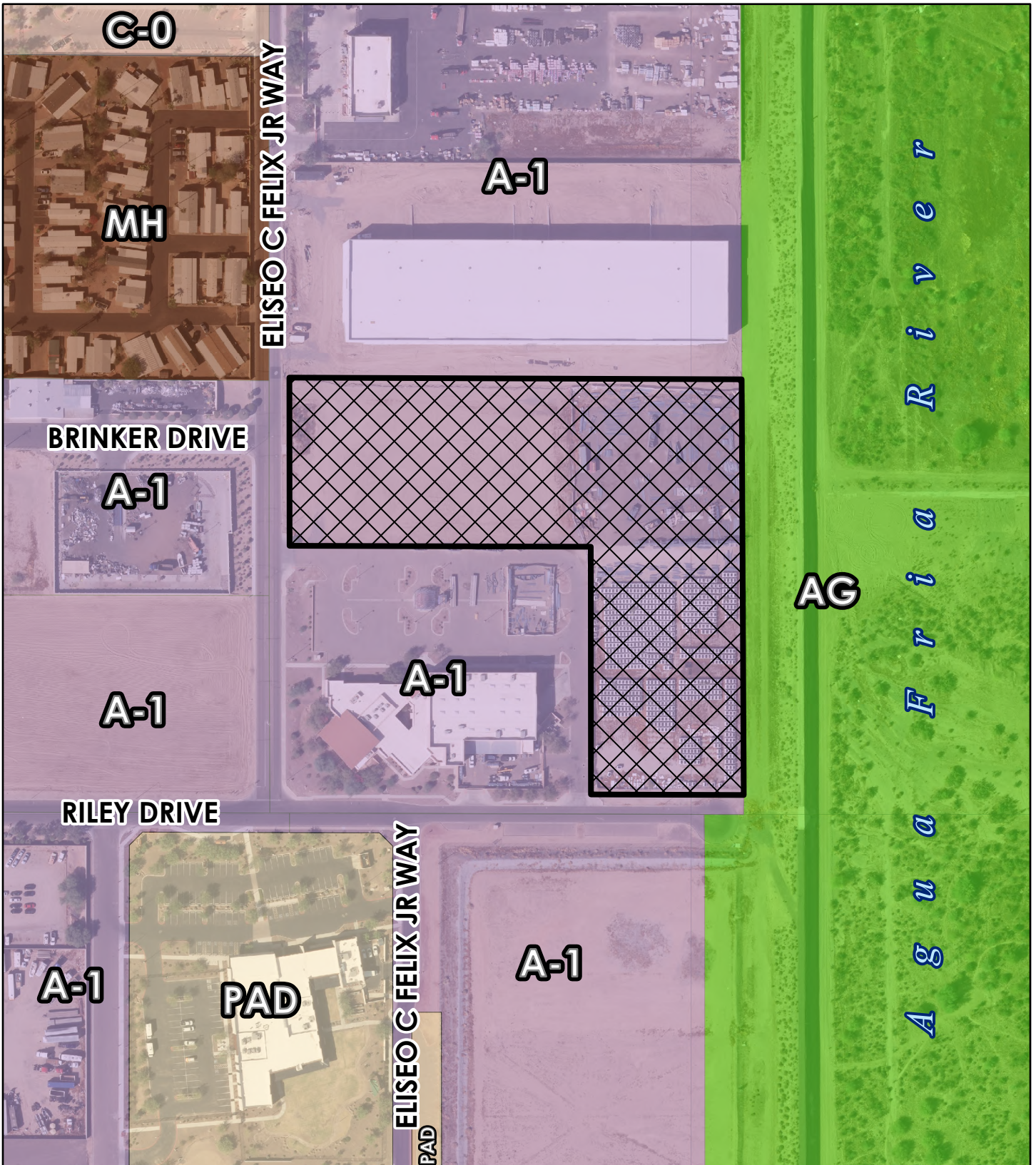


Aerial Map



Subject Property





Zoning Vicinity



Subject Property





General Plan Land Use



-  Education
-  High Density Residential
-  Industrial
-  Open Space and Parks



Subject Property



Exhibit D - Narrative

September 18, 2024



6/20/24 (2nd Submittal)

City of Avondale Development Services
Department ATT: Michelle Simerdla
11465 W. Civic Center Drive
Avondale, Arizona 85323

RE: Premier Underground – Conditional Use Permit
Project Narrative Application
#PL03-0329

Dear Michelle,

This letter shall service as a formal request to grant a conditional use permit to allow the private use of a truck and equipment fueling facility on this site.

Proposed Conditional Use Permit

The City of Avondale General Plan land use for this property is Industrial. The industrial land-use category is intended to provide employment opportunities for heavy manufacturing within enclosed or partially enclosed structures. This category is typically characterized by uses that may need special consideration and may include refining, assembly, fabrication of products, demolition, solar, or wholesaling.

Although Premier Underground operations do not include such heavy manufacturing, fabrication or refining uses, their operations are better defined as administration office operations to manage their core business - underground utilities installations on construction projects located throughout the Phoenix Metropolitan area. Additionally, a portion of the site will be used for materials handling with product stored within a fully enclosed warehouse attached to the main office structure.

Additional on-site facilities will include a free-standing three-bay mechanics maintenance and repair building, with mechanics office and break room and an attached single-bay manually operated truck wash. A small free-standing covered fueling facility is also proposed within the site and will be used strictly for Premier Underground operations. ***This fueling station is the subject of this request for a Conditional Use Permit.***

The fueling station will feature three (3) pad-mounted tanks that will contain diesel and gas for the sole use by Premier Underground. We purposely located the fueling station at the back center portion of the site to limit it's visibility from the surrounding streets and properties. Two (2) tanks will have 2,000 gal. capacities and one (1) with a 1,000 gal. capacity. The tanks will also feature emergency shut offs. The fueling station will be covered with a convenient store/service station style canopy. Premier Underground will not generate any excessive, unwanted noise, smoke, or dust as a part of their daily operations.

Project Overview

The subject property is a currently vacant 6.04 gross acre (263,116 sq. ft.) parcel located approximately 150 ft. north of the intersection of N. Eliseo Felix Jr. Way and Riley Ave., in Avondale. The legal description is more specifically identified as a portion of the southwest quarter of Section 11, Township 1 North, Range 1 West of Gila & Salt River Base and Meridian, Maricopa County, Arizona. Surrounding properties include a recently completed concrete tilt warehouse/distribution facility directly to the north, an existing two- story structure to the south that is occupied by MAC Prefab, vacant land across N. Eliseo Felix Jr. Way to the west, and the Agua Fria River to the east. The site is currently zoned A-1 and will remain A-1 after development. Occupancy group is B and S-1.

When completed, the project will contain a 25,393 gross sq. ft. two-story class-A corporate office space and an attached 8,948 sq. ft. warehouse with a 22' clear height. Construction type is II-B and will be fully sprinklered. The site will contain 176 total parking spaces including 52 covered solar carports, and 6 accessible spaces. **Per the Development Services comments issued on 4/29/24 there will be a total of six (6) EV capable charging stations provided on site. Two will be provided with fully functional charging stations.** The site and all structures will meet all landscaping, screening, site lighting, and parking, building height and setback requirements applicable to the A-1 zoning designation and related City of Avondale ordinances as proposed. **The subject property was originally two separate parcels. As a condition for site plan approval, Premier Underground created a minor land division (MLD) to combine the two parcels into one parcel. The MLD and updated title report is included with this submittal. The size and 'L' shape of the subject property is large enough to meet the needs and use of Premier Underground's operations notwithstanding the ability to separate the flow of truck traffic with the visitor and employee parking entering and exiting from the opposite side of the site.**

The areas designated for industrial use must also have adequate transportation and activity access with an emphasis on minimizing potential conflicts between existing adjacent land uses or streets. We believe we have exceeded the above requirement through careful positioning of the entry points with only one new curb cut on Riley Ave. This entrance will be used strictly for Premier Underground's construction trucks entering and exiting the site. The second entrance is located off N. Eliseo Felix Jr. Way at existing curb cut that straddles the property line between the Premier Underground site and the adjacent property to the south. A shared access easement between the two properties is recorded with the plat. This entrance is designated for employee and visitor parking only. **These access points do not impose any conflicts with the surrounding properties or streets.**

We believe the single-owner use of the site, positioning of the buildings, site screening and internal separation between Premier Underground's truck traffic and the visitor and employee parking meets and exceeds all the objectives for safe circulation set forth in the General Plan and are consistent in use and character with the surrounding properties. The total number of on-site parking spaces and loading of materials will preclude the need for any on-street parking. The site will be adequately lit with site and wall mounted building lighting, designed, and positioned to minimize encroachment onto the adjoining parcels and dark sky ordinances.

Ownership and Operations

The property was purchased by PUC Holding, LLC in mid-2023 and will be occupied and operate by Premier Underground Construction, LLC an Arizona based corporation that provides underground dry utilities installation for commercial, multi-family and single-family subdivision projects across the Phoenix Metro Area. Mr. Newman Wong, President, and CEO of both PUC Holdings and Premier Underground, along with his dedicated administration and staff have provided underground utility solutions for Arizona electrical contractors, general contractors, plumbing/mechanical contractors, residential developers & builders, and renewable contractors since 2004.

Hours of operation will be limited to 7:00 AM to 5:00 PM daily. Premier Underground is closed on Saturdays and Sundays.

Basis For Approving This Conditional Use Permit

Premier Underground is well known for its professional and highly visible presence throughout the Valley . They operate several trucks and other construction equipment related to their business operations and their trucks can be seen all over the valley. They have made a conscience effort to keep their vehicles in a clean, well maintained, and presentable manner.

The basis for granting this Conditional Use Permit is that the refueling station is an integral and necessary part of Premier Underground's daily operations and uninterrupted use of their equipment. Failing to allow the on-site use of this vital service, Premier Underground will have no other alternative but to use nearby off-site retail fueling facilities. This will create several different challenges for both Premier Underground and the City of Avondale.

1) Logistical concerns by disrupting the sequence of how trucks are prepared for daily service (i.e. fueling), and equipment maintenance followed by the loading of materials and equipment on the trucks, and the flow of trucks in and out of the site.

2) Added truck traffic will most likely result from Premier trucks having to enter and exit the site multiple times daily to 1) exit the site to fuel their trucks off-site to other nearby retail locations within City of Avondale, return to Premier Underground's facilities to load and once again, exit the site.

3) The use of on-site fueling and washing would greatly diminish this added and unnecessary traffic by permitting only one daily fueling and washing, exiting the site during morning hours, and returning once again in the afternoon.

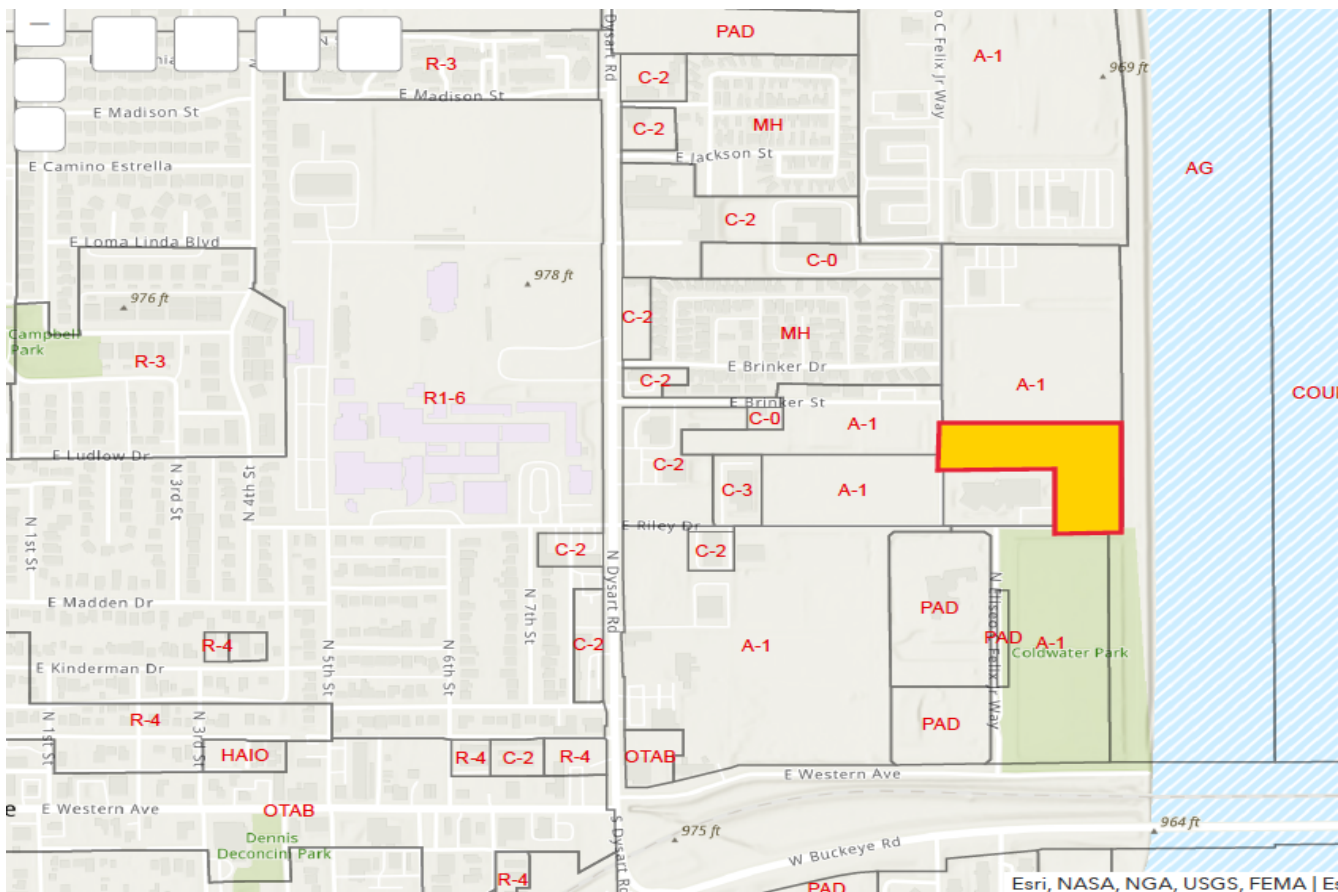
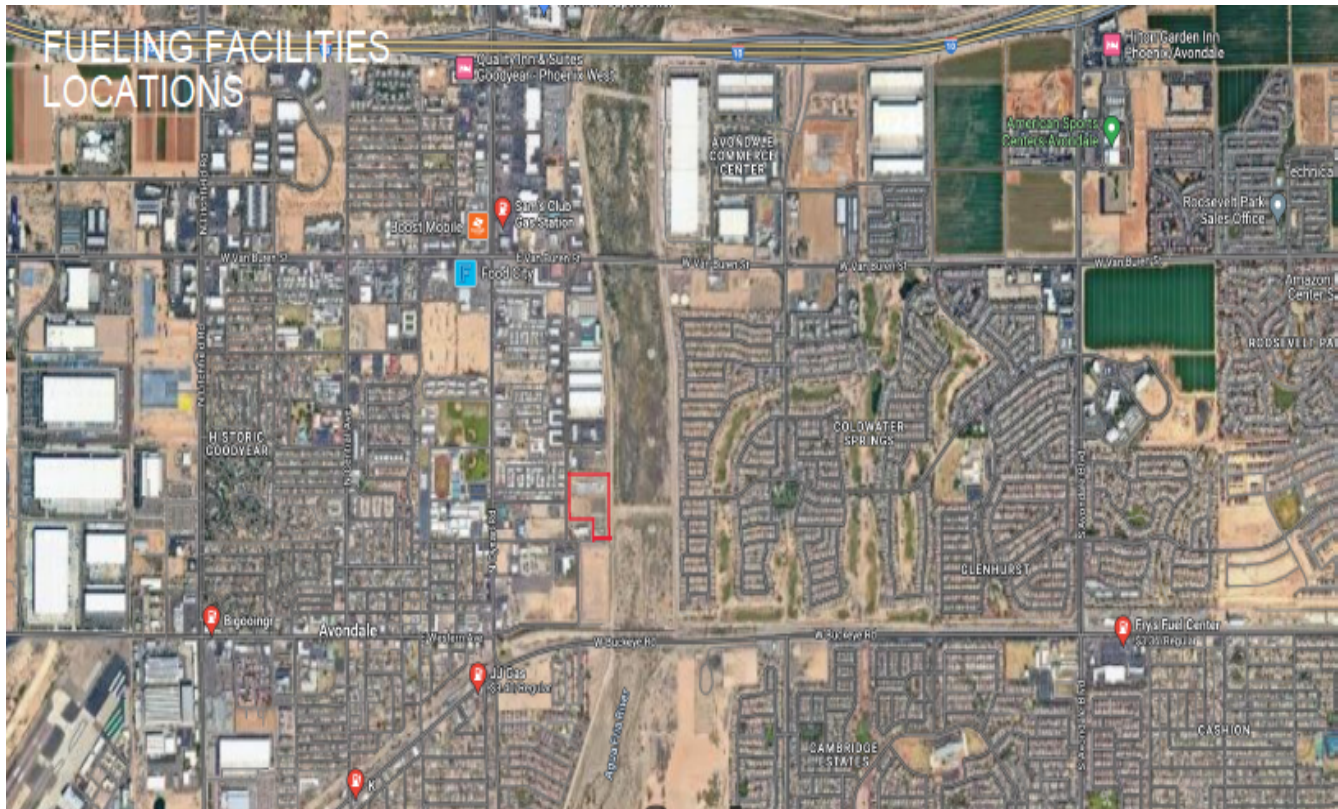
4) Premier Underground sought out property in the City of Avondale specifically for its close and easy access to the I-10 freeway, and other major arterial roads leading to other valley cities. The site was already properly zoned A-1 and the size and configuration of the property fit Premier Underground's needs perfectly. They have invested a great deal of money to purchase the property and will add a significant number of employees and visitors to their location and in turn, increase sales tax revenue by frequenting local restaurants and other neighborhood support centers for goods and services.

5) When considering the site, Premier Underground ownership did not anticipate the added cost and logistical conflicts caused using off-site retail facilities to support their operations. As mentioned above, this will impose a significant disruption to their daily operations, logistics, and a financial burden on the company.

Other Relevant Facts That Support This CUP:

- The fueling facility will be used specifically by and for Premier Underground and will not be operated for any other commercial uses. The fueling facility is essential and necessary parts of their company.
- We believe the proposed use is 1) consistent with the land-use designation set forth in the Avondale general plan, 2) will follow the city's general guidelines and objectives for development of the area, as set forth in the general plan and 3) will be consistent with the desired character of the surrounding zoning and uses.
- The proposed on-site facilities will be 1) compatible with other adjacent and nearby land uses and 2) will not be detrimental to persons residing or working in the area, adjacent property, the neighborhood, or the public welfare in general. As noted above, the entire site will be enclosed and screened on all sides of the property with little to no visibility from the surrounding properties or streets. These two features are located at the east center half of the property and will not be visible from any public right of way. The entire site will be screened and secured with a 7' high CMU wall on the north, south and east boundaries of the property. Parking along the N. Eliseo Felix Jr. Way frontage will be screened by a minimum 3' high CMU wall.
- The site is adequate in size and shape to accommodate the proposed use, allowing for safe on-site circulation, and will meet all required development standards for Industrial Zoning including, but not limited to, setbacks, parking, screening, and landscaping including the proposed fueling facility. The site has been designed to meet these specific qualifications for approval.
- There are no known or intended adverse effects that we have not addressed in the proposed site plan.
- All requirements for setbacks, open space, screening, parking, lighting, and landscaping associated with the Dedication of public rights-of-way, street improvements and the control of access points or on-site circulation to mitigate traffic impacts will not be modified as a result of the proposed truck wash or fueling facilities. Approval of the CUP will reduce the daily traffic count in and out of the Premier site.

- There are several businesses that are currently operating other fueling facilities within a 1-mile radius of the Premier Underground site that support this use. Refer to the Google Map Exhibits shown below. These locations do not show other fueling facilities or car/truck washing equipment that other businesses maintain on site for their commercial use.



We trust that we have addressed all the relevant zoning regulations and requirements to support our request for this Conditional Use Permit.

Should you have any questions or concerns regarding this request, please do not hesitate to contact us.

