







Boundary Source:
CIVIL CAD FILE

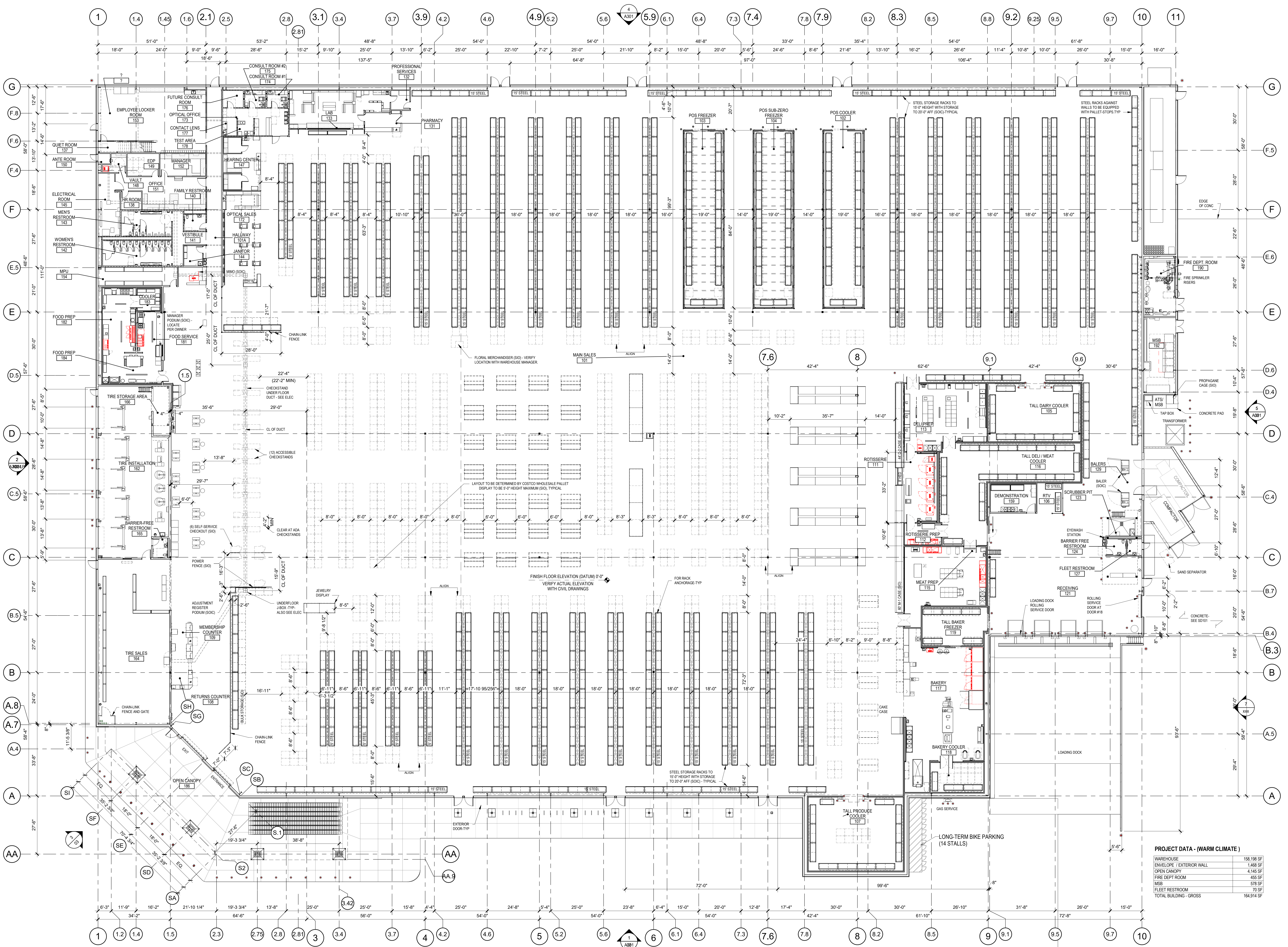
Stormwater Management Design:
AVERAGE REGIONAL REQUIRED
PROVIDED

Conceptual Site Plan
Costco Warehouse - Tucson 2
9748 E Old Vail Rd, Tucson, AZ 85747



ORTH

GE
1



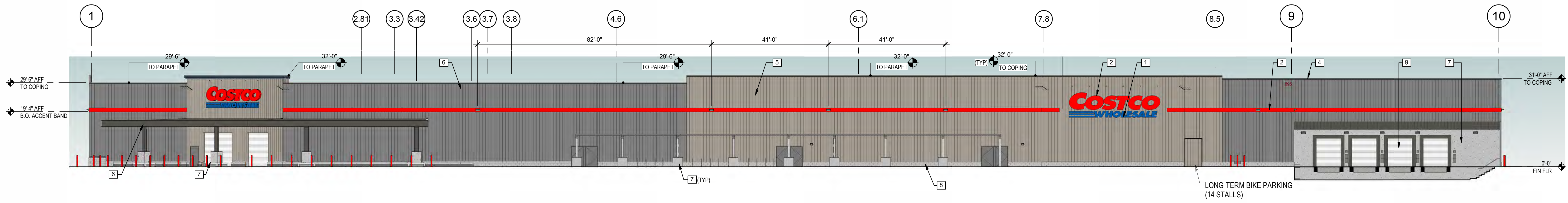


COSTCO
WHOLESALE

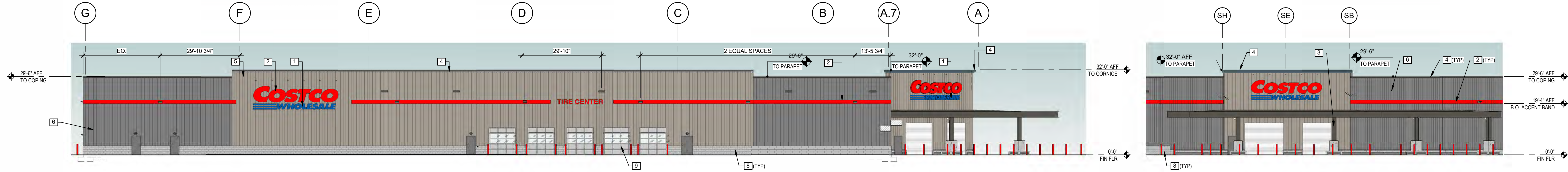
ENTRANCE

LIQUOR
SALES





1 NORTH (GRID-A) WALL ELEVATION
SCALE: 1/16" = 1'-0"

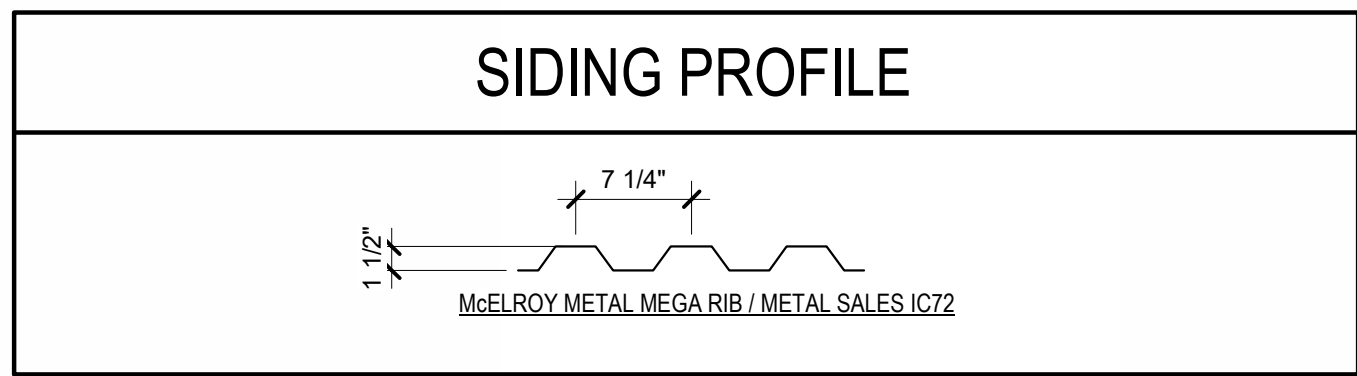


2 EAST (GRID-1) WALL ELEVATION
SCALE: 1/16" = 1'-0"

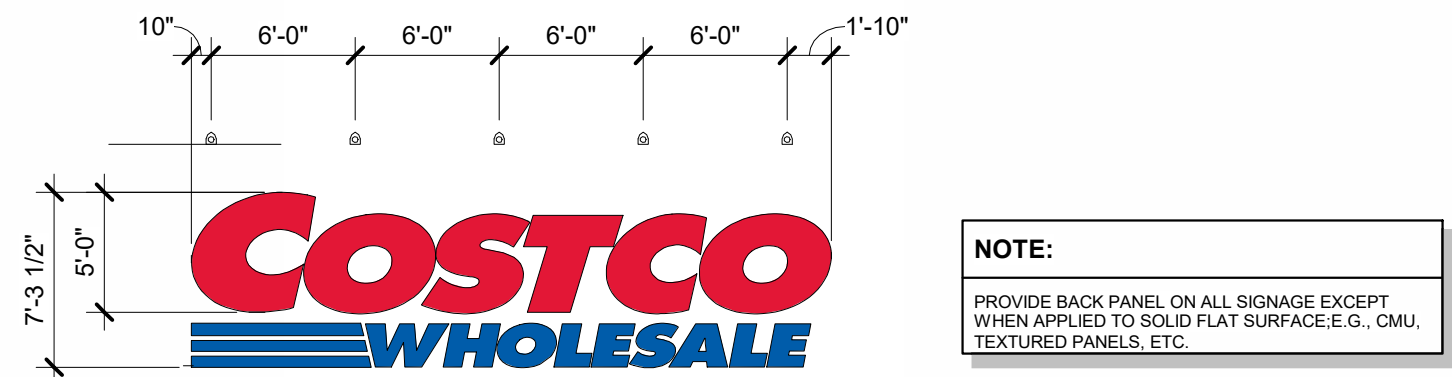
3 ENTRY (GRID-S.2) WALL ELEVATIONS
SCALE: 1/16" = 1'-0"



