



**City of Surprise Planning and Zoning Commission  
AGENDA**

**Tuesday, April 1, 2008 - 6 P.M.  
Surprise City Hall**

**12425 West Bell Road, Suite D100, Surprise, AZ**

**CALL TO ORDER**

- A. Roll Call
- B. Pledge of Allegiance
- C. Approval of items on the **Consent** Agenda – all items with an asterisk (\*) are considered to be routine matters and will be enacted by one motion and one roll call vote to the Planning and Zoning Commission. There will be no separate discussion on these items unless a Commissioner requests; in which event, the item will be removed from the consent agenda and considered in its normal sequence on the agenda.

<b>ITEM NO.</b>	<b>ITEM DESCRIPTION</b>	<b>STAFF RECOMMENDATION</b>
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**CURRENT EVENTS REPORT**

1	PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT REPORT	DISCUSSION
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**CONSENT AGENDA:**

- |    |   |   |
|----|---|---|
| 2* | APPROVE PLANNING/ZONING COMMISSION MINUTES FOR MARCH 18, 2008.<br><br>APPROVE PLANNING/ZONING COMMISSION WORKSHOP MINUTES FOR MARCH 4, 2008.  | <b>APPROVE<br/>SECRETARY:<br/>CAROL DAGER</b> |
| 3* | <b>SP07-414– CONSIDERATION AND ACTION – DESERT OASIS – LANCER COMMUNITY POOL SITE (PARCEL 14C):</b> REVIEW A SITE PLAN FOR A COMMUNITY POOL SITE WHICH WILL BE A SINGLE-PHASED RECREATION CENTER PROVIDING A POOL, SPLASH PAD, RESTROOMS, SHADE STRUCTURES, AND PARKING FACILITIES. REQUEST IS SUBJECT TO STIPULATIONS A THROUGH H. | <b>APPROVE<br/>PLANNER:<br/>BART WINGARD</b>  |

**OLD BUSINESS: REGULAR AGENDA ITEM REQUIRING A PUBLIC HEARING:**

- |   |   |   |
|---|---|---|
| 4 | <b>PP07-380– CONSIDERATION AND ACTION – ACOMA COURT:</b> REVIEW A PRELIMINARY PLAT FOR ACOMA COURT PROPOSING 100 SINGLE-FAMILY RESIDENTIAL LOTS GENERALLY LOCATED NORTH OF ACOMA BETWEEN 156 <sup>TH</sup> AND 159 <sup>TH</sup> AVENUES. REQUEST IS SUBJECT TO STIPULATIONS A THROUGH J.<br><br><b>CONTINUED FROM MARCH 18, 2008</b> | <b>APPROVE<br/>PLANNER:<br/>LANCE FERRELL</b> |
|---|---|---|

**REGULAR AGENDA ITEM REQUIRING A PUBLIC HEARING:**

- |   |   |   |
|---|---|---|
| 5 | <b>CUP07-274– CONSIDERATION AND ACTION – STORAGE WEST – SURPRISE:</b> REVIEW A CONDITIONAL USE PERMIT FOR STORAGE WEST LOCATED ON THE NORTHEAST CORNER OF BELL ROAD AND BULLARD AVENUE. REQUEST IS SUBJECT TO STIPULATIONS A THROUGH C. | <b>APPROVE<br/>PLANNER:<br/>ADAM COPELAND</b> |
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**Surprise Planning & Zoning Commission**

Jan Blair, Chair - Steve Somers, Vice Chair  
Matthew Bieniek, Ken Chapman, John Hallin, Robert Rein, Fred Watts

6

**PP07-308– CONSIDERATION AND ACTION – PALO CRISTI COMMERCE PARK:**  
REVIEW A PRELIMINARY PLAT FOR PALO CRISTI COMMERCE PARK ON APPROXIMATELY ONE-HUNDRED (100) GROSS ACRES. REQUEST IS SUBJECT TO STIPULATIONS A THROUGH N.

**APPROVE  
PLANNER:  
ADAM COPELAND**

**OPEN CALL TO PUBLIC:**

**CALL TO THE PUBLIC**

Note: During this time members of the public may address the Commission on any item not on the agenda. At the conclusion of the open call, Commissioners may respond to criticism, may ask staff to review the matter or may ask that the matter be put on a future agenda. No discussion or action shall take place on any item raised.

**CURRENT EVENTS REPORT**

CHAIRPERSON AND COMMISSIONERS

**CONSIDERATION AND ACTION TO HOLD AN EXECUTIVE SESSION:**

Pursuant to A.R.S. § 38-431.03(A)(3), the Planning and Zoning Commission may go into executive session with the City Attorney for legal advice on any item listed on the agenda.

**ADJOURNMENT:**

**POSTED: MARCH 25, 2008      TIME: 9 a.m.**

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Kathy S. Rice, Acting Director  
Community Development

**REQUEST TO SPEAK:** Comments pertaining to the Planning and Zoning Commission business are welcome. If you wish to address the Planning and Zoning Commission, please complete a Public Comment Form and present it to the secretary before the call to order for this meeting.

**SPECIAL NOTE:** Individuals needing reasonable accommodations, such as large print materials and oral/ ASL interpreters, should contact the Disability Advocate at **623.222.3821** (Voice) or **623.222.3802** (TTY/VP) at least three (3) business days prior to the event so arrangements can be made.

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**Surprise Planning & Zoning Commission**

Jan Blair, Chair - Steve Somers, Vice Chair  
Matthew Bieniek, Ken Chapman, John Hallin, Robert Rein, Fred Watts



**City of Surprise Planning and Zoning Commission**  
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**APPROVE**  
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**ADAM COPELAND**

**OPEN CALL TO PUBLIC:**

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**CURRENT EVENTS REPORT**

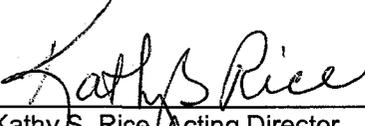
CHAIRPERSON AND COMMISSIONERS

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Pursuant to A.R.S. § 38-431.03(A)(3), the Planning and Zoning Commission may go into executive session with the City Attorney for legal advice on any item listed on the agenda.

**ADJOURNMENT:**

**POSTED: MARCH 25, 2008      TIME: 9 a.m.**

  
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Kathy S. Rice, Acting Director  
Community Development

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**Surprise Planning & Zoning Commission**

Jan Blair, Chair - Steve Somers, Vice Chair  
Matthew Bieniek, Ken Chapman, John Hallin, Robert Rein, Fred Watts



## City of Surprise Planning and Zoning Commission

### WOKSHOP AGENDA

Tuesday, April 1, 2008 - 5 P.M.

Surprise City Hall  
12425 West Bell Road, Suite D100  
Surprise, AZ 85374

### CALL TO ORDER

### WORK SESSION TOPIC

- ✍ Grand Vista
  - Presentation by Toll Brothers

### ADJOURNMENT

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Kathy S. Rice, Acting Director  
Community Development

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### ADJOURNMENT

A handwritten signature in cursive script that reads "Kathy S. Rice".

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Kathy S. Rice, Acting Director  
Community Development

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### Surprise Planning & Zoning Commission

Jan Blair, Chair - Steve Somers, Vice Chair  
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**CITY OF SURPRISE**

**PLANNING AND ZONING COMMISSION  
12425 West Bell Road, Suite D-100  
Surprise, Arizona 85374**

**March 18, 2008**

**REGULAR MEETING MINUTES**

**CALL TO ORDER**

Chair Jan Blair called the Planning and Zoning Commission Meeting to order at 6:00 p.m. at the Surprise City Hall, 12425 West Bell Road, Suite D100, Surprise, Arizona 85374, on Tuesday, March 18, 2008.

**ROLL CALL**

In attendance with Chair Blair were Vice Chair Somers, and Commissioners Matthew Bieniek, Ken Chapman, John Hallin, Robert Rein and Fred Watts.

**PLEDGE OF ALLEGIANCE**

**CONSENT AGENDA**

All items listed with an asterisk (\*) are considered to be routine by the Planning and Zoning Commission and were approved by one motion. There was no separate discussion of these items during this meeting.

Chair Blair announced that Item 3 would be removed from the consent agenda.

Commissioner Rein made a motion to approve the **Consent Agenda**. Commissioner Chapman seconded the motion. The motion passed with a vote of 7 ayes.

- **Item 2\*: Planning and Zoning Commission Minutes for March 4, 2008.  
Planning and Zoning Commission Workshop Minutes for February 19, 2008.**

**PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT REPORT**

Acting Community Development Director Kathy Rice commented that the next scheduled General Plan meetings are scheduled as follows:

March 22, 2008	10 a.m.	Nadaburg School
March 26, 2008	6 p.m.	Northwest Regional Library

She also noted that the City Council has passed several new ordinances. One of the new ordinances may affect how the city does business regarding conditional use permits. Another ordinance has established a Board of Adjustment that will hear appeals and does not include members of the City Council as board members.

## AGENDA ITEM REMOVED FROM CONSENT

### Item 3: RZ07-422 – Consideration and Action – Northwest Capital Holdings Commercial Development

Planner Copeland presented the project to the Commission. Staff recommended approval of **RZ07-422, Northwest Capital Holding Commercial Development**, subject to stipulations 'a' through 'c.'

**Lamar Newmeyer, applicant**, provided additional information about the project, specifically noting the intended uses of the site.

In response to Commissioner Hallin, Planner Copeland explained that more of the road structure will be brought forward with the site plan. Mr. Newmeyer noted that the disconnected portion of the parcel does not have an intended use at this time.

In response to Commissioner Watts, Mr. Newmeyer pointed out that the entire site is zoned C2.

In response to Vice Chair Somers, Planner Copeland indicated that he is not aware of any closures for 193<sup>rd</sup> Avenue.

Responding to Commissioner Rein's question, there was some discussion about the surrounding properties and the notification to the property owners regarding the rezoning of this project. It was noted that there was no objection from the surrounding property owners regarding the rezone.

In response to Chair Blair, Mr. Newmeyer explained that only one parcel is in escrow which was delayed until June for the rezoning of the project.

Chair Blair opened the meeting for public comment.

**Susanne duPlessis, Wittmann**, voiced the following concerns:

- Xeriscape landscaping.
- Lighted signs turned off at night.
- Amber lighting in parking lots.
- Western-style architecture.

Applicant noted that they are amicable to considering the requests. Planner Copeland stated that the concerns will be addressed at the various stages of the project.

Hearing no further comments from the public, Chair Blair closed the public hearing.

Vice Chair Somers made a motion to **approve RZ07-422, Northwest Capital Holding Commercial Development**, subject to stipulations 'a' through 'c.' Commissioner Chapman seconded the motion. The motion passed with a vote of 7 ayes.

## REGULAR AGENDA ITEMS REQUIRING A PUBLIC HEARING

### Item 4: PP07-380 – Consideration and Action – Acoma Court

Planner Ferrell announced that the applicant has requested a continuation of **PP07-380, Acoma Court**.

Commissioner Rein made a motion to **continue PP07-380, Acoma Court, to April 1, 2008**. Commissioner Bieniek seconded the motion. The motion passed with a vote of 7 ayes.

### Item 5: TA07-368 – Consideration and Action – Text Amendment to Chapter 125

Planner Adam Copeland presented the project to the Commission. Staff recommended approval of **TA07-368, Text Amendment to Chapter 125**, subject to stipulations 'a' through 'b.'

In response to Commissioner Watts, Planner Copeland explained that the majority of the updates are to make minor changes to Chapter 125. There is an addition to the requirements that notes that if an applicant cannot meet a requirement, they would need to present findings to the Planning and Zoning Commission or City Council for consideration.

Responding to Commissioner Bieniek, Planner Copeland noted that the turf in nonactive retention areas along Reems Road will not be removed at this time.

In response to Commissioner Chapman, Planner Copeland further explained the traditional and nontraditional landscape areas.

In response to Commissioner Hallin, Planner Copeland mentioned that to avoid buildings constructed with all metal, language indicating a percentage of how much metal can be used has been added. Discussion regarding research about crushed rock generating heat and the use of trees to provide shade. There was also discussion regarding streetscape and maintaining dark skies

Chair Blair opened the meeting for public comment.

**Jim Olmsted, Chairman of the Disability Advisory Commission**, voiced the following concerns:

- Pima County 2002 Ordinance regarding accessibility for new construction; cost just over \$300 per building.
- Would like to have this type of ordinance.

Hearing no further comments from the public, Chair Blair closed the public hearing.

Vice Chair Somers made a motion to **approve, TA07-368, Text Amendment to Chapter 125**, subject to stipulations 'a' and 'b.' Commissioner Chapman seconded the motion. The motion passed with a vote of 7 ayes.

## OPEN CALL TO PUBLIC

Chairman Blair called to the public to discuss any issues not noted on the agenda. Hearing no comments from the public, Chairman Blair closed the call to the public.

## **CURRENT EVENTS REPORT:**

Chair Blair mentioned that she attended a meeting in Surprise where author Ruth Jordan provided a presentation about the history of her family in Arizona. During that presentation, it was noted that the first lawsuit in 1919 before the Arizona Supreme Court was about air pollution.

## **CONSIDERATION AND ACTION TO HOLD AN EXECUTIVE SESSION**

**Pursuant to A.R.S. § 38-431.03(A)(3), the Planning and Zoning Commission may go into executive session with the City Attorney for legal advice on any item listed on the agenda.**

No request was made to call for an executive session.

## **ADJOURNMENT**

Hearing no further business, Chairman Blair adjourned the regular Planning and Zoning Commission meeting, Tuesday, March 18, 2008, at 6:56 p.m.

## **STAFF PRESENT:**

Assistant City Attorney Jim Gruber, Fire Marshall Doug Helbig, Assistant Fire Chief Clint Mills, City Planner Adam Copeland, City Planner Bart Wingard, City Planner Dennis Dorch, Planning and Development Services Berrin Nejad, Acting Community Development Director Kathy S. Rice, and Planning and Zoning Commission Secretary Carol Dager.

**COUNCIL MEMBERS PRESENT:** None

  
\_\_\_\_\_  
Kathy S. Rice, Acting Director  
Community Development Department

\_\_\_\_\_  
Jan Blair, Chairman  
Planning and Zoning Commission

**CITY OF SURPRISE**  
**PLANNING AND ZONING COMMISSION WORKSHOP**

**12425 West Bell Road, Suite D-100**  
**Surprise, Arizona 85374**

**March 4, 2008**

**MINUTES**

**Call to Order:**

Chair Jan Blair called the Planning and Zoning Commission workshop meeting to order at 5 p.m. in the Surprise City Hall, 12425 West Bell Road, Suite D100, Surprise, Arizona 85374, on Tuesday, March 4, 2008.

In attendance with Chair Blair were Commissioners Matthew Bieniek, Ken Chapman, John Hallin, Robert Rein, and Steve Somers. Commissioner Fred Watts was absent.

**PRESENTATION:**

Planner Bart Wingard presented a brief overview of the Parks and Trails Master Plan, specifically noting that the 2001 General Plan adopted the recreation element directive directing the Planning Department to prepare this plan.

Planner Wingard pointed out that parks and trails improve:

- Economics
- Traffic
- Environment
- Wellness
- Crime Prevention

He commented that parks and trails could provide safer paths for children to school. Statistics show that 25% of the morning traffic is attributed to taking children to school.

Commissioner Hallin questioned the reduction of crime by the installation of parks and trails. Acting Director Kathy Rice explained that Florida has surveys that show residents feel safer because of their lighted parks and trails. Planner Wingard added that a well-designed, well-lighted trail does assist in improving the crime rate.

Planner Wingard talked about the various National Recreation and Parks Association (NRPA) Standards for Parks which includes the following:

- Pocket Parks – Less than 5 acres (1/4 mile service area)
- Neighborhood Parks – 5 to 25 acres (1/2 mile service area)
- Community Parks – 25 to 100 acres (3 mile service area)
- Regional Parks – 100 acres (10 mile service area)

Charts were displayed that showed the existing parks in the city, as well as information indicating the comparisons of the numbers of parks in surrounding local cities and some nationwide cities of similar size.

Responding to questions regarding the various acres each developer should dedicate for a park, Planner Wingard noted that some creative solutions will be needed for the developers designing smaller parcels. This is a working document and will be updated annually to accommodate the changing times.

Planner Wingard mentioned that the key factor of this plan that ties into the village concept is the trails portion.

When discussing the trails plan, the following was noted:

- Regional Trails – 89 miles
- Signature Trails – 50 miles
- Community Trails – 136 miles
- Local Trails – 114 miles

Planner Wingard commented that they have worked with the various surrounding jurisdictions to connect with trails through the communities. He mentioned that we are actively looking at funding sources for trails, noting that there is an abundance of monies available for motorized trails. He showed a map of the 50-mile signature trail which will encompass the entire planning area for Surprise.

He pointed out the various standards established:

- Provide standards to developers to supply parks and trails.
- Standardize maintenance.
- Standardize equipment to cut maintenance costs.

In response to questions, Planner Wingard explained that the master plan for parks and trails will be evaluated each year, asking residents for input. Acting Director Rice stated that Code Enforcement is responsible for monitoring parks for inappropriate signs. Community Recreation is responsible for maintaining the parks. This new master plan should assist the White Tanks Park in controlling the misuses at their park.

Planner Wingard wrapped up with summarizing the items discussed.

#### **CONSIDERATION AND ACTION TO HOLD AN EXECUTIVE SESSION:**

**Pursuant to A.R.S. § 38-431.03(A)(3), the Planning and Zoning Commission may go into executive session with the City Attorney for legal advice on any item listed on the agenda.**

There was no request made to call for an executive session.

**ADJOURNMENT:**

Hearing no further business, the Planning and Zoning Commission workshop meeting was adjourned on Tuesday, March 4, 2008, at 5:35 p.m.

**STAFF PRESENT:**

Assistant City Attorney Jim Gruber, City Planner Adam Copeland, City Planner Bart Wingard, City Planner Nicole Green-Catten; City Planner Dennis Dorch, City Planner Janice See; Fire Marshall Doug Helbig; Assistant Fire Chief Clint Mills, Planning & Development Services Manager Berrin Nejad, Acting Community Development Director Kathy S. Rice; and Planning and Zoning Commission Secretary Carol Dager.



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Kathy S. Rice, Acting Director  
Community Development Department

**CITY OF SURPRISE  
COMMUNITY DEVELOPMENT DEPARTMENT**

**SP07-414**

**SITE PLAN**

for:

**Desert Oasis Lancer Community Pool Site**

**PLANNING AND ZONING COMMISSION**

*Hearing Date: April 1, 2008*

**STAFF:**

Hobart Wingard, 623.222.3156

**LOCATION:**

Northwest corner of 174<sup>th</sup> Avenue and Maya Way.

**DESCRIPTION OF  
THE REQUEST:**

Approval of a site plan.

**SUMMARY ANALYSIS:**

The applicant is requesting approval of a site plan for a community pool site. Desert Oasis Lancer Community Pool will be a single-phased recreation center that will provide a pool, splash pad, restrooms, shade structures and parking facilities.

**SUGGESTED MOTION:**

**I move to approve SP07-414, a site plan for Desert Oasis Lancer Community Pool Site, and to adopt staff's findings, subject to stipulations a through h.**

**REPORT TO THE PLANNING AND ZONING COMMISSION**

CASE NUMBER: SP07-414 Desert Oasis Lancer Community Pool Site  
STIPULATIONS: a through h  
PREPARED BY: Hobart Wingard, Planner @ 623.222.3156  
hobart.wingard@surpriseaz.com

Application Date: December 3, 2007  
Planning & Zoning Commission Hearing Date: April 1, 2008

**APPLICANT**

Eric Froberg  
RBF Consulting  
16605 N. 28<sup>th</sup> Avenue, Suite 100  
Phoenix, AZ 85053  
Phone 602.467.2200  
Fax 602.467.2275  
[efroberg@rbf.com](mailto:efroberg@rbf.com)

**PROPERTY OWNER**

Jake Jones  
Centex Homes  
8665 East Hartford Drive, Suite 200  
Scottsdale, AZ 85255  
Phone 480.889.0900  
Fax 480.889.0948  
[jacob.jones@centexhomes.com](mailto:jacob.jones@centexhomes.com)

**REQUEST**

Approval of a site plan for a community pool site.

**SITE LOCATION**

The subject site is located at the northwest corner of 174<sup>th</sup> Avenue and Maya Way, within Section 35, Township 5 North, Range 2 West of the Gila and Salt River Base and Meridian, Maricopa County, Arizona.

**SITE SIZE**

The subject site plan encompasses 4.46 net acres.

**RECOMMENDATION**

Approval

**PROJECT ANALYSIS**

The Desert Oasis Lancer Parcel is a 583-acre development planned to provide single-family residential, commercial, community facilities and schools. The proposed Desert Oasis Community Pool is located within the southern portion of Parcel L14C as Tract R-L14C.

## ITEM 3

The proposed pool site is to include a splash pad, pool, restrooms, shade structures, hardscaping, landscaping, stormwater retention and parking for 27 vehicles.

The Desert Oasis Homeowners Association (HOA) will be responsible for the ownership and maintenance of the community pool site.

### ARCHITECTURE

The design of the Desert Oasis Lancer Community Pool building is consistent with the goals and ideas set forth in the City of Surprise Design Guidelines. Evident in the building is its sensitivity to neighborhood scale, site orientation and the use of similar building materials. As a result, the buildings have continued the overlying Spanish and Mission architectural themes found in Desert Oasis.

Building materials consist of an exterior finish system that resembles stucco and cultured stone serves as a base and column accent feature. Both materials are consistent with the existing residential architecture found in the Desert Oasis subdivision. The roof design is low and unobtrusive and through its use of concrete flat tiles, it remains consistent with the surrounding residential community.

### CIRCULATION

The project is located on the northwest corner of 174<sup>th</sup> Avenue and Maya Way. Vehicular access to the site is available from West Red Bird Road to the north.

Pedestrian circulation is prevalent throughout the site. The applicant is providing a five-foot-wide sidewalk from the north and the south to the existing sidewalk that envelops the site.

### LANDSCAPE

The landscape design for this project will utilize drought resistant plant material and provide adequate screening for surrounding uses. The landscape design review conforms to the adopted City of Surprise Planning and Design Guidelines.

### DEPARTMENTAL REVIEW

All departments have reviewed this application with no additional comments.

### EXISTING AND SURROUNDING ZONING

ON-SITE:	Desert Oasis PAD
NORTH:	Desert Oasis PAD
EAST:	Desert Oasis PAD
SOUTH:	Desert Oasis PAD
WEST:	Desert Oasis PAD

**EXISTING AND SURROUNDING LAND USE**

ON-SITE: Vacant – Low-Density Residential  
NORTH: Vacant – Low-Density Residential  
EAST: Low-Density Residential  
SOUTH: Vacant – Low-Density Residential  
WEST: Low-Density Residential

**CONFORMANCE TO ADOPTED LAND USE PLANS**

GENERAL PLAN If approved, this request would comply with the Surprise 2020 General Plan.

DESERT OASIS PAD If approved, this request would comply with the Desert Oasis PAD, approved on September 14, 2000.

**PROJECT DATA**

<b>Zoning</b>	PAD, Desert Oasis PAD
<b>Building Area</b>	819 SF
<b>Site Area</b>	3.46 net acres 150,518 square feet
<b>Parking</b>	27 Required Spaces 27 Provided Spaces

**EXISTING UTILITIES AND SERVICES STATUS**

WATER City of Surprise

SEWER City of Surprise

FIRE PROTECTION The nearest Fire Station is located at 22443 North 163<sup>rd</sup> Avenue, approximately 3.5 miles southeast of the project site.

POLICE PROTECTION The City of Surprise Police Department is located within the City of Surprise Public Safety building located at 14250 West Statler Plaza, approximately 8 miles southeast of the project site.

**INFRASTRUCTURE**

All infrastructure will be developed in accordance with the Surprise Municipal Code.

### FINDINGS

The proposed use of the property for a community pool site is in general conformance with the City of Surprise Municipal Code, as well as the Surprise General Plan 2020. If approved, it will appear to not adversely affect the public health, safety, or welfare.

### **STANDARD STIPULATIONS:**

- a) Prior to delivery of any combustible material to the site, fire department access and fire protection systems shall be completely operational in accordance with the approved plans by the Fire Chief and the City Engineer.
- b) Major changes to this Site Plan with regards to use and intensity must be processed as a revised application with approval by the Planning and Zoning Commission. Minor changes may be administratively approved by the City Engineer, Fire Marshal, Water Services Director, and the Community Development Director.
- c) All parcel numbers shall be active prior to submittal of any building permit and shall stay active throughout the construction process until a Letter of Compliance and/or Certificate of Occupancy is issued. Any subdivision or lot split shall be reviewed and approved by the City of Surprise prior to recordation with Maricopa County.
- d) The applicant shall include all approved stipulations related to the project on the title sheet of construction plans prior to plan check submittal.
- e) Applicant or property owner must provide the City with approved earth moving permit by Maricopa County Environmental Services Department prior to release of any permits.
- f) Approval of this site plan is not to be construed as an approval of any violation of the Surprise Municipal Code, 2006 International Building, Plumbing, Mechanical, Fire Codes and/or the National Electric Codes.
- g) All roof mounted and ground mounted mechanical equipment shall be screened from public view and will be subject to the approval of the Community Development Director.
- h) All mechanical equipment, transformers, gas lines, shall be completely screened from public view prior to letter of compliance and/or certificate of occupancy. Any changes to the landscape plan shall be submitted to the Community Development Department for review and approval.

**FINDINGS**

The proposed use of the property for a community pool site is in general conformance with the City of Surprise Municipal Code, as well as the Surprise General Plan 2020. If approved, it will appear to not adversely affect the public health, safety, or welfare.

**STANDARD STIPULATIONS:**

- a) Prior to delivery of any combustible material to the site, fire department access and fire protection systems shall be completely operational in accordance with the approved plans by the Fire Chief and the City Engineer.
- b) Major changes to this Site Plan with regards to use and intensity must be processed as a revised application with approval by the Planning and Zoning Commission. Minor changes may be administratively approved by the City Engineer, Fire Marshal, Water Services Director, and the Community Development Director.
- c) All parcel numbers shall be active prior to submittal of any building permit and shall stay active throughout the construction process until a Letter of Compliance and/or Certificate of Occupancy is issued. Any subdivision or lot split shall be reviewed and approved by the City of Surprise prior to recordation with Maricopa County.
- d) The applicant shall include all approved stipulations related to the project on the title sheet of construction plans prior to plan check submittal.
- e) Applicant or property owner must provide the City with approved earth moving permit by Maricopa County Environmental Services Department prior to release of any permits.
- f) Approval of this site plan is not to be construed as an approval of any violation of the Surprise Municipal Code, 2006 International Building, Plumbing, Mechanical, Fire Codes and/or the National Electric Codes.
- g) All roof mounted and ground mounted mechanical equipment shall be screened from public view and will be subject to the approval of the Community Development Director.
- h) All mechanical equipment, transformers, gas lines, shall be completely screened from public view prior to letter of compliance and/or certificate of occupancy. Any changes to the landscape plan shall be submitted to the Community Development Department for review and approval.

# Contextual Map

## Desert Oasis Pool Lancer Parcel 14C



-  Fire Station
-  Police Station
-  Medical
-  Public Park
-  Exist. K-8 Schl.
-  Prop. K-8 Schl.
-  Exist. High Schl.
-  Prop. High Schl.

### PROJECTS:

1. Desert Oasis
2. Asante

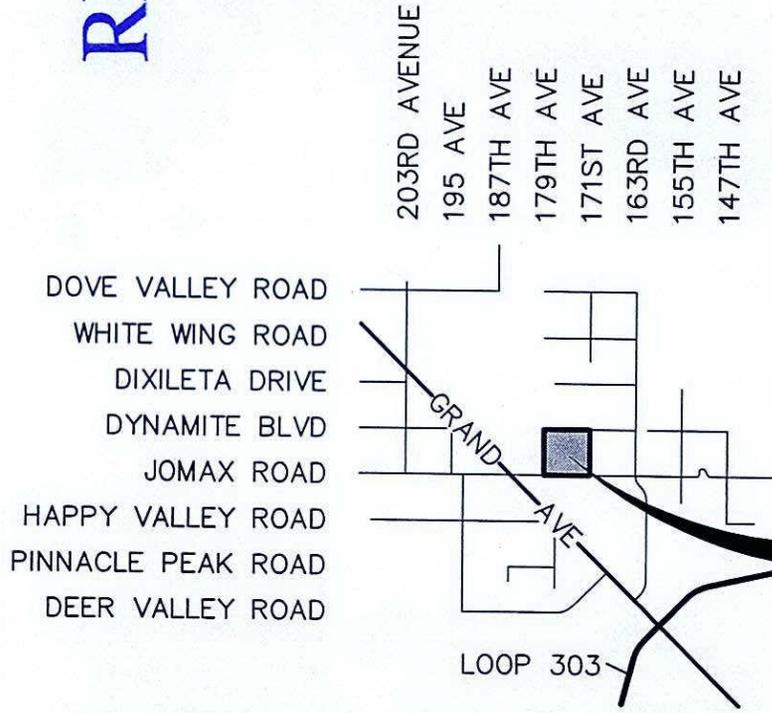


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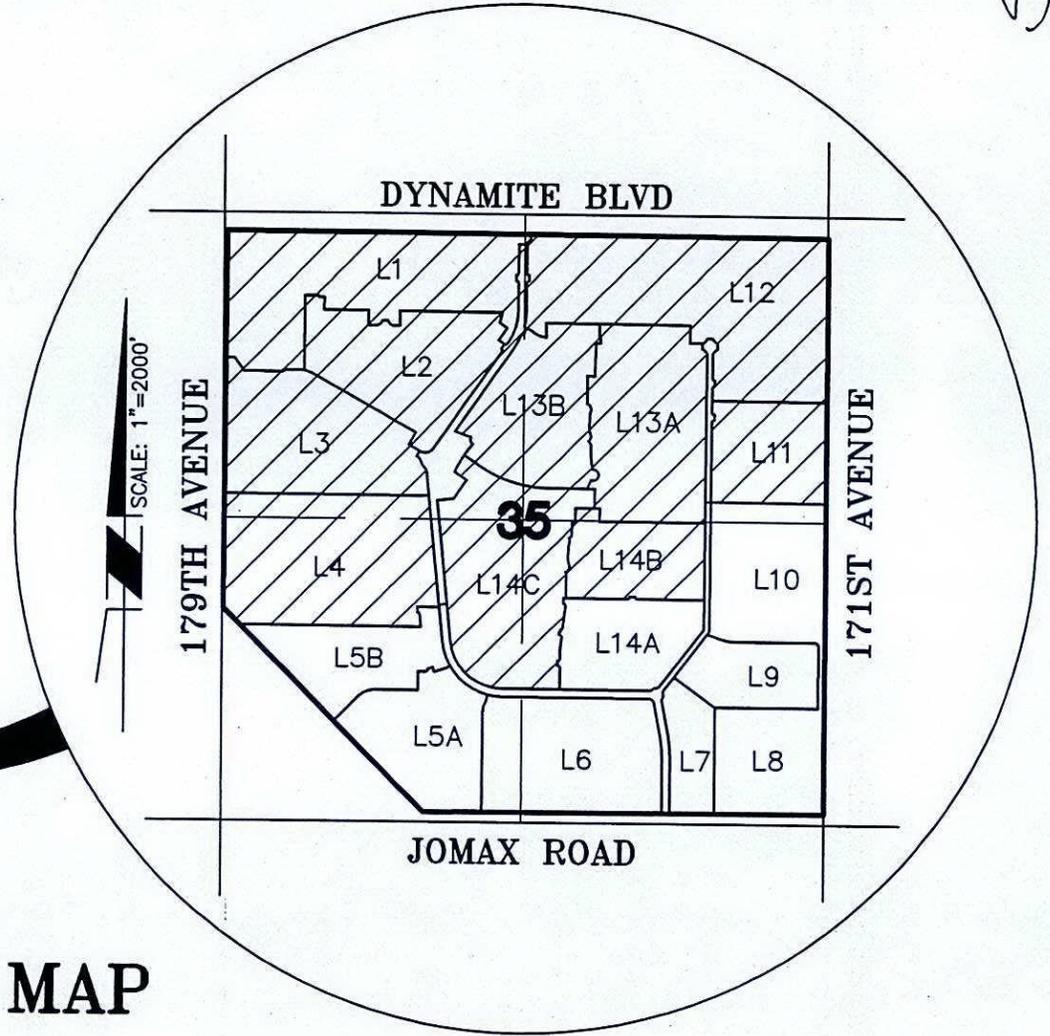
FEB 20 2008

COMMUNITY  
DEVELOPMENT

SF07-414



VICINITY MAP



Desert Oasis of Surprise  
Lancer Parcel 14C  
Community Pool Site

Project Narrative

January 22, 2008

For:  
Centex Homes  
8665 East Hartford Drive, Suite 200  
Scottsdale, Arizona 85255

By:  
RBF Consulting  
16605 N. 28<sup>th</sup> Avenue, Suite 100  
Phoenix, Arizona 85053

SP07-414

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## **1.0 Project Description**

### **1.1 Location**

The Desert Oasis Lancer Parcel is a 583-acre development planned to provide single-family residential, commercial, community facilities, and schools. Desert Oasis is located in the City of Surprise, Maricopa County, Arizona. The site is located in Section 35, Township 5 North, Range 2 West of the Gila and Salt River Base and Meridian. The Lancer Parcel is bounded to the north by Dynamite Boulevard, to the east by 171<sup>st</sup> Avenue, to the south by Jomax Road, and to the west by the 179<sup>th</sup> Avenue alignment.

The proposed Desert Oasis Community Pool is located within the southern portion of Parcel L14C as Tract R-L14C. The pool site lies in the southern half of Section 35 and shares its northern boundary with West Red Bird Road. Tract M-L14C surrounds the pool site on the eastern, southern and western boundaries.

### **1.2 Density/Open Space**

Parcel L14C is designated in the Desert Oasis Planned Area Development (P.A.D.) as single-family residential.

### **1.3 Surrounding Land Uses**

The pool site (Tract R-L14C) is located within Desert Oasis Parcel L14C, a residential parcel.

## **2.0 Existing Conditions**

### **2.1 Existing Infrastructure**

The roads surrounding the Desert Oasis site are all currently dirt roads or under construction. Jomax Road has been improved to a two-lane paved road leading up to the southeast corner of the site. Construction on the Phase 1 Improvements for Desert Oasis is underway and will be completed before the end of construction of the Pool Site. There is an existing water campus located in the northwest corner of the Desert Oasis Baer Parcel. This contains a well that will be used to supply water to the Pool Site.

A temporary wastewater treatment plant is located in the southeast corner of the Desert Oasis Baer Parcel. This temporary plant currently does have sufficient capacity to service the Desert Oasis Pool Site. Centex Homes is discussing with the City of Surprise (Rich Williams) the possibility of reducing the design flow from 300gpcpd to 200-250 gpcpd. The latter number is a value closer to the actual flows (approx. 180 gpcpd) being experienced by the temporary treatment facility. If the City of Surprise and Maricopa County agree to lower the design flows to a smaller value additional capacity will become available while the Regional

Reclamation Facility is being completed. Ultimately all the wastewater generated by Desert Oasis-Lancer will be serviced by the Regional Reclamation Facility.

## **2.2 Physical Features / Topography**

The property is currently fallow farmland in which the land slopes from north to south at approximately 1 percent. Some grading has been done along the south portion of the site due to the construction for Parcels L5A, L5B, L14A and the Infrastructure roads. There is a wash that runs along the west side of 179<sup>th</sup> Avenue. This wash creates a floodplain that is classified as Zone A. This affects Parcels L3 and L4.

The existing drainage conditions for the entire Desert Oasis site and the surrounding areas were included in the Wittmann Area Drainage Master Study Update produced for the Flood Control District of Maricopa County in October of 2004. Offsite drainage approaches the project from the north through a breach in a cattle tank. This offsite flow will be rerouted around the Desert Oasis master plan. A channel has been designed to divert the offsite flow of 849 cfs east along Dynamite Blvd and then south along 171<sup>st</sup> Avenue. The 171<sup>st</sup> Avenue Channel Plans and Final Drainage Report produced by RBF Consulting have been approved by the City of Surprise. These plans will eliminate any floodplain created by the offsite flow in the Wittmann ADMSU. The 171<sup>st</sup> Avenue channel plans as well as a CLOMR & LOMR will be prepared to remove any lots from the floodplains affecting the Desert Oasis development.

## **3.0 Proposed Improvements/ Accessibility**

The site will be accessible from the south via 163<sup>rd</sup> Avenue and then Jomax Road. Jomax Road and 171<sup>st</sup> Avenue are minor arterials and the half-street improvements for these roads will be completed with the Desert Oasis Phase 1 Infrastructure plans. 172<sup>nd</sup> Drive and 176<sup>th</sup> Avenue, both collectors, located inside the development, are also part of the Phase 1 Improvements. This will be the main access for the Parcel L14C.

## **4.0 Community Facilities and Services**

Several public and community facilities are planned throughout the Desert Oasis community to serve the residents. These facilities include a public school, community parks/ recreation areas, drainage facilities, and public streets. This narrative covers the Desert Oasis Pool Site located within Parcel L14C.

The Desert Oasis Homeowners Association (HOA) will be responsible for the ownership and maintenance of the community pool site.

## **5.0 Public Utilities and Services**

A 2" water service is provided to the Pool Site from the proposed 8" water line in West Red Bird Road. In addition, a 4" sewer service is extended to the Pool Site from the proposed 8" sewer line located in West Red Bird Road. The swimming pool, spa, and splash pad backwash systems will be discharged to the sewer system. The water and sewer services for the pool site were included in the approved Desert Oasis Parcel L14C Water and Sewer Plans.

## **6.0 Development Schedule**

According to the current schedule of construction and engineering, the developer plans to start grading on this parcel in the first quarter of 2008. The Desert Oasis Phase 1 Infrastructure Improvements will need to be finished before construction on Parcel L14C is completed. The Desert Oasis Pool site is located in the first of four phases of Parcel L14C.



DEPARTMENT OF THE AIR FORCE  
AIR EDUCATION AND TRAINING COMMAND

10 January 2008

Mr. James R. Mitchell  
Director, Community Initiatives Team  
56th Fighter Wing  
14185 West Falcon Street  
Luke AFB AZ 85309-1629

Ms. Carol Dager  
Planning and Zoning Division  
12425 West Bell Road  
Surprise AZ 85374

Re: Case #SP07-414 Desert Oasis Lancer Community Pool

Dear Ms. Dager

Thank you for the opportunity to provide comments on the Site Plan Application for Desert Oasis Lancer Community Pool. The pool is located on 4-acres of Parcel L14C north and east of the northeast corner of Jomax Road and 179th Avenue. The proposal is to build a community swimming pool. Parcel L-14C is located approximately 2 miles outside the Luke AFB Auxiliary Field #1 2004 65 Ldn, "high noise or accident potential zone," as defined by A.R.S. § 28-8461, and outside the "territory in the vicinity of a military airport," also defined by A.R.S. § 28-8461.

As described, the community pool will not negatively impact the flying operations at Luke AFB. Even though Parcel L-14C will be located outside the "vicinity of a military airport," it will be subjected to approximately 13,000 flight operations per year, with some as low as 1,500 feet above ground level. We recommend a strong notification program on the part of the applicant to inform potential residents about Luke AFB operations. We also recommend a review of the Luke AFB web site at <http://www.luke.af.mil>, Community Interests and Community Initiatives links, for further information.

If there are any questions, please contact my Community Planner, Mr. Bob Dubsy, at (623) 856-6195.

Sincerely

A handwritten signature in black ink, appearing to read "James R. Mitchell", written over a horizontal line.

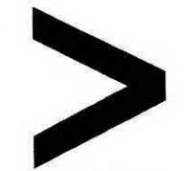
JAMES R. MITCHELL

cc:

Colonel Henry M. Reed III, Vice Commander, 56th Fighter Wing

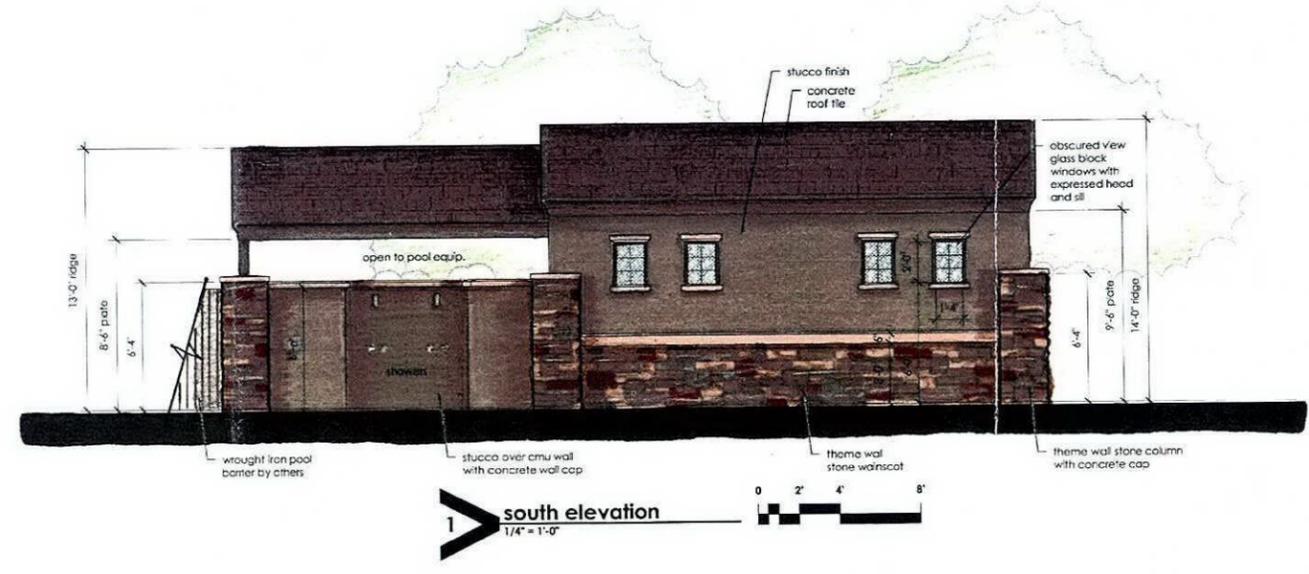
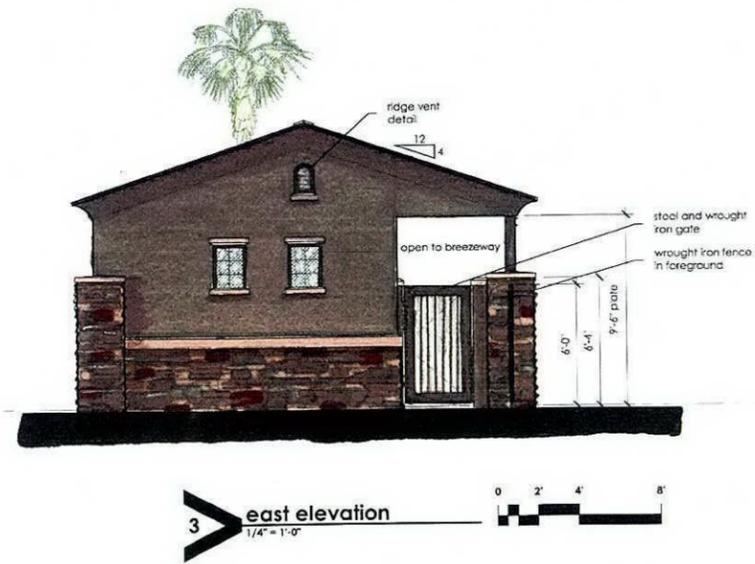
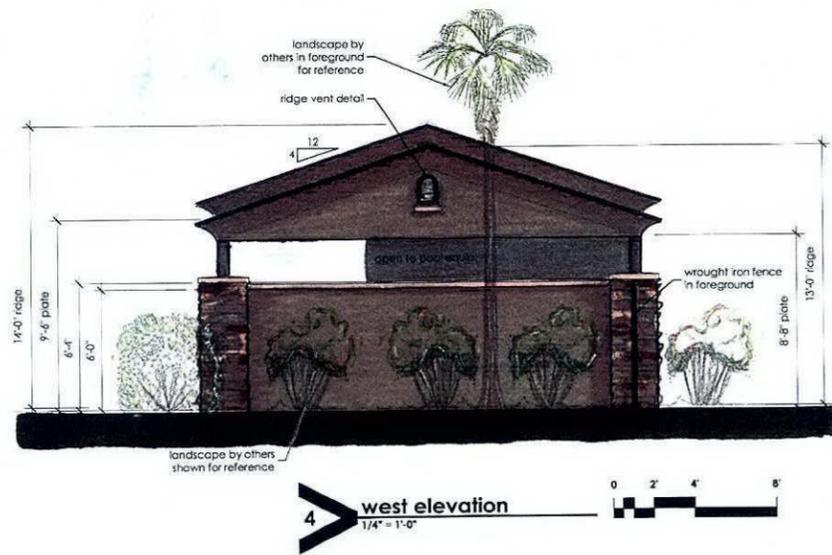
**exterior materials:**

- > Verify materials with Owner prior to construction.
- > All materials are to match those used throughout the development in color and style.
- > stucco body paint: finish: sand  
ICI color: 370 or A1741 "woodruff"  
lv: 43
- > trim/accent paint: mnr: ICI  
color: 307 "bungalow"  
lv: 16
- note:**  
> ICI 307 "bungalow" has been discontinued as of 2007 but is still available in paint mixes.  
> ICI A1721 "lurel brown" rv.17: from new 2007 color palette is new closest color match.
- > trim/projections paint: mnr: ICI  
color: 541 or A1822 "desert castle"  
lv: 53
- > stone: style: drystack ledgerstone  
mnr: cultured stone  
color: CSV 2012 "charonny"  
instal: dry stacked
- > roof tile: type: flat concrete  
mnr: eagle  
style: ponderosa  
color: 5502 "arcadia"



**greater than  
architecture, llc**  
7328 east laredo lane  
scottsdale, az 85250  
480.629.8238 (480.459.5032 fax)

availability of documents  
these drawings and specifications are preliminary in nature and are subject to change without notice. they are not to be used for any other purpose than that for which they were prepared. no warranty is made by the architect as to the accuracy or completeness of the information contained herein. the architect shall not be responsible for any errors or omissions in these drawings or specifications. the contractor shall be responsible for obtaining all necessary permits and for the accuracy of the information contained herein. the contractor shall be responsible for the accuracy of the information contained herein. the contractor shall be responsible for the accuracy of the information contained herein.



**pool restroom @ desert oasis**  
a centex homes development  
surprise, az

preliminary -  
not for construction

Issue date: 12.21.07  
project no. 0712

**elev**

# LANDSCAPE SCHEDULE

Symbol	TREES Item	Size	Quantity	Comments
	Acacia atonophylla	24" box	10	
	Shoestring Acacia	36" box Std. Trunk	5	
	Parkinsonia hybrid 'Desert Museum'	24" box	11	
	Desert Museum Palo Verde	36" box Multi Trunk	12	
	Pistacia chinensis	24" box	6	
	Sam's Redwood	36" box Std. Trunk	14	
	Washingtonia robusta	BTH per plan	9	
	Mexican Fan Palm			
	Prosopis hybrid Phoenix™	24" box	35	
	Phoenix Mesquite	36" box Multi Trunk	23	
	Sophora secundiflora	24 box	21	
	Texas Mountain Laurel	Std. Trunk		
	Syagrus romanzoffiana	BTH per plan	9	
	Queen Palm			
SHRUBS & ACCENTS				
Item	Size	Quantity	Comments	
	Agave geminiflora	5 gal.	14	
	Twinkflowered Agave			
	Eremophila maculata Valeriana™	5 gal.	32	
	Emu Bush			
	Euphorbia biglandulosa	5 gal.	216	
	Gopher Plant			
	Fouquieria splendens	Bareroot	5	10 cane min
	Coccoloba			
	Hesperaloe parviflora Yellow	5 gal.	142	
	Yellow Yucca			
	Leucophyllum tangamankae 'Lynn's Legacy'™	5 gal.	76	
	Lynn's Legacy™			
	Muhlenbergia capillaris Regal Mist™	5 gal.	506	
	Regal Mist Grass			
	Opuntia santa Rita	Bareroot	45	Min 3 pad
	Purple Prickly Pear			
	Pediocactus macrocarpus	5 gal.	65	
	Lady's Slipper			
	Phoenix roebelenii	30 gal.	8	3 Trunk Min
	Pygmy Date Palm			
	Rosa banksiae	5 gal.	53	Espalier to fence
	Lady Bank's Rose			
	Serena artemisioides	5 gal.	60	
	Festuary Cassia			
	Simmondsia chinensis	5 gal.	69	
	Joloba			
	Tecoma stans 'Gold Star'	5 gal.	9	
	Gold Star Yellow Bells			
	Tecoma x 'Orange Jubilee'	5 gal.	16	
	Orange Jubilee Yellow Bells			
GROUNDCOVERS				
Item	Size	Quantity	Comments	
	Bulbine frutescens 'Tiny Tangerine'™	1 gal.	113	
	Tiny Tangerine Bulbine			
	Convolvulus cneorum	1 gal.	188	
	Bush Morning Glory			
	Lantana montevidensis	1 gal.	125	
	Purple Trailing Lantana			
	Lantana species 'New Gold'	1 gal.	174	
	New Gold Lantana			
	Rosmarinus officinalis 'Huntington Carpet'	1 gal.	28	
	Trailing Rosemary			
MISCELLANEOUS				
Item	Size	Quantity	Comments	
	Concrete Header Integral color to match DG	6" x 6"	1,122 L.F.	Field Verify L.F.
	Decomposed Granite - 'Saddleback Brown'	3/4" Screened	34,406 S.F.	2" Depth, Field Verify S.F.
	Turf - 'Mid Iron' Bermuda Sod		46,090 S.F.	Field Verify S.F.
	Rip Rap color to match DG		32,161 S.F.	Field Verify S.F.

# IRRIGATION LEGEND

Symbol	Description
	2" Water Meter (see Civil Plans for location - Qty 1).
	Febco 825-YA Reduced Pressure Backflow Preventor. Same size as meter. Place In Guard Shack Enclosure 'Desert Tan' color.
	Nibco Brass Gate Valve (Size To Line)
	Rainbird 44C Quick coupler with 44k key.
	Hunter ICV Series Control Valve (Size As Shown)
	Rainbird ESP-36MC-SS: 36 station wall mounted controller
	Rainbird ESP-36MC-SS: 36 station wall mounted controller
	Rainbird PSI-M30X-M50X Pressure Regulator With Rainbird QKCHK-100 - 1" Basket Filter with 200 mesh screen
	Tree Multi-port Emitter (Size per Emitter Schedule)
	Palm Tree Bubblers (Size per Emitter Schedule)
	Class 200 PVC Lateral Line To Shrub Emitters (Size Per Pipe Table)
	Class 200 PVC Lateral Line To Tree Emitters (Size Per Pipe Table)
	Class 200 PVC Lateral Line To Palm Tree Emitters (Size Per Pipe Table)
	Class 200 PVC Lateral Line To Turf Heads (Size Per Pipe Table)
	Sch. 40 PVC Mainline - Size 1" larger than backflow preventor
	Agricultural Products Self Flushing End Cap
	Station Number
	50.7 GPM (Flow)
	Valve Size
	2" Valve Type
	TURF
SLEEVING SCHEDULE: Sch 40 PVC Sleeve. Contractor is responsible for all sleeving whether shown or not.	
	Mainline Sleeves 6" Sch. 40
	Drip Lateral Sleeves 2" Sch. 40
	Lateral From Valve To Regulators 3" Sch. 40
	Wires 2" Sch. 40

For graphic clarity no shrub emitters have been shown, verify emitter count with emitter detail and plant counts. See Emitter Detail for irrigation system.

### IRRIGATION NOTES

Irrigation is diagrammatic only. Install all irrigation components in landscape areas. Irrigation is not to be installed in roadways, hardscape or home site lots.

### SPRAY HEAD SCHEDULE

SYMBOL	MODEL	NOZZLE	DESIGN PRESSURE
	RAINBIRD	1804-6 VAN	30 PSI
	RAINBIRD	1804-8 MPR	20 PSI
	RAINBIRD	1804-8 VAN	30 PSI
	RAINBIRD	1804-8 MPR	30 PSI
	RAINBIRD	1804-10 VAN	30 PSI
	RAINBIRD	1804-10 VAN	30 PSI
	HUNTER	PGJ-06-V-.75	30 PSI
	HUNTER	PGJ-06-V-1.0	30 PSI
	HUNTER	PGJ-06-V-2.0	30 PSI
	HUNTER	PGJ-06-V-3.0	30 PSI

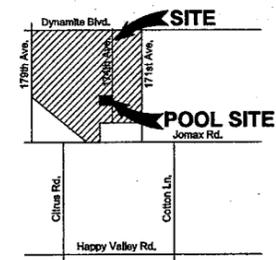
# PROJECT TEAM

DISCIPLINE	COMPANY, CONTACT, ADDRESS & PHONE NUMBER
Owner	Centex Homes, Jacob Jones 8665 East Hanford Drive, Suite 200 Scottsdale, Arizona 85255 (480) 889-1018
Landscape Architect	Hadley Design Group, Doug Prouty, R.L.A. 7272 East Indian School Road, Suite 472 Scottsdale, Arizona 85251 (480) 429-0500
Civil Engineer	RFI Consulting, Eric Froberg, P.E. 16605 N 28th Ave., Phoenix, Arizona 85053 (602) 467-2200

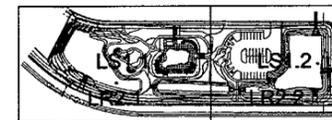
# SHEET INDEX

NUMBER	DESCRIPTION
LC0.1	Cover Schedule
LC0.2	Cover Notes
LS1.1 - LS1.2	Landscape Plans
LR2.1 - LR2.2	Irrigation Plans
LD3.1 - LD3.2	Landscape Irrigation Details
LD3.3	Landscape Irrigation Details
LH4.1	Hardscape Layout Plans
LD5.1	Hardscape Details
LP6.1 - LP6.8	Specifications

# VICINITY MAP



# KEY MAP



HADLEY DESIGN GROUP

7272 E. Indian School Rd. Suite 472  
Scottsdale, Arizona 85251  
Tel. 480.429.0500 Fax. 480.429.0501



Desert Oasis Community Pool  
Pool Site  
Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

Title: Cover Schedules	
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file:	0710cad
Project No:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submittal	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:
City Numbers:	
Case #	SP07-414

Sheet Number:

LC0.1

SHEET 1 OF 20

SP07-414

## GENERAL LANDSCAPING NOTES

- Plant material shall be approved by the Landscape Architect prior to installation. Contractor shall be responsible for notifying the Landscape Architect and coordination an inspection of the plant material that will be delivered to the job site at least 48 hours prior to delivery. Contractor shall not delay the construction schedule due to rejected plant material. The Landscape Architect, or his representative, reserve the right to refuse any plant materials he deems unacceptable. (See specifications)
- For clarification of discrepancies between the drawings and the site, it should be brought to the attention of the Landscape Architect prior to beginning work.
- Any substitutions shall be approved in writing by the Landscape Architect.
- All quantities indicated on the plans are provided as a courtesy only. The Contractor shall be responsible for verify all quantities shown by conducting an independent take off. Plans take precedence.
- Double stake all 15 gallon, 24", and 36" box trees as required.
- Under no circumstances shall a tree be planted within 6; from any building without the express written approval of the Landscape Architect.
- Sprinkler Contractor must guarantee 100% coverage in all landscape areas.
- Exposed soil in planters shall be raked and free from rocks, roots, weeds, etc.
- Plants shall be quality material having a growth habit which is normal for the species and be sound, vigorous, healthy, and free from insects and injury.
- Groundcover and/or decomposed granite shall extend under shrubs unless noted.
- After all work is completed, the contractor shall remove all materials not incorporated in the Scope of Work from the job site.
- A pre-emergent herbicide is to be applied to all granite areas before and after the granite has been laid. Include all river rock areas, if applicable.
- All underground conduits and utilities are to be located and protected before digging. If doubt exists call Blue Stake at (602) 263-1100.
- All material to be guaranteed for a period of one (1) year after final acceptance.
- Landscape contractor shall provide arbor guards to all trees located in turf areas.
- Contractor is responsible for all required sleeving whether it is shown on the plans or not.
- Clarification or any discrepancies between the construction drawings and the site should be brought to the attention of the Landscape Architect.
- Plants to be relocated away from fire hydrants, transformers, and lights as necessary.
- All plant material to meet or exceed Arizona Nurseryman's Association Standards for recommended tree sizes
- All plant material locations shall be inspected and approved by the Landscape Architect prior to any holes dug.
- It is the responsibility of the Landscape Contractor to inform the Landscape Architect/ Owner of any plant material concerns based on planting season (i.e. winter, summer). Should the Landscape Contractor have any concerns about plant material due to heat/ frost or exposure, he shall request a substitution or delay in planting. Once planted, all plant material is subject to specified warranties.
- All vegetation disturbed or destroyed by construction shall be replaced in like size, type and quantity.
- Grading shall include all excavation, settlement, handling, import, distribution, transportation, and disposal necessary to bring ground to finish grade as shown on the plan. (once general contractor has provided finish grade within 1/10 of 1')
- Elevations and locations of all mounding grades are approximate and may be adjusted in the field at the Landscape Architect's request prior to installation. All final grades, and mounding are to be approved by the Landscape Architect prior to the installation of any plant material or irrigation components.
- Finished grade in groundcover, granite and lawn areas shall be 1" below adjacent header, paving, curbing, etc.
- Elevations and locations of mounding are approximate.
- 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.
- General contractor is to provide all rough grades for berms and mounds. (only if noted "see civil"). The landscape contractor shall be responsible for all finished grading of berms, to establish variations in elevations and convey a natural aesthetic appearance.

## GENERAL PROJECT NOTES

- All work shall be done in accordance with these plans, details, and specifications, and per the city of Surprise codes and requirements.
- The contractor shall carefully inspect the site and verify all conditions and dimensions prior to proceeding with any work describes herein. The contractor shall notify the Landscape Architect of any discrepancies with these documents prior to beginning any construction.
- The contractor shall carry all worker's compensation, public liability, and property damage insurance as required by the owner.
- Hold Harmless and Indemnification Clause - The Contractor shall agree that in accordance with generally accepted construction practices, the Contractor shall be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety to all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify, and hold the Landscape Architect harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting for liability arising from the sole negligence of the Landscape Architect.
- Damage Responsibility - Contractor shall assume full responsibility for any damage imposed, intentionally or accidentally, to existing utilities, buildings, or other amenities, due to the actions of the Contractor, Contractor's employees, and/or Contractor's sub-contractors. Contractor shall at all times protect his work from damage and theft and replace all damaged or stolen items or parts at the Contractor's expense until the work is accepted in writing from the owner.
- Unauthorized Changes to the Plans - The Landscape Architect preparing these plans shall not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the Landscape Architect and the governing municipality to the commencement of any work.
- The Contractor shall apply, obtain, and pay for all required permits to complete the scope of work contained in these documents.
- Trade Coordination - Construction and installation of all items within these documents shall require close coordination between trades involved in underground and utility installation, and tree locations. Contractor shall be responsible to insure proper coordination between trades to insure and avoid construction delays or damage to any improvements or utilities. Any coordination problems shall be immediately reported to the owner or owner's representative.
- Underground Service Alert - Contractor shall notify Blue Stake 48 hours prior to digging at 1-800-stake-it or 602-263-1100. The Contractor shall exercise extreme care in working near existing utilities. The Contractor shall verify the location and condition of all utilities prior to the construction.
- Inspections - The Contractor shall be responsible for notify the municipality representative at least 48 hours in advance prior to any required municipal inspections. The Contractor shall also notify the Landscape Architect 48 hours in advance prior to any required inspection per the project specifications.
- Written dimensions shall take precedence over scaled dimensions and shall be verified on the job site. Any discrepancies shall be brought to the attention of the Landscape Architect prior to the commencement of work.
- The Landscape Architect shall decide all questions relating to the interpretation of the drawings and the acceptable fulfillment of the contract documents.
- The Contractor shall maintain a clean premises which will be free of excess equipment, material, and rubbish incidental of his work at all times including weekends and holidays. All rubble, trash, debris, or disposable items resulting from the demolition of construction shall be disposed of in a legal, lawful, and safe manner to an approved disposal site.

## CITY OF SURPRISE NOTES

- All utility boxes and structures are to be screened from view.
- Plant material is not to be located closer than 3 feet from any fire hydrant of fire department connection.
- All changes are to be approved by the City of Surprise Community Development Department.
- Signs require a separate permit.
- Plant material located within a sight visibility triangle is to be maintained such that no tree hangs lower than 7 feet and no shrub grows higher than 2 feet from ground elevation.
- Plant material is to meet ANA standards.