Respectfully Submitted,

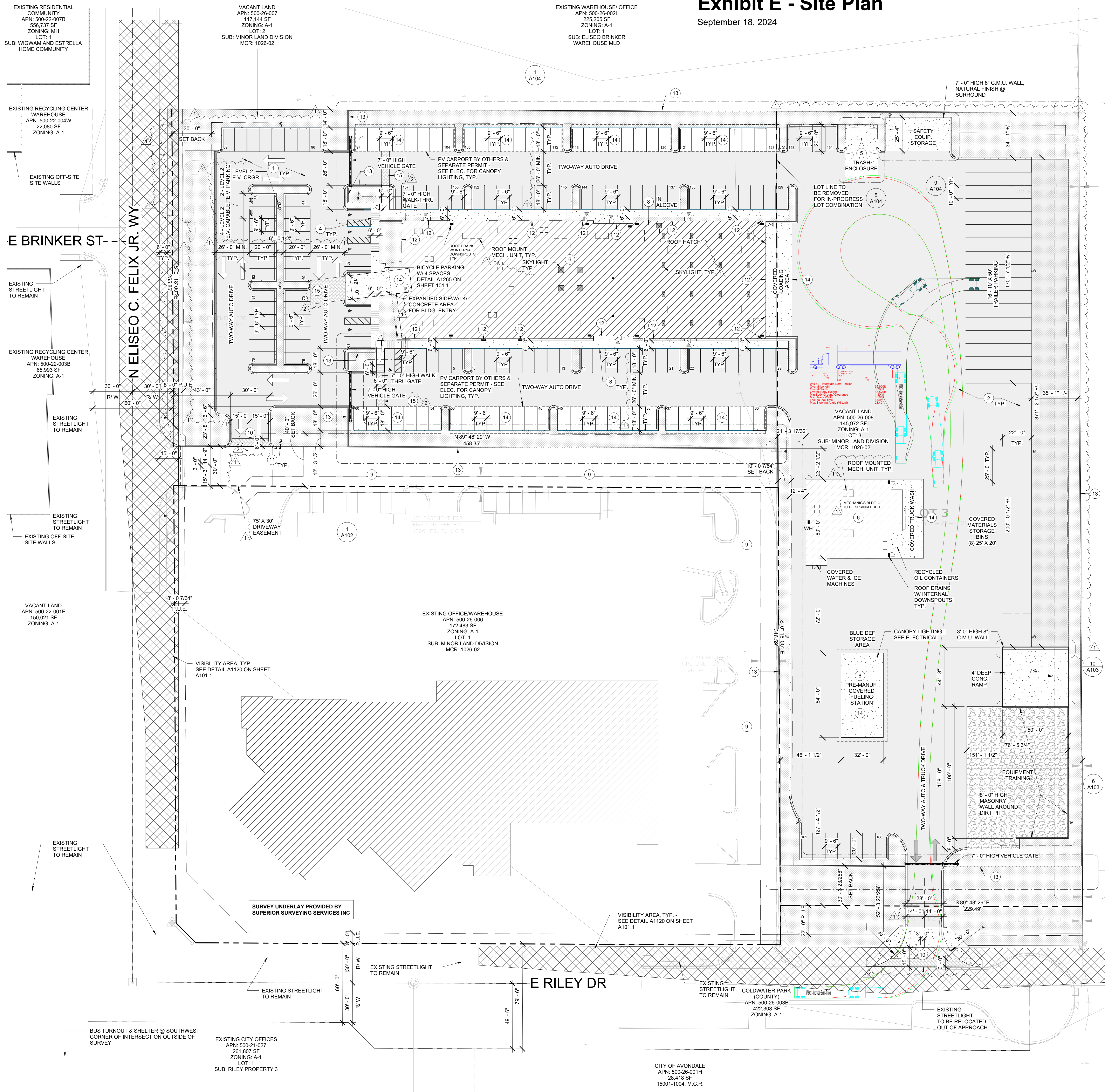
Realty Asset Advisors SW, Inc.



Daniel Fox, President, and Architect of Record
for and on behalf of Premier Underground

Exhibit E - Site Plan

September 18, 2024



SITE GENERAL NOTES

- A. COMBUSTIBLE MATERIALS MAY NOT BE BROUGHT ON SITE UNTIL FIRE DEPARTMENT ACCESS AND WATER SUPPLY REQUIREMENTS ARE IN PLACE.
- B. ALL NEW AND EXISTING UTILITIES WITHIN OR CONTIGUOUS TO THIS SITE TO BE PLACED UNDERGROUND.
- C. ALL UTILITY BOXES, VAULTS, AND BACKFLOW PREVENTION DEVICES SHALL BE SCREENED BY MASONRY WALL OR ROUND-TOPPED WIRE MESH ENCLOSURE FROM PUBLIC. ALL ITEMS ARE TO BE PAINTED TO MATCH THE ADJACENT WALL.
- D. MEET ALL SIGHT DISTANCE REQUIREMENTS FOR DRIVEWAYS AND STREETS.
- E. ALL ON-SITE LIGHTING SHALL COMPLY W/ APPLICABLE ORDINANCES.
- F. MAXIMUM NOISE LEVEL AT PROPERTY LINE TO BE NO MORE THAN 55 DECIBELS (NORMAL SPEAKING VOICE).
- G. LANDSCAPING OF ALL PUBLIC RIGHTS-OF-WAY ADJACENT TO THE PROJECT IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
- H. ALL EXIT DISCHARGE AREAS TO PUBLIC RIGHT OF WAY ROUTES SHALL CONTAIN SLIP-RESISTANT SURFACES PER IBC 1003.4.

AREAS

1ST FLOOR (ENCLOSED GROSS): 24,488 SF
1ST FLOOR OFFICE (GROSS): 15,492 SF
1ST FLOOR WAREHOUSE/STORAGE (GROSS): 8,993 SF
1ST FLOOR COVERED AREA OUTSIDE WAREHOUSE: 1,726 SF
2ND FLOOR (ENCLOSED GROSS): 24,488 SF
2ND FLOOR OFFICE (GROSS): 14,983 SF
2ND FLOOR PATIO (GROSS): 1,740 SF
2ND FLOOR PATIO TRELLIS (GROSS): 740 SF
MAIN BUILDING (ENCLOSED GROSS): 39,478 SF
MECHANICAL BAYS AND TRUCK WASH (ENCLOSED GROSS): 4,262 SF
MECHANICAL BAYS AND TRUCK WASH (COVERED): 1,185 SF
COVERED FUEL STATION (GROSS): 2,048 SF

SITE INFORMATION

BUILDING DEPARTMENT: AVONDALE, AZ
COUNTY: MARICOPA
APN: 500-26-007 & 500-26-008
GROSS LOT AREA: 6.04 ACRES (263,116 SF)
NET LOT AREA: 5.07 ACRES (220,967 SF)
NEW BUILDING COVERAGE: 5,435 SF (PRIMARY) (MECHANICS) (FUEL CANOPY) (TOTAL BUILDING)
FRONT YARD: 5,435 SF
SIDE YARD: 2,048 SF
REAR YARD: 31,971 SF
12.15% LOT COVERAGE (N/A'S MAX. COVERAGE)
NEW HARDSCAPE AREA: 152,076 SF
SITE CONCRETE (NON-WALK): 9,535 SF
CONCRETE WALKS: 6,083 SF
TOTAL: 167,894 SF
NEW LANDSCAPE AREA: 71,541 SF
ZONING: A-1, GENERAL INDUSTRIAL
DESCRIPTION: NEW OFFICE/WAREHOUSE BUILDING ON A VACANT PARCEL
YEAR BUILT: N/A, VACANT
LEGAL DESCRIPTION: SEE RECORDED DEED FOR INFORMATION
ZONING REQUIREMENTS: MAX. HEIGHT: 45'
MAX. BUILDING COVERAGE: N/A
MIN. SET BACKS: FRONT YARD: 30'
SIDE YARD: 10'
REAR YARD: 10'
STREETSIDE: 30'
ADJ. TO RESIDENTIAL: 75'
SITE INFORMATION ACQUIRED THROUGH THE COUNTY, PLAT MAPS, SURVEYS, AND OWNER PROVIDED DOCUMENTATION & INFORMATION

BUILDING INFORMATION

OCC./USE GROUP: B & S-1 NON-SEPARATED
CONSTRUCTION TYPE: II-B, SPRINKLERED
BUILDING HEIGHT: 37' - 2" +/-
NUMBER OF STORIES: TWO (OFFICE) ONE (WAREHOUSE)
SPRINKLERS PROVIDED: YES, DEFERRED
FIRE ALARMS: YES, DEFERRED
EMERGENCY LIGHTS: YES
TOTAL GROSS FLOOR AREA: 37,571 SF
NET FLOOR AREA: 25,393 SF
B - BUSINESS: 8,948 SF
S-1 - STORAGE: 34,341 SF
TOTAL: 34,341 SF
TOTAL NET FLOOR AREA: 34,341 SF
TOTAL WALL, ETC. AREA: 3,230 SF
ALLOWABLE HEIGHT (TABLE 504.3): 85'
ALLOWABLE STORIES ABOVE GRADE (TABLE 504.4): B: 6 STORIES S-1: 5 STORIES
ALLOWABLE AREA, S1 (TABLE 506.2): B: 150,000 SF S-1: 104,000 SF
EXITS REQUIRED: 4
EXITS PROVIDED: 6
ACCESSIBLE ENTRANCES: 100% PROVIDED > 60%
PARKING REQUIRED: GENERAL/ PROFESSIONAL OFFICES UP TO 50,000 SF: 1/250 SF, MIN. 10% COVERED
WAREHOUSE/ STORAGE: 51 MIN., 6 MIN. COVERED
BICYCLE PARKING: 3
PARKING PROVIDED: 168 SPACES
COVERED PARKING PROVIDED: 64 SPACES
ACCESSIBLE SPACES PROVIDED: 6 SPACES
EV CAPABLE PARKING REQUIRED: 3% OF TOTAL PARKING SPACES
EV CAPABLE PARKING PROVIDED: 2 LEVEL 2 E.V. SPACES & 4 LEVEL 2 E.V. CAPABLE SPACES
BICYCLE PARKING PROVIDED: 4

SITE PLAN KEYNOTES

- NEW ASPHALT PAVING - SEE DETAILS ON SHEET A101
- NEW MILLED ASPHALT PAVING
- NEW CONCRETE SIDEWALK/CURB - SLIP RESISTANT @ EXIT DISCHARGE ROUTE TO PUBLIC WAY
- ADA RAMP - SEE 5 / A101
- NEW STRUCTURE
- NEW DECOMPOSED GRANITE - SEE LANDSCAPE PLAN
- NEW ELECTRICAL SERVICE ENTRANCE
- EXISTING NEIGHBOR PARKING
- NEW ENTRANCE & DECORATIVE PAVEMENT, PAVERS, OR STAMPED CONCRETE ACROSS ENTRANCE. ADA COMPLIANT - SEE DETAILS ON A101
- 16" HIGH FULLY SHIELDED LED SITE/ PARKING LIGHTING ON CONCRETE COLUMN - SEE 4 / A101 & ELECTRICAL
- FULLY SHIELDED WALL LIGHTING, ABOVE - 8' - 0" A.F.F. - SEE ELECTRICAL
- 7" HIGH MASONRY BLOCK WALL W/ CONC. CAP, NATURAL FINISH - SEE SHEET A101 & STRUCTURAL
- FULLY SHIELDED CANOPY LIGHTING - SEE ELECTRICAL
- DECORATIVE PAVEMENT, PAVERS, OR STAMPED CONCRETE ACROSS ENTRANCE @ PEDESTRIAN CROSSINGS. ADA COMPLIANT - SEE DETAILS ON A101

COA SITE NOTES

- A. ALL UTILITY LINES LESS THAN 60 KV SHALL BE UNDERGROUNDED WITH THE FIRST PHASE OF DEVELOPMENT.
- B. ALL GROUND-MOUNTED EQUIPMENT SHALL BE SCREENED/CONCEALED FROM STREET VIEW.
- C. PLANTS LOCATED WITHIN REQUIRED AASHTO SIGHT VISIBILITY TRIANGLES SHALL BE PRUNED REGULARLY TO PERMIT UNOBSTRUCTED VISION. PLANT MATERIALS SHALL BE MAINTAINED TO BE LOWER THAN 2' (SHRUBS) OR TALLER THAN 7' (BOTTOM OF TREE CANOPY).
- D. FUTURE DEVELOPMENT PADS WITHIN MASTER PLANNED DEVELOPMENTS SHALL BE COVERED WITH A MINIMUM OF 2" THICK DECOMPOSED GRANITE FOR DUST CONTROL AT TIME OF DEVELOPMENT.
- E. ALL DEVELOPMENTS SHALL BE MAINTAINED IN CONFORMANCE WITH THE APPROVED SITE PLAN AND LANDSCAPE PLAN. ANY CHANGES THERETO SHALL REQUIRE APPROVAL OF THE CITY OF AVONDALE.
- F. THIS PROJECT IS SUBJECT TO THE CURRENT AVONDALE GENERAL ENGINEERING REQUIREMENTS (AND MAG SUPPLEMENTAL REGULATIONS), COMMERCIAL/INDUSTRIAL/MULTI-FAMILY DESIGN MANUAL, ZONING ORDINANCE, GENERAL PLAN, AVONDALE STREET TREE MASTER PLAN, AND ANY APPLICABLE SPECIFIC PLANS.

REALTY ASSET ADVISORS

REALTY ASSET ADVISORS
15545 N. SCOTTSDALE RD.
SCOTTSDALE, AZ 85254
PH: 402.709.2121

3RD PLANNING SUBMITTAL
07.10.2024

NO.	DESCRIPTION	DATE
1	CITY PLANNING REVIEW REVISIONS	2024.03.30
2	2ND CITY PLANNING REVIEW REVISIONS	2024.07.10

NEW DESIGN-BUILD COMMERCIAL BUILDING FOR:
X ELISEO C FELIX JR WAY, AVONDALE, AZ 85323
PREMIER UNDERGROUND

PROJECT NUMBER
2023.04.24

DATE
2023.04.24

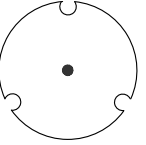
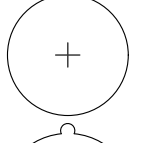
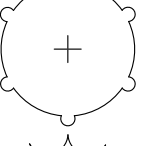
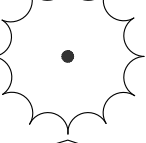
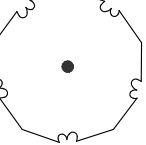
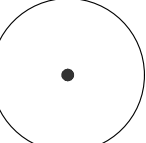
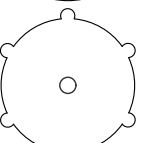
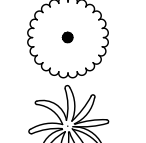
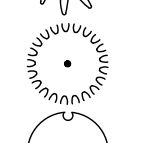
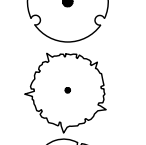
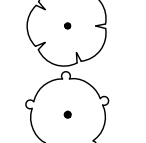
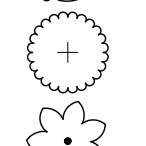
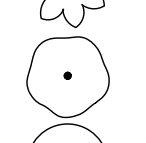
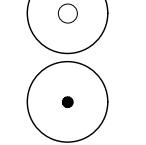
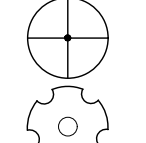
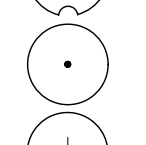
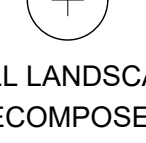
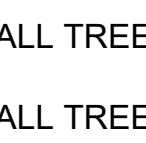
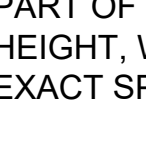
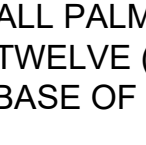
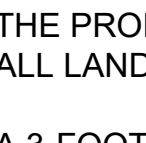
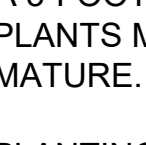
SITE PLAN
A100

REVIEWED BY: SM DATE: _____

DRAFTED BY: STAFF DATE: _____

CHECKED BY: SM DATE: _____

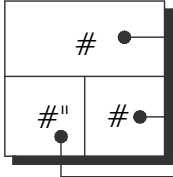
Plant Schedule

SYMBOL	BOTANICAL / COMMON NAME	SIZE	QTY
TREES			
	Acacia aneura / Mulga	24" Box	23
	Chilopsis linearis / Desert Willow	24"-Box	13
	Fraxinus velutina `Fan-Tex` / Fan-Tex Velvet Ash	24"-Box	16
	Pistacia lentiscus / Red Push	24"-Box	14
	Quercus shumardii / Shumard Red Oak	24"-Box	17
	Quercus virginiana / Southern Live Oak	36"-Box	5
	Ulmus parvifolia / Chinese Evergreen Elm	24"-Box	3
SHRUBS			
	Acacia redolens `Desert Carpet` / Desert Carpet Bank Catclaw	1-Gal	33
	Agave americana `Variegata` / Variegated Century Plant	5-Gal	25
	Agave parryi / Parry`s Agave	5-Gal	18
	Bougainvillea x `Barbara Karst` / Barbara Karst Bougainvillea Trellis	5-Gal	1
	Calliandra eriophylla / Fairy Duster	5-Gal	54
	Callistemon viminalis `Little John` / Little John Weeping Bottlebrush	5-Gal	67
	Dodonaea viscosa `Green` / Green Hopseed Bush	5-Gal	68
	Euphorbia rigida / Yellow Spurge	5-Gal	73
	Hesperaloe funifera / Giant Hesperaloe	5-Gal	19
	Lantana camara `Gold Mound` / Gold Mound Lantana	5-Gal	80
	Lantana montevidensis / Trailing Lantana	1-Gal	35
	Leucophyllum candidum / Violet Silverleaf	5-Gal	87
	Leucophyllum frutescens / Green Cloud Sage	5-Gal	57
	Rosmarinus officinalis `Prostratus` / Dwarf Rosemary	1-Gal	74
	Ruellia brittoniana `Katie` / Dwarf Blue Bells	5-Gal	62
	Tecoma stans `Bells of Fire` / Bells of Fire Tecoma	5-Gal	82
ALL LANDSCAPE SURFACE AREAS SHALL BE FINISHED WITH DECOMPOSED GRANITE AT 2"-3" COVERAGE. DECOMPOSED GRANITE TO BE MADISON GOLD ½" SCREEN OR SIMILAR. TOTAL AREA IS 63,904 SQ.FT.			

City of Avondale Notes

1. ALL TREES REQUIRED ON SITE SHALL HAVE A MINIMUM BOX SIZE OF 24 INCHES.
2. ALL TREES SHALL BE SPECIFIED IN THE SCHEDULE OF PLANT MATERIAL (REQUIRED AS PART OF THE PRELIMINARY LANDSCAPE PLAN AND THE FINAL LANDSCAPE PLAN) BY HEIGHT, WIDTH AND BY ANY OTHER RELEVANT INFORMATION WHICH DEFINES THE EXACT SPECIFICATIONS OF THE PLANT MATERIAL BEING PROPOSED.
3. ALL PALM TREES (FAN PALMS, DATE PALMS, AND QUEEN PALMS) SHALL HAVE A MINIMUM TWELVE (12) FOOT TRUNK HEIGHT MEASURED FROM THE BASE OF THE TRUNK TO THE BASE OF THE FRONDS.
4. THE PROPERTY OWNER AND/OR LESSEE SHALL BE RESPONSIBLE TO INSTALL/MAINTAIN ALL LANDSCAPING WITHIN THE RIGHT-OF-WAY.
5. A 3-FOOT CLEAR SPACE IS REQUIRED AROUND ALL FIRE SUPPRESSION EQUIPMENT. NO PLANTS MAY BE INSTALLED THAT WILL ENCROACH UPON THIS CLEAR SPACE WHEN MATURE.
6. PLANTINGS WITHIN ANY SIGHT VISIBILITY EASEMENT SHALL BE MAINTAINED SO THAT NO LIMBS HANG LOWER THAN SEVEN (7) FEET AND SHRUBS OR OTHER PLANTS PLANTED WITHIN ANY SIGHT VISIBILITY EASEMENT SHALL BE NO TALLER THAN TWO (2) FEET AT FULL GROWTH.
7. THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS OR OMISSIONS.