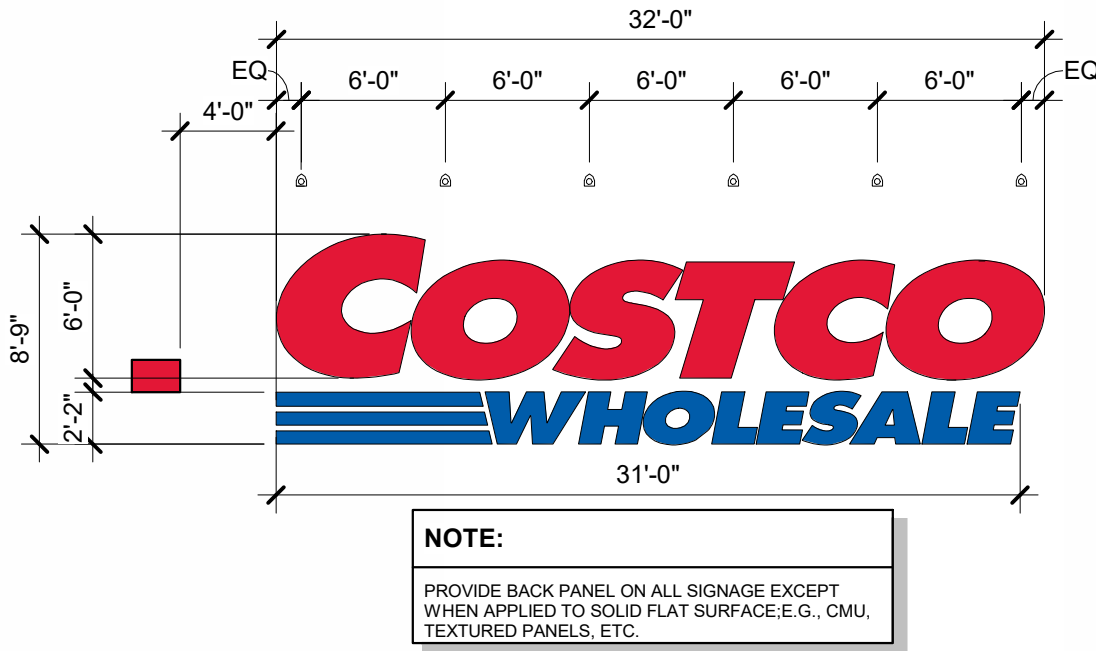
4 SOUTH (GRID-G) WALL ELEVATION
SCALE: 1/16" = 1'-0"



SIGNAGE AREA TABULATION (WALL SIGNS)				
QTY	SIGN	SIZE	AREA (SF) EA	TOTAL SF
3	COSTCO WHOLESALE	6'-0" X 6"	251 SF	753
1	COSTCO WHOLESALE	9'-0" X 6"	174 SF	174
1	TIRE CENTER	17'-4" X 1'-9"	31 SF	31
TOTAL SIGNAGE AREA				707

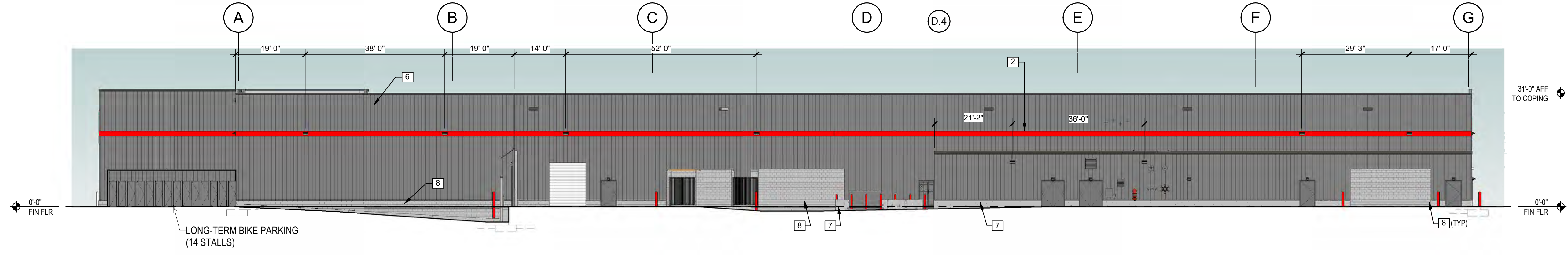


8 ENTRY SIGNAGE (SUPPLIED AND INSTALLED BY MBS)
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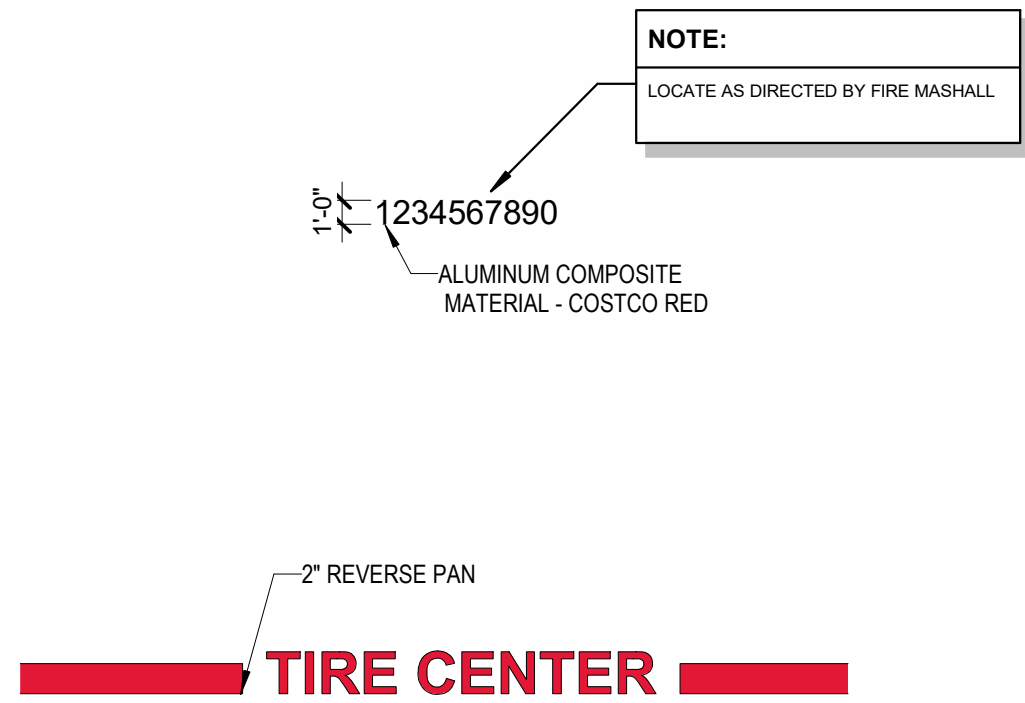


9 BUILDING SIGNAGE
SCALE: 1/8" = 1'-0"

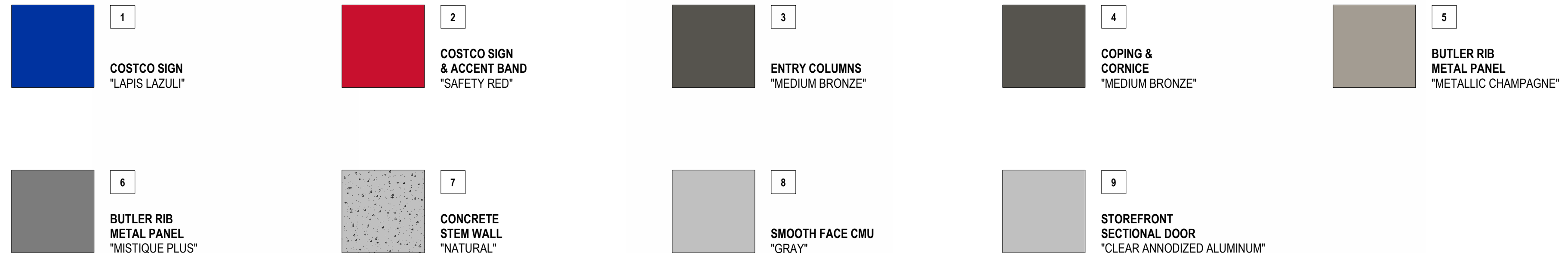
5 WEST (GRID-10) WALL ELEVATION
SCALE: 1/16" = 1'-0"