## IRRIGATION NOTES

- All irrigation equipment to be located in landscape areas within property boundaries of the project - all lines and equipment are schematic and are sometimes shown in roadways, sidewalks, or outside property lines. This is done for clarity purposes only.
- Do not install the irrigation system as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences, or differences in area dimensions exist that might not have been considered in the engineering. Such obstructions or conflicts should be brought to the attention of the owner and landscape architect immediately. In the event this notification is not performed, the contractor shall assume full responsibility for any revisions necessary.
- The irrigation system design is based on a minimum source pressure of 70 psi, a minimum operating pressure of 40 psi and a maximum flow demand of 50 gpm. The contractor shall verify water pressures prior to construction and report any discrepancies between the water pressure indicated on the drawings and the actual pressure reading at the irrigation point of connection to the landscape architect immediately.
- All material used shall be installed as detailed. All irrigation equipment not otherwise detailed or specified shall be installed per manufacturer's recommendations and specifications. Owner's representative and/or landscape architect shall approve all deviation's from drawings or materials used.
- The owner's representative may, at any time, take and analyze samples of materials and equipment for conformity to specifications. The contractor shall make such samples available upon request. Rejected material shall be immediately removed from the site and replaced at the contractor's expense.
- Install backflow prevention unit(s) piping between the point of connection and the bpu per local codes. The owner's authorized representative shall approve the final location of the bpu. Backflow preventer must be screened from view.
- Contractor shall be responsible for supplying materials and labor to provide specified electrical service to all controller locations. All electrical work to be per manufacturer's specifications and per local code.
- 24 volt wire shall be 600v, uf, ul approved, #14 gauge, single strand, plastic insulated, copper wire. Common wire is to be white, control wire is to be red (use no black wire). Tape and bundle wire every twelve (12) feet. During installation wires shall have a 24" loop tied at each direction changes greater than 30 degrees & be untied prior to trench fill in. Lay beside mainline. Splice in valve boxes only, using manufactured epoxy or resin filled wire connectors. Provide 18" slack at each elbow in main line and at each remote control valve. Pull one additional spare wire to the most distant valve location for potential future use. Color of extra wire shall be yellow.
- Level of pea gravel in irrigation boxes shall be a minimum of 4" below the bottom of the valve so that the valve is completely visible. All pea gravel in valve box to be cleaned from top of valve so that valve is completely visible. Lip of valve box is also to be free of debris. Reference irrigation details.
- Locate pressure regulator and Y strainer in a valve box as required. Remote control valve to be located in a separate (adjacent) valve box, or a jumbo valve box may be used in lieu of two separate boxes.
- All drip systems to be flushed through flush caps. Flush caps to be located in 10" round economy boxes and placed at the end of all laterals.
- The contractor shall provide check valves and air vacuum relief valves as required, or at the discretion of the landscape architect, to each circuit throughout the irrigation system located within sloped areas to prevent low irrigation head drainage.
- Pipe sizes shall conform to the pipe sizing schedule on detail sheet. No substitutions of smaller pipe sizes shall be permitted but substitutions of larger sizes may be approved by the landscape architect.
- All pipe shall be bedded on all sides with four inches of rock free (3/8" minus) material. Import sand if necessary. Backfill in two or more compacted lifts. Settling of trenches by more than an inch shall be brought to finish grade at the contractor's expense.
- All irrigation lines on slopes or within retention basins shall be run parallel with grade and are to maintain the highest elevations possible at all times.
- Multi-outlet emitters shall service all trees and shrubs and/or groundcovers.
- All plants that require more than one drip emitter shall have emitters distributed evenly around perimeter of planting well. Emission points at rootballs shall be located on the uphill side, midway between the center of the plant and the edge of the rootball.
- Landscape contractor is responsible for all landscape sleeving. Coordinate installation with the general contractor. Verify any existing sleeves installed by other contractors.
- Irrigation end electrical sleeves to be schedule 40 pvc and all sleeves shall conform to the irrigation schedule. All sleeves to extend at least 12" beyond concrete structures. Allow at least 4" - 6" from end of sleeves to first fitting on irrigation line. All sleeves to be 24" below grade and/or per owner's specifications. All sleeves under parking lots, streets, staging areas, and patios to be installed by paving contractor prior to paving.
- Notify the owner's representative 48 hours prior to the following required stages of observation for:
  - mainline: installation, depth, valves, wire, line pressure test
  - emitter laterals: installation, depth, valves, emitters, outlet tubing, at line pressure
  - controller: installation, functioning
- Prior to owner's approval, an irrigation "tune up" must be performed as follows:
  - All irrigation equipment (including all pipelines and sleeves) to be documented from two stationary points.
  - All drip systems to be flushed beginning with "Y" strainer, working away from the pressure regulator.
  - All irrigation sprinkler heads to be flushed of debris and flow controls adjusted to achieve maximum coverage for turf areas. Avoid over spray on all streets, curbs, sidewalks, walls, and structures.
  - All irrigation heads shall be adjusted to proper height.
  - Irrigation valves to be labeled on a sheet of paper with stations corresponding to etched labels on top of valve boxes. This sheet to be placed in a plastic pouch and attached to inside of controller.
- Set back all spray and stream type irrigation heads from backs of curbs or sidewalks as per irrigation details to reduce over spray or provide design alternatives to achieve similar results to be approved by landscape architect.
- Locate valve boxes in planting areas so that they are screened from view. No valve boxes shall be located in turf areas.
- All mainlines and irrigation equipment shall be placed outside the right-of-way and public utility easements.
- Prior to placing any irrigation systems in service, an Arizona certified backflow device tester shall test the backflow prevention device and give a copy of the passed test results to the pinal county inspector or mail it to the pinal county department of public works inspection section.
- After initial testing all backflow devices shall be tested and passed annually in accordance with local utility requirements.
- Backflow prevention devices shall be placed a minimum of two (2) feet from the water meter and be the same size as the meter service line.
- All bpd devices shall have a minimum 24"x36"x4" class b concrete slab with pipe sleeves. If a security cage is installed concrete shall be six (6") inches larger on all sides than the security cage.
- All mainline pipe to be a minimum of schedule 40.
- All pipe crossings in the right-of-way shall be marked on each side of the curb with a non-destructible marking.

## ABBREVIATIONS

@	AT
AC	AIR CONDITIONER
AD	AREA DRAIN
A	AND
APPVD	APPROVED
ARCH	ARCHITECT
AVG.	AVERAGE
B.O.C.	BACK OF CURB
BC	BEGIN CURVE
BLDG.	BUILDING
BP	DRAINAGE BREAK POINT
BPU, BFPD	BACKFLOW PREVENTION UNIT
BTH	BROWN TRUNK HEIGHT
BRM FIN	BROOM FINISH
BR	BOTTOM OF RAMP
BS	BOTTOM OF STAIRS/SLOPE
B.S.	BOTH SIDES
BW	BASE OF WALL @ FINISH GRADE
CAB	CRUSHED AGGREGATE BASE
CAL	GALIPER
CB	CATCH BASIN
CF	CURB FACE
CLR.	CLEAR
CL	CENTER LINE
CI	COUNTOUR INTERVAL
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
C.M.U.	CONCRETE MASONRY UNIT
CP	CENTER POINT
CU.FT., CF	CUBIC FEET
DESC.	DESCRIPTION
D.I.	DRAIN INLET
DET	DETAIL
DI	DIAMETER
DN.	DRAIN
DWGS.	DRAWINGS
EA	EACH
EJ, EXP.JT.	EXPANSION JOINT
E.E.	ELECTRICAL ENGINEER
ELEV., EL	ELEVATION
ENGR.	ENGINEER
EQUAL	EQUAL
EW	EACH WAY
EX.	EXISTING
F.O.C.	FACE OF CURB
F.F.	FINISH FLOOR
FL	FLOW LINE
FG	FINISH GRADE
FR	FIRE HYDRANT
FIN	FINISH
FS	FINISH SURFACE
FT	FEET
FTN	FOUNTAIN
GAL.	GALLON
GALV	GALVANIZED
G.C.	GROUNDCOVER
H	HIGH
HP	HIGHPOINT
HT	HEIGHT
HORIZ.	HORIZONTAL
INV.	INVERT
INCH	INCH
ID	INSIDE DIAMETER
JOINT	JOINT
L	LONG
LAND, ARCH.	LANDSCAPE ARCHITECT
LINE, FT., LF	LINEAL FOOT
MECH.	MECHANICAL
MIN.	MINIMUM
MULTI	MULTIPLE
N.O., #	NUMBER
N.T.S.	NOT TO SCALE
OD	OUTSIDE DIAMETER
O.H.	OVERHEAD
OPP	OPPOSITE
P.A.	PLANTING AREA
PL	PROPERTY LINE
PLTG	PLANTING
P.E.	PAD ELEVATION
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF CONNECTION
P.D.	PLANTER DRAIN
R	RADIUS
REF	REFER
RET.	RETAINING
REQD	REQUIRED
SHT.	SHEET
SM	SIMILAR
SF	ROUND, DIAMETER
SQ	SQUARE FEET
SS.	SQUARE
STD	STANDARD
STRUCT	STRUCTURAL
STL	STEEL
SPECS	SPECIFICATIONS
S.V.T.	SIGHT VISIBILITY TRIANGLE
SYMB.	SYMBOL
TBD	TO BE DETERMINED
TBS	TO BE SELECTED
TC	TOP OF CURB
TD	TOP OF DRAIN
TG	TOP OF GRATE
TR	TOP OF RAMP
TR	TREE
TW	TOP OF WALL
TP	TOP OF PAVING
TS	TOP OF STAIRS/SLOPE
TYP.	TYPICAL
TS	TUBULAR STEEL
U.G.	UNDERGROUND
UP.	UTILITY POLE
VERT	VERTICAL
W/	WITH
W/L	WROUGHT IRON
W/O	WITHOUT
W.P.	WATERPROOFING
W.W.F.	WIRE WOVEN FABRIC
W.W.M.	WIRE WOVEN MESH

## HADLEY DESIGN GROUP

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Scottsdale, Arizona 85251  
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# Desert Oasis Community Pool Pool Site Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

Title: **COVER NOTES**

Date: **18/JAN/08**

Drawn by: **RM**

Checked by: **DP**

CAD File:  
0718cad  
Project No:  
0718

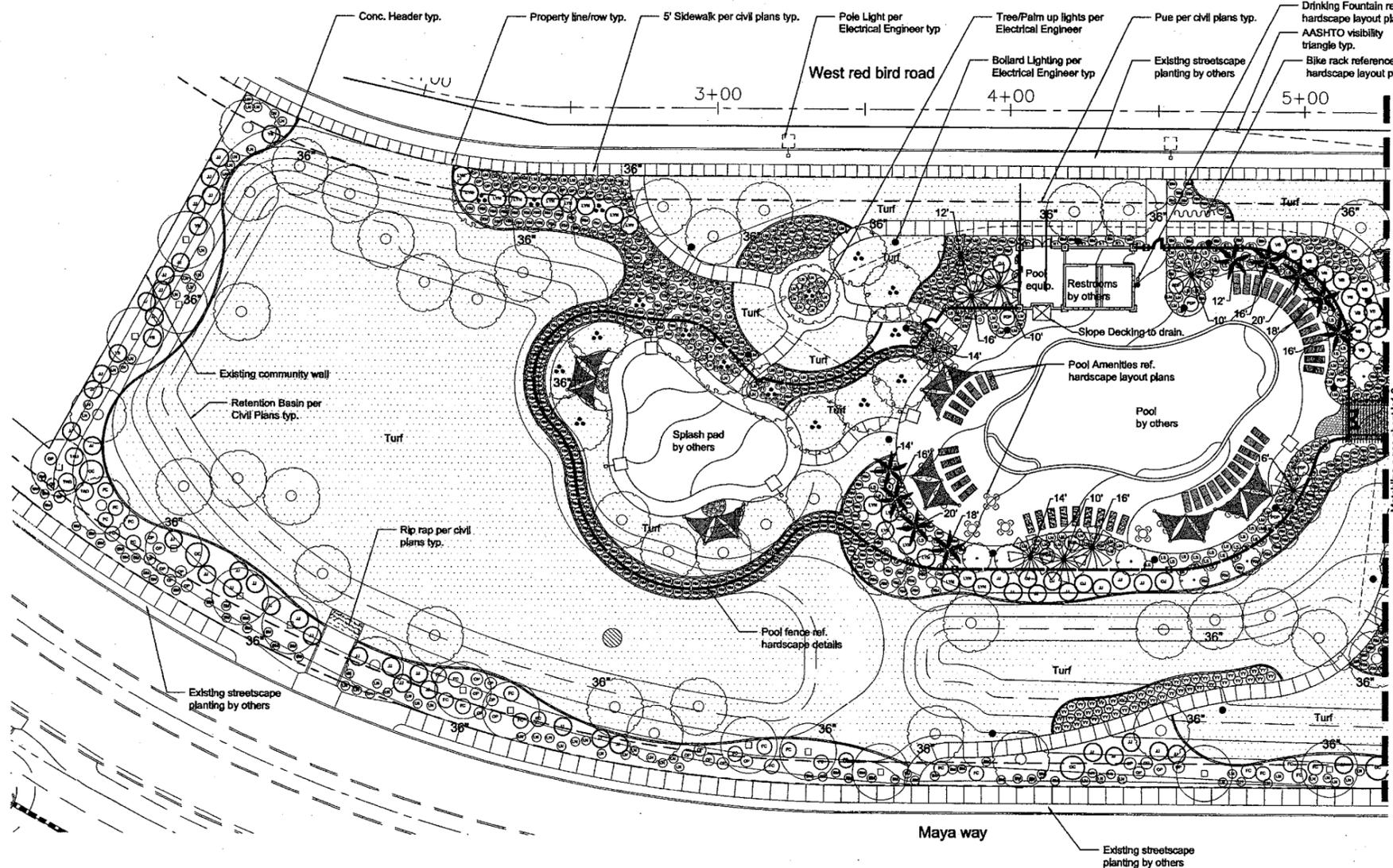
- Design Development Date:
- Progress Const. Docs. Date:
- City Submittal Date: 18/JAN/08
- Construction Issue Date:
- Bid Package Date:
- Record Drawings Date:

City Numbers:  
Case # SP07-414

Sheet Number:

**LC0.2**

SHEET 2 OF 20



### LANDSCAPE LEGEND

Symbol	TREES Item	Size
	<i>Acacia stenophylla</i> Shoestring Acacia	24" box 36" box Std. Trunk
	<i>Parkinsonia hybrid</i> "Desert Museum" Desert Museum Palo Verde	24" box 36" box Multi Trunk
	<i>Pistacia chinensis</i> Sarah's Redbark	24" box 36" box Std. Trunk
	<i>Washingtonia robusta</i> Mexican Fan Palm	BTH per plan
	<i>Prosopis hybrid</i> Phoenix™ Phoenix Mesquite	24" box 36" box Multi Trunk
	<i>Sophora secundiflora</i> Texas Mountain Laurel	24" box Std. Trunk
	<i>Syngonium hybrid</i> Queen Palm	BTH per plan
SHRUBS & ACCENTS		Size
	<i>Agave geminiflora</i> Twin-flowered Agave	5 gal.
	<i>Eriosepala maculata</i> Valentine™ Emu Bush	5 gal.
	<i>Euphorbia biglandulosa</i> Gopher Plant	5 gal.
	<i>Fouquieria splendens</i> Ocotillo	Bareroot
	<i>Hesperaloe parviflora</i> Yellow Yellow Yucca	5 gal.
	<i>Leucophyllum langmanii</i> "Lynn's Legacy" Lynn's Legacy™	5 gal.
	<i>Muhlenbergia capillaris</i> Regal Mar™ Regal Mar Grass	5 gal.
	<i>Opuntia santa-rita</i> Purple Prickly Pear	Bareroot
	<i>Pedicularis macrocarpa</i> Lady's Slipper	5 gal.
	<i>Phoenix roebelenii</i> Pygmy Date Palm	30 gal.
	<i>Rosa banksiae</i> Lady Bank's Rose	5 gal.
	<i>Sonora arborescens</i> Feathery Cassia	5 gal.
	<i>Symphoricarpos chinensis</i> Jocko	5 gal.
	<i>Tecoma stans</i> "Gold Star" Gold Star Yellow Bells	5 gal.
	<i>Tecoma x 'Orange Jubilee'</i> Orange Jubilee Yellow Bells	5 gal.
GROUNDCOVERS		Size
	<i>Bulbine frutescens</i> Tiny Tangerine™ Tiny Tangerine Bulbine	1 gal.
	<i>Convolvulus creosmum</i> Bush Morning Glory	1 gal.
	<i>Lantana montividaensis</i> Purple Trailing Lantana	1 gal.
	<i>Lantana speciosa</i> "New Gold" New Gold Lantana	1 gal.
	<i>Rosmarinus officinalis</i> "Huntington Carpet" Trailing Rosemary	1 gal.
MISCELLANEOUS		Size
	Concrete Header Intregal color to match DG	6" x 6"
	Decomposed Granite - "Saddleback Brown"	3/4" Screened
	Turf - "Mid Iron" Bermuda Sod	
	Rip Rap color to match DG	

**HADLEY DESIGN GROUP**

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# Desert Oasis Community Pool Pool Site Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

Title: **LANDSCAPE PLANS**

Date: 18/JAN/08

Drawn by: RM

Checked by: DP

CAD file: 0718cad

Project No. 0718

Design Development Date:

Progress Const. Docs. Date:

City Submittal Date: 18/JAN/08

Construction Issue Date:

Bid Package Date:

Record Drawings Date:

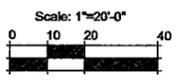
City Numbers:  
Case # SP07-414

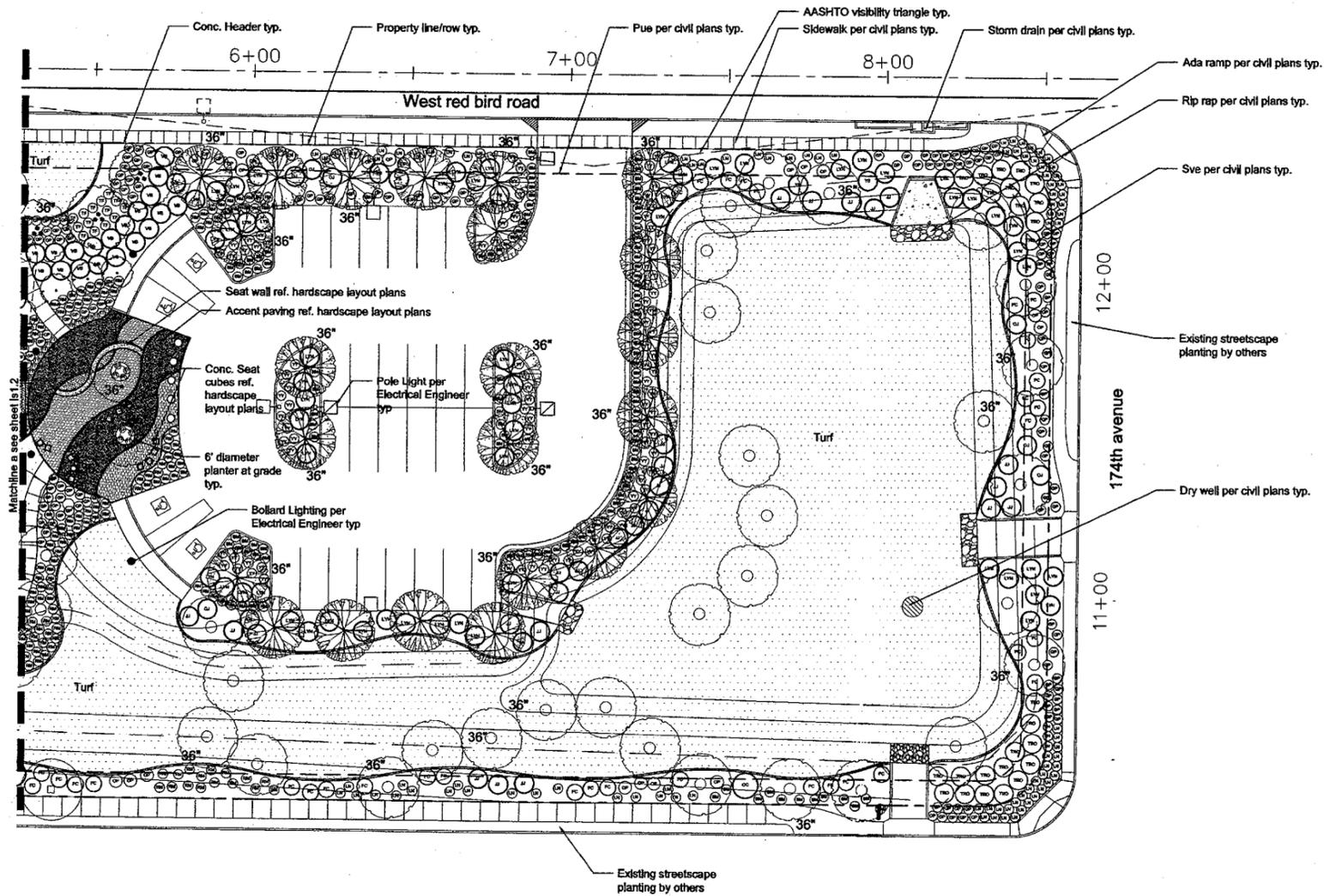
Sheet Number:

**LS1.1**

SHEET 3 OF 20

### KEY MAP

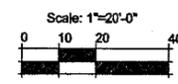




### LANDSCAPE LEGEND

Symbol	TREES Item	Size
	<i>Acacia stenophylla</i> Shoestring Acacia	24" box 36" box Std. Trunk
	<i>Parkinsonia hybrid</i> 'Desert Museum' Desert Museum Palo Verde	24" box 36" box Multi Trunk
	<i>Pistacia chinensis</i> Sarah's Radiance	24" box 36" box Std. Trunk
	<i>Washingtonia robusta</i> Mexican Fan Palm	BTH per plan
	<i>Prosopis hybrid</i> Phoenix™ Phoenix Mesquite	24" box 36" box Multi Trunk
	<i>Sophora secundiflora</i> Texas Mountain Laurel	24 box Std. Trunk
	<i>Syagrus romanzoffiana</i> Queen Palm	BTH per plan
<b>SHRUBS &amp; ACCENTS</b>		
	<i>Agave geminiflora</i> Twin-flowered Agave	5 gal.
	<i>Eriophora maculata</i> Valentine™ Ernu Bush	5 gal.
	<i>Euphorbia ligulidulosa</i> Gopher Plant	5 gal.
	<i>Fouquieria splendens</i> Saguaro	Bareroot
	Ocotillo	5 gal.
	<i>Hesperaloe parviflora</i> Yellow Yellow Yucca	5 gal.
	<i>Leucosiphum longimanis</i> 'Lynn's Legacy™' Lynn's Legacy™	5 gal.
	<i>Muhlenbergia capillaris</i> Regal Mist™ Regal Mist Grass	5 gal.
	<i>Opuntia santa rita</i> Purple Prickly Pear	Bareroot
	<i>Pedicularis macrocarpa</i> Lady's Slipper	5 gal.
	<i>Phoenix roebelenii</i> Pygmy Date Palm	30 gal.
	<i>Rosa banksiae</i> Lady Bank's Rose	5 gal.
	<i>Senecio artemisioides</i> Feathery Cassia	5 gal.
	<i>Simmondsia chinensis</i> Jojoba	5 gal.
	<i>Tecoma stans</i> 'Gold Star' Gold Star Yellow Bells	5 gal.
	<i>Tecoma x 'Orange Jubilee'</i> Orange Jubilee Yellow Bells	5 gal.
<b>GROUNDCOVERS</b>		
	<i>Bulbine frutescens</i> Tiny Tangerine™ Tiny Tangerine Bulbine	1 gal.
	<i>Convolvulus creorum</i> Bush Morning Glory	1 gal.
	<i>Lantana montealemana</i> Purple Trailing Lantana	1 gal.
	<i>Lantana species</i> 'New Gold' New Gold Lantana	1 gal.
	<i>Rosmarinus officinalis</i> 'Huntington Carpet' Trailing Rosemary	1 gal.
<b>MISCELLANEOUS</b>		
	Concrete Header	Integral color to match DG 6" x 6"
	Decomposed Granite - 'Saddleback Brown'	3/4" Screened
	Turf - 'MKI Iron' Bermuda Sod	
	Rip Rap	color to match DG

### KEY MAP



**HADLEY DESIGN GROUP**

2722 E Indian School Rd. Suite 472  
Scottsdale, Arizona 85251  
Tel: 480.429.0500 Fax: 480.429.6501



# Desert Oasis Community Pool Pool Site Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

Title: **LANDSCAPE PLANS**

Date: 18/JAN/08

Drawn by: RM

Checked by: DP

CAD file: 0718ecad

Project No. 0718

Design Development Date:

Progress Const. Docs. Date:

City Submittal Date: 18/JAN/08

Construction Issue Date:

Bid Package Date:

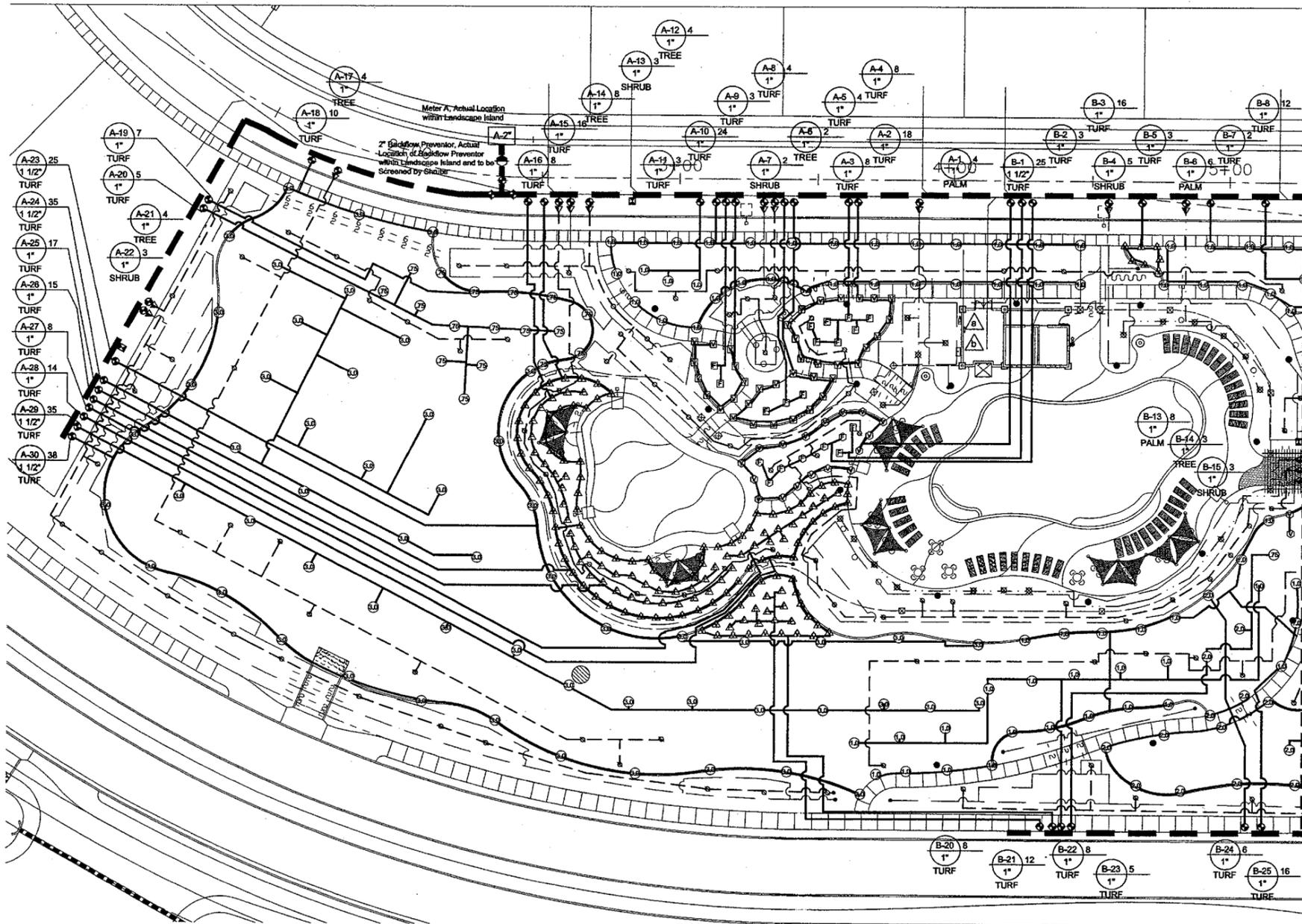
Record Drawings Date:

City Numbers:  
Case # SP07-414

Sheet Number:

**LS1.2**

SHEET 4 OF 20



### IRRIGATION LEGEND

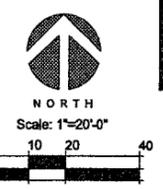
- Symbol Description
- 2" Water Meter (see Civil Plans for location - Qty 1).
  - Febco 825-YA Reduced Pressure Backflow Preventor. Same size as meter. Place in Guard Shack Enclosure 'Desert Tan' color.
  - Nibco Brass Gate Valve (Size To Line)
  - Rainbird 44C Quick coupler with 44k key.
  - Hunter ICV Series Control Valve (Size As Shown)
  - Rainbird ESP-36MC-SS: 36 station wall mounted controller
  - Rainbird ESP-36MC-SS: 36 station wall mounted controller
  - Rainbird PSI-M30X-M50X Pressure Regulator With Rainbird QKCHK-100 - 1" Basket Filter with 200 mesh screen
  - Tree Multi-port Emitter (Size per Emitter Schedule)
  - Palm Tree Bubbler (Size per Emitter Schedule)
  - Class 200 PVC Lateral Line To Shrub Emitters (Size Per Pipe Table)
  - Class 200 PVC Lateral Line To Tree Emitters (Size Per Pipe Table)
  - Class 200 PVC Lateral Line To Palm Tree Emitters (Size Per Pipe Table)
  - Class 200 PVC Lateral Line To Turf Heads (Size Per Pipe Table)
  - Sch. 40 PVC Mainline - Size 1" larger than backflow preventor
  - Agricultural Products Self Flushing End Cap
  - Station Number
  - 50.7 GPM (Flow)
  - 2" Valve Size
  - TURF Valve Type
- SLEEVING SCHEDULE: Sch 40 PVC Sleeve.  
 Contractor is responsible for all sleeving whether shown or not.
- |   |   |    |         |
|---|---|----|---------|
| 6 | 6 | 1" | Sch. 40 |
| 2 | 2 | 2" | Sch. 40 |
| 3 | 3 | 3" | Sch. 40 |
| 2 | 2 | 2" | Sch. 40 |
- For graphic clarity no shrub emitters have been shown, verify emitter count with emitter detail and plant counts. See Emitter Detail for irrigation system.

**IRRIGATION NOTES**  
 Irrigation is diagrammatic only. Install all irrigation components in landscape areas. Irrigation is not to be installed in roadways, hardscape or home site lots.

**SPRAY HEAD SCHEDULE**

SYMBOL	MODEL	NOZZLE	DESIGN PRESSURE
	RAINBIRD	1804-6 VAN	30 PSI
	RAINBIRD	1804-8 MPR	20 PSI
	RAINBIRD	1804-8 VAN	30 PSI
	RAINBIRD	1804-8 MPR	30 PSI
	RAINBIRD	1804-10 VAN	30 PSI
	RAINBIRD	1804-10 VAN	30 PSI
	HUNTER	PGJ-06-V-.75	30 PSI
	HUNTER	PGJ-06-V-1.0	30 PSI
	HUNTER	PGJ-06-V-2.0	30 PSI
	HUNTER	PGJ-06-V-3.0	30 PSI

### KEY MAP



### HADLEY DESIGN GROUP

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 Tel. 480.429.0500 Fax. 480.429.0501



# Desert Oasis Community Pool Site

Surprise, AZ

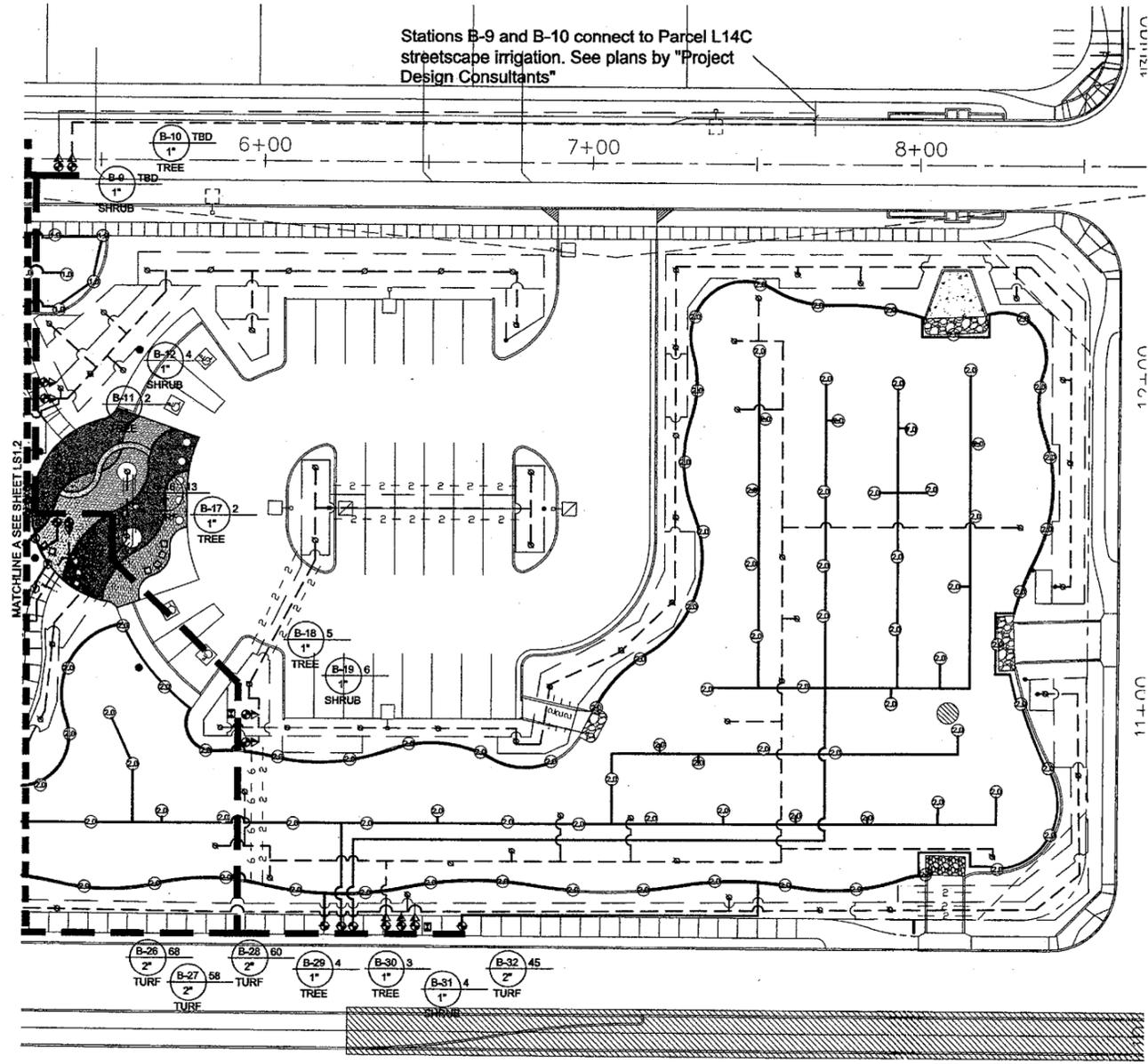
PREPARED FOR: Centex Homes

Revisions:

### IRRIGATION PLANS

Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD File:	0718.dwg
Project No.:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submittal	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:
City Numbers:	
Case #	SP07-414

Sheet Number:  
**LR2.1**  
 SHEET 5 OF 20



### IRRIGATION LEGEND

- | Symbol | Description  |
|--------|--|
| A-2"   | 2" Water Motor (see Civil Plans for location - Qty 1).   |
| ◆      | Febco 825-YA Reduced Pressure Backflow Preventor. Same size as meter. Place in Guard Shack Enclosure 'Desert Tan' color. |
| ◆      | Nibco Brass Gate Valve (Size To Line)  |
| ⊠      | Rainbird 44C Quick coupler with 44k key.   |
| ⊕      | Hunter ICV Series Control Valve (Size As Shown)  |
| △      | Rainbird ESP-36MC-SS: 36 station wall mounted controller   |
| △      | Rainbird ESP-36MC-SS: 36 station wall mounted controller   |
| ▲      | Rainbird PSI-M30X-M50X Pressure Regulator With Rainbird QKCHK-100 - 1" Basket Filter with 200 mesh screen                |
| ⊗      | Tree Multi-port Emmitter (Size per Emmitter Schedule)  |
| ⊗      | Palm Tree Bubbler (Size per Emmitter Schedule)   |
| ---    | Class 200 PVC Lateral Line To Shrub Emitters (Size Per Pipe Table)   |
| ---    | Class 200 PVC Lateral Line To Tree Emitters (Size Per Pipe Table)  |
| ---    | Class 200 PVC Lateral Line To Palm Tree Emitters (Size Per Pipe Table)   |
| ---    | Class 200 PVC Lateral Line To Turf Heads (Size Per Pipe Table)   |
| ---    | Sch. 40 PVC Mainline - Size 1" larger than backflow preventor  |
| ---    | Agricultural Products Self Flushing End Cap  |
| ○      | Station Number   |
| A1     | 50.7 GPM (Flow)  |
| 2"     | Valve Size   |
| TURF   | Valve Type   |
- SLEEVING SCHEDULE: Sch 40 PVC Sleeve.  
 Contractor is responsible for all sleeving whether shown or not.
- | Item                             | Size | Schedule |
|----------------------------------|------|----------|
| Mainline Sleeves                 | 6"   | Sch. 40  |
| Drip Lateral Sleeves             | 2"   | Sch. 40  |
| Lateral From Valve To Regulators | 3"   | Sch. 40  |
| Wires                            | 2"   | Sch. 40  |
- For graphic clarity no shrub emitters have been shown, verify emitter count with emitter detail and plant counts. See Emmitter Detail for irrigation system.

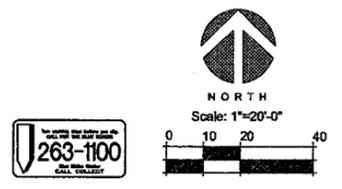
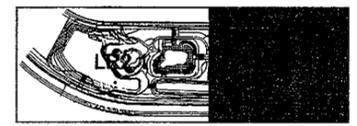
### IRRIGATION NOTES

Irrigation is diagramic only. Install all irrigation components in landscape areas. Irrigation is not to be installed in roadways, hardscape or home site lots.

### SPRAY HEAD SCHEDULE

SYMBOL	MODEL	NOZZLE	DESIGN PRESSURE
△	RAINBIRD	1804-8 VAN	30 PSI
△	RAINBIRD	1804-8 MPR	20 PSI
⊠	RAINBIRD	1804-8 VAN	30 PSI
⊠	RAINBIRD	1804-8 MPR	30 PSI
⊗	RAINBIRD	1804-10 VAN	30 PSI
⊗	RAINBIRD	1804-10 VAN	30 PSI
⊕	HUNTER	PGJ-06-V-.75	30 PSI
⊕	HUNTER	PGJ-06-V-1.0	30 PSI
⊕	HUNTER	PGJ-06-V-2.0	30 PSI
⊕	HUNTER	PGJ-06-V-3.0	30 PSI

### KEY MAP



**HADLEY DESIGN GROUP**

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 Scottsdale, Arizona 85251  
 Tel. 480.429.0500 Fax. 480.429.0501



**Desert Oasis Community Pool  
 Pool Site  
 Surprise, AZ**  
 PREPARED FOR: Centex Homes

Revisions:

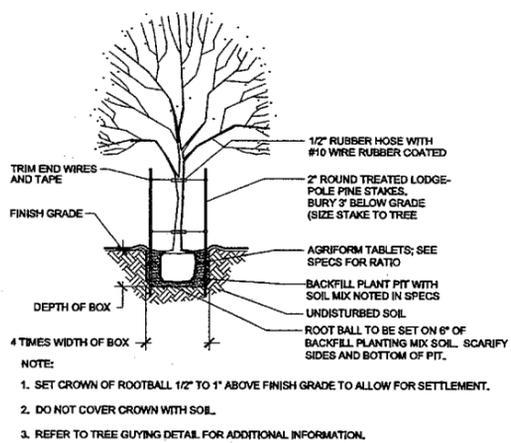
### IRRIGATION PLANS

Date: 18/JAN/08  
 Drawn by: RM  
 Checked by: DP  
 CAD file: 0718head  
 Project No. 0718

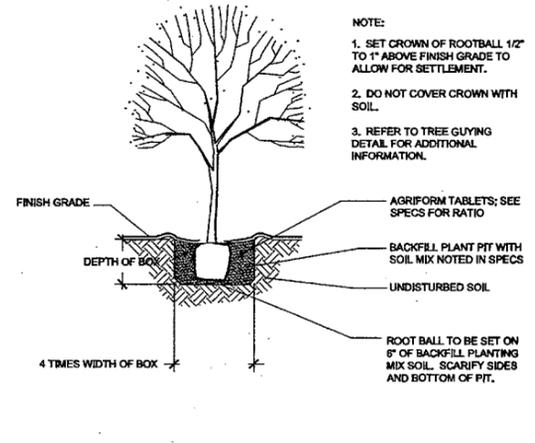
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 City Submittal Date: 18/JAN/08  
 Construction Issue Date:  
 Bid Package Date:  
 Record Drawings Date:

City Numbers:  
 Case # SP07-414

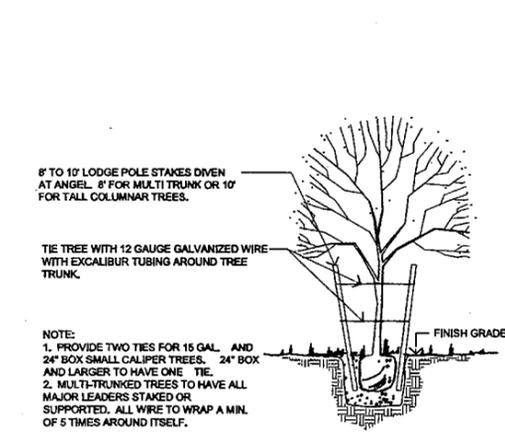
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**LR2.2**  
 SHEET 6 OF 20



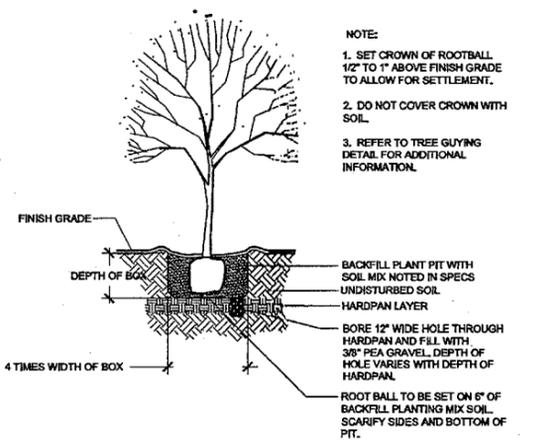
**L1 TREE PLANTING DETAIL ( 15 GALLON - 30" BOX )**  
SCALE: N.T.S.



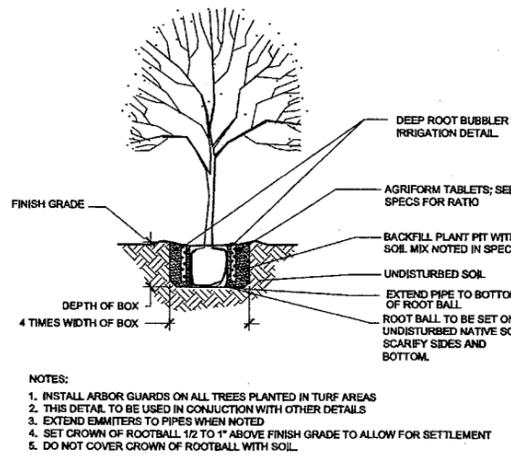
**L2 TREE PLANTING DETAIL ( 36" BOX AND LARGER )**  
SCALE: N.T.S.



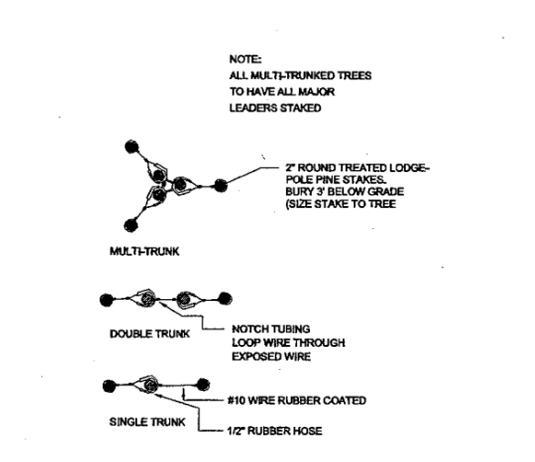
**L3 TYPICAL STAKING DETAIL**  
SCALE: N.T.S.



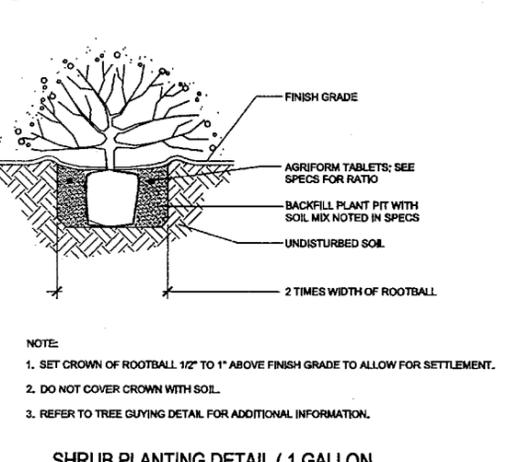
**L4 HARDPAN PLANTING DETAIL**  
SCALE: N.T.S.



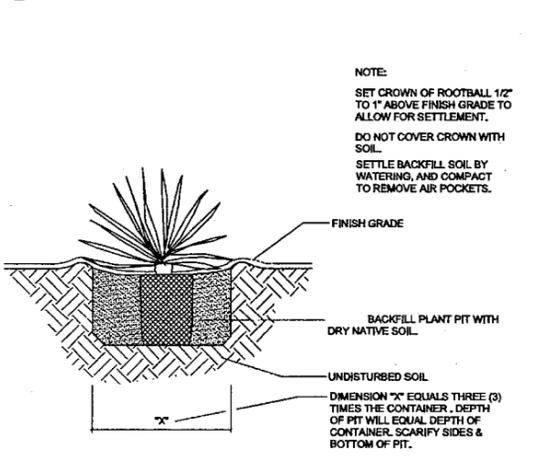
**L5 TREE PLANTING IN TURF DETAIL**  
SCALE: N.T.S.



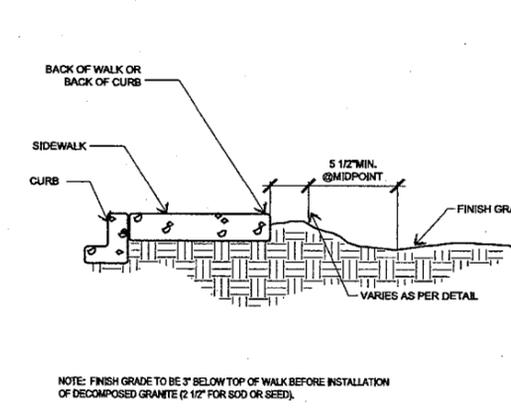
**L6 TREE GUYING DETAIL**  
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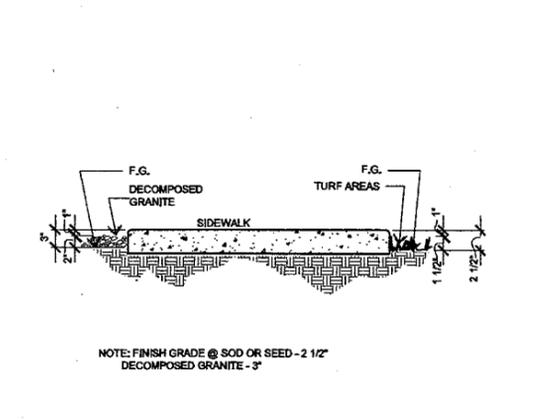
**L7 SHRUB PLANTING DETAIL ( 1 GALLON TO 15 GALLON )**  
SCALE: N.T.S.



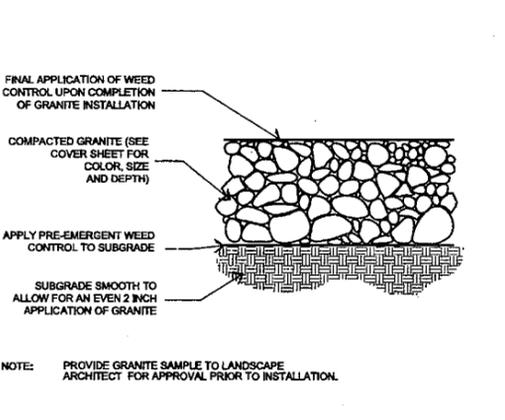
**L8 AGAVE / YUCCA PLANTING DETAIL**  
SCALE: N.T.S.



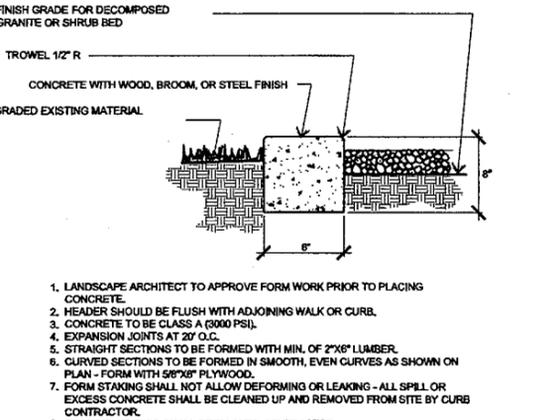
**L9 SWALE AT WALK OR CURB**  
SCALE: N.T.S.



**L10 GRADING AT WALKS/HEADERS**  
SCALE: N.T.S.



**L11 DECOMPOSED GRANITE DETAIL**  
SCALE: N.T.S.



**L12 CONCRETE HEADER DETAIL**  
SCALE: N.T.S.

**Desert Oasis Community Pool  
Pool Site  
Surprise, AZ**

PREPARED FOR: Centex Homes

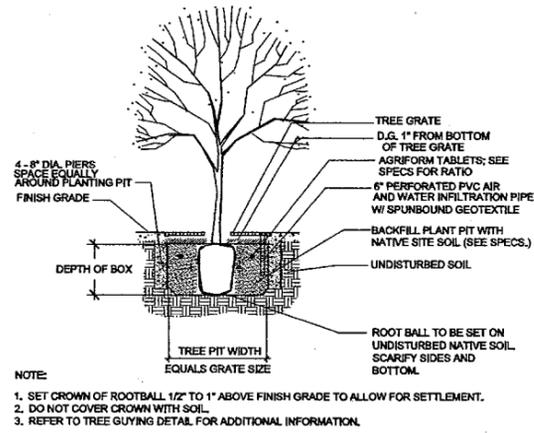
Revisions:

Date	By	Description
18/JAN/08	RM	Planting & Irrigation Details

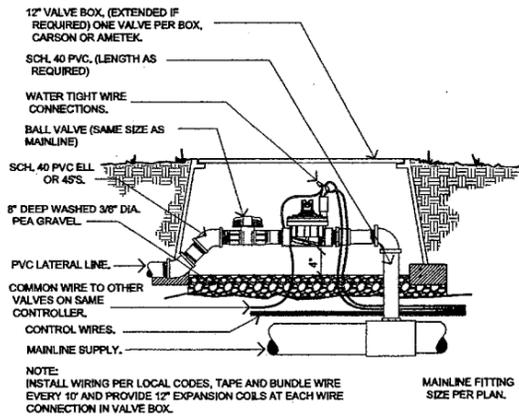
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 Date: 18/JAN/08  
 Drawn by: RM  
 Checked by: DP  
 CAD file: 0718.dwg  
 Project No: 0718

Design Development Date:  
 Progress Const. Docs. Date:  
 City Submitted Date: 18/JAN/08  
 Construction Issue Date:  
 Bid Package Date:  
 Record Drawings Date:

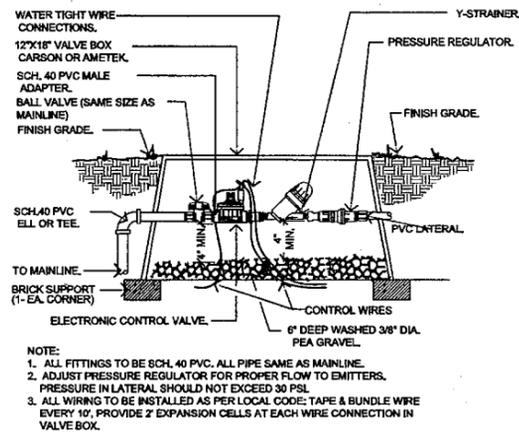
City Numbers:  
 Case # SP07-414



**L13 TREE GRATE PLANTING DETAIL**  
SCALE: N.T.S.



**L11 TURF VALVE DETAIL**  
SCALE: N.T.S.

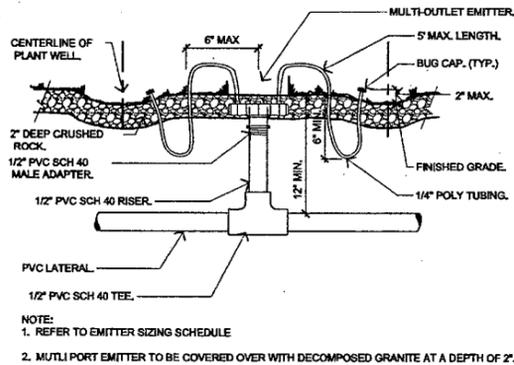


**L12 DRIP VALVE DETAIL**  
SCALE: N.T.S.

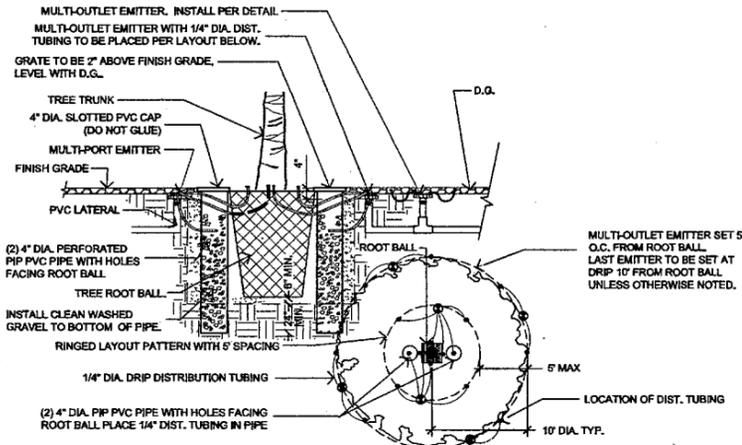
PLANT SIZE	FLOW/PER PLANT	EMITTER/BUBBLER	QTY
1 GAL.	1 GPH	BOWSMITH ML-210	(4-6) SHRUBS MAX.
5 GAL.	1 GPH	BOWSMITH ML-210	(4-6) SHRUBS MAX.
15 GAL.	4 GPH	BOWSMITH ML-210	1
24" BOX	6 GPH	BOWSMITH ML-210	2
36" BOX	8 GPH	BOWSMITH ML-210	2
48" BOX	12 GPH	BOWSMITH ML-220	2
54"-72" BOX	16 GPH	BOWSMITH ML-220	3
AGAVES/CACTI	.5 GPH	BOWSMITH ML-210	1
PALMS	.5 GPM	PRESSURE COMPENSATING BUBBLERS PER PLAN.	2

NOTE:  
1. PROVIDE IRRIGATION TO 4-5 SHRUBS MAX PER MULTI PORT EMITTERS. (TYP.)  
2. ALL EMITTERS TO BE BOWSMITH MODEL ONLY, NO SUBSTITUTIONS.  
3. DO NOT PROVIDE IRRIGATION TO CACTUS.  
4. INSTALL ALL EMITTERS AS SHOWN ON THE IRRIGATION DETAILS SHEETS.  
5. HAND WATER OCOTILLO'S WHEN NEEDED BY PLAN.

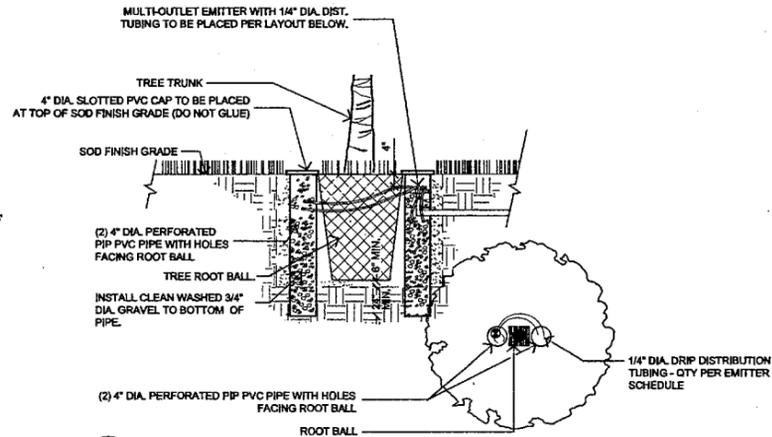
**L13 Emitter Sizing Schedule**  
SCALE: N.T.S.



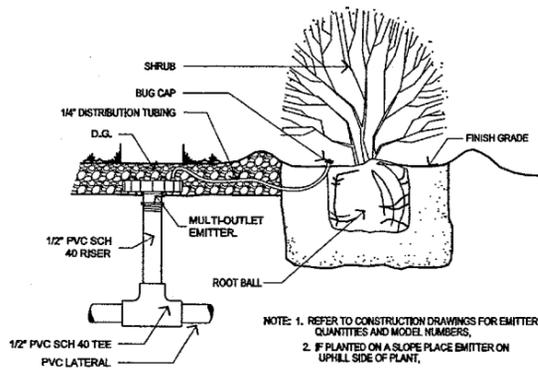
**L14 Multi-Outlet Emitter @ Shrubs and trees**  
SCALE: N.T.S.