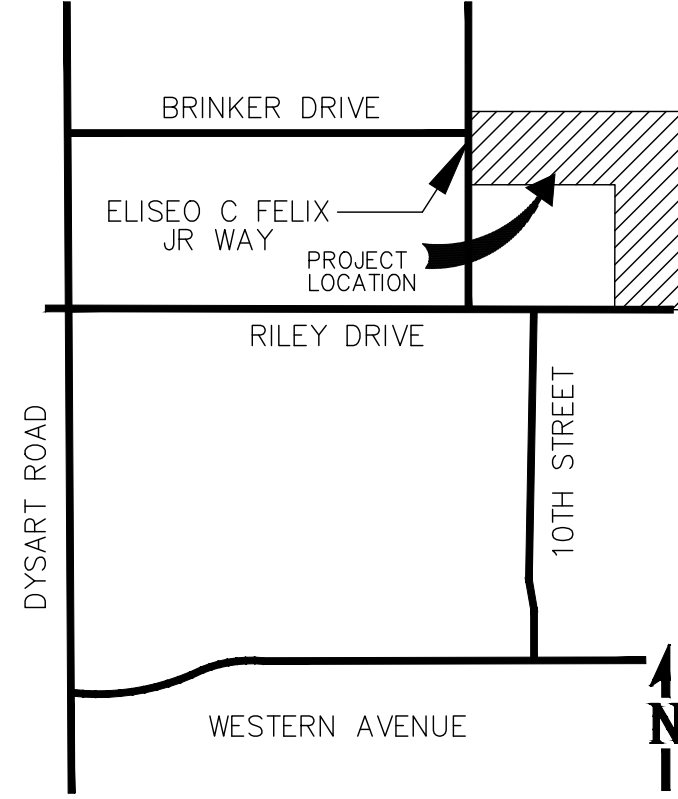
Irrigation Schedule

SYMBOL	MANUFACTURER /MODEL /DESCRIPTION	QTY
	Hunter ICZ-101-25 1" Drip Control Zone Kit. 1in. ICV Globe Valve with 1in. HY100 filter system. Pressure Regulation: 25psi. Flow Range: 2 GPM to 20 GPM. 150 mesh stainless steel screen.	18
	Rain Bird XBT-6 Six-Outlet, Pressure Compensating, Drip Emitter. Flow rates of 0.5 GPH=blue, 1.0 GPH=black, and 2.0 GPH=red, at each emitter outlet. Comes with 1/2in. FPT Inlet x Barb Outlet.	938
SYMBOL MANUFACTURER /MODEL /DESCRIPTION QTY		
	Hunter HQ-3RC 3/4" Quick coupler valve, yellow rubber cover, red brass and stainless steel, with 3/4in. NPT inlet, 1-piece body.	11
	Febco 825YA 1" See Detail I11 Sheet #7 Reduced Pressure Backflow Preventer	1
	Hunter A2C-150D-M 150-Station decoder controller with one (1) A2C-D75 module in an outdoor metal wall mount enclosure.	1
	Water Meter 1-1/2"	1
Irrigation Lateral Line: PVC Class 200 SDR 21 1/2"		9,140 l.f.
Irrigation Lateral Line: PVC Class 200 SDR 21 3/4"		1,346 l.f.
Irrigation Lateral Line: PVC Class 200 SDR 21 1"		192.0 l.f.
Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/4"		177.9 l.f.
Irrigation Mainline: PVC Schedule 40 1/2"		10.8 l.f.
Irrigation Mainline: PVC Schedule 40 3/4"		8.4 l.f.
Irrigation Mainline: PVC Schedule 40 1"		32.2 l.f.
Irrigation Mainline: PVC Schedule 40 1 1/4"		550.0 l.f.
Irrigation Mainline: PVC Schedule 40 1 1/2"		100.6 l.f.
Irrigation Mainline: PVC Schedule 40 2"		611.3 l.f.
Irrigation Mainline: PVC Schedule 40 2 1/2"		72.7 l.f.
Irrigation Mainline: PVC Schedule 40 3"		787.9 l.f.
Pipe Sleeve: PVC Schedule 40		827.6 l.f.
Valve Callout		
	# Valve Number	
	# Valve Flow	
	# Valve Size	

Irrigation Notes

1. ALL MATERIAL USED SHALL BE INSTALLED AS PER PLAN AND AS PER MANUFACTURER'S SPECIFICATIONS. ALL DEVIATIONS FROM DRAWINGS OR MATERIALS USED SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT.
2. LOCATE VALVE BOXES IN SHRUB BEDS. ALL PEA GRAVEL IN VALVE BOXES TO BE CLEANED FORM TOP OF VALVE SO THAT THE VALVE IS COMPLETELY VISIBLE. LIP OF VALVE IS TO BE FREE OF DEBRIS.
3. SYSTEM HAS BEEN DESIGNED FOR A STATIC WATER PRESSURE OF 45 PSI. CONTRACTOR TO FIELD VERIFY PRESSURE PRIOR TO ORDERING MATERIAL OR STARTING ANY IRRIGATION. INSTALLATION AND NOTIFY LANDSCAPE ARCHITECT OF ANY DIFFERENCE FROM STATED PRESSURE. IF CONTRACTOR FAILS TO NOTIFY LANDSCAPE ARCHITECT ,CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ANY SYSTEM ALTERATIONS.
4. WATER MAINS ARE EXISTING. SEE PLANS FOR LOCATIONS. WATER METER COST BY DEVELOPER.
5. COORDINATE INSTALLATION OF SLEEVING WITH INSTALLATION OF ASPHALT CONCRETE PAVING. IRRIGATION CONTRACTOR IS ALSO RESPONSIBLE FOR IDENTIFYING SLEEVE LOCATIONS, VERIFYING SLEEVE SIZES AND COORDINATING SLEEVE INSTALLATIONS WITH ELECTRICAL CONTRACTOR IN ALL HARDSCAPE AREAS. INSTALL SLEEVING AS PER SIZING SCHEDULE BELOW.
6. IRRIGATION IS DIAGRAMTIC ONLY. FOR GRAPHIC CLARITY NO SHRUB EMITTERS HAVE BEEN SHOWN, VERIFY EMITTER COUNT WITH EMITTER DETAIL AND PLANT COUNTS.
7. INSTALL ALL IRRIGATION COMPONENTS IN LANDSCAPE AREAS.
8. IRRIGATION IS NOT TO BE INSTALLED IN ROADWAYS, HARDSCAPE OR HOME SITE LOTS.
9. ADJUST IRRIGATION LINE TO AVOID ANY AND ALL UTILITIES.
10. LOCATE EMITTERS ON UPHILL SIDE OF PLANTS IN SLOPED PLANTING AREAS. INSTALL DRIP EMITTERS PER IRRIGATION DETAILS.

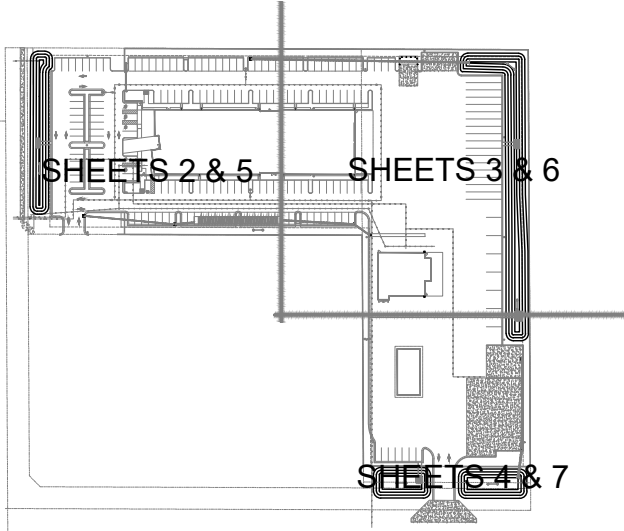
Location Map:



Key Map

Exhibit F - Landscape Plans

September 18, 2024



Project Team:

OWNER
EXECUTIVE WEST PROPERITES LLC
20890 W CORA VISTA
MARICOPA, ARIZONA, 85396
CONTACT: MICHAEL P FAITH ESQ

LANDSCAPE ARCHITECT
smART DEVELOPMENT, LLC
3419 N. KACHINA LANE
SCOTTSDALE, ARIZONA 85251
CONTACT: SONNY MORIC
P. 480.516.8845
E. SMORIC@SMART-DEVELOPMENT.COM

Sheet Index:

SHEET	SHEET DESCRIPTION	SHEET NO.
LA-1.0	LANDSCAPE COVER SHEET	1
LA-2.0 to LA-2.2	LANDSCAPE PLANTING PLANS	2-4
LA-3.0 to LA-3.2	LANDSCAPE IRRIGATION PLANS	5-7
LA-4.0 to LA-4.1	LANDSCAPE & IRRIGATION DETAILS	8-9
LA-5.0 to LA-5.1	LANDSCAPE SPECIFICATIONS SHEET	10-11

Landscape Site Data:

ROW Landscape	68,740 Sq.Ft.		
On-site Landscape	2,800 Sq.Ft.		
Total Landscape	71,540 Sq.Ft.		
		REQUIRED	PROVIDED
Trees (ROW / Street frontage)	17 EA	17 EA	
1 tree/25 l.f. of frontage			
Shrubs (ROW / Street frontage)	170 EA	170 EA	

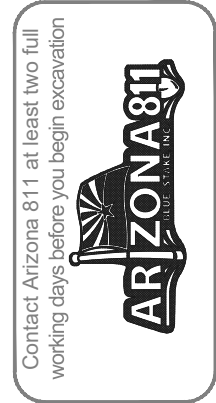
General Notes:

1. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK PER THE PLANS.
2. THE CONTRACTOR SHALL FOLLOW THE IMPROVEMENT PLANS AS CLOSELY AS POSSIBLE. ANY DISCREPANCY BETWEEN THE PLANS AND THE FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.
3. SIGHT VISIBILITY TRIANGLE SHALL BE CLEAR OF LANDSCAPING AND OTHER VISIBILITY OBSTRUCTIONS WITH A HEIGHT GREATER THAN 2 FEET. TREES WITHIN THE SIGHT VISIBILITY TRIANGLE SHALL HAVE A CANOPY THAT BEGINS AT 7 FEET IN HEIGHT UPON INSTALLATION.
4. PLANTING SEASON: WITHIN THE OVERALL PROJECT PHASING AND COMPLETION REQUIREMENTS, THE SCHEDULE FOR PLANTING OF TREES AND SHRUBS SHALL BE AT THE DISCRETION OF THE CONTRACTOR. PLANTING DURING EXTREMELY COLD, HOT, OR WINDY PERIODS SHALL BE PERFORMED AT THE CONTRACTOR'S RISK. PLANTS WHICH ARE DAMAGED OR DIE PRIOR TO FINAL ACCEPTANCE AS A RESULT OF EXTREME WEATHER CONDITIONS OR OTHER ACTS OF GOD SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. PLANT SIZE, LOCATION AND SPACING:

5.1. TREES AND SHRUBS ARE TO BE LOCATED SO THAT, AT MATURITY, THEY DO NOT INTERFERE WITH EXISTING ONSITE OR OFF-SITE UTILITY SERVICE LINES OR UTILITY EASEMENTS TO AN ADJACENT PROPERTY.

5.2. ALL SHRUBS AND GROUNDCOVERS TO BE A MINIMUM OF 2' FROM BACK OF SIDEWALK.
6. PLANT PLACEMENT TO BE FIELD ADJUSTED AS NEEDED TO AVOID EXISTING/PROPOSED UTILITIES, AND OTHER FIELD CONDITIONS. CONTACT THE OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS.
7. WRITTEN DIMENSIONS WILL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
8. THE CONTRACTOR SHALL TAKE EXTREME CARE WHILE WORKING WITHIN THE PROJECT AREA AS TO NOT DISTURB ANY EXISTING UTILITIES OR STRUCTURES ON OR ADJACENT TO THE PROJECT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND OR REPAIRING ANY EXISTING STRUCTURES OR UTILITIES DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
9. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE REVEGETATED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE CITY REPRESENTATIVE PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.
10. NOTIFY THE OWNER'S REPRESENTATIVE 48 HOURS IN ADVANCE OF ANY INSPECTIONS AND / OR APPROVALS OF LANDSCAPE MATERIAL AND IRRIGATION PRODUCTS PRIOR TO INSTALLATION.
11. THE CONTRACTOR SHALL WARRANTY THE PLANT MATERIAL, IRRIGATION SYSTEM, AND WORKMANSHIP FOR A MINIMUM PERIOD OF ONE YEAR.
12. ALL TREES ARE TO BE STAKED AND GUYED PER LANDSCAPE DETAILS FOR A PERIOD OF ONE YEAR. CONTRACTOR SHALL REMOVE ALL STAKING AND GUYING, PRIOR TO THE FINAL, ONE YEAR WALK THROUGH. LOCATION OF ALL ELEMENTS ON THIS PLAN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE, PRIOR TO INSTALLATION.
13. LANDSCAPE CONTRACTOR IS TO PROVIDE LAB WITH SOIL SAMPLES FOR TESTING. AMEND SOIL PER LAB'S RECOMMENDATIONS PRIOR TO CONSTRUCTION.
14. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FINISHED GRADES.
15. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES AND BUILDINGS DURING THE FINISH GRADING PROCESS. NO PUDDLING SHALL OCCUR ALONG EDGES OF STRUCTURES AND BUILDINGS OR IN LANDSCAPE AREAS.

smART Development
Landscape Architecture
3419 N. KACHINA LANE
SCOTTSDALE, ARIZONA 85251
Office 480-516-8845

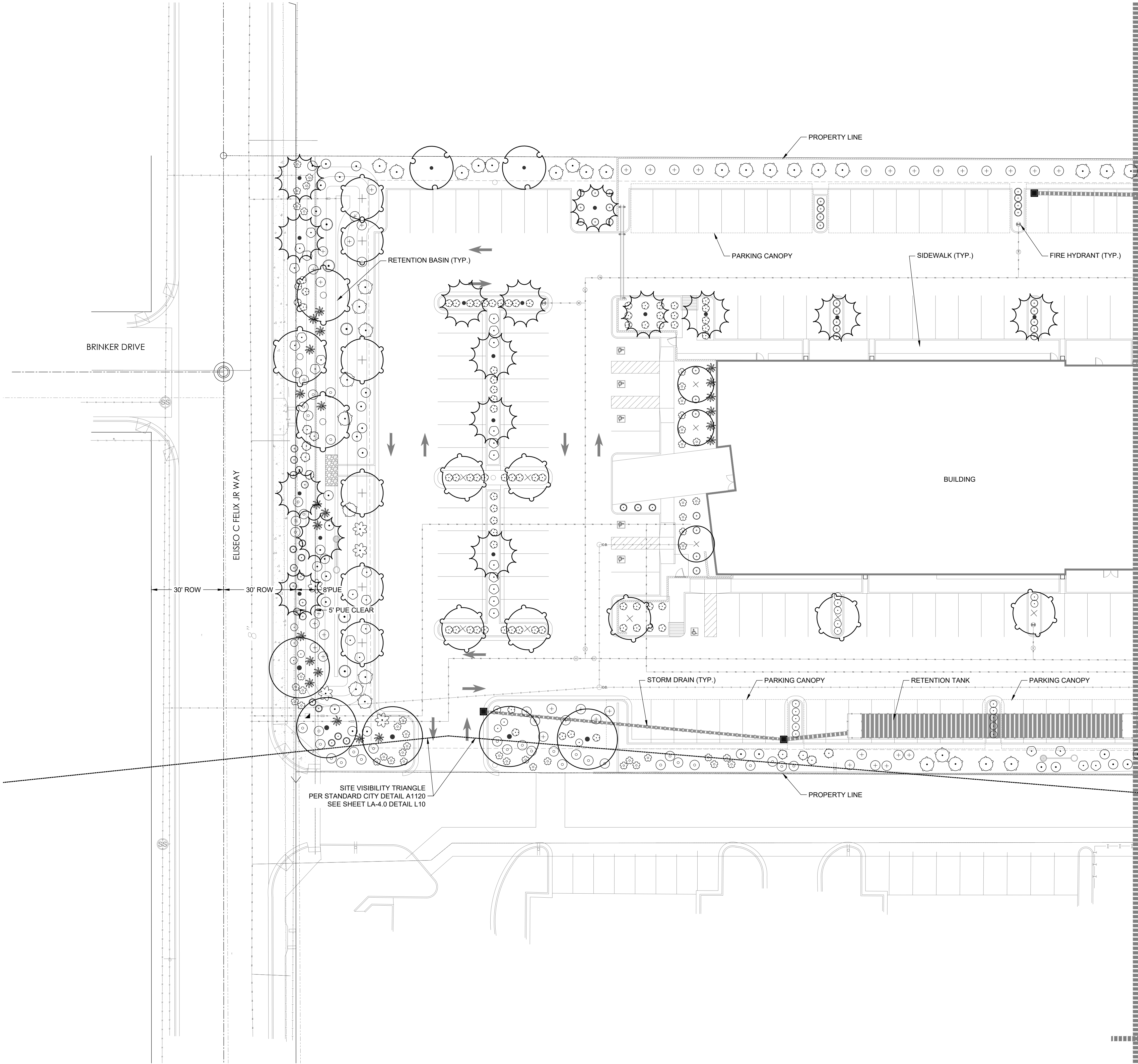


NEW OFFICE BUILDING
PREMIER UNDERGROUND
LANDSCAPE CONSTRUCTION DOCUMENTS
LANDSCAPE COVER SHEET

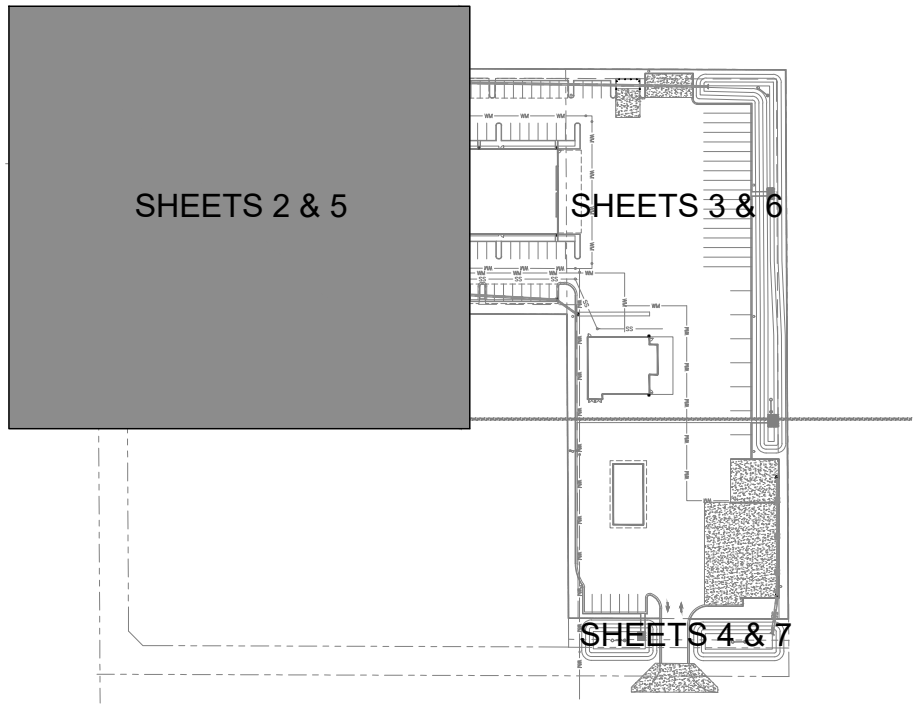


DESIGNED: SM
DRAWN: STAFF
CHECKED: SM PLOT DATE 07/06/2024
SHEET 1 OF 11
LA-1.0
PROJECT NO. SD-2404

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DRAFTED BY: SM DATE: _____
CHECKED BY: SM DATE: _____



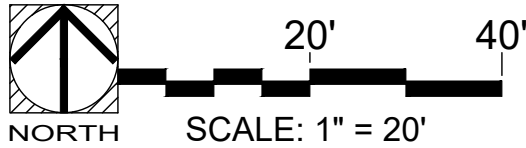
KEYMAP



PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	SIZE	QTY
TREES			
	Acacia aneura / Mulga	24" Box	23
	Chilopsis linearis / Desert Willow	24"-Box	13
	Fraxinus velutina 'Fan-Tex' / Fan-Tex Velvet Ash	24"-Box	16
	Pistacia lentiscus / Red Push	24"-Box	14
	Quercus shumardii / Shumard Red Oak	24"-Box	17
	Quercus virginiana / Southern Live Oak	36"-Box	5
	Ulmus parvifolia / Chinese Evergreen Elm	24"-Box	3
SHRUBS			
	Acacia redolens 'Desert Carpet' / Desert Carpet Bank Catclaw	1-Gal	33
	Agave americana 'Variegata' / Variegated Century Plant	5-Gal	25
	Agave parryi / Parry's Agave	5-Gal	26
	Bougainvillea x 'Barbara Karst' / Barbara Karst Bougainvillea Trellis	5-Gal	1
	Calliandra eriophylla / Fairy Duster	5-Gal	55
	Callistemon viminalis 'Little John' / Little John Weeping Bottlebrush	5-Gal	64
	Dodonaea viscosa 'Green' / Green Hopseed Bush	5-Gal	64
	Euphorbia rigida / Yellow Spurge	5-Gal	66
	Hesperaloe funifera / Giant Hesperaloe	5-Gal	19
	Lantana camara 'Gold Mound' / Gold Mound Lantana	5-Gal	67
	Lantana montevidensis / Trailing Lantana	1-Gal	67
	Leucophyllum candidum / Violet Silverleaf	5-Gal	82
	Leucophyllum frutescens / Green Cloud Sage	5-Gal	57
	Rosmarinus officinalis 'Prostratus' / Dwarf Rosemary	1-Gal	82
	Ruellia brittoniana 'Katie' / Dwarf Blue Bells	5-Gal	55
	Tecoma stans 'Bells of Fire' / Bells of Fire Tecoma	5-Gal	77

ALL LANDSCAPE SURFACE AREAS SHALL BE FINISHED WITH DECOMPOSED GRANITE AT 2"-3" COVERAGE. DECOMPOSED GRANITE TO BE MADISON GOLD 1/2" SCREEN OR SIMILAR. TOTAL AREA IS 63,904 SQ.FT.