6 COSTCO SIGNAGE (SUPPLIED AND INSTALLED BY MBS)
SCALE: 1/8" = 1'-0"



7 MATERIAL BOARD
SCALE: NOT TO SCALE





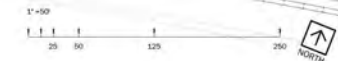




PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME
(Green circle with 1)	Acacia farnesiana / Sweet Acacia
(Green circle with 2)	Cercidium bursatum / Blue Palo Verde
(Green circle with 3)	Cercidium microphyllum / Little Leaf Palo Verde
(Pink circle with 4)	Chaptalia linum / Desert Willow
(Green circle with 5)	Prosopis juliflora / AZT / Thornless Mesquite
(Yellow circle with 6)	Parthenocissus florida / Blue Palo Verde
(Green circle with 7)	Prosopis juliflora / Velvet Mesquite
(Green circle with 8)	Stemodia griffithii / Calceolaria
(Pink circle with 9)	Hesperaloe parviflora 'Tropicana' / Brackenridge Red Yucca
(Green circle with 10)	Salvia greggii / Autumn Sage
(Green circle with 11)	Stipa leucostachya / Mexican Feather Grass
(Green circle with 12)	Cylindropuntia pectinifera / Desert Cholla
(Green circle with 13)	Cylindropuntia imbricata / Graham's Fishhook Cactus
(Green circle with 14)	Cylindropuntia robusta ssp. 'Schoen' / Pima Fishhook Cactus
(Green circle with 15)	Fouquieria splendens / Saguaro
(Green circle with 16)	Fouquieria splendens / Saguaro
(Green circle with 17)	Yucca elata / Soapberry Yucca
(Green circle with 18)	Zelkova schubertii var. 'canescens' / Greythorn
(Green circle with 19)	Agave attenuata / Octopus Agave
(Green circle with 20)	Dasylirion wheeleri / Grey Desert Spoon
(Purple circle with 21)	Lantana montevidensis 'Purple' / Purple Trailing Lantana
(Green circle with 22)	Rosa rugosa 'Eden Rose' / Dwarf Rosemary
(Green circle with 23)	Ceanothus leucanthus / Desert Ceanothus
(Green circle with 24)	Leucophyllum frutescens / Texas Sage
(Green circle with 25)	Nerium oleander 'Little Leaf' / Little Red Oleander
(Green circle with 26)	Vauquelinia californica / Arizona Rosewood

SYMBOL	DESCRIPTION
(Light grey box)	Natural Soil Undisturbed
(Dark grey box)	2-4" Concrete Brown Rock
(Light brown box)	3"-6" Rip Rap for Basin
(Light grey box)	Natural Soil Graded





Cercidium microphyllum



Prosopis x 'AZT'



Acacia farnesiana



Cercidium floridum



Chilopsis linearis



Dasylirion wheeleri



Stipa tenacissima



Rosmarinus officinalis 'Prostratus'



Agave vilmoriniana



Salvia greggii



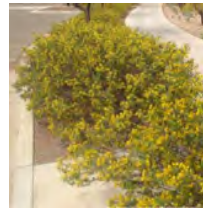
Hesperaloe parviflora 'Perpa' TM



Vauquelinia californica



Leucophyllum frutescens



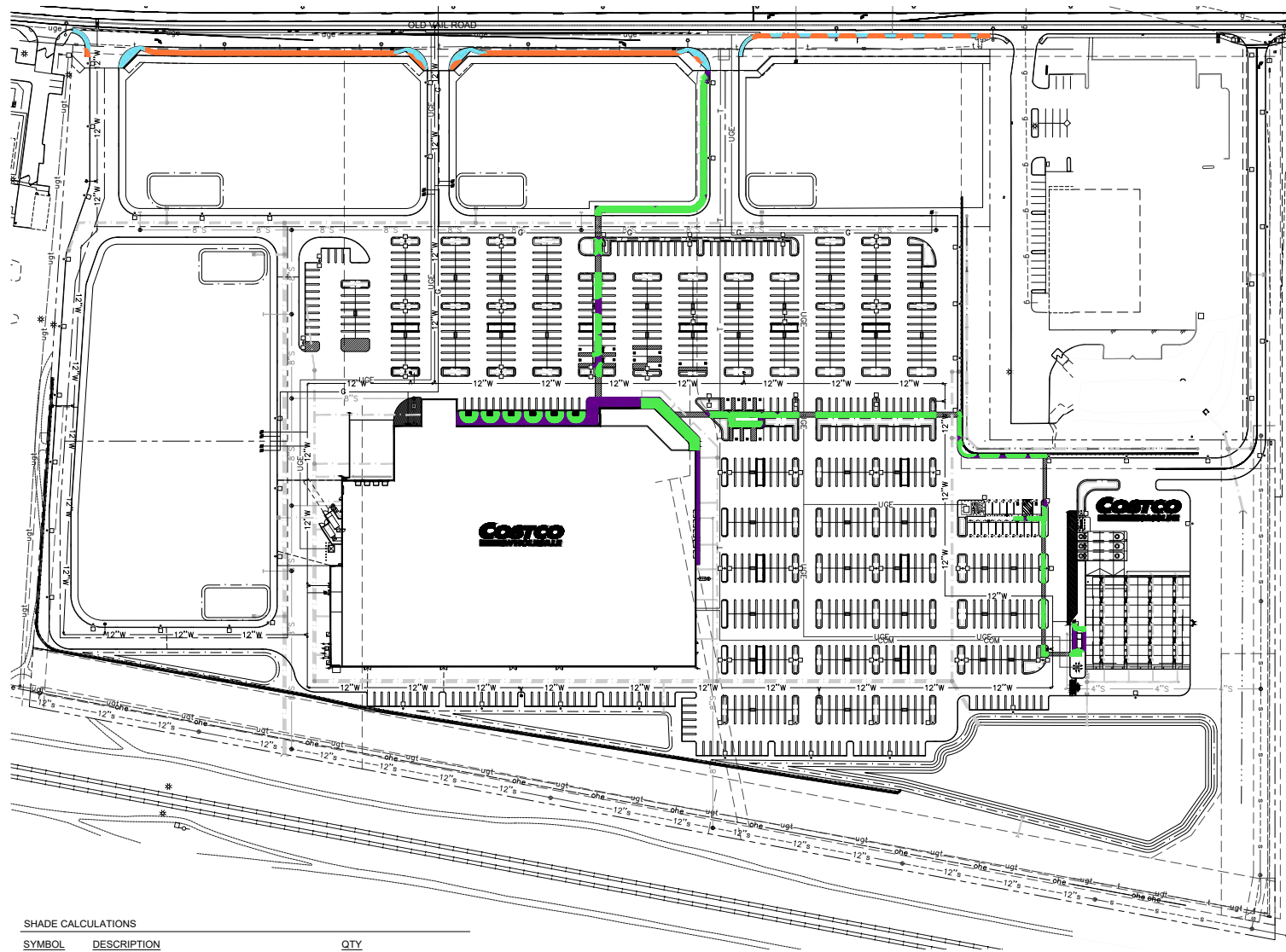
Cassia nemophila



Lantana montevidensis 'Purple'



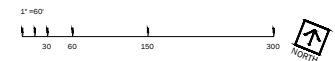
Nerium oleander 'Little Red'



SHADE CALCULATIONS

SYMBOL	DESCRIPTION	QTY
	Pedestrian walkways on-site	16,287 sf
	Pedestrian walkway shade on-site	10,833 sf = 66.5%
	Pedestrian walkways off-site. Public ROW	7,787 sf
	Pedestrian walkway shade off-site. Public ROW	5,098 sf = 65.1%