**L15 TREE DEEP ROOT & EMITTER DETAIL**  
SCALE: N.T.S.



**L16 TREE IN TURF - DEEP ROOT & EMITTER DETAIL**  
SCALE: N.T.S.



**L17 Emitter Detail @ Shrubs (Multi-port)**  
SCALE: N.T.S.

**L18 Vine Trellis Detail (@ Pool Equipment Enclosure)**  
SCALE: N.T.S.



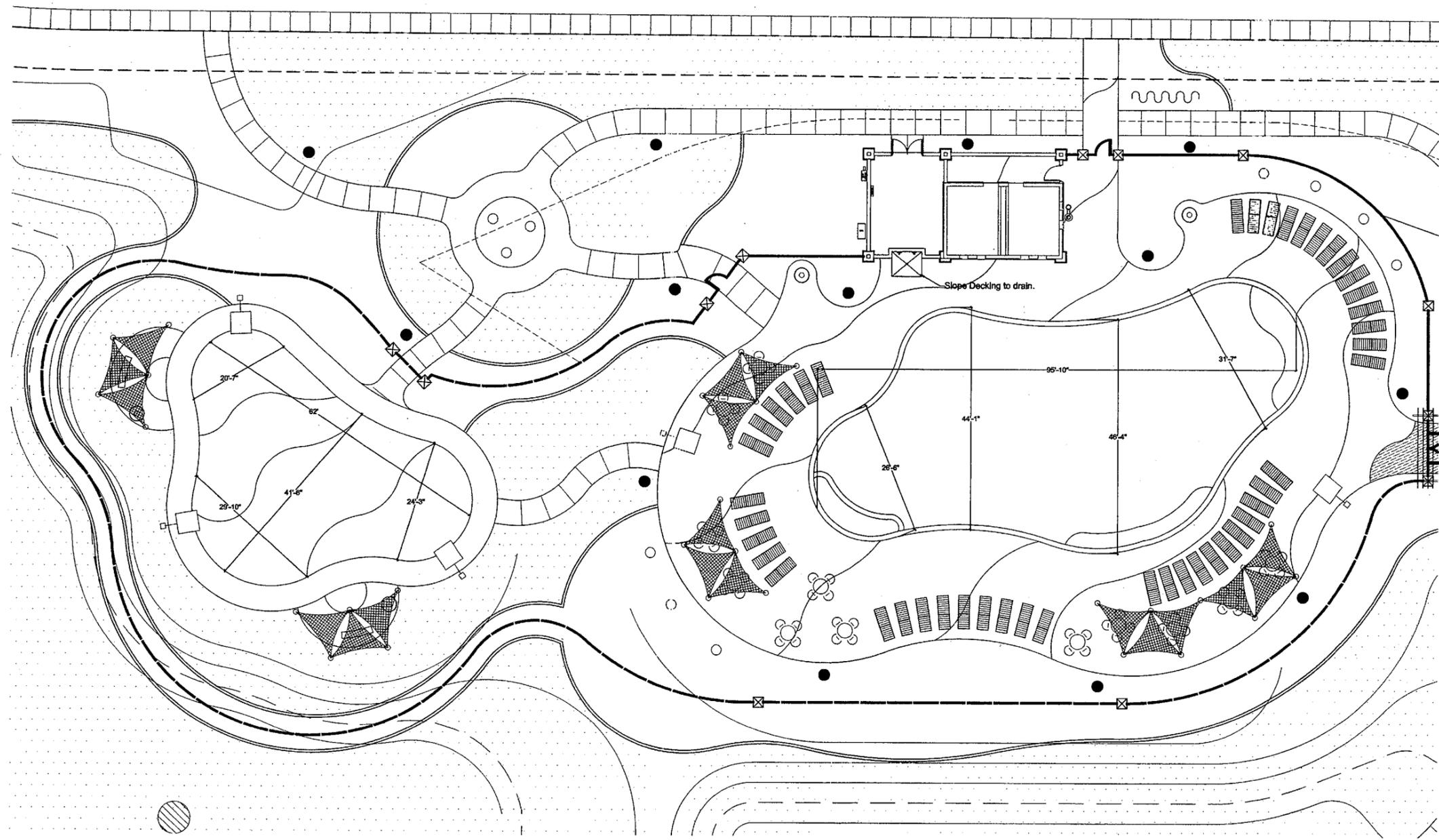
**Desert Oasis Community Pool  
Pool Site  
 Surprise, AZ**

PREPARED FOR: Centex Homes

Revisions:

Title	Date
Planting & Irrigation Details	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file:	
071104d	
Project No.	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submittal	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:
City Numbers:	
Case # SP07-414	





**1 POOL LAYOUT PLAN**  
SCALE: 1"=10'-0"

**HADLEY DESIGN GROUP**  
2272 E. Indian School Rd. Suite 472  
Scottsdale, Arizona 85251  
Tel. 480.427.0500 Fax. 480.429.0501



**Desert Oasis Community Pool  
Pool Site**  
Surprise, AZ

PREPARED FOR: Centex Homes

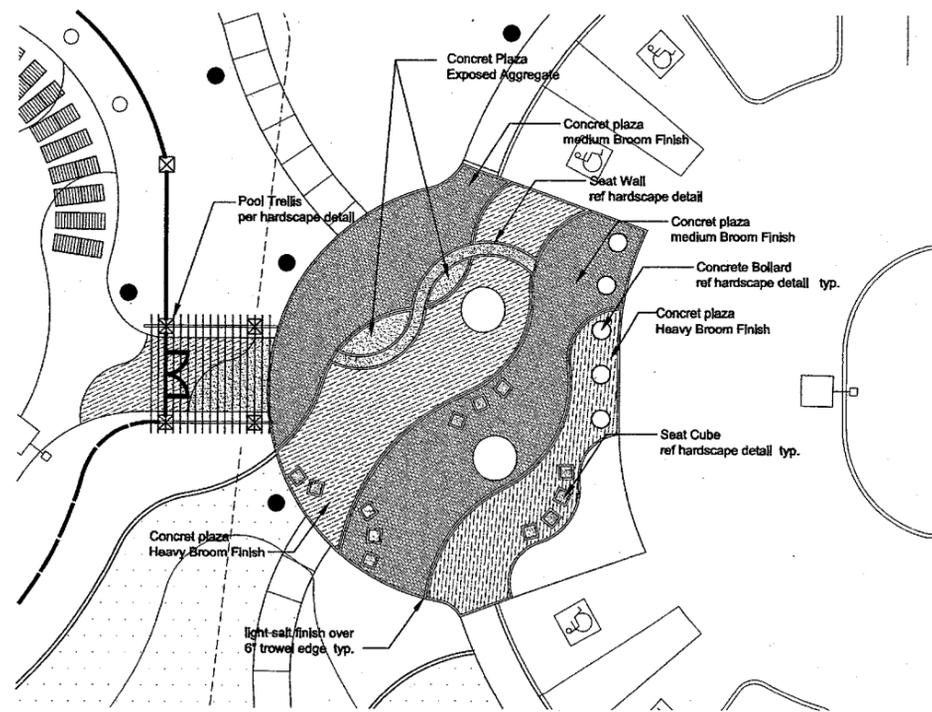
Revisions:

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Date: **18/JAN/08**  
Drawn by: **RM**  
Checked by: **DP**  
CAD file: **0718.dwg**  
Project No: **0718**

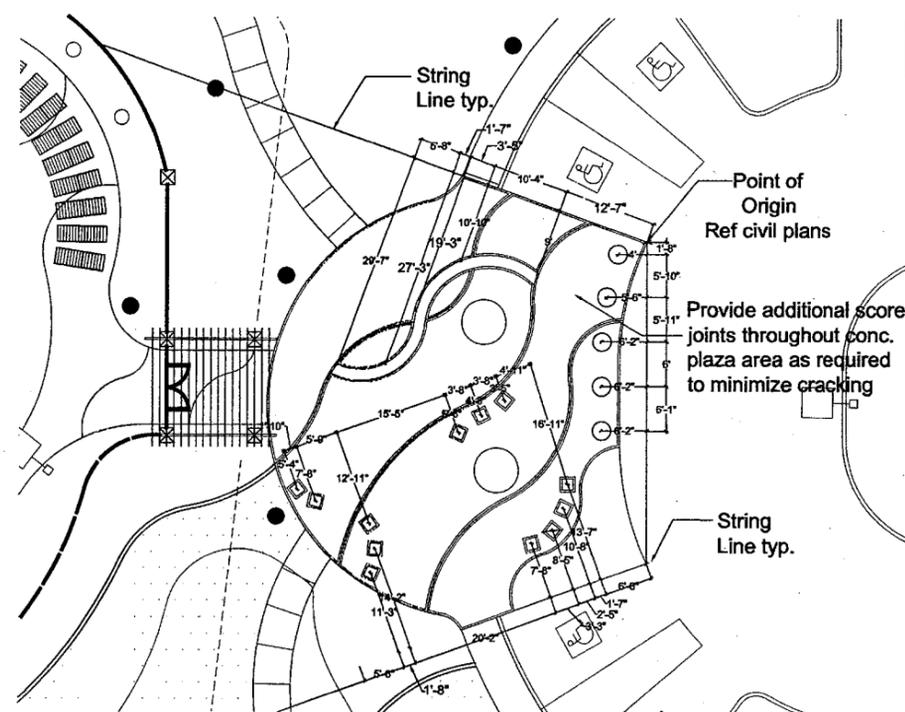
- Design Development Date:
- Progress Const. Docs. Date:
- City Submittal Date: 18/JAN/08
- Construction Issue Date:
- Bid Package Date:
- Record Drawings Date:

City Numbers:  
Case # SP07-414

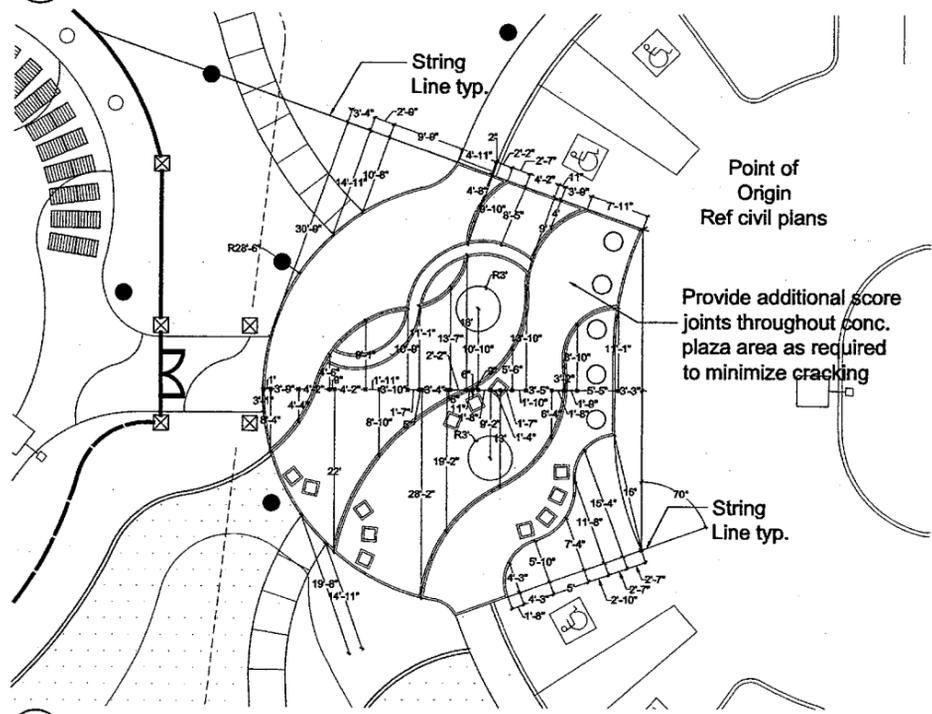
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**LHL4.1**  
SHEET 10 OF 20



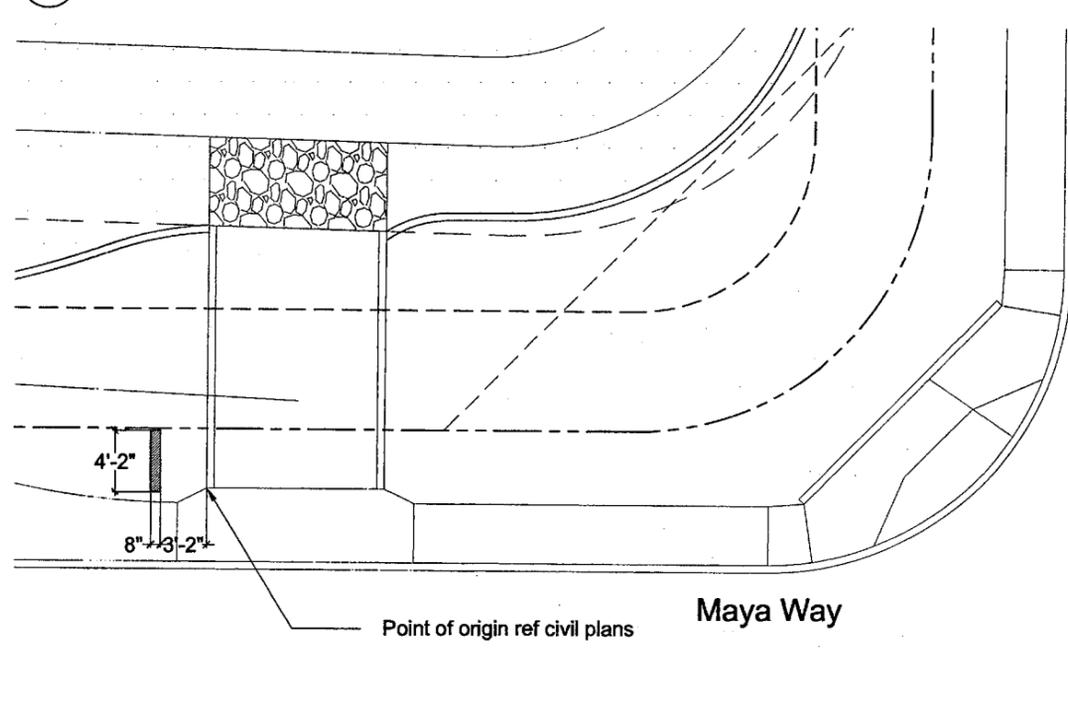
1 HARDSCAPE FINISHES LAYOUT  
 SCALE: 1"=10'-0"



2 WALL, SEAT CUBES AND BOLLARD LAYOUT PLAN  
 SCALE: 1"=10'-0"



3 MAJOR CONTROL JOINT LAYOUT PLAN  
 SCALE: 1"=10'-0"



2 KIOSK LAYOUT  
 SCALE: 1"=6'-0"

\* Contractor to contact landscape architect minimum of 72 hours in advance to approve layout and all hardscape items

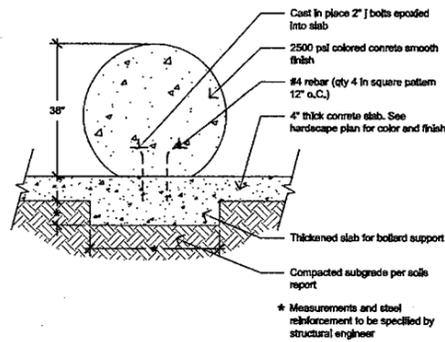


Desert Oasis Community Pool  
 Pool Site  
 Surprise, AZ

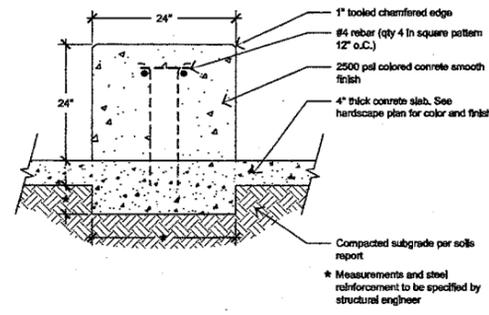
PREPARED FOR: Centex Homes

Revisions:

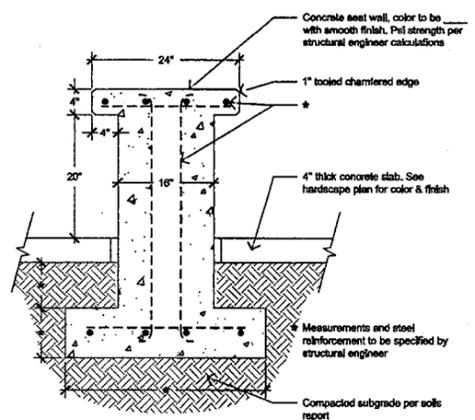
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Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file:	0718aed
Project No.:	0718
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<input type="checkbox"/> Progress Const. Docs.	Date:
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City Numbers: Case # SP07-414	



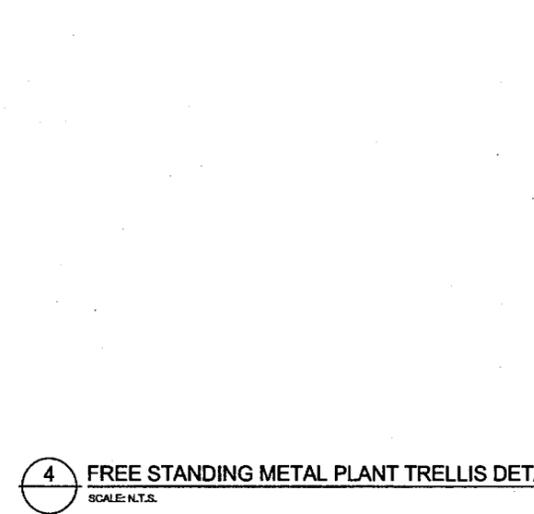
**1 CAST CONC. SPHERE BOLLARD DETAIL**  
SCALE: N.T.S.



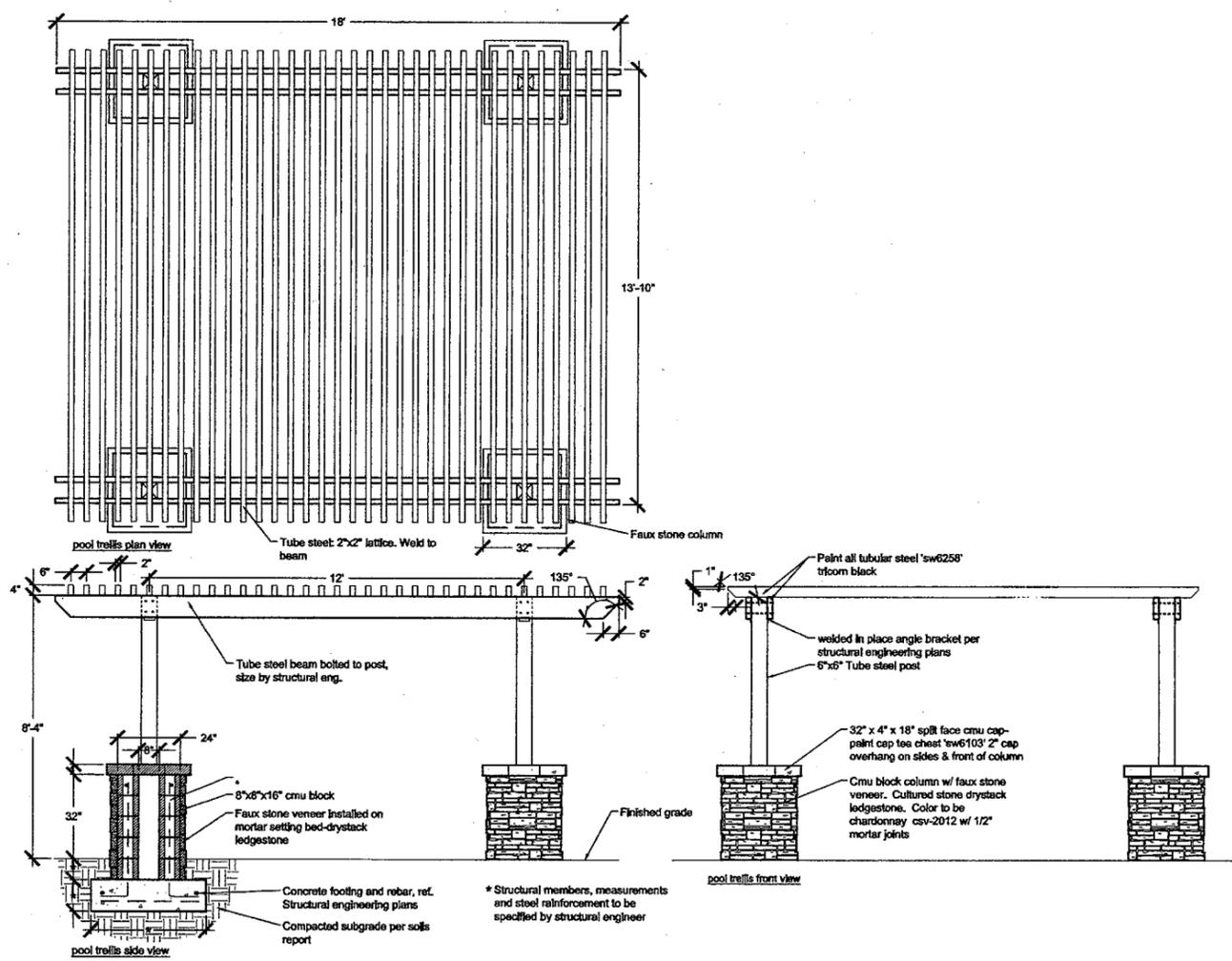
**2 POURED IN PLACE CONC. SEAT CUBE DETAIL**  
SCALE: N.T.S.



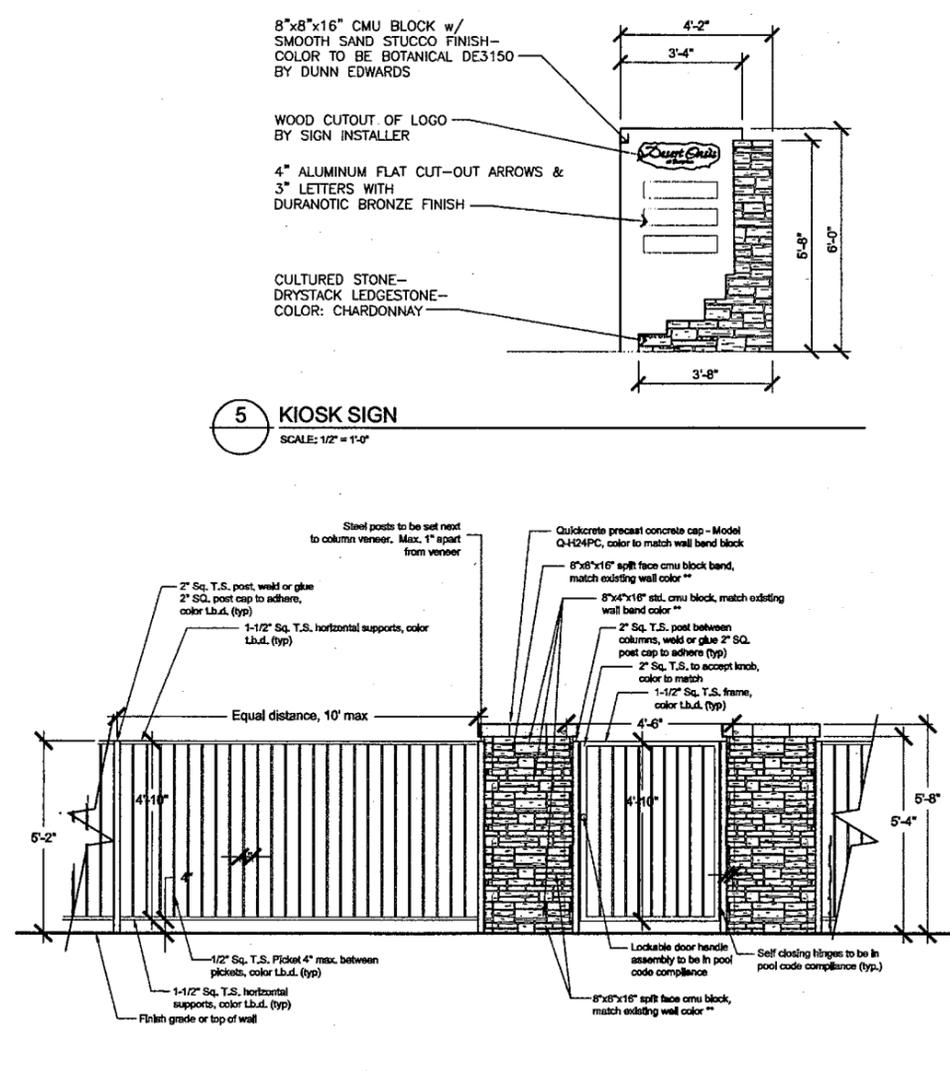
**3 POURED IN PLACE CONC. SEAT WALL DETAIL**  
SCALE: N.T.S.



**4 FREE STANDING METAL PLANT TRELLIS DETAIL**  
SCALE: N.T.S.



**6 POOL TRELLIS DETAIL**  
SCALE: N.T.S.



**7 POOL FENCE DETAIL**  
SCALE: N.T.S.



**Desert Oasis Community Pool  
Pool Site  
Surprise, AZ**

PREPARED FOR: Centex Homes

Revisions:

Title:	HARDSCAPE DETAILS
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file:	0718.dwg
Project No.:	0718
Design Development Date:	
Progress Const. Docs. Date:	
<input checked="" type="checkbox"/> City Submittal Date:	18/JAN/08
Construction Issue Date:	
Bid Package Date:	
Record Drawings Date:	
City Numbers:	Case # SP07-414

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 supercede 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: DESERT OASIS COMMUNITY POOL
1. Project Location: SURPRISE, ARIZONA
  2. Owner: CENTEX HOMES
- B. Owner's Representative: JACOB JONES, 8665 EAST HARTFORD DRIVE, SUITE 200, SCOTTSDALE, ARIZONA 85251
- C. Work consists of the following:
1. The Work includes Landscape Improvements to include plant materials and an automatic irrigation system.
- D. 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 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 to 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 construction operations to area designated on drawings unless directed otherwise by Owner or Owner's representative.

#### SECTION 01320 - CONSTRUCTION PROGRESS DOCUMENTATION

##### PART 1 - GENERAL

###### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
1. Contractor's Construction Schedule.
  2. Submittals Schedule.
  3. Daily construction reports.
  4. Field condition reports.
- B. See Division 1 Section "Summary of Multiple Contracts" for preparing a combined Contractor's Construction Schedule if multiple contracts are to be awarded.
- C. See Division 1 Section "Payment Procedures" for submitting the Schedule of Values.
- D. See Division 1 Section "Photographic Documentation" for submitting construction photographs if required.

###### 1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
  2. Predecessor Activity: An activity that precedes another activity in the network.
  3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Float: The measure of leeway in starting and completing an activity.
1. Float time belongs to Owner is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
- E. Fragment: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- F. Major Area: A story of construction, a separate building, or a similar significant construction element.

###### 1.3 SUBMITTALS

- A. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:
1. Scheduled date for first submittal.
  2. Specification Section number and title.
  3. Submittal category (action or informational).
  4. Name of subcontractor.
  5. Description of the Work covered.
  6. Scheduled date for Architect's final release or approval.
- B. Preliminary Network Diagram: Submit two opaque copies, large enough to show entire network for entire construction period. Show logic ties for activities.

- C. Contractor's Construction Schedule: Submit two opaque copies of initial schedule, large enough to show entire schedule for entire construction period.
1. Submit an electronic copy of schedule, using software indicated, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.
- D. CPM Reports: Concurrent with CPM schedule, submit three copies of each of the following computer-generated reports. Format for each activity in reports shall contain activity number, activity description, cost and resource loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
1. Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.
  2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
  3. Total Float Report: List of all activities sorted in ascending order of total float.
- E. Daily Construction Reports: Submit two copies at weekly intervals.
- F. Field Condition Reports: Submit two copies at time of discovery of differing conditions.
- ###### 1.4 COORDINATION
- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
1. Secure time commitments for performing critical elements of the Work from parties involved.
  2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

##### PART 2 - PRODUCTS

###### 2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
  2. Submit concurrently with the first complete submittal of Contractor's Construction Schedule.
- ###### 2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL
- A. Time Frame: Extend schedule from date awarded contract to date of Final Completion.
1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
1. Activity Duration: Define work activity and time required to complete work.
  2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
    - a. Provide a list of major items or pieces of equipment that may require a long lead time.
    - b. All material shall be acquired and installed within the time limits specified by the Owner, Owner's Representative or Architect(s) and shall not be basis of project delay or hold up.
  3. Submittal Review Time: Include review and resubmittal times indicated in Division 1 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
  4. Startup and Testing Time: Include not less than 7 days for startup and testing.
  5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion. Contact the Architect no later than 48 hours to schedule a Substantial Completion Walk Through.

- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
1. Phasing (if applicable): Arrange list of activities on schedule by phase.
  2. Work under More Than One Contract (if applicable): Include a separate activity for each contract.
  3. Work by Owner (if applicable): Include a separate activity for each portion of the Work performed by Owner.
  4. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.
    - c. Uninterruptible services.
    - d. Partial occupancy before Substantial Completion.
    - e. Use of premises restrictions.
    - f. Provisions for future construction.
    - g. Seasonal variations.
    - h. Environmental control.
  5. Work Stages: Indicate important stages of construction for each major portion of the Work.
  6. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.

- E. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragments to demonstrate the effect of the proposed change on the overall project schedule.
- ###### 2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)
- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for either commencement of the Work, the Notice to Proceed or the Notice of Award. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
1. For construction activities that require 3 months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.
- ###### 2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE) (if required)
- A. General: Prepare network diagrams using AON (activity-on-node) format.
- B. Preliminary Network Diagram: Submit diagram within 14 days of date established for either commencement of the Work, the Notice to Proceed, or the Notice of Award. Outline significant construction activities for the first 60 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

- C. CPM Schedule: Prepare Contractor's Construction Schedule using a computerized, cost- and resource-loaded, time-scaled CPM network analysis diagram for the Work.
1. Develop network diagram in sufficient time to submit CPM schedule so it can be accepted for use no later than 30 days after date established for either commencement of the Work, the Notice to Proceed, or the Notice of Award.
    - a. Failure to include any work item required for performance of this Contract shall not excuse Contractor from completing all work within applicable completion dates, regardless of Architect's approval of the schedule.
  2. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.
  3. Use "one workday" as the unit of time. Include list of nonworking days and holidays incorporated into the schedule.
- D. CPM Schedule Preparation: Prepare a list of all activities required to complete the Work. Using the preliminary network diagram, prepare a skeleton network to identify probable critical paths.

1. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
  - a. Preparation and processing of submittals.
  - b. Mobilization and demobilization.
  - c. Purchase of materials.
  - d. Delivery.
  - e. Fabrication.
  - f. Utility interruptions.
  - g. Installation.
  - h. Work by Owner that may affect or be affected by Contractor's activities.
  - i. Testing and/or commissioning.
2. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.
3. Processing: Process data to produce output data on a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.
4. Format: Mark the critical path. Locate the critical path near center of network; locate paths with most float near the edges.
  - a. Subnetworks on separate sheets are permissible for activities clearly off the critical path.

- E. Initial Issue of Schedule: Prepare initial network diagram from a list of straight "early start-total float" sort. Identify critical activities. Prepare tabulated reports showing the following:
1. Contractor or subcontractor and the Work or activity.
  2. Description of activity.
  3. Principal events of activity.
  4. Immediate preceding and succeeding activities.
  5. Early and late start dates.
  6. Early and late finish dates.
  7. Activity duration in workdays.
  8. Total float or slack time.
  9. Average size of workforce.
- F. Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:
1. Identification of activities that have changed.
  2. Changes in early and late start dates.
  3. Changes in early and late finish dates.
  4. Changes in activity durations in workdays.
  5. Changes in the critical path.
  6. Changes in total float or slack time.
  7. Changes in the Contract Time.

###### 2.5 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
1. List of subcontractors at Project site.
  2. Equipment at Project site.
  3. Material deliveries.
  4. High and low temperatures and general weather conditions.
  5. Accidents.
  6. Stoppages, delays, shortages, and losses.
  7. Meter readings and similar recordings.
  8. Orders and requests of authorities having jurisdiction.
  9. Services connected and disconnected.
  10. Equipment or system tests and startups.
- B. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for Interpretation on CSI Form 13.2A. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

##### PART 3 - EXECUTION

###### 3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  3. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
  2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 01320

#### SECTION 01330 - SUBMITTAL PROCEDURES

##### PART 1 - GENERAL

###### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. See Division 1 Section 1320 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule.
- C. See Division 1 Section "Photographic Documentation" for submittal requirements if required.
- D. See Division 1 Section "Quality Requirements" for submitting test and inspection reports and for mockup requirements.
- E. See Division 1 Section "Closeout Procedures" for submitting warranties.
- F. See Division 1 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- G. See Division 1 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.

###### 1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Architect's responsive action.
- B. Informational Submittals: Written information that does not require Architect's responsive action. Submittals may be rejected for not complying with requirements.
- ###### 1.3 SUBMITTAL PROCEDURES
- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- B. Submittals Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.
- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
  2. Provide a space on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
  3. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name and address of Architect.
    - d. Name and address of Contractor.
    - e. Name and address of subcontractor.
    - f. Name and address of supplier.
    - g. Name of manufacturer.
    - h. Submittal number or other unique identifier, including revision identifier.
      - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 06100.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06100.01.A).
        - i. Number and title of appropriate Specification Section.
        - j. Drawing number and detail references, as appropriate.
        - k. Location(s) where product is to be installed, as appropriate.
        - l. Other necessary identification.

- E. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.
- F. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
1. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.
- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will discard submittals received from sources other than Contractor.
1. Transmittal Form: Use standard transmittal form with Contractor's Company name and phone number, date sent, sender's name and title.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
  2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  3. Resubmit submittals until they are marked "Approved or Approved as noted."

- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Use only final submittals with mark indicating "Approved or Approved as noted" taken by Architect.

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Desert Oasis Community Pool  
Pool Site  
Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

Title:	18/JAN/08
SPECIFICATIONS	
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file:	
Project No.:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submittal	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:
City Numbers:	
Case #	SP07-414

Sheet Number:

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- 1.4 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES
- A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:
- All files provided will be in a pdf format. Any alterations or modifications to these drawings that differ from those in the Architect's possession will deem the Contractor liable for said changes, alterations and modifications.
- PART 2 - PRODUCTS
- 2.1 ACTION SUBMITTALS
- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
- If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
  - Mark each copy of each submittal to show which products and options are applicable.
  - Include the following information, as applicable:
    - Manufacturer's written recommendations.
    - Manufacturer's product specifications.
    - Manufacturer's installation instructions.
    - Manufacturer's catalog cuts.
    - Wiring diagrams showing factory-installed wiring.
    - Printed performance curves.
    - Operational range diagrams.
    - Compliance with specified referenced standards.
    - Testing by recognized testing agency.
  - Number of Copies: Submit three copies of Product Data, unless otherwise indicated. Architect will return two copies. Mark up and retain one returned copy as a Project Record Document.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
- Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - Dimensions.
    - Identification of products.
    - Fabrication and installation drawings.
    - Roughing-in and setting diagrams.
    - Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
    - Shopwork manufacturing instructions.
    - Templates and patterns.
    - Schedules.
    - Notation of coordination requirements.
    - Notation of dimensions established by field measurement.
    - Relationship to adjoining construction clearly indicated.
    - Seal and signature of professional engineer if specified.
    - Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
  - Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
  - Number of Copies: Submit two opaque (bond) copies of each submittal. Architect will return one copy.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
- Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  - Identification: Attach label on unexposed side of Samples that includes the following:
    - Generic description of Sample.
    - Product name and name of manufacturer.
    - Sample source.
    - Number and title of appropriate Specification Section.
  - Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
  - Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
    - Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
  - Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
    - Number of Samples: Submit three sets of Samples. Architect will retain two sample sets; remainder will be returned.
- E. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location.
- Number of Copies: Submit three copies of product schedule or list, unless otherwise indicated. Architect will return two copies.
- F. Submittals Schedule: Comply with requirements specified in Division 1 Section "Construction Progress Documentation."
- G. Application for Payment: Comply with requirements specified in Division 1 Section "Payment Procedures."
- H. Schedule of Values: Comply with requirements specified in Division 1 Section "Payment Procedures."
- I. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Use CSI Form 1.5A.
- Number of Copies: Submit three copies of subcontractor list, unless otherwise indicated. Architect will return two copies.

- 2.2 INFORMATIONAL SUBMITTALS
- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
- Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Architect will not return copies.
  - Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
  - Test and Inspection Reports: Comply with requirements specified in Division 1 Section "Quality Requirements."
- B. Coordination Drawings: Comply with requirements specified in Division 1 Section "Project Management and Coordination."
- C. Contractor's Construction Schedule: Comply with requirements specified in Division 1 Section "Construction Progress Documentation."
- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other InformaWelding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- E. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- F. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- G. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- H. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- I. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- J. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- K. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.
- L. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- M. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- N. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- O. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 1 Section "Operation and Maintenance Data."
- P. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- Q. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer.
- R. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
  - Statement on condition of substrates and their acceptability for installation of product.
  - Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - Results of operational and other tests and a statement of whether observed performance complies with requirements.
- S. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- T. Construction [Photographs] [and] [Videotapes]: Comply with requirements specified in Division 1 Section "Photographic Documentation."
- U. Material Safety Data Sheets (MSDSs): Submit information directly to Owner; do not submit to Architect.
  - Architect will not review submittals that include MSDSs and will return them for resubmittal.
- 2.3 DELEGATED DESIGN
- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
- If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
- Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

- PART 3 - EXECUTION
- 3.1 CONTRACTOR'S REVIEW
- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
- 3.2 ARCHITECT'S ACTION
- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.
- END OF SECTION 01330

SECTION 01400 - QUALITY REQUIREMENTS

- PART 1 - GENERAL
- 1.1 SUMMARY
- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
- Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
  - Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. See Divisions 2 through 16 Sections for specific test and inspection requirements.
- 1.2 DEFINITIONS
- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.
- D. Laboratory Mockups: Full-size, physical assemblies that are constructed at testing facility to verify performance characteristics.
- E. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- F. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- G. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- H. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- I. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- J. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
- Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- 1.3 CONFLICTING REQUIREMENTS
- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.
- 1.4 SUBMITTALS
- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Reports: Prepare and submit certified written reports that include the following:
  - Date of issue.
  - Project title and number.
  - Name, address, and telephone number of testing agency.

- Dates and locations of samples and tests or inspections.
  - Names of individuals making tests and inspections.
  - Description of the Work and test and inspection method.
  - Identification of product and Specification Section.
  - Complete test or inspection data.
  - Test and inspection results and an interpretation of test results.
  - Record of temperature and weather conditions at time of sample taking and testing and inspecting.
  - Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  - Name and signature of laboratory inspector.
  - Recommendations on retesting and reinspecting.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.
- 1.5 QUALITY ASSURANCE
- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction/Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
- Requirement for specialists shall not supersede building codes and regulations governing the Work.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in Individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
- NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
  - NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
  - Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
  - Notify Architect seven days in advance of dates and times when mockups will be constructed.
  - Demonstrate the proposed range of aesthetic effects and workmanship.
  - Obtain Architect's approval of mockups before starting work, fabrication, or construction.
  - Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
  - Demolish and remove mockups when directed, unless otherwise indicated.
- 1.6 QUALITY CONTROL
- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
- Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
  - Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
- Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
    - Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
  - Notify testing agencies at least 48 hours in advance of time when Work that requires testing or inspecting will be performed.
  - Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  - Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  - Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 1 Section "Submittal Procedures."
- D. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.

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Desert Oasis Community Pool  
Pool Site  
Surprise, AZ

PREPARED FOR: Centex Homes

Revision:

Title:	SPECIFICATIONS
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file:	0718cad
Project No.:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submittal	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:

City Numbers:  
Case # SP07-414

Sheet Number:

LP6.2

SHEET 14 OF 20



**Desert Oasis Community Pool  
Pool Site  
Surprise, AZ**

**PREPARED FOR: Centex Homes**

Revisions:

SPECIFICATIONS	
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file:	0718.rvt
Project No.:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submittal	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:
City Numbers:	
Case #	SP07-414

**2.4 MATERIALS NOT SPECIFIED**  
A. It has been attempted through the writing of these specifications to cover materials and equipment necessary for the completion of this project. However, the possibility exists that an item or items may be detailed or indicated on the drawings that have not been specified. If such an item clearly appears on the drawings and is not specified, it shall be provided as a part of the contract, unless the item is noted as not-in-contract (N.I.C.). Seek clarification immediately to avoid delay of the work.

**PART 3 - EXECUTION**

END OF SECTION 01600

**SECTION 01700 - EXECUTION REQUIREMENTS**

**PART 1 - GENERAL**  
**1.1 SUMMARY**  
C. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:

- Construction layout.
  - Field engineering and surveying.
  - General installation of products.
  - Progress cleaning.
  - Starting and adjusting.
  - Protection of installed construction.
  - Correction of the Work.
- B. See Division 1 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

- 1.2 SUBMITTALS**
- Certificates: Submit certificate signed by either land surveyor or professional engineer certifying that location and elevation of improvements comply with requirements.
  - Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal if required.
  - Certified Surveys: Submit two copies signed by either land surveyor or professional engineer.
  - Final Property Survey: Submit 10 copies showing the Work performed and record survey data.

**1.3 QUALITY ASSURANCE**  
A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION**

**3.1 EXAMINATION**  
A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.

B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.

C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Before construction, verify the location and points of connection of utility services.

2. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.

3. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

4. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

**3.2 PREPARATION**  
A. Existing Utility Information: Furnish information to Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect and Owner's Representative. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

**3.3 CONSTRUCTION LAYOUT**  
A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.

**PART 2 - PRODUCTS**

**2.1 PRODUCT SELECTION PROCEDURES**

A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.

- Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
- Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- Where products are accompanied by the term "as selected," Architect will make selection.
- Where products are accompanied by the term "match sample," sample to be matched by Architect.
- Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

**B. Product Selection Procedures:**

- Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
- Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
- Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
- Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
- Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.

6. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.

7. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.

8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.

9. Visual Matching Specification: Where Specifications require matching an established sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.

10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.

a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.

b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

**2.2 PRODUCT SUBSTITUTIONS**

A. Timing: Architect will consider requests for substitution if received within 60 days after commencement of the Work. Requests received after that time may be considered or rejected at discretion of Architect.

B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.

2. Requested substitution does not require extensive revisions to the Contract Documents.

3. Requested substitution is consistent with the Contract Documents and will produce indicated results.

4. Substitution request is fully documented and properly submitted.

5. Requested substitution will not adversely affect Contractor's Construction Schedule.

6. Requested substitution has received necessary approvals of authorities having jurisdiction.

7. Requested substitution is compatible with other portions of the Work.

8. Requested substitution has been coordinated with other portions of the Work.

9. Requested substitution provides specified warranty.

**2.3 COMPARABLE PRODUCTS**

A. Conditions: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.

2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.

**1.3 SUBMITTALS**

A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

3. Substitution Request Form: Use CSI Form 13.1A or form provided by Owner.

4. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

- Statement indicating why specified material or product cannot be provided.
- Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
- Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
- Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- Samples, where applicable or requested.
- List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
- Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
- Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
- Cost information, including a proposal of change, if any, in the Contract Sum.
- Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.

3. Contractor's waiver of rights to additional payment or time that may subsequently become necessary/Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

a. Form of Acceptance: Change Order.

b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.

B. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

a. Form of Approval: As specified in Division 1 Section "Submittal Procedures."

b. Use product specified if Architect cannot make a decision on use of a comparable product request within time allocated.

C. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 1 Section "Submittal Procedures." Show compliance with requirements.

**1.4 QUALITY ASSURANCE**

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

**1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING**

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.

2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.

3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.

4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.

2. Store materials in a manner that will not endanger Project structure.

3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.

4. Store cementitious products and materials on elevated platforms.

5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.

6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.

E. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.

1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.

2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.

3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.

4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.

5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.

6. Do not perform any duties of Contractor.

F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:

- Access to the Work.
- Incidental labor and facilities necessary to facilitate tests and inspections.
- Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
- Facilities for storage and field curing of test samples.
- Delivery of samples to testing agencies.
- Preliminary design mix proposed for use for material mixes that require control by testing agency.
- Security and protection for samples and for testing and inspecting equipment at Project site.

G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

**1.7 SPECIAL TESTS AND INSPECTIONS**

A. Special Tests and Inspections: Owner will engage a qualified testing agency or special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:

B. Special Tests and Inspections: Conducted by a qualified testing agency or special inspector as required by authorities having jurisdiction, as indicated in Individual Specification Sections, and as follows:

1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.

2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.

3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.

4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.

5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.

6. Retesting and reinspecting corrected work.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION**

**3.1 REPAIR AND PROTECTION**

H. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.

I. Protect construction exposed by or for quality-control service activities.

J. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01400

**SECTION 01600 - PRODUCT REQUIREMENTS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.

B. See Division 1 Section "Closeout Procedures" for submitting warranties for Contract closeout.

C. See Divisions 2 through 16 Sections for specific requirements for warranties on products and installations specified to be warranted.

**1.2 DEFINITIONS**

A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.

2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.

3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

- B. General: Engage a professional land surveyor to lay out the Work using accepted surveying practices.
1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
  2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions if dimensions are not shown on plans.
  3. Inform installers of lines and levels to which they must comply.
  4. Check the location, level and plumb, of every major element as the Work progresses.
  5. Notify Architect when deviations from required lines and levels exceed allowable tolerances.
  6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.
- 3.4 FIELD ENGINEERING
- A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
- B. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
7. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
- C. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework if required by governing jurisdiction or by Owner.
- D. Final Property Survey: Prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor or professional engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey if required by governing jurisdiction or by Owner.
1. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."
- 3.5 INSTALLATION
- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
1. Make vertical work plumb and make horizontal work level.
  2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
  3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
  2. Allow for structure movement, including thermal expansion and contraction.
  3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.
- 3.6 PROGRESS CLEANING
- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above that recommended by material manufacturer.
  3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
1. Remove liquid spills promptly.
  2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.

- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.
- 3.7 STARTING AND ADJUSTING
- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 1 Section "Quality Requirements."
- 3.8 PROTECTION OF INSTALLED CONSTRUCTION
- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.
- 3.9 CORRECTION OF THE WORK
- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 1 Section "Cutting and Patching."
1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.
- 3.10 CONSTRUCTION SAFETY PROGRAM AND REGULATIONS
- A. The "Manual of Accident Prevention in Construction", Fifth Revised Edition, 1958, as published by the Associated General Contractors of America, Inc., the "General Construction Safety Code", adopted March 26, 1957, as published by the Industrial Commission of Arizona, and the Occupational Safety & Health Standards, 1971 (OSHA) shall constitute the outline for the safety program to be adhered to during the course of the project. Provide copy of these publications at the job site for reference.
- 3.11 DUST CONTROL
- A. Provide controls and take measures to water site as necessary to prevent dust from becoming a nuisance to the community in accordance with Governing Agency regulations.
- END OF SECTION 01700
- SECTION 01732 - SELECTIVE DEMOLITION
- PART 1 - GENERAL
- 1.1 SUMMARY
- A. This Section includes the following:
1. Demolition and removal of selected portions of building or structure.
  2. Demolition and removal of selected site elements.
  3. Salvage of existing items to be reused or recycled.
- B. See Division 1 Section "Construction Waste Management" for disposal of demolished materials.
- C. See Division 2 Section "Site Clearing" for site clearing and removal of above- and below-grade improvements.
- 1.2 DEFINITIONS
- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.
- 1.3 SUBMITTALS
- A. Schedule of Selective Demolition Activities: Indicate detailed sequence of selective demolition and removal work, with starting and ending dates for each activity, interruption of utility services, use of elevator and stairs, and locations of temporary partitions and means of egress.
- B. Pre-demolition Photographs or Videotapes: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by selective demolition operations. Comply with Division 1 Section "Photographic Documentation." Submit before Work begins.
- C. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.
1. Comply with submittal requirements in Division 1 Section "Construction Waste Management."
- 1.4 QUALITY ASSURANCE
- A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.
- B. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.
- C. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- D. Standards: Comply with ANSI A10.6 and NFPA 241.
- E. Pre-demolition Conference: Conduct conference at Project site.
- 1.5 PROJECT CONDITIONS
- A. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
1. Before selective demolition, Owner may remove items at will. Contractor to coordinate removal, salvage or protection of on site items prior to commencement of work.
- B. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Hazardous Materials: It is unknown whether hazardous materials will be encountered in the Work.

1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.
  2. Storage or sale of removed items or materials on-site is not permitted.
  3. Utility Services: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
- 1.6 WARRANTY
- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.
- B. PART 2 - PRODUCTS (Not Used)
- C. PART 3 - EXECUTION
- 3.1 EXAMINATION
- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- E. Engage a professional engineer to survey condition of structure to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.
- F. Survey of Existing Conditions: Record existing conditions by use of measured drawings.
- G. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.
- 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS
- A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
- B. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
1. Arrange to shut off indicated utilities with utility companies.
  2. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
  3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.
- 3.3 PREPARATION
- C. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
1. Comply with requirements for access and protection specified in Division 1 Section "Temporary Facilities and Controls."
- D. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- E. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
- 3.4 SELECTIVE DEMOLITION
- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chipping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and] portable fire-suppression devices during flame-cutting operations.
  4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  5. Dispose of demolished items and materials promptly. Comply with requirements of governing agencies pertaining to disposal of Construction Waste.
- B. Reuse of Building Elements: Project has been designed to result in end-of-Project rates for reuse of building elements as follows. Do not demolish building elements beyond what is indicated on Drawings without Architect's approval.
- C. Removed and Salvaged Items:
1. Clean salvaged items.
  2. Pack or crate items after cleaning. Identify contents of containers.
  3. Store items in a secure area on-site or off-site until delivery to Owner or use on project.
  4. Transport items to Owner's storage area designated by Owner unless indicated otherwise on Drawings.
  5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
  2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  3. Protect items from damage during transport and storage.
  4. Reinstall items and material in locations indicated on plans. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.
- 3.5 DISPOSAL OF DEMOLISHED MATERIALS
- A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
1. Comply with requirements specified in Division 1 Section "Construction Waste Management."
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

- 3.6 CLEANING
- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.
- END OF SECTION 01732
- SECTION 01770 - CLOSEOUT PROCEDURES
- PART 1 - GENERAL
- 1.1 SUMMARY
- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
8. Inspection procedures.
  9. Warranties.
  10. Final cleaning.
- B. See Division 1 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
- C. See Division 1 Section "Photographic Documentation" for submitting Final Completion construction photographs and negatives.
- D. See Division 1 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- E. See Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- F. See Division 1 Section "Demonstration and Training" for requirements for instructing Owner's personnel.
- G. See Divisions 2 through 16 Sections for specific closeout and special cleaning requirements for the Work in those Sections.
- 1.2 SUBSTANTIAL COMPLETION
- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  2. Advise Owner of pending insurance changeover requirements.
  3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  5. Prepare and submit Project Record Documents, operation and maintenance manuals, irrigation as-builts, damage or settlement surveys, property surveys, and similar final record information.
  6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  7. Complete startup testing of systems.
  8. Submit test/adjust/balance records.
  9. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  10. Advise Owner of changeover in water and other utilities if applicable.
  11. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
  12. Complete final cleaning requirements, including touchup painting.
  13. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner, Owner's Representative, Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  2. Results of completed inspection will form the basis of requirements for Final Completion.
- 1.3 FINAL COMPLETION
- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
  2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  4. Submit pre-emptive warranty.
  5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
- 1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)
- A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

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Desert Oasis Community Pool  
 Pool Site  
 Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

Title:	18/JAN/08
SPECIFICATIONS	
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD File:	
Project No.:	0718
Project No.:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submitted	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:
City Numbers:	
Case # SP07-414	

1.5 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
c. Rake grounds that are planted to a smooth, even-textured surface.
d. Remove tools, construction equipment, machinery, and surplus material from Project site.
e. Remove snow and ice to provide safe access to building and site.
f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
g. Remove debris and surface dust from planting areas, limited access spaces, including equipment vaults, irrigation components, and similar spaces.
h. Sweep concrete floors broom clean in unoccupied spaces.
i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
j. Clean exterior landscape light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
k. Leave Project clean and ready for occupancy.
C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.
END OF SECTION 01770

SECTION 01781 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
1. Record Drawings.
2. Record Specifications.
3. Record Product Data.
B. See Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
C. See Divisions 2 through 16 Sections for specific requirements for Project Record Documents of the Work in those Sections.

1.2 SUBMITTALS

- A. Record Drawings: Comply with the following:
1. Number of Copies: Submit one set of marked-up Record Prints to Landscape Architect at time of Final Walk Through.
B. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications.
C. Record Product Data: Submit one copy of each Product Data submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

- B. Record Transparencies: Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with Architect. When authorized, prepare a full set of corrected transparencies of the Contract Drawings and Shop Drawings.
1. Incorporate changes and additional information previously marked on Record Prints. Erase, redraw, and add details and notations where applicable.
2. Refer instances of uncertainty to Architect for resolution.
3. Owner will furnish Contractor one set of transparencies of the Contract Drawings for use in recording information.
4. Print the Contract Drawings and Shop Drawings for use as Record Transparencies. Architect will make the Contract Drawings available to Contractor's print shop.
C. Record CAD Drawings: Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with Architect.

- D. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
2. Record Transparencies: Organize into unbound sets matching Record Prints. Place transparencies in durable tube-type drawing containers with end caps. Mark end cap of each container with identification. If container does not include a complete set, identify Drawings included.
3. Identification: As follows:
a. Project name.
b. Date.
c. Designation "PROJECT RECORD DRAWINGS."
d. Name of Architect.
e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
4. Note related Change Orders, Record Product Data, and Record Drawings where applicable.
2.3 RECORD PRODUCT DATA
A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.
2.4 MISCELLANEOUS RECORD SUBMITTALS
A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.
END OF SECTION 01781

SECTION 01782 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
1. Emergency manuals.
2. Operation manuals for systems, subsystems, and equipment.
3. Maintenance manuals for the care and maintenance of products, materials, and finishes, systems and equipment.
B. See Divisions 2 through 16 Sections for specific operation and maintenance manual requirements for the Work in those Sections.

1.2 SUBMITTALS

- A. Manual: Submit one copy of each manual in final form at least 15 days before substantial completion inspection. Architect will return copy with comments within 15 days after substantial completion inspection.
1. Correct or modify each manual to comply with Architect's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Architect's comments.

PART 2 - PRODUCTS

2.1 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain a title page, table of contents, and manual contents.
B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
1. Subject matter included in manual.
2. Name and address of Project.
3. Name and address of Owner.
4. Date of submittal.
5. Name, address, and telephone number of Contractor.
6. Name and address of Architect.
7. Cross-reference to related systems in other operation and maintenance manuals.
C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper, with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
a. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
4. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

- 2.2 EMERGENCY MANUALS
E. Content: Organize manual into a separate section for type of emergency, emergency instructions, and emergency procedures.
F. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component for fire, flood, gas leak, water leak, power failure, water outage, equipment failure, and chemical release or spill.
G. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
H. Emergency Procedures: Include instructions on stopping, shutdown instructions for each type of emergency, operating instructions for conditions outside normal operating limits, and required sequences for electric or electronic systems.

- 2.3 OPERATION MANUALS
A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and equipment descriptions, operating standards, operating procedures, operating logs, wiring and control diagrams, and license requirements.
B. Descriptions: Include the following:
1. Product name and model number.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.
C. Operating Procedures: Include start-up, break-in, and control procedures; stopping and normal shutdown instructions; routine, normal, seasonal, and weekend operating instructions; and required sequences for electric or electronic systems.
D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

- 2.4 PRODUCT MAINTENANCE MANUAL
A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
C. Product Information: Include the following, as applicable:
1. Product name and model number.
2. Manufacturer's name.
3. Color, pattern, and texture.
4. Material and chemical composition.
5. Reordering information for specially manufactured products.
D. Maintenance Procedures: Include manufacturer's written recommendations and inspection procedures, types of cleaning agents, methods of cleaning, schedule for cleaning and maintenance, and repair instructions.
E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

- 2.5 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL
A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including maintenance instructions, drawings and diagrams for maintenance, nomenclature of parts and components, and recommended spare parts for each component part or piece of equipment.
D. Maintenance Procedures: Include test and inspection instructions, troubleshooting guide, disassembly instructions, and adjusting instructions, and demonstration and training videotape if available, that detail essential maintenance procedures.

- D. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
C. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify date applicable to the Work and delete references to information not applicable.
E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
1. Do not use original Project Record Documents as part of operation and maintenance manuals.
F. Comply with Division 1 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.
END OF SECTION 01782

SECTION 02230 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
1. Protecting existing trees, shrubs, groundcovers, plants, and grass to remain.
2. Removing existing trees, shrubs, groundcovers, plants, and grass.
3. Clearing and grubbing.
4. Stripping and stockpiling topsoil.
5. Removing above- and below-grade site improvements.
6. Disconnecting and capping or sealing site utilities.
7. Temporary erosion and sedimentation control measures.
1.2 MATERIAL OWNERSHIP
A. Except for stripped topsoil or other materials indicated to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.
1.3 PROJECT CONDITIONS
A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
B. Salvage Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
C. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.
D. Do not commence site clearing operations until temporary erosion and sedimentation control measures are in place.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. Satisfactory Soil Materials: Requirements for satisfactory soil materials are specified in Division 2 Section "Earthwork."
1. Obtain approved borrow soil materials off-site when satisfactory soil materials are not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction. Locate and clearly flag trees and vegetation to remain or to be relocated.
B. Protect existing site improvements to remain from damage during construction.
1. Restore damaged improvements to their original condition, as acceptable to Owner.
3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL
A. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
B. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
C. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

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Desert Oasis Community Pool
Pool Site
Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

Table with columns for Title, Date, Checked by, CAD file, Project No., Design Development, Progress Const. Docs, City Submittal, Construction Issue, Bid Package, Record Drawings, City Numbers, and Case #.



**Desert Oasis Community Pool  
Pool Site  
Surprise, AZ**

**PREPARED FOR: Centex Homes**

Revisions:

SPECIFICATIONS	
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file created:	
Project No.:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submitted	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:

City Numbers:  
Case # SP07-414

3.3 TREE PROTECTION  
A. Erect and maintain temporary fencing around tree protection zones before starting site clearing. Remove fence when construction is complete.  
B. Do not excavate within tree protection zones, unless otherwise indicated.  
C. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations, in a manner approved by Architect.

3.4 UTILITIES  
A. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.  
1. Arrange with utility companies to shut off indicated utilities.  
B. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:  
1. Notify Architect not less than two days in advance of proposed utility interruptions.  
2. Do not proceed with utility interruptions without Architect's written permission.  
C. Removal of underground utilities is included in Division 2 Sections covering site utilities.

3.5 CLEARING AND GRUBBING  
A. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.  
1. Place fill material in horizontal layers not exceeding a loose depth of 6 inches, and compact each layer to a density equal to adjacent original ground.

3.6 TOPSOIL STRIPPING  
A. Remove sod and grass before stripping topsoil.  
B. Strip topsoil to whatever depths are encountered in a manner to prevent intermingling with underlying subsoil or other waste materials.  
C. Stockpile topsoil materials away from edge of excavations without intermingling with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.

3.7 SITE IMPROVEMENTS  
A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction. Coordinate with other trades and municipalities as required.

3.8 DISPOSAL  
A. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.  
1. If option is requested or required, separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermingling with other materials and transport them to recycling facilities.

END OF SECTION 02300

**SECTION 02300 - EARTHWORK**  
**PART 1 - GENERAL**  
**1.1 SUMMARY**  
A. This Section includes the following:  
1. Preparing subgrades for lawns, lawns and grasses and exterior plants).  
2. Subbase course for concrete walks.

**1.2 DEFINITIONS**  
A. Backfill: Soil material used to fill an excavation.  
1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.  
2. Final Backfill: Backfill placed over initial backfill to fill a trench.  
B. Bedding Course: Course placed over the excavated subgrade in a trench before laying pipe.  
C. Base Course: Course placed between the subbase course and hot-mix asphalt paving.  
D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.  
E. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.  
1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions changes in the Work.  
2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.  
F. Drainage Course: Course supporting the slab-on-grade that also minimizes upward capillary flow of pore water.  
G. Fill: Soil materials used to raise existing grades.  
H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.  
I. Subbase Course: Course placed between the subgrade and base course for hot-mix asphalt pavement, or course placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.  
J. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.  
K. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

**1.3 PROJECT CONDITIONS**  
A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Architect and then only after arranging to provide temporary utility services according to requirements indicated.

**PART 2 - PRODUCTS**  
**2.1 SOIL MATERIALS**  
A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.  
B. Satisfactory Soils: ASTM D 2487 Soil Classification Groups GW, GP, GM, SW, SP, and SM or AASHTO M 145 Soil Classification Groups A-1, A-2.4, A-2.5, and A-3, or a combination of these groups; free of rock or gravel larger than 1 inch in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.  
C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487 or A-2.6, A-2.7, A-4, A-5, A-6, and A-7 according to AASHTO M 145, or a combination of these groups.  
1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.  
D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.  
E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.  
F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.

G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.  
H. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve.

**2.2 ACCESSORIES**  
A. Warning Tape: Acid- and alkali-resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility.

**PART 3 - EXECUTION**  
**3.1 PREPARATION**  
A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.  
B. Preparation of subgrade for earthwork operations including removal of vegetation, topsoil, debris, obstructions, and deleterious materials from ground surface is specified in Division 2 Section "Site Clearing."  
C. Protect and maintain erosion and sedimentation controls, which are specified in Division 2 Section "Site Clearing," during earthwork operations.

**3.2 EXCAVATION**  
A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.  
1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

**3.3 EXCAVATION FOR WALKS AND PAVEMENTS**  
A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

**3.4 SUBGRADE INSPECTION**  
A. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

**3.5 UNAUTHORIZED EXCAVATION**  
A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Architect.  
1. Fill unauthorized excavations under other construction or utility pipe as directed by Architect.

**3.6 STORAGE OF SOIL MATERIALS**  
A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermingling. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.  
1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

**3.10 SOIL FILL**  
A. Flow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.  
B. Place and compact fill material in layers to required elevations as follows:  
1. Under grass and planted areas, use satisfactory soil material.  
2. Under walks and pavements, use satisfactory soil material.  
3. Under steps and ramps, use engineered fill.  
4. Under building slabs, use engineered fill.  
5. Under footings and foundations, use engineered fill.

**3.11 SOIL MOISTURE CONTROL**  
A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within required percentage of optimum moisture content according to geotechnical engineer's written recommendations.  
1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.  
2. Remove and replace, or scarify and air dry otherwise satisfactory soil material that exceeds optimum moisture content required percentage of optimum moisture content according to geotechnical engineer's written recommendations, and is too wet to compact to specified dry unit weight.

**3.12 COMPACTION OF SOIL BACKFILLS AND FILLS**  
A. Place backfill and fill soil materials in layers not more than six inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.  
B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.  
C. Compact soil materials to not less than the following percentages of maximum dry unit density according to ASTM D 698, ASTM D 1557:  
1. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent.  
2. Under lawn or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent.  
3. For trenches, compact each layer of initial and final backfill soil material at 85 percent.

**3.13 GRADING**  
A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.  
B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:  
1. Lawn or Unpaved Areas: Plus or minus 1 inch.  
2. Walks: Plus or minus 1/2 inch.  
3. Pavements: Plus or minus 1/2 inch.  
C. Grading Inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

**3.14 SUBBASE AND BASE COURSES**  
A. Place subbase and base course on subgrades free of mud, frost, snow, or ice.  
B. On prepared subgrade, place subbase and base course under pavements and walks as follows:  
1. Shape subbase and base course to required crown elevations and cross-slope grades.  
2. Compact subbase and base course to optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698 or ASTM D 1557.

**3.15 DRAINAGE COURSE**  
A. Place drainage course on subgrades free of mud, frost, snow, or ice.  
B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:  
1. Place drainage course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.  
2. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

**3.16 FIELD QUALITY CONTROL**  
A. Testing Agency: Owner will engage a qualified independent geotechnical engineering testing agency to perform field quality-control testing.  
B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.  
C. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.  
D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable.  
E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.

**3.17 PROTECTION**  
A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.  
B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.  
C. Where settling occurs before Project completion period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.  
1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

**3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS**  
A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

END OF SECTION 02300

**SECTION 02810 - IRRIGATION SYSTEMS**  
**PART 1 - GENERAL**  
**1.1 SUMMARY**  
A. This Section includes piping, valves, sprinklers, specialties, controls, and wiring for [automatic] [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.