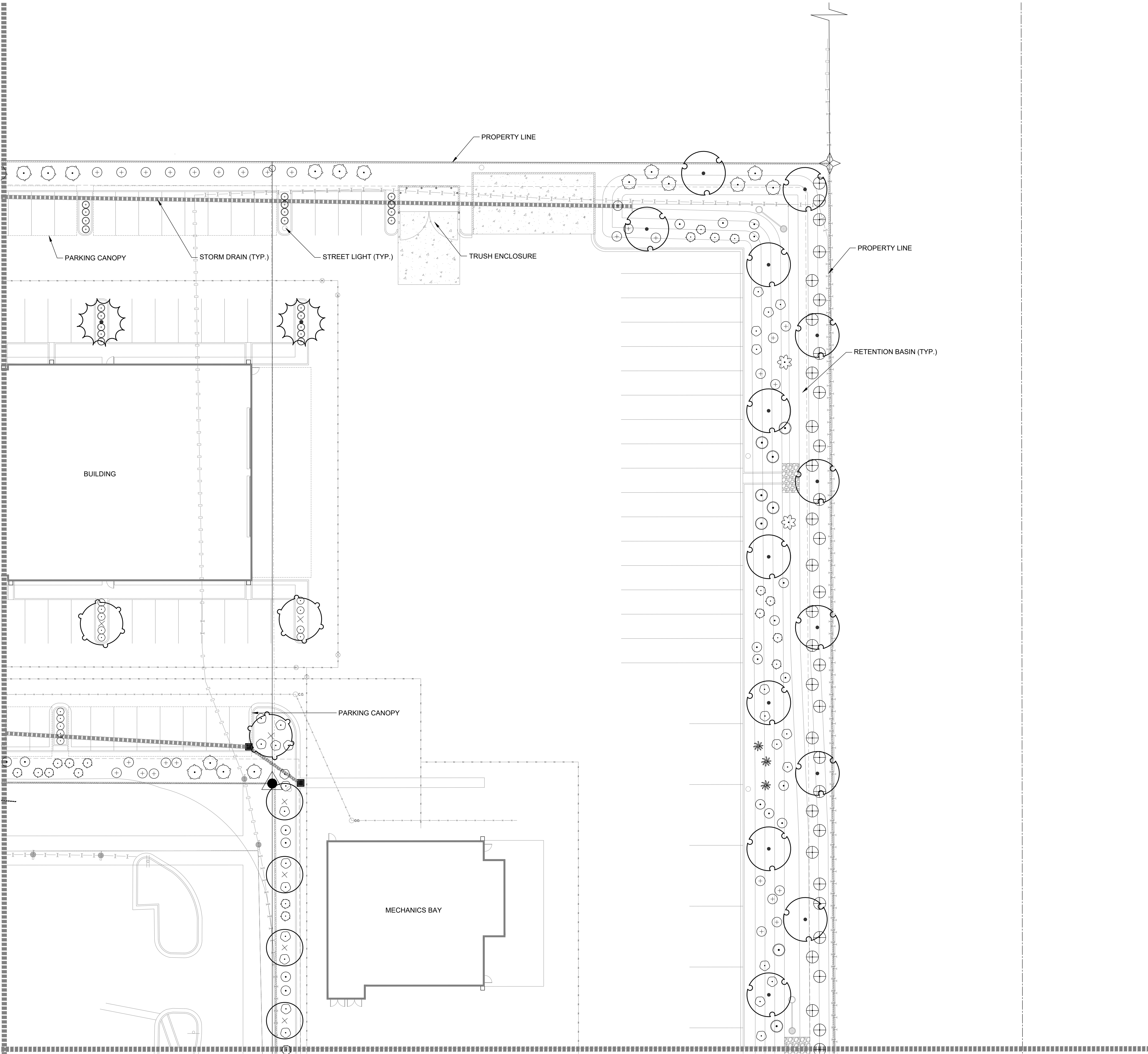


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SHEET 2 OF 11
LA-2.0

PROJECT NO. SD-2404

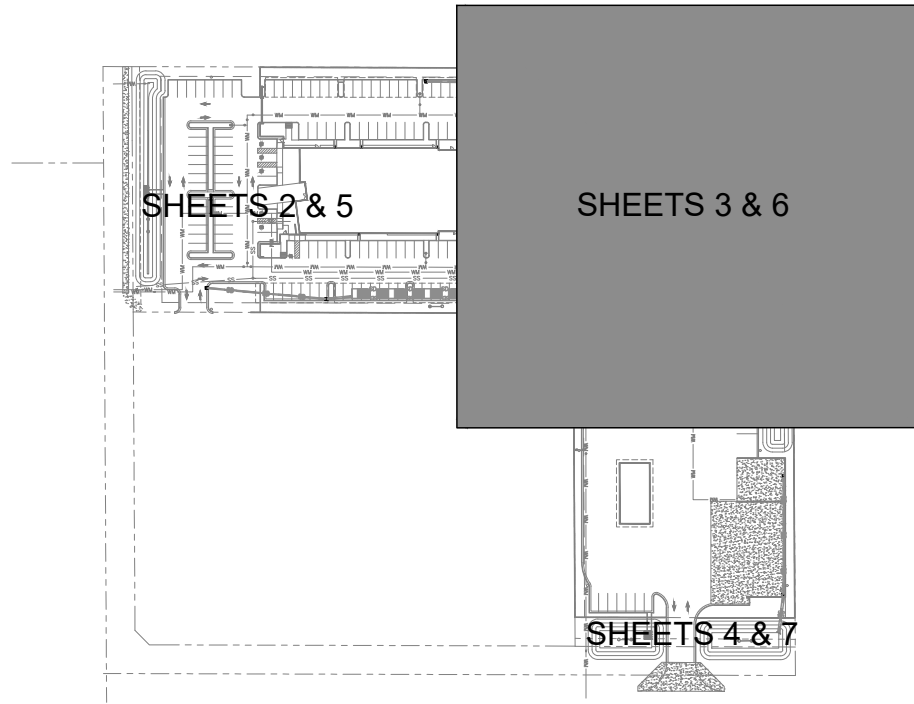
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DRAFTED BY: STAFF DATE: _____
CHECKED BY: SM DATE: _____

MATCHLINE A-A SEE SHEET LA-2.0



MATCHLINE B-B SEE SHEET LA-2.2

KEYMAP



PLANT SCHEDULE

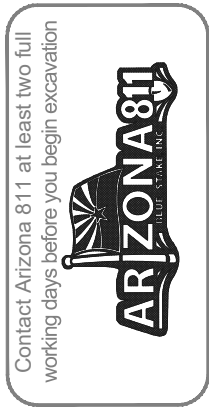
SYMBOL	BOTANICAL / COMMON NAME	SIZE	QTY
TREES			
	Acacia aneura / Mulga	24" Box	23
	Chilopsis linearis / Desert Willow	24"-Box	13
	Fraxinus velutina 'Fan-Tex' / Fan-Tex Velvet Ash	24"-Box	16
	Pistacia lentiscus / Red Push	24"-Box	14
	Quercus shumardii / Shumard Red Oak	24"-Box	17
	Quercus virginiana / Southern Live Oak	36"-Box	5
	Ulmus parvifolia / Chinese Evergreen Elm	24"-Box	3
SHRUBS			
	Acacia redolens 'Desert Carpet' / Desert Carpet Bank Catclaw	1-Gal	33
	Agave americana 'Variegata' / Variegated Century Plant	5-Gal	25
	Agave parryi / Parry's Agave	5-Gal	26
	Bougainvillea x 'Barbara Karst' / Barbara Karst Bougainvillea Trellis	5-Gal	1
	Calliandra eriophylla / Fairy Duster	5-Gal	55
	Callistemon viminalis 'Little John' / Little John Weeping Bottlebrush	5-Gal	64
	Dodonaea viscosa 'Green' / Green Hopseed Bush	5-Gal	64
	Euphorbia rigida / Yellow Spurge	5-Gal	66
	Hesperaloe funifera / Giant Hesperaloe	5-Gal	19
	Lantana camara 'Gold Mound' / Gold Mound Lantana	5-Gal	67
	Lantana montevidensis / Trailing Lantana	1-Gal	67
	Leucophyllum candidum / Violet Silverleaf	5-Gal	82
	Leucophyllum frutescens / Green Cloud Sage	5-Gal	57
	Rosmarinus officinalis 'Prostratus' / Dwarf Rosemary	1-Gal	82
	Ruellia brittoniana 'Katie' / Dwarf Blue Bells	5-Gal	55
	Tecoma stans 'Bells of Fire' / Bells of Fire Tecoma	5-Gal	77

ALL LANDSCAPE SURFACE AREAS SHALL BE FINISHED WITH DECOMPOSED GRANITE AT 2"-3" COVERAGE. DECOMPOSED GRANITE TO BE MADISON GOLD ½" SCREEN OR SIMILAR. TOTAL AREA IS 63,904 SQ.FT.



20' 40'
SCALE: 1" = 20'

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Landscape Architecture
3419 N. Kachina Lane
Scottsdale, Arizona 85251
Office 480-516-8845

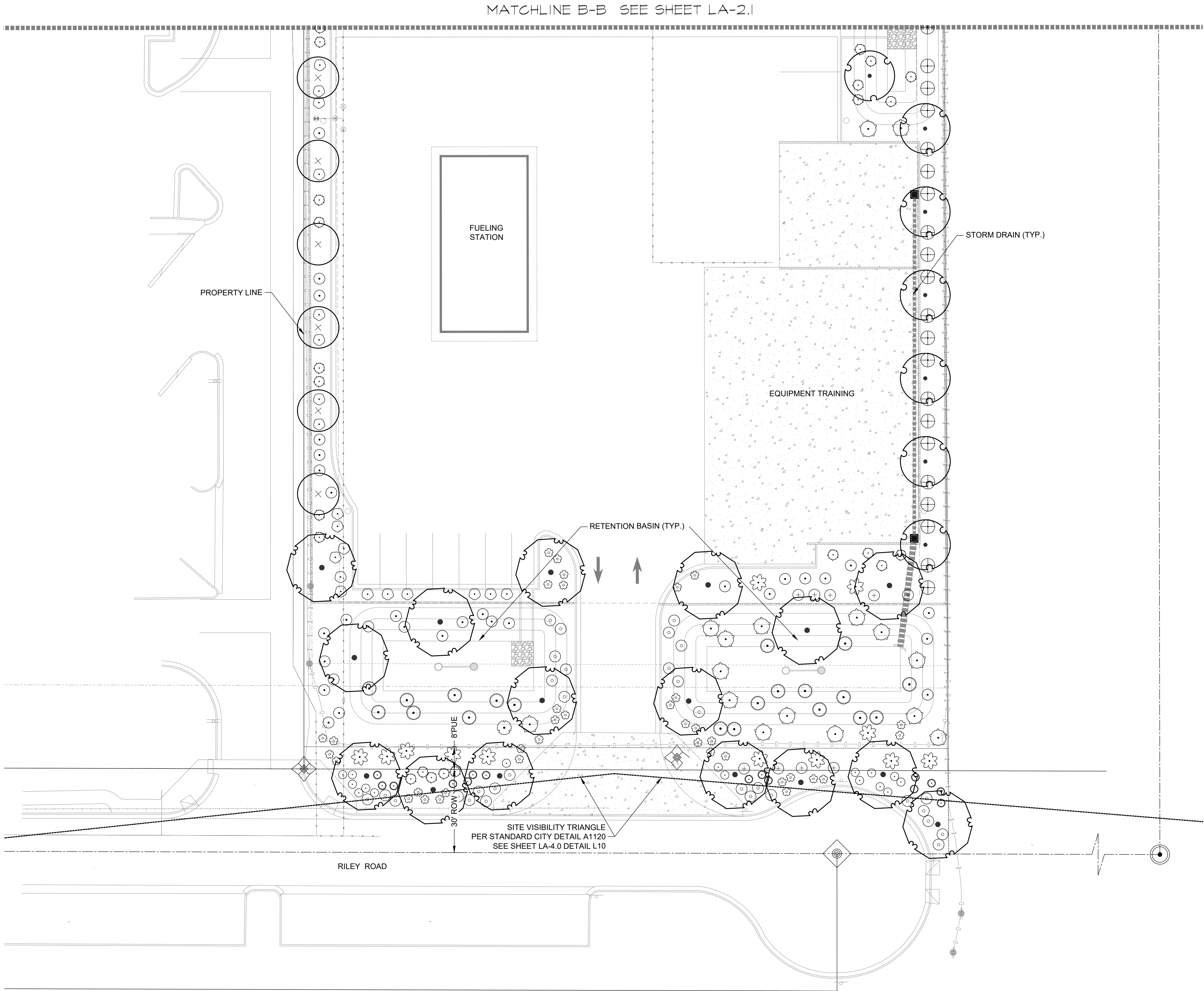


NEW OFFICE BUILDING
PREMIER UNDERGROUND
LANDSCAPE CONSTRUCTION DOCUMENTS
LANDSCAPE PLANTING PLAN

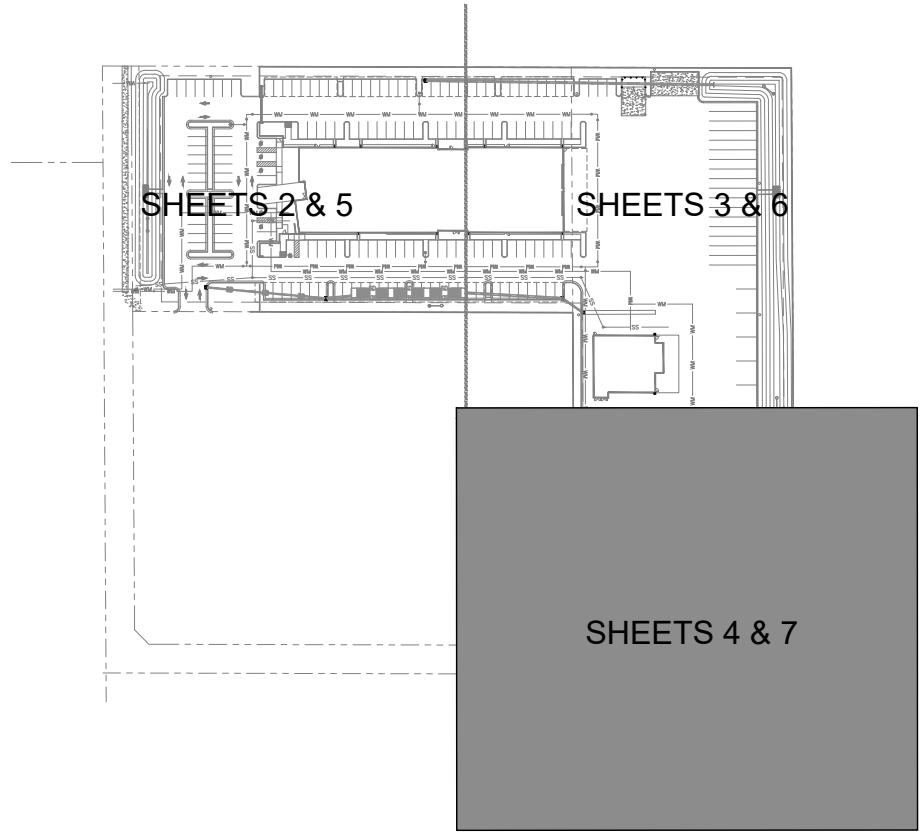


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DRAWN: STAFF
CHECKED: SM PLOT DATE 07/06/2024
SHEET 3 OF 11
LA-2.1
PROJECT NO. SD-2404

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CHECKED BY: SM DATE: _____



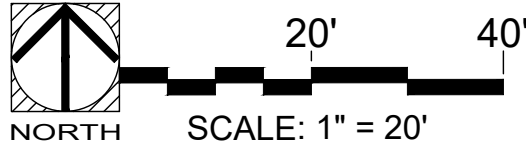
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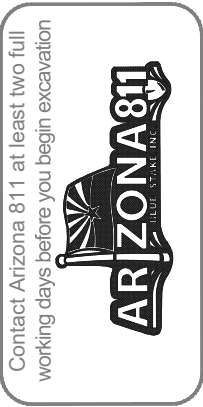
PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	SIZE	QTY
TREES			
	Acacia aneura / Mulga	24" Box	23
	Chilopsis linearis / Desert Willow	24"-Box	13
	Fraxinus velutina 'Fan-Tex' / Fan-Tex Velvet Ash	24"-Box	16
	Pistacia lentiscus / Red Push	24"-Box	14
	Quercus shumardii / Shumard Red Oak	24"-Box	17
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	Agave parryi / Parry's Agave	5-Gal	26
	Bougainvillea x 'Barbara Karst' / Barbara Karst Bougainvillea Trellis	5-Gal	1
	Calliandra eriophylla / Fairy Duster	5-Gal	55
	Callistemon viminalis 'Little John' / Little John Weeping Bottlebrush	5-Gal	64
	Dodonaea viscosa 'Green' / Green Hopseed Bush	5-Gal	64
	Euphorbia rigida / Yellow Spurge	5-Gal	66
	Hesperaloe funifera / Giant Hesperaloe	5-Gal	19
	Lantana camara 'Gold Mound' / Gold Mound Lantana	5-Gal	67
	Lantana montevidensis / Trailing Lantana	1-Gal	67
	Leucophyllum candidum / Violet Silverleaf	5-Gal	82
	Leucophyllum frutescens / Green Cloud Sage	5-Gal	57
	Rosmarinus officinalis 'Prostratus' / Dwarf Rosemary	1-Gal	82
	Ruellia brittoniana 'Katie' / Dwarf Blue Bells	5-Gal	55
	Tecoma stans 'Bells of Fire' / Bells of Fire Tecoma	5-Gal	77

ALL LANDSCAPE SURFACE AREAS SHALL BE FINISHED WITH DECOMPOSED GRANITE AT 2"-3" COVERAGE. DECOMPOSED GRANITE TO BE MADISON GOLD 3/4" SCREEN OR SIMILAR. TOTAL AREA IS 63,904 SQ.FT.



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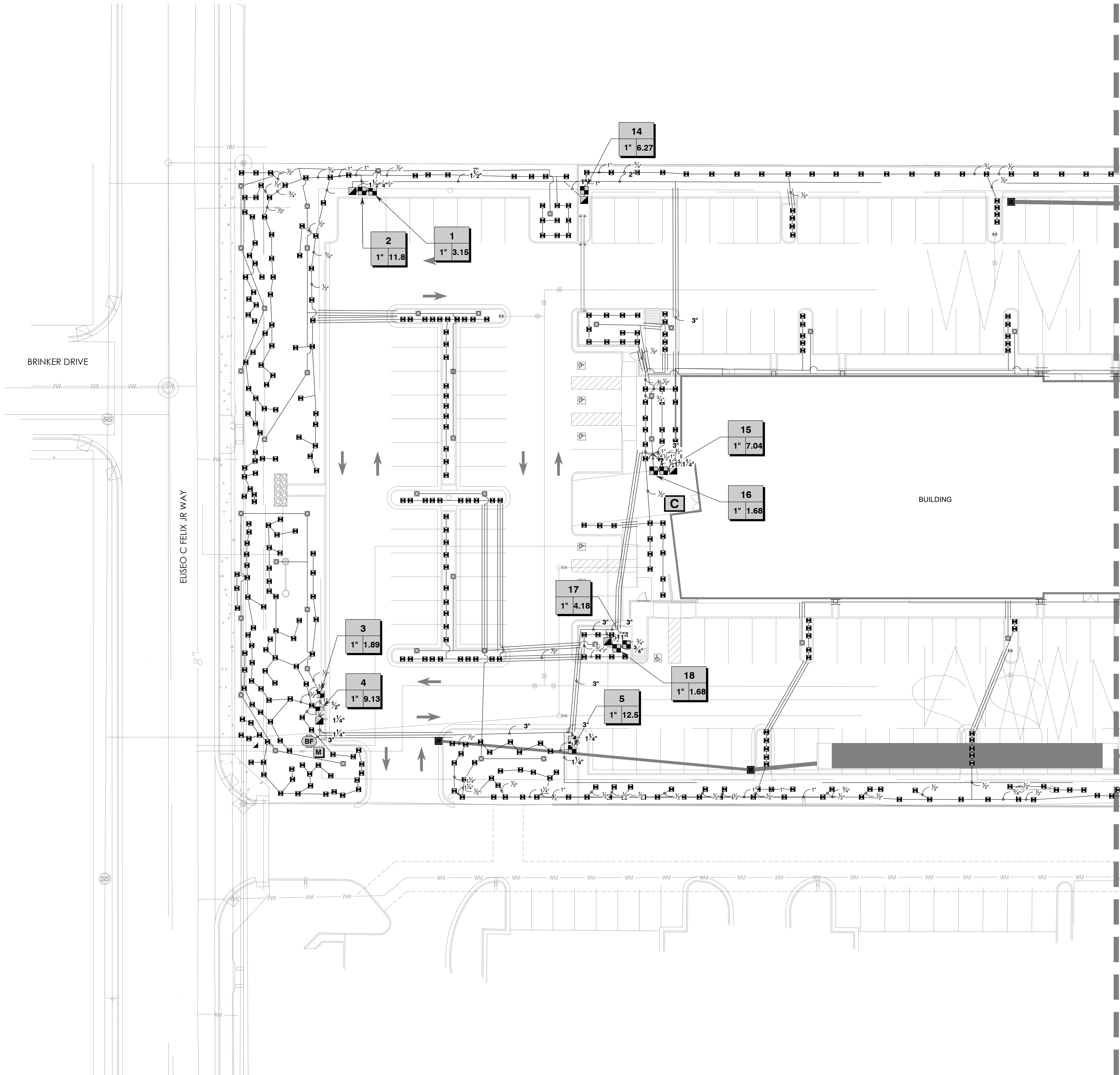


NEW OFFICE BUILDING
PREMIER UNDERGROUND
LANDSCAPE CONSTRUCTION DOCUMENTS
LANDSCAPE PLANTING PLAN



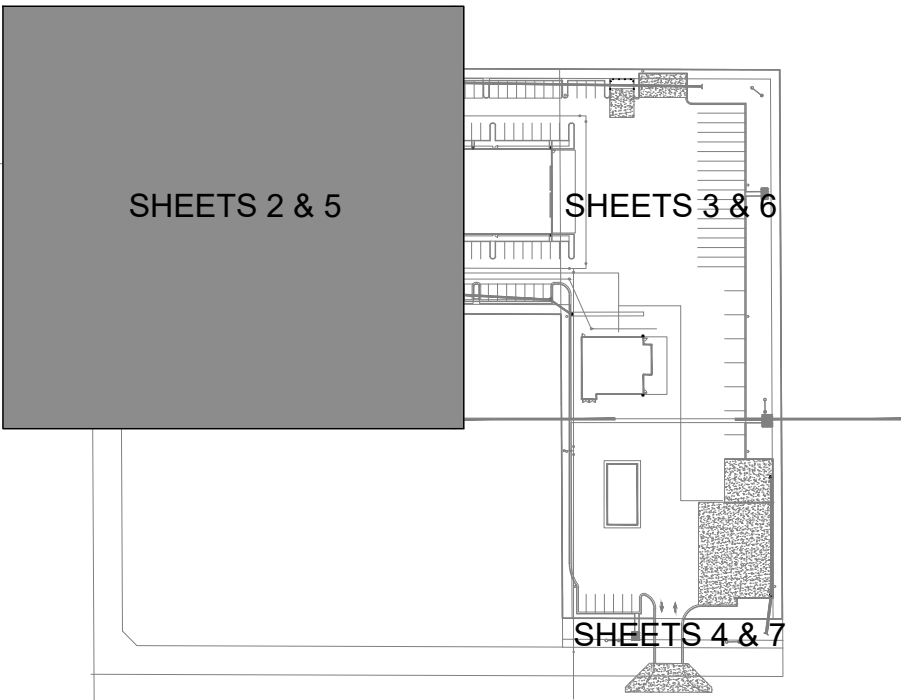
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SHEET 4 OF 11
LA-2.2
PROJECT NO. SD-2404

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DRAFTED BY STAFF DATE
CHECKED BY SM DATE



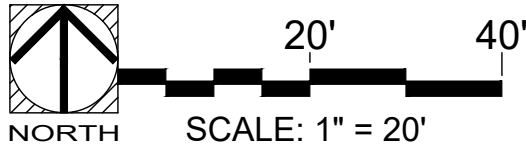
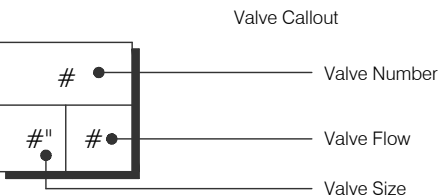
MATCHLINE A-A SEE SHEET LA-3-I

KEYMAP



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter ICZ-101-25 1" Drip Control Zone Kit. 1in. ICV Globe Valve with 1in. HY100 filter system. Pressure Regulation: 25psi. Flow Range: 2 GPM to 20 GPM. 150 mesh stainless steel screen.	18
	Rain Bird XBT-6 Six-Outlet, Pressure Compensating, Drip Emmitter. Flow rates of 0.5 GPH=blue, 1.0 GPH=black, and 2.0 GPH=red, at each emitter outlet. Comes with 1/2in. FPT Inlet x Barb Outlet.	938
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter HQ-3RC 3/4" Quick coupler valve, yellow rubber cover, red brass and stainless steel, with 3/4in. NPT inlet, 1-piece body.	11
	Febco 825YA 1" Reduced Pressure Backflow Preventer	1
	Hunter A2C-150D-M 150-Station decoder controller with one (1) A2C-D75 module in an outdoor metal wall mount enclosure.	1
	Water Meter 1-1/2"	1
	Irrigation Lateral Line: PVC Class 200 SDR 21 1/2"	9,140 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 3/4"	1,346 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1"	192.0 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/4"	177.9 l.f.
	Irrigation Mainline: PVC Schedule 40 1/2"	10.8 l.f.
	Irrigation Mainline: PVC Schedule 40 3/4"	8.4 l.f.
	Irrigation Mainline: PVC Schedule 40 1"	32.2 l.f.
	Irrigation Mainline: PVC Schedule 40 1 1/4"	550.0 l.f.
	Irrigation Mainline: PVC Schedule 40 1 1/2"	100.6 l.f.
	Irrigation Mainline: PVC Schedule 40 2"	611.3 l.f.
	Irrigation Mainline: PVC Schedule 40 2 1/2"	72.7 l.f.
	Irrigation Mainline: PVC Schedule 40 3"	787.9 l.f.
	Pipe Sleeve: PVC Schedule 40	827.6 l.f.