* Shade study demonstrating compliance, calculated at 90 degrees over horizon



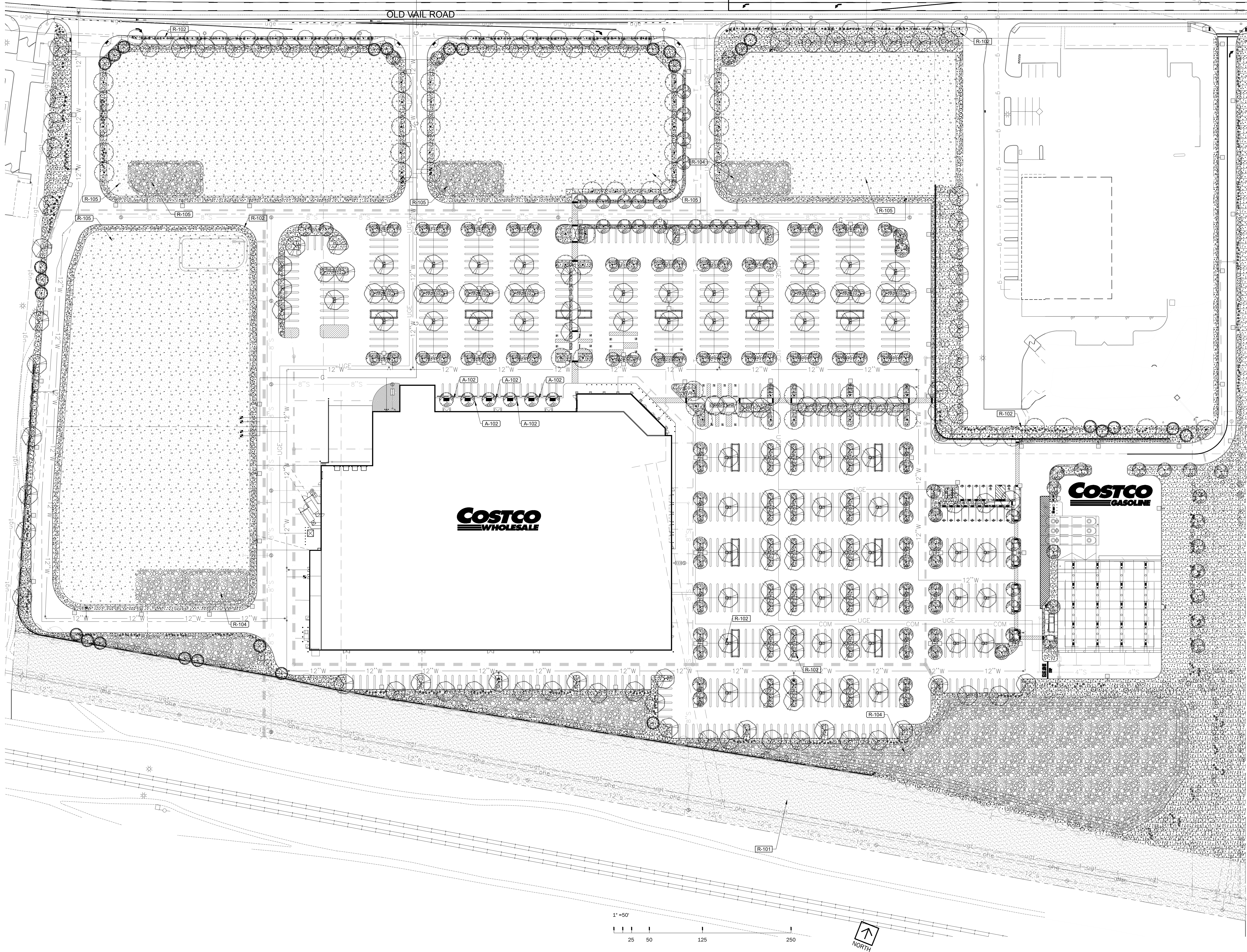
TUCSON DRB SUBMISSION

SHADE PLAN
Costco Warehouse - SE Tucson
9748 E Old Vail Rd, Tucson, AZ 85747



25.10786
2026.08.04

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PLANT SCHEDULE	
SYMBOL	BOTANICAL / COMMON NAME
TREES	
	Acacia farnesiana / Sweet Acacia
	Cercidium floridum / Blue Palo Verde
	Cercidium microphyllum / Little Leaf Palo Verde
	Chilopsis linearis / Desert Willow
	Prosopis x 'AZT' / AZT Thornless Mesquite
PRESERVATION	
	Parkinsonia florida / Blue Palo Verde
	Prosopis velutina / Velvet Mesquite
	Senegalia greggii / Catclaw Acacia
SHRUBS	
	Hesperaloe parviflora 'Perpa' TM / Brakelights Red Yucca
	Salvia greggii / Autumn Sage
GRASSES	
	Stipa tenacissima / Mexican Feather Grass
PRESERVATION	
	Celtis pallida / Desert Hackberry
	Cochemia grahamii / Graham's Fishhook Cactus
	Coryphantha robustispina spp. Scheeri / Pima Pineapple Cactus
	Ferocactus wislizeni / Fish Hook Barrel Cactus
	Fouquieria splendens / Ocotillo
	Vachellia constricta / Whitethorn Acacia
	Yucca elata / Soaptree Yucca
	Ziziphus obtusifolia var. canescens / Greythorn
SHRUB - ACCENT	
	Agave vilmoriniana / Octopus Agave
	Dasylirion wheeleri / Grey Desert Spoon
SHRUB - GROUNDCOVER	
	Lantana montevidensis 'Purple' / PurpleTrailing Lantana
	Rosmarinus officialis 'Prostratus' / Dwarf Rosemary
SHRUB - SCREENING	
	Cassia nemophila / Desert Cassia
	Leucophyllum frutescens / Texas Sage
	Nerium oleander 'Little Red' / Little Red Oleander
	Vauquelinia californica / Arizona Rosewood
ROCK & DECOMPOSED GRANITE	
SYMBOL	DESCRIPTION
	Natural Soils Undisturbed.
	2-4" Coronado Brown Rock
	3-8" Rip Rap for Basin
	Natural Soils Graded.



TUCSON DRB SUBMISSION

Conceptual Planting Plan
Costco Warehouse - SE Tucson
9748 E Old Vail Rd, Tucson, AZ 85747



GENERAL PLANTING NOTES

1. Installer shall be responsible for making himself familiar with all underground utilities, pipes and structures. Installer shall take sole responsibility for any cost incurred due to damage of said utilities.
2. The installer shall make himself familiar with all local, regional, County, State and Federal regulations, requirements etc. in affect as to the transport, import, delivery and installation of all plant materials specified on the plans. It is strongly recommended to source plant materials from local nurseries that are also familiar with the requirements for growing, supplying and transporting plants into the area of the project.
3. Installer shall not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist that may not have been known during design.
4. Installer shall have soils tested by a qualified agronomy laboratory. Materials and mixing of soil amendments, fertilizers, and back fill for planting pits shall be in accordance with recommendations of the soils agronomy report.
5. The installer shall secure all plant material for the project upon award of contract but in no instances less than 120 days prior to installation.
6. All plant material shall be approved by the Landscape Architect, Owner or Owner's representative prior to installation.
7. Final location of all plant material shall be subject to the approval of the Construction Manager.
8. See details for staking method and plant pit dimensions.
9. If conflicts arise between size of areas and plans, Installer to contact Construction Manager for resolution. Failure to make such conflicts known to the Construction Manager will result in Installer's liability to relocate the materials.
10. All ground covers to be held back 4" from edge of new shrubs typical and 2" from back of curbs or edge of walks at time of planting.
11. Ground covers shall be triangularly spaced per detail.
12. Trees shall be located minimum 4' from walls, overhead, walks, headers and other trees within the project, unless otherwise shown.
13. Place Deep Root Barrier at new trees that are with in 5' of Curbs or paving unless noted otherwise on the plans. Deep Root model UB 24-2 see installation detail.
14. Separate all ground cover /shrub, areas from lawn, rock or Decomposed Granite areas with headers as per the installation details.
15. All slopes greater than 3:1 in shrub areas shall be covered jute mesh to prevent soil erosion during plant establishment
16. Remove stakes and trellis from vines and espaliers and secure to walls, fences and posts as per detail
17. In all cases "Root Bound" plant material will not be accepted.
18. No trees are to be planted within or above site storm drain pipes or in swales flowlines.
19. If the need to address conflicts arises; trees must be planted as required per Zoning Code. Contact the Landscape Architect for direction.
20. Separate all ground cover and shrub areas from lawn areas with headers as per the installation details. If no detail is present use Permaloc CleanLine Aluminum edging, 1/8" x 4", Mill finish.
21. Separate all shrub areas and lawn areas from area of rock or Decomposed Granite with headers as per the installation details. If no detail is present use Permaloc CleanLine Aluminum edging, 1/8" x 4", Mill finish.
22. All planting areas including pots irrigated with drip irrigation or low volume irrigation components shall be hand watered by the installer until the plant materials root zones have established enough to effectively access the irrigation water from the drip systems.
23. Suitable Soil Import
 - a. General - Topsoil shall be free of roots, clods, stones larger than 1-inch in the greatest dimension, pockets of coarse sand, noxious weeds, sticks, lumber, brush and other litter. It shall not be infested with nematodes or other undesirable disease-causing organisms such as insects and plant pathogens
 - b. Topsoil shall be friable and have sufficient structure in order to give good tilth and aeration to the soil.
 - c. Gradation limits - soil shall be a sandy loam. The definition of soil texture shall be the USDA classification scheme cited below. Gravel over 2 millimeters in diameter shall be less than 20% by weight
 - d. Permeability Rate - Hydraulic conductivity rate shall be not less than one inch per hour nor more than 10 inches per hour when tested in accordance with the USDA Handbook Number 60, method 34b or other approved methods.
 - e. Fertility - The range of the essential elemental concentration in soil shall be as follows for approval of source soil:

Ammonium Bicarbonate/DTPA Extraction
parts per million (mg/kilogram
dry weight basis

phosphorus	10 - 40
potassium	100 - 220
iron	5- 35
manganese	0.6 - 6
zinc	1 - 8
copper	0.3 - 5
boron	0.2 - 1
magnesium	50 - 150
sodium	0 - 100
sulfur	25 - 500
molybdenum	0.1 - 2

- f. Acidity - The soil pH range measured in the saturation extract (Method 21a, USDA Handbook Number 60) shall be 6.0 - 7.9.
- g. Salinity - The salinity range measured in the saturation extract (Method 3a, USDA Handbook Number 60) shall be 0.5 - 2.5 dS/m.
- h. Chloride - The maximum concentration of soluble chloride in the saturation extract (Method 3a, USDA Handbook Number 60) shall be 150 mg/l (parts per million).
- i. Boron - The maximum concentration of soluble boron in the saturation extract (Method 3a, USDA Handbook Number 60) shall be 1 mg/l (parts per million).
- j. Sodium Adsorption Ratio (SAR) - The maximum SAR shall be 3 measured per Method 20b, USDA Handbook Number 60.
- k. Aluminum - Available aluminum measured with the Ammonium Bicarbonate/DTPA Extraction shall be less than 3 parts per million.
- l. Soil Organic Matter Content - Sufficient soil organic matter shall be present to impart good physical soil properties but not be excessive to cause toxicity or cause excessive reduction in the volume of soil due to decomposition of organic matter. The desirable range is 3% to 5%. The carbon:nitrogen ratio should be about 10.
- m. Calcium Carbonate Content - Free calcium carbonate (limestone) shall not be present for acid-loving plants.
- n. Heavy Metals - The maximum permissible elemental concentration in the soil shall not exceed the following concentrations:

Ammonium Bicarbonate/DTPA Extraction
parts per million (mg/kilogram)
dry weight basis

arsenic	1
cadmium	1
chromium	10
cobalt	2
lead	30
mercury	1
nickel	5
selenium	3
silver	0.5
vanadium	3

- o. If the soil pH is between 6 and 7, the maximum permissible elemental concentration shall be reduced 50%. If the soil pH is less than 6.0, the maximum permissible elemental concentration shall be reduced 75%. No more than three metals shall be present at 50% or more of the above values.

Phytotoxic constituent, herbicides, hydrocarbons etc. - Germination and growth of monocots and dicots shall not be restricted more than 10% compared to the reference soil. Growth inhibiting constituents must not be present.

20. Organic soil amendment

- a. Composted aerobic humus compost without presence of decomposition products. The organic matter content shall be at least 50% on dry weight basis. Humus material shall have an acid-soluble ash content of no less than 8% and no more than 20%.
- b. The pH of the material shall be between 6 and 7.5.
- c. The salt content shall be less than 6 millimho/cm @ 25° C. (ECe less than 6) in a saturated paste extract.
- d. Boron content of the saturated extract shall be less than 1.0 part per million.
- e. Silicon content (acid-insoluble ash) shall be less than 50%.
- f. Calcium carbonate shall not be present if to be applied on alkaline soils.
- g. Types of acceptable products are composts, manures, mushroom composts, straw, alfalfa, peat mosses etc. low in salts, low in heavy metals, free from weed seeds, free of pathogens and other deleterious materials.
- h. Composted wood products are conditionally acceptable [stable humus must be present]. Wood based products are not acceptable which are based on red wood or cedar.
- i. Sludge-based materials are not acceptable.
- j. Carbon:nitrogen ratio is between 8.0 and 20:1.
- k. SAR (sodium adsorption ratio) less than 5.
- l. Seed germination - over 80% germination in saturation extract diluted 1 to 3 in water compared to seeds germinated in deionized water.
- m. Germination vigor - equal to or better than seed length for seeds germinated in deionized water.
- n. Maturity and stability - Solvita 5 or higher.
- o. Molar ratio of ammoniacal nitrogen to nitrate nitrogen less than 2.
- p. The compost shall be aerobic without malodorous presence of decomposition products.
- q. The maximum particle size shall be 0.5 inch, 80% or more shall pass a No. 4 screen.

Maximum total permissible pollutant concentrations in amendment in parts per million on a dry weight basis:

arsenic	12	copper	100	selenium	20
cadmium	15	lead	100	silver	10
chromium	100	mercury	10	vanadium	50
cobalt	50	zinc	200	molybdenum	20
nickel	100				

20. Decomposed granite (D.G.) - install a 2" (Min.) layer or 2" minimum or twice the size of the granite, which ever is greater, w/ stabilizer, color as per plan, in all planters under all trees and shrubs as indicated. Before placing granite, compact sub-grade to 85% and apply a pre-emergent herbicide to soil. After placing granite: rake smooth, wet to entire depth, allow to dry, then lightly scarify surface with a leaf rake. Apply a secondary application of pre-emergent herbicide to top of granite. Keep top of granite 1-1/2" below adjacent walks and curbs. Do not allow granite to touch the trunk of any plant. Install after installation of plant material making note of plant height so they are not buried by D.G..
21. Cactus / Succulent Mix:
 - Pumice or Perlite (Approximately 40%)
 - Potting Soil Mix (Approximately 15%)
 - Clean Washed River Sand (Approximately 10%)
 - Loosened Coir (Approximately 35%)
22. All Washingtonia Palms shall be skinned to the green fronds above and shall be as per the brown trunk height (BT) as indicated on the planting plan and legend.
23. All Phoenix Palms shall be "Pineapple Cut" skinned and shall be as per the brown trunk height (BT) as indicated on the planting plan and legend and matched to be of equal height in each area of use.
24. Brown Trunk Height "BT" shall mean as measured from the ground line to the base of the heart leaf.
25. All Palms must be certified disease and pest free by a licensed Arborist. Written documentation must be provided prior to planting.

SOIL TESTS FOR SOIL MANAGEMENT

1. The Contractor shall be responsible for obtaining soils testing and soil amendment recommendations. Soils testing shall be completed and test results and amendment recommendations submitted to the Owner's Representative a minimum of sixty (60) days before commencement of any planting. The report shall be reviewed approved by the project Landscape Architect and ALL required governing agencies PRIOR to the commencement of any soil amending or planting.
2. The testing laboratory shall be IAS Laboratories 2515 E University Drive, Phoenix, Arizona 85034, phone (602) 273-7248 or approved equal as approved by the Owner's Representative. , or approved equal as approved by the Owner's Representative.
3. The testing laboratory for soils analysis shall use the following criteria for soil testing: USDA Agricultural Suitability Test per Handbook 60, to include Boron presence and content; and University of California Soil Fertility Test.
4. Interpretations, fertilization and soil amendment recommendations, and comments regarding these tests are required.
5. Infiltration Rate determined by laboratory test or Soil Texture and Infiltration Rate table
6. Soils test sites shall occur not more than 250 feet on center in the planting areas, unless otherwise noted on plans.
7. Samples of all import soil from each source shall also be submitted to the soils testing laboratory for analysis, interpretation and recommendations prior to placement, blending or back-filling.
8. A copy of the plant schedule shall be provided to the lab for review and comment in relation to the results of the soils tests.

PERCOLATION TEST

1. The landscape installer shall dig (as test areas) four (4) plant pits of 24" box size, or larger, at four (4) locations minimum within the job site. Pits are to be filled with water. The results of this test shall be reported to the Landscape Architect and owner 48 hours after initiating. Test pits shall be in actual location of trees as shown on the plan. Failure to carry out this test shall make the landscape installer liable for any and all trees that die due to poor water percolation beyond the agreed guarantee period.
- OPTION 1
Should the water drain out of the test pits at a normal rate indicating good percolation then tree detail "A" and shrub planting detail "A" shall be utilized.
- OPTION 2
In the event any amount of water is left standing in the test pit (per the above procedure) 24 hours after initiating the percolation test then the vertical mulching details for tree detail "B" and shrub detail "B" shall apply to all trees and shrubs regardless of size. These details shall supersede all other planting details. However, the tree staking requirements of tree planting detail "A" shall remain intact in either case.

PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	CAL / SIZE	BOX SIZE	QTY
TREES				
	Acacia farnesiana / Sweet Acacia Single Trunk	2"	24" Box	129
	Cercidium floridum / Blue Palo Verde High Branching	2"	24" Box	53
	Cercidium microphyllum / Little Leaf Palo Verde Multi	2"	24" Box	28
	Chilopsis linearis / Desert Willow	2"	24" Box	25
	Prosopis x AZT / AZT Thornless Mesquite High Branching	2"	24" Box	194

PRESERVATION

	Parkinsonia florida / Blue Palo Verde Salvaged - Transplant (28)	-		28
	Prosopis velutina / Velvet Mesquite Salvaged - Transplant (68)	-		68
	Senegalia greggii / Catclaw Acacia Salvaged - Transplant (5)	-		5

SYMBOL	BOTANICAL / COMMON NAME	CONT	H/W	QTY
SHRUBS				
	Hesperaloe parviflora 'Perpa' TM / Brakelights Red Yucca	5 Gal		795
	Salvia greggii / Autumn Sage	5 Gal		436

GRASSES

	Stipa tenacissima / Mexican Feather Grass	5 Gal		23
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PRESERVATION

	Celtis pallida / Desert Hackberry Salvaged - Transplant (2)	-		2
	Cochemia grahamii / Graham's Fishhook Cactus Salvaged - Transplant (1)	-		1
	Coryphantha robustispina spp. Scheeri / Pima Pineapple Cactus Salvaged - Transplant (1) to be donated to a local demonstration garden.	-		1
	Ferocactus wislizeni / Fish Hook Barrel Cactus Salvaged - Transplant (107)	-		107
	Fouquieria splendens / Ocotillo Salvaged - Transplant (45)	-		45
	Vachellia constricta / Whitethorn Acacia Salvaged - Transplant (21)	-		21
	Yucca elata / Soaptree Yucca Salvaged - Transplant (3)	-		3
	Ziziphus obtusifolia var. canescens / Greythorn Salvaged - Transplant (3)	-		3

SHRUB - ACCENT

	Agave vilmoriniana / Octopus Agave	5 Gal		91
	Dasylirion wheeleri / Grey Desert Spoon	5 Gal		83

SHRUB - GROUND COVER

	Lantana montevidensis 'Purple' / Purple Trailing Lantana	5 Gal		523
	Rosmarinus officinalis 'Prostratus' / Dwarf Rosemary	5 Gal		358

SHRUB - SCREENING

	Cassia nemophila / Desert Cassia	5 Gal		435
	Leucophyllum frutescens / Texas Sage	5 Gal		218
	Nerium oleander 'Little Red' / Little Red Oleander	5 Gal		345
	Vauquelinia californica / Arizona Rosewood	5 Gal		31

ROCK & DECOMPOSED GRANITE

SYMBOL	CODE	DESCRIPTION	QTY
	R-101	Natural Soils Undisturbed.	978 cy
	R-102	2-4" Coronado Brown Rock	3,058 cy
	R-104	3"-8" Rip Rap for Basin	106,767 sf
	R-105	Natural Soils Graded.	250,427 sf

AMENITIES

SYMBOL	CODE	DESCRIPTION	QTY
	A-102	Tree Grate Ironsmith 9660 Tweed. Natural Finish.	6

Development \Standards and Landscape Guidelines

Driveways and Parking Areas:

- Parking areas shall be screened from the street to a height of thirty (30) inches as required by the C.O.T. with shrubs form the list in Appendix A.
- One (1) tree in a curbed planter for each ten (10) parking stalls shall be provided in parking areas. Curbed planter areas shall be a minimum of five (5) feet in width. Minimum parking area tree size shall meet C.O.T. standards. Trees selected from Appendix A.

Streetscape:

- Old Vail Road landscape materials have been selected and included in the Master Landscape Plant List included in Appendix A of the Guidelines.

Irrigation:

- In all landscaped areas and planters, a permanent automatic underground irrigation system shall be installed, which shall be capable of providing the proper amount of precipitation for the particular type of plant material used. Drip irrigation systems are recommended for water conservation purposes.



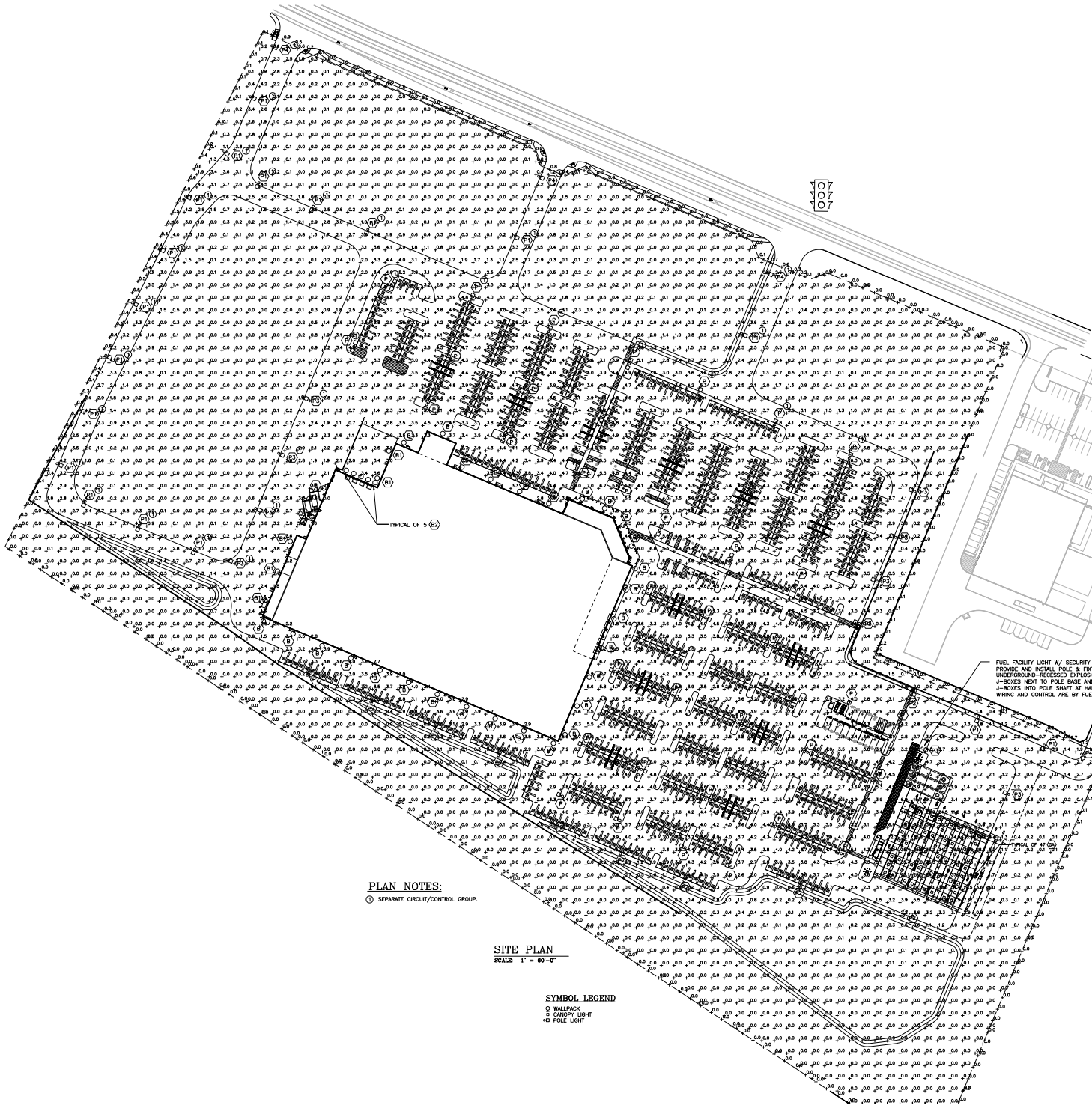
TUCSON DRB SUBMISSION

Planting Schedules & Notes
Costco Warehouse - Tucson 2
9748 E Old Vail Rd, Tucson, AZ 85747



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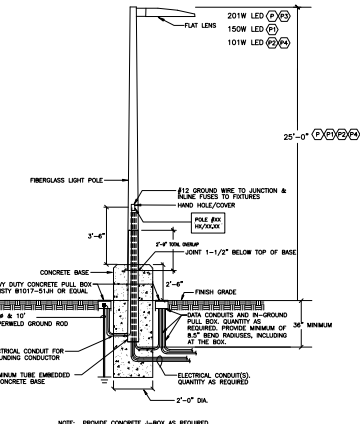


PLAN NOTES:
① SEPARATE CIRCUIT/CONTROL GROUP

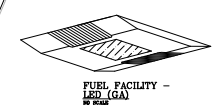
SITE PLAN
SCALE 1" = 60'-0"

SYMBOL LEGEND
○ WALLPACK
○ CANOPY LIGHT
○ POLE LIGHT

FIXTURE	QUANTITY	LUMENS/FIXTURE	TOTAL	WAREHOUSE	ACRES
P 74	4	30,370	2,247,380	28.14	ACRES
P1	1	18,190	18,190	OUT PARCELS	5.13
P2	10	122,000	1,220,000	TOTAL AREA	37.27
P3	4	11,430	45,720		
P4	1	288,000	288,000		
B1	5	8,890	44,450		
B2	2	2,210	4,420		
B3	80	14,000	1,120,000		
TOTAL LUMENS PROPOSED			4,134,700 LUMENS PROPOSED		
TOTAL ALLOWED LUMENS			110,838 L/ACRE 4,164,720 LUMENS ALLOWED		