**PART 2 - PRODUCTS**  
**2.1 MANUFACTURERS**  
A. 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 B 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 2883.  
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-sealed, nonrising-stem, gray- 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-mm-) diameter barrel.  
1. Operating Wrenches: Furnish total of [one] [two] <Insert number> steel, tee-handle operating wrench(es) 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 I, Class 125, with solid wedge and flanged ends. Include all bronze trim, cast-iron body, and handwheel.  
1. Available Manufacturers:  
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. (The); Pipe Products Div.  
c. Grinnell Corp.; Mueller Co.; Water Products Div.  
d. Jones, James Company.  
e. Master Meter, Inc.  
f. McDonald, A. Y. Mfg. Co.  
g. Red Hed 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 rod(s) 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. NIBCO INC.  
b. 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. NIBCO INC.  
b. 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. NIBCO INC.  
b. Reference Irrigation Legend on Drawings  
I. PVC Ball Valves: MSS SP-122, nonunion type, with full-port ball, socket or threaded detachable and 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. Rainbird.  
b. 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. Hunter Industries Incorporated.  
b. Rain Bird Sprinkler Mfg. Corp.  
c. 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. Hunter Industries Incorporated.  
b. Rain Bird Sprinkler Mfg. Corp.  
c. 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. Rain Bird Sprinkler Mfg. Corp.  
b. 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 5000 lb (2268 kg) minimum over 10 by 10 inches square.



Desert Oasis Community Pool  
 Pool Site  
 Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

SPECIFICATIONS	
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
Project No.:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submittal	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:

City Number:  
 Case # SP07-414

3. Cover Material: Polymer concrete with cover design loading of 5000 lb (2268 kg) minimum over 10 by 10 inches square.  
 a. Lettering: Permanently brand valve box lid cover with corresponding station number  
 4. Available Manufacturers:  
 a. Carson Industries LLC.  
 b. 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 SPRINKLERS**  
**A. Description:** Brass or plastic housing and corrosion-resistant interior parts designed for uniform coverage over entire spray area indicated, at available water pressure.  
 1. Available Manufacturers:  
 a. Hunter Industries Incorporated.  
 b. Rain Bird Sprinkler Mfg. Corp.  
 c. Reference Irrigation Legend on Drawings  
 2. Flush, Surface Sprinklers: Fixed pattern, with screw-type flow adjustment.  
 3. Bubblers: Fixed pattern, with screw-type flow adjustment.  
 4. Shrubbery Sprinklers: Fixed pattern, with screw-type flow adjustment.  
 5. Pop-up, Spray Sprinklers: Fixed pattern, with screw-type flow adjustment and stainless-steel retraction spring.  
 6. Pop-up, Rotary, Spray Sprinklers: Gear drive, full-circle and adjustable part-circle types.  
 7. Pop-up, Rotary, Impact Sprinklers: Impact drive, full-circle and part-circle types.  
 8. Aboveground, Rotary, Impact Sprinklers: Impact drive, full-circle and part-circle types.  
**2.6 SPRINKLER SPECIALTIES**  
**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. Netatim USA.  
 b. NIBCO INC.  
 c. Rain Bird Sprinkler Mfg. Corp.  
 d. Salco Products, Inc.  
 e. Reference Irrigation Legend on Drawings  
 2. Single-Outlet Emitters: To deliver the following flow at approximately 20 psig (138 kPa):  
 a. Flow: 1/2 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. Agricultural Products, Inc.  
 b. Agrifilm.  
 c. Netatim USA.  
 d. Rain Bird Sprinkler Mfg. Corp.  
 e. Salco Products, Inc.  
 f. Reference Irrigation Legend on Drawings  
**2.7 AUTOMATIC-CONTROL SYSTEM**  
**A. Available Manufacturers:**  
 1. Hunter Industries Incorporated.  
 2. Rain Bird Sprinkler Mfg. Corp.  
 3. 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, dripproof, 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 Corp.  
 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.  
**2.8 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 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 aboveground 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.  
**F. Circuit Piping:** Size per Irrigation Schedule, PVC pipe and socket fittings; and solvent-cemented joints.  
**H. Risers to Aboveground Sprinklers and Specialties:** Size per Irrigation Schedule, hard copper tube, wrought-copper fittings, and soldered joints.  
**I. Drain Piping:** Size per Irrigation Schedule, PVC pipe and socket fittings; and solvent-cemented joints.  
**K. Sleeves:** Size per Irrigation Schedule, PVC pipe and socket fittings; and solvent-cemented joints.  
**M. 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] [Plastic] ball valve.  
 B. Underground, Shutoff-Duty Valves: Use the following:  
 1. NPS 2 (DN 50) and Smaller: Curb stop with tee head, curb-stop service box, end 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 fittings 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 on precast concrete bases not less than 36 by 24 by 4 inches thick, and not less than 6 inches greater in each direction than overall dimensions of controller.**  
**P. Install control cable in same trench as irrigation piping and at least 2 inches beside piping. 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.**  
**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 mm) 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**

**SECTION 02920 - LAWN AND GRASSES**  
**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 Supervisor:** 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 TP1'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 (Cynodon 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 TP1'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  
 1. Summer Lawn Seed: Common Bermuda Grass (Cynodon 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%.  
**2.3 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 produce 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-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.  
 2. Peat: Finely divided or granular texture, with pH range of 6 to 7.5, containing partially decomposed moss peat, native peat, or reed-edge 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-end 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-edge 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 acre: 150 lbs.  
 6. Weight of Epsom Salts per acre: 50 lbs.  
 7. Weight of Zinc Sulfate per acre: 150 lbs.  
 8. Weight of Commercial Fertilizer per acre: 400 lbs. (initial application)  
 9. Repeat 16-20-0 at rate of 400 pounds/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 lbs.

2. Weight of tackifier per acre: 50 lbs.  
 3. Weight of seed per 1,000 sq. ft.: 3 lbs. Bermuda  
 4. Weight of Fertilizer per 1,000 sq. ft.: 6 lbs. sulfate of ammonia  
 5. Weight of Fertilizer per 1,000 sq. ft.: 15 lbs. superphosphate  
**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. Moisture 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. (0.8 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] [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. Stegger 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 silted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.**  
 1. Lay sod across angles of slopes exceeding 1:3.  
 2. Anchor sod on slopes exceeding 1:6 with wood pegs [or steel staples] spaced as recommended by sod manufacturer but not less than 2 anchors per sod strip to prevent slippage.  
**C. Saturate sod with fine water spray within two hours of planting. During 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 LAWN**  
**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.

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-lie 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 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 date of Substantial Completion.
  2. Warranty Period for Ground Cover and Plants: 90 days from date of Substantial Completion.

1.7 MAINTENANCE

- A. 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-shaped, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and discoloration.
  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 5208, 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 produce 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-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:
  1. Bonemeal: Commercial, raw or steamed, finely ground; a minimum of 1 percent nitrogen and 10 percent phosphoric acid.
  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.
- E. Mulches:
  1. Organic Mulch: Ground or shredded bark.
  2. Compost Mulch: Shall be well-rotted, decomposed wood fiber, or cotton stubble-derived materials with no fillers or agents, save for the balance of nitrogen-adding ingredients. PH shall range from 6.8-7.2; moisture content shall be 30-40% 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".
- F. 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 5-20% passing a No.4 sieve. One color shall be used for the entire work, and shall be obtained from only one source.
- G. 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

- A. 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 nitrogenized sawdust.
  3. 1 pound 10-20-0 per cubic yard of mix.
- B. 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:
    1. Pits and Trenches: Install per details shown.
    2. Set trees and shrubs per details shown.
      - a. 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.
      - b. Container Grown: Carefully remove root ball from container without damaging root ball or plant.
      - c. 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.
      - d. 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.
  - 3. Organic Mulching: add amendments as listed above.
  - C. Tree and Shrub Pruning: Prune, thin, 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.
    4. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
    5. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.
  - E. Decomposed Granite:
    1. 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 for 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



Desert Oasis Community Pool  
Pool Site  
Surprise, AZ

PREPARED FOR: Centex Homes

Revisions:

Title: SPECIFICATIONS	
Date:	18/JAN/08
Drawn by:	RM
Checked by:	DP
CAD file:	071604.dwg
Project No.:	0718
<input type="checkbox"/> Design Development	Date:
<input type="checkbox"/> Progress Const. Docs.	Date:
<input checked="" type="checkbox"/> City Submittal	Date: 18/JAN/08
<input type="checkbox"/> Construction Issue	Date:
<input type="checkbox"/> Bid Package	Date:
<input type="checkbox"/> Record Drawings	Date:
City Numbers: Case # SP07-414	

**45102480**  
 PROJECT NUMBER  
 SHEET NUMBER  
 JAN/2008  
 ORIGINAL PLAN DATE  
**DESERT OASIS - LANGER POOL (PCL L14C)**  
 PRODUCT NAME  
**SITE PLAN**  
 PLAN TYPE

**REVISIONS**

NO.	BY	DESCRIPTION	APPR'D.	DATE

**REVISIONS**

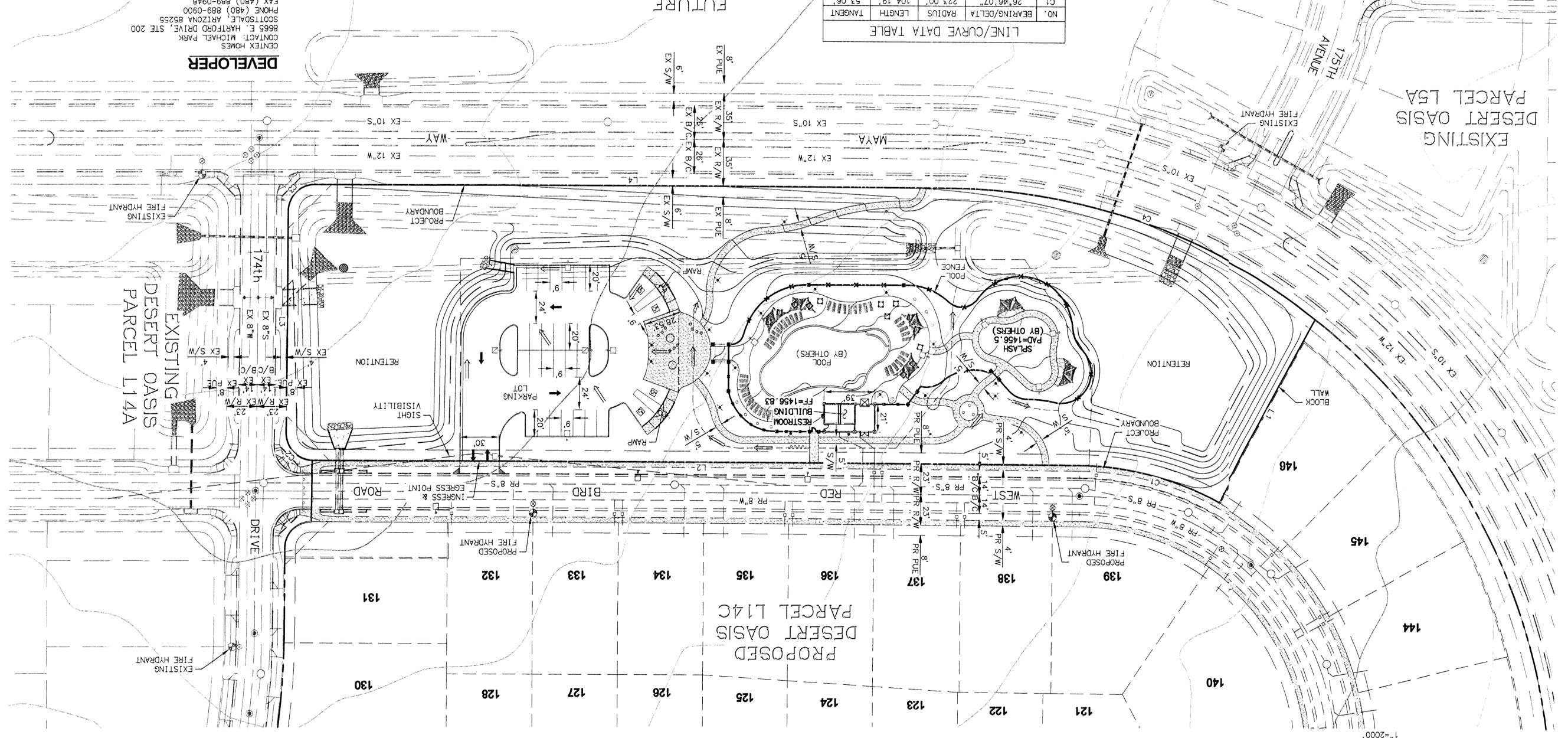
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LINE/CURVE DATA TABLE

NO.	BEARINGS/Delta	RADIUS	LENGTH	TANGENT
C1	26°46'07"	223.00'	104.19'	53.06'
C2	90°16'21"	20.00'	31.51'	20.10'
C3	90°00'00"	20.00'	31.42'	20.00'
C4	37°22'00"	465.15'	303.34'	157.29'
L1	N 28°52'09" E	---	156.25'	---
L2	S 89°43'39" E	---	592.54'	---
L3	N 00°16'21" E	---	165.51'	---
L4	S 89°43'39" E	---	484.68'	---

**SITE DATA**

TOTAL AREA = 150,518 SF  
 BUILDING AREA = 819 SF  
 PARKING AREA = 16,980 SF  
 POOL/SPLASH AREA = 7,031 SF  
 LANDSCAPE AREA = 125,688 SF  
 LANDSCAPE COVERAGE = 83.5%

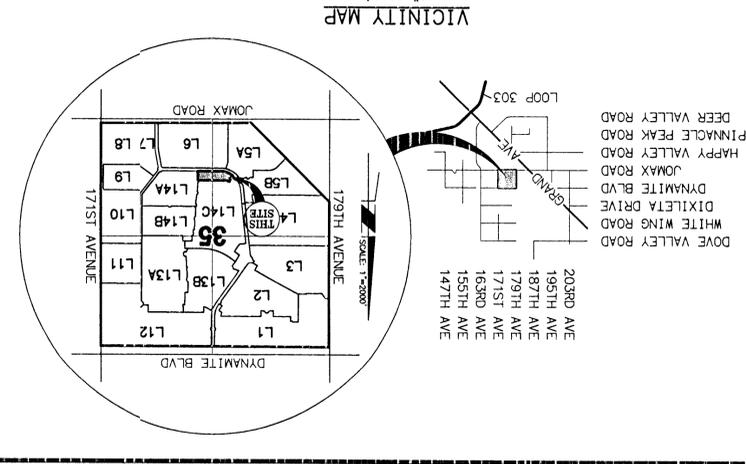
PROVIDED PARKING SPACES = 27 STANDARD, 4 DISABLED (COMMUNITY OR RECREATION CENTER)  
 REQUIRED PARKING SPACES = 27 STANDARD, 2 DISABLED

**LEGEND**

- ☐ LIGHTPOSTS
- × LIGHTED BOLLARD
- ⇄ DRAINAGE FLOW
- TRAFFIC FLOW

SCALE: 1"=40'

**SITE PLAN**  
 FOR  
**DESERT OASIS - LANGER POOL (PARCEL L14C)**  
 AT  
 17525 WEST RED BIRD ROAD  
 A PORTION OF THE SOUTH HALF OF SECTION 35, TOWNSHIP 5 NORTH, RANGE 2 WEST OF THE GILA  
 AND SALT RIVER BASE AND MERIDIAN, CITY OF SURPRISE, MARICOPA COUNTY, ARIZONA



**CITY OF SURPRISE  
COMMUNITY DEVELOPMENT DEPARTMENT**

**PP07-380**

**PRELIMINARY PLAT**

for:

**Acoma Court**

**PLANNING AND ZONING COMMISSION**

*Hearing Date: April 1, 2008*

**STAFF:**

Lance Ferrell, 623.222.3135

**LOCATION:**

North of Acoma Road between 159<sup>th</sup> and 156<sup>th</sup>  
Avenues.

**DESCRIPTION OF  
THE REQUEST:**

Approval of a preliminary plat.

**SUMMARY ANALYSIS:**

The applicant is requesting a preliminary plat for  
the plating of 100 single-family homes.

**SUGGESTED MOTION:**

I move to recommend for approval PP07-380, a  
preliminary plat for Acoma Court and to adopt  
staff's findings, subject to stipulations a  
through j.

**REPORT TO THE PLANNING AND ZONING COMMISSION**

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**CASE NUMBER:** PP07-380 **Acoma Court**  
**STIPULATIONS:** a through j  
**PREPARED BY:** Lance Ferrell, Planner @ 623.222.3135

**Application Date:** **March 20, 2007**  
**Planning & Zoning Commission Hearing Date:** **March 18, 2008**  
**Continued to:** **April 1, 2008**  
**City Council Hearing Date:** **April 10, 2008**

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**APPLICANT:** Phil Sarandos  
Kimley-Horn & Associates, Inc.  
7878 North 16<sup>th</sup> Street, Suite 300  
Phoenix, AZ 85020

**OWNER:** Marc Sperberg  
Acoma Land Company LLC  
10620 Southern Highlands Pkwy. #110-235  
Las Vegas, NV 89140

**REQUEST:** Approval of a preliminary plat for Acoma Court creating 100 single-family homes.

**SITE LOCATION:** The subject site is generally located on north of Acoma Road between 159<sup>th</sup> and 156<sup>th</sup> Avenues.

**SITE SIZE:** The combined parcels make up approximately 29.56 Gross Acres.

**RECOMMENDATION:** Approval

**PROJECT ANALYSIS:**

Acoma Court is proposing 100 single-family lots that range in size from 6,670s.f. to 16,284s.f. There is open space throughout the project that runs from the southern border to the north end of the project. There is a tot-lot at the center of the project with a grass area for active recreation.

Acoma Court PAD05-344 was approved by Planning and Zoning Commission on March 7, 2006 and denied by City Council on April 13, 2006. Denial was based on the

## ITEM 4

issue that the project proposed 133 "Z" lots, which resulted in a higher density than the surrounding neighborhoods. After waiting one year from the date of the City Council denial, another PAD was submitted and approved by City Council on November 8, 2007. The second PAD proposed 100 single-family lots.

Questions arose about the stub street at the northeast portion of the site. Staff asked for this stub so that if residential communities were to be built; it would have a second connection for fire as well as a vehicular and pedestrian connection to the other community. Fire has stated a cul-de-sac would not be needed because the street section is less than 150' and they would be able to turn around any emergency vehicle safely.

### **ACCESS:**

Primary access to the residential lot will be from Custer Lane to the north and Acoma Drive to the south. There is also potential for connection to the parcel to the east if it is developed as a residential development.

### **GENERAL PLAN:**

The Acoma Court property is located within the planning and development jurisdiction of the City of Surprise. The Surprise General Plan Land Use Map identified the property as Low-Density Residential (3-5 du/ac) land use designation. The Low-Density Residential category is intended for predominately single-family detached residential development of up to five dwelling units per acre. The Acoma Court plan includes an overall density of 3.5 du/ac, in full compliance with the 3-5 du/ac identified in the General Plan.

### **EXISTING AND SURROUNDING ZONING:**

ON-SITE:	PAD Acoma Court
NORTH:	R1-5
EAST:	R1-43 (Charter School)
SOUTH:	R1-5
WEST:	PAD Legacy Parc

### **EXISTING AND SURROUNDING LAND USE:**

ON-SITE:	Low-Density Residential
NORTH:	Low-Density Residential
EAST:	Low-Density Residential
SOUTH:	Low-Density Residential
WEST:	Low-Density Residential

### **DEPARTMENTAL REVIEW:**

All departments involved in the subject review of the site plan are recommending the project for approval subject to all stipulations.

**SERVICES EXISTING AND FUTURE:**

**FUTURE WATER** Arizona American Water Co.  
**FUTURE SEWER** City of Surprise  
**FIRE PROTECTION** Surprise Fire Department's closest site is at 15517 Parkview Place which is 1 mile from the site.

**POLICE PROTECTION:** Surprise Police Department's closest site is at 14250 West Statler Plaza which is 1.5 miles from the site.

**NOISE:**

This property is not located within the noise contours of the 1997-revised AICUZ as adopted by the City of Surprise in March of 1998, nor is the subject property within any noise contours as defined by the 1988 MAG JLUS. However, this property is subject to over flights from Luke Air Force Base; therefore, appropriate noise attenuation will be required in the homes and businesses as they are constructed.

**INFRASTRUCTURE**

With this development, the collector roads adjacent to the property will be developed as required by the City Engineering department. Additionally, all internal roads will be developed to their full required right-of-way.

Sewer infrastructure will be designed and constructed per the City of Surprise and MAG specifications.

Water will be provided by Arizona American Water Company. Water infrastructure will be designed and constructed per Arizona American Water Company standards and specifications.

**LIGHTING:**

Lighting shall be consistent with the Surprise Municipal Code.

**PHASING:**

The project will be built in one phase.

**FINDINGS:**

The preliminary plat for Acoma Court is consistent with the General Plan 2020 and approved PAD for Acoma Court.

**STANDARD STIPULATIONS:**

- a. Prior to delivery of any combustible material to the site, fire department access and fire protection systems shall be completely operational in accordance with the approved plans by the Fire Chief and the City Engineer;
- b. Major changes to this Preliminary Plat with regard to use and intensity must be processed as a revised application with approval by the City Council upon recommendation of the Planning and Zoning Commission. Minor changes to the Preliminary Plat may be administratively approved by the Community Development Director, City Engineer, Fire Marshall, and Water Services Director;
- c. The applicant or property owner must provide the City with approved dust control permits issued by Maricopa County Environmental Services Department prior to release of any permits;
- d. The applicant shall include the City Attorney's sound attenuation and overflight language on every final plat;
- e. The applicant shall dedicate an avigation easement to the United States Air Force on every final plat or other such recorded instrument acceptable to the City Attorney. Such avigation or other recorded instrument easement shall be approved by the City Attorney;
- f. The applicant shall include the City Attorney release of liability language regarding the sidewalks on every final plat;
- g. The applicant shall provide residential home product information (i.e., colored elevations and materials sample information) and related materials prior to the issuance of residential building permits, subject to review and approval by the Community Development Director; this is considered to be the Home Product Review process;
- h. All public notice signs shall be removed from the site immediately following a final decision by the City Council as applicable. A signed Affidavit of Sign Removal shall be included within the Stipulation Response Package;
- i. If the U.S. Postal Service requires "gang"-type boxes, applicant shall install adequate lighting over said postal receptacles.
- j. Before a Final Plat can move forward to City Council, a copy of the school agreement with Dysart Unified School District must be signed and submitted to the City.

**CITY OF SURPRISE  
COMMUNITY DEVELOPMENT DEPARTMENT**

**CUP07-274**

**CONDITIONAL USE PERMIT**

for:

**STORAGE WEST**

**PLANNING AND ZONING COMMISSION**

Hearing Date: **April 1, 2008**

<b>STAFF:</b>	Adam Copeland, 623.222.3137
<b>LOCATION:</b>	Generally NEC of Bullard Avenue and Bell Road.
<b>DESCRIPTION OF THE REQUEST:</b>	Approval of a Conditional Use Permit.
<b>SUMMARY ANALYSIS:</b>	The applicant is requesting a Conditional Use Permit Approval.

<b>SUGGESTED MOTION:</b>	<b>I move to approve CUP07-274, a Conditional Use Permit for Storage West and to adopt staff's findings, subject to stipulations a through f.</b>
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**City of Surprise  
Planning and Zoning Division**

**EXECUTIVE SUMMARY**

**CUP07-274  
Storage West**

<b>APPLICANT:</b>	John Hathaway LAACO Ltd. 431 West 7 <sup>th</sup> Street Los Angeles, CA 90014 Phone: 213.622.4582 Fax: 213.627.8649
<b>OWNER:</b>	Lavona Buttrum Sunstorm Enterprise 27201 North Black Canyon Highway Phoenix, AZ 85085 Phoenix, 602.505.1170 Fax: 602.957.0902
<b>HEARING DATE:</b>	April 1, 2008
<b>STAFF:</b>	Adam Copeland
<b>LOCATION:</b>	Generally on the NEC of Bell Road and Bullard Avenue
<b>DESCRIPTION of the REQUEST:</b>	Approval of a Conditional Use Permit
<b>STAFF RECOMMENDATION:</b>	Approval
<b>SUMMARY ANALYSIS:</b>	The applicant is requesting a Conditional Use Permit approval for Storage West on approximately 5.4 gross acres. The property is zoned C-2 Community Commercial.

**HISTORY**

1. The site has been vacant since it was annexed into the City of Surprise. The site is currently zoned C-2 Community Commercial.

## STAFF ANALYSIS

The subject site has been vacant since it was annexed into the City of Surprise. The property is zoned C-2 Community Commercial which allows residential storage and retail. Residential storage in a C-2 zoning designation requires a Conditional Use Permit application.

This site has had interest from developers in the last couple of years. Some of the primary issues with the site included access and buffering from surrounding residential. The City and applicant made an attempt to work with the church, adjacent and east of the site, to allow for shared access. The board at the church denied the request. There are some anticipated expansions to the church, in which the City would require shared access if this was to take place. The applicant designed the site to allow for future shared access if the church ever expands.

Because this is a Conditional Use Permit application, staff analyzed impacts on surrounding single-family residential. The applicant will provide a large landscape buffer adjacent to all residentially designated areas. A residential storage use is a very low intense traffic use, which made sense in this location with access limitations.

**Landscaping:**

The site will have a landscape buffer in areas adjacent to single-family residential. Additional landscaping will be located throughout the site and along the frontage of Bell Road.

**Departmental Review:** All departments are recommending approval of the site subject to all stipulations and findings of fact.

**Traffic Division:** Traffic had concerns with the access to the site and recommended shared access with the church. The applicant attempted to work with the church for shared access, but was not successful. The applicant designed the access points per traffic's recommendation, which will restrict turning movements on Bell Road and have the opportunity for future shared access.

**Fire Department:** Fire had concerns regarding fire hydrant locations and spacing, as well as truck turning movements. The applicant addressed all comments

**Planning Department:** Planning had significant concerns about landscaping, lighting, architecture, and buffer to residential. The applicant revised the plan to address all comments.

**Building Division:** Standard Comments

**Water Services Department:** Standard Comments

**Engineering Department:** The Engineering Department had concerns on drainage. Applicant addressed all comments.

**APPLICABLE LAW**

This section details the comprehensive plan policies, zoning ordinance regulations, and other applicable standards regarding development of the subject property.

1. City of Surprise Municipal Code Sec. 125-188 Community commercial zone
2. City of Surprise Municipal Code. Sec. 125-223 Planning and Design Guidelines
3. City of Surprise General Plan 2020

**FINDINGS**

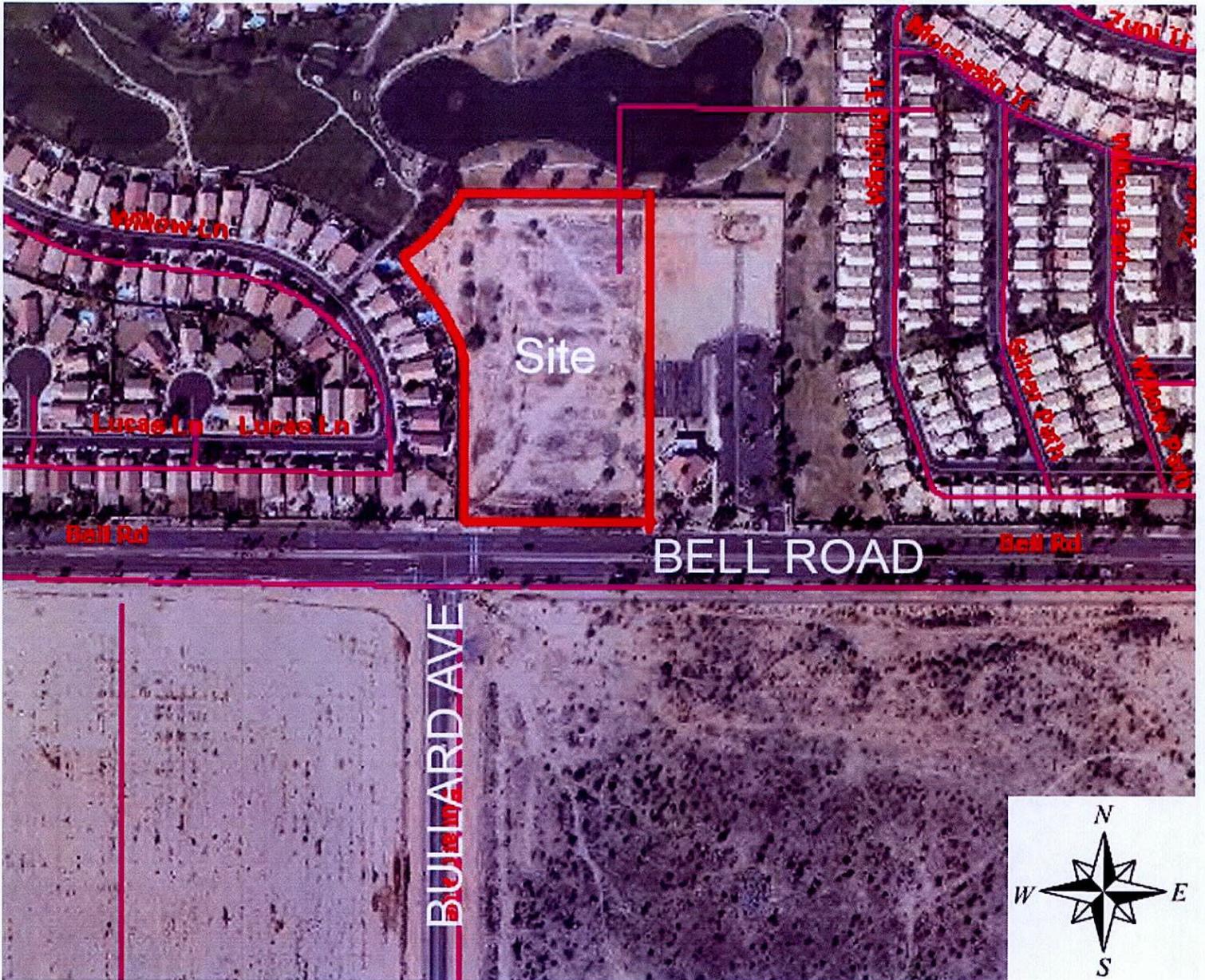
1. The Planning and Zoning Commission finds that the impact of the proposed use upon the health, safety, and general welfare of occupants of surrounding land is negligible.
2. The Planning and Zoning Commission finds that the existing and anticipated traffic impacts from the proposed project, including impacts to parking facilities and to adjacent streets and land, are not significant.
3. City of Surprise General Plan 2020:  
The Planning and Zoning Commission finds that the proposed development is consistent with the Surprise General Plan 2020 employment land use category.

**STIPULATIONS**

**REQUIRED ACTIONS.** The applicant and/or owner shall comply with the following list of stipulations for Case CUP07-274, Storage West.

- a. Prior to delivery of any combustible material to the site, fire department access and fire protection systems shall be completely operational in accordance with the approved plans by the Fire Chief and the City Engineer.
- b. All public notice signs shall be removed from the site immediately following final decision by the City Council as applicable. A signed Affidavit of Sign Removal shall be included within the Stipulation Response Package.
- c. If the U.S. Postal Service requires "gang"-type boxes, applicant shall install adequate lighting over said postal receptacles.
- d. The sidewalk along Bell Road is to be a minimum of six feet wide.
- e. The applicant is to landscape and replace the sidewalk in the Right of Way 50 feet west of the project along Bell Road.
- f. FDC's shall be provided on the main entrance side of each building and within 150' of a fire hydrant.

# Storage West Vicinity Map



**City of Surprise**

Community and Economic Development Department  
Planning and Zoning Division  
12425 West Bell Road, Suite D-100  
Surprise, Arizona 85374  
P 623.583.1088  
F 623.875.5049

Re: **Storage West Surprise – PA07-0009**  
**NEC of West Bell Road and North Bullard Avenue**  
**Surprise, Arizona**

To Whom It May Concern:

**Location and Project Description of Proposal:**

The project is located on the NEC of West Bell Road and North Bullard Avenue in the Surprise, AZ. This project is located within the City of Surprise in Maricopa County. This project will not require rezoning. This project will require a conditional use permit. The site(s) are comprised of two (2) lots and are identified below:

- Lot 1: 233,904 SF / 5.63 acres / zoned C-2 Community Commercial / parcel no. 503-59-047S
- Lot 2: 15,943 SF / 0.37 acres / zoned C-2 Community Commercial / parcel no. 503-59-026C

The site improvements and amenities may include but not limited to the following:

1. New driveway curb cut(s) per governing municipality
2. New deceleration Lane(s)
3. Center aisle drive-up lane between buildings "B" and "C"
4. New public access sidewalk along Bell Road and to the retail and office buildings
5. New on-site parking stalls for employees, customers and visitors per governing municipality
6. New on-site parking screen wall(s) to match building materials and color
7. Landscaped areas per governing municipality (minimum 15% coverage required)
8. Above ground surface retention basin(s)
9. Below ground detention pipes
10. New trash (refuse) enclosure(s) per governing municipality
11. New 8' high CMU block screen wall(s) for security (Existing 6' high CMU block adjacent to residential to remain as is)
12. New horizontal gate(s) and motor with Tomar electronic pre-emption devices with battery back up along with Knox Box(s)
13. Keypads for entrance and exit control for customers
14. Monument sign
15. Site lighting on concrete anchored bases and buildings (Maximum 16' in height adjacent to residential)
16. New wet and dry utilities
17. New off-site improvements in the R.O.W. right of way

Office: This space will be used for the day to day management of the self storage facility with limited retail sales of common moving supplies like cardboard boxes, packaging tape, locks, bubble wrap etc.

Residential: This space will be used for the on-site managers living quarters. This industry standard use serves to provide on-site security 24-7 as well as attracting better quality employees.

**Infrastructure:**

Water, Sewer, Gas, Telephone and Electric will all come from Bell Road.

Water: American Water Company

Sewer: City of Surprise

Gas: S.W. Gas

Telephone: Qwest or Cox

Electric: APS

**Phasing:**

It is our intentions to entitlement approve the whole project...both self storage and retail. Our client intends to develop the self storage portion through certificate of occupancy. Once final tenants are identified for the retail use our client will pursue a building permit for the shell retail building followed by each individual retail tenant improvement plans.

**Other Pertinent Information Deemed Necessary by Planning Staff:**

Adjacent zoning includes; C-2 Community Commercial to the east, and PAD Planned Area Development to the north, west, southwest and southeast.

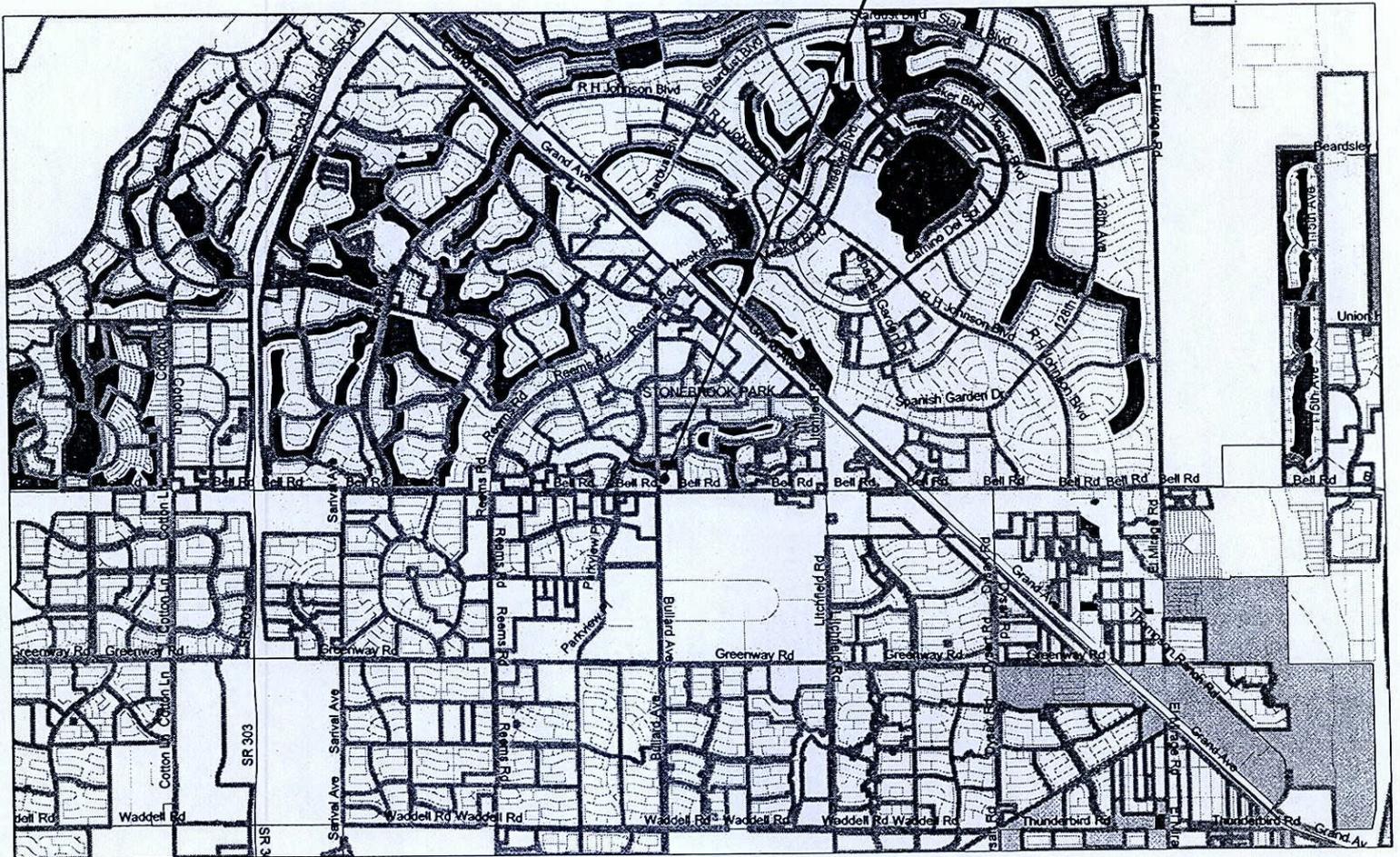
# County Parcels

RECEIVED

FEB 28 2008

COMMUNITY DEVELOPMENT

SITE

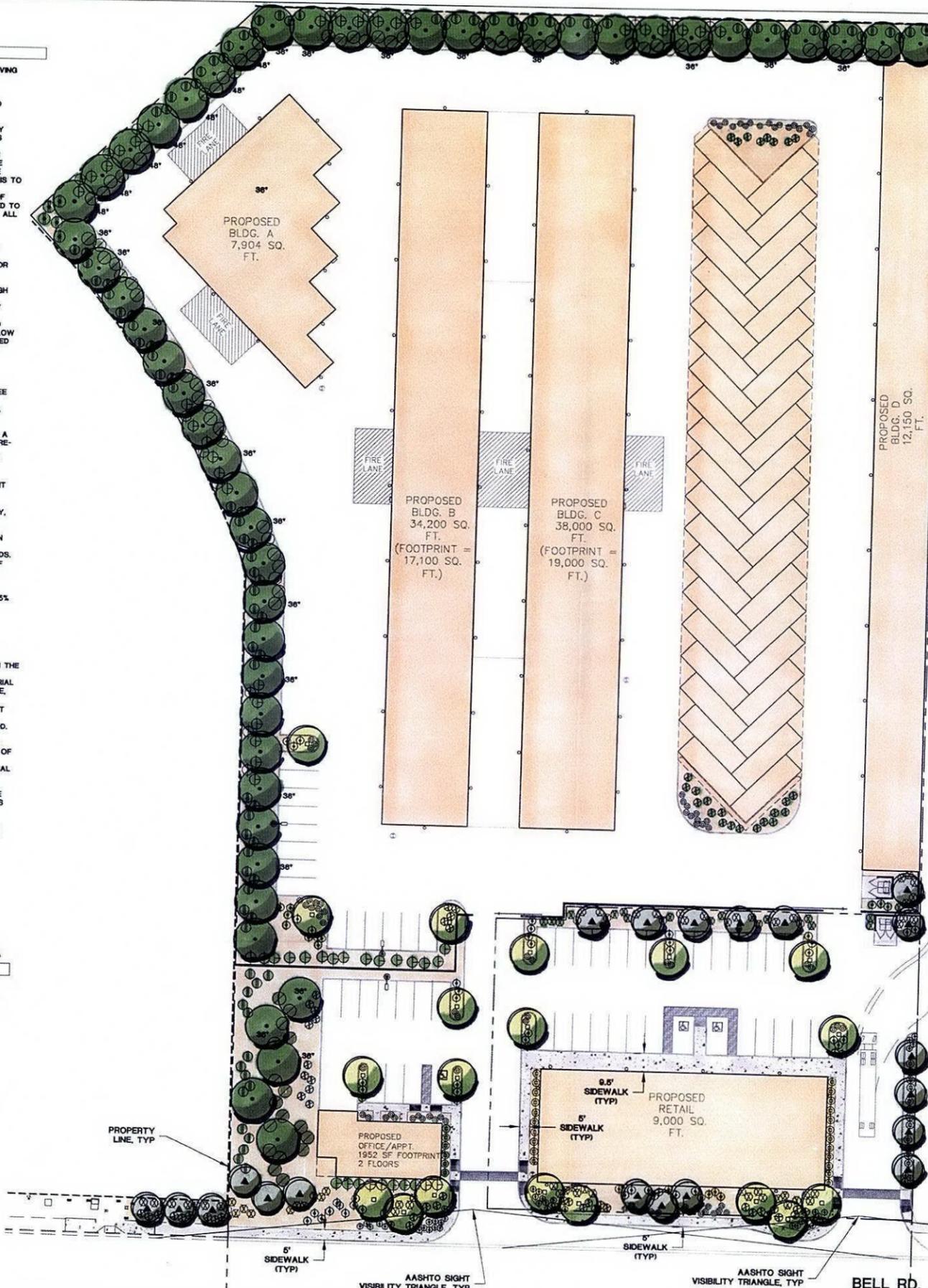


# LANDSCAPE NOTES

- CONTRACTOR TO OBTAIN PERMITS FROM LOCAL AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS SITE.
- CONTRACTOR TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO ANY INSTALLATION.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL THE WORK INDICATED ON THE LANDSCAPE DOCUMENTS. HE SHALL BE RESPONSIBLE FOR CAREFUL SITE INSPECTION, DETAILED REVIEW OF THE PLANS, AND COORDINATION WITH OTHER CONTRACTORS ON-SITE PRIOR TO ANY INSTALLATION. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S AGENT.
- PRIOR TO INITIATING THESE LANDSCAPE IMPROVEMENTS, THE LANDSCAPE CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION MEETING ON-SITE WITH THE APPROVAL OF THE OWNER AND THE GENERAL CONTRACTOR. THE OWNER'S REPRESENTATIVE AND/OR THE PROJECT LANDSCAPE ARCHITECT MUST BE PRESENT. THE PURPOSE OF THIS MEETING IS TO RESOLVE ANY EXISTING SITE CONDITIONS THAT MAY BE IN CONFLICT WITH THESE LANDSCAPE CONSTRUCTION DOCUMENTS AND THEREFORE IMPACT THE INSTALLATION OF ANY OF THESE PROPOSED IMPROVEMENTS. THIS FIRST MEETING SHOULD BE SCHEDULED TO OCCUR AFTER THE COMPLETION OF ON-SITE AND OFF-SITE IMPROVEMENTS INCLUDING: ALL UNDERGROUND UTILITIES, MASS GRADING, AND STREET IMPROVEMENTS.
- DAMAGE TO EXISTING LANDSCAPING, UNDERGROUND UTILITIES, IRRIGATION LINES, ELECTRICAL LINES, ETC. SHALL BE REPAIRED AT CONTRACTORS EXPENSE.
- ANY DISCREPANCIES FOUND BETWEEN THE PLANS AND THE SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
- ALL QUANTITIES PROVIDED ARE FOR BIDDING PURPOSES ONLY. LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINISH GRADES IN LANDSCAPED AREAS. HE SHALL DETERMINE, WITH THE GENERAL CONTRACTOR, THE EXTENT OF ROUGH GRADING AND/OR FINE GRADING TO BE ESTABLISHED BY OTHERS.
- ALL GRADING AND DRAINAGE SHALL BE IN ACCORDANCE WITH THE PLANS PREPARED BY THE PROJECT CIVIL ENGINEER, OR AS DIRECTED BY THE OWNER'S AGENT. CONTRACTOR TO MEET ALL EXISTING GRADES AT PROJECT BOUNDARIES. FINISH GRADE SHALL BE 3" BELOW THE TOP OF ADJACENT WALKS AND CURBS PRIOR TO RECEIVING MULCH OR DECOMPOSED GRANITE.
- ALL AREAS DISTURBED DURING CONSTRUCTION TO BE FINE GRADED. ADJACENT UNDISTURBED AREAS DAMAGED OR DISTURBED TO BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL FINE GRADE ENTIRE LANDSCAPED AREA AS REQUIRED FOR INSTALLATION OF PLANTING. ALL GRADES SHALL BE NEAT, RAKED SMOOTH AND BE FREE OF DEBRIS PRIOR TO SUBSTANTIAL COMPLETION.
- PRIOR TO SPREADING MATERIAL GROUNDCOVERS, ADJUST AND COMPACT FINISH GRADES. APPLY WEED PRE-EMERGENT SURFLAN AS PER MANUFACTURER'S INSTRUCTIONS. THEN SPREAD DECOMPOSED GRANITE, RIVER RUN, OR MULCH AS INDICATED ON PLANS. DECOMPOSED GRANITE SHALL BE WATERED, THEN COMPACTED WITH A SOD ROLLER TO A MINIMUM DEPTH OF 2" AFTER COMPACTION. PROVIDE A SECOND APPLICATION OF THE PRE-EMERGENT SURFLAN AT THE END OF THE MAINTENANCE PERIOD.
- ALL LANDSCAPED AREAS SHALL RECEIVE A 2" TOP DRESSING OF DECOMPOSED GRANITE AS SPECIFIED IN THE LANDSCAPE PLANT SCHEDULE. PROVIDE SAMPLE OF SIZE AND COLOR FOR APPROVAL BY OWNER'S AGENT PRIOR TO DELIVERY.
- STAKE LOCATIONS OF ALL TREES FOR APPROVAL PRIOR TO INSTALLATION OF ANY PLANT MATERIAL.
- ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED (WHEN IN-LEAF) AS IS TYPICAL FOR THE SPECIES. THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS (NOT POT BOUND), A NORMAL HABIT OF GROWTH CONSISTENT WITH INDUSTRY STANDARDS, AND FREE OF ANY BRUISES, CUTS, OR OTHER ABNORMALITIES. PLANT MATERIAL SHALL BE SIZED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF NURSERYMEN, AND THE ARIZONA NURSERYMAN ASSOCIATION STANDARDS.
- ALL RIGHT-OF-WAY PLANT MATERIAL MUST BE IN COMPLIANCE WITH THE DEPARTMENT OF WATER RESOURCES' LOW WATER USE PLANT LIST. NO PLANT SUBSTITUTIONS, TYPE, OR QUANTITY DEVIATIONS FROM THE APPROVED LANDSCAPE PLANS WITHOUT PRIOR APPROVAL FROM THE CITY OF SURPRISE.
- BACKFILL MIXTURES, EXCEPT AS NOTED, TO BE COMPRISED OF 75% NATIVE SOIL AND 25% DECOMPOSED GRANULAR BARK MULCH, AND 2 LBS. DISPERSAL PER CUBIC YARD OF BACKFILL.
- ADD AGR-FORM FERTILIZER TABLETS AT THE FOLLOWING RATES:  
 1 GALLON PLANT - 1 TABLET  
 5 GALLON PLANT - 2 TABLETS  
 15 GALLON PLANT - 4 TABLETS  
 30 GALLON PLANT - 8 TABLETS (MIN)  
 TABLETS TO BE PLACED NO DEEPER THAN 6" BELOW SOIL SURFACE.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON PLANTING PLAN. DO NOT SUBSTITUTE PLANTS BY TYPE OR QUANTITY WITHOUT WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT OR OWNER'S AGENT.
- THE OWNER'S AGENT RESERVES THE RIGHT TO REJECT ANY SELECTION OF PLANT MATERIAL THAT DOES NOT SATISFY THE INTENT OF THE LANDSCAPE DESIGN BASED ON SIZE, SHAPE, EVIDENCE OF STRESS OR IMPROPER CARE.
- PRIOR TO INITIATING THE 90-DAY MAINTENANCE PERIOD, COMPLETE ANY INITIAL PUNCH LIST ITEMS, THEN OBTAIN APPROVAL FROM OWNER'S AGENT OF SUBSTANTIAL COMPLETION. DETERMINE WITH OWNER'S AGENT THE START DATE FOR THE 90-DAY MAINTENANCE PERIOD. CONTRACTOR TO THEN MAINTAIN LANDSCAPE WHICH MAY INCLUDE WATERING, WEEDING, PRUNING, AND REPLACEMENT OF ANY MATERIAL THAT HAS DIED OR IS SHOWING EVIDENCE OF STRESS. SUBMIT WRITTEN REQUEST FOR FINAL PUNCH LIST ONE WEEK PRIOR TO END OF MAINTENANCE PERIOD.
- PROVIDE OWNER WITH A WRITTEN GUARANTEE OF SIX (6) MONTHS FOR ALL PLANT MATERIAL DATED FROM START OF MAINTENANCE PERIOD AGAINST DEFECTS INCLUDING DEATH AND MAINTENANCE PROCEDURES TO BE ADOPTED IN ORDER TO PROTECT GUARANTEE. INCLUDE WATERING SCHEDULE AND FERTILIZER PROGRAM. ONE (1) YEAR GUARANTEE FOR ALL TREES AND PALMS.
- TREAT ALL DATE PALM TREES FOR CROWN ROT AT LEAST ONCE PRIOR TO END OF THE GUARANTEE PERIOD. CONTRACTOR SHALL ARRANGE FOR A SUBCONTRACTOR SPECIALIZING IN PALM TREE MAINTENANCE TO SERVICE ALL PALMS AND PROVIDE BRIEF STATEMENT FOR EACH PALM.
- INSTALL ALL SIDEWALKS PER A.D.A. REQUIREMENTS.

## CITY OF SURPRISE PLANTING DATA

LANDSCAPE AREAS COMMERCIAL ONLY	REQUIRED	PROVIDED
A. ON-SITE LANDSCAPE AREA COMMERCIAL - 5% OF NET SITE AREA	38,700 SQ. FT.	37,800 SQ. FT.
B. RESIDENTIAL BUFFER LANDSCAPE AREA 10 FT. FROM ALL FROM ALL RESIDENTIAL BOUNDARIES.	9,140 S.F.	10,200 S.F.
C. PARKING LANDSCAPE AREA MINIMUM 5%	1,360 S.F.	4,580 S.F.
D. PARKING ISLANDS 1 PER 12 CONSECUTIVE PARKING SPACES MINIMUM 6 FT. WIDE MINIMUM 50 SQ. FT.	1,950 SQ. FT.	7,410 SQ. FT.
E. FOUNDATION PLANTING 33% OF BUILDING FRONTAGE FOR BUILDINGS FRONTING ON PUBLIC STREETS.	78 LF	236 LF
LANDSCAPE PLANTINGS	REQUIRED	PROVIDED
F. RIGHT OF WAY LANDSCAPE PLANTINGS		
F. TREES - 1 PER 20 FT. OF STREET FRONTAGE	14 TREES	14 TREES
G. SHRUBS - 2 PER 20 FT. OF STREET FRONTAGE	28 SHRUBS	87 SHRUBS
H. SHRUB AND GROUNDCOVER AREA 25%	1,481 SQ. FT.	3,654 SQ. FT.
PARKING SPACE PLANTING		
I. TREES - 1 PER 8 PARKING SPACES	6 TREES	



## PLANT SCHEDULE

SYMBOL	BOTANICAL/COMMON NAME	SIZE/CLPR	QTY.	REMARKS
<b>TREES</b>				
○	PARKINSONIA HYBRID 'DEBERT MUSEUM'	48" BOX	18	STAKE AS REQUIRED
○	DESERT MUSEUM PALO VERDE	48" BOX	18	STAKE AS REQUIRED
○	ACACIA ANEURA	48" BOX	20	STAKE AS REQUIRED
○	ACACIA	48" BOX	20	STAKE AS REQUIRED
○	PROSOPIS CHILENSIS 'THORNLESS'	24" BOX	22	STAKE AS REQUIRED
○	THORNLESS CHILEAN MESQUITE	36" BOX	22	STAKE AS REQUIRED
○	48" BOX	7		
<b>SHRUBS</b>				
⊕	CASSIA MEMOPHILA	5 GAL	70	1 GPH EMITTER
⊕	DESERT CASSIA	5 GAL	70	1 GPH EMITTER
⊕	LEUCOPHYLLUM CANDIDUM 'THUNDER CLOUD'	5 GAL	68	1 GPH EMITTER
⊕	THUNDER CLOUD SAGE	5 GAL	68	1 GPH EMITTER
⊕	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD'	5 GAL	103	1 GPH EMITTER
⊕	GREEN CLOUD SAGE	5 GAL	103	1 GPH EMITTER
⊕	NERUM OLEANDER 'PETITE PINK'	5 GAL	42	1 GPH EMITTER
⊕	DWARF PINK OLEANDER	5 GAL	42	1 GPH EMITTER
⊕	RUELLIA 'PENINSULARIS'	5 GAL	84	1 GPH EMITTER
⊕	ELVA RUELLIA	5 GAL	84	1 GPH EMITTER
⊕	BOUGAINVILLEA S. 'BARBARA KARST'	5 GAL	8	1 GPH EMITTER
⊕	BARBARA KARST BOUGAINVILLEA	5 GAL	8	1 GPH EMITTER
<b>ACCENTS</b>				
⊕	HEPERALOE PARVIFLORA	5 GAL	72	1 GPH EMITTER
⊕	RED YUCCA	5 GAL	72	1 GPH EMITTER
<b>GROUNDCOVER</b>				
⊕	ACACIA REDOLENS 'LOW BOY'	1 GAL	80	1 GPH EMITTER
⊕	N.C.N.	1 GAL	80	1 GPH EMITTER
⊕	LANTANA SPP.	1 GAL	40	1 GPH EMITTER
⊕	'NEW GOLD' LANTANA	1 GAL	40	1 GPH EMITTER
⊕	LANTANA MONTEVIDENSIS	1 GAL	80	1 GPH EMITTER
⊕	PURPLE TRAILING LANTANA	1 GAL	80	1 GPH EMITTER
<b>MATERIAL</b>				
⊕	DECOMPOSED GRANITE 'DESERT GOLD'	1/2" SCREENED		2" DEPTH ALL LANDSCAPE AREAS

NOTES:  
 1) TREE HEIGHTS AND CALIPERS WILL COMPLY WITH 'ARIZONA NURSERY ASSOCIATION SPECIFICATIONS' FOR THAT TYPE AND SIZE OF TREE.  
 2) LANDSCAPE TO BE WATERED BY AN UNDERGROUND AUTOMATIC IRRIGATION SYSTEM.  
 3) TREES SHALL MEET SPECIFIED CALIPER SIZE WITHIN ONE YEAR OF INSTALLATION DATE.  
 PERCENTAGE OF PLANTS ON ADWR LOW WATER USE PLANT LIST - 99%.

NOTES:  
 1) ALL CHANGES TO BE APPROVED BY THE CITY OF SURPRISE COMMUNITY DEVELOPMENT DEPARTMENT.  
 2) SIGNS REQUIRE SEPARATE PERMIT.  
 3) ALL UTILITY BOXES AND STRUCTURES ARE TO BE SCREENED FROM VIEW.  
 4) TREES IN PAVED AREAS TO HAVE DEEP ROOT BARRIERS.  
 5) ALL PLANT MATERIAL LOCATED WITHIN AASHTO VISIBILITY TRIANGLES ARE TO BE MAINTAINED NO HIGHER THAN 2 FEET HIGH AND HANG NO LOWER THAN 7 FEET FROM GROUND ELEVATION.

# RECEIVED

FEB 28 2008  
 COMMUNITY DEVELOPMENT

CALL TWO WORKING DAYS BEFORE YOU DIG  
**602-263-1100**  
**1-800-STAKE-IT**  
 (OUTSIDE MARICOPA COUNTY)

LANDSCAPE PLAN  
 SCALE: 1"=30'

**GILMORE PARSONS**  
 LAND DESIGN GROUP  
 3211 N. 78 Street, Phoenix, AZ 85006  
 T: 602.266.5622 F: 602.266.6797  
 www.gilmore.com

**T<sup>2</sup> ARCHITECTURE GROUP, LLC.**  
 7227 N. 16TH STREET, SUITE 125  
 PHOENIX, AZ 85020  
 (602) 674-3250  
 (602) 674-3246 FAX

STORAGE WEST SURPRISE  
 NE CORNER BELL RD. & BULLARD AVE.  
 SURPRISE, ARIZONA



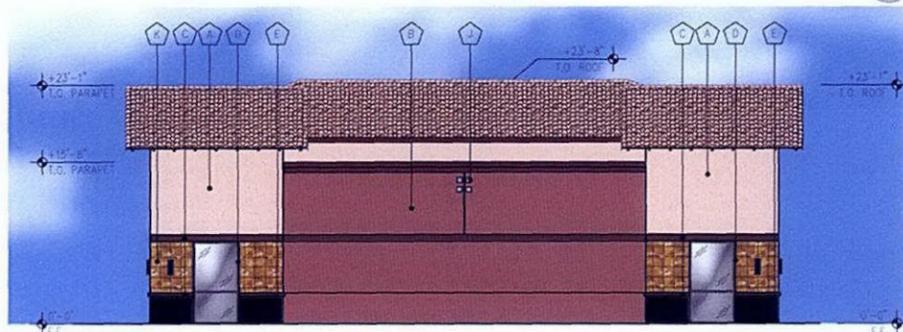
PROJECT NUMBER: 07084  
 DRAWN BY: STAFF  
 CHECKED BY: SCP  
 DATE: 1-28-08

TITLE  
**L1.1**  
 1 of 1

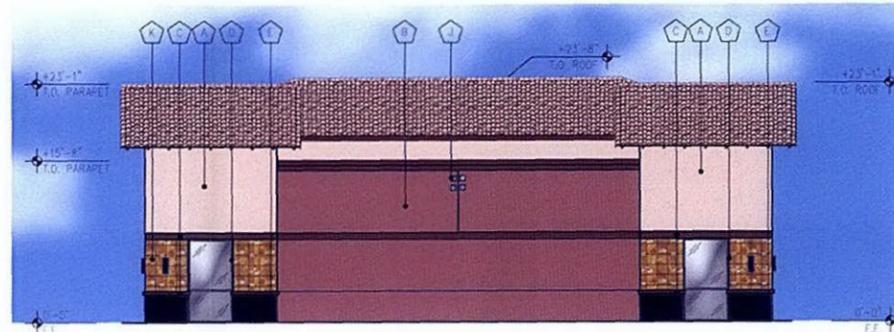
STORAGE WEST SURPRISE\_JOB 0716\_CDP07-274



1 RETAIL BUILDING SOUTH ELEVATION  
SCALE: 1/8" = 1'-0"



2 RETAIL BUILDING EAST ELEVATION  
SCALE: 1/8" = 1'-0"



3 RETAIL BUILDING WEST ELEVATION  
SCALE: 1/8" = 1'-0"



4 RETAIL BUILDING NORTH ELEVATION  
SCALE: 1/8" = 1'-0"

COLOR LEGEND

	DUNN EDWARDS -DESERT ROCK -DE6066
	DUNN EDWARDS -PRAYER DOG -DE6054
	DUNN EDWARDS -DARK CHOCOLATE -DE6014
	DUNN EDWARDS -IRON FIXTURE -DE6384
	SUPERLITE BLOCK -8"X8"X16" SPLIT FACE CMU -"BLACK" 62.55.3
	OWENS CORNING -COUNTRY LEDGESTONE -BUCKS COUNTY
	US DOOR -DARK TEAL
	MDCI -GALVALUM
	DALTILE -SLATE COLLECTION -SUNSET GLORY S775
	DALTILE -ONYX COLLECTION -MULTI BROWN ONYX MS10
	EAGLE ROOFING -CAPISTRANO -SUNRISE BLEND 545



T<sup>2</sup> ARCHITECTURE GROUP, LLC.  
7227 N. 16TH STREET, SUITE 125  
PHOENIX, AZ 85020  
(602) 674-3250  
(602) 674-3746 FAX

STORAGE WEST SURPRISE  
NE CORNER BELL RD. & BULLARD AVE.  
SURPRISE, ARIZONA

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FEB 28 2008  
COMMUNITY DEVELOPMENT



PROJECT NUMBER: 0716  
DRAWN BY: SB  
CHECKED BY: MD  
DATE: 07-06-07

TITLE  
RETAIL BUILDING ELEVATIONS

A5-1

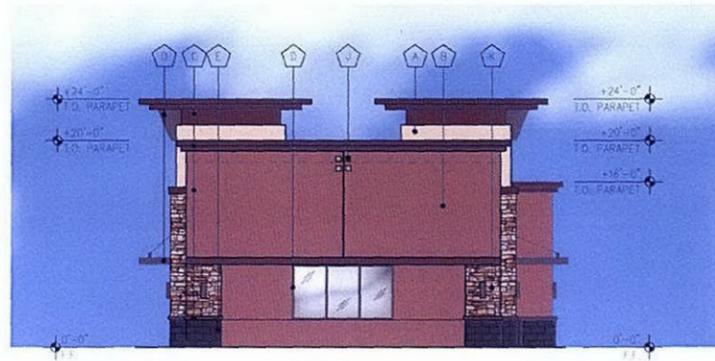
102 WEST SURPRISE, JOB 0716, (FOR APPLICATION), 07-06-07

COLOR LEGEND

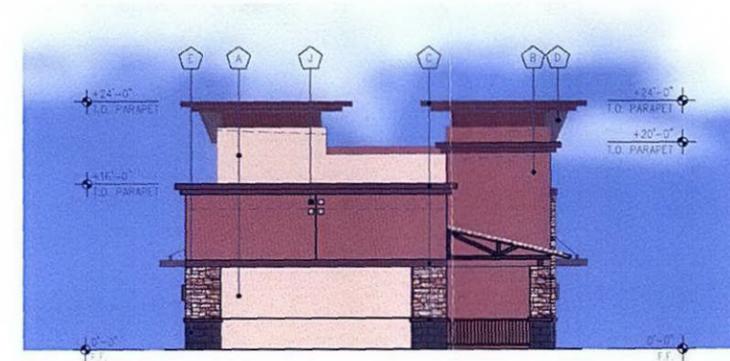
	DUNN EDWARDS -DESERT ROCK -DE6066
	DUNN EDWARDS -PRAIRIE DOG -DE6054
	DUNN EDWARDS -DARK CHOCOLATE -DE6014
	DUNN EDWARDS -IRON FIXTURE -DE6334
	SUPERLITE BLOCK -8"X8"X16" SPLIT FACE CMU -"BLACK" 62.55.3
	OWENS CORNING -COUNTRY LEDGESTONE -BUCKS COUNTY
	US DOOR -DARK TEAL
	MBCI -GALVALUM
	DALTILE -SLATE COLLECTION -SUNSET GLORY S775
	DALTILE -ONYX COLLECTION -MULTI BROWN ONYX M510
	EAGLE ROOFING -CAPISTRANO -SUNRISE BLEND 545



1 OFFICE/APPT.  
SOUTH ELEVATION  
SCALE: 1/4" = 1'-0"



2 OFFICE/APPT.  
EAST ELEVATION  
SCALE: 1/4" = 1'-0"



3 OFFICE/APPT.  
WEST ELEVATION  
SCALE: 1/4" = 1'-0"



4 OFFICE/APPT.  
NORTH ELEVATION  
SCALE: 1/4" = 1'-0"



T<sup>2</sup> ARCHITECTURE  
GROUP, LLC.