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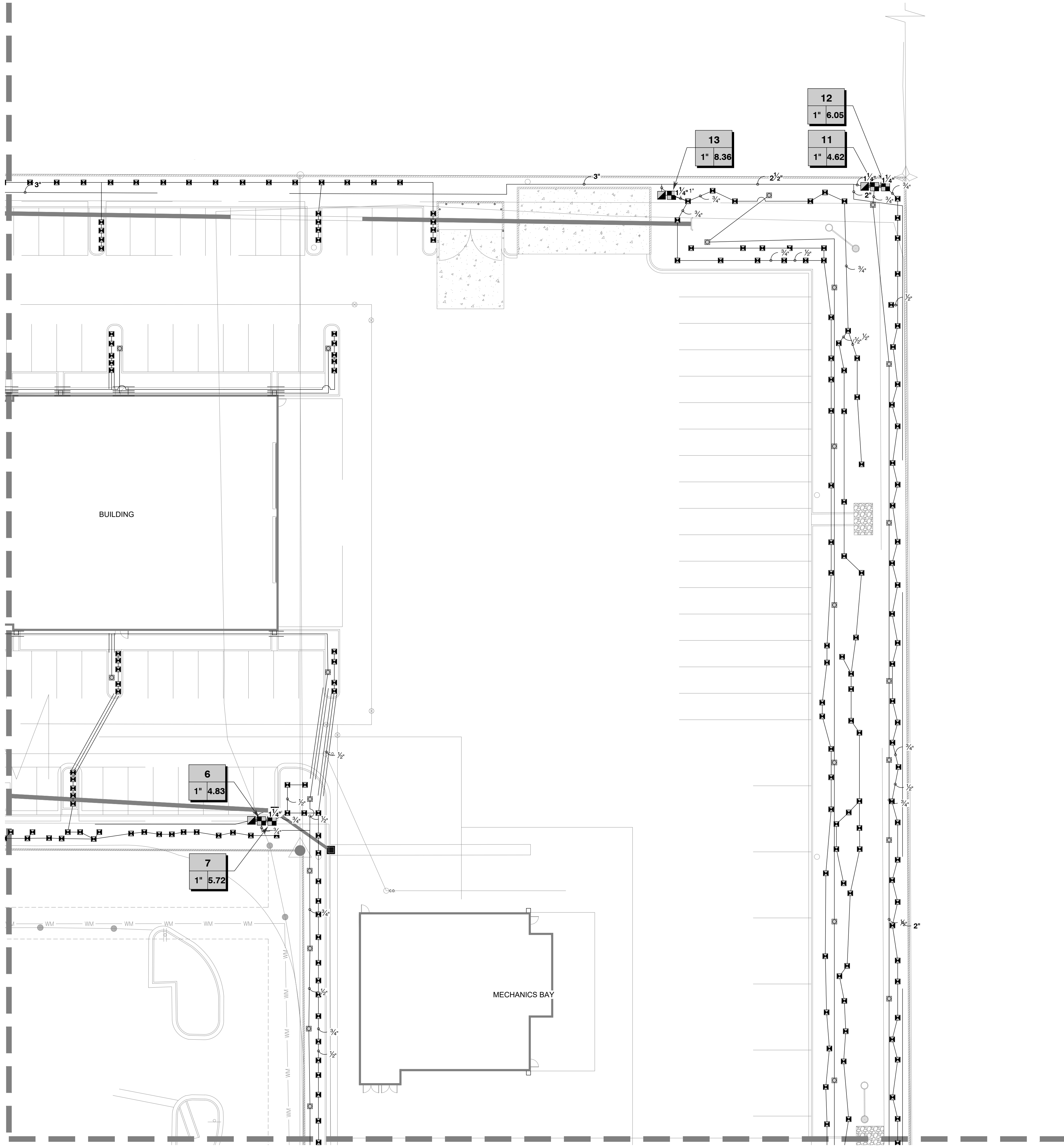
NEW OFFICE BUILDING
PREMIER UNDERGROUND
LANDSCAPE CONSTRUCTION DOCUMENTS
LANDSCAPE IRRIGATION PLAN



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CHECKED: SM PLOT DATE 07/06/2024
SHEET 5 OF 11
LA-30
PROJECT NO. SD-2404

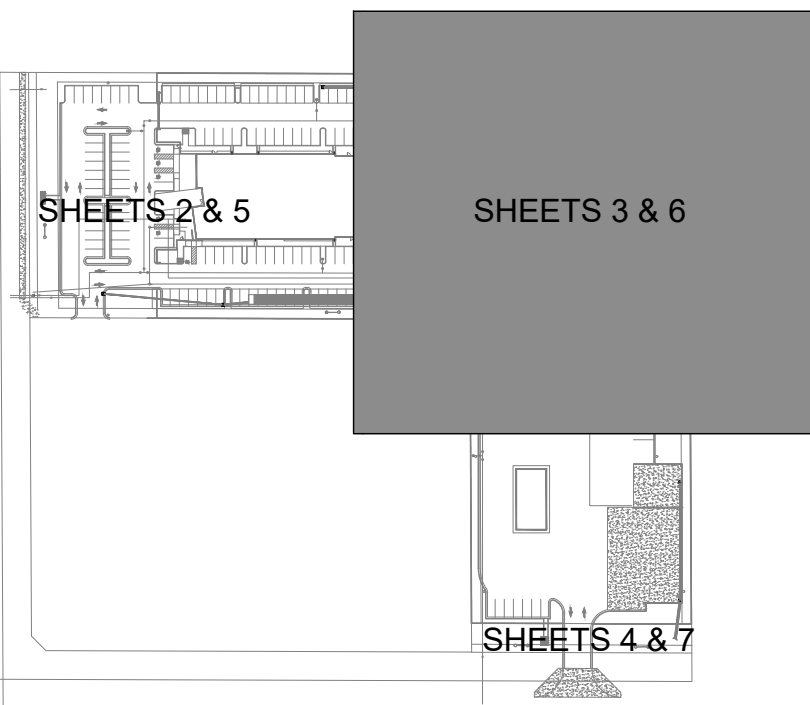
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MATCHLINE A-A SEE SHEET LA-3.0



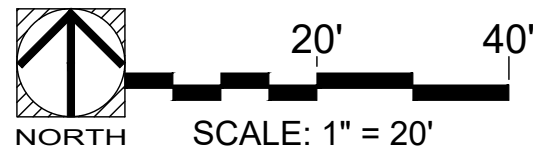
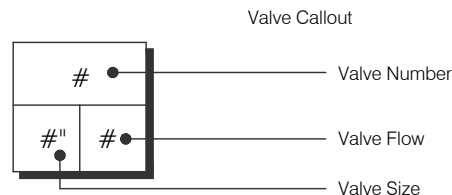
MATCHLINE B-B SEE SHEET LA-3.2

KEYMAP



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter ICZ-101-25 1" Drip Control Zone Kit. 1in. ICV Globe Valve with 1in. HY100 filter system. Pressure Regulation: 25psi. Flow Range: 2 GPM to 20 GPM. 150 mesh stainless steel screen.	18
	Rain Bird XBT-6 Six-Outlet, Pressure Compensating, Drip Emmitter. Flow rates of 0.5 GPH=blue, 1.0 GPH=black, and 2.0 GPH=red, at each emitter outlet. Comes with 1/2in. FPT Inlet x Barb Outlet.	938
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter HQ-3RC 3/4" Quick coupler valve, yellow rubber cover, red brass and stainless steel, with 3/4in. NPT inlet, 1-piece body.	11
	Febco 825YA 1" Reduced Pressure Backflow Preventer	1
	Hunter A2C-150D-M 150-Station decoder controller with one (1) A2C-D75 module in an outdoor metal wall mount enclosure.	1
	Water Meter 1-1/2"	1
	Irrigation Lateral Line: PVC Class 200 SDR 21 1/2"	9,140 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 3/4"	1,346 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1"	192.0 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/4"	177.9 l.f.
	Irrigation Mainline: PVC Schedule 40 1/2"	10.8 l.f.
	Irrigation Mainline: PVC Schedule 40 3/4"	8.4 l.f.
	Irrigation Mainline: PVC Schedule 40 1"	32.2 l.f.
	Irrigation Mainline: PVC Schedule 40 1 1/4"	550.0 l.f.
	Irrigation Mainline: PVC Schedule 40 1 1/2"	100.6 l.f.
	Irrigation Mainline: PVC Schedule 40 2"	611.3 l.f.
	Irrigation Mainline: PVC Schedule 40 2 1/2"	72.7 l.f.
	Irrigation Mainline: PVC Schedule 40 3"	787.9 l.f.
	Pipe Sleeve: PVC Schedule 40	827.6 l.f.



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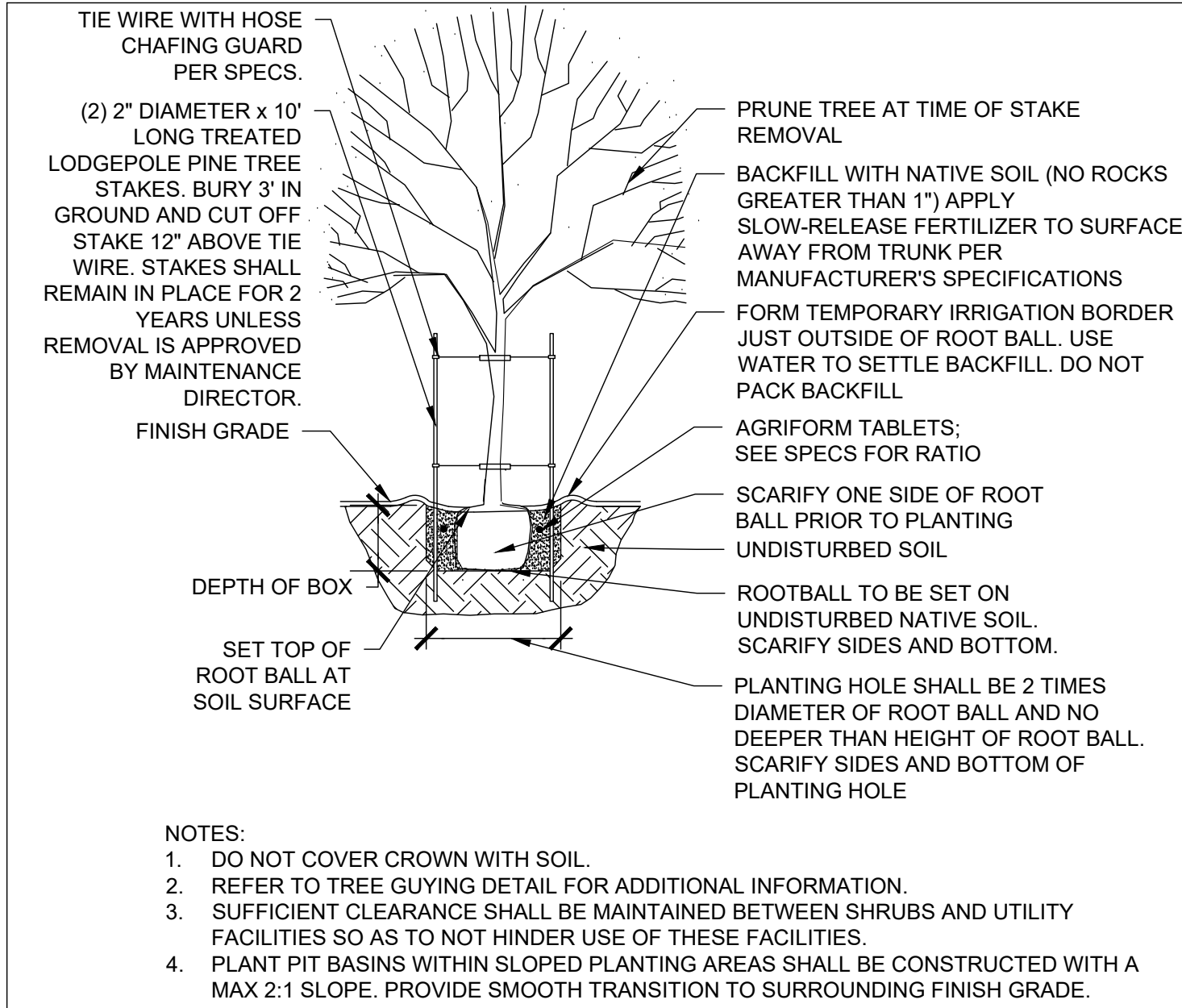


NEW OFFICE BUILDING
PREMIER UNDERGROUND
LANDSCAPE CONSTRUCTION DOCUMENTS
LANDSCAPE IRRIGATION PLAN

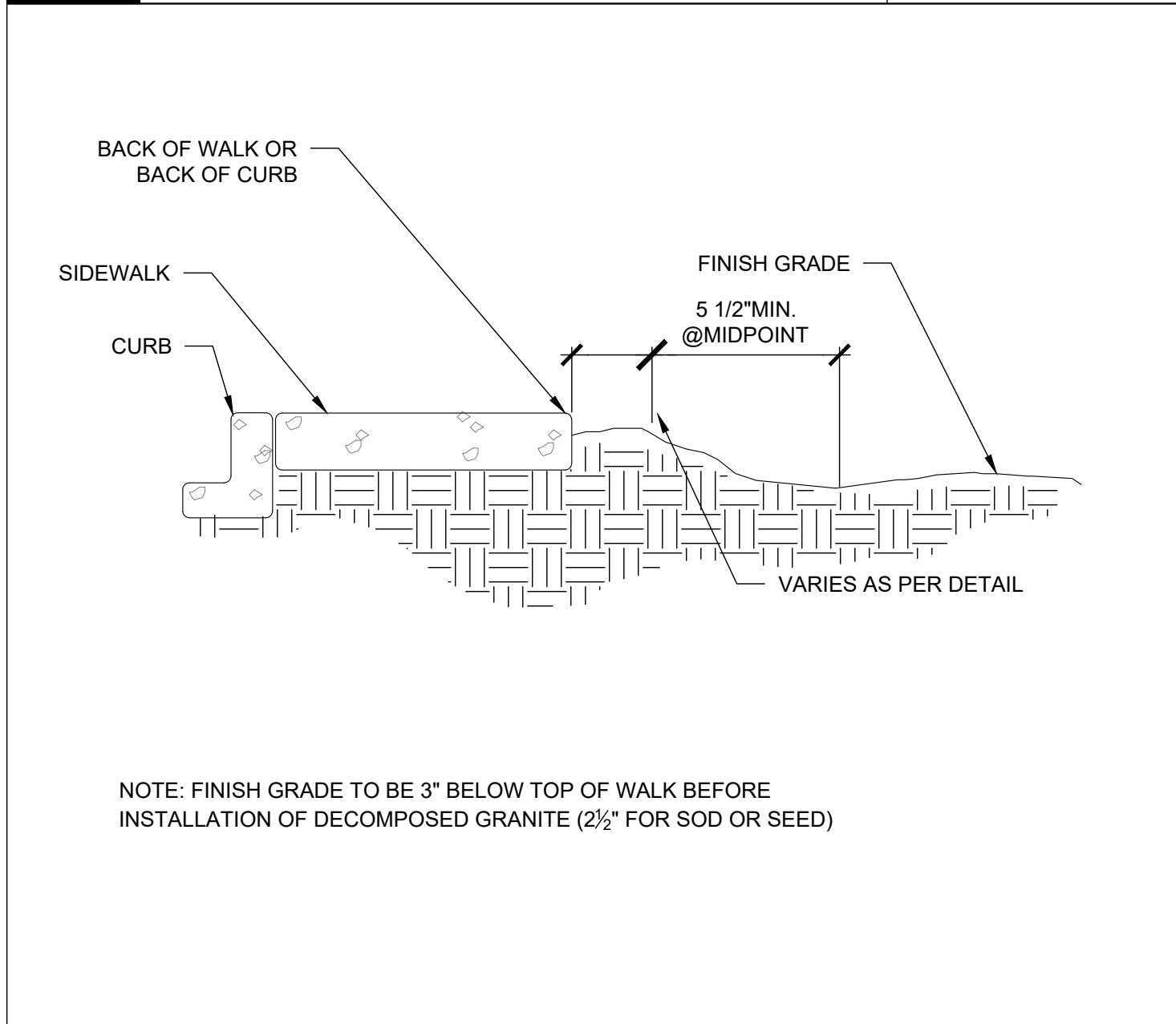


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SHEET 6 OF 11
LA-3.1
PROJECT NO. SD-2404

