Courtyard Renovation Project Purpose

- The original Design Committee: Cathy Gauthier, Diane Churchill, Ben Roberts, Wes & Marilyn Chow, Steve & Kathy Terry, Pat Davis & Dave Howell
 - Create a safer, more accessible and welcoming space.
 - Design by Kikuchi + Kankel Design Group
 - Elevated area mirroring the shape of Chancel for services & concerts
 - Multi-level built in benches
 - Retractable shade canopy
 - Stone water feature
 - More than a dozen trees & native plants

Landscape Plan - Courtyard



Courtyard Construction Team

- Led by Diane Churchill, Ben Roberts, Steve & Kathy Terry, Dave Howell
- Meet monthly on the 1st Wednesday via Zoom
- Working with Kikuchi-Kankel Design Group
 - Steve Kikuchi, ASLA, Founder
 - Jeanette Hill, PLA, Partner

Progress to Date

Shade Canopy

Water Feature

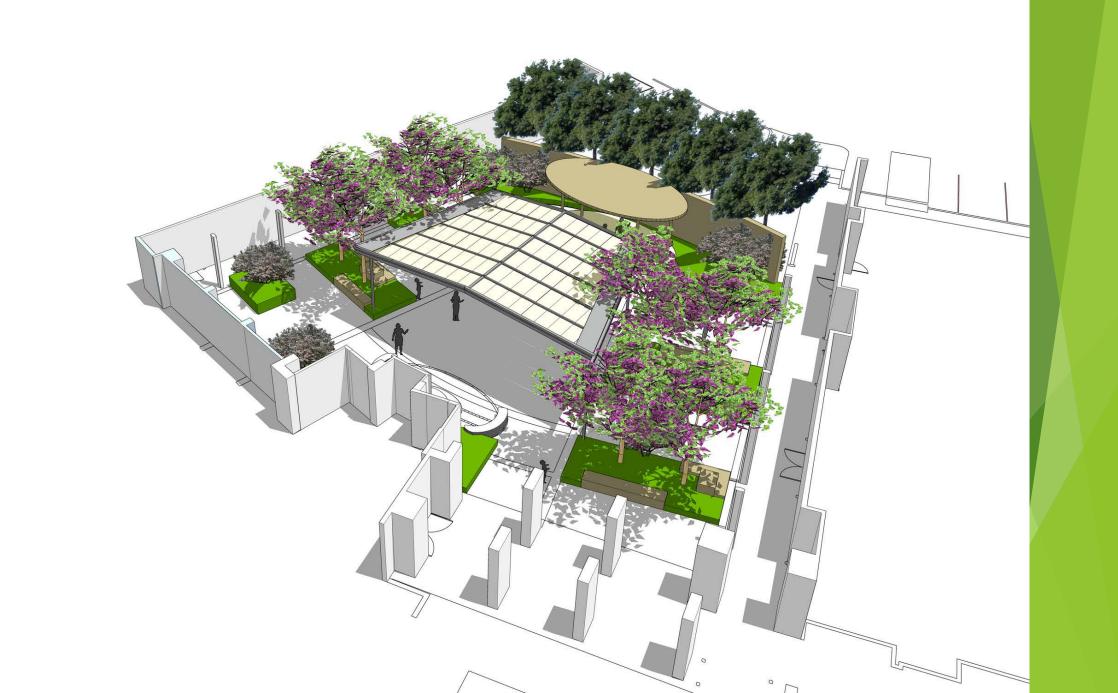
Trees

Shade Canopy

- It will take several years before the newly planted trees will provide adequate shade.
- Shade is particularly important for outdoor worship in August.
- Since shade will not be necessary most of the time, it needs to be retractable.

Shade Canopy

- Process:
 - Looked at examples of retractable canopies.
 - Listed our preferences:
 - Attractive framework not intrusive.
 - Semitransparent mesh for the canopy gives open feeling to see above yet blocks rays.
 - Architects presented design options.
 - Extensive testing & research by the team.







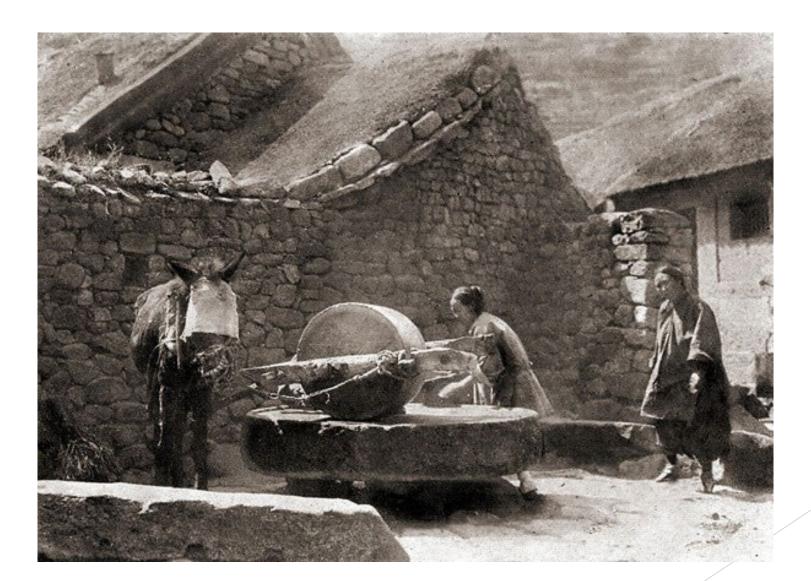
Shade Canopy Design Features

- Design mirrors the sanctuary roof peak and clean lines of existing buildings.
- Retractable, fire-resistant, semitransparent mesh shades.
- Each shade individually slides along tracks towards the center to open.
 - Eliminates drooping shades and wires.
 - Withstands high winds
- Decks above retracted shades protects them from dust & leaf litter.
- Metal framework designed and placed to minimize its visual impact by increasing the thickness of the metal to support the structure.
 - ▶ 15' height of the center peak.
 - Vertical poles are in the planters.
- Additional vertical shades may be added if needed.