1227 N. 16TH STREET,  
SUITE 125  
PHOENIX, AZ 85020  
(602) 674-3250  
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STORAGE WEST  
SURPRISE  
NE CORNER BELL RD. & BULLARD AVE.  
SURPRISE, ARIZONA



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FEB 28 2008

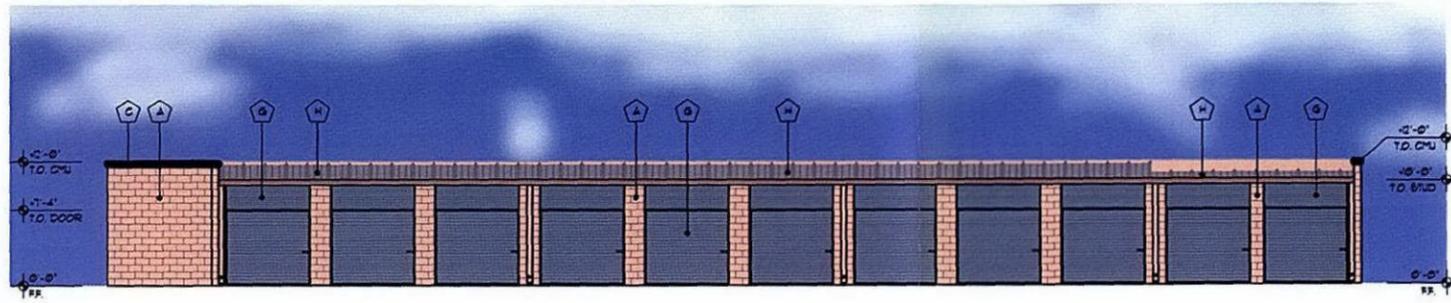
COMMUNITY  
DEVELOPMENT

PROJECT NUMBER: 07716  
DRAWN BY: NR  
CHECKED BY: MD  
DATE: 02-06-07

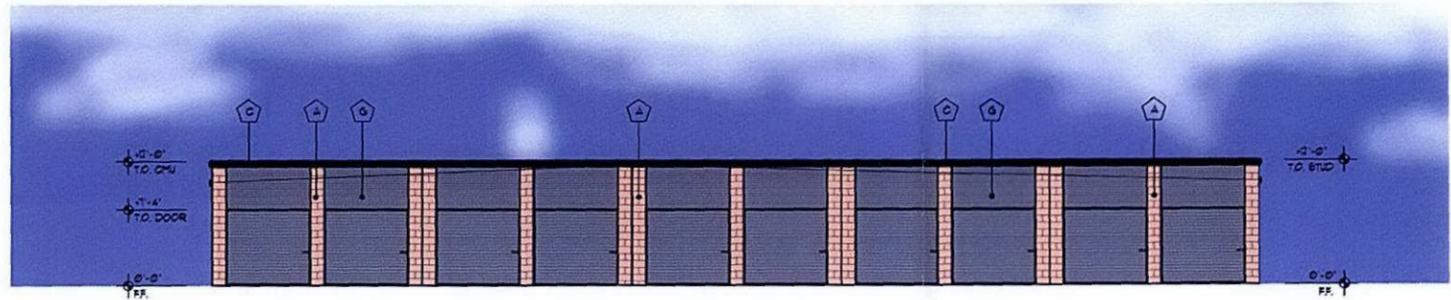
TITLE  
OFFICE/APPT.  
ELEVATIONS

A5-2

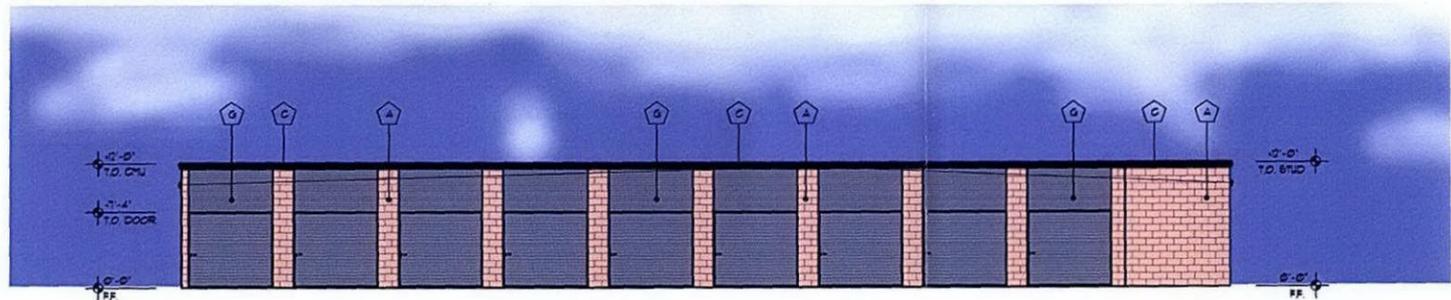
T<sup>2</sup> ARCHITECTURE GROUP, LLC (P.C.) - APPLICATION: 07-06-07



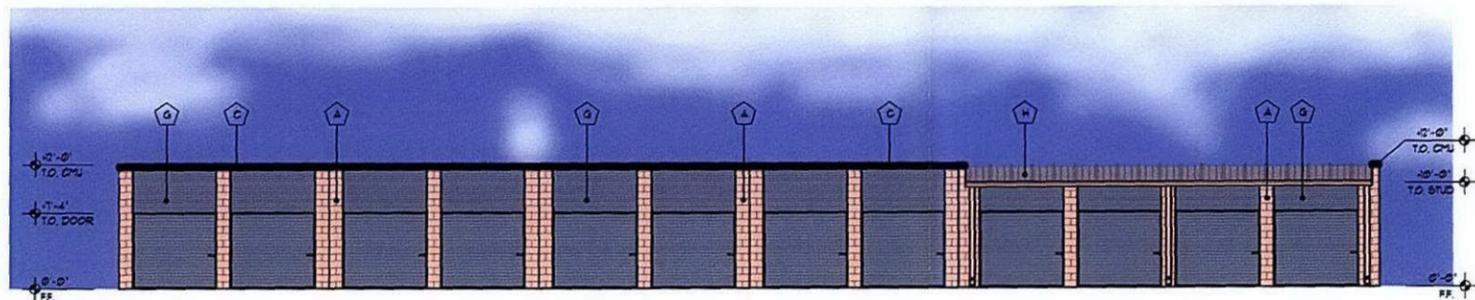
1 BUILDING A  
SOUTH ELEVATION  
SCALE: 1/8" = 1'-0"



2 BUILDING A  
EAST ELEVATION  
SCALE: 1/8" = 1'-0"



3 BUILDING A  
WEST ELEVATION  
SCALE: 1/8" = 1'-0"



4 BUILDING A  
NORTH ELEVATION  
SCALE: 1/8" = 1'-0"

COLOR LEGEND

A	DAN EDWARDS -DESERT ROCK -DE6066
B	DAN EDWARDS -PRAIRIE DOG -DE6054
C	DAN EDWARDS -DARK CHOCOLATE -DE6044
D	DAN EDWARDS -IRON FUTURE -DE6054
E	SUPERLITE BLOCK -8"X16" SPLIT FACE CMU -"BLACK" 6255.5
F	GENES CORNING -COUNTRY LEDGESTONE -BUCKS COUNTY
G	US DOORS -DARK TEAL
H	MEGI -GALVALUM
J	DALTILE -SLATE COLLECTION -SUNSET GLORY STS
K	DALTILE -ONYX COLLECTION -MULTI BROWN ONYX MS10



T<sup>2</sup> ARCHITECTURE  
GROUP, LLC.  
1227 N. 16TH STREET,  
SUITE 125  
PHOENIX, AZ 85020  
(602) 674-3250  
(602) 674-3246 FAX

STORAGE WEST  
SURPRISE  
NE CORNER BELL RD. & BULLARD AVE.  
SURPRISE, ARIZONA

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FEB 28 2008

COMMUNITY  
DEVELOPMENT



PROJECT NUMBER: 0716  
DRAWN BY: NR  
CHECKED BY: MD  
DATE: 01-06-07

TITLE  
BUILDING A  
ELEVATIONS

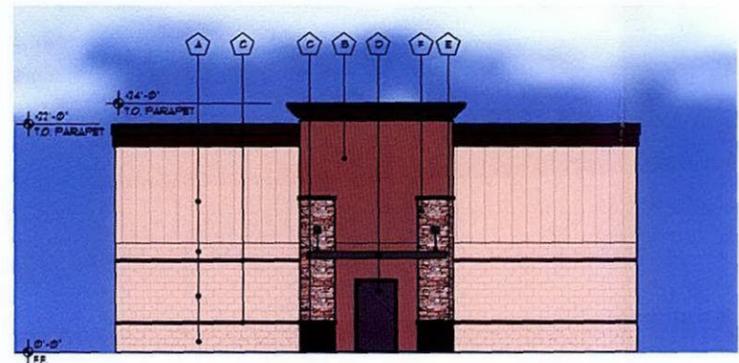
A5-3

**COLOR LEGEND**

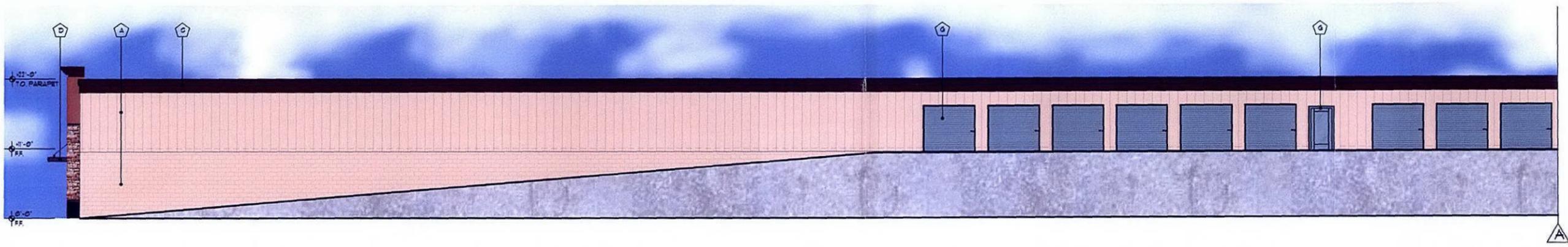
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	B	DIAN EDWARDS -PRAIRIE DOG -DEB054
	C	DIAN EDWARDS -DARK CHOCOLATE -DEB014
	D	DIAN EDWARDS -IRON FIXTURE -DEB504
	E	SUPERLITE BLOCK -8"x8"x16" SPLIT FACE CMU -BLACK 62353
	F	DIVERS CORNING -COUNTRY LEDGESTONE -BUCKS COUNTY
	G	US DOORS -DARK TEAL
	H	M&C -GALVALUM
	I	DALTILE -SLATE COLLECTION -SUNSET GLORY STS
	J	DALTILE -ONYX COLLECTION -MULTI BROWN ONYX M510



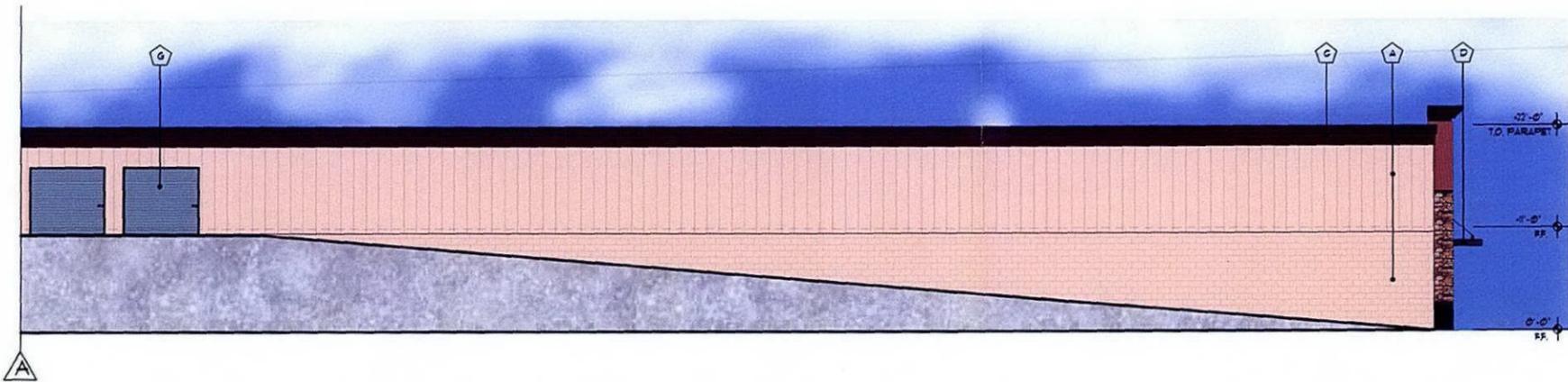
**T² ARCHITECTURE  
GROUP, LLC.**  
12271 N. 16TH STREET,  
SUITE 125  
PHOENIX, AZ 85020  
(602) 674-9250  
(602) 674-3246 FAX



**BUILDING B  
SOUTH ELEVATION**  
SCALE: 1/8" = 1'-0"



**BUILDING B  
EAST ELEVATION**  
SCALE: 1/8" = 1'-0"



**STORAGE WEST  
SURPRISE**  
NE CORNER BELL RD. & BULLARD AVE.  
SURPRISE, ARIZONA

**RECEIVED**

FEB 28 2008  
COMMUNITY  
DEVELOPMENT



PROJECT NUMBER:	0716
DRAWN BY:	NR
CHECKED BY:	MO
DATE:	07-06-07

TITLE  
**BUILDING B  
ELEVATIONS**

**A5-4**

AZ WEST SURPRISE JOB 0716, PRELIMINARY APPLICATION, 07-06-07

**COLOR LEGEND**

A	DANN EDWARDS -DESERT ROCK -DE6066
B	DANN EDWARDS -PRAIRIE DOG -DE6054
C	DANN EDWARDS -DARK CHOCOLATE -DE6014
D	DANN EDWARDS -IRON FIXTURE -DE6584
E	SUPERLITE BLOCK -8"X8"X16" SPLIT FACE CMU -BLACK 62353
F	OWENS CORNING -COUNTRY LEDGESTONE -BUCKS COUNTY
G	HS DOOR -DARK TEAL
H	MEGI -GALVALUM
I	DALTILE -SLATE COLLECTION -SUNSET GLORY STS
J	DALTILE -ONYX COLLECTION -MULTI BROWN ONYX MS10

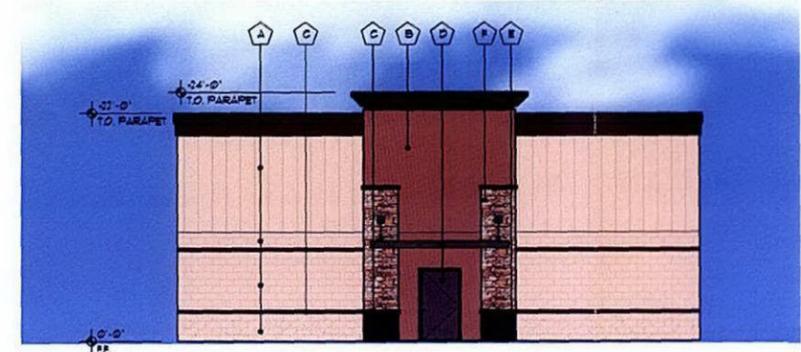


**T² ARCHITECTURE  
GROUP, LLC.**  
1221 N. 16TH STREET,  
SUITE 125  
PHOENIX, AZ 85020  
(602) 674-3250  
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FEB 28 2008

COMMUNITY  
DEVELOPMENT



**BUILDING B  
NORTH ELEVATION**  
SCALE: 1/8" = 1'-0"



**BUILDING B  
WEST ELEVATION**  
SCALE: 1/8" = 1'-0"

**STORAGE WEST  
SURPRISE**  
NE CORNER BELL RD. & BULLARD AVE.  
SURPRISE, ARIZONA



PROJECT NUMBER: 0716  
DRAWN BY: NR  
CHECKED BY: KJ  
DATE: 07-06-07

**BUILDING B  
ELEVATIONS  
CONTINUED**

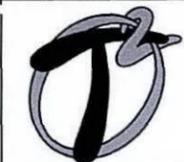
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Z:\WEST SURPRISE\_LOB 0716\_ARCH\APP\APPLICATION\_07-06-07

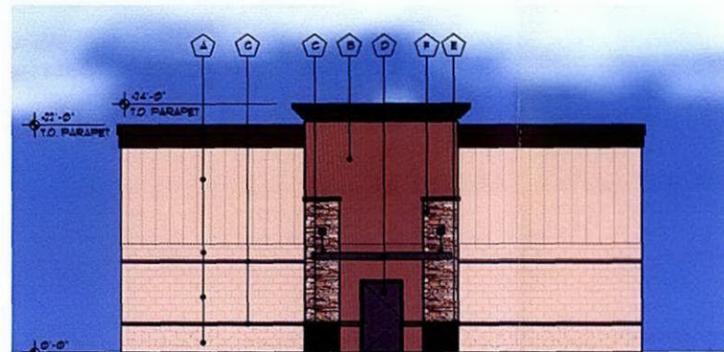


**COLOR LEGEND**

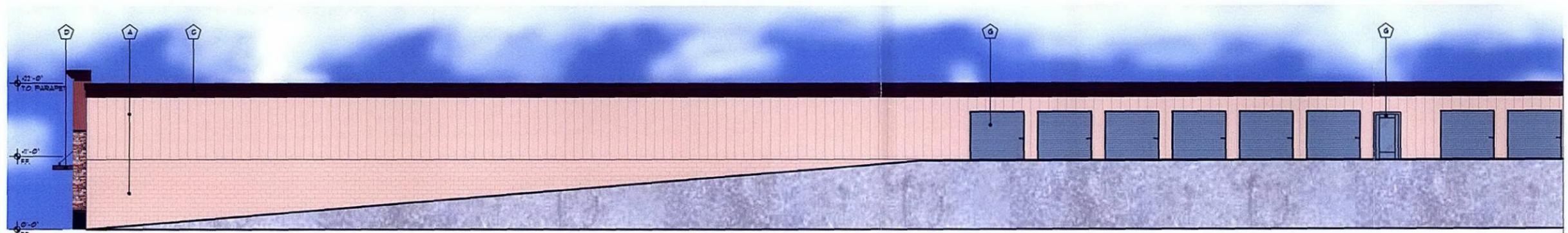
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B	DAN EDWARDS -PRAIRIE DOG -DE8054
C	DAN EDWARDS -DARK CHOCOLATE -DE8014
D	DAN EDWARDS -IRON FIXTURE -DE8584
E	SUPERLITE BLOCK -8"X8"X16" SPLIT FACE CMU -BLACK 62553
F	OHENS CORNING -COUNTRY LEDGESTONE -BUCKS COUNTY
G	US DOORS -DARK TEAL
H	MEGI -GALVALUM
J	DALTILE -SLATE COLLECTION -SUNSET GLORY ST5
K	DALTILE -ONYX COLLECTION -MULTI BROWN ONYX M510



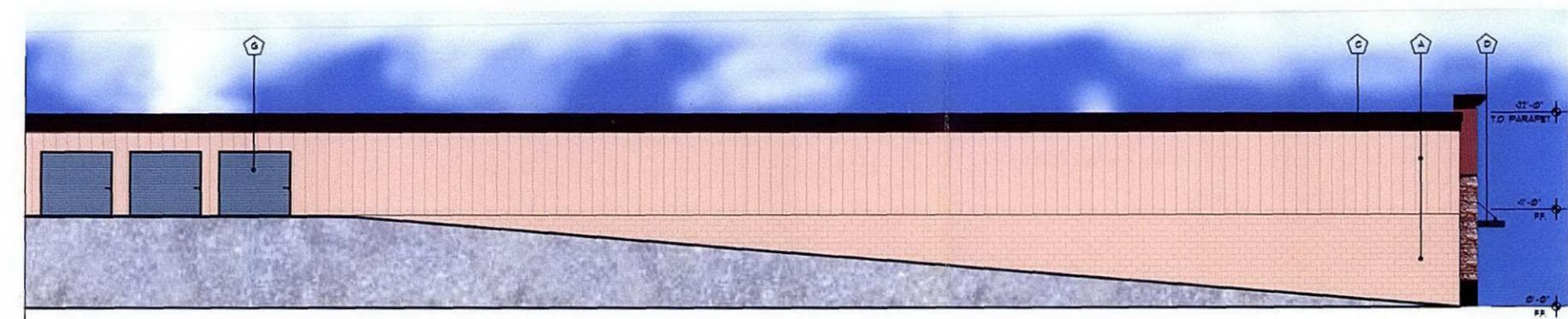
**T² ARCHITECTURE GROUP, LLC.**  
 1227 N. 16TH STREET, SUITE 125  
 PHOENIX, AZ 85020  
 (602) 674-9250  
 (602) 674-9246 FAX



**BUILDING C  
 NORTH ELEVATION**  
 SCALE: 1/8" = 1'-0"



**BUILDING C  
 WEST ELEVATION**  
 SCALE: 1/8" = 1'-0"



**RECEIVED**

FEB 28 2008

COMMUNITY DEVELOPMENT



PROJECT NUMBER: 0716  
 DRAWN BY: NR  
 CHECKED BY: XG  
 DATE: 01-06-07

**BUILDING C  
 ELEVATIONS  
 CONTINUED**

**A5-7**

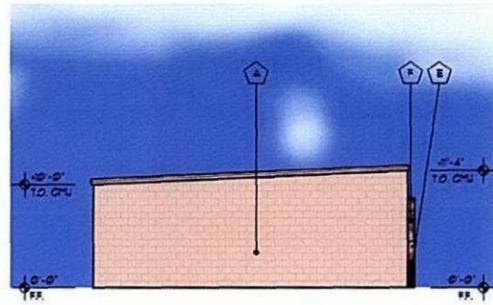
**STORAGE WEST  
 SURPRISE**  
 NE CORNER BELL RD. & BULLARD AVE.  
 SURPRISE, ARIZONA

STORAGE WEST SURPRISE, JOB 0716, PRELIMINARY, (DATE: 01-06-07)

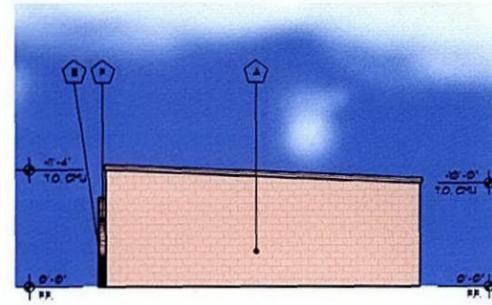
RECEIVED

FEB 28 2008

COMMUNITY DEVELOPMENT



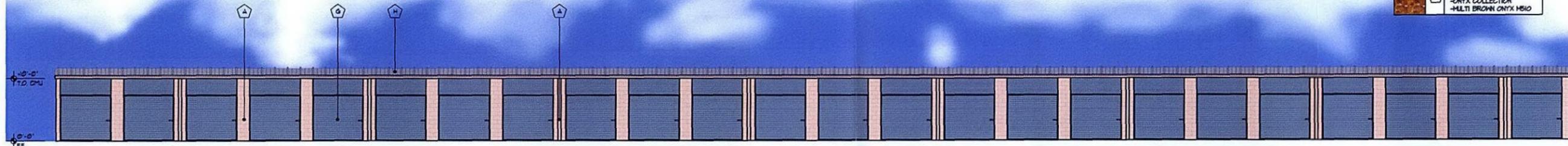
BUILDING D SOUTH ELEVATION  
① SCALE: 1/8" = 1'-0"



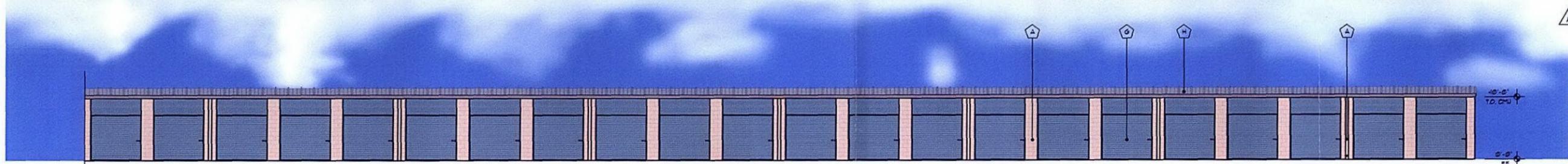
BUILDING D NORTH ELEVATION  
③ SCALE: 1/8" = 1'-0"

COLOR LEGEND

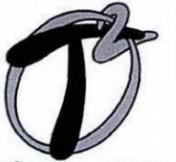
A	DAN EDWARDS -DESERT ROCK -DE6066
B	DAN EDWARDS -PRAIRIE DOG -DE6054
C	DAN EDWARDS -DARK CHOCOLATE -DE6044
D	DAN EDWARDS -IRON FIXTURE -DE6554
E	SUPERLITE BLOCK -9"X16" SPLIT FACE CMU -"BLACK" 6235.3
F	OWENS CORNING -COUNTRY LEDGESTONE -BUCKS COUNTY
G	US DOOR -DARK TEAL
H	MECI -GALVALUM
I	DALTILE -SLATE COLLECTION -SUNSET GLORY 5775
K	DALTILE -ONYX COLLECTION -MULTI BROWN ONYX H510



BUILDING D EAST ELEVATION  
② SCALE: 1/8" = 1'-0"



BUILDING D WEST ELEVATION  
④ SCALE: 1/8" = 1'-0"



T<sup>2</sup> ARCHITECTURE GROUP, LLC.

1227 N. 16TH STREET, SUITE 125  
PHOENIX, AZ 85020  
(602) 674-3250  
(602) 674-3246 FAX

STORAGE WEST  
SURPRISE  
NE CORNER BELL RD. & BULLARD AVE.  
SURPRISE, ARIZONA



PROJECT NUMBER: 0716  
DRAWN BY: MS  
CHECKED BY: MS  
DATE: 07-06-07

TITLE  
BUILDING D ELEVATIONS  
A5-8

STORAGE WEST SURPRISE, JOB 0716, PREPARED BY: B. MOORE, DATE: 07-06-07



1 BELL ROAD FRONTAGE  
PROPOSED RETAIL  
SCALE: 3/16" = 1'-0"



2 BELL ROAD FRONTAGE PROPOSED  
SELF STORAGE OFFICE/RESIDENCE  
SCALE: 3/16" = 1'-0"

RECEIVED

FEB 28 2008

COMMUNITY  
DEVELOPMENT

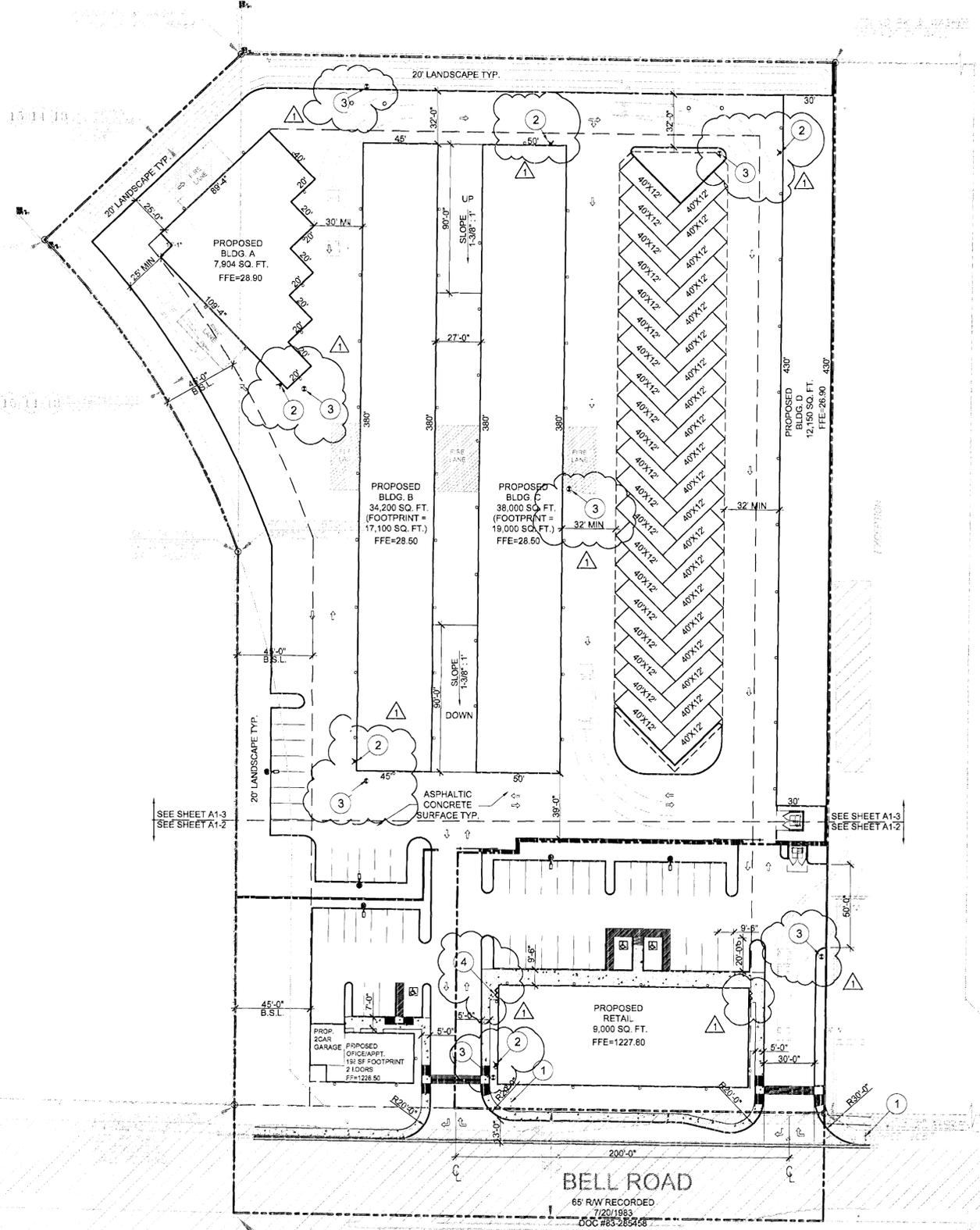


T<sup>2</sup> ARCHITECTURE  
GROUP, LLC.

STORAGE WEST  
SURPRISE

NEC BELL RD AND BULLARD AVE  
SURPRISE, ARIZONA





**PROJECT TEAM**

**OWNER:**  
SUNSTORM ENTERPRISES  
27201 N BLACK CANYON HIGHWAY  
PHOENIX AZ 85085  
PHONE: (602)505-1170  
FAX: (602)957-0902

**DEVELOPER:**  
STORAGE WEST  
431 W. SEVENTH STREET  
LOS ANGELES, CA 90014  
CONTACT: JOHN -ATHAWAY  
PHONE: (213) 622-1254  
FAX: (213) 627-8649  
EMAIL: john.athaway@aaco.net

**ARCHITECT:**  
T2 ARCHITECTURE GROUP, LLC.  
7227 N. 16TH STREET, #125  
PHOENIX, AZ 85020  
CONTACT: MARC DAVIS  
PHONE: (602) 674-3250  
FAX: (602) 674-3346  
EMAIL: mcdavis@t2archgrp.com

**CIVIL ENGINEER:**  
RCC DESIGN GROUP, PLLC.  
11022 S. 51ST STREET, STE. 102  
PHOENIX, AZ 85044  
CONTACT: STUART RAYBURN  
PHONE: (480) 598-0270  
FAX: (480) 598-0273  
EMAIL: stu@rccdesigngroup.com

**LANDSCAPE ARCHITECT:**  
GILMORE PARSONS LAND DESIGN GROUP  
2211 N. 7TH STREET  
PHOENIX, AZ 85006  
CONTACT: STEVE PARSONS  
PHONE: (602) 266-5622  
FAX: (602) 266-5707  
EMAIL: sparsons@getgilmore.com

**SITE INFORMATION**

**NAME OF PROJECT:**  
STORAGE WEST SURPRISE  
CASE #CLP07-274

**LOCATION:**  
N.E. CORNER OF BELL ROAD & BULLARD AVE.  
SURPRISE, ARIZONA

**PARKING:**  
RETAIL = 1/250 SF  
9,000 SF/250 = 36 REQ. SPACES  
SPACES PROVIDED = 34

**STORAGE = 1/35 UNITS**  
680 UNITS/35 = 20 REQ. SPACES  
PROVIDED SPACES = 20

**COVERAGE:**  
RETAIL SITE AREA = 35,535 SF OR .82 ACRES  
RETAIL BUILDING AREA = 9,000 SF  
9,000/35,535 = 25%

**STORAGE SITE AREA = 230,795 SF OR 5.3 ACRES**  
STORAGE BUILDING:  
OFFICE/APT FOOTPRINT = 1,952 SF  
BUILDING A = 7,904 SF  
BUILDING B = 34,200 SF (17,000 FP)  
BUILDING C = 38,000 SF (19,000 FP)  
BUILDING D = 2,150 SF  
CANOPY = 23,029 SF

**TOTAL BUILDING AREA (FOOTPRINT) = 81,035 SF**  
81,035/230,795 = 35%  
LANDSCAPE = 31,668 SF  
31,668/266,330 = 12% COVERAGE

**ZONING:**  
CURRENT = C-2 COMMUNITY COMMERCIAL  
REQUIRED = C-2 COMMUNITY COMMERCIAL

**OCCUPANCY CLASSIFICATIONS:**  
RETAIL = GROUP M  
STORAGE BUILDINGS A THRU D = GROUP S-1  
OFFICE = GROUP B  
RESIDENTIAL = GROUP R-3

**CONSTRUCTION TYPE:**  
RETAIL = TYPE IV B  
STORAGE = TYPE IB  
OFFICE = TYPE IV B  
RESIDENTIAL = TYPE IV B

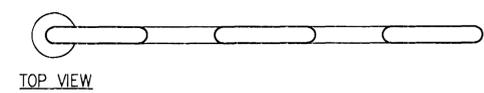
**BUILDING HEIGHT:**  
RETAIL = 20'-0"  
STORAGE =  
BUILDING A = 14'-0"  
BUILDING B = 24'-0"  
BUILDING C = 24'-0"  
BUILDING D = 12'-0"  
OFFICE/RESIDENTIAL = 24'-0"

**KEYNOTES**

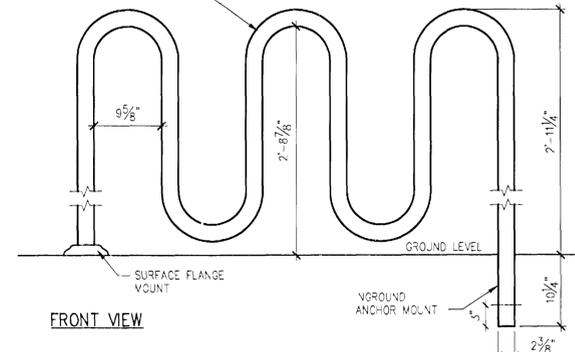
1. FIRE ACCESS LANE PER SURPRISE FIRE DEPARTMENT ACCESS DETAILS
2. FDC LOCATION
3. FIRE HYDRANT
4. BIKE RACK SEE DETAIL BELOW

**GENERAL NOTES**

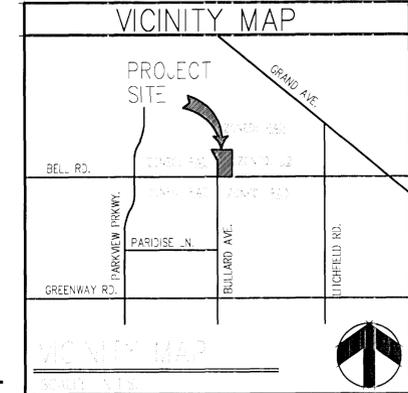
1. ALL ACCESS ROADS AND ALL TURNING RADIUS, INCLUDING PARKING AISLE ISLANDS SHALL COMPLY WITH REQUIREMENT OF "WB-50"
2. ALL PROPOSED DEVELOPMENT PHASES DEPICTED ON THIS SITE PLAN SHALL PROVIDE A MINIMUM OF TWO (2) SEPARATE POINTS OF UNOBSTRUCTED ACCESS WITH A MINIMUM WIDTH OF TWENTY FEET INSTALLED AND MAINTAINED PURSUANT TO THE REQUIREMENTS OF THE CITY OF SURPRISE.



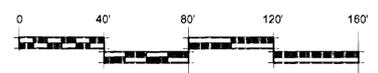
ALL STD. UNITS MADE FROM: ASTM A53 S-CO 40 STEEL PIPE (2.375" O.D. x .154 THK) HYDRALICALLY BENT WITH A MANDRIL, HOT-DIPPED GALVANIZED AFTER FABRICATION.



**RIBBON BIKE RAKE DETAIL**  
SCALE: 1"=1'-0"



**PRELIMINARY SITE PLAN**  
SCALE: 1" = 40'-0"



**T2 ARCHITECTURE GROUP, LLC.**  
7227 N. 16TH STREET, SUITE 125  
PHOENIX, AZ 85020  
(602) 674-3250  
(602) 674-3246 FAX

TAC REVIEW CITY COMMENTS  
01-30-08

**STORAGE WEST SURPRISE**  
NE CORNER BELL RD. & BULLARD AVE.  
SURPRISE, ARIZONA

**RECEIVED**

FEB 28 2008  
COMMUNITY DEVELOPMENT



PROJECT NUMBER: 07116  
DRAWN BY: NR  
CHECKED BY: MS  
DATE: 07-06-07

TITLE  
**MASTER SITE PLAN**

**A1-1**

Cup07-274

**CITY OF SURPRISE  
COMMUNITY DEVELOPMENT DEPARTMENT**

**PP07-308**

**PRELIMINARY PLAT**

for:

**Palo Cristi Commerce Park**

**PLANNING AND ZONING COMMISSION**

Hearing Date: **April 1, 2008**

<b>STAFF:</b>	Adam Copeland, 623-222-3137
<b>LOCATION:</b>	Generally SWC of Laurel Lane and Litchfield Road.
<b>DESCRIPTION OF THE REQUEST:</b>	Approval of a Preliminary Plat.
<b>SUMMARY ANALYSIS:</b>	The applicant is requesting a Preliminary Plat Approval.

<b>SUGGESTED MOTION:</b>	<b>I move to recommend for approval PP07-308, a Preliminary Plat for Palo Cristi Commerce Park and adopt staff's findings, subject to stipulations a through n.</b>
--------------------------	---

**City of Surprise  
Planning and Zoning Division**

**EXECUTIVE SUMMARY**

**PP07-308  
Palo Cristi Commerce Park**

<b>APPLICANT:</b>	Jack Gilmore Gilmore Parsons Land Design Group 2211 N. 7 <sup>th</sup> Street Phoenix, AZ 85006 P: 602-266-5622 F: 602-266-5707
<b>OWNER:</b>	George Quinif Palo Cristi Commerce Park 5108 N. 40 <sup>th</sup> St #3 Phoenix, AZ 85018 P: 602-952-0213 F: 602-957-2033
<b>HEARING DATE:</b>	April 01, 2008
<b>STAFF:</b>	Adam Copeland
<b>LOCATION:</b>	Generally on the SWC of Laurel Lane and Litchfield Road
<b>DESCRIPTION of the REQUEST:</b>	Approval of a Preliminary Plat
<b>STAFF RECOMMENDATION:</b>	Approval.
<b>SUMMARY ANALYSIS:</b>	The applicant is requesting a Preliminary Plat approval for Palo Cristi Commerce Park on approximately one-hundred (100) gross acres. The property is zoned PAD Planned Area Development.

**HISTORY**

1. On March 28, 2002, City of Surprise approved a rezone for Kenly Farms Case RZ01-068.
2. On July 10, 2003, the applicant proposed to subdivide the subject property into one acre single-family residential lots. The application was denied by City Council.

3. On July 24, 2003, the City Council initiated a zoning on the subject site case RZ03-173, Ordinance #03-20, from R1-43 (Single-Family Residential) to Planned Area Development to include the uses described in ARS 28-8481 (K) and all other uses deemed compatible with military operations by the City of Surprise and Luke Air Force Base. Residential development is not allowed in this area due to the Luke noise contour overlap. (See attached approved Ordinance # 03-20, and uses)
4. The Council decision on the rezoning was appealed and taken to public vote on March 8, 2005. A referendum went to vote as proposition 300. The vote passed with 80% of Surprise residents supporting the City Council's decision to rezone the property with Employment land uses in support of Luke.

### **STAFF ANALYSIS**

The subject request is to plat 48 lots on approximately 100 gross acres within the Kenly Farms Employment designated area. The lots are expected to be sold and processed as separate site plan applications.

#### **Circulation:**

Primary access to the site will be from Litchfield Road to the east and secondary access from Laurel Lane to the north. With community feedback and staff recommendation, the applicant limited access to Laurel Lane with one ingress/egress point, which is directly across future commercial development to the north.

Some of the interior streets have curvature, which is expected to create more streetscape diversity and interest in a business park setting. The applicant provided a master circulation plan that designates shared access points throughout the development. This was recommended by staff to create a more comprehensive plan, because the individual lots are not sold and not ready for technical site plan review.

Careful consideration was given to traffic along Litchfield Road. Engineering worked with the applicant to provide an acceptable design that included deceleration lanes and limited turning movements. The only full turning movement will be on Cholla Street. All other turning movements will be restricted.

Each site plan application will need to design around the master circulation plan to ensure proper spacing between access points, to mitigate conflicts in turning movements.

#### **Landscaping:**

Staff has substantial concerns with the landscaping along Laurel Lane, Litchfield Road, and all internal streets. The applicant worked with staff to provide a comprehensive landscape plan that is conceptual with this application; however, it will be officially approved with the Final Plat application.

All sidewalks along the streets will be curb-separated and include trees, shrubs, and ground cover between sidewalk and curb. Laurel Lane's landscaping will mimic the landscape design and buffer area that is existing on the residential side to the north.

A large 100' landscape buffer is used on the southern and western property line to separate the intensity of uses from the surrounding one-acre lot residential development. This landscape buffer is required in the Planning and Design Guidelines where commercial and/or industrial development abut against rural property.

**Departmental Review** (All departments are recommending approval of the site subject to all stipulations and findings of fact.)

**Traffic Division:** Traffic had concerns with the number of access points off of Litchfield Road, Access on Luarel Lane, and ½ street improvements. The applicant revised the plan to reduce the number of curb cuts along Litchfield, restricted turning movements, and provided adequate design for street improvements.

**Fire Department:** Fire had concerns on fire hydrant locations and spacing, access, and dead-end roads not exceeding 150' without a turn around. Applicant revised the plans to address all of fire comments. If additional access is needed on lots that abut Laurel Lane, additional Fire Access only curb cuts may be placed at the time of individual site plan review.

**Planning Department:** Planning had significant concerns on landscaping, buffer to residential, access to local streets, exceeded access points on Litchfield Road, lot size, sidewalks, and overall site design. The applicant worked with staff to provide buffers, sidewalks, master landscape plan, better mix of lot sizes, and revised the overall design to mimic surrounding street patterns.

**Building Department:** No comments

**Water Services Department:** Water Services had comments on reclaimed water lines, labeling all infrastructure, and utility easements. The applicant revised the plan to address the comments.

**Engineering Department:** The Engineering Department had concerns on drainage. Each site will be responsible for one site drainage at the time of site plans. All technical comments were addressed.

### **Community Outreach Meeting:**

A Community Outreach Meeting was held on October 23, 2007. Approximately five (5) residents attended. The applicant presented the history of the project, and discussed why the City Council initiated the rezone from R1-43 single-family residential to PAD Planned Area Development. Concerns from the residents were truck traffic through the neighborhoods, industrial uses, noise, proximity to residential, buffers, lighting, and height. The applicant and staff explained many of the standards for each concern above.

Residents wanted less intense uses near the residential areas. Some residents were ok with having the more intense uses along Litchfield Road, but the applicant explained that the PAD allows for all uses that are supported by State Statutes under the Luke Noise Contours.

All residents in attendance were not in support of the allowed industrial uses on the site and had remaining concerns with truck traffic and buffers.

The applicant explained that they designed the project to limit access off of Laurel Lane, which would divert a majority of any truck traffic primarily to Litchfield Road. In addition, a 100' landscape buffer was added along the south and western property lines, as well as a 20' landscape buffer on the NWC of the project.

### **APPLICABLE LAW**

This section details the comprehensive plan policies, zoning ordinance regulations, and other applicable standards regarding development of the subject property.

1. City of Surprise Municipal Code Sec. 121-60. Preliminary Plat
2. City of Surprise Municipal Code. Sec. 125-223 Planning and Design Guidelines
3. City of Surprise General Plan 2020
4. RZ03-173 Kenly Farms Phase II City Initiated Rezone

### **FINDINGS**

1. The Planning and Zoning Commission finds that the proposed preliminary plat complies with section 121-60 of the Surprise Municipal Code, which allows a subdivision of property through a preliminary plat process with 10 lots or greater per the City of Surprise Municipal Code.
2. The Planning and Zoning Commission finds that the proposed development meets the guidelines that are set forth in the Planning and Design Guidelines Chapters 1 through 9.
3. City of Surprise General Plan 2020:  
The Planning and Zoning Commission finds that the proposed development is consistent with the Surprise General Plan 2020 employment land use category.
4. RZ03-173 Kenly Farms Phase II City Initiated Rezone  
The Planning and Zoning Commission finds that all lot sizes proposed comply with the zoning document RZ03-173.

## STIPULATIONS

REQUIRED ACTIONS. The applicant and/or owner shall comply with the following list of stipulations for Case PP07-308, Palo Cristi Commerce Park.

- a. Prior to delivery of any combustible material to the site, fire department access and fire protection systems shall be completely operational in accordance with the approved plans by the Fire Chief and the City Engineer.
- b. Major changes to this Preliminary Plat with regard to use and intensity must be processed as a revised application with approval by the City Council upon recommendation of the Planning and Zoning Commission. Minor changes to the Preliminary Plat may be administratively approved by the Community Development Director, City Engineer, Fire Marshall, and Water Services Director prior to City Council approval of the Final Plat.
- c. The applicant or property owner must provide the City with approved dust control permits issued by Maricopa County Environmental Services Department prior to release of any permits.
- d. The applicant shall include the City Attorney's sound attenuation and overflight language on every final plat.
- e. The applicant shall dedicate an avigation easement to the United States Air Force on every final plat or other such recorded instrument acceptable to the City Attorney. Such avigation or other recorded instrument easement shall be approved by the City Attorney.
- f. The Preliminary Plat expires one year from the date of City Council action.
- g. Landscaping and perimeter wall(s) details to be reviewed and approved by the Community Development Director upon submittal of the Final Plat.
- h. The applicant shall include the City Attorney release of liability language regarding the sidewalks on every final plat.
- i. All public notice signs shall be removed from the site immediately following final decision by the City Council as applicable. A signed Affidavit of Sign Removal shall be included within the Stipulation Response Package.
- j. If the U.S. Postal Service requires "gang"-type boxes, applicant shall install adequate lighting over said postal receptacles.
- k. Comments were provided to the applicant for the water report submitted to the COS. Once the response from the applicant is received, a second review of the report will be conducted. The wastewater report appears to be consistent with the Integrated Water Master Plan.
- l. Turf is to be utilized in active recreation areas only. Turf shall not be allowed in linear retention areas.

## ITEM 6

- m. A more detailed landscape design review is required for the Final Plat. The landscape plans are to include streetscape treatments for all roads, and a design standard for the landscape buffer areas.
- n. The sidewalk portion on the northwest corner of the exception parcel that overlaps shall be resolved by the applicant and reviewed and approved by the City, prior to improvement plan approval.

**ORDINANCE NO. 03-20**

**AN ORDINANCE APPROVING THE REZONING RZ03-173, CONSISTING OF CHANGING THE ZONING OF APPROXIMATELY 105.69 ACRES FROM R1-43 TO PLANNED AREA DEVELOPMENT TO INCLUDE THE USES DESCRIBED IN ARS §28-8481(K) AND ALL OTHER USES DEEMED COMPATIBLE WITH MILITARY OPERATIONS BY THE CITY OF SURPRISE AND LUKE AIR FORCE BASE. THE SUBJECT SITE IS LOCATED SOUTH OF CACTUS ROAD, WEST OF LITCHFIELD ROAD.**

WHEREAS, this Ordinance has been properly noticed for public hearing and the necessary hearings and opportunity for public input have been completed; and

WHEREAS, changes have occurred in the vicinity of Section 21, Township 3 North, Range 1 West of the Gila and Salt River Base and Meridian, which require that the zoning of a parcel of land in that area be changed; and

WHEREAS, rezoning of the subject property will not cause traffic congestion or depreciate surrounding property values and, at the same time is in harmony with the purposes and intent of the zoning ordinance, the plan for the area, and the Surprise General Plan 2020; and

NOW THEREFORE BE IT ORDAINED, by the City Council of the City of Surprise, Arizona, that:

Section 1. This Ordinance is not of a general and permanent nature and shall not be codified.

Section 2. The property described in Exhibit A is rezoned from R1-43 (Single Family Residential) to Planned Area Development (PAD) zone with the uses described in Exhibit B, and all other uses deemed compatible with military operations by the City of Surprise and Luke Air Force Base. The uses listed in Exhibit B are compatible with Arizona Revised Statutes §28-8481(K), and are consistent with those permitted in Commercial (2), Commercial (3), Business Park and Industrial (1) zones (per Title 17 of the Surprise Municipal Code).

Section 3. All present and future owners of the property described on Exhibit A shall develop the property only in accordance with the requirements of this Ordinance and the stipulations contained in Exhibit C.

Section 4. This Ordinance shall become effective thirty-one (31) days after formal passage by the council.

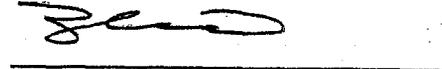
PASSED AND ADOPTED THIS 24 day of July, 2003

  
Mayor

ATTEST:

APPROVED AS TO FORM:

  
City Clerk

  
City Attorney

YEAS: Mayor Shafer, Vice-Mayor Cox, Council Members; Allen, Arismendez, Bails & Sullivan. (Excused-Vukanovich)

NEAS: \_\_\_\_\_

# TABLE OF COMPATIBLE USES FOR KENLY FARMS, PHASE II PAD

## Transportation, communications, and utilities

Highway and street right-of-way  
Motor vehicle parking  
Other transportation, communications and utilities

Communications (noise sensitive)  
Utilities

## Commercial/retail trade

Wholesale trade  
Building materials-retail  
General merchandise-retail  
Food-retail  
Automotive and marine

Apparel and accessories-retail  
Eating and drinking places  
Furniture and home furnishings-retail  
Other retail trade

## Personal and business services

Finance, insurance and real estate  
Personal services  
Business services  
Repair services

Contract construction services  
Indoor recreation services  
Other services

## Industrial/manufacturing

Food and kindred products  
Textile mill products  
Apparel  
Printing and publishing  
Professional, scientific and controlling instruments

Stone, clay and glass products  
Furniture and fixtures  
Paper and allied products  
Fabricated metal products  
Miscellaneous manufacturing

## Public and quasi-public services

Government services  
Cultural activities, including churches  
Medical and other health services

Nonprofit organizations  
Cemeteries  
Other public and quasi-public services

## Outdoor recreation

Playgrounds and neighborhood parks  
Community and regional  
Nature exhibits  
Other outdoor recreation

Water based recreational areas  
Auditoriums and concert halls  
Golf courses

## Resource production, extraction, and open space

Agriculture (except livestock)  
Fishing activities and related services

Forestry activities  
Permanent open space



DEPARTMENT OF THE AIR FORCE  
AIR EDUCATION AND TRAINING COMMAND

13 September 2007

Mr. James R. Mitchell  
Director, Community Initiatives Team  
56th Fighter Wing  
14185 West Falcon Street  
Luke AFB AZ 85309-1629

RECEIVED

SEP 19 2007

COMMUNITY DEVELOPMENT

Ms. Carol Dager  
City of Surprise Planning Department  
12425 West Bell Road  
Surprise AZ 85374

Re: Case #PP07-308 Palo Cristi Commerce Park

Dear Ms. Dager

Thank you for the opportunity to provide comments on the Preliminary Subdivision Plat Application for the Palo Cristi Commerce Park. The Commerce Park will be located on 100.86 gross acres south of the southwest corner of Cactus and Litchfield Roads. Plans call for the development of 48 lots for mixed-use commercial, business and light industrial. The site is located inside the 1988 JLUS 65 Ldn, "high noise or accident potential zone" as defined by A.R.S. § 28-8461 and is within the "territory in the vicinity of a military airport" also defined by A.R.S. § 28-8461.

As described, this division of lots for the Commerce Park, will not negatively impact the flying operations at Luke AFB. Since there has been no determination of individual businesses, Luke AFB requests the opportunity to provide additional comments when proposals are made. Please note that construction plans and oversized construction equipment for this property may be influenced by requirements from the FAA and may require submittal of an FAA Form 7460-1, Notice of Proposed Construction or Alteration.

Since the site is located within the "territory in the vicinity of a military airport," it will be subjected to noise from approximately 165 over flights a day, with some as low as 1,000 feet above ground level. We recommend you review the sound attenuation requirements found in A.R.S. § 28-8482 for construction planning. In addition, a strong notification program on the part of the applicant will be essential to inform tenants about Luke AFB operations. We also recommend a review of the Luke AFB web site at <http://www.luke.af.mil>, Community Interests and Community Initiatives links, for further information.

If there are any questions, please contact my Community Planner, Mr. Bob Dubsky, at (623) 856-6195.

Sincerely

JAMES R. MITCHELL

cc:

Colonel Henry M. Reed III, Vice Commander, 56th Fighter Wing



# Arizona Department of Transportation

## Intermodal Transportation Division

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano  
Governor

Victor M. Mendez  
Director

Sam Elters  
State Engineer

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SEP 17 2007

COMMUNITY DEVELOPMENT

September 12, 2007

Ms. Carol Dager  
City of Surprise Planning Department  
12425 West Bell Road Suite D100  
Surprise, Arizona 85374

RE: **Palo Cristi Commerce Park** /PP07-308/ SWC of Laurel Lane & Litchfield Rd.

Dear Ms. Dager:

Thank you for your notification regarding the Preliminary Plat on the above referenced subject. After a complete review, we have concurred that at this time the proposed project will have no impact on our highway facilities in this area.

**ADOT does reserve the right to review and comment any further development plans, changes and or additions for this site, as to any impact they may have on the State Highway System.**

Should you have any questions, you may contact me at 602-712-8876, or in writing at 205 S. 17<sup>th</sup> Avenue, Right of Way Project Management Section, MD 612E, Phoenix, Arizona 85007. Thanking you in advance for your cooperation.