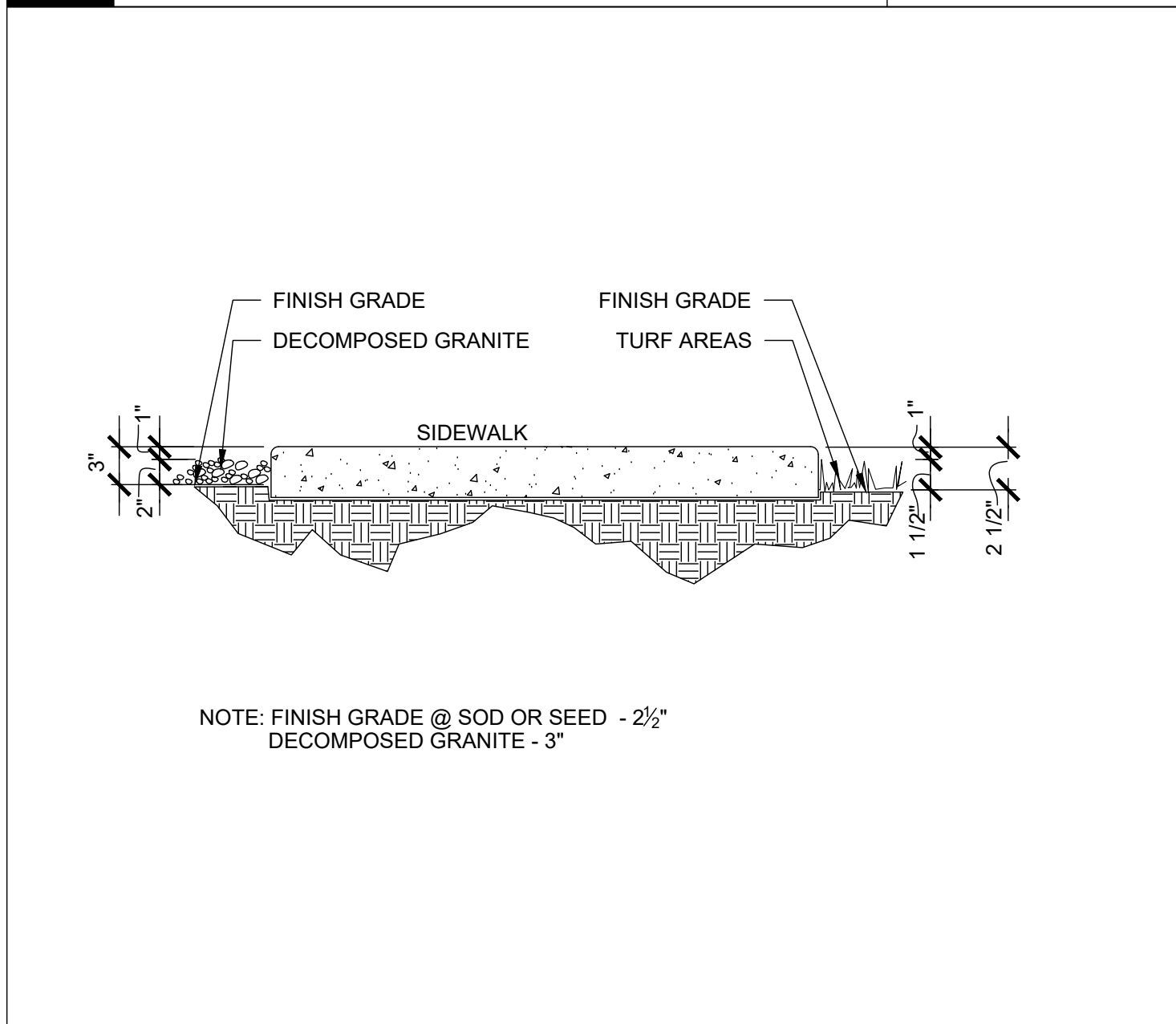
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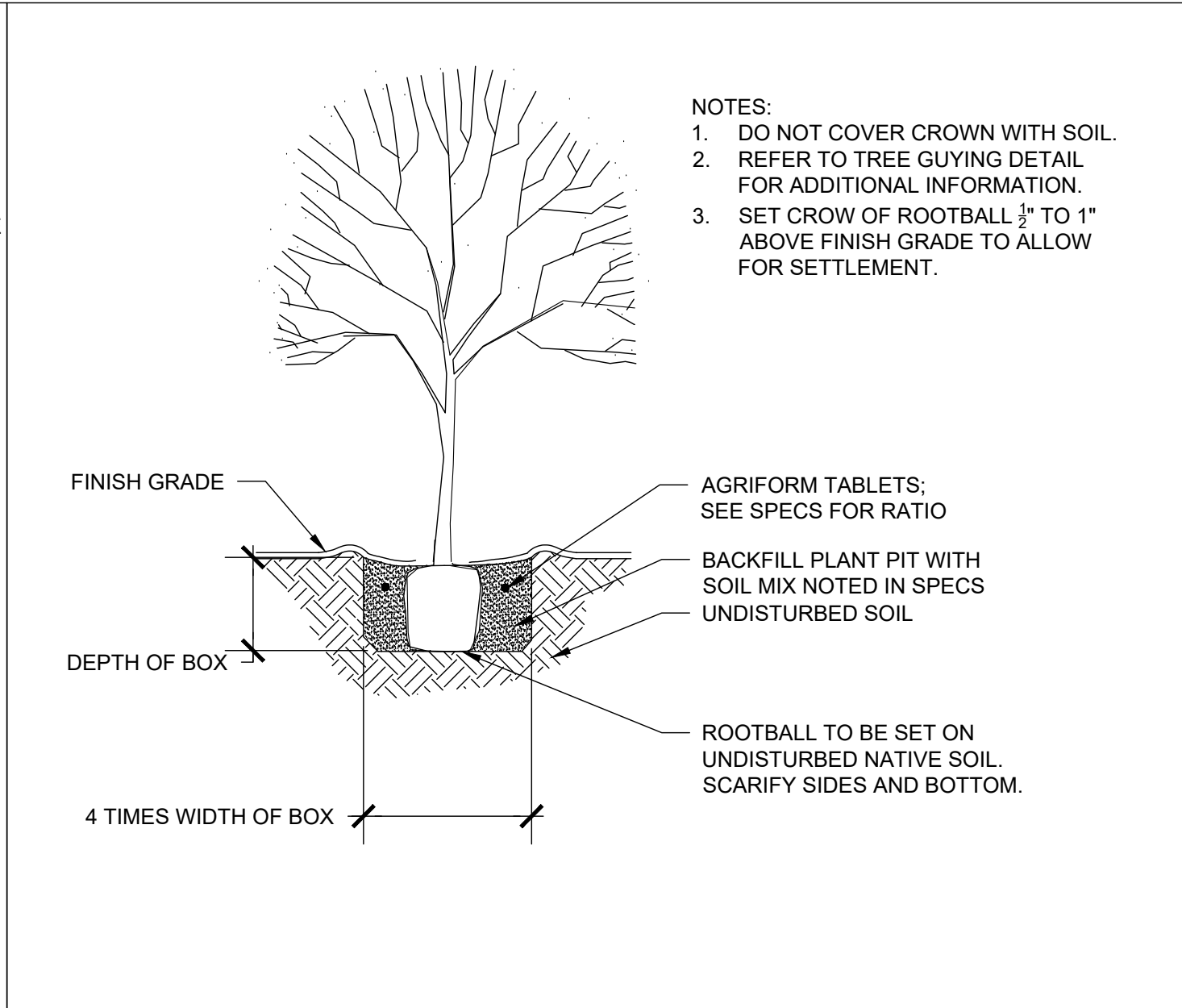
L1 Tree planting detail (15 gallon - 30" box) Scale: N.T.S.



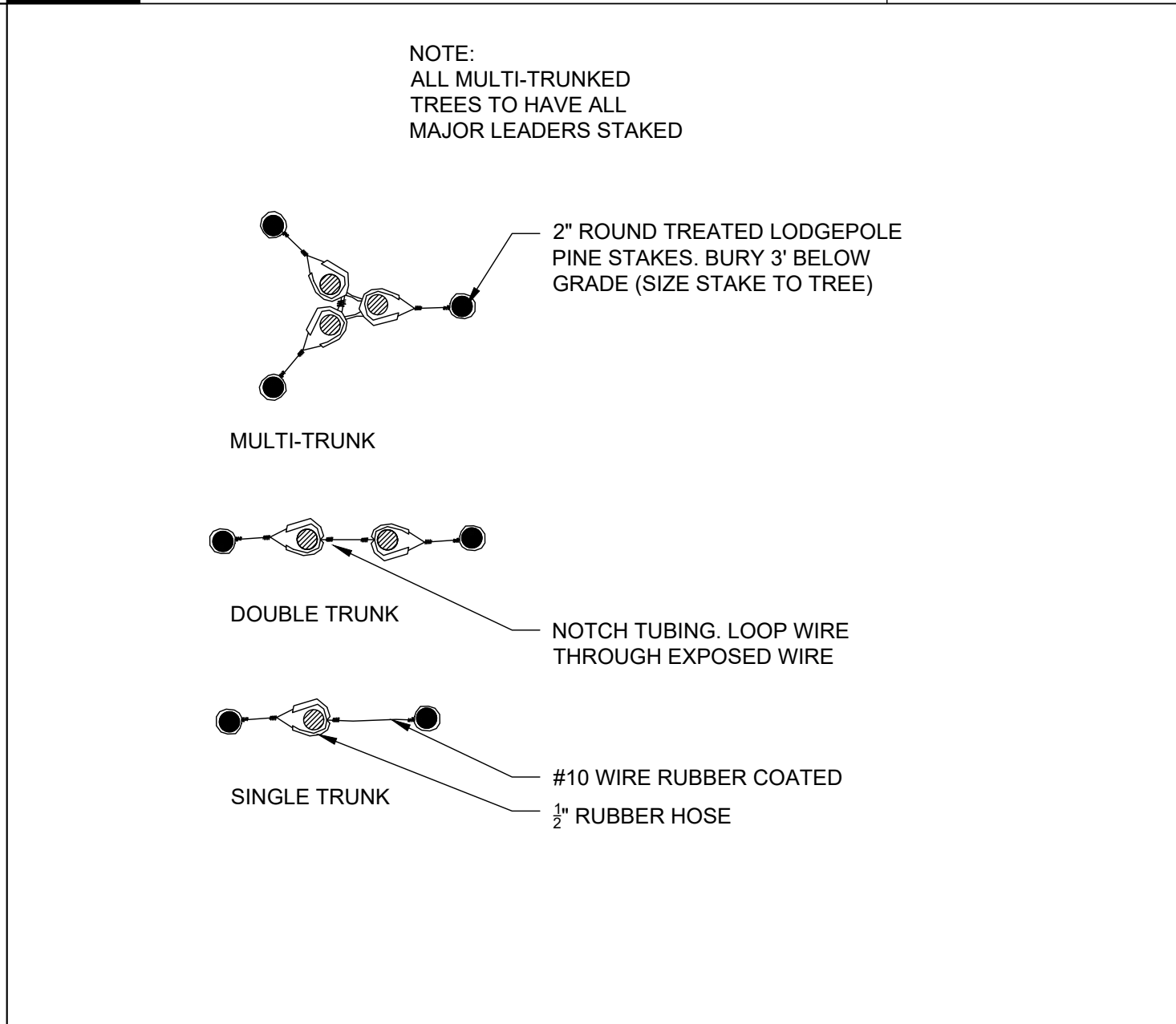
L5 Swale at walk or curb Scale: N.T.S.



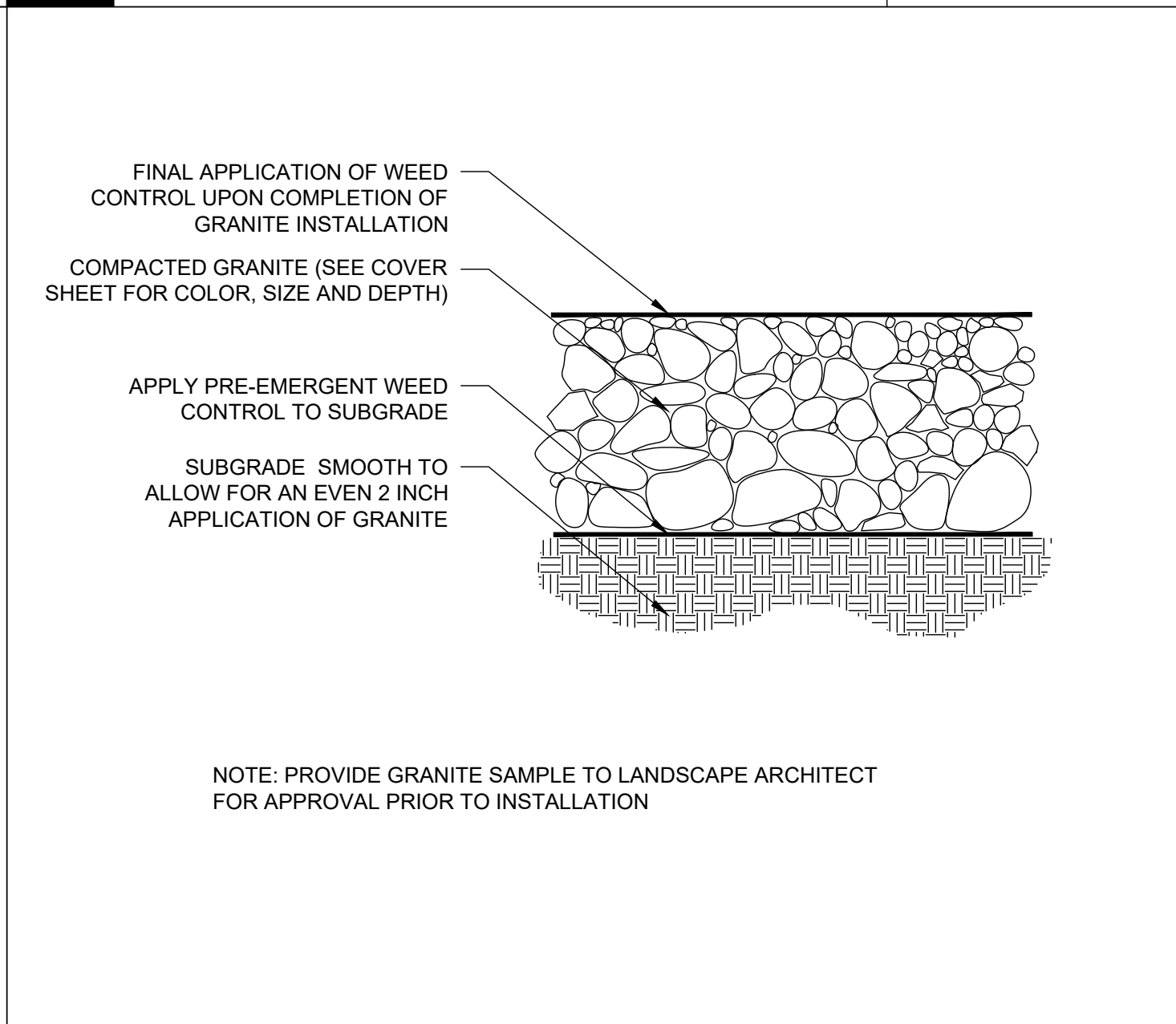
L8 Grading at walks and headers Scale: N.T.S.



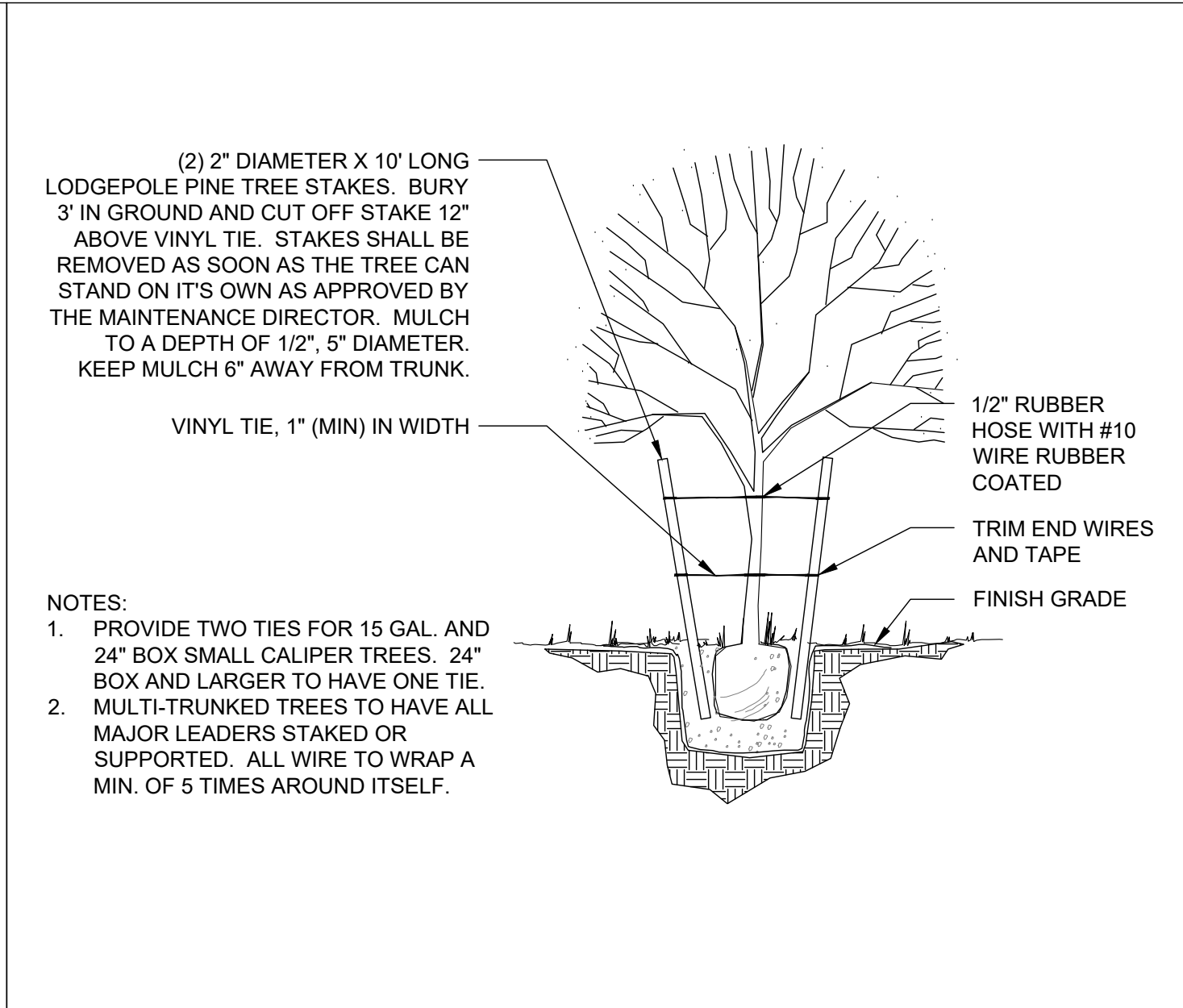
L2 Tree planting detail (36" box and larger) Scale: N.T.S.



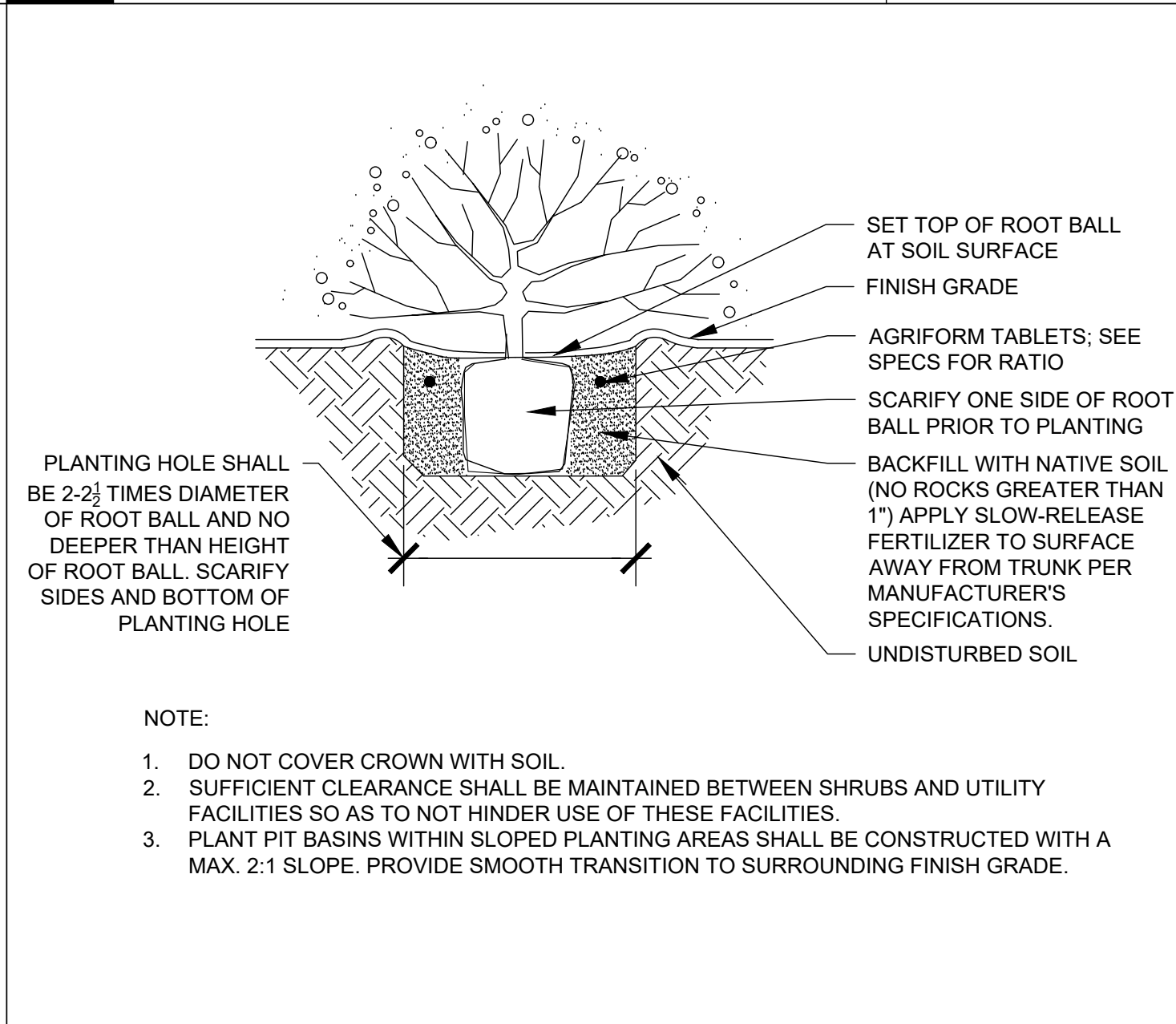
L6 Tree guying detail Scale: N.T.S.



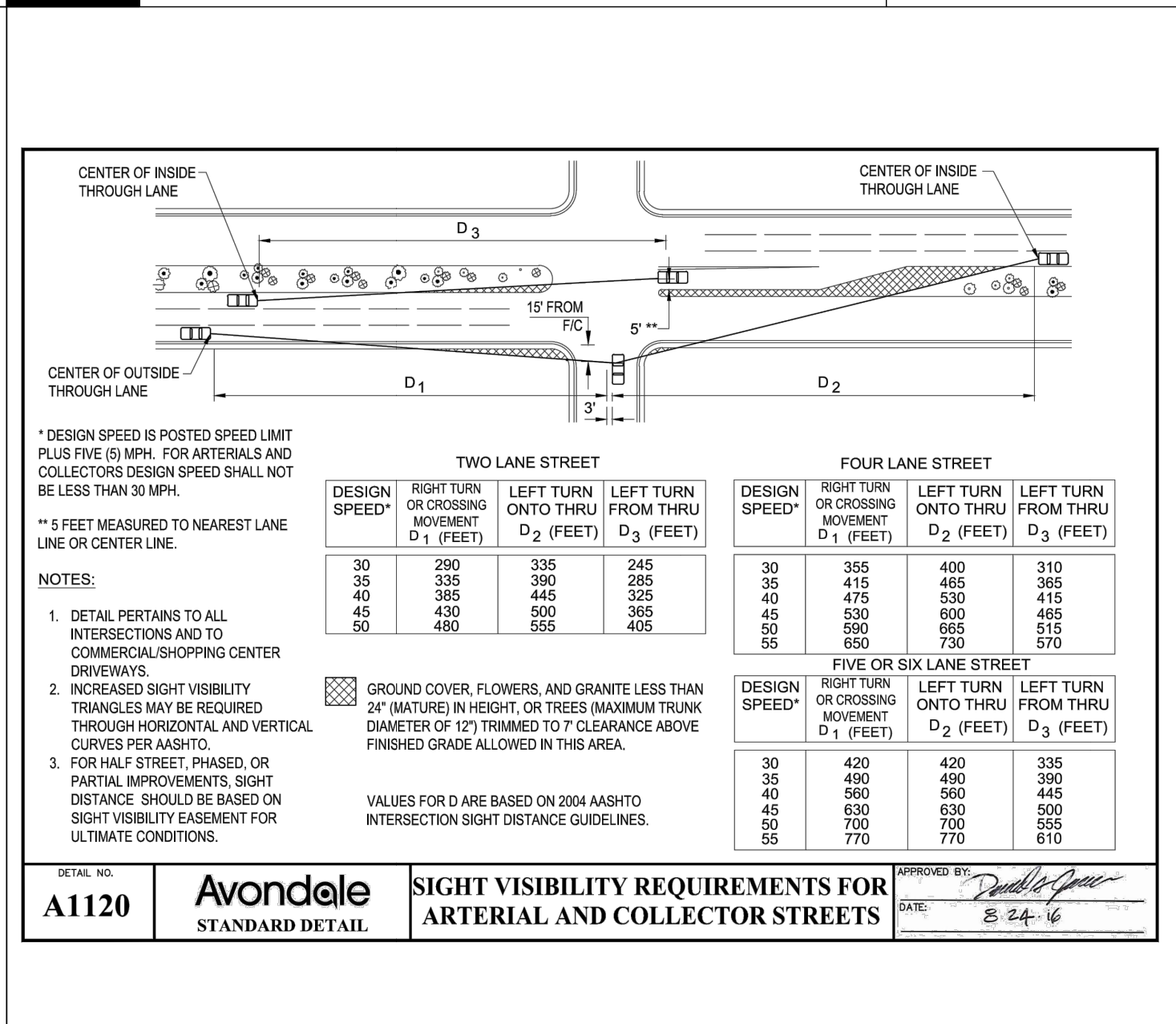
L9 Decomposed granite detail Scale: N.T.S.