NEW POLE DETAIL
SCALE: NTS



FIXTURE DESCRIPTION	
①	LITHONIA DS9W2-LED-P6-40K-700R-12M-MVOLT, 71W LED, 20' MOUNTING HEIGHT
①①	LITHONIA DS9W2-LED-P6-40K-700R-14M-MVOLT, 71W LED, 20' MOUNTING HEIGHT
①②	LITHONIA DS9W1-LED-P3-40K-800R-14M-MVOLT, 21W LED, 15' MOUNTING HEIGHT
①③	ROW LED, SURFACE SYMMETRIC DOWN LIGHT, FLAT LENS, 17' MOUNTING HEIGHT
①④	COOPER CALM-SBAC-730-U-PWQ-BZ, 201W TYPE 5 WIDE DISTRIBUTION, FIBERGLASS POLE 25'-0" ABOVE GRADE, WITH 2'-6" BASE
①⑤	COOPER CALM-SB3C-730-U-SL3-HSS-BZ, 150W TYPE 3 DISTRIBUTION W/SPILL CONTROL, FIBERGLASS POLE 25'-0" ABOVE GRADE, WITH 2'-6" BASE
①⑥	COOPER CALM-SB2C-730-U-SL3-HSS-BZ, 101W TYPE 3 DISTRIBUTION W/SPILL CONTROL, FIBERGLASS POLE 25'-0" ABOVE GRADE, WITH 2'-6" BASE
①⑦	COOPER CALM-SBAC-730-U-14FT-HSS-BZ, 201W TYPE 4 DISTRIBUTION W/FORWARD THROW, FIBERGLASS POLE 25'-0" ABOVE GRADE, WITH 2'-6" BASE
①⑧	COOPER CALM-SB2C-730-U-SL3-HSS-BZ, 101W SPILL LIGHT ELIMINATOR RIGHT, FIBERGLASS POLE 25'-0" ABOVE GRADE, WITH 2'-6" BASE

LIGHTING PLAN

GREEN INK
DRAWING NO.
CHECKED-JAM

REVISION DATE

ISSUE DATE: JUNE 2023

ARCHITECT REFERENCE NO.

PROJECT NO: 23-014

DD PACKAGE



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ELECTRICAL PM:
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OWNER
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SE-1

SE TUCSON COSTCO

DESIGN COMPATIBILITY REPORT

4.9.9. RETAIL TRADE USE GROUP

D. Large Retail Establishment Design Standards

Large Retail Establishments shall be subject to the following use specific standards. Variances from the standards shall not be permitted; however, if one or more of the standards cannot be met, the applicant may request approval through the special exception land use process where there is substantial compliance with this section.

1. Site Design and Relationship to Surrounding Community

a. Vehicular Access

The project shall provide safety and protection to adjacent residential uses by having motor vehicle access from a major street as designated by the adopted Major Streets and Routes (MS&R) Plan . Access can also be provided from a street that is not designated by the MS&R Plan , provided it can be shown that any negative impacts on residential uses or residentially zoned properties can be mitigated.

There are no adjacent residential uses to this site. Vehicular access is provided from Old Vail Road, a designated major street per the MS&R Plan.

b. Buffers

The project shall provide visual and noise buffers where the site is adjacent to a residential use or residentially zoned property. This can be accomplished by providing a minimum building setback of at least 200 feet from a residential use or residentially zoned property that is adjacent to the site . An eight foot high, or higher, masonry screen wall and at least a 20-foot wide landscape buffer shall be provided adjacent to the site property line where it adjoins a residential use or residentially zoned property. The landscape buffer shall be placed on the inside of the screen wall and shall include, in addition to shrubs and groundcover, canopy trees at 20- to 30-foot intervals depending on the separation needed for the tree canopies to touch at maturity to form a noise, light, and visual screen above the screen wall. No other uses, such as, but not limited to, parking or storage, shall be permitted within the landscape buffer area.

There are no residential uses or residentially zoned properties adjacent to this site; therefore, no buffer is required.

c. Outdoor Storage Areas

The project shall mitigate visual and noise impacts on residential uses, residentially zoned properties, and streets that may be adjacent to the site from outdoor storage areas (when permitted by the zone district requirements). The mitigation can be accomplished by locating these areas on-site and at least 200 feet from any residential use or residentially zoned property that is adjacent to the site . The areas should be screened or enclosed so that they are not visible from public streets , public sidewalks , internal pedestrian walkways, or adjacent residential properties. The screen shall be at least eight feet high and of masonry construction to assure the highest level of noise abatement and to confine any loose papers, cartons, and other trash. Storage materials shall not be visible above the screen wall. It is preferred that these outdoor storage areas be placed between buildings in a manner that would allow the buildings to act as screens .

There are no adjacent residential uses or residentially zoned properties. All storage is contained within the building. Trash compactors are located on-site and fully screened — see Section 1d below.

d. Trash Collection Areas

The project shall mitigate visual and noise impacts on adjoining residential neighborhoods and streets from trash collection areas by locating these areas on-site and at least 200 feet from any residential use, residentially zoned property, and street that is adjacent to the site . The areas shall be screened or enclosed so that they are not visible from public streets , public sidewalks , internal pedestrian walkways, or adjacent residential properties. Screening and landscaping of these areas shall conform to the predominant materials used on the site . The screen shall be at least eight feet high and of masonry construction to assure the highest level of noise abatement and to confine any loose papers, cartons, and other trash. It is preferred that these trash collection areas be placed between buildings to allow the buildings to act as screens . No trash shall be removed between 4:00 p.m. and 9:00 a.m. as part of scheduled trash collection.

All trash compactors are located on the NW side of the building, well in excess of 200 feet from any residential use or zone. They are fully screened by an 8-foot masonry wall that is architecturally consistent with the building's masonry stem wall. See Architectural plan for exact location.

e. Pedestrian Flow

The project shall provide pedestrian accessibility, safety, and convenience to reduce traffic impacts and enable the development to project a friendly, inviting image. Sidewalks shall be at least eight feet wide and unobstructed and shall connect the public street sidewalks , the main entrances to the stores, transit stops on- or off-site , and other buildings on the site , in addition to providing convenient access to adjacent residential neighborhoods. Sidewalks shall be provided along the full length of any building where it adjoins a parking lot . Sidewalks shall have an associated three foot wide landscape strip for their entire length, except at intersections with parking area access lanes (PAALs). The landscaping shall include canopy trees or other shading devices to shade at least 65 to 75%

of the sidewalks during the major part of the day (shadow pattern needs to be taken into consideration).

We are providing 8' sidewalks connecting our store entrance to Old Vail Rd to the north. These sidewalks are flush with the asphalt parking to provide members with a smooth transition when pushing carts out to their cars. Landscaping is provided along the walkway in the planter islands at the ends of every parking aisle.

A 19-foot-wide covered walkway with shade trellis is provided along the NE entry wall. The sidewalk is intentionally omitted along the SE tire center wall due to high vehicle traffic in that area; pedestrian circulation is routed safely away from that zone. A shade study is included in the submittal demonstrating code-compliant shaded walkways.

f. Central Features and Community Spaces

The project shall provide attractive and inviting pedestrian scale features, spaces, and amenities. Entrances and parking lot locations shall be functional and inviting with walkways conveniently tied to logical destinations. Bus stops should be considered integral parts of the configuration whether they are located on-site or along the street. Customer drop-off/pick-up points that may be provided should also be integrated into the design (shall not conflict with traffic lanes or pedestrian paths). Pedestrian ways shall be anchored by special design features, such as towers, arcades, porticos, light fixtures, planter walls, seating areas, and other architectural features that define circulation paths and outdoor spaces. Examples are outdoor plazas, patios, courtyards, and window shopping areas. Each development shall have at least two of these features.

The main entry features a prominent signage wall above a large pedestrian portico that serves as the focal wayfinding element and anchors the building's public face. Integrated benches are provided at the base of each portico column. Along the NE wall, a trellis and shade feature further enhance the pedestrian experience. The entry portico connects all on-site pedestrian walkways and functions as a covered drop-off and pick-up point for members.

g. Delivery and Loading Spaces

(1) Delivery and loading operations shall be designed and located to mitigate visual and noise impacts to adjoining residential neighborhoods. If there is a residential use or residentially zoned property adjacent to the site, such operations shall not be permitted between 10:00 p.m. and 7:00 a.m. Delivery and loading spaces shall be setback at least 200 feet from a residential use or residentially zoned property that is adjacent to the site, unless such operations are located entirely within an enclosed building, provided it is no closer than the allowable building setback.

There are no adjacent residential uses or residentially zoned properties; therefore, the operational restrictions of this section do not apply.