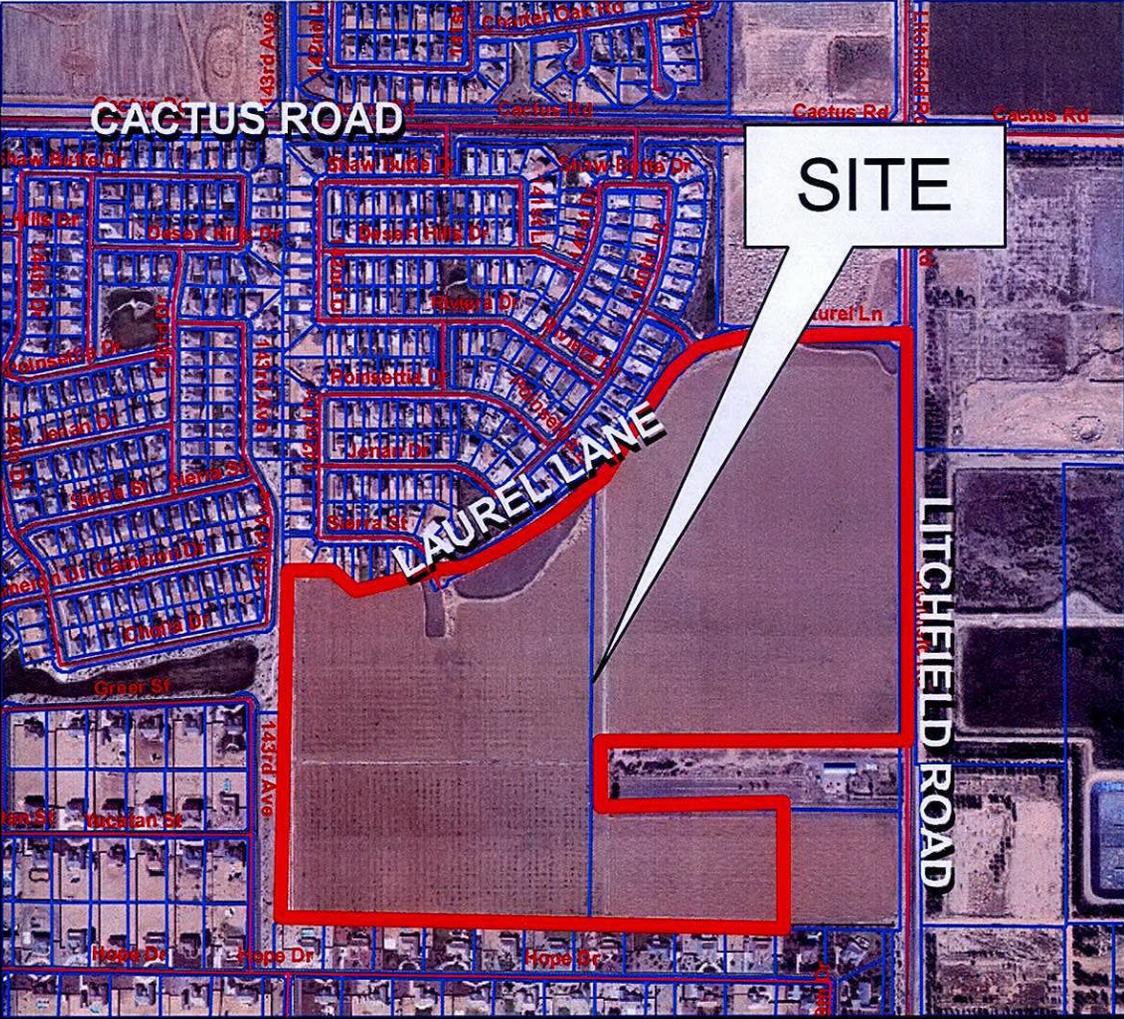
Sincerely,

Annette Close  
Administrative Assistant III  
Right of Way Project Management  
[aclose@azdot.gov](mailto:aclose@azdot.gov)



# Vicinity Map

# Palo Cristi Commerce Park



# Palo Cristi Commerce Park

Surprise, Arizona

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FEB 25 2008

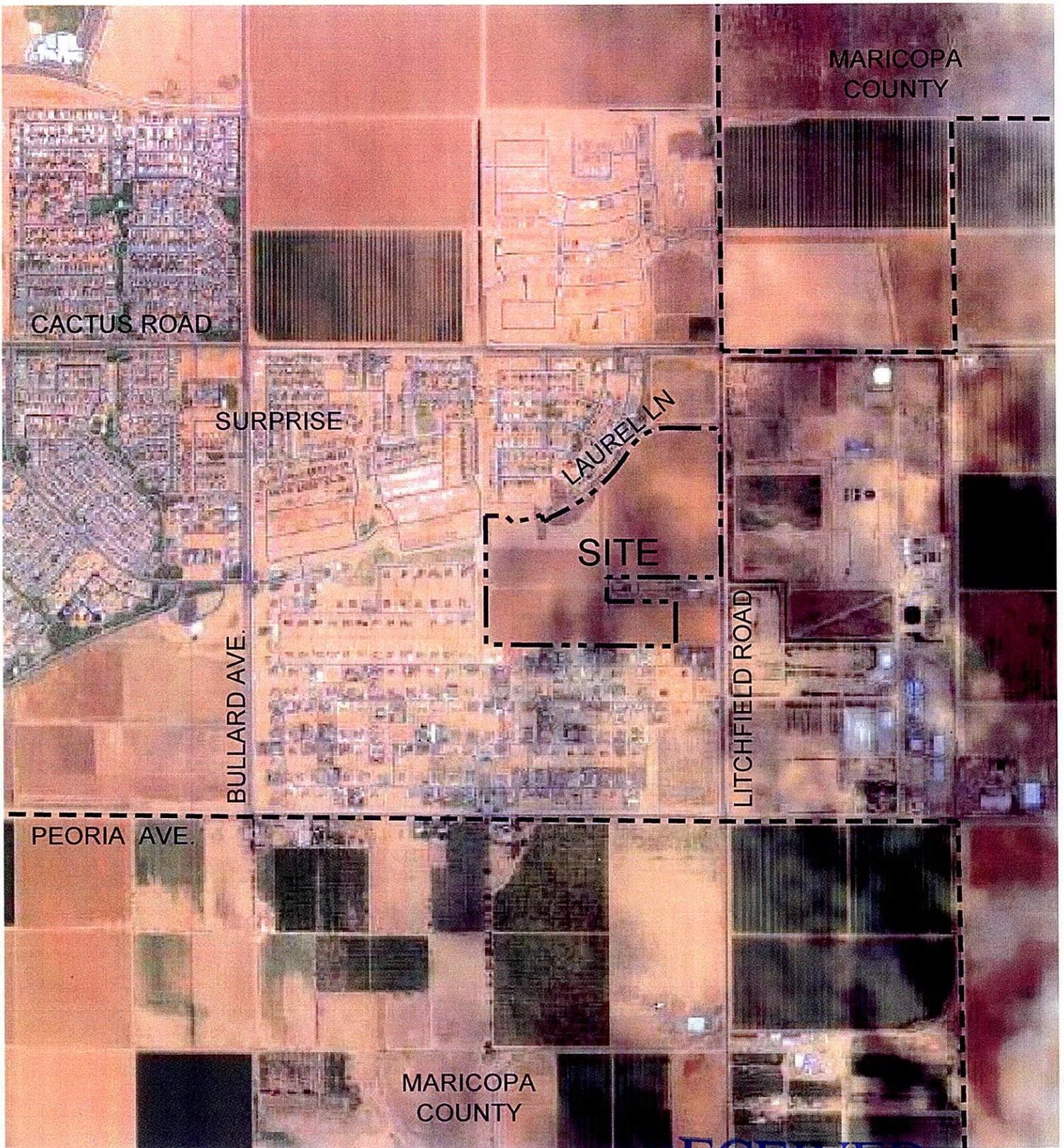
COMMUNITY  
DEVELOPMENT

Prepared for:  
Palo Cristi Properties, LCC

Prepared By:  
Gilmore Parsons  
Land Design Group

August 24, 2007

November 9, 2008 - First Revision  
January, 24 2008 - Second Revision  
Febrruary 24, 2008 - Third Revision



RECEIVED

FEB 25 2008

COMMUNITY DEVELOPMENT

# Palo Cristi Commerce Park

Surprise, Arizona

Prepared For: Palo Cristi, LLC

Vicinity Map



Job # 07081  
Date: 2-21-08



GILMORE PARSONS  
LAND DESIGN GROUP  
2000 W. BUCKLEBOURNE, SUITE 100  
TULSA, OKLAHOMA 74116  
www.gilmoreparsons.com

FEB 25 2008

COMMUNITY  
DEVELOPMENT

PP07-308

**A. Introduction**

This narrative report provides a project overview of Palo Cristi Commerce Park, a mixed use commercial, business and light industrial project on approximately 100 acres located at the southwest corner of Litchfield Road and Laurel Lane in Surprise, Arizona as shown in the Vicinity Map enclosed as Exhibit 'A'. This narrative is intended to provide the City of Surprise Planning Staff with the information necessary to facilitate the review of the design intent and development standards for this Preliminary Plat Application.

**1. Site Ownership**

The property is owned by Palo Cristi Properties, LLC.

**2. Site Data**

The site for this proposed planned employment area is located at the southwest corner of Litchfield Road and Laurel Lane. The total area for the site is 100.86 gross acres. Refer to Exhibits 'B-1' and 'B-2' for the Legal Description and ALTA Survey.

**3. Existing Site Conditions / Topography**

The site is currently vacant, but historically it has been used for agricultural production. There are existing retention basins on-site along Laurel Lane for stormwater runoff that will be incorporated into the subdivision. The site is relatively flat with no significant topographic features. The site drains from the northwest to the southeast. Refer to Exhibit 'C' Existing Conditions and Surrounding Land Uses.

**4. Existing Zoning**

The current zoning is Planned Area Development (PAD) with uses generally restricted to those listed within the C-2, C-3, BP, and I-1 zoning districts. The property was rezoned under a City Council Initiative to the Planned Area Development (PAD) in order to comply with the City's General Plan, which calls for the development of compatible land uses adjacent to Luke Air Force Base.

**5. Surrounding Land Uses**

North: The area north of the Property is shared by an existing residential subdivision (Kenly Farms) zoned R1-8, and vacant commercial property zoned C-2 that fronts onto both Litchfield Road and Laurel Lane.

West: The area west of the Property is Mountain Gate, an existing residential subdivision zoned R1-43.

South: The area south of the Property is another phase of Mountain Gate, an existing residential subdivision zoned R1-43.

East: The area east side of the Property across Litchfield Lane, is owned by the City of Surprise and is currently zoned R1-43.

Exception Parcel: There is an exception parcel along the south side of Cholla Street that is not included within this Preliminary Plat Application. The north half (30') of Cholla Street will be dedicated and improved with the understanding that the south half dedication and improvements will occur at a later date. This exception parcel is currently zoned R1-43.

Refer to Exhibits 'C' Existing Conditions and Surrounding Land Uses for additional information indicating surrounding land uses and zoning.

## **B. General Development Plan**

### **1. Project Description**

The PAD for the subject property was approved by the Surprise City Council on July 24, 2003. The specific language of the ordinance approving the PAD referenced land uses deemed compatible with military operations by the City of Surprise and Luke Air Force Base. Those uses are found within the Community Commercial Zone (C-2, General Commercial Zone (C-3), Business park Zone (BP), and the Light Industrial Zone (I-1). In accordance with the PAD, commercial land uses will be encouraged within the two blocks fronting onto Litchfield Road and Laurel Lane. The balance of the property is expected to attract Business Park and Light Industrial users. However, depending on market conditions, the placement of these land uses may vary.

Although the development pattern and placement of land uses may be more randomly distributed within the Property, there will be some development standards that will help to unify the project. Entry monumentation, project walls, and a standard streetscape theme will help to establish visual continuity throughout the project.

### **2. Relationship to Surrounding Properties**

The original master plan for the property called for single family residential development similar to the existing neighborhoods located to the northwest, west, and to the south. The City Council's Initiative to rezone the Property to non-residential uses has imposed some interesting challenges for site planning and vehicular circulation. The City's Planning and Design Guidelines for non-residential projects have been incorporated into the master plan for Palo Cristi Commerce Park. Refer to Exhibits 'D' and 'E' to review the General Development Plan for the project. Some of the design features incorporated into the master plan include:

- 2.1 Landscape Theme: The Litchfield Road frontage shall conform to the Design Standards adopted by the City of Surprise section 17.32.030. The balance of the landscape materials prescribed for trees, shrubs, groundcovers and accents will be selected from the Arizona Department of Water Resources low water use plant list for the Phoenix Active Management Area (Phoenix AMA). The streetscape will reflect the overall

landscape theme for the development. The goal of the street frontage landscape is to unify the development while providing safety and comfort for pedestrians. Refer to Exhibit 'F' Master Landscape Plan / Sections & Exhibit 'G' Master Landscape Theme as well as Exhibits L.1 – L.5 for more detailed plans.

- 2.2 Residential Buffers: Along the west and south property lines adjacent to the R1-43 zoning, the project has included a 100' landscape setback to buffer the neighborhood. This landscaped setback may be used for retention of storm waters and employee oriented recreational amenities and picnic areas. Along the Laurel Lane frontage, a landscaped setback measured 45' from the back of curb to a 6' screen wall will be installed to buffer the existing neighborhood to the north. This is the front portion of the 70' landscape setback measured from back of curb along Laurel Lane and the Litchfield Road frontage. The Owner reserves the right to limit the landscape buffer to the 35' front yard setback for lots 6, 7, and 9, if commercial or office uses are developed and fronting onto Laurel Lane. Along the Litchfield Road frontage, the landscape setback may be reduced to 35' if the commercial/office uses are designed for "architecture forward" with parking internal to the lot.

The City of Surprise is currently analyzing their criteria for setback standards for residential buffers. There are indications from the Planning Staff that modifications are forthcoming. The Owner reserves the right to modify the building setbacks and landscape buffers during the site plan approval process to reflect the then currently approved setback and buffer standards.

- 2.3 Screen Walls: Screen wall design and placement will follow the rules and regulations set forth in 17.32.060 of the Surprise Zoning Ordinance to screen all service areas, mechanical and electrical equipment yards, outdoor storage areas, and refuse collection areas. Screen walls shall be a minimum of 6' in height and buffered with landscaping between the street frontage(s) and screen wall. This theme wall will help to reinforce the continuity of the streetscape theme. Refer to Exhibit 'H' for typical screen wall elevations.
- 2.4 Site Lighting: Lighting shall be provided with the development of each lot. Site lighting shall be provided for security throughout all parking areas, service areas, and building entries/exits. All light poles shall be 16' or under. All site lighting shall be directed downward and use an appropriate light source to minimize light pollution onto adjacent properties and to adhere to local dark sky ordinance. The use of shields with cut-off fixtures as well as limiting the heights of light poles may be required to limit light levels at the property lines to 0 foot candles.
- 2.5 Grading and Drainage: Retention basins shall be provided to retain all on-site run-off. Retention basins shall be designed and contoured to assume a more natural appearance and to be an integral part of the project

landscape. Where space allows, the use of landscape berms, boulders, and groundcover type plant material shall be encouraged to screen the retention basins.

2.6 Signs: All signs must conform to Chapter 15.24, city sign ordinances for all site plans, conditional uses, planned area developments and other applicable procedures addresses in this title. Any and all requirements pertaining to signs shall comply with Chapter 15.24 of the City of Surprise Zoning Ordinance.

**3. Dimension Requirements**

Lot Area, height, setback and related standards for this district will be as follows:

Land Uses		C-2 & C-3	BP & I-1
Minimum Site Area		1 acre	1 acre
Lot Width		100 ft. (1)	100 ft.
Lot Depth		per Ord.	per Ord.
Maximum Building Coverage		50%	50%
Maximum Height		35 ft.	35 ft.
Minimum Setbacks			
Litchfield Road	Front	35 ft. / 70 ft.(2)	35 ft. / 70 ft.(2)
	Corner Side	25 ft. / 70 ft (3)	30 ft. / 70 ft (4)
Laurel Lane	Front	35 ft. / 70 ft.(2)	35 ft. / 70 ft.(2)
	Corner Side	25 ft. / 70 ft (3)	30 ft. / 70 ft (4)
	Rear	45 ft. / 70 ft (5)	30 ft. / 70 ft (5)
Interior Side Yard		15 ft.	15 ft.
Rear Yard		15 ft.	15 ft. (6. & 7.)

**Notes**

1. Commercial corner lots shall have a minimum width of 150'.
2. 35' from ROW or 70' measured from back of curb per site plan approval.
3. 25' from ROW or 70' measured from back of curb per site plan approval.
4. 30' from ROW or 70' measured from back of curb per site plan approval.
5. 45' Landscape setback from BOC, 70' Building Setback from BOC
6. 100' Landscape setback along west and south boundaries adjacent to R1-43.
7. 70' Building setback from back of curb along Laurel Lane for Lots 10, 11, 12, 13, and 14.  
Lots 1,5,6, 7, and 9 may be reduced to 35' for office and commercial with architecture forward orientation measured from ROW.

Building setbacks and landscape buffers are shown with measurements in accordance with the City of Surprise Ordinances and Guidelines in place at the time of the filing of this Pre-Plat and are subject to change if the applicable Ordinances and Guidelines are modified prior to the approval of the Final Plat."

**4. Property Owners Association / CCR's.**

The Owner will create a Property Owners Association (POA) that will enforce the covenants, conditions, and restrictions (CCR's) to be recorded with the Final Plat. The primary function of the POA will be to serve as the Architectural Design Committee (ADC) to establish pre-development design criteria with prospective users. The ADC will discuss and review building architecture, site improvements, landscaping and screening requirements. The ADC will complete its initial review of a project's preliminary design concepts prior to its application for Site Plan approval in Surprise. Unless otherwise specified by the CC&R's, the Owner will serve as both the POA and the ADC until either (i) the last lot has been sold, or (ii) such date as the Owner shall elect to transfer control of the POA to its Members (lot owners). At the time of either (i) or (ii), the Owner will provide written notice to the POA and the Members.

Common POA amenities such as: entry monumentation, streetscape improvements, and temporary retention basins will initially be maintained by the Owner. All maintenance required for these common POA amenities will be assumed by the POA after either (i) or (ii) above.

**5. Infrastructure / Utilities**

**1. Access / Circulation.**

Primary access into the project is expected to occur at the intersection of Litchfield Road and Cholla Street, which could be signalized. There will be two additional intersections off Litchfield Road at Laurel Lane and W Cameron Drive. The Laurel Lane intersection will be limited to a "three-quarter turn" with the north bound left turning movement being eliminated. The W Cameron Drive intersection will be limited to right-in and right-out only turning movements.

**2. Shared Access.**

The General Development Plan illustrates potential shared access driveways for the entire development. These shared access locations are conceptual locations that address the City's requirement for two points of ingress and egress for all lots. Additional driveways may be approved at a later date subject to the specific requirements of the user and as approved through the City's Site Plan Approval process.

**3. Street Improvements.**

Street improvements will be constructed per City of Surprise standards and in conformance with the Phasing Plan approved with this Preliminary Plat. Right-of-Way dedications and street improvements will occur as referenced on the Preliminary Subdivision Plat prepared by Hunter Engineering and attached in the Appendix.

Litchfield Road: A minor arterial street will have a west half right-of-way width of 55'. Improvements call for a raised median and south bound deceleration lanes at Laurel Lane, W Cameron Drive, and Cholla Street. The current understanding with Staff is that the construction of the median will occur with the PCCP improvements with the understanding that the City will fund their east half improvements. If the City cannot generate their funds, then the median will be deferred until the City decides to improve the east half of Litchfield Road. This deferment will require PCCP to post a bond, with details to be resolved during the Final Plat process.

Laurel Lane: There is an existing 30' south half right-of-way that extends to Sierra Street. In accordance with the City of Surprise's Development Standards, the south half improvements will complete the pavement with curb, gutter, sidewalk and landscaping. Because of the proximity to residential development, there will be a 45' landscape buffer installed from back of curb to a 6' screen wall.

Cholla Street: Is a mid-section collector and ultimately developed with a 60' right-of-way. PCCP will initially dedicate and improve the north half right-of-way of 30'. In order to create the required three lanes of access off Litchfield Road, the right-of-way will taper and expand to 42' north of the centerline/common property line. The south half will be dedicated at a later date by the exception parcel that parallels the entire south side of Cholla Street.

All other internal roads: Will have a 60' right-of-way developed in accordance with City standards.

### **3. Grading and Drainage**

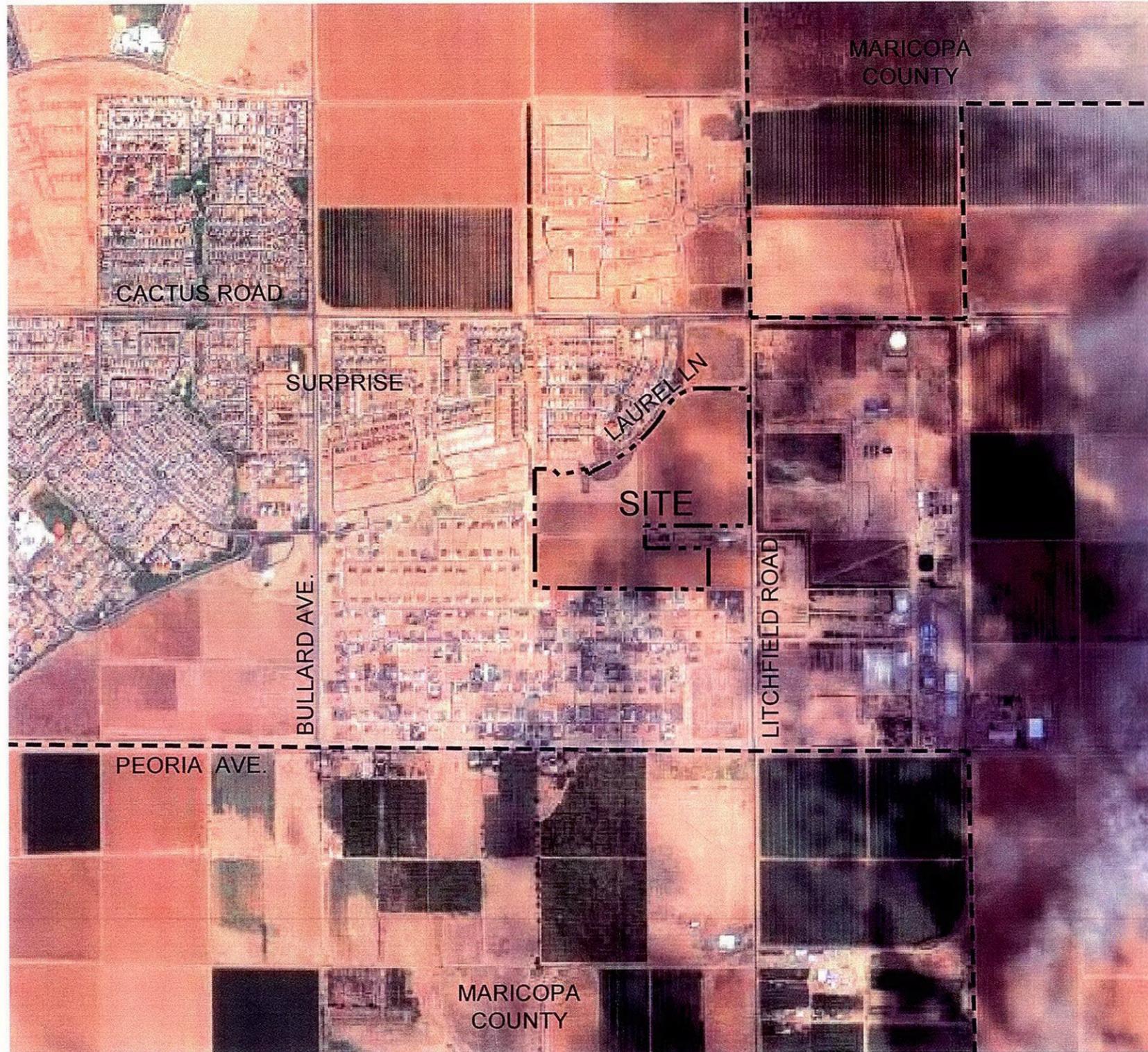
Initial infrastructure improvements will include temporary retention basins to retain all on-site storm run-off. These basins shall be modified as needed with the development of individual lots in accordance with approved plans submitted for Building Permit. Retention basins shall be designed and contoured to assume a more natural appearance and to be an integral part of the project landscape. Where space allows, the use of landscape berms, boulders, and groundcover type plant material shall be encouraged to screen the retention basins. Please refer to the Preliminary Drainage Report and the Preliminary Grading and Drainage Plans prepared by Hunter Engineering and attached in the Appendix.

**4. Water Service.**

A public waterline shall be installed within the interior public streets to provide fire and domestic water service. Three separate connections to the existing water system are proposed in Litchfield Road. Refer to Preliminary Utility Plan prepared by Hunter Engineering in the Appendix for water and sewer line alignments within the project.

**5. Sanitary Sewer Service.**

The project will be serviced by gravity flow to an existing 48-inch sanitary sewer line in Litchfield Road. Lot No. 1 may be served by the existing 8-inch sewer in Laurel Lane if capacity is available and approved by the City of Surprise. Interior lots will be serviced by a proposed 8-inch sewer line within the proposed interior public streets right-of-way. A 12-inch sewer line is proposed for the final portion of the sewer main in Cholla Street prior to the connection in Litchfield Road. The size of the proposed sewer lines are based on the estimated sewer demands for the development. See Conceptual Utility plan for additional information.



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# Palo Cristi Commerce Park

Surprise, Arizona

Prepared For: Palo Cristi, LLC

Exhibit A  
Vicinity Map

Job # 07081  
Date: 11/7/07



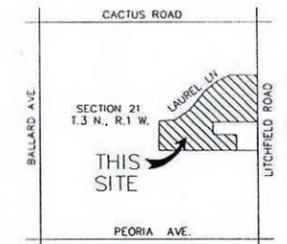
GILMORE PARSONS  
LAND DESIGN GROUP  
2211 N. 7th Street, Phoenix, AZ 85006  
T 602.266.5622 F 602.266.5707  
www.gilmore.com

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FEB 25 2008  
COMMUNITY DEVELOPMENT

ALTA/ACSM LAND TITLE SURVEY

A PORTION OF THE EAST HALF OF SECTION 21, TOWNSHIP 3 NORTH, RANGE 1 WEST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.



VICINITY MAP:

NO.	DATE	REVISION	BY
1	10/07	UPDATED TITLE REPORT	JOH

PURPOSE:  
A.L.T.A. SURVEY

DESIGN BY: SD  
DRAWN BY: GRB  
CHECKED BY: JOH

LEGAL DESCRIPTION: (EXHIBIT "A")

A PART OF THE EAST HALF OF SECTION 21, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 21 FROM WHICH THE EAST QUARTER CORNER BEARS SOUTH 00 DEGREES 00 MINUTES 53 SECONDS WEST, 2635.05 FEET;

THENCE SOUTH 00 DEGREES 00 MINUTES 53 SECONDS WEST ALONG THE EAST LINE OF SAID SECTION 21, 2529.94 FEET;

THENCE NORTH 89 DEGREES 35 MINUTES 35 SECONDS WEST, 33.00 FEET TO THE WESTERLY RIGHT OF WAY LINE OF LITCHFIELD ROAD AND THE TRUE POINT OF BEGINNING;

THENCE CONTINUING NORTH 89 DEGREES 35 MINUTES 35 SECONDS WEST, 1276.95 FEET;

THENCE SOUTH 00 DEGREES 34 MINUTES 04 SECONDS EAST, 278.39 FEET;

THENCE SOUTH 89 DEGREES 44 MINUTES 23 SECONDS EAST, 771.95 FEET;

THENCE SOUTH 00 DEGREES 00 MINUTES 44 SECONDS WEST, 518.70 FEET;

THENCE NORTH 89 DEGREES 20 MINUTES 02 SECONDS WEST, 2107.82 FEET ALONG THE NORTH LINE OF A PARCEL DESCRIBED IN INSTRUMENT NO. 94-399048 TO THE NORTH/SOUTH MID-SECTION LINE ALSO DESCRIBED IN SAID INSTRUMENT NO. 94-399048;

THENCE NORTH 00 DEGREES 01 MINUTES 47 SECONDS WEST ALONG SAID MID-SECTION LINE 1451.15 FEET;

THENCE NORTH 89 DEGREES 58 MINUTES 42 SECONDS EAST, 0.36 FEET TO THE SOUTHWEST CORNER OF KENLY FARMS I, ACCORDING TO BOOK 641 OF MAPS, PAGE 14 OF THE OFFICIAL RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE CONTINUING NORTH 89 DEGREES 58 MINUTES 42 SECONDS EAST, 223.00 FEET;

THENCE SOUTH 45 DEGREES 04 MINUTES 17 SECONDS EAST, 106.25 FEET TO A NON-TANGENT CURVE CONCAVE TO THE SOUTH, HAVING A RADIUS OF 12.00 FEET, THE CENTER OF WHICH BEARS SOUTH 45 DEGREES 04 MINUTES 16 SECONDS EAST;

THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 36 DEGREES 03 MINUTES 06 SECONDS, AN ARC LENGTH OF 7.55 FEET, TO A REVERSE CURVE HAVING A RADIUS OF 1782.60 FEET;

THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 10 DEGREES 26 MINUTES 09 SECONDS, AN ARC LENGTH OF 324.70 FEET;

THENCE SOUTH 20 DEGREES 15 MINUTES 32 SECONDS EAST, 50.05 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 575.00 FEET;

THENCE SOUTHERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 02 DEGREES 44 MINUTES 47 SECONDS, AN ARC LENGTH OF 27.56 FEET;

THENCE NORTH 72 DEGREES 29 MINUTES 15 SECONDS EAST, 50.00 FEET;

THENCE NORTH 25 DEGREES 08 MINUTES 47 SECONDS EAST, 28.99 FEET TO A NON-TANGENT CURVE CONCAVE TO THE NORTH HAVING A RADIUS OF 1842.70 FEET, THE CENTER OF WHICH BEARS NORTH 21 DEGREES 39 MINUTES 20 SECONDS WEST;

THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 37 DEGREES 39 MINUTES 56 SECONDS, AN ARC LENGTH OF 1211.37 FEET, TO A REVERSE CURVE HAVING A RADIUS OF 470.00 FEET;

THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 60 DEGREES 05 MINUTES 44 SECONDS, AN ARC LENGTH OF 492.97 FEET;

THENCE SOUTH 89 DEGREES 13 MINUTES 32 SECONDS EAST, 547.99 FEET;

THENCE SOUTH 44 DEGREES 36 MINUTES 22 SECONDS EAST, 28.47 FEET;

THENCE SOUTH 89 DEGREES 59 MINUTES 11 SECONDS EAST, 22.07 FEET TO THE WESTERLY RIGHT OF WAY LINE OF LITCHFIELD ROAD;

THENCE SOUTH 00 DEGREES 00 MINUTES 53 SECONDS EAST, 1635.50 FEET TO THE TRUE POINT OF BEGINNING.

BENCHMARK:

AGS DISK STAMPED, LITCH 1986, SET IN CONCRETE MOUND, FROM THE INTERSECTION OF BELL ROAD & GRAND AVENUE, GO NORTHWEST 1.25 MILES ALONG GRAND AVENUE. THE STATION IS LOCATED ALONG RAILROAD TRACK 39.0' SOUTHWEST FROM FENCE, 69.0' NORTHEAST FROM NORTH RAILROAD TRACK, 4.0' NORTHWEST FROM WITNESS POST & SIGN, 4.0' SOUTHEAST FROM WITNESS POST & SIGN-USGS QUAD MAP, CALDERWOOD BUTTE (1981) DESIGNATION, LITCH, P.L.D. # DV2241. ELEV.=1235.00, (NGS DATUM)

SCHEDULE "B" ITEMS:

A PLAT RECORDED IN BOOK 10 OF ROAD MAPS, PAGE 38, PURPORTING TO SHOW A COUNTY ROADWAY (SHOWN - NOT INCLUDED IN SCHEDULE "B" EXCEPTIONS)

- 1) ANY CHARGE UPON THE LAND BY REASON OF ITS INCLUSION IN MCWICKEN IRRIGATION DISTRICT.
- 2) RESERVATIONS OR EXCEPTIONS IN PATENTS, OR IN ACTS AUTHORIZING THE ISSUANCE THEREOF.
- 3) WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT SHOWN BY THE PUBLIC RECORDS.
- 4) THE TERMS, CONDITIONS, LIABILITIES AND OBLIGATIONS CONTAINED IN THE DOCUMENT ENTITLED DEVELOPMENT AGREEMENT KENLY FARMS RECORDED MARCH 14, 2003 AS 2003-315678, OF OFFICIAL RECORDS. (NOT PLOTTABLE)
- 5) THE TERMS, CONDITIONS, LIABILITIES AND OBLIGATIONS CONTAINED IN THE DOCUMENT ENTITLED DRAINAGE AND MAINTENANCE EASEMENT AGREEMENT RECORDED 11/7/2005 AS 2005-1685840, OF OFFICIAL RECORDS. (AS SHOWN)
- 6) THE TERMS, CONDITIONS, LIABILITIES AND OBLIGATIONS CONTAINED IN THE DOCUMENT ENTITLED DRAINAGE AND MAINTENANCE EASEMENT AGREEMENT RECORDED 11/7/2005 AS 2005-1686637, OF OFFICIAL RECORDS. (AS SHOWN)
- 7) THE TERMS, CONDITIONS, LIABILITIES AND OBLIGATIONS CONTAINED IN THE DOCUMENT ENTITLED DRAINAGE AND MAINTENANCE EASEMENT AGREEMENT RECORDED 11/7/2005 AS 2005-1686645, OF OFFICIAL RECORDS. (AS SHOWN)
- 8) "RECORDED DISCLOSURE FOR TERRITORY IN THE VICINITY OF MILITARY AIRPORT" RECORDED AUGUST 14, 2001 AS 2001-743413, OF OFFICIAL RECORDS. (BLANK EASEMENT)
- 9) ADVERSE MATTERS THAT MAY BE REVEALED BY AN INSPECTION OF THE LAND. (NOTE: THIS EXCEPTION WILL BE AMENDED OR DELETED UPON THE SUBMISSION OF THE CORRESPONDING DOCUMENTS REQUIRED IN SCHEDULE B, REQUIREMENTS.
- 10) ANY FACTS, RIGHTS, INTERESTS OR CLAIMS THAT WOULD BE DISCLOSED BY A CORRECT ALTA/ACSM SURVEY.
- 11) ANY RIGHTS, INTEREST OR CLAIMS OF PARTIES IN POSSESSION OF THE LAND NOT SHOWN BY THE PUBLIC RECORDS.

PERTINENT DOCUMENTS USED:

- (R1) COMMITMENT FOR TITLE INSURANCE PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY FILE NO. 071417, DATED OCTOBER 15, 2007 AND CORRESPONDING ALTA/ACSM LAND TITLE SURVEY PREPARED BY HIGH MOUNTAIN SURVEYING AND MAPPING, SIGNED AND SEALED BY PAUL A. CULVER, L.S. #29868 ON MARCH 14, 2006.
- (R2) COMMITMENT FOR TITLE INSURANCE PREPARED BY NORTH AMERICAN TITLE INSURANCE ORDER NO. AZ-06-20003253(A) AND CORRESPONDING ALTA/ACSM LAND TITLE SURVEY PREPARED BY LAND SURVEY SERVICES, SIGNED AND SEALED BY THOMAS L. ROPE, L.S. #29868 ON SEPTEMBER 26, 2006.
- (R3) FINAL PLAT FOR KENLY FARMS, ACCORDING TO THE PLAT THEREOF RECORDED IN BOOK 641 OF MAPS, PAGE 14, MARICOPA COUNTY RECORDS, ARIZONA.
- (R4) FINAL PLAT MOUNTAIN GATE PHASE 1 AND PHASE 2, ACCORDING TO THE PLAT THEREOF RECORDED IN BOOK 608 OF MAPS, PAGE 41, MARICOPA COUNTY RECORDS, ARIZONA.
- (R5) FINAL PLAT MOUNTAIN GATE PHASE 3 AND PHASE 4, ACCORDING TO THE PLAT THEREOF RECORDED IN BOOK 662 OF MAPS, PAGE 18, MARICOPA COUNTY RECORDS, ARIZONA.
- (R6) FINAL PLAT MOUNTAIN GATE PHASE 5, ACCORDING TO THE PLAT THEREOF RECORDED IN BOOK 669 OF MAPS, PAGE 15, MARICOPA COUNTY RECORDS, ARIZONA.
- (R7) PLSS SUBDIVISION RECORD OF SURVEY / MARICOPA COUNTY GEODETIC DENSIFICATION AND CADASTRAL SURVEY RECORDED IN BOOK 688 OF MAPS, PAGE 41, MARICOPA COUNTY RECORDS, ARIZONA.

NOTES:

1. ALL TITLE INFORMATION IS BASED ON A COMMITMENT FOR TITLE INSURANCE ISSUED BY NORTH AMERICAN TITLE COMPANY, ORDER NO. AZ-06-20003112(A), EFFECTIVE DATE: MAY 18, 2006, AT 7:50 A.M. AND ORDER NO. AZ-06-20003253(A), EFFECTIVE DATE AUGUST 15, 2006 AT 7:50 A.M.
2. THE UNDERGROUND UTILITIES HAVE BEEN SHOWN BASED ON RECORDS PROVIDED BY THE RESPECTIVE UTILITY COMPANIES WITHOUT VERIFICATION BY THE SURVEYOR; THEREFORE, NO GUARANTEE CAN BE MADE AS TO THE EXTENT OF THE UTILITIES AVAILABLE, EITHER IN SERVICE ABANDONED, NOR TO THEIR EXACT LOCATION. PLEASE CALL "BLUE-STAKE" AT 602-263-1100 PRIOR TO ANY EXCAVATION.
3. BASIS OF BEARING FOR THIS SURVEY IS THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 3 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, AS DEPICTED ON THE PLSS SUBDIVISION RECORD OF SURVEY / MARICOPA COUNTY GEODETIC DENSIFICATION AND CADASTRAL SURVEY RECORDED IN BOOK 688 OF MAPS, PAGE 41, MARICOPA COUNTY RECORDS, ARIZONA. A BEARING OF SOUTH 00°01'23" WEST WAS USED.
4. THE LEGAL DESCRIPTION AS EXHIBIT "A" PER COMMITMENT FILE NO. 071417, PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY AND THE ALTA/ACSM LAND TITLE SURVEY PREPARED BY PAUL A. CULVER, BOTH RESULT IN THE WEST LINE OF THE PROPERTY BEING 0.27 FEET WEST OF THE NORTH-SOUTH MID SECTION LINE AT THE SOUTHWEST CORNER OF THE SUBJECT PROPERTY AND 0.36 FEET WEST OF THE NORTH-SOUTH MID SECTION LINE AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY. THE LEGAL DESCRIPTIONS FOR THE RECORDED FINAL PLATS OF MOUNTAIN GATE PHASES 3, 4, AND 5, CALL OUT THE NORTH-SOUTH MID SECTION LINE AS BEING THE EAST LINE BOUNDARY OF THE OF ALL 3 PHASES OF THE SUBDIVISION. THEREFORE THE WEST BOUNDARY LINE OF THE SUBJECT PROPERTY AS DEPICTED ON THE SURVEY IS THE NORTH-SOUTH MID SECTION LINE TO ELIMINATE ANY OVERLAPS - ENCROACHMENTS OF TITLE.
5. THE SURVEYOR HAS MADE NO ATTEMPT AND HAS NOT OBTAINED ANY INFORMATION RELATING TO, AND HAS NO KNOWLEDGE OF ANY PROPOSED RIGHT-OF-WAYS, EASEMENTS, OR DEDICATIONS THAT ANY MUNICIPALITY, INDIVIDUAL OR GOVERNMENTAL AGENCY MAY HAVE MADE OR MAY REQUIRE.
6. USE OF THE INFORMATION, CONTAINED IN THIS ALTA/ACSM LAND TITLE SURVEY, FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS INTENDED ("TITLE INSURANCE MATTERS"), IS FORBIDDEN, UNLESS EXPRESSLY PERMITTED IN WRITING IN ADVANCE BY HUNTER ENGINEERING, INC. AND THEREFORE SHALL HAVE NO LIABILITY FOR ANY SUCH UNAUTHORIZED USE.

FEMA CERTIFICATION:

THE CURRENT FEMA FLOOD INSURANCE RATE MAP (FIRM) FOR THIS AREA, (MAP NUMBER 040130605 J, EFFECTIVE DATE, SEPTEMBER 30, 2005), SHOWS THIS PROPERTY IS IN FLOOD HAZARD ZONE "X". ZONE "X" IS DEFINED AS AREAS OF 20% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

SURVEYOR'S CERTIFICATION:

TO:  
PALO CRISTI PROPERTIES, L.L.C., AN ARIZONA LIMITED LIABILITY COMPANY & FIRST AMERICAN TITLE INSURANCE COMPANY.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT WAS BASED WERE MADE IN ACCORDANCE WITH "MINIMUM STANDARDS DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS IN 2005, AND INCLUDES ITEMS 1,6,8,10,11(b), 16,17 & 18 OF TABLE A THEREOF, PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION; UNDERSIGNED FURTHER CERTIFIES THAT THE SURVEY WAS MADE UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE ARIZONA MINIMUM STANDARDS AS SET FORTH AND ADOPTED BY THE ARIZONA PROFESSIONAL LAND SURVEYORS ASSOCIATION IN 2002.

CIVIL AND SURVEY

HUNTER ENGINEERING

10450 N. 74TH STREET, SUITE 200  
SCOTTSDALE, AZ 85258  
F. 480.981.3886

ALTA/ACSM LAND TITLE SURVEY

A PORTION OF THE EAST HALF OF SECTION 21, TOWNSHIP 3 NORTH, RANGE 1 WEST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

SECTION: 06  
TWN: 3N  
RANGE: 5E

JOB NO.:  
PAL0001-SA

SCALE  
1"=120'

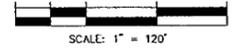
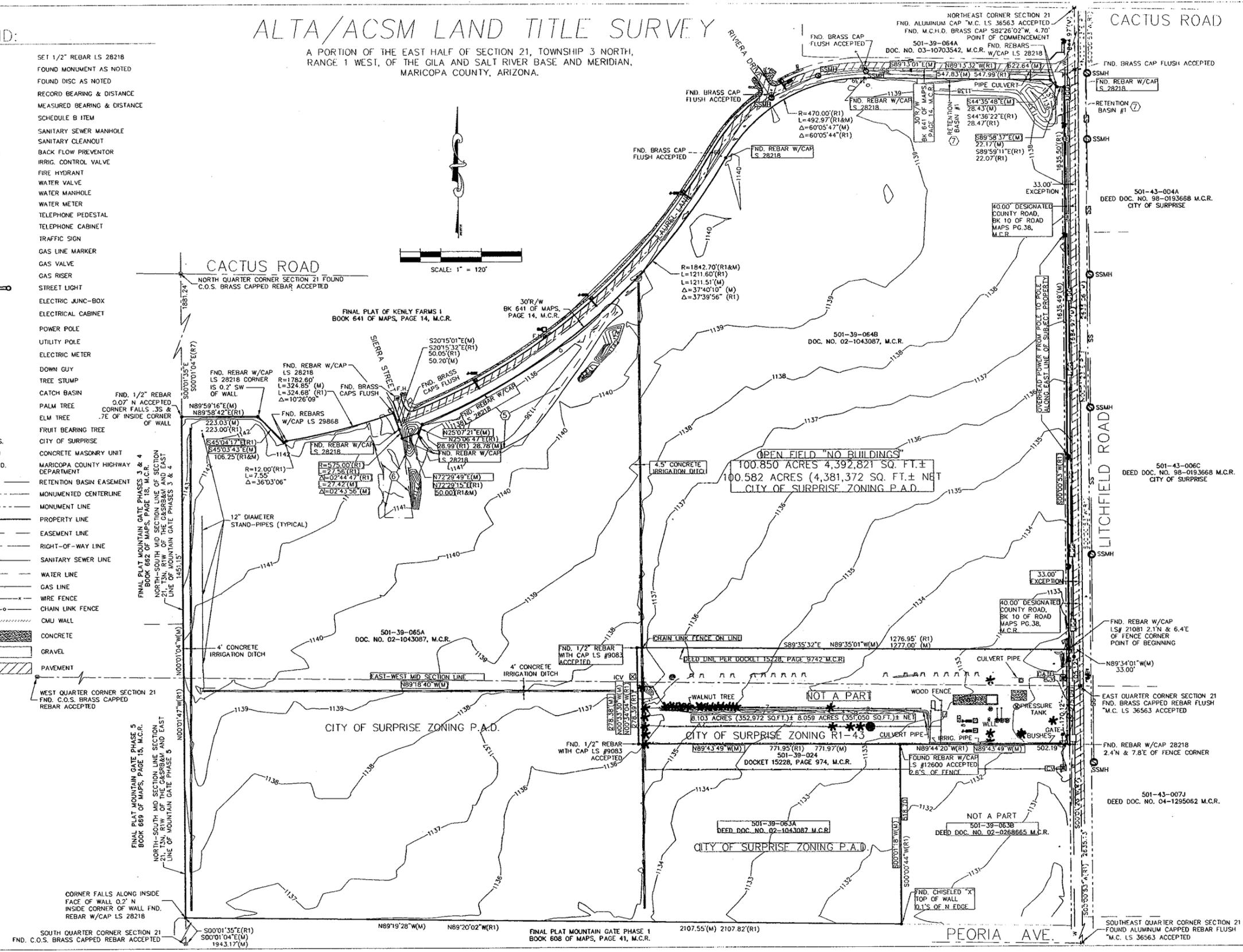
SHEET  
1 OF 2

**LEGEND:**

- SET 1/2" REBAR LS 28218
- FOUND MONUMENT AS NOTED
- ⊕ FOUND DISC AS NOTED
- (R) RECORD BEARING & DISTANCE
- (M) MEASURED BEARING & DISTANCE
- Ⓢ SCHEDULE B ITEM
- ⊙ SANITARY SEWER MANHOLE
- ⊙ SANITARY CLEANOUT
- ⊙ BACK FLOW PREVENTOR
- ⊙ IRRIG. CONTROL VALVE
- ⊙ FIRE HYDRANT
- ⊙ WATER VALVE
- ⊙ WATER MANHOLE
- ⊙ WATER METER
- ⊙ TELEPHONE PEDESTAL
- ⊙ TELEPHONE CABINET
- ⊙ TRAFFIC SIGN
- ⊙ GAS LINE MARKER
- ⊙ GAS VALVE
- ⊙ GAS RISER
- ⊙ STREET LIGHT
- ⊙ ELECTRIC JUNC.-BOX
- ⊙ ELECTRICAL CABINET
- ⊙ POWER POLE
- ⊙ UTILITY POLE
- ⊙ ELECTRIC METER
- ⊙ DOWN GUY
- ⊙ TREE STUMP
- ⊙ CATCH BASIN
- ⊙ FND. 1/2" REBAR 0.07' N ACCEPTED CORNER FALLS 35' & 7E OF INSIDE CORNER OF WALL
- ⊙ PALM TREE
- ⊙ ELM TREE
- ⊙ FRUIT BEARING TREE
- ⊙ C.O.S.
- ⊙ CMU
- ⊙ M.C.H.D.
- RETENTION BASIN EASEMENT
- MONUMENTED CENTERLINE
- MONUMENT LINE
- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SS SANITARY SEWER LINE
- W WATER LINE
- UGG GAS LINE
- WIRE FENCE
- CHAIN LINK FENCE
- CMU WALL
- CONCRETE
- GRAVEL
- PAVEMENT

# ALTA/ACSM LAND TITLE SURVEY

A PORTION OF THE EAST HALF OF SECTION 21, TOWNSHIP 3 NORTH, RANGE 1 WEST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.



NO.	DATE	REVISION	BY
1	10/07	UPDATED TITLE REPORT	JDH

DESIGN BY: SD  
DRAWN BY: GRB  
CHECKED BY: JDH

CIVIL AND SURVEY  
**HUNTER ENGINEERING**  
10450 N. 74TH STREET, SUITE 200  
SCOTTSDALE, AZ 85258  
F 480 981 3986

501-43-004A  
DEED DOC. NO. 98-0193668 M.C.R.  
CITY OF SURPRISE

ALTA/ACSM LAND TITLE SURVEY  
A PORTION OF THE EAST HALF OF SECTION 21, TOWNSHIP 3 NORTH, RANGE 1 WEST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

SECTION: 21  
TOWNSHIP: 3N  
RANGE: 1W

JOB NO.:  
PAL0001-SA

SCALE:  
1"=120'

SHEET  
2 OF 2

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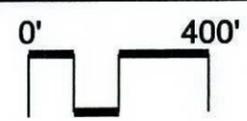
# Palo Cristi Commerce Park

Surprise, Arizona

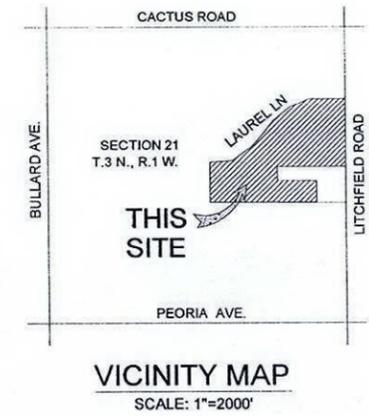
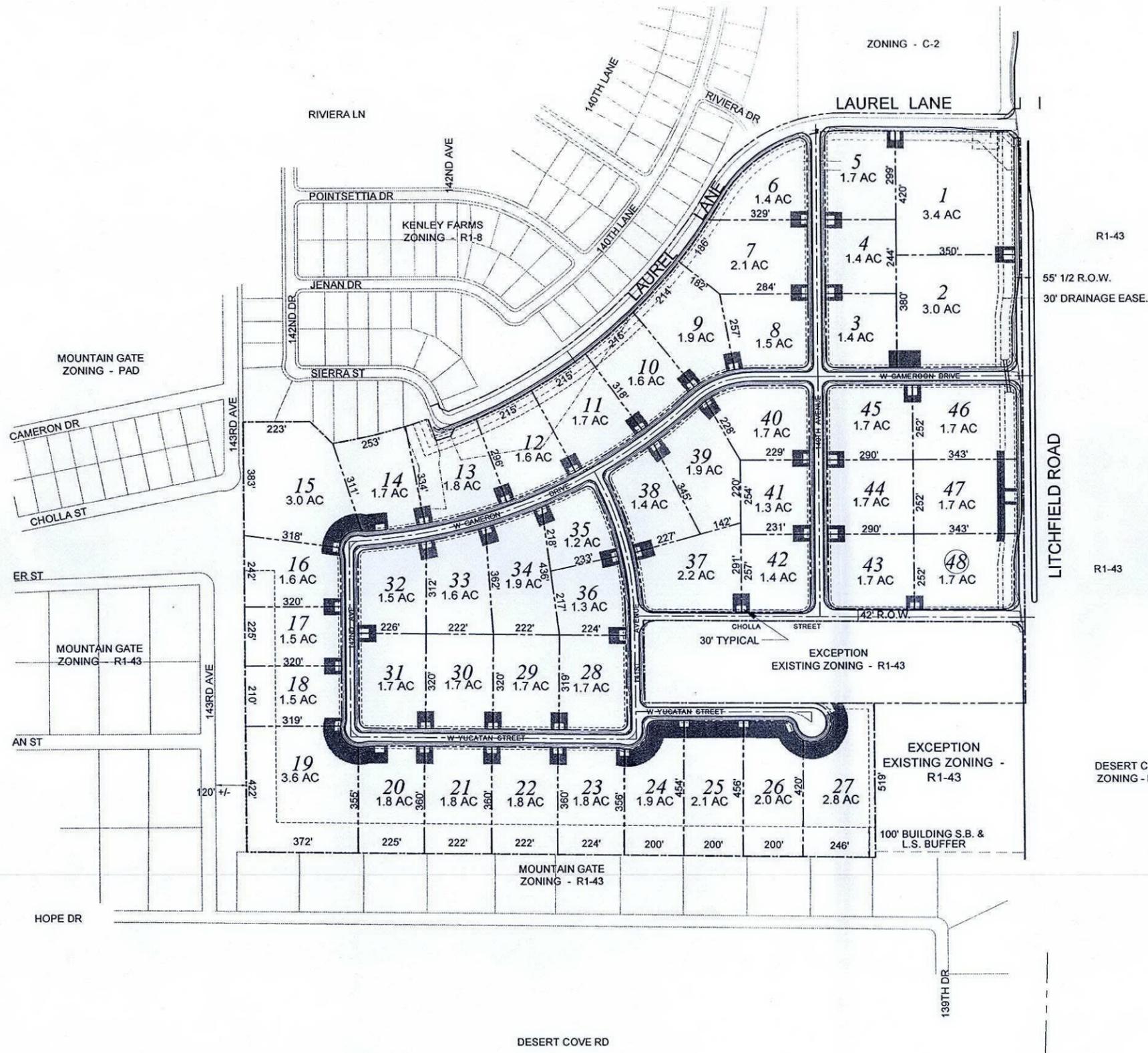
Exhibit C  
Existing Conditions and Surrounding Land Uses

Prepared For: Palo Cristi, LLC

Job # 07081  
Date: 11/7/07



**GILMORE PARSONS**  
LAND DESIGN GROUP  
2111 N. 7th Street, Phoenix, AZ 85006  
T 602.266.5622 F 602.266.5707  
www.gilmore.com



<b>Site Data:</b>	
Gross Ac	100.86
Net Developable	98.00
Existing Zoning	PAD

■ Shared Access

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FEB 25 2008  
COMMUNITY DEVELOPMENT

# Palo Cristi Commerce Park

Surprise, Arizona

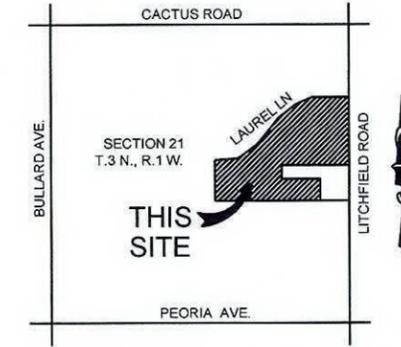
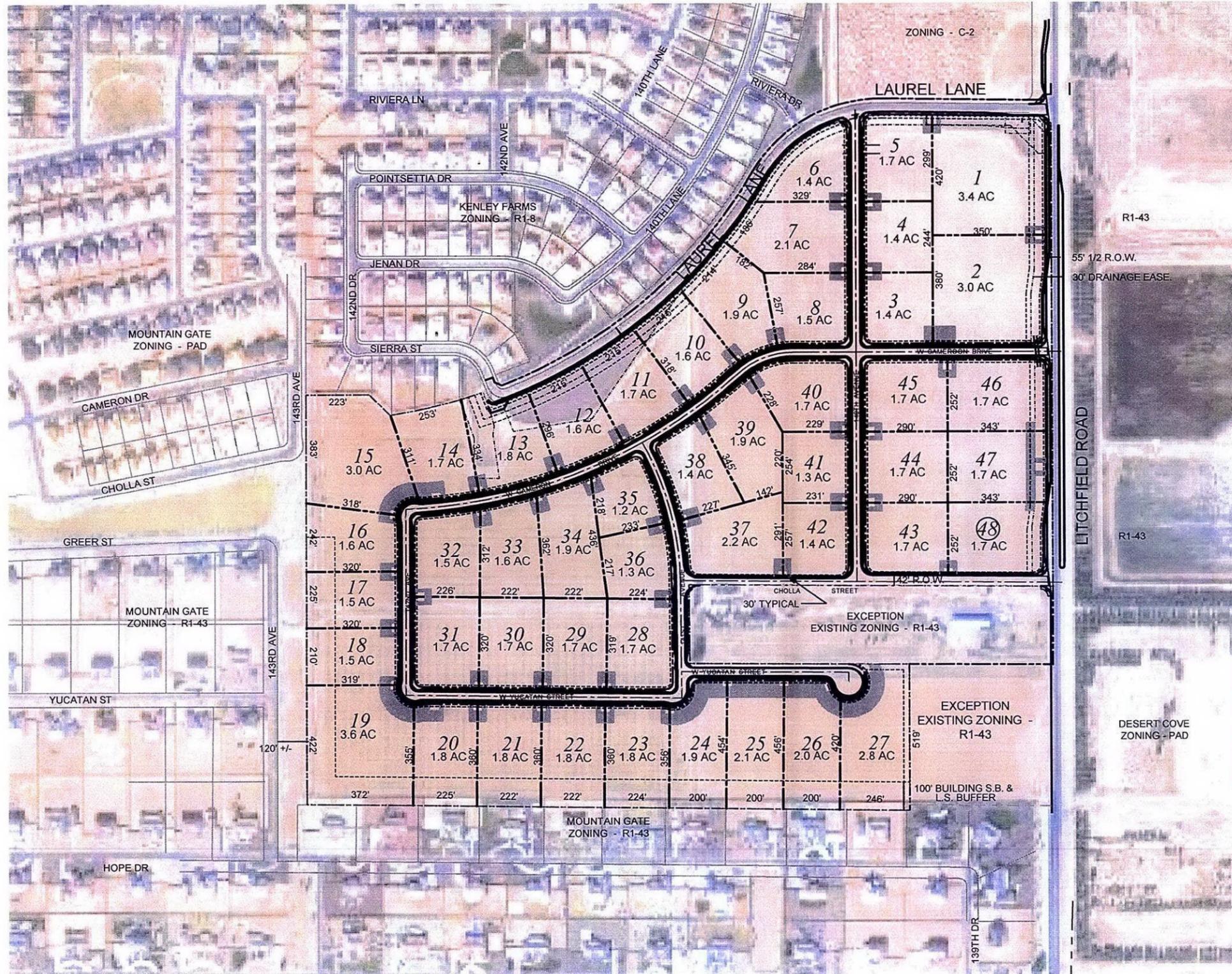
Exhibit D  
General Development & Shared Access Plan

Prepared For: Palo Cristi, LLC

Job # 07081  
Date: 1/24/08



**GILMORE PARSONS**  
LAND DESIGN GROUP  
2211 N. 7th Street, Phoenix, AZ 85006  
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www.gilmore.com



VICINITY MAP  
SCALE: 1"=2000'

Site Data:	
Gross Ac	100.86
Net Developable	98.00
Existing Zoning	PAD

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FEB 25 2008

COMMUNITY  
DEVELOPMENT

# Palo Cristi Commerce Park

Surprise, Arizona

Exhibit E  
General Development Plan with Aerial

Prepared For: Palo Cristi, LLC

Job # 07081  
Date: 11/7/07

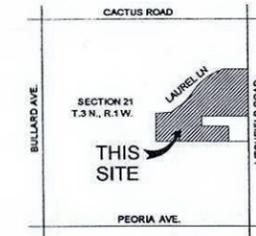


GILMORE PARSONS  
LAND DESIGN GROUP  
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T 602.266.5022 F 602.266.5707  
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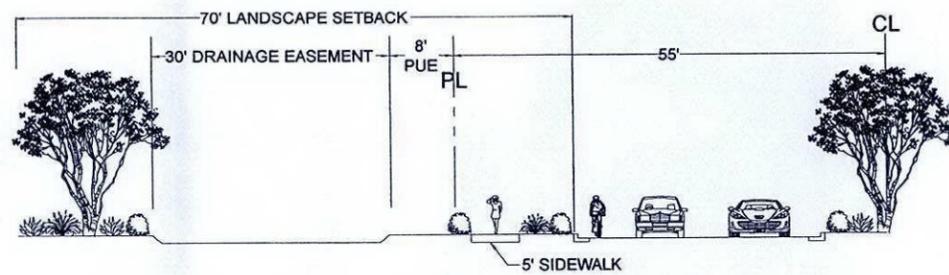
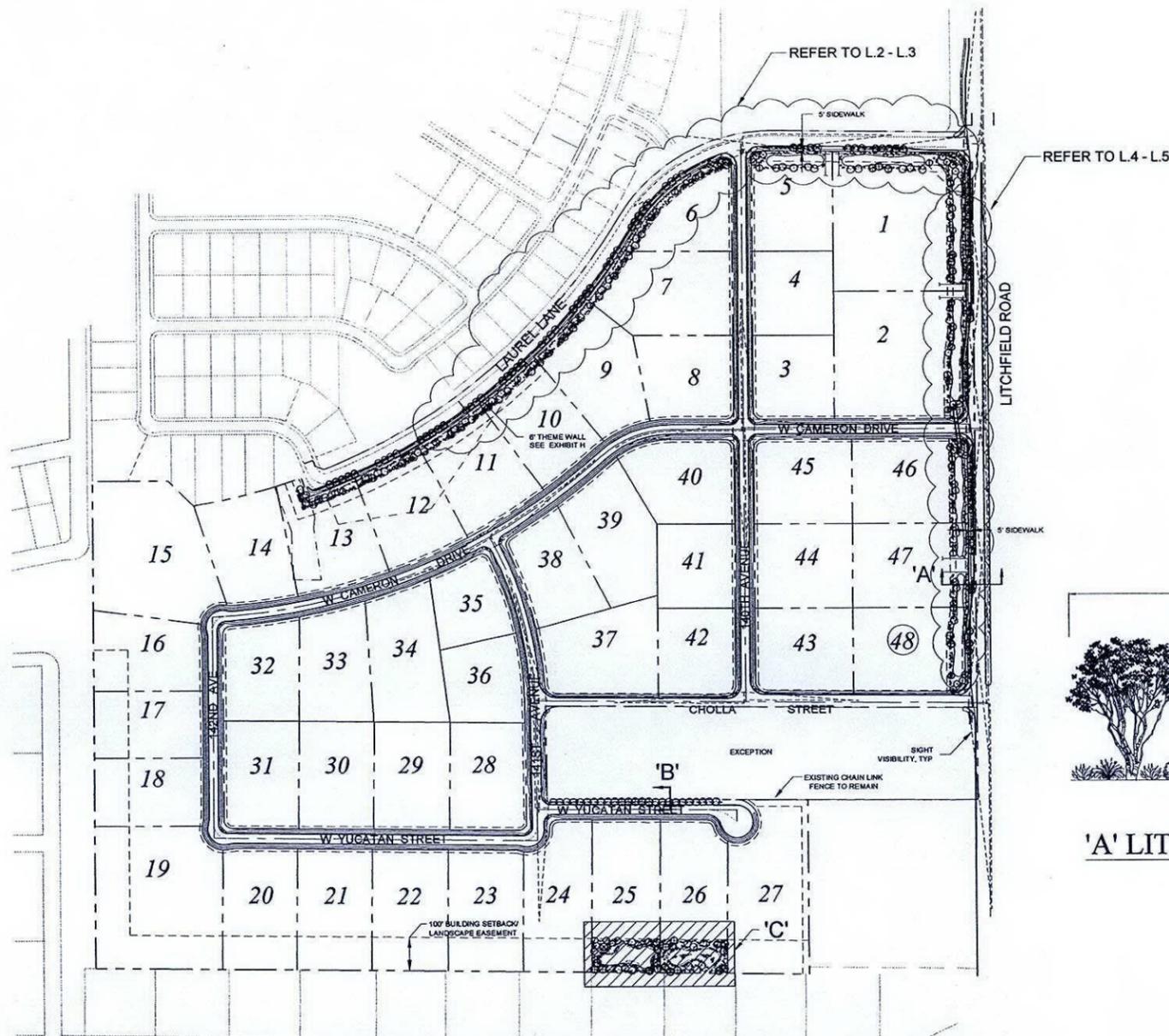
**PLANT SCHEDULE**

SYMBOL	BOTANICAL /COMMON NAME	SIZE	QTY.
<b>TREES</b>			
▲	CERCIDIUM HYBRID DESERT MUSEUM	24" BOX	35
○	OLEA EUROPAEA SWAN HILL OLIVE	36" BOX	58
○	PINUS ELDORICA MONDEL PINE	48" BOX	23
○	PROSOPIS CHILENSIS 'THORNLESS' THORNLESS CHILEAN MESQUITE	48" BOX	91
<b>SHRUBS</b>			
⊗	CAESALPINIA PULCHERRIMA RED BIRD OF PARADISE	5 GAL	156
⊕	DOODONAEA VISCOSEA HOPSEED BUSH	5 GAL	156
⊙	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD' GREEN CLOUD SAGE	5 GAL	276
⊙	LEUCOPHYLLUM LANGMANIAE 'RIO BRAVO' RIO BRAVO SAGE	5 GAL	147
⊙	BOUGAINVILLEA 'BARBARA KARST' BARBARA KARST BOUGAINVILLEA	5 GAL	45
⊙	RUELLIA PENINSULARIS BAJA REULLIA	5 GAL	129
<b>ACCENTS</b>			
⊙	HESPERALOE PARVIFLORA RED YUCCA	5 GAL	134
⊙	MUHLENBERGIA CAPILARIS 'REGAL MIST' REGAL MIST DEER GRASS	5 GAL	166
<b>GROUND COVER</b>			
⊙	CYNODON DACTYLON 'MIDIRON' MIDIRON HYBRID BERMUDA	SOD	
⊙	DALEA GREGGII TRAILING INDIGO BUSH	1 GAL	270
⊙	LANTANA SPP. 'NEW GOLD' LANTANA	1 GAL	482
<b>MATERIAL</b>			
—	CONCRETE HEADER	6" x 6" CURBSTYLE	
—	DECOMPOSED GRANITE 'DESERT GOLD'	3/4" SCREENED	