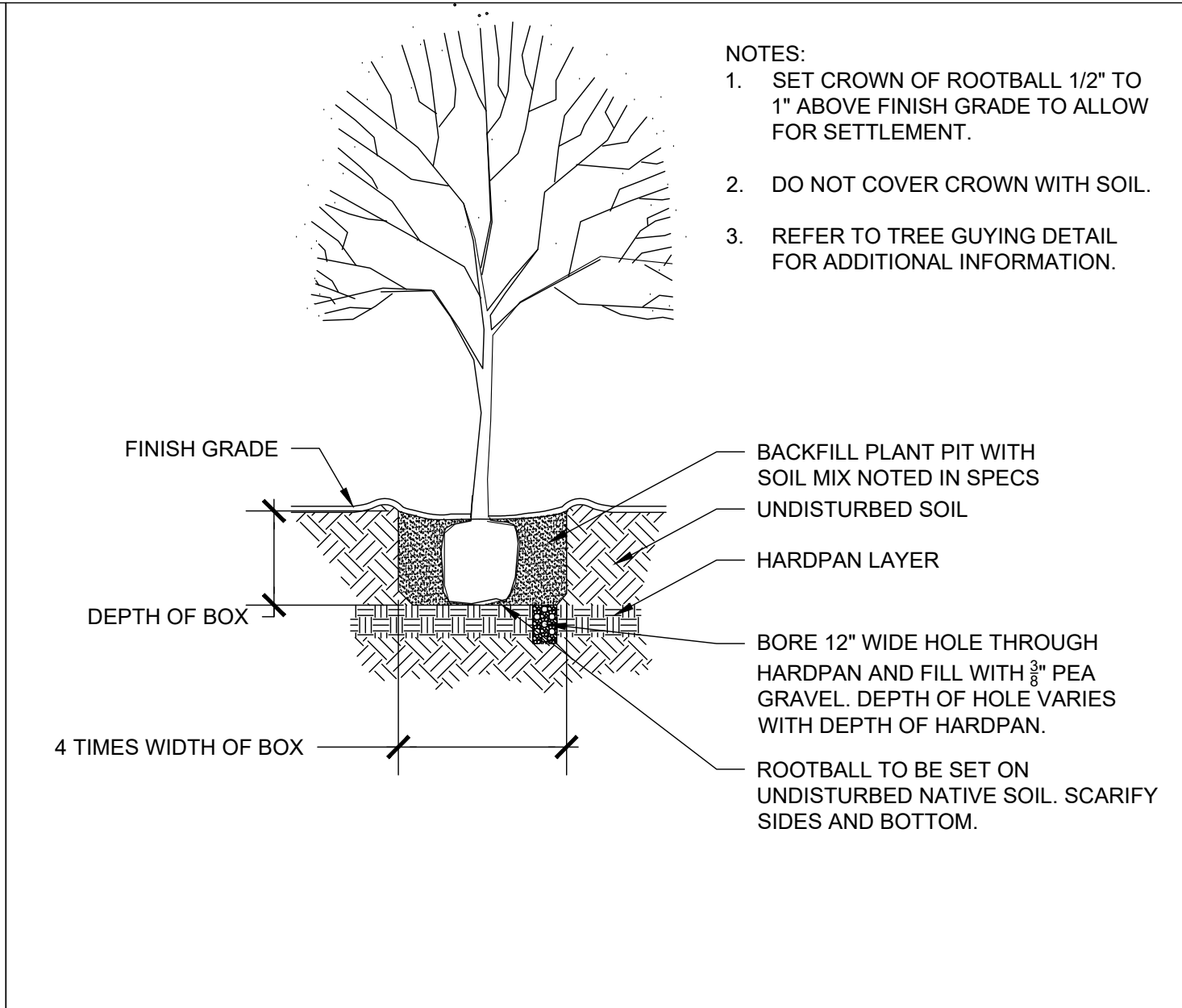
L3 Typical staking detail Scale: N.T.S.



L7 Shrub planting detail (1 gallon - 15 gallon) Scale: N.T.S.



L10 Site Visibility Triangle Scale: N.T.S.



L4 Hardpan planting detail Scale: N.T.S.



REVIEWED BY	SM	DATE
DRAFTED BY	STAFF	DATE
CHECKED BY	SM	DATE

These specifications are in addition to any specifications supplied by the Owner, Owner's Representative or Project Architect(s). Specifications supplied by the Owner, Owner's Representative or Project Architect(s) regarding Division 1 shall supersede those listed below, the most stringent shall apply. Awarded Contractor is responsible to adhere to all specifications provided on this project. Deviations from these specifications and those supplied by the Owner, Owner's Representative or Project Architect(s) shall indemnify the Landscape Architect from all liability. Notify the Owner, Owner's Representative or Project Architect(s) with any questions prior to proceeding with construction.

SECTION 01100 - SUMMARY

PART 1 - GENERAL

- 1.1 SUMMARY
- A. This Section includes the following:
1. Work covered by the Contract Documents.
 2. Work phases.
 3. Work under other contracts.
 4. Use of premises.
 5. Owner's occupancy requirements.
 6. Specification formats and conventions.
- 1.2 WORK COVERED BY CONTRACT DOCUMENTS
- A. Project Identification: RV Storage
- B. Project Location: Mesa, Arizona
- C. Owner: Lavigna Investment Corporation
- D. Owner's Representative:
- E. Architect: smART Development LLC
- F. Work consists of the following
1. Landscape improvements to include plant materials and an automatic irrigation system.
 2. Play Equipment
 3. Concrete sidewalk
 4. Entry Signage
 5. Project will be constructed under a single prime contract.
- 1.3 USE OF PREMISES
- A. General: Contractor shall have full use of premises for construction operations, including use of Project site, during construction period. Contractor's use of premises is limited only by Owner's right to perform work or to retain other contractors on portions of the Project.
- B. General: Contractor shall have limited use of premises for construction operations as indicated on drawings by the Contract limits.
- C. Use of Site: Any limited use of premises shall be determined by Owner or Owner's representative at time of bid or during construction. Do not disturb portions of Project site beyond areas in which the work or direction is indicated.
1. Limits: Confine constructions operations to area designated on drawings unless directed otherwise by Owner or Owner's representative.
- END OF SECTION 01100

SECTION 02810 - IRRIGATION SYSTEMS

PART 1 - GENERAL

- 1.1 SUMMARY
- A. This Section includes piping, valves, sprinklers, specialties, controls and wiring for automatic or manual-control irrigation system.
- B. See Division 2 Section "Water Distribution" for water supply from water service piping, water meters, protective enclosures and backflow preventers.
- 1.2 DEFINITIONS
- A. Circuit Piping: Downstream from control valves to sprinklers, specialties and drain valves. Piping is under pressure during flow.
- B. Drain Piping: Downstream from circuit-piping drain valves. Piping is not under pressure.
- C. Irrigation Main Piping: Downstream from point of connection to water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.
- 1.3 SUBMITTALS
- A. Product Data: Include pressure ratings, rated capacities and settings of selected models for the following:
1. General-duty valves.
 2. Specialty valves.
 3. Control-valve boxes.
 4. Sprinklers.
 5. Irrigation specialties.
 6. Controllers.
- B. Shop Drawings: Show irrigation system piping, including plan layout, and locations, types, sizes, capacities and flow characteristics of irrigation system piping components. Include water meters, backflow preventers, valves, piping, sprinklers and devices, accessories, controls and wiring. Show areas of sprinkler spray and overspray. Show wire size and number of conductors for each control cable.
- C. Field quality-control test reports.
- D. Operation and maintenance data.
- 1.4 QUALITY ASSURANCE
- A. Electrical Components, Devices and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- 1.5 GUARANTEE
- A. Within ten (10) days after the Contractor's notification that the sprinkler installation is complete, the Landscape Architect will inspect the system and, if necessary, submit a "punch list" to the Contractor. Acceptance by the Landscape Architect of these corrections will signify final acceptance by the Owner.
- B. The entire sprinkler system shall be guaranteed for a period of one (1) year from this final acceptance date. The Contractor shall promptly replace, without cost to the Owner, any defective materials or faulty workmanship which may develop within this guarantee period, including restoration of any property damaged during repairs. He shall also be responsible for damages resulting from leaks which may occur in the piping system installed by him, and he shall repair, at his expense, all damage so caused, in a manner satisfactory to the Owner. However the Contractor shall not be held liable for damages occasioned by strikes, fire, weather, violence or theft, acts of God, acts of other contractors, or any other cause beyond the control of the Contractor.
- C. It will be the Owner's responsibility to maintain the system in working order during the guarantee period, performing necessary minor maintenance, keeping grass from obstructing the sprinkler heads, protecting against vandalism and preventing damage during the landscape maintenance operation.
- D. The Contractor shall service the system at the Owner's request during the guarantee period, and shall be paid for work performed which is not covered by the guarantee, in accordance with a predetermined schedule of fees.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- B. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.
 2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.
- 2.2 PIPES, TUBES AND FITTINGS
- A. Soft Copper Tube: ASTM B 88, Type L (ASTM B 88M, Type B), water tube, annealed temper.
1. Copper Pressure Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper, solder-joint fittings. Furnish wrought-copper fittings if indicated.
 2. Copper Unions: MSS SP-123, cast-copper-alloy, hexagonal-stock body, with ball-and-socket, metal-to-metal seating surfaces and solder-joint or threaded ends.
- B. Hard Copper Tube: ASTM 88, Type L (ASTM B 88M, Type B), ASTM B 88, Type L (ASTM B 88M, Type B) and ASTM B 88, Type M (ASTM B 88M, Type C), ASTM B 88, Type M (ASTM B 88M, Type C), water tube, drawn temper.
1. Copper Pressure Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper, solder-joint fittings. Furnish wrought-copper fittings if indicated.
 2. Copper Unions: MSS SP-123, cast-copper-alloy, hexagonal-stock body, with ball-and-socket, metal-to-metal seating surfaces and solder-joint or threaded ends.
- C. PVC Pipe: ASTM D 1785, PVC 1120 compound, Schedule 40.
1. PVC Socket Fittings, Schedule 40: ASTM D 2466.
- D. PE, Controlled OD Pipe: ASTM F 771 and ASTM D 3035, PE 3408 compound, DR 9 and DR 11.
1. PE Socket Fittings: ASTM D 2683.
 2. PE Butt-Fusion Fittings: ASTM D 3261.
- E. PE, Controlled ID Pipe: ASTM F 771 and ASTM D 2239; PE 3408 compound; SDRs 7, 9, 11.5 and 15.
1. Insert Fittings for PE Pipe: ASTM D 2609, PA or PP. Include bands or other fasteners.
- F. Transition Fittings: Refer to Division 2 Section "Piped Utilities - Basic Materials and Methods" for transition fittings.
- G. Refer to Division 2 Section "Piped Utilities - Basic Materials and Methods" for commonly used joining materials.
- 2.3 GENERAL-DUTY VALVES
- A. AWWA, Cast-Iron Gate Valves: AWWA C500, metal-seated or AWWA C509, resilient-seated, nonrising-stem, grey- or ductile-iron body and bonnet gate valve, with bronze stem and stem nut.
1. Minimum Working Pressure: 200 psig (1380 kPa).
 2. End Connections: Mechanical joint.
 3. Interior Coating: Complying with AWWA C550.
 4. Manufacturers:
 - a. NIBCO, INC.
- B. Valve Boxes: Comply with AWWA M44 for cast-iron valve boxes. Include top section, adjustable extension of length required for depth of burial of valve, plug with lettering "WATER," bottom section with base of size to fit over valve, and approximately 5-inch (125-millimeter) diameter barrel.
1. Operating Wrenches: Furnish total of two steel, tee-handle operating wrenches with one pointed end, stem of length to operate deepest buried valve and socket matching valve operating nut.
- C. MSS, Cast-Iron, Nonrising-Stem Gate Valves: MSS SP-70, Type 1, Class 125, with solid wedge and flanged ends. Include all bronze trim, cast-iron body and handwheel.
1. Available Manufacturer:
 - a. NIBCO, INC.
- D. Curb Valves: AWWA C800. Include bronze body, ball or ground-key plug, and wide tee head, with inlet and outlet matching piping material.
1. Available Manufacturers:
 - a. Amcast Industrial Corporation; Lee Brass Unit.
 - b. Ford Meter Box Co., Inc.; Pipe Products Division.
 - c. Grinnell Corp.; Mueller Co.; Water Products Division.
 - d. Jones, James Company.
 - e. Master Meter, Inc.
 - f. McDonald, A.Y. Mfg. Co.
 - g. Red Head Manufacturing Co.
- E. Service Boxes for Curb Valves: Similar to AWWA M44 requirements for cast-iron valve boxes. Include cast-iron telescoping top section of length required for depth of burial of valve, plug with lettering "WATER," bottom section with base of size to fit over curb valve, and approximately 3-inch diameter barrel.
1. Shutoff Rods: Furnish total of two steel, tee-handle shutoff rods with one pointed end, stem of length to operate deepest buried valve, and slotted end matching curb valve.
- F. Copper-Alloy Ball Valves: MSS SP-110, two-piece brass or bronze body with full or regular-port, chrome-plated bronze ball; PTFE or TFE seats; and 600-psig (4140-kPa) minimum CWP rating and blowout-proof stem.
1. Available Manufacturers:
 - a. Reference irrigation Legend on Drawings.
- G. Bronze Gate Valves: MSS SP-80, Class 125, Type 1, nonrising-stem, bronze body with solid wedge, threaded ends and malleable-iron handwheel.
1. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
- H. Bronze Globe Valves: MSS SP-80, Class 125, Type 2, with bronze body and PTFE or TFE disc.
1. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
- I. PVC Ball Valves: MSS SP-122, nonunion type, with full-port ball, socket or threaded detachable end connectors and pressure rating not less than 150 psig (1035 kPa).
1. Material Option: MSS SP-122, of plastic other than PVC and suitable for potable water. Include threaded ends and pressure rating not less than 150 psig (1035 kPa), unless otherwise indicated.
 2. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
- 2.4 SPECIALTY VALVES
- A. Bronze Automatic Control Valves: Cast-bronze body, normally closed, diaphragm type with manual flow adjustment and operated by 24-V ac solenoid.
1. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
- B. Plastic Automatic Control Valves: Molded-plastic body, normally closed, diaphragm type with manual flow adjustment, and operated by 24-V ac solenoid.
1. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
- C. Automatic Drain Valves: Spring-loaded-ball type of corrosion-resistant construction and designed to open for drainage if line pressure drops below 2-1/2 to 3 psig (17 to 20 kPa).

- D. Quick-Couplers: Factory-fabricated, bronze or brass, two-piece assembly. Include coupler water-seal valve; removable upper body with spring loaded or weighted, rubber-covered cap; hose swivel with ASME B1.20.7, 3/4-11.5NH threads for garden hose on outlet; and operating key.
1. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
- E. Polymer-Concrete Control-Valve Boxes: Box and cover, with open bottom and openings for piping; designed for installing flush with grade. Include size as required for valves and service.
1. Shape: Round, Square or Rectangular.
 2. Sidewall Material: Polymer concrete with lateral and vertical sidewall design loading of 5,000 pounds (2,268 kilograms) minimum over 10 by 10 inches square.
 3. Cover Material: Polymer concrete with cover design loading of 5,000 pounds (2,268 kilograms) minimum over 10 by 10 inches square.
 - a. Lettering: Permanently brand valve box lid cover with corresponding station number.
 4. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
- F. Drainage Backfill: Cleaned gravel or crushed stone, graded from 3/4 inch minimum to 3 inches maximum.
- 2.5 DRIP IRRIGATION
- A. Strainer/Filter Units: Brass or plastic housing, with corrosion-resistant internal parts; of size and capacity required for devices downstream from unit.
- B. Emitters: PE or vinyl body.
1. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
 2. Single-Outlet Emitters: To deliver the following flow at approximately 20 psig (138 kPa):
 - a. Flow: ½ gph (1.9 L/h), 1 gph (3.8 L/h) and 2 gph (7.6 L/h).
 - b. Tubing Size: .580" minimum ID and 5 feet long.
 3. Outlet Caps: Plastic, for outlets without tubing.
- C. Drip Tubes: NPS 1/2 (DN 15), flexible PE or PVC tubing for emitters and other devices, of length indicated and with plugged end.
1. Available Manufacturers:
 - a. Reference Irrigation Legend on Drawings.
- 2.6 AUTOMATIC-CONTROL SYSTEM
- A. Available Manufacturers:
1. Reference Irrigation Legend on Drawings.
- B. Exterior Control Enclosures: NEMA 250, Type 4, weatherproof, with locking cover and two matching keys; include provision for grounding.
1. Material: Stainless-steel, Molded plastic.
 2. Mounting: Freestanding type for concrete-base, Surface type for wall mounting.
- C. Interior Control Enclosures: NEMA 250, Type 12, drip proof with locking cover and two matching keys.
1. Material: Molded plastic.
 2. Mounting: Freestanding type for concrete-base, Surface type for wall mounting.
- D. Control Transformer: 24-V secondary, with primary fuse.
- E. Controller Stations for Automatic Control Valves: Each station is variable, consult controller manufacturer for time limits. Include switch for manual or automatic operation of each station.
- F. Timing Device: Adjustable, 24-hour, 14-day clock, with automatic operations to skip operation any day in timer period, to operate every other day, or to operate 2 or more times daily.
1. Manual or Semiautomatic Operation: Allows this mode without disturbing preset automatic operation.
 2. Nickel-Cadmium Battery and Trickle Charger: Automatically powers timing device during power outages.
- G. Wiring: UL 493, Type UF-B multiconductor, with solid-copper conductors and insulated cable; suitable for direct burial.
1. Available Manufacturers:
 - a. AFC Cable Systems, Inc.
 - b. Alcatel Canada Wire, Inc.
 - c. American Electric Cable Co.
 - d. American Insulated Wire Co.
 - e. Cerro Wire & Cable Co., Inc.
 - f. Colonial Wire and Cable Co., Inc.
 - g. Essex Group, Inc.; Building Wire Products Division.
 - h. Precision Cable Manufacturing Co., Inc.
 - i. Southwire Company.
 - j. Triangle Wire and Cable Co.
 2. Feeder-Circuit Cables: No. 12 AWG minimum, between building and controllers.
 3. Low-Voltage, Branch-Circuit Cables: No. 14 AWG minimum, between controllers and automatic control valves; color-coded different from feeder-circuit-cable jacket color; with jackets of different colors for multiple-cable installation in same trench.
 4. Splicing Materials: Manufacturer's packaged kit consisting of insulating, spring-type connector or crimped joint and epoxy resin moisture seal; suitable for direct burial.
- 2.7 BACKFLOW PREVENTION UNITS (R.P.P.A./B.P.U.)
- A. Available Manufacturers:
1. Reference Irrigation Legend on Drawings.

PART 3 - EXECUTION

3.1 EARTHWORK

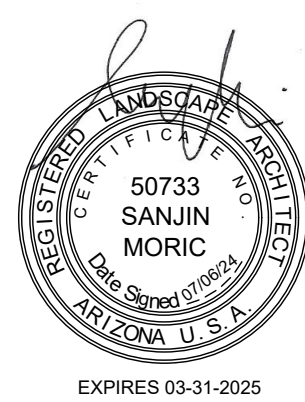
- A. Refer to Division 2 Section "Earthwork" for excavating, trenching and backfilling.
- B. Install warning tape directly above pressure piping, 12 inches below finished grades, except 6 inches below subgrade under pavement and slabs.
- C. Install piping and wiring in sleeves under sidewalks, roadways, parking lots and railroads.
- D. Drain pockets: Excavate to sizes indicated. Backfill with cleaned gravel or crushed stone, graded from 3/4 to 3 inches, to 12 inches below grade. Cover gravel or crushed stone with sheet of asphalt-saturated felt and backfill remainder with excavated material.
- E. Provide minimum cover over top of underground piping according to the following:
1. Irrigation Main Piping: Reference Trenching Depth Schedule.
 2. Circuit Piping: Reference Trenching Depth Schedule.
 3. Drain Piping: Reference Trenching Depth Schedule.
 4. Sleeves: Reference Trenching Depth Schedule.
- 3.2 PIPING APPLICATIONS
- A. Piping in control-valve boxes and above ground may be joined with flanges instead of joints indicated.
- B. Underground Irrigation Main Piping: Size per irrigation schedule, PVC pipe and socket fittings and solvent-cemented joints.
- C. Circuit Piping: Size per irrigation schedule, PVC pipe and socket fittings and solvent-cemented joints.
- D. Risers to Above Ground Sprinklers and Specialties: Size per irrigation schedule, hard copper tube, wrought-copper fittings and soldered joints.
- E. Drain Piping: Size per irrigation schedule, PVC pipe and socket fittings; and solvent-cemented joints.