(2) Delivery trucks shall not be parked in close proximity to or within a designated delivery or loading area during non-delivery hours with motors and/or refrigeration/generators running, unless the area where the trucks are parked is setback at

least 300 feet from residential property to mitigate the truck noise. The setback shall not apply if the main building is located between the truck parking and the residential use or residentially zoned property to act as the screen .

There are no adjacent residential uses or residentially zoned properties; therefore, the operational restrictions of this section do not apply.

(3) The delivery and loading areas shall be screened or enclosed so that they are not visible from public streets , public sidewalks , internal pedestrian walkways, or adjacent properties. The screen shall be of masonry construction and at least ten feet high, measured from the loading dock floor elevation, to screen the noise and activity at the loading dock. The masonry screen assures the highest level of noise abatement. It is preferred that the delivery and loading spaces be enclosed within a building or placed between buildings in a manner that would allow the buildings to act as screens .

The loading dock is located at the NW corner of the building, set back approximately 590 feet from Old Vail Road and approximately 450 feet from the adjacent NW property line. Screening from Old Vail Road is provided by multiple layers of parking lot landscaping and future outparcel development. Screening from the NW property is provided by a 7-foot concrete wall measured from the bottom of the loading dock to the top of the wall, supplemented by outparcels and landscaping. See Landscape plans for detail.

h. Traffic Impacts

The applicant shall have a professional entity perform a Traffic Impact Analysis (TIA) report for the development using the Institute of Transportation Engineers' Trip Generation publication as the standard for trip generation calculation, as well as a parking generation report proposing the number of motor vehicle parking spaces required for the project , if different from shopping center calculations. The scope and standards for the TIA report shall be approved by the Department of Transportation, prior to submittal of the TIA report. The parking generation report shall be accepted by the Department of Transportation and PDSD, prior to the first public hearing. The TIA report shall identify traffic flow impacts on the public streets , recommend mitigation measures to address those conditions that fall below the standards established by the adopted regional Mobility Management Plan, and show how the applicant will provide the recommended improvements . The Mayor and Council may approve a parking requirement that supersedes the number required by Section 7.4, Motor Vehicle and Bicycle Parking, as part of their review process. The TIA and parking generation reports are applicable to a specific application. Any change to the specific proposed use of the site and buildings requires resubmittal, review, and approval of a revised TIA report and revised parking generation report.

A TIA prepared by Kittleson and Associates was submitted on 06/24/2026 to the City of Tucson and is currently under review.

i. Outdoor Lighting

A photometric plan and outdoor lighting report shall be required that provides information on how outdoor lighting is addressed to mitigate negative impacts on adjacent residential uses or residentially zoned properties. The report shall also address the negative impacts of outdoor lighting between the hours of 10:00 p.m. and 7:00 a.m. on adjacent residential properties or zones and how they will be mitigated. Outdoor lighting between 10:00 p.m. and 7:00 a.m. shall be limited to low-pressure sodium lighting.

There are no adjacent residential uses or residentially zoned properties. A photometric plan and outdoor lighting report are included in this submittal demonstrating full cutoff fixture compliance and light containment at the property boundaries.

j. Outdoor Sales Display/Ancillary Uses

Measures to mitigate any negative impacts to a residential use or residentially zoned property that is adjacent to the site from the location of any outdoor activity associated with services to the public, such as, but not limited to, outdoor merchandise display and sales, outdoor storage, and outdoor snack bar and eating areas shall be required. The outside activity shall be setback at least 250 feet and oriented to face away from any residential use or residentially zoned property that is adjacent to the site, unless a building is located between the activity and the residential property.

Costco does not conduct permanent outdoor sales or display activities. All retail sales occur within the enclosed building.

k. Hazardous Materials

The project shall provide a Hazardous Materials Management Plan and Hazardous Materials Inventory Statement as provided in the Fire Code to assure that the building site and design will protect public health and safety from accidental exposure to hazardous materials as provided in the Tucson Fire Code.

A Hazardous Materials Management Plan and Hazardous Materials Inventory Statement will be provided at building permit submittal.

l. Noise Abatement

The project shall provide a noise mitigation plan indicating how the noise initiated by the land use will be mitigated to comply with noise standards in Section 16-31, Excessive Noise, of the Tucson Code. Trucks shall not be left idling between the hours of 6:00 p.m. and 7:00 a.m.

A noise mitigation plan will be provided at permit submittal.

m. Combination of Retail with Food and Beverage Sales

General Merchandise Sales and retail sales shall not be combined with Food and Beverage Sales except where one of the Land Use Classes consists of less than 10% of the gross floor area.

The food service area (food court and ancillary food/beverage sales) within Costco constitutes less than 10% of the total gross floor area.

2. Aesthetic Character of Buildings

a. Facades and Exterior Walls Including Sides and Back

The building shall be designed in a way that will reduce the massive scale and uniform and impersonal appearance and will provide visual interest consistent with the community's identity, character, and scale. Long building walls shall be broken up with projections or recessions with depths of at least 3% of the facade length along all sides of the building. Along any public street frontage, the building design should include windows, arcades, or awnings along at least 60% of the building length. Architectural treatment, similar to that provided to the front facade, shall be provided to the sides and rear of the building to mitigate any negative view from adjacent properties and/or streets.

Physical variations in plane along exterior walls are not operationally feasible due to interior racking systems that require flat walls throughout. To meet the intent of this standard, the design incorporates: variation in exterior wall materials and colors, significant parapet height changes along all four facades, an arcade extending 60% of the primary street-facing facade, and a large entry portico at the main entrance. These elements collectively reduce the perceived mass and scale of the building. See elevation drawings for full documentation.

b. Detail Features

The project shall provide architectural features that contribute to visual interest at the pedestrian scale and reduce the massive aesthetic effect by breaking up the building wall, front, side, or rear, with color, texture change, wall offsets, reveals, or projecting ribs.

All four building facades incorporate multiple exterior colors, material changes (ribbed architectural panel over masonry CMU stem wall), and parapet stepping to break up the wall plane and provide pedestrian-scale visual interest. See exterior elevation drawings.

c. Roofs

The roof design shall provide variations in roof lines to add interest to, and reduce the massive scale of, large buildings. Roof features shall complement the architectural and visual character of adjoining neighborhoods. Roofs shall include two or more roof planes. Parapet walls shall be architecturally treated to avoid a plain, monotonous look, unless it is in keeping with the architectural style of the building, e.g., Santa Fe style with smooth walls.

Parapet heights vary along all four facades to create roofline articulation and reduce the perceived scale of the building. At the main entry, an embellished cornice serves as a prominent wayfinding feature. The entry portico steps the building mass down to the pedestrian scale. See elevation drawings.

d. Materials and Color

The buildings shall have exterior building materials and colors that are aesthetically pleasing and compatible with materials and colors that are used in adjoining neighborhoods. This includes the use of high-quality materials and colors that are low reflective, subtle, neutral, or earth tone. Certain types of colors shall be avoided, e.g., fluorescent or metallic. Construction materials, such as tilt-up concrete, smooth-faced concrete block, prefabricated steel panels, and other similar material shall be avoided, unless the exterior surface is covered with an acceptable architectural treatment.

The building's exterior palette utilizes warm earth tones consistent with the surrounding neighborhood's aesthetic. Primary materials include factory-finished ribbed architectural metal panels over an architectural CMU masonry stem wall — both durable, low-maintenance materials appropriate to the Tucson climate.

e. Entryways

The building design shall provide design elements that give customers orientation on accessibility and that add aesthetically pleasing character to buildings by providing clearly-defined, highly-visible customer entrances.

The main entry is clearly defined by a prominent signage wall above a pedestrian portico, providing strong visual orientation and wayfinding for members approaching from the parking field and Old Vail Road. These elements establish an inviting, human-scaled arrival experience.

f. Screening of Mechanical Equipment

(1) Roof- or ground-mounted mechanical equipment shall be screened to mitigate noise and views in all directions. If roof mounted, the screen shall be designed to conform architecturally with the design of the building, whether it is with varying roof planes or with parapet walls. A wood fence or similar treatment is not acceptable.

All rooftop mechanical equipment is screened from ground-level view on all sides by the building's perimeter parapet walls. The parapet screen is architecturally integrated with the building design.

(2) Ground-mounted mechanical equipment shall be screened. The screen shall be of masonry construction and be of sufficient height to block the view and noise of the equipment.

There is no outdoor ground mounted mechanical equipment on site.

3. Design Review Board (DRB)

All proposed Large Retail Establishments shall be reviewed by the Design Review Board (DRB) for recommendation to the PDSD Director, who will make a recommendation on whether the project complies with the use specific standards. The DRB will base its recommendation on whether or not the project complies with the use specific standards related to compatibility, architecture, and site design, as provided in Section 4.9.9.D, Large Retail Establishment Design Standards, where specific requirements are not provided. The

applicant shall be responsible for providing all documentation and information necessary to show compliance, such as, but not limited to, site plans , building elevations, landscaping plans, floor plans, and outdoor lighting photometry plan.