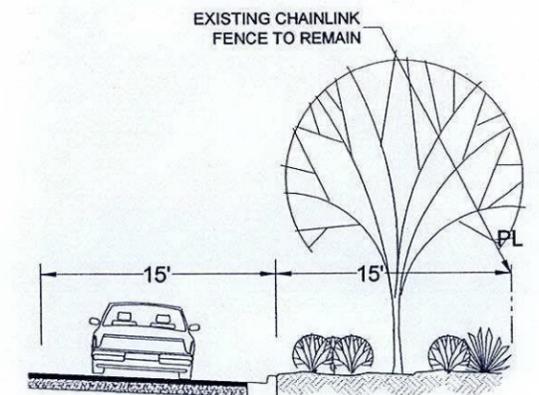


**VICINITY MAP**  
SCALE: 1"=200'

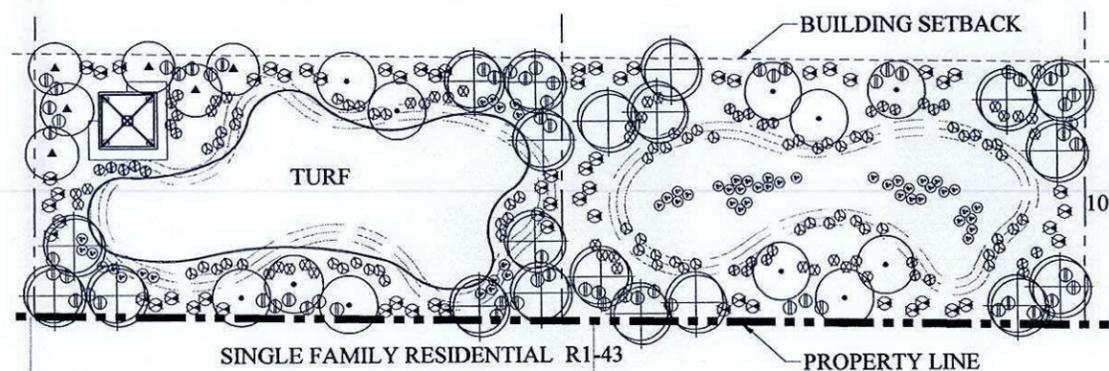
LANDSCAPE PLANTINGS	REQUIRED	PROVIDED
RIGHT OF WAY LANDSCAPE PLANTINGS		
F. TREES: 1 PER 20 FT. OF STREET FRONTAGE (INCLUDES EXISTING LANDSCAPE IN ROW)	189 TREES	207 TREES
G. SHRUBS: 2 PER 20 FT. OF STREET FRONTAGE (INCLUDES EXISTING LANDSCAPE IN ROW)	378 SHRUBS	913 SHRUBS
H. SHRUB AND GROUND COVER AREA 25%	25%	72%
PARKING SPACE PLANTING		
I. TREES: 1 PER 8 PARKING SPACES	N/A	N/A
TOTAL TREE MINIMUM SIZES		
J. 20% - 24" BOX	43 TREES	35 TREES
30% - 36" BOX	65 TREES	58 TREES
50% - 48" BOX	108 TREES	114 TREES



**'A' LITCHFIELD ROAD BUFFER**  
SCALE: 1:10



**'B' STREET SECTION**  
SCALE: 1:5



**'C' TYPICAL RESIDENTIAL SETBACK BUFFER**  
SCALE: 1:30

**NOTE:**  
 AN AUTOMATIC IRRIGATION SYSTEM WILL BE PROVIDED FOR ALL LANDSCAPED AREAS. IRRIGATION SYSTEM WILL BE IN COMPLIANCE WITH CITY OF SUPRISE WATER UTILIZATION AND CONSERVATION GUIDELINES

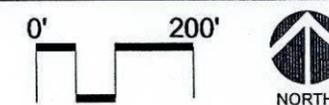


**Palo Cristi Commerce Park** Surprise, Arizona  
 Prepared For: Palo Cristi, LLC

Exhibit F  
 Master Landscape Plan/Sections

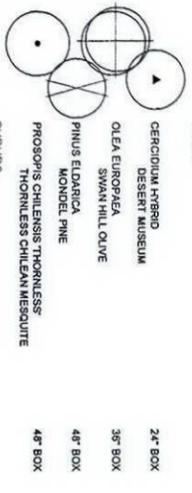


Job # 07027  
 Date: 1/24/08



# PLANT SCHEDULE

SYMBOL BOTANICAL / COMMON NAME SIZE

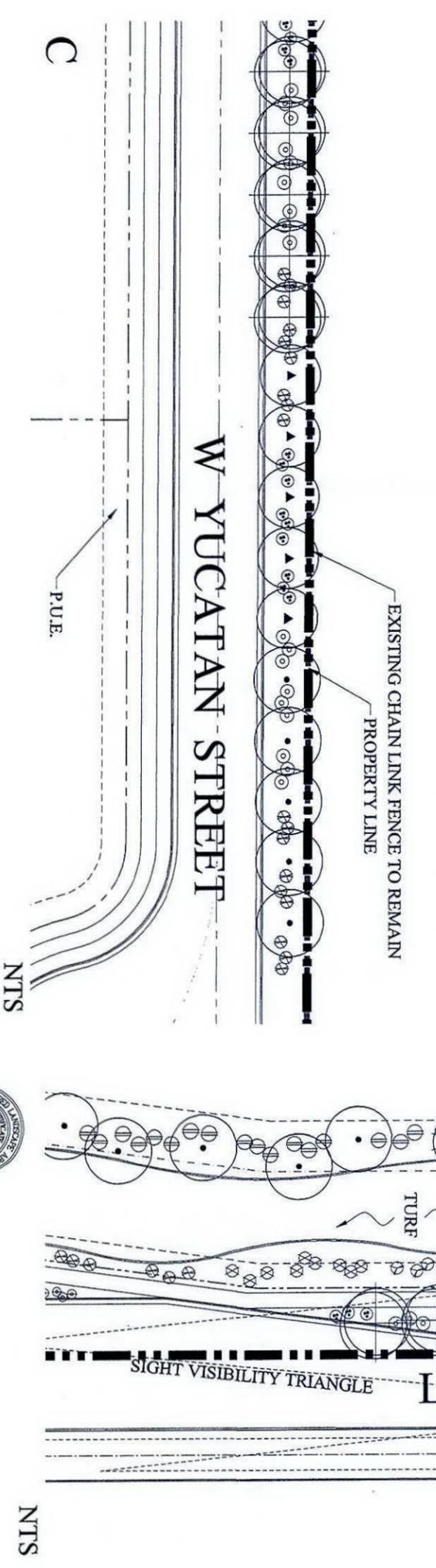
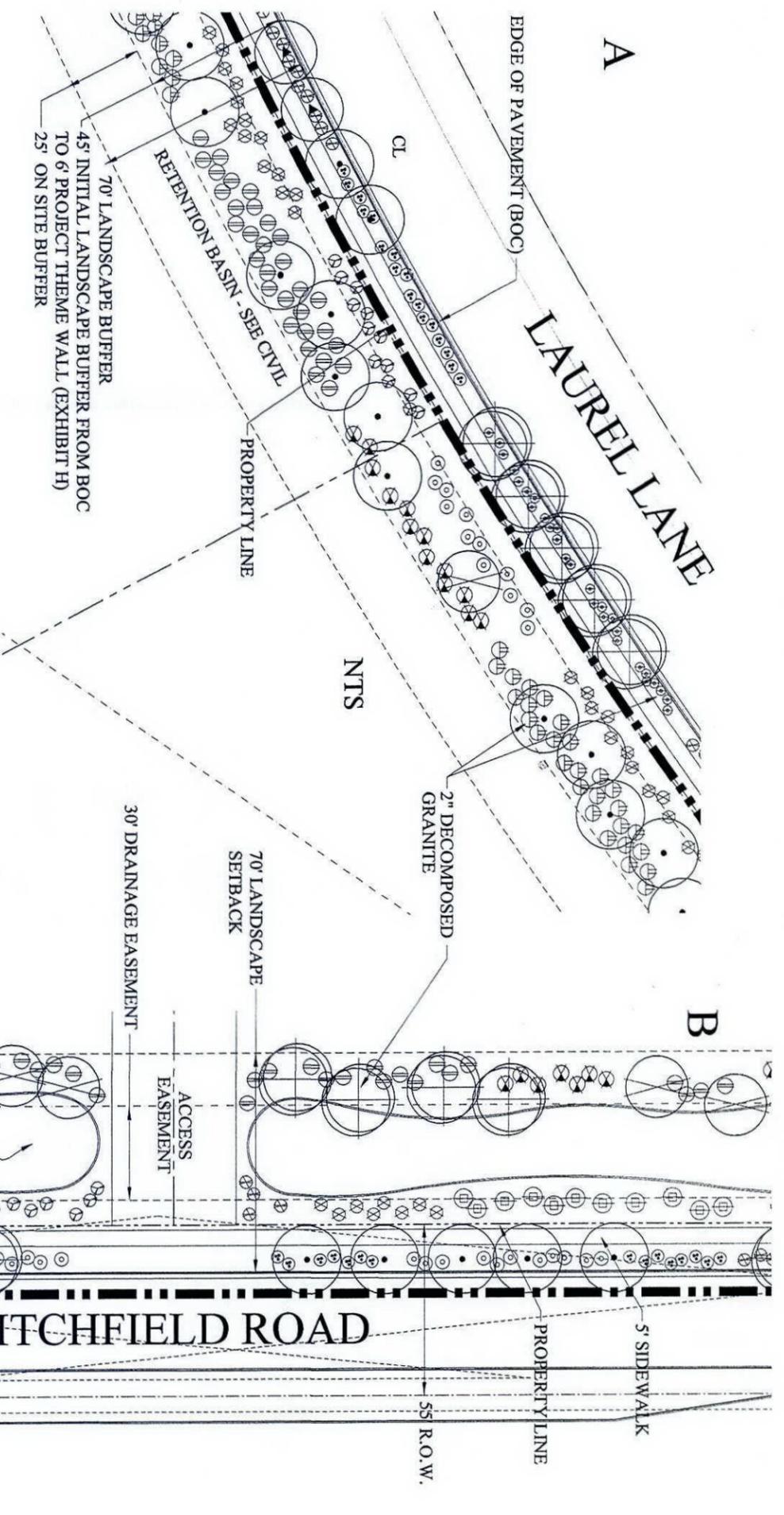


SYMBOL	BOTANICAL / COMMON NAME	SIZE
▲	CERCIUM HOBBO DESERT MUSEUM	24" BOX
○	OLEA EUROPAEA SWAN HILL OLIVE	36" BOX
○	PIRUS ELDARICA MONDEL PINE	48" BOX
○	PROSORIS CHLSENSIS THORNLESS THORNLESS CHILEAN MESQUITE	48" BOX
○	SHRUBS	
⊗	CAESALPINIA PULCHERRIMA RED BIRD OF PARADISE	5 GAL
⊗	DODONAEA VISCOSA WAXY WINGED BUSH	5 GAL
⊗	LEUCOPHYLLUM FRUTESCENS GREEN CLOUD	5 GAL
⊗	LEUCOPHYLLUM LANGMANIAE RIO BRAVOM	5 GAL
⊗	RIO BRAVO SAGE	5 GAL
⊗	BOUTANIVILLEA BARBARA KARST	5 GAL
⊗	BARBARA KARST BOUTANIVILLEA	5 GAL
⊗	RUPELLIA PENINSULARIS BAJA REDLUA	5 GAL
⊗	ACCENTS	
⊗	HEPERLOE PARVIFLORA RED YUCCA	5 GAL
⊗	MULLENBERGIA CAPULARS REGAL MIST REGAL MIST DEEN GRASS	5 GAL
⊗	GROUNDCOVER	
⊗	CYNODON DACTYLON WINDROCK DALEA GREGGII TRAILING INDIAN BUSH LAHTYAKA SPP. NEW GOLD LANTANA	500 1 GAL 1 GAL 1 GAL
⊗	TURF	
⊗	DALEA GREGGII	1 GAL
⊗	TRAILING INDIAN BUSH	1 GAL
⊗	LAHTYAKA SPP.	1 GAL
⊗	NEW GOLD LANTANA	1 GAL
⊗	MATERIAL	
⊗	CONCRETE HEADER	5" x 6" CURBSTYLE
⊗	DECOMPOSED GRANITE	34" SCREENED
⊗	DESERT GOLD	

NOTE: 1 - TREE HEIGHTS AND CALIPERS WILL COMPLY WITH ARIZONA NURSERY ASSOCIATION SPECIFICATIONS FOR THAT TREE AND SIZE OF TREE SYSTEM.  
 2 - SPECIFICATIONS FOR THAT TREE AND SIZE OF TREE SYSTEM TO BE WANTED BY AN UNDERGROUND AUTOMATIC IRRIGATION SYSTEM.  
 3 - TREES SHALL MEET SPECIFIED CALIPER SIZE WITHIN ONE YEAR OF INSTALLATION DATE.

LANDSCAPING AND SETBACKS  
 Landscaping buffers and easements as well as building setbacks are shown with measurements in accordance with the City Ordinances and Guidelines in place at the time of the filing of this Pre-Plan and are subject to change if the applicable Ordinances and Guidelines are modified prior to the approval of the Final Plan.

Key Map



# Palo Cristi Commerce Park

Prepared For: Palo Cristi, LLC

Surprise, Arizona

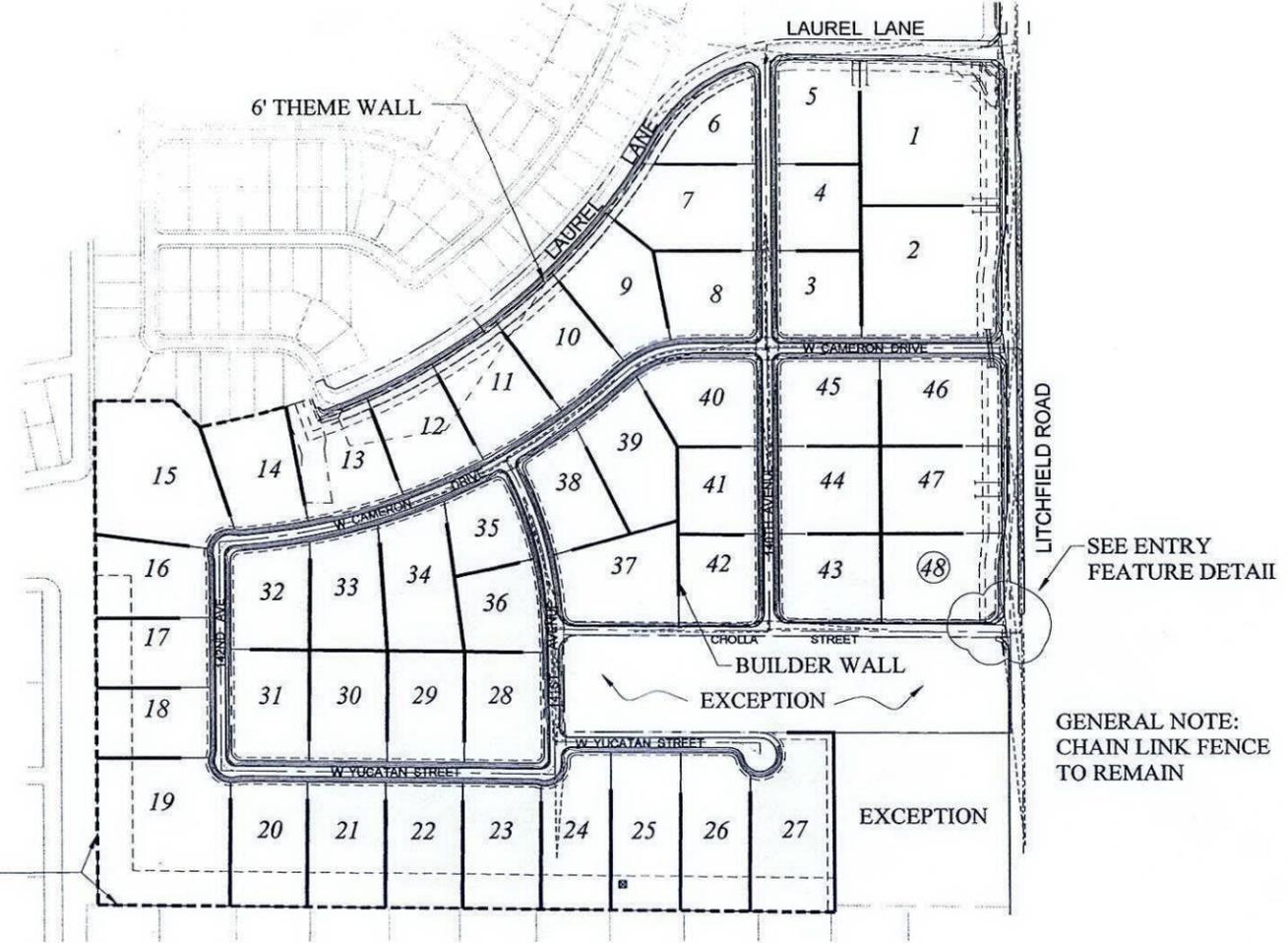
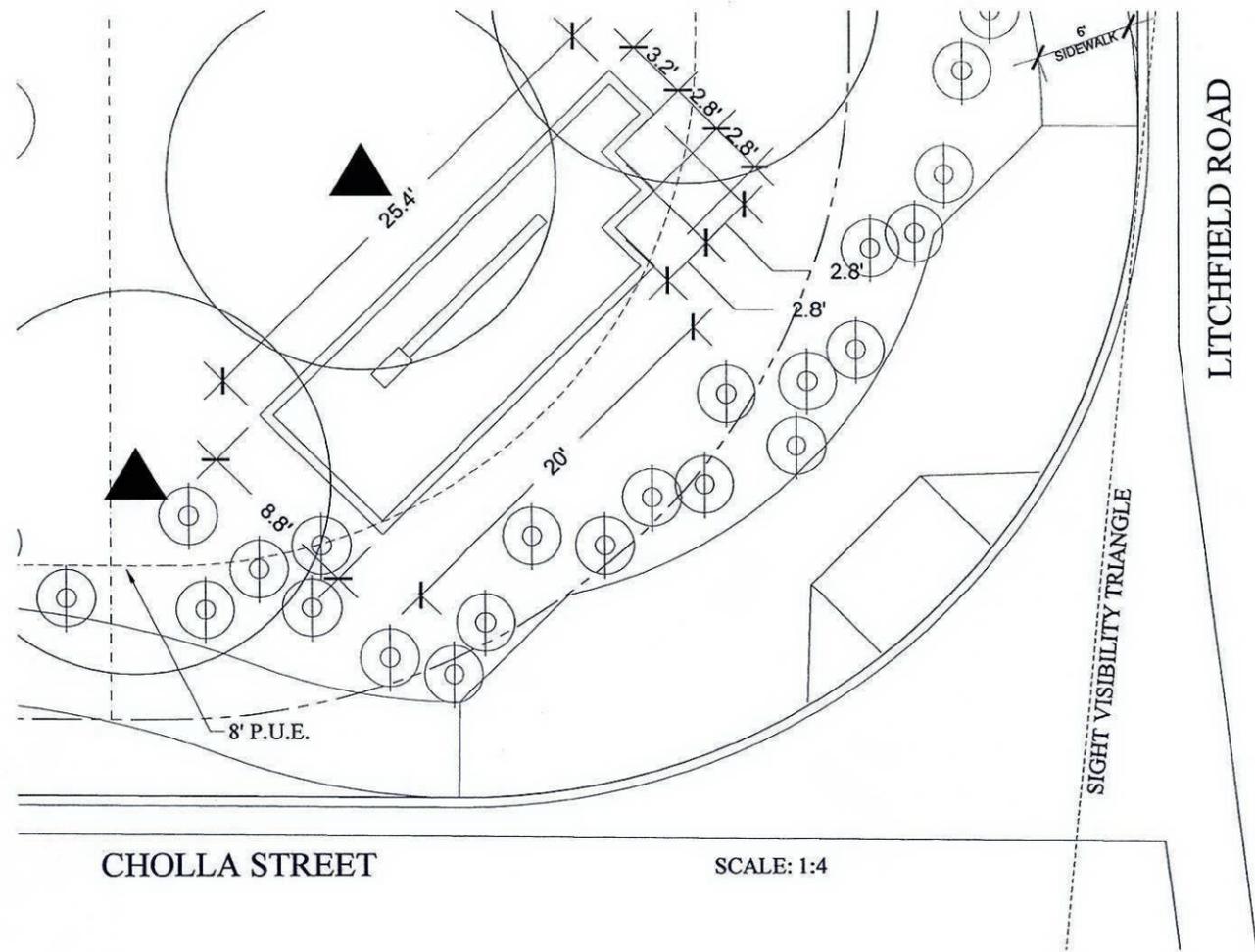
Exhibit G  
Master Landscape Theme



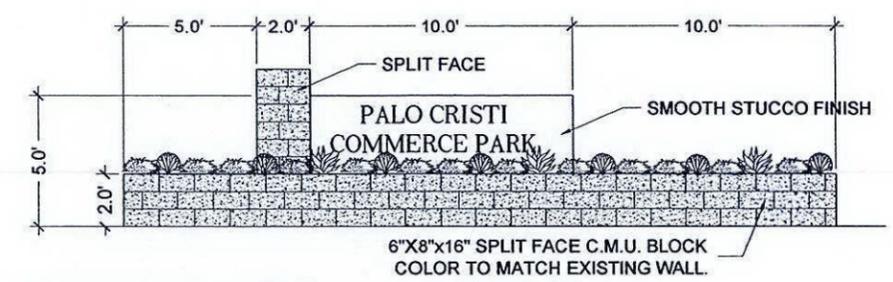
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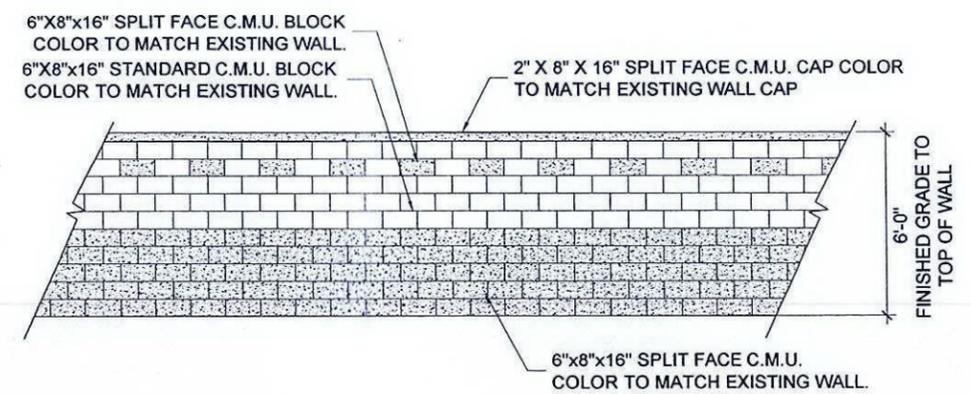
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ENTRY FEATURE



ENTRY FEATURE SCALE: 1:3



6' THEME WALL SCALE: 1:3

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# Palo Cristi Commerce Park

Surprise, Arizona

Prepared For: Palo Cristi, LLC



Exhibit H  
 Wall & Signage Plan



Job # 07027  
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# CONCEPTUAL LANDSCAPE PLANS FOR PALO CRISTI COMMERCE PARK

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## LANDSCAPE NOTES

- CONTRACTOR TO OBTAIN PERMITS FROM LOCAL AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS SITE.
- CONTRACTOR TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO ANY INSTALLATION.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL THE WORK INDICATED ON THE LANDSCAPE DOCUMENTS. HE SHALL BE RESPONSIBLE FOR CAREFUL SITE INSPECTION, DETAILED REVIEW OF THE PLANS, AND COORDINATION WITH OTHER CONTRACTORS ON-SITE PRIOR TO ANY INSTALLATION. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S AGENT.
- PRIOR TO INITIATING THESE LANDSCAPE IMPROVEMENTS, THE LANDSCAPE CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION MEETING ON-SITE WITH THE APPROVAL OF THE OWNER AND THE GENERAL CONTRACTOR. THE OWNER'S REPRESENTATIVE AND/OR THE PROJECT LANDSCAPE ARCHITECT MUST BE PRESENT. THE PURPOSE OF THIS MEETING IS TO RESOLVE ANY EXISTING SITE CONDITIONS THAT MAY BE IN CONFLICT WITH THESE LANDSCAPE CONSTRUCTION DOCUMENTS AND THEREFORE IMPACT THE INSTALLATION OF ANY OF THESE PROPOSED IMPROVEMENTS. THIS FIRST MEETING SHOULD BE SCHEDULED TO OCCUR AFTER THE COMPLETION OF ON-SITE AND OFF-SITE IMPROVEMENTS INCLUDING: ALL UNDERGROUND UTILITIES, MASS GRADING, AND STREET IMPROVEMENTS.
- DAMAGE TO EXISTING LANDSCAPING, UNDERGROUND UTILITIES, IRRIGATION LINES, ELECTRICAL LINES, ETC. SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- ANY DISCREPANCIES FOUND BETWEEN THE PLANS AND THE SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
- ALL QUANTITIES PROVIDED ARE FOR BIDDING PURPOSES ONLY. LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINISH GRADES IN LANDSCAPED AREAS. HE SHALL DETERMINE, WITH THE GENERAL CONTRACTOR, THE EXTENT OF ROUGH GRADING AND/OR FINE GRADING TO BE ESTABLISHED BY OTHERS.
- ALL GRADING AND DRAINAGE SHALL BE IN ACCORDANCE WITH THE PLANS PREPARED BY THE PROJECT CIVIL ENGINEER, OR AS DIRECTED BY THE OWNER'S AGENT. PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING(S) IN ALL CONDITIONS. CONTRACTOR TO MEET ALL EXISTING GRADES AT PROJECT BOUNDARIES. FINISH GRADE SHALL BE 3" BELOW THE TOP OF ADJACENT WALKS AND CURBS PRIOR TO RECEIVING MULCH OR DECOMPOSED GRANITE.
- ALL AREAS DISTURBED DURING CONSTRUCTION TO BE FINE GRADED. ADJACENT UNDISTURBED AREAS DAMAGED OR DISTURBED TO BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL FINE GRADE ENTIRE LANDSCAPED AREA AS REQUIRED FOR INSTALLATION OF PLANTING. ALL GRADES SHALL BE NEAT, RAKED SMOOTH AND BE FREE OF DEBRIS PRIOR TO SUBSTANTIAL COMPLETION.
- PRIOR TO SPREADING MATERIAL GROUNDCOVERS, ADJUST AND COMPACT FINISH GRADES. APPLY WEED PRE-EMERGENT SURFLAN AS PER MANUFACTURER'S INSTRUCTIONS. THEN SPREAD DECOMPOSED GRANITE, RIVER RUN, OR MULCH AS INDICATED ON PLANS. DECOMPOSED GRANITE SHALL BE WATERED, THEN COMPACTED WITH A SOIL ROLLER TO A MINIMUM DEPTH OF 2" AFTER COMPACTION. PROVIDE A SECOND APPLICATION OF THE PRE-EMERGENT SURFLAN AT THE END OF THE MAINTENANCE PERIOD.
- ALL LANDSCAPED AREAS SHALL RECEIVE A 2" TOP DRESSING OF DECOMPOSED GRANITE AS SPECIFIED IN THE LANDSCAPE PLANT SCHEDULE. PROVIDE SAMPLE OF SIZE AND COLOR FOR APPROVAL BY OWNER'S AGENT PRIOR TO DELIVERY.
- STAKE LOCATIONS OF ALL TREES FOR APPROVAL PRIOR TO INSTALLATION OF ANY PLANT MATERIAL.
- ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED (WHEN IN-LEAF) AS IS TYPICAL FOR THE SPECIES. THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS (NOT POT BOUND), A NORMAL HABIT OF GROWTH CONSISTENT WITH INDUSTRY STANDARDS, AND FREE OF ANY BRUISES, CUTS, OR OTHER ABNORMALITIES. PLANT MATERIAL SHALL BE SIZED IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, AND THE ARIZONA NURSERYMAN ASSOCIATION STANDARDS.
- ALL RIGHT-OF-WAY PLANT MATERIAL MUST BE IN COMPLIANCE WITH THE DEPARTMENT OF WATER RESOURCES LOW WATER USE PLANT LIST. NO PLANT SUBSTITUTIONS, TYPE, OR QUANTITY DEVIATIONS FROM THE APPROVED LANDSCAPE PLANS WITHOUT PRIOR APPROVAL FROM THE CITY OF SURPRISE.
- BACKFILL MIXTURES, EXCEPT AS NOTED, TO BE COMPRISED OF 75% NATIVE SOIL AND 25% DECOMPOSED GRANULAR BARK MULCH, AND 2 LBS. DISPERSAL PER CUBIC YARD OF BACKFILL.
- ADD AGRIFORM FERTILIZER TABLETS AT THE FOLLOWING RATES:  
1 GALLON PLANT - 1 TABLET  
15 GALLON PLANT - 4 TABLETS  
5 GALLON PLANT - 2 TABLET  
BOXED TREE - 8 TABLETS (MIN.)  
TABLETS TO BE PLACED NO DEEPER THAN 6" BELOW SOIL SURFACE.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON PLANTING PLAN. DO NOT SUBSTITUTE PLANTS BY TYPE OR QUANTITY WITHOUT WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT OR OWNER'S AGENT.
- THE OWNER'S AGENT RESERVES THE RIGHT TO REJECT ANY SELECTION OF PLANT MATERIAL THAT DOES NOT SATISFY THE INTENT OF THE LANDSCAPE DESIGN BASED ON: SIZE, SHAPE, EVIDENCE OF STRESS OR IMPROPER CARE.
- PRIOR TO INITIATING THE 90-DAY MAINTENANCE PERIOD, COMPLETE ANY INITIAL PUNCH LIST ITEMS, THEN OBTAIN APPROVAL FROM OWNER'S AGENT OF SUBSTANTIAL COMPLETION. DETERMINE WITH OWNER'S AGENT THE START DATE FOR THE 90-DAY MAINTENANCE PERIOD. CONTRACTOR TO THEM MAINTAIN LANDSCAPE WHICH MAY INCLUDE WATERING, WEEDING, PRUNING, AND REPLACEMENT OF ANY MATERIAL THAT HAS DIED OR IS SHOWING EVIDENCE OF STRESS. SUBMIT WRITTEN REQUEST FOR FINAL PUNCH LIST ONE WEEK PRIOR TO END OF MAINTENANCE PERIOD.
- PROVIDE OWNER WITH A WRITTEN GUARANTEE OF SIX (6) MONTHS FOR ALL PLANT MATERIAL DATED FROM START OF MAINTENANCE PERIOD AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. PROVIDE OWNER WITH WRITTEN INSTRUCTIONS OUTLINING MAINTENANCE PROCEDURES TO BE ADOPTED IN ORDER TO PROTECT GUARANTEE. INCLUDE WATERING SCHEDULE AND FERTILIZER PROGRAM. ONE (1) YEAR GUARANTEE FOR ALL TREES AND PALMS.
- TREAT ALL DATE PALM TREES FOR CROWN ROT AT LEAST ONCE PRIOR TO END OF THE QUARANTINE PERIOD. CONTRACTOR SHALL ARRANGE FOR A SUBCONTRACTOR SPECIALIZING IN PALM TREE MAINTENANCE TO SERVICE ALL PALMS AND PROVIDE BRIEF STATEMENT FOR EACH PALM.
- INSTALL ALL SIDEWALKS PER A.D.A. REQUIREMENTS.

## CITY OF SURPRISE NOTES

- TREE CALIPERS WILL COMPLY WITH "ARIZONA NURSERY ASSOCIATION SPECIFICATIONS" FOR THAT TYPE AND SIZE OF TREE.
- MINUS DECOMPOSED GRANITE TO BE USED ON ALL "PAD" AREAS FOR DUST CONTROL.
- 3/4" DECOMPOSED GRANITE TO BE USED FOR ALL NON-TURF LANDSCAPE AREAS.
- NO PLANT MATERIAL TO BE WITHIN 3' OF ANY FIRE HYDRANT AT MATURITY.
- NO THORN BEARING TREES TO BE USED ADJACENT TO PEDESTRIAN USE AREAS.
- DEEP ROOT BARRIERS TO BE INSTALLED WITH ANY TREE WITHIN 4' OF PAVED AREA.
- CITY OF SURPRISE TO APPROVE ANY CHANGES TO THESE PLANS.

## PLANT SCHEDULE

SYMBOL	BOTANICAL /COMMON NAME	SIZE	QTY.	REMARKS
TREES				
▲	CERCIDIUM HYBRID DESERT MUSEUM	24" BOX	35	STAKE AS REQUIRED
●	OLEA EUROPAEA SWAN HILL OLIVE	36" BOX	58	STAKE AS REQUIRED
○	PINUS ELDERICA MONDEL PINE	48" BOX	23	STAKE AS REQUIRED
○	PROSOPIS CHILENSIS 'THORNLESS' THORNLESS CHILEAN MESQUITE	48" BOX	91	STAKE AS REQUIRED
SHRUBS				
⊗	CAESALPINIA PULCHERRIMA RED BIRD OF PARADISE	5 GAL	156	1 GPH EMITTER
⊕	ODONAEA VISCOSEA HOPESEED BUSH	5 GAL	158	1 GPH EMITTER
⊖	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD' GREEN CLOUD SAGE	5 GAL	278	1 GPH EMITTER
⊙	LEUCOPHYLLUM LANGMANIAE 'RIO BRAVO' RIO BRAVO SAGE	5 GAL	147	1 GPH EMITTER
⊕	BOUGAINVILLEA BARBARA KARST' BARBARA KARST BOUGAINVILLEA	5 GAL	45	1 GPH EMITTER
⊖	RUELLIA PENNSULARIS BAJA RUELLIA	5 GAL	129	1 GPH EMITTER
ACCENTS				
⊕	HEPERALOE PARVIFLORA RED YUCCA	5 GAL	134	1 GPH EMITTER
⊖	MURLENERGIA CAPILLARIS 'REGAL MIST' REGAL MIST DEER GRASS	5 GAL	166	1 GPH EMITTER
GROUND COVER				
TURF	CYNODON DACTYLON 'MIDIRON' MIDIRON HYBRID BERMUDA	800		POP-UP SPRAY HEADS
⊙	DALEA GREGGII TRAILING INDIGO BUSH	1 GAL	270	1 GPH EMITTER
⊖	LANTANA SPP. 'NEW GOLD' LANTANA	1 GAL	482	1 GPH EMITTER
MATERIAL				
—	CONCRETE HEADER	8" x 6" CURBSTYLE		SEE DETAIL
—	DECOMPOSED GRANITE	3/4" SCREENED		2" DEPTH ALL LANDSCAPE AREAS

- NOTE: 1 - TREE HEIGHTS AND CALIPERS WILL COMPLY WITH "ARIZONA NURSERY ASSOCIATION SPECIFICATIONS" FOR THAT TYPE AND SIZE OF TREE  
2 - LANDSCAPE TO BE WATERED BY AN UNDERGROUND AUTOMATIC IRRIGATION SYSTEM.  
3 - TREES SHALL MEET SPECIFIED CALIPER SIZE WITHIN ONE YEAR OF INSTALLATION DATE.
- LANDSCAPING AND SETBACKS  
Landscape buffers and easements as well as building setbacks are shown with measurements in accordance with the City Ordinances and Guidelines in place at the time of the filing of this Pre-Plan and are subject to change if the applicable Ordinances and Guidelines are modified prior to the approval of the Final Plan.

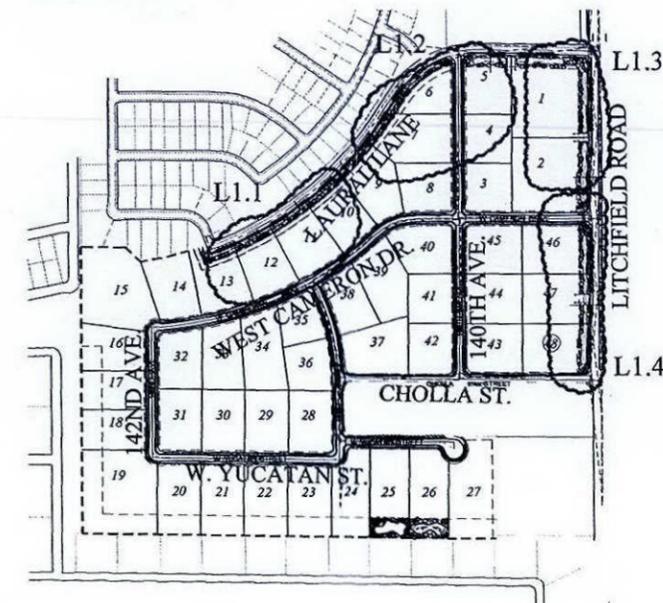
## GENERAL NOTES

- ALL CHANGES TO BE APPROVED BY THE CITY OF SURPRISE PLANNING DEPARTMENT.
- SIGNS REQUIRE A SEPARATE PERMIT
- ALL UTILITY BOXES AND STRUCTURES ARE TO BE SCREENED FROM VIEW.
- PLANT MATERIAL IS NOT TO BE LOCATED WITHIN 3 FEET OF ANY FIRE HYDRANT OR FIRE DEPARTMENT CONNECTION.
- TRESS IN PAVED AREAS ARE TO HAVE DEEP ROOT BARRIERS. PROVIDE DETAIL/CATALOG OUT.
- ALL PLANT MATERIAL SIZES ARE TO BE CONSISTENT WITH ANA STANDARDS.
- ALL PLANT MATERIAL LOCATED WITHIN VISIBILITY TRIANGLES ARE TO BE MAINTAINED NO HIGHER THAN 2 FEET AND HANG NO LOWER THAN 7 FEET FROM GROUND ELEVATION.

LANDSCAPE PLANTINGS	REQUIRED	PROVIDED
RIGHT OF WAY LANDSCAPE PLANTINGS		
F. TREES: 1 PER 20 FT. OF STREET FRONTAGE (*INCLUDES EXISTING LANDSCAPE IN ROW)	189 TREES	207 TREES
G. SHRUBS: 2 PER 20 FT. OF STREET FRONTAGE (*INCLUDES EXISTING LANDSCAPE IN ROW)	378 SHRUBS	913 SHRUBS
H. SHRUB AND GROUND COVER AREA 25%	25%	72%
PARKING SPACE PLANTING		
I. TREES: 1 PER 8 PARKING SPACES	N/A	N/A
TOTAL TREE MINIMUM SIZES		
J. 20% - 24" BOX	43 TREES	35 TREES
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50% - 48" BOX	108 TREES	114 TREES



## KEY MAP



2211 N. 7th Street  
Phoenix, AZ 85006  
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F 602.266.5707  
www.gilmore.com

LANDSCAPE ARCHITECTURE  
LAND PLANNING

PALO CRISTI COMMERCE PARK  
SWC LITCHFIELD ROAD AND LAUREL LANE  
SURPRISE, AZ  
PREPARED FOR: PALO CRISTI, LLC

JOB NO. 07081  
DRAWN BY. JRH  
APPROVED BY. JJK  
DATE. 11.07.07



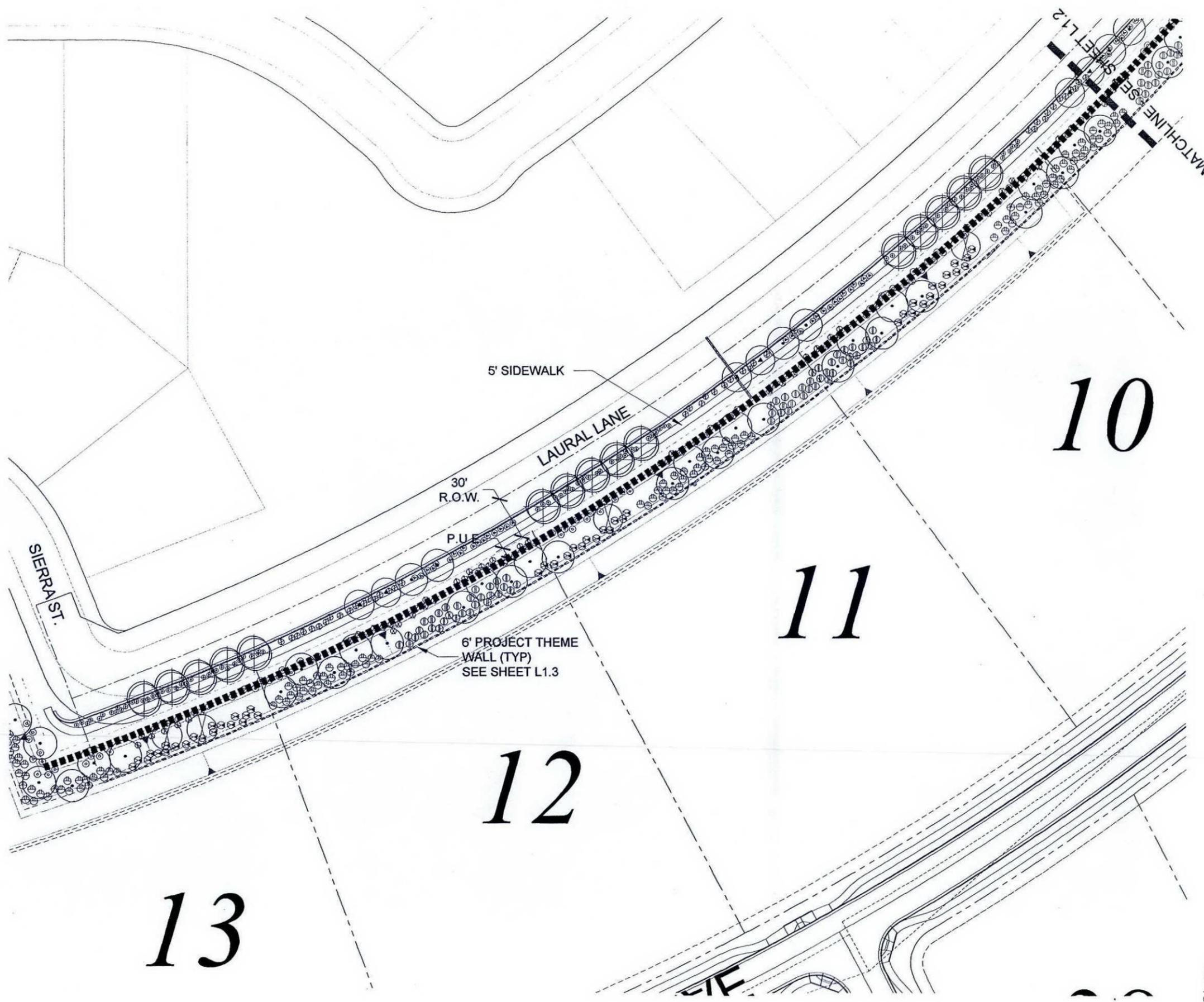
REVISIONS.

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COVER SHEET

SHEET

L1.0

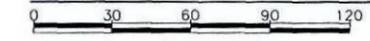


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NOTE:  
ALL SHRUBS LOCATED IN SIGHT VISIBILITY TRIANGLE (SVT) TO BE KEPT AT A 2' MAXIMUM. ALL TREES LOCATED IN SVT TO BE TRIMMED TO 7' MINIMUM.

CONCEPTUAL LANDSCAPE PLAN



**GILMORE PARSONS**  
LAND DESIGN GROUP

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LANDSCAPE ARCHITECTURE  
LAND PLANNING

**PALO CRISTI COMMERCE PARK**  
SWC LITCHFIELD ROAD AND LAUREL LANE  
SUPIRISE, AZ  
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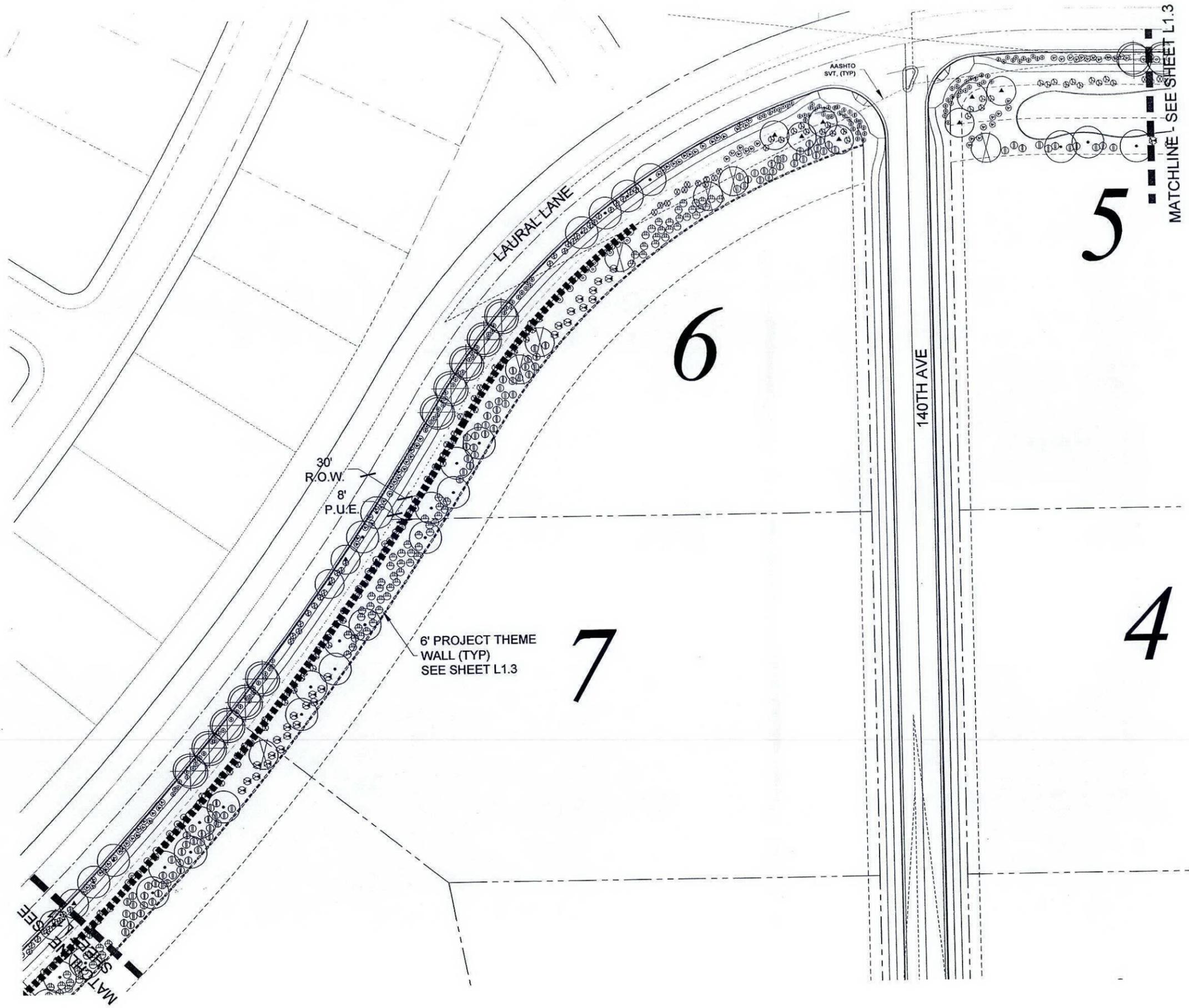


REVISIONS:

- 1.
- 2.
- 3.
- 4.

CONCEPTUAL LANDSCAPE PLAN

SHEET  
**L1.1**



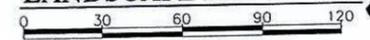
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COMMUNITY DEVELOPMENT

NOTE:  
 ALL SHRUBS LOCATED IN SIGHT VISIBILITY TRIANGLE (SVT) TO BE KEPT AT A 2' MAXIMUM HEIGHT.  
 ALL TREE CANOPIYS LOCATED IN SVT TO BE TRIMMED TO 7' MINIMUM CLEARANCE.

CONCEPTUAL LANDSCAPE PLAN



**GP**  
 GILMORE PARSONS  
 LAND DESIGN GROUP

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 F 602.266.5707  
 www.gp-gilmore.com

LANDSCAPE ARCHITECTURE  
 LAND PLANNING

**PALO CRISTI COMMERCE PARK**  
 SWC LITCHFIELD ROAD AND LAUREL LANE  
 SUPRISE, AZ  
 PREPARED FOR: PALO CRISTI, LLC

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 APPROVED BY. JJO  
 DATE. 11.07.07

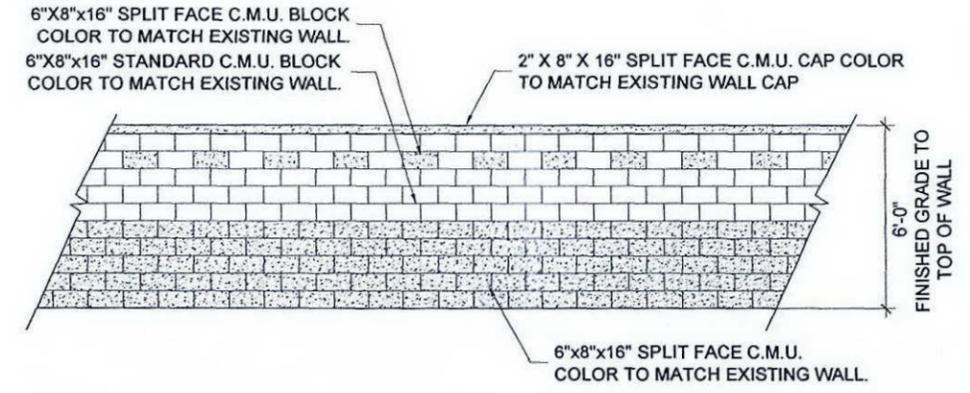
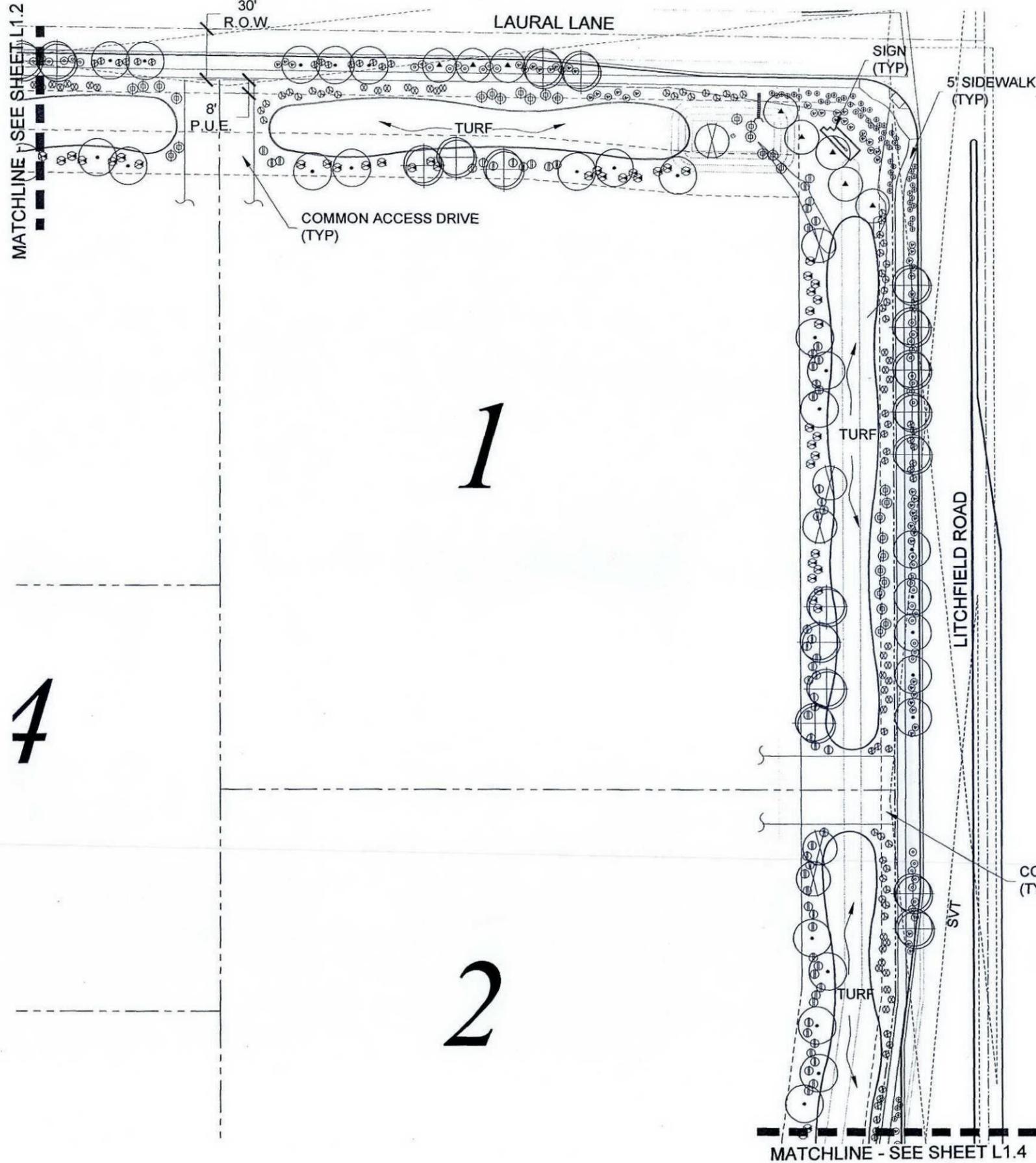


REVISIONS:  
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 4.

CONCEPTUAL LANDSCAPE PLAN  
 SHEET  
**L1.2**

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6' THEME WALL

SCALE: 1:3

NOTE:  
ALL SHRUBS LOCATED IN SIGHT  
VISIBILITY TRIANGLE (SVT) TO BE  
KEPT AT A 2' MAXIMUM. ALL  
TREES LOCATED IN SVT TO BE  
TRIMMED TO 7' MINIMUM.

4

1

2



GILMORE PARSONS  
LAND DESIGN GROUP

2211 N. 7th Street  
Phoenix, AZ 85006  
T 602.266.5622  
F 602.266.5707  
www.gilmore.com

LANDSCAPE ARCHITECTURE  
LAND PLANNING

PALO CRISTI COMMERCE PARK  
SWC LITCHFIELD ROAD AND LAUREL LANE  
SUPRISE, AZ  
PREPARED FOR: PALO CRISTI, LLC

JOB NO.	07081
DRAWN BY.	JJK
APPROVED BY.	JJK
DATE.	11.07.07



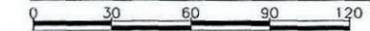
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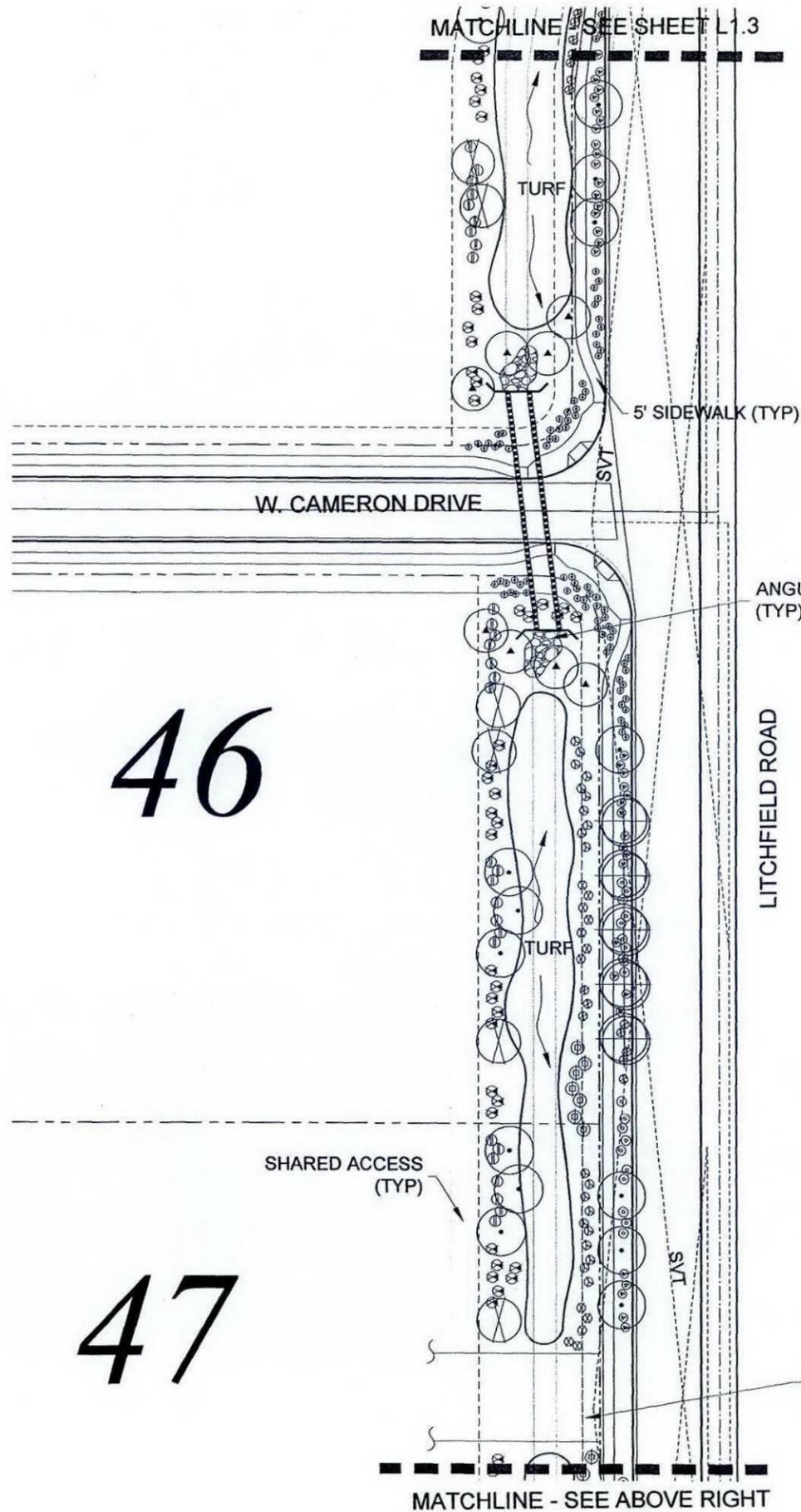
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CONCEPTUAL  
LANDSCAPE PLAN

SHEET  
L1.3

CONCEPTUAL  
LANDSCAPE PLAN

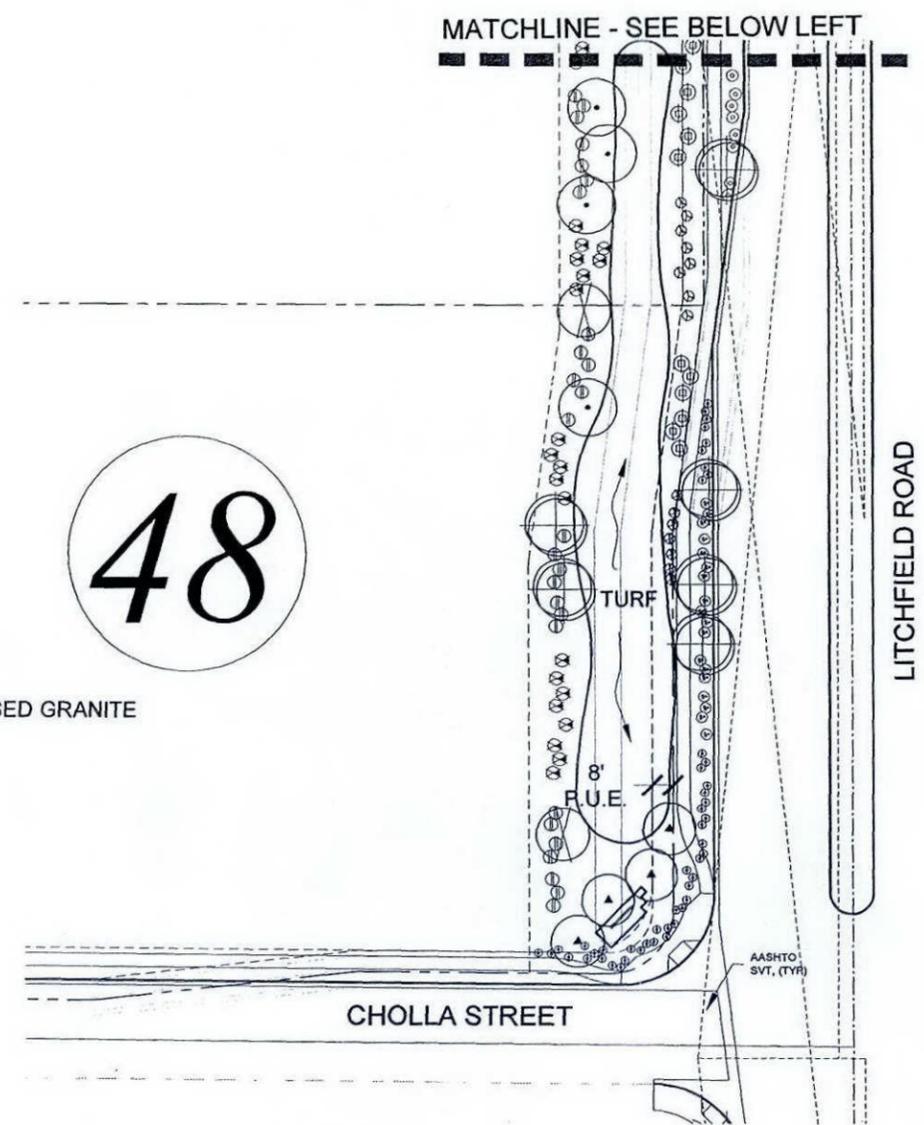




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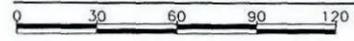
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NOTE:  
 ALL SHRUBS LOCATED IN SIGHT  
 VISIBILITY TRIANGLE (SVT) TO BE  
 KEPT AT A 2' MAXIMUM. ALL  
 TREES LOCATED IN SVT TO BE  
 TRIMMED TO 7' MINIMUM.