- F. Sleeves: Size per irrigation schedule, PVC pipe and socket fittings and solvent-cemented joints.
- G. Transition Fittings: Use transition fittings for plastic-to-metal pipe connections according to the following:
1. Couplings:
 - a. Underground Piping NPS 1-1/2 (DN 40) and Smaller: Manufactured fitting or coupling.
 - b. Underground Piping NPS 2 (DN 50) and Larger: AWWA transition coupling.
 2. Fittings:
 - a. Aboveground Piping: Plastic-to-metal transition fittings.
 - b. Underground Piping: Union with plastic end of same material as plastic piping.
 3. Transition fittings are specified in Division 2 Section "Piped Utilities - Basic Materials and Methods."
- 3.3 VALVE APPLICATIONS
- A. Aboveground, Shutoff-Duty Valves:
1. NPS 2 (DN 50) and Smaller: Bronze or plastic ball valve.
- B. Underground, Shutoff-Duty Valves:
1. NPS 2 (DN 50) and Smaller: Curb stop with tee head, curb-stop service box and shutoff rod.
- C. Underground, Manual Control Valves: Bronze globe valve with control-valve box and valve key.
- D. Control Valves: Bronze or plastic ball valve per irrigation schedule.
- E. Drain Valves: Bronze or plastic ball valve per irrigation schedule.
- 3.4 INSTALLATION
- A. Install piping at minimum uniform slope of 0.5 percent down toward drain valves.
- B. Install piping free of sags and bends.
- C. Install groups of pipes parallel to each other, spaced to permit valve servicing.
- D. Install fittings for changes in direction and branch connections.
- E. Install unions adjacent to valves and to final connections to other components.
- F. Lay piping on solid subbase, uniformly sloped without humps or depressions.
- G. Refer to Division 2 Section "Piped Utilities - Basic Materials and Methods" for basic pipe joint construction.
- H. Underground Gate Valves: Install in valve box with top flush with grade.
- I. Underground Curb Stops: Install in service box with top flush with grade.
- J. Underground, Manual Control Valves: Install in manual control-valve box.
- K. Control Valves: Install in control-valve box.
- L. Drain Valves: Install in control-valve box.
- M. Flush circuit piping with full head of water and install sprinklers after hydrostatic test is completed.
- N. Locate part-circle sprinklers to maintain a minimum distance of 2 inches from walls and 2 inches from other boundaries, unless otherwise indicated.
- O. Install freestanding controllers or wall mounted controllers per irrigation details.
- P. Install control cable in same trench as irrigation piping per irrigation details. Provide conductors of size not smaller than recommended by controller manufacturer. Install cable in separate sleeve under paved areas if irrigation piping is installed in sleeve.
- Q. Install Backflow Prevention Unit per governing jurisdiction requirements and standards.
- R. Install cage assembly over Backflow Prevention Unit per details provided in Drawings.
- 3.5 CONNECTIONS
- A. Ground equipment according to Division 16 Section "Grounding and Bonding."
- B. Connect wiring according to Division 16 Section "Conductors and Cables."
- 3.6 LABELING AND IDENTIFYING
- A. Refer to Division 2 Section "Piped Utilities - Basic Materials and Methods" for equipment nameplates and signs.
- B. Warning Tapes: Arrange for installation of continuous, underground, detectable warning tape over underground piping, during backfilling of trenches.
- C. Refer to Division 2 Section "Earthwork" for warning tapes.
- D. Brand tops of PVC Irrigation Valve boxes with appropriate controller station number.
- E. E. Install Cristy valve tag on irrigation valve that corresponds with controller station number and branded valve box lid.
- 3.7 FIELD QUALITY CONTROL
- A. Perform the following field tests and inspections and prepare test reports:
1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
 2. Operational Test: After electrical circuitry has been energized, operate controllers and automatic control valves to confirm proper system operation.
 3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- B. Remove and replace units and retest as specified above.
- 3.8 ADJUSTING
- A. Adjust settings of controllers.
- B. Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit.
- C. Adjust sprinklers so they will be flush with, or not more than 1/2 inch (13 millimeters) above, finish grade.
- D. Irrigation system must provide 100% coverage of plant material.
- E. All spray and rotor heads in turf areas must be spaced to provide head to head coverage.
- END OF SECTION 02810

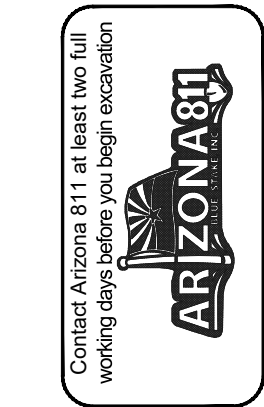
NEW OFFICE BUILDING
PREMIER UNDERGROUND

LANDSCAPE CONSTRUCTION DOCUMENTS

LANDSCAPE SPECIFICATION SHEET



DESIGNED: SM	
DRAWN: STAFF	
CHECKED: SM	PLOT DATE 07/06/2024
SHEET LA-50	10 OF 11
PROJECT NO.	SD-2404



REVIEWED BY	SM	DATE
DRAFTED BY	STAFF	DATE
CHECKED BY	SM	DATE

SECTION 02920 - LAWNS AND GARDENS

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes seeding and sodding.

1.2 DEFINITIONS

- A. Finish Grade: Elevation of finished surface of planting soil.
B. Manufactured Soil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.
C. Planting Soil: Native or imported topsoil, manufactured topsoil, or surface soil modified to become topsoil; mixed with soil amendments.
D. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill immediately beneath planting soil.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
B. Product certificates.
C. Planting Schedule: Indicating anticipated planting dates.

1.4 QUALITY ASSURANCE

- A. Installer's Field Supervision: Require installer to maintain an experienced full-time supervisor on Project site when planting is in progress.
B. Topsoil Analysis: Furnish soil analysis by a qualified soil-testing laboratory.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Sod: Harvest, deliver, store and handle sod according to requirements in TPI's "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" in its "Guideline Specifications to Turfgrass Sodding."

1.6 LAWN MAINTENANCE

- A. Begin maintenance immediately after each area is planted and continue until acceptable lawn is established, but for not less than the following periods:
1. Seeded Lawns: 60 days from date of Substantial Completion.
2. Sodded Lawns: 30 days from date of Substantial Completion.
B. Mow lawn as soon as top growth is tall enough to cut. Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings.

PART 2 - PRODUCTS

2.1 SEED

- A. Seed Species and Planting Timeframe:

1. Summer Lawn Seed: Common Bermuda Grass (Cynondon dactylon) and shall be planted from April 15 to September 15 in the Phoenix Metro area; it shall be fancy hulled seed having minimum percentages of purity and germination of 94% and 88% respectively, and a weed content not exceeding 0.35%.
2. Winter Lawn Seed: Common Rye Grass and shall be planted when Common Bermuda Grass is in the stages of dormancy it shall be fancy hulled seed having minimum percentages of purity and germination of 94% and 88% respectively, and a weed content not exceeding 0.35%.

2.2 TURFGRASS SOD

- A. Turfgrass Sod: Number 1 Quality/Premium, including limitations on thatch, weeds, diseases, nematodes and insects, complying with TPI's "Specifications for Turfgrass Sod Materials" in its "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color and texture, strongly rooted, and capable of vigorous growth and development when planted.
B. Turfgrass Species: Per Drawing Landscape Legend.
Summer Lawn Seed: Hybrid Bermuda Grass (See landscape legend) and shall be planted from April 15 to September 15 in the Phoenix Metro area; it shall be fancy hulled seed having minimum percentages of purity and germination of 94% and 88% respectively, and a weed content not exceeding 0.35%.
Winter Lawn Seed: Common Rye Grass and shall be planted when Hybrid Bermuda Grass is in the stages of dormancy it shall be fancy hulled seed having minimum percentages of purity and germination of 94% and 88% respectively, and a weed content not exceeding 0.35%.

2.3 PLANTING MATERIALS

- A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum of 4 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth.
1. Topsoil Source: Reuse surface soil stockpiled on-site and supplement with imported or manufactured topsoil from off-site sources when quantities are insufficient. Verify suitability of stockpiled surface soil to product topsoil.
B. Inorganic Soil Amendments:
1. Lime: ASTM C 602, Class T or O, agricultural limestone containing a minimum 80 percent calcium carbonate equivalent.
2. Sulfur: Granular, biodegradable, containing a minimum of 90 percent sulfur, with a minimum 99 percent passing through No. 6 (3.35 millimeter) sieve and a maximum 10 percent passing through No. 40 (0.425 millimeter) sieve.
3. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
4. Aluminum Sulfate: Commercial grade, unadulterated.
C. Organic Soil Amendments:
1. Compost: Well-composted, stable and weed-free organic matter, pH range of 5.5 to 8.
2. Peat: Finely divided or granular texture, with pH range of 6 to 7.5, containing partially decomposed moss peat, native peat or reed-sedge peat and having water-absorbing capacity of 1100 to 2000 percent.
3. Wood Derivatives: Decomposed nitrogen-treated sawdust, ground bark or wood waste of uniform texture, free of chips, stones, sticks, soil or toxic materials.
D. Fertilizer:
1. Bonemeal: Commercial, raw or steamed, finely ground; a minimum of 1 percent nitrogen and 10 percent phosphoric acid unless specific soil conditions require a different mixture composition.
2. Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.
3. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous and potassium in the following composition.
E. Mulches:
1. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats or barley.
2. Peat Mulch: Finely divided or granular texture, with pH range of 6 to 7.5, containing partially decomposed moss peat, native peat or reed-sedge peat and having water-absorbing capacity of 1100 to 2000 percent.
3. Compost Mulch: Well-composted, stable and weed-free organic matter, pH range of 5.5 to 8.

2.4 PLANTING SOIL MIX

- A. Planting Soil Mix for Sod: Mix topsoil with the following soil amendments and fertilizers in the following quantities:
1. Ratio of Loose Compost to Topsoil by Volume: 1:4.
2. Ratio of Loose Peat to Topsoil by Volume: 1:10.
3. Ratio of Loose Wood Derivatives to Topsoil by Volume: 1:10.
4. Weight of Lime per acre: 2 tons.
5. Weight of Potassium Sulfate per acre: 150 pounds.
6. Weight of Epsom Salts per acre: 50 pounds.
7. Weight of Zinc Sulfate per acre: 150 pounds.
8. Weight of Commercial Fertilizer per acre: 400 pounds. (initial application)
9. Repeat 16-20-0 at a rate of 400 pounds per acre 5 to 6 weeks after installation of sod.
B. Planting Soil Mix for Seeding: Mix topsoil with the following soil amendments and fertilizers in the following quantities:
1. Weight of Fiber Mulch per acre: 1,500 pounds.
2. Weight of tackifier per acre: 50 pounds.
3. Weight of seed per 1,000 square feet: 3 pounds Bermuda.
4. Weight of Fertilizer per 1,000 square feet: 5 pounds sulfate of ammonia.
5. Weight of Fertilizer per 1,000 square feet: 15 pounds superphosphate.

PART 3 - EXECUTION

3.1 LAWN PREPARATION

- A. Newly Graded Subgrades: Loosen subgrade to a minimum depth of 6 inches. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish and other extraneous matter and legally dispose of them off Owner's property.
1. Apply superphosphate fertilizer directly to subgrade before loosening.
2. Thoroughly blend planting soil mix off-site before spreading or spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil mix.
3. Spread planting soil mix to a depth of 4 inches but not less than required to meet finish grades after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen, muddy or excessively wet.
B. Unchanged Subgrades: If lawns are to be planted in areas unaltered or undisturbed by excavating, grading or surface soil stripping operations, prepare surface soil as follows:
1. Remove existing grass, vegetation and turf. Do not mix into surface soil.
2. Loosen surface soil to a depth of at least 6 inches. Apply soil amendments and fertilizers according to planting soil mix proportions and mix thoroughly into top 4 inches of soil. Till soil to a homogeneous mixture of fine texture.
3. Remove stones larger than 1 inch in any dimension and sticks, roots, trash and other extraneous matter.
4. Legally dispose of waste material, including grass, vegetation and turf, off Owner's property.
C. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future.
D. Moistened prepared lawn areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
E. Restore areas if eroded or otherwise disturbed after finish grading and before planting.

3.2 SEEDING

- A. Sow seed at the rate of 2 lb/1000 sq. ft. (0.9 kg/92.9 sq. m)
B. Rake seed lightly into top 1/8 inch (3 mm) of topsoil, roll lightly and water with fine spray.
C. Protect seeded areas with slopes not exceeding 1:6 by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre (42 kg/92.9 sq. m) to form a continuous blanket 1-1/2 inches (38 mm) in loose depth over seeded areas. Spread by hand, blower or other suitable equipment.
D. Protect seeded areas from hot, dry weather or drying winds by applying compost mulch, peat mulch, planting soil or topsoil within 24 hours after completing seeding operations. Soak and scatter uniformly to a depth of 3/16 inch (4.8 mm) and roll to a smooth surface.

3.3 SODDING

- A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.
B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to subgrade or sod during installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
C. Saturate sod with fine water spray within two hours of planting. During the first week, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches (38 mm) below sod.

3.4 SATISFACTORY LAWNS

- A. Satisfactory Seeded Lawn: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. (0.92 sq. m.) and bare spots not exceeding 5 by 5 inches (125 by 125 mm).
B. Satisfactory Sodded Lawn: At end of maintenance period, a healthy, well-rooted, even-colored, viable lawn has been established, free of weeds, open joints, bare areas and surface irregularities.
C. Reestablish lawns that do not comply with requirements and continue maintenance until lawns are satisfactory.

END OF SECTION 02920

SECTION 02930 - EXTERIOR PLANTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
1. Trees.
2. Shrubs.
3. Ground Cover.
4. Plants.

1.2 DEFINITIONS

- A. Finish Grade: Elevation of finished surface of planting soil.
B. Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.
C. Planting Soil: Native or imported topsoil, manufactured topsoil or surface soil modified to become topsoil; mixed with soil amendments.
D. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill, before placing planting soil.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
B. Samples: Mineral mulch.
C. Product certificates.
D. Planting Schedule: Indicating anticipated planting dates for exterior plants.
E. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of exterior plants during a calendar year.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer who maintains an experienced full-time supervisor on Project. Site when exterior planting is in progress.
B. Topsoil Analysis: Furnish soil analysis by a qualified soil-testing laboratory.
C. Provide quality, size, genus, species and variety of exterior plants indicated, complying with applicable requirements in ANSI Z60.1, "American Standard for Nursery Stock."
D. Preinstallation Conference: Conduct conference at Project site.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Do not prune trees and shrubs before delivery. Protect bark, branches and root systems from sun scald, drying, sweating, whipping and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of exterior plants during delivery. Do not drop exterior plants during delivery.
B. Deliver exterior plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set exterior plants and trees in shade, protect from weather and mechanical damage, and keep roots moist. All B&B stock shall be planted immediately upon arrival, or heeled-in for temporary storage until planting. Keep all plant materials out of full sun during summer months. Protect from drying winds and dust storms.

1.6 WARRANTY

- A. Special Warranty: Warrant the following exterior plants, for the warranty period indicated, against defects including death, theft, vandalism and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect or abuse by Owner, or incidents that are beyond Contractor's control.
1. Warranty Period for Trees and Shrubs: 90 days from the date of Substantial Completion.
2. Warranty Period for Ground Cover and Plants: 90 days from the date of Substantial Completion.
B. Trees and Shrubs: Maintain during warranty period by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening and repairing stakes and guy supports and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required to keep trees and shrubs free of insects and disease.
B. Ground Cover and Plants: Maintain during warranty period by watering, weeding, fertilizing and other operations as required to establish healthy, viable plantings.

PART 2 - PRODUCTS

2.1 EXTERIOR PLANTS

- A. Tree and Shrub Material: Furnish nursery-grown trees and shrubs complying with ANSI Z60.1, with healthy root systems developed by transplanting or root pruning. Provide well-shaded, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions and disfigurement.
1. Provide balled and burlapped or container-grown trees and shrubs as specified on Drawings.
B. Ground Cover: Provide ground cover of species indicated on Drawings, established and well rooted in pots or similar containers, and complying with ANSI Z60.1.
C. Annuals: Provide healthy, disease-free plants of species and variety shown or listed on Drawings. Provide only plants that are acclimated to outdoor conditions before delivery and that are in bud but not yet in bloom.
D. Perennials: Provide healthy, field-grown plants from a commercial nursery of species and variety shown or listed on Drawings.

2.2 PLANTING MATERIALS

- A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum of 2 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth.
1. Topsoil Source: Reuse surface soil stockpiled on-site and supplement with imported or manufactured topsoil from off-site sources when quantities are insufficient. Verify suitability of stockpiled surface soil to product topsoil.
B. Inorganic Soil Amendments:
1. Lime: ASTM C602, Class T or O, agricultural limestone containing a minimum 80 percent calcium carbonate equivalent.
2. Sulfur: Granular, biodegradable, containing a minimum of 90 percent sulfur, with a minimum 99 percent passing through No. 6 (3.35 mm) sieve and a maximum 10 percent passing through No. 40 (0.425 mm) sieve.
3. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
4. Aluminum Sulfate: Commercial grade, unadulterated.

C. Organic Soil Amendments:

1. Compost: Well-composted, stable and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve.
2. Peat: Sphagnum peat moss, partially decomposed, finely divided or granular texture, with a pH range of 3.4 to 4.8.
3. Peat: Finely divided or granular texture, with a pH range of 6 to 7.5, containing partially decomposed moss peat, native peat or reed-sedge peat and having a water-absorbing capacity of 1100 to 2000 percent.
4. Wood Derivatives: Decomposed, nitrogen-treated sawdust, ground bark or wood waste of uniform texture, free of chips, stones, sticks, soil or toxic materials.

D. Fertilizer: Bonemeal:

- Commercial, raw or steamed, finely ground; a minimum of 1 percent nitrogen and 10 percent phosphoric acid.
Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.
Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous and potassium.

D. Mulches: Organic Mulch:

- Ground or shredded bark.
Compost Mulch: Shall be well-rotted, decomposed wood fiber, or cotton stubble-derived materials with not fillers or agents, save for the balance of nitrogen-adding ingredients. pH shall range from 6.8 to 7.2; moisture content shall be 30% to 40% by weight and nutrients shall comply with the following minimum requirements by volume: Nitrate Nitrogen - 1.5%; Organic Nitrogen - 3.65%; Phosphorous - 1.14%; Potassium - 1.19%; Iron - 0.84%. All mulch is subject to approval of the Landscape Architect. Delivery to site shall be either bulk or marked bags. Acceptable products are "Greenworld Mulch", "Com-Pel Soil Conditioner", and natural "Peat Moss".

- E. Decomposed Granite: Shall be the color as specified, free of clumps which cannot be broken with one shovel blow, free of foreign substances and meeting the following requirements: 100% passing a 2" sieve; 85-100% passing a 3/4" sieve; and 5% to 20% passing a No. 4 sieve. One color shall be used for the entire work, and shall be obtained from only one source.
F. Weed-Control per Landscape Legend: A pre-emergent shall be used in all decomposed granite areas. Follow manufacturer's recommendations for applications. Plastic liners are not allowed under any condition.

2.3 PLANTING SOIL MIX

- Planting Soil Mix: Mix topsoil with the following soil amendments and fertilizers in the following quantities:
1. 6 parts by volume of site fertile soil.
2. 4 parts by volume nitrolized sawdust.
3. 1 pound 10-20-0 per cubic yard of mix.
Mixture ratio to be 3 parts native soil to 1 part amended soil unless specified in soils report provided by Owner's Representative.

PART 3 - EXECUTION

3.1 EXTERIOR PLANTING

- A. Bed Establishment:
1. Loosen subgrade of planting beds to a minimum depth of 4 inches.
2. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish and other extraneous matter and legally dispose of them off Owner's property.
3. Thoroughly blend planting soil mix off-site before spreading or spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil mix.
4. Spread planting soil mix to a depth 4 inches but not less than required to meet finish grades after natural settlement. Do not spread if planting soil or subgrade is frozen, muddy or excessively wet.
5. Finish Grading: Grade planting beds to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges and fill depressions to meet finish grades.
B. Trees and Shrubs:
Pits and Trenches: Install per details shown.
Set trees and shrubs per details shown.
Balled and Burlapped: Remove burlap and wire baskets from tops of root balls and partially from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
Container Grown: Carefully remove root ball from container without damaging root ball or plant.
Fabric Bag Grown: Carefully remove root ball from fabric bag without damaging root ball or plant. Do not use planting stock if root ball is cracked or broken before or during planting operation.
Place planting soil mix around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.
Organic Mulching: Add amendments as listed above.
C. Tree and Shrub Pruning: Prune, think and shape trees and shrubs according to standard horticultural practice. Prune trees to retain required height and spread. Do not cut tree leaders; remove only injured or dead branches from flowering trees. Prune shrubs to retain natural character. Shrub sizes indicated are sizes after pruning.
D. Ground Cover and Plant Planting:
1. Install per details shown.
2. Set out and space ground cover and plants as indicated.
3. Dig holes large enough to allow spreading of roots and backfill with planting soil.
4. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.
5. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
6. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.
E. Decomposed Granite:
Granite shall be installed to a depth of 2" and shall be measured after compaction and rolling. Remove all weeds by mechanical methods or by repeating spraying of weed killer for weeds and round-up for grasses.
F. Protect exterior plants from damage due to landscape operations, operations by other contractors and trades and others. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged exterior planting.
G. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 02930

NEW OFFICE BUILDING
PREMIER UNDERGROUND

LANDSCAPE CONSTRUCTION DOCUMENTS

LANDSCAPE SPECIFICATION SHEET



smART Development
Landscape Architecture
3419 N. Kachina Lane
Scottsdale, Arizona 85251
Office 480-516-8845



DESIGNED: SM
DRAWN: STAFF
CHECKED: SM PLOT DATE 07/06/2024
SHEET 11 OF 11
LA-51
PROJECT NO. SD-2404