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CONCEPTUAL  
 LANDSCAPE PLAN



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LANDSCAPE ARCHITECTURE  
 LAND PLANNING

**PALO CRISTI COMMERCE PARK**  
 SWC LITCHFIELD ROAD AND LAUREL LANE  
 SUPRISE, AZ  
 PREPARED FOR: PALO CRISTI, LLC

JOB NO. 07081  
 DRAWN BY: JRH  
 APPROVED BY: JJC  
 DATE: 11.07.07



REVISIONS:

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- 
- 

CONCEPTUAL  
 LANDSCAPE PLAN  
 SHEET  
 L1.4

**Jack Gilmore**

---

**From:** Adam Copeland [Adam.Copeland@surpriseaz.com]  
**Sent:** Friday, February 22, 2008 2:57 PM  
**To:** Jack Gilmore  
**Cc:** Steve Kenly; George Quinif; Andy Jochums  
**Subject:** RE: Palo Cristi Final TAC approval letter

RECEIVED

FEB 25 2008

COMMUNITY  
DEVELOPMENT

No school district agreement will be required. Please print this when submitting.

Adam Copeland  
Planner II  
City of Surprise  
[adam.copeland@surpriseaz.com](mailto:adam.copeland@surpriseaz.com)  
D: 623-222-3137  
F: 623-222-3001

---

**From:** Jack Gilmore [mailto:jgilmore@getgilmore.com]  
**Sent:** Friday, February 22, 2008 2:51 PM  
**To:** Adam Copeland  
**Cc:** Steve Kenly; George Quinif; Andy Jochums  
**Subject:** RE: Palo Cristi Final TAC approval letter

Adam:

Thank you for the letter. We are assembling the "packets" and expect to have them for you on Monday. I do want to point out that there is no school district agreement; since this is a non-residential project, that requirement was waived when we made our first submittal many months ago. Please confirm.

Jack

---

**From:** Adam Copeland [mailto:Adam.Copeland@surpriseaz.com]  
**Sent:** Thursday, February 21, 2008 4:43 PM  
**To:** Jack Gilmore; Andy Jochums  
**Subject:** Palo Cristi Final TAC approval letter

We will add stipulations to the project when it moves forward to avoid further delay. I will send those stips prior to finalization of the staff report.

Regards,

Adam Copeland  
Planner II  
City of Surprise  
[adam.copeland@surpriseaz.com](mailto:adam.copeland@surpriseaz.com)  
D: 623-222-3137  
F: 623-222-3001





# PRELIMINARY SUBDIVISION PLAT GRADING & DRAINAGE PLAN

FOR  
**PALO CRISTI COMMERCE PARK**  
SWC LITCHFIELD ROAD & LAUREL LANE  
SURPRISE, ARIZONA

NO.	DATE	REVISION	BY

PURPOSE:  
**3RD TAC SUBMITTAL 1/25/08**

DESIGN BY: WJC  
DRAWN BY: NAA  
CHECKED BY: JDE

**HUNTER**  
ENGINEERING  
CIVIL AND SURVEY

10450 N. 74TH ST., SUITE 200  
SCOTTSDALE, AZ 85258  
T: 480.991.3885  
F: 480.991.3886



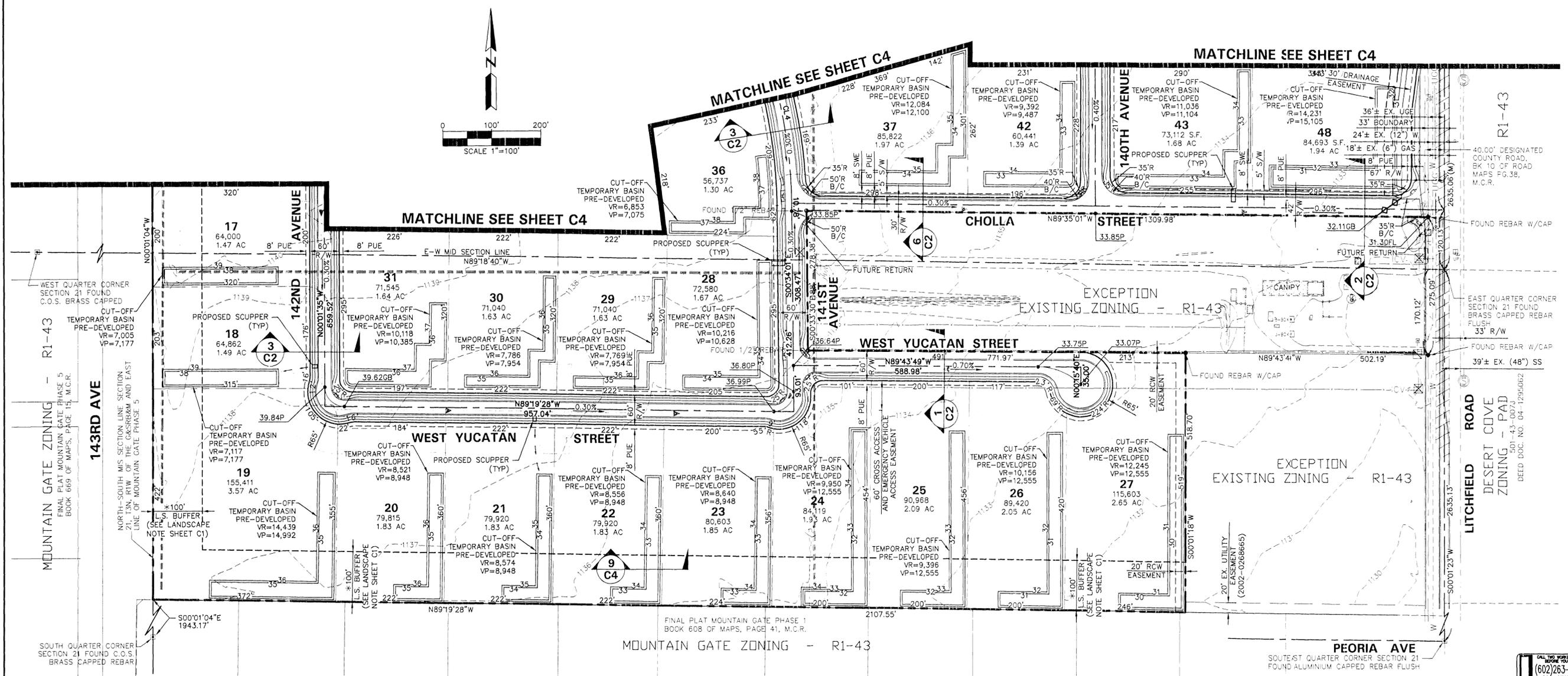
**PRELIMINARY SUBDIVISION PLAT  
GRADING & DRAINAGE PLAN  
PALO CRISTI COMMERCE CENTER  
SWC LITCHFIELD ROAD & LAUREL LANE  
SURPRISE, ARIZONA**

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.:  
**PALO001**

SCALE  
**1"=100'**

SHEET  
**C3** OF **6**

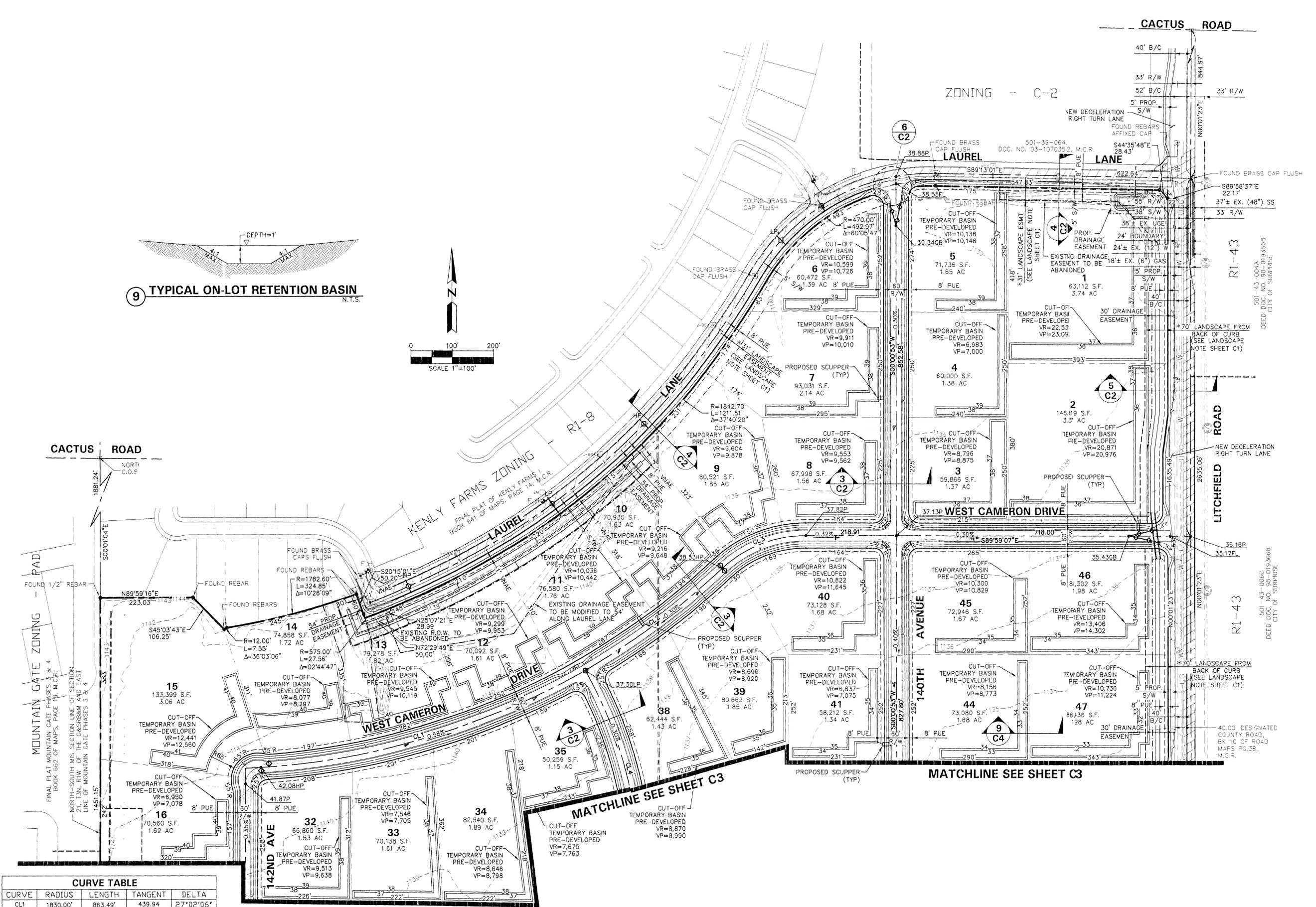
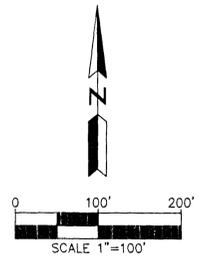
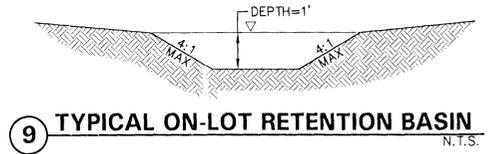


FINAL PLAT MOUNTAIN GATE PHASE 1  
BOOK 608 OF MAPS, PAGE 41, M.C.R.

MOUNTAIN GATE ZONING - R1-43

PEORIA AVE  
SOUTHEAST QUARTER CORNER SECTION 21  
FOUND ALUMINIUM CAPPED REBAR FLUSH





CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
CL1	1830.00'	863.49'	439.94'	27°02'06"
CL2	1830.00'	410.73'	206.23'	12°51'35"
CL3	300.00'	221.84'	116.26'	42°22'04"
CL4	1037.00'	516.21'	263.57'	28°31'17"

NO.	DATE	REVISION	BY

DESIGN BY: WJC  
 DRAWN BY: NAA  
 CHECKED BY: JDE

PURPOSE: 3RD TAC SUBMITTAL 1/25/08

CIVIL AND SURVEY

**HUNTER ENGINEERING**  
 10450 N. 74TH ST., SUITE 200  
 SCOTTSDALE, AZ 85258  
 T 480 991 3985  
 F 480 991 3986



**PRELIMINARY SUBDIVISION PLAN  
 GRADING & DRAINAGE PLAN  
 PALO CRISTI COMMERCE CENTER  
 SWC LITCHFIELD ROAD & LAUREL LANE  
 SURPRISE, ARIZONA**

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.: PAL001

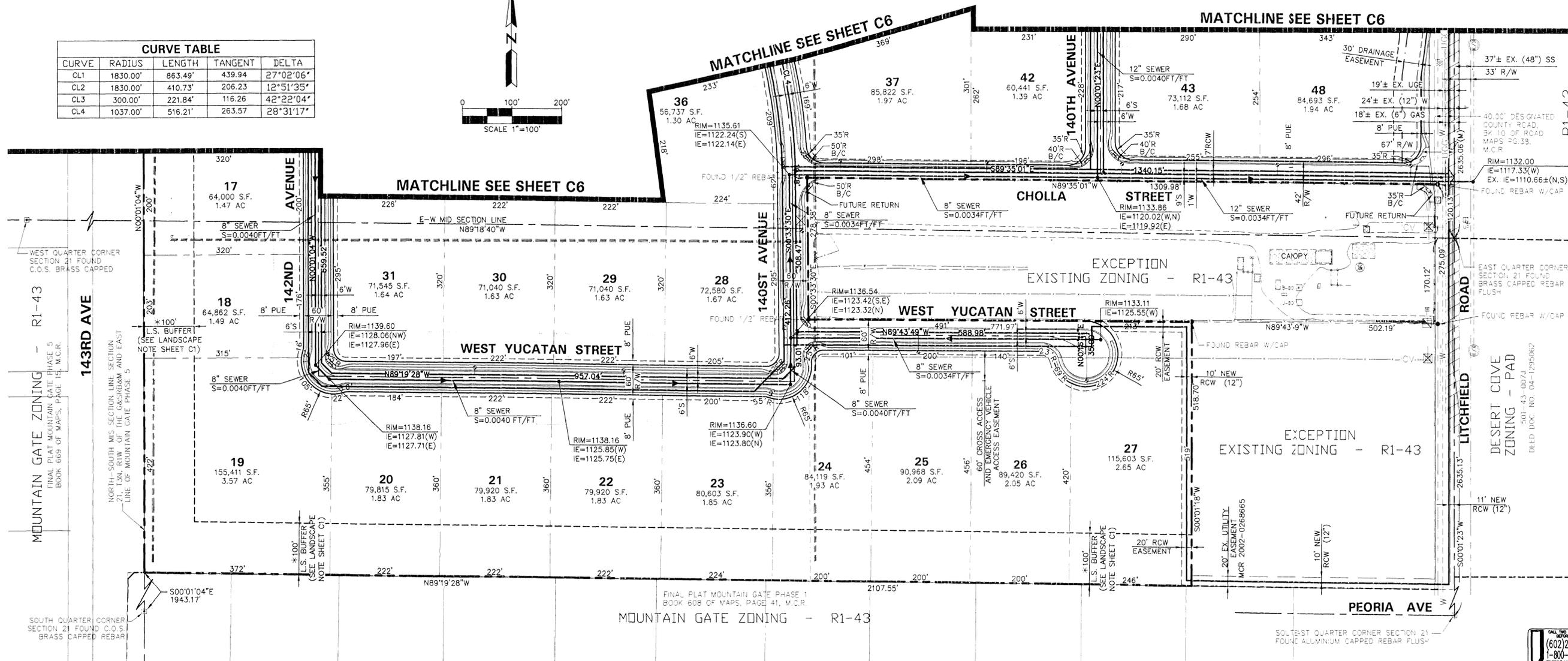
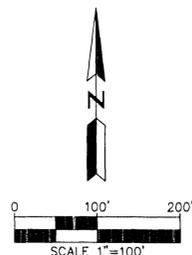
SCALE 1"=100'

SHEET **C4** OF **6**

# PRELIMINARY SUBDIVISION PLAT UTILITY PLAN

FOR  
**PALO CRISTI COMMERCE PARK**  
SWC LITCHFIELD ROAD & LAUREL LANE  
SURPRISE, ARIZONA

CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
CL1	1830.00'	863.49'	439.94	27°02'06"
CL2	1830.00'	410.73'	206.23	12°51'35"
CL3	300.00'	221.84'	116.26	42°22'04"
CL4	1037.00'	516.21'	263.57	28°31'17"



NO.	DATE	REVISION	BY

DESIGN BY: WJC  
DRAWN BY: NAA  
CHECKED BY: JDF

**HUNTER**  
ENGINEERING  
10450 N. 74TH ST, SUITE 200  
SCOTTSDALE, AZ 85258  
T 480 991 3985  
F 480 991 3986

CIVIL AND SURVEY



**PRELIMINARY SUBDIVISION PLAT  
UTILITY PLAN**  
**PALO CRISTI COMMERCE CENTER**  
**SWC LITCHFIELD ROAD & LAUREL LANE**  
**SURPRISE, ARIZONA**

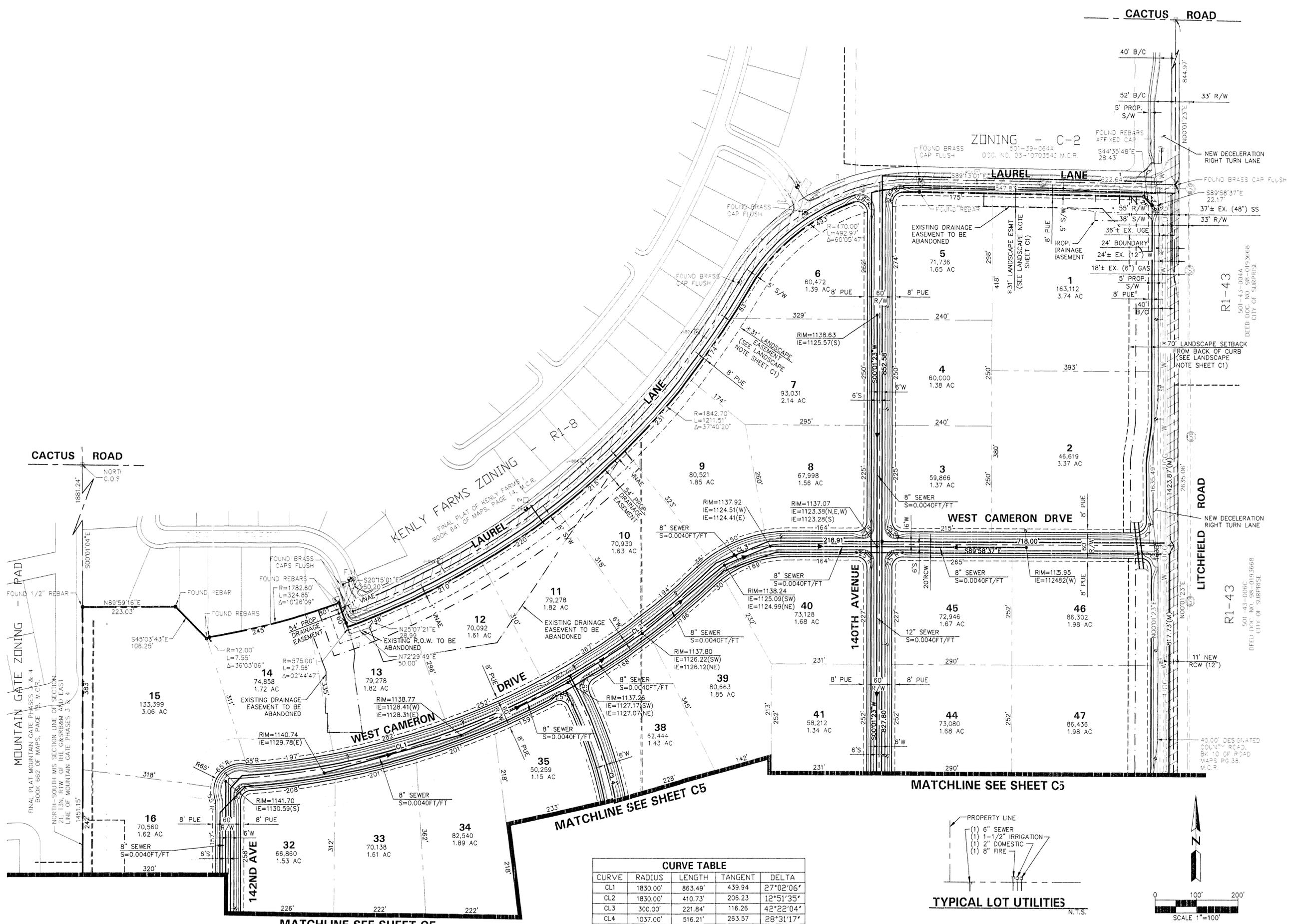
THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.: PAL0001

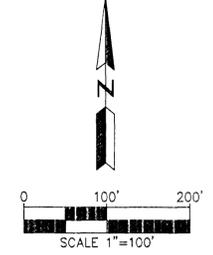
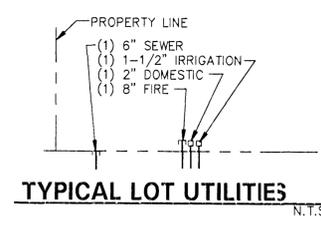
SCALE 1"=100'

SHEET **C5** OF **6**





CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
CL1	1830.00'	863.49'	439.94	27°02'06"
CL2	1830.00'	410.73'	206.23	12°51'35"
CL3	300.00'	221.84'	116.26	42°22'04"
CL4	1037.00'	516.21'	263.57	28°31'17"



NO.	DATE	REVISION	BY

PURPOSE: 3RD TAC SUBMITTAL 1/25/08

DESIGN BY: WJC  
DRAWN BY: NAA  
CHECKED BY: JDE

CIVIL AND SURVEY

**HUNTER**  
ENGINEERING

10450 N. 74TH ST., SUITE 200  
SCOTTSDALE, AZ 85258  
T 480 991 3985  
F 480 991 3986



PRELIMINARY SUBDIVISION PLAT  
UTILITY PLAN  
PALO CRISTI COMMERCE CENTER  
SWC LITCHFIELD ROAD & LAUREL LANE  
SURPRISE, ARIZONA

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.: PAL0001

SCALE 1"=100'

SHEET **C6** OF **6**

# CONCEPTUAL LANDSCAPE PLANS FOR PALO CRISTI COMMERCE PARK

## LANDSCAPE NOTES

- CONTRACTOR TO OBTAIN PERMITS FROM LOCAL AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS SITE.
- CONTRACTOR TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO ANY INSTALLATION.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO INSTALL THE WORK INDICATED ON THE LANDSCAPE DOCUMENTS. HE SHALL BE RESPONSIBLE FOR CAREFUL SITE INSPECTION, DETAILED REVIEW OF THE PLANS, AND COORDINATION WITH OTHER CONTRACTORS ON-SITE PRIOR TO ANY INSTALLATION. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S AGENT.
- PRIOR TO INITIATING THESE LANDSCAPE IMPROVEMENTS, THE LANDSCAPE CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION MEETING ON-SITE WITH THE APPROVAL OF THE OWNER AND THE GENERAL CONTRACTOR. THE OWNER'S REPRESENTATIVE AND/OR THE PROJECT LANDSCAPE ARCHITECT MUST BE PRESENT. THE PURPOSE OF THIS MEETING IS TO RESOLVE ANY EXISTING SITE CONDITIONS THAT MAY BE IN CONFLICT WITH THESE LANDSCAPE CONSTRUCTION DOCUMENTS AND THEREFORE IMPACT THE INSTALLATION OF ANY OF THESE PROPOSED IMPROVEMENTS. THIS FIRST MEETING SHOULD BE SCHEDULED TO OCCUR AFTER THE COMPLETION OF ON-SITE AND OFF-SITE IMPROVEMENTS INCLUDING: ALL UNDERGROUND UTILITIES, MASS GRADING, AND STREET IMPROVEMENTS.
- DAMAGE TO EXISTING LANDSCAPING, UNDERGROUND UTILITIES, IRRIGATION LINES, ELECTRICAL LINES, ETC. SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- ANY DISCREPANCIES FOUND BETWEEN THE PLANS AND THE SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
- ALL QUANTITIES PROVIDED ARE FOR BIDDING PURPOSES ONLY. LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINISH GRADES IN LANDSCAPED AREAS. HE SHALL DETERMINE, WITH THE GENERAL CONTRACTOR, THE EXTENT OF ROUGH GRADING AND/OR FINE GRADING TO BE ESTABLISHED BY OTHERS.
- ALL GRADING AND DRAINAGE SHALL BE IN ACCORDANCE WITH THE PLANS PREPARED BY THE PROJECT CIVIL ENGINEER, OR AS DIRECTED BY THE OWNER'S AGENT. PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING(S) IN ALL CONDITIONS. CONTRACTOR TO MEET ALL EXISTING GRADES AT PROJECT BOUNDARIES. FINISH GRADE SHALL BE 3" BELOW THE TOP OF ADJACENT WALKS AND CURBS PRIOR TO RECEIVING MULCH OR DECOMPOSED GRANITE.
- ALL AREAS DISTURBED DURING CONSTRUCTION TO BE FINE GRADED, ADJACENT UNDISTURBED AREAS DAMAGED OR DISTURBED TO BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL FINE GRADE ENTIRE LANDSCAPED AREA AS REQUIRED FOR INSTALLATION IF SUBSTANTIAL COMPLETION.
- PRIOR TO SPREADING MATERIAL, GROUNDCOVERS, ADJUST AND COMPACT FINISH GRADES. APPLY WEED PRE-EMERGENT SURFLAN AS PER MANUFACTURER'S INSTRUCTIONS. THEN SPREAD DECOMPOSED GRANITE, RIVER RUN, OR MULCH AS INDICATED ON PLANS. DECOMPOSED GRANITE SHALL BE WATERED, THEN COMPACTED WITH A SOD ROLLER TO A MINIMUM DEPTH OF 2" AFTER COMPACTING. PROVIDE A SECOND APPLICATION OF THE PRE-EMERGENT SURFLAN AT THE END OF THE MAINTENANCE PERIOD.
- ALL LANDSCAPED AREAS SHALL RECEIVE A 2" TOP DRESSING OF DECOMPOSED GRANITE AS SPECIFIED IN THE LANDSCAPE PLANT SCHEDULE. PROVIDE SAMPLE OF SIZE AND COLOR FOR APPROVAL BY OWNER'S AGENT PRIOR TO DELIVERY.
- STAKE LOCATIONS OF ALL TREES FOR APPROVAL PRIOR TO INSTALLATION OF ANY PLANT MATERIAL.
- ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED (WHEN IN-LEAF) AS IS TYPICAL FOR THE SPECIES. THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS (NOT POT BOUND), A NORMAL HABIT OF GROWTH CONSISTENT WITH INDUSTRY STANDARDS, AND FREE OF ANY BRUISES, CUTS, OR OTHER ABNORMALITIES. PLANT MATERIAL SHALL BE SIZED IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, AND THE ARIZONA NURSERYMAN ASSOCIATION STANDARDS.
- ALL RIGHT-OF-WAY PLANT MATERIAL MUST BE IN COMPLIANCE WITH THE DEPARTMENT OF WATER RESOURCES' LOW WATER USE PLANT LIST. NO PLANT SUBSTITUTIONS, TYPE, OR QUANTITY DEVIATIONS FROM THE APPROVED LANDSCAPE PLANS WITHOUT PRIOR APPROVAL FROM THE CITY OF SURPRISE.
- BACKFILL MIXTURES, EXCEPT AS NOTED, TO BE COMPRISED OF 75% NATIVE SOIL AND 25% DECOMPOSED GRANULAR BARK MULCH, AND 2 LBS. DISPERSAL PER CUBIC YARD OF BACKFILL.
- ADD AGRI-FORM FERTILIZER TABLETS AT THE FOLLOWING RATES:  
1 GALLON PLANT - 1 TABLET  
15 GALLON PLANT - 4 TABLETS  
5 GALLON PLANT - 2 TABLET  
BOXED TREE - 6 TABLETS (MIN.)  
TABLETS TO BE PLACED NO DEEPER THAN 6" BELOW SOIL SURFACE.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON PLANTING PLAN. DO NOT SUBSTITUTE PLANTS BY TYPE OR QUANTITY WITHOUT WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT OR OWNER'S AGENT.
- THE OWNER'S AGENT RESERVES THE RIGHT TO REJECT ANY SELECTION OF PLANT MATERIAL THAT DOES NOT SATISFY THE INTENT OF THE LANDSCAPE DESIGN BASED ON: SIZE, SHAPE, EVIDENCE OF STRESS OR IMPROPER CARE.
- PRIOR TO INITIATING THE 90-DAY MAINTENANCE PERIOD, COMPLETE ANY INITIAL PUNCH LIST ITEMS, THEN OBTAIN APPROVAL FROM OWNER'S AGENT OF SUBSTANTIAL COMPLETION. DETERMINE WITH OWNER'S AGENT THE START DATE FOR THE 90-DAY MAINTENANCE PERIOD. CONTRACTOR TO THEN MAINTAIN LANDSCAPE WHICH MAY INCLUDE WATERING, WEEDING, PRUNING, AND REPLACEMENT OF ANY MATERIAL THAT HAS DIED OR IS SHOWING EVIDENCE OF STRESS. SUBMIT WRITTEN REQUEST FOR FINAL PUNCH LIST ONE WEEK PRIOR TO END OF MAINTENANCE PERIOD.
- PROVIDE OWNER WITH A WRITTEN GUARANTEE OF SIX (6) MONTHS FOR ALL PLANT MATERIAL DATED FROM START OF MAINTENANCE PERIOD AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. PROVIDE OWNER WITH WRITTEN INSTRUCTIONS OUTLINING MAINTENANCE PROCEDURES TO BE ADOPTED IN ORDER TO PROTECT GUARANTEE. INCLUDE WATERING SCHEDULE AND FERTILIZER PROGRAM. ONE (1) YEAR GUARANTEE FOR ALL TREES AND PALMS.
- TREAT ALL DATE PALM TREES FOR CROWN ROT AT LEAST ONCE PRIOR TO END OF THE QUARANTINE PERIOD. CONTRACTOR SHALL ARRANGE FOR A SUBCONTRACTOR SPECIALIZING IN PALM TREE MAINTENANCE TO SERVICE ALL PALMS AND PROVIDE BRIEF STATEMENT FOR EACH PALM.
- INSTALL ALL SIDEWALKS PER A.D.A. REQUIREMENTS.

## CITY OF SURPRISE NOTES

- TREE CALIPERS WILL COMPLY WITH "ARIZONA NURSERY ASSOCIATION SPECIFICATIONS" FOR THAT TYPE AND SIZE OF TREE.
- 1/2" MINUS DECOMPOSED GRANITE TO BE USED ON ALL "PAD" AREAS FOR DUST CONTROL.
- 3/4" DECOMPOSED GRANITE TO BE USED FOR ALL NON-TURF LANDSCAPE AREAS.
- NO PLANT MATERIAL TO BE WITHIN 3' OF ANY FIRE HYDRANT AT MATURITY.
- NO THORN BEARING TREES TO BE USED ADJACENT TO PEDESTRIAN USE AREAS.
- DEEP ROOT BARRIERS TO BE INSTALLED WITH ANY TREE WITHIN 4' OF PAVED AREA.
- CITY OF SURPRISE TO APPROVE ANY CHANGES TO THESE PLANS.

## PLANT SCHEDULE

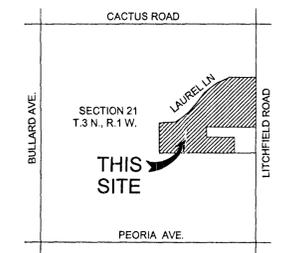
SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY.	REMARKS
TREES				
▲	CERCIDIUM HYBRID DESERT MUSEUM	24" BOX	35	STAKE AS REQUIRED
●	OLEA EUROPAEA SWAN HILL OLIVE	36" BOX	56	STAKE AS REQUIRED
○	PINUS ELDARICA MONDEL PINE	48" BOX	23	STAKE AS REQUIRED
○	PROSOPIS CHILENSIS THORNLESS THORNLESS CHILEAN MESQUITE	48" BOX	61	STAKE AS REQUIRED
SHRUBS				
⊗	CAESALPINIA PULCHERRIMA RED BIRD OF PARADISE	5 GAL.	156	1 GPH EMITTER
⊕	DODONAEA VISCOSA HOPSEED BUSH	5 GAL.	158	1 GPH EMITTER
⊖	LEUCOPHYLLUM FRUTESCENS 'GREEN CLOUD' GREEN CLOUD SAGE	5 GAL.	278	1 GPH EMITTER
⊙	LEUCOPHYLLUM LANGMANIAE 'RIO BRAVO' RIO BRAVO SAGE	5 GAL.	147	1 GPH EMITTER
⊕	BOUGAINVILLEA 'BARBARA KARSZ' BARBARA KARSZ BOUGAINVILLEA	5 GAL.	45	1 GPH EMITTER
⊗	RUELLIA PENINSULARIS BAJA REULLIA	5 GAL.	129	1 GPH EMITTER
ACCENTS				
⊕	HESPERALOE PARVIFLORA RED YUCCA	5 GAL.	134	1 GPH EMITTER
⊕	MUHLENBERGIA CAPILARIS 'REGAL MIST' REGAL MIST DIER GRASS	5 GAL.	166	1 GPH EMITTER
GROUNDCOVER				
TURF	CYNODON DACTYLON 'MIDIRON' MIDIRON HYBRID BERMUDA	SOD		POP-UP SPRAY HEADS
⊕	DALEA GREGGII TRAILING INDIAN BUSH	1 GAL.	270	1 GPH EMITTER
⊕	LANTANA SPP. 'NEW GOLD' LANTANA	1 GAL.	482	1 GPH EMITTER
MATERIAL				
—	CONCRETE HEADER	6" x 6" CURBSTYLE		SEE DETAIL
—	DECOMPOSED GRANITE 'DESERT GOLF'	3/4" SCREENED		2" DEPTH ALL LANDSCAPE AREAS

- NOTE: 1 - TREE HEIGHTS AND CALIPERS WILL COMPLY WITH "ARIZONA NURSERY ASSOCIATION SPECIFICATIONS" FOR THAT TYPE AND SIZE OF TREE
- 2 - LANDSCAPE TO BE WATERED BY AN UNDERGROUND AUTOMATIC IRRIGATION SYSTEM.
- 3 - TREES SHALL MEET SPECIFIED CALIPER SIZE WITHIN ONE YEAR OF INSTALLATION DATE.
- LANDSCAPING AND SETBACKS  
Landscape buffers and easements as well as building setbacks are shown with measurements in accordance with the City Ordinances and Guidelines in place at the time of the filing of this Pre-Plan and are subject to change if the applicable Ordinances and Guidelines are modified prior to the approval of the Final Plan.

## GENERAL NOTES

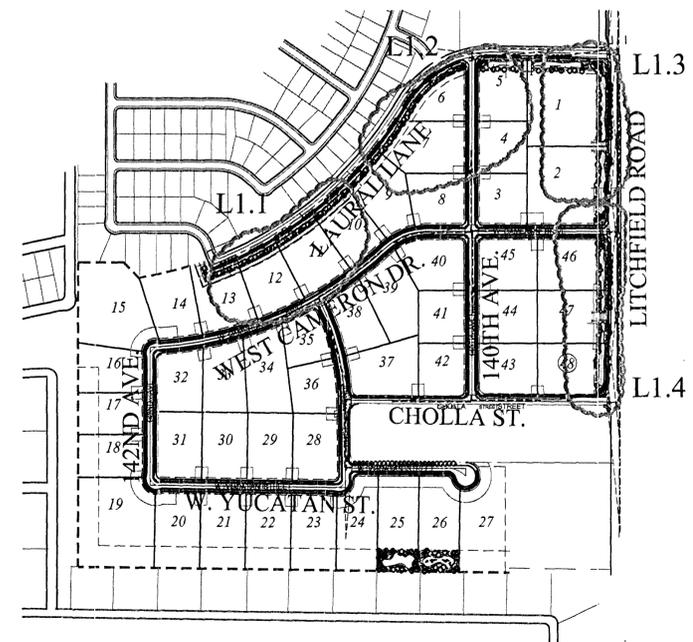
- ALL CHANGES TO BE APPROVED BY THE CITY OF SURPRISE PLANNING DEPARTMENT.
- SIGNS REQUIRE A SEPARATE PERMIT.
- ALL UTILITY BOXES AND STRUCTURES ARE TO BE SCREENED FROM VIEW.
- PLANT MATERIAL IS NOT TO BE LOCATED WITHIN 3 FEET OF ANY FIRE HYDRANT OR FIRE DEPARTMENT CONNECTION.
- TREES IN PAVED AREAS ARE TO HAVE DEEP ROOT BARRIERS. PROVIDE DETAIL/CATALOG CUT.
- ALL PLANT MATERIAL SIZES ARE TO BE CONSISTENT WITH ANA STANDARDS.
- ALL PLANT MATERIAL LOCATED WITHIN VISIBILITY TRIANGLES ARE TO BE MAINTAINED NO HIGHER THAN 2 FEET AND HANG NO LOWER THAN 7 FEET FROM GROUND ELEVATION.

LANDSCAPE PLANTINGS	REQUIRED	PROVIDED
RIGHT OF WAY LANDSCAPE PLANTINGS		
F. TREES: 1 PER 20 FT. OF STREET FRONTAGE (*INCLUDES EXISTING LANDSCAPE IN ROW)	189 TREES	207 TREES
G. SHRUBS: 2 PER 20 FT. OF STREET FRONTAGE (*INCLUDES EXISTING LANDSCAPE IN ROW)	378 SHRUBS	913 SHRUBS
H. SHRUB AND GROUNDCOVER AREA 25%	25%	72%
PARKING SPACE PLANTING	N/A	N/A
I. TREES: 1 PER 8 PARKING SPACES		
TOTAL TREE MINIMUM SIZES		
J. 20% - 24" BOX	43 TREES	35 TREES
30% - 36" BOX	65 TREES	58 TREES
50% - 48" BOX	108 TREES	114 TREES



VICINITY MAP  
SCALE: 1"=2000'

## KEY MAP



RECEIVED

FEB 25 2006

COMMUNITY  
DEVELOPMENT

2211 N. 7th Street  
Phoenix, AZ 85006  
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F 602.266.5707  
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LANDSCAPE ARCHITECTURE  
LAND PLANNING

PALO CRISTI COMMERCE PARK  
SWC LITCHFIELD ROAD AND LAUREL LANE  
SURPRISE, AZ  
PREPARED FOR: PALO CRISTI, LLC

JOB NO. 07081  
DRAWN BY: JRH  
APPROVED BY: JIG  
DATE: 11.07.07



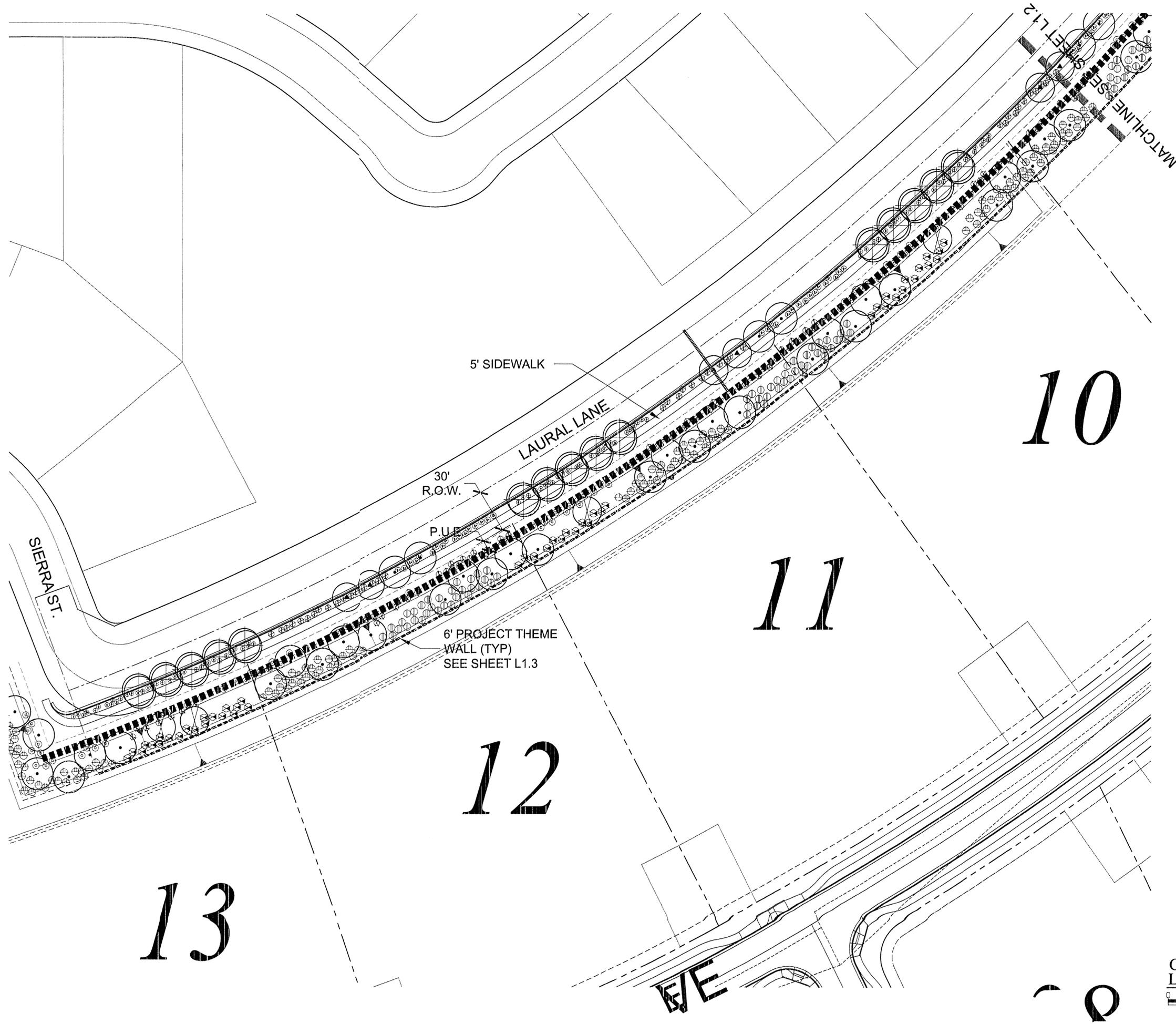
REVISIONS:  
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COVER SHEET

SHEET

L1.0

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**NOTE:**  
 ALL SHRUBS LOCATED IN SIGHT VISIBILITY TRIANGLE (SVT) TO BE KEPT AT A 2' MAXIMUM. ALL TREES LOCATED IN SVT TO BE TRIMMED TO 7' MINIMUM.

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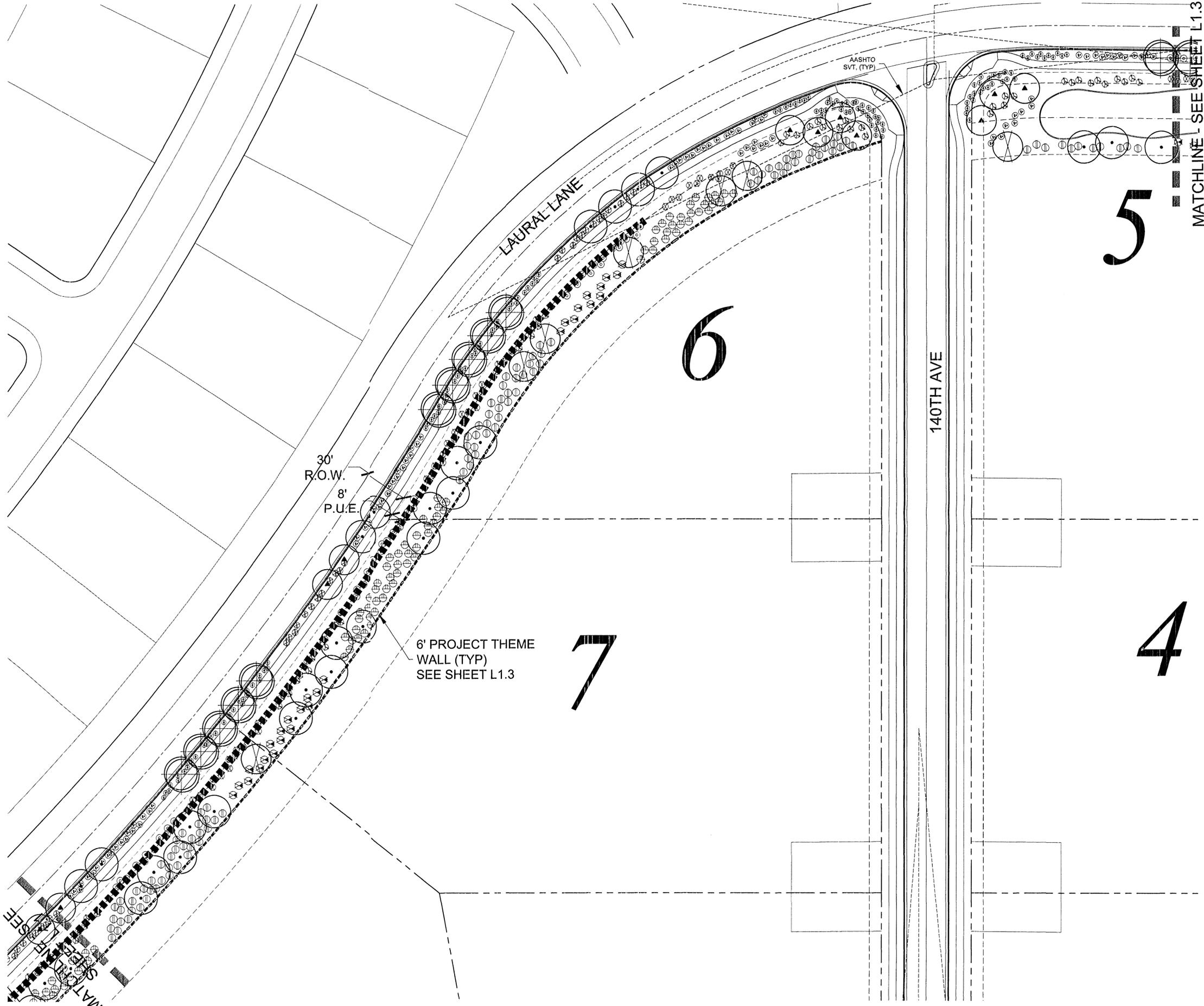
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MATCHLINE - SEE SHEET L1.3

NOTE:  
 ALL SHRUBS LOCATED IN SIGHT  
 VISIBILITY TRIANGLE (SVT) TO BE  
 KEPT AT A 2' MAXIMUM HEIGHT.  
 ALL TREE CANOPYS LOCATED IN  
 SVT TO BE TRIMMED TO 7'  
 MINIMUM CLEARANCE.

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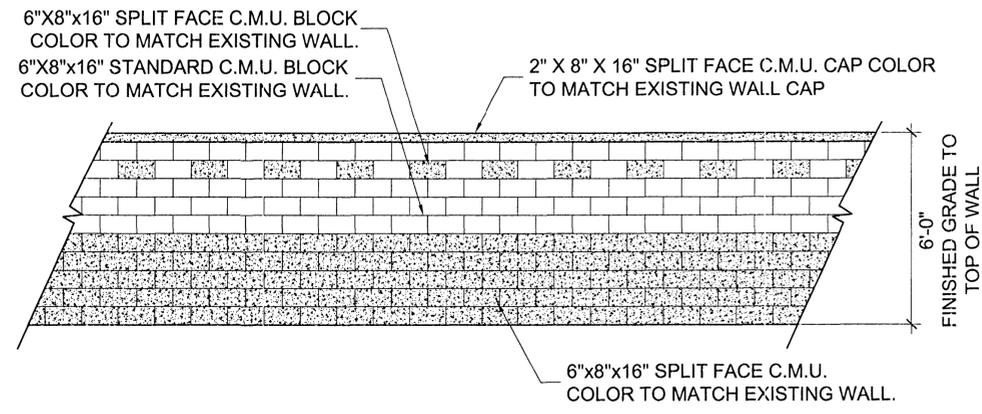
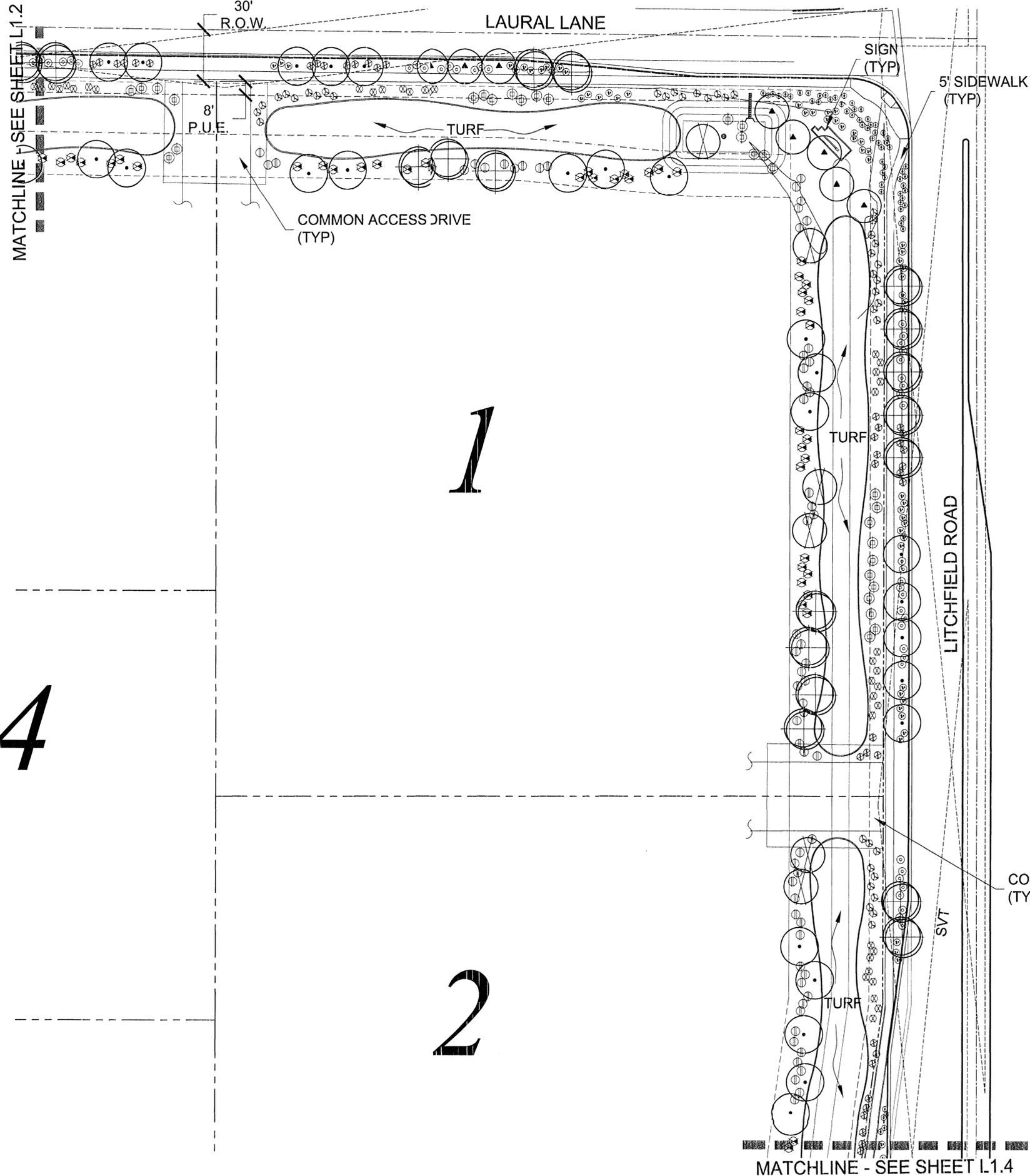
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MATCHLINE - SEE SHEET L1.1



6' THEME WALL

SCALE: 1:3

**NOTE:**  
 ALL SHRUBS LOCATED IN SIGHT VISIBILITY TRIANGLE (SVT) TO BE KEPT AT A 2' MAXIMUM. ALL TREES LOCATED IN SVT TO BE TRIMMED TO 7' MINIMUM.

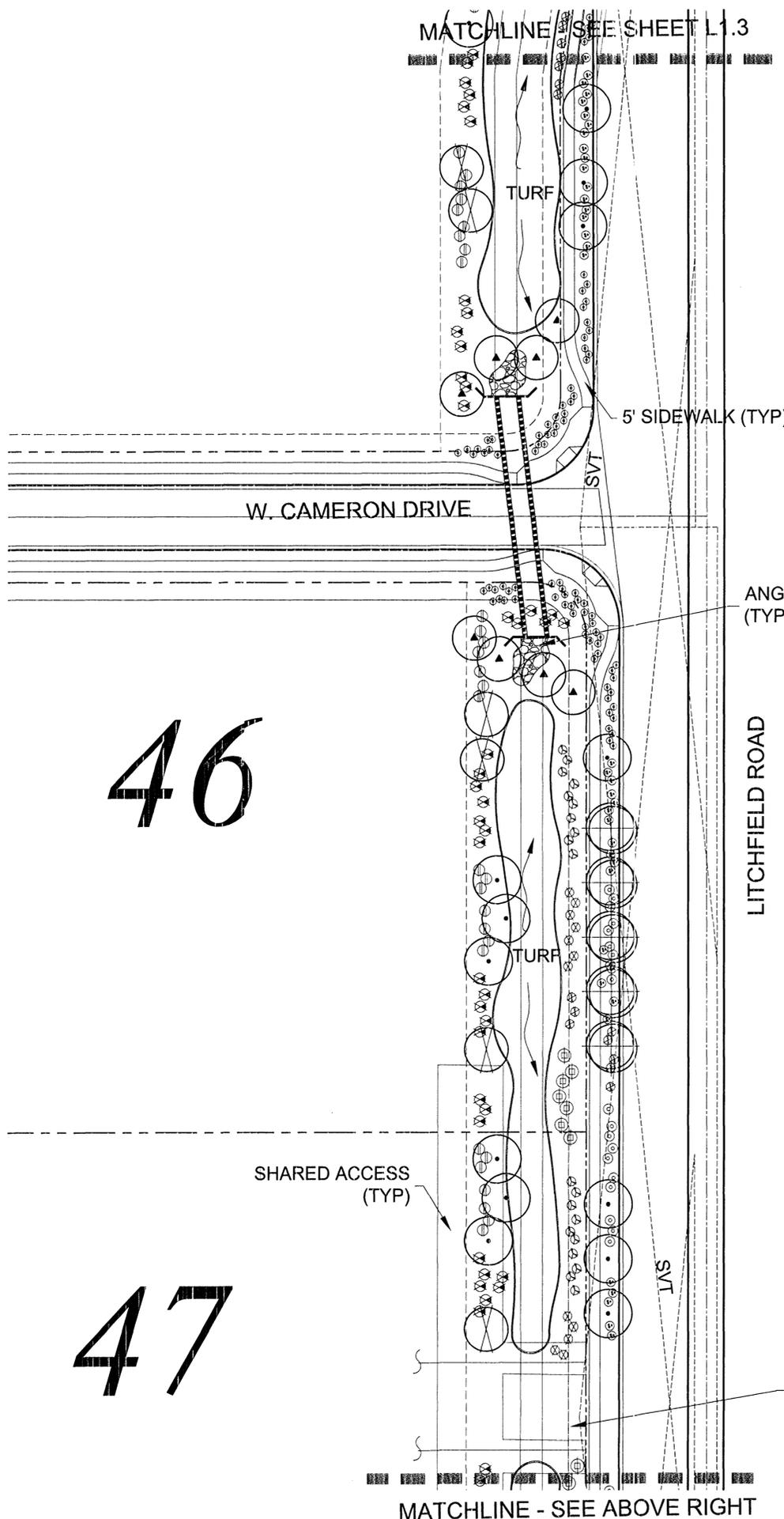
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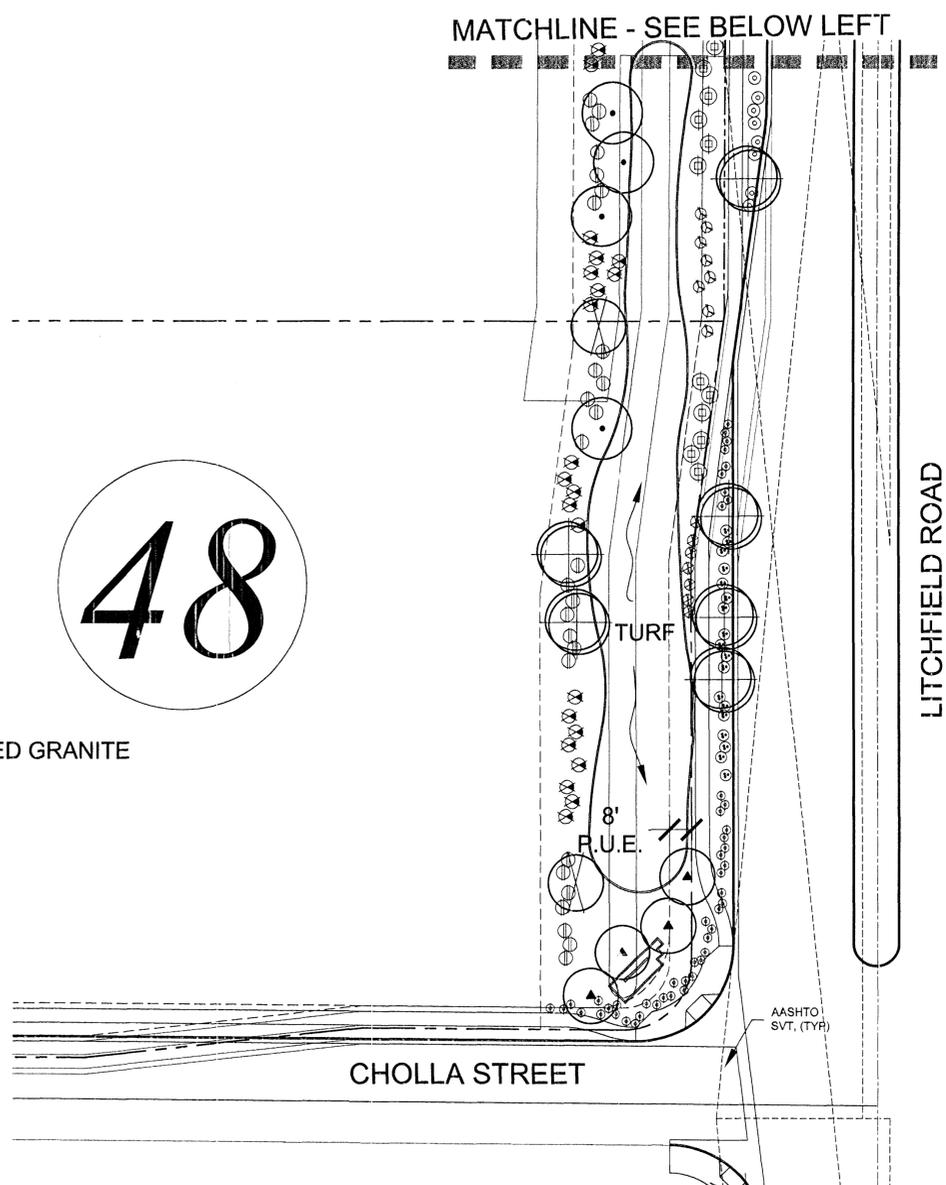
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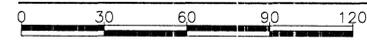


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NOTE:  
ALL SHRUBS LOCATED IN SIGHT  
VISIBILITY TRIANGLE (SVT) TO BE  
KEPT AT A 2' MAXIMUM. ALL  
TREES LOCATED IN SVT TO BE  
TRIMMED TO 7' MINIMUM.

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