Water Feature

- Water feature benefits:
 - Creates a pleasant auditory experience.
 - Inviting space to pause for reflection on stone benches
 - Sound barrier to road noise.
- Process: Listed our preferences:
 - No standing water.
 - Unobtrusive.
 - Research Stone Forest "millstone" design
 - Architects used same company design options.

Chinese Grain Mill, circa early 1900s





Fountain Design Features

- 4 ft x 6 ft elliptical shape mirrors the Chancel and stage areas.
- Fountain & curved benches cut from same stone giving continuity of design.
- "Millstone" design raised surface adds interest & added dimension.
- Reinforced pedestal and solid stone benches for safety.
- No standing water as water flows onto a grate into concrete reservoir.
- Adjustable waterflow and timer.

Fountain & Benches Conceptual Cost Estimate

- Stone Forest For over 35 years, Stone Forest designs celebrate the simple beauty of natural materials.
- ▶ \$64,850
 - 72"x48"x8" custom cut Millstone and custom curved stone benches
 - Plus: Fountain reservoir/foundation (concrete) w/equipment, lighting, waterline, drainage, electrical, & shipping

Courtyard Trees

Process

- Established criteria for trees, including:
 - Native
 - Seasonal color
 - Drought tolerant
 - Low maintenance
 - Minimal surface roots
- Reviewed tree suggestions from our landscape architects and project arborist.
- Present information to congregation for input

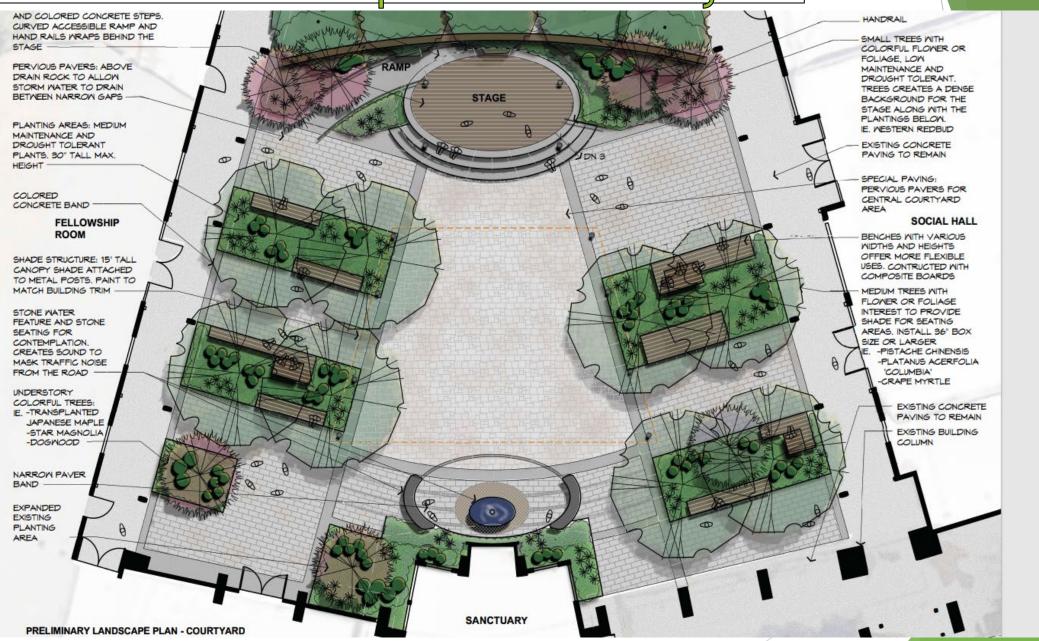
Courtyard Trees

Trees considered:

| Small Trees: | "Swan Hill" fruitless olive | Natchez" crape myrtle |
|--|------------------------------|-----------------------|
| | "Tuscarora" crape myrtle | Western redbud |
| | 'Pink Dawn' Chitalpa | Chinese Fringe tree |
| Medium Trees: "Keith Davey" Chinese pistache | | |
| | "Green Vase" Japanese zelkov | /a |
| | "Sterling Silver" linden | "Autumn Blaze" maple |
| | Sterting Silver tinden | Racanni Blaze maple |
| | Trident maple | Pacific wax myrtle |
| | • | • |
| Large Trees: | Trident maple | • |

▶ NOTE: Current trees, Flowering Pear, are considered "Medium" in size.

Landscape Plan - Courtyard



Pacific Wax Myrtle

► Tall evergreen hedge along the back of the fence facing Celtic garden



Myrica californica Pacific Wax Myrtle

- 1. A native tall, dense evergreen shrub.
- 2. Grows at a moderate rate to 10 30 feet and 10 12 ft wide.
- 3. Good looking year-round a fine choice for informal hedges, windbreaks and privacy screens.
- 4. Lifespan of around 25 30 years.

PROS:

- 1. Native to CA.
- 2. Clusters of tiny yellowish spring flowers are followed by small, waxy, purple-black berries that are popular with many birds.
- 3. Drought-tolerant and can withstand extreme heat.
- 4. Low maintenance.

CONS:

1. The shrubs tend to sucker. If you want to limit their spread, prune out suckers as they appear.

Consider: planting along the celtic garden side of the newly placed fence.

Western Redbud -

Spring Color - Two on each side of stage



Cercis Occidentalis Western redbud

1. Deciduous multi-trunked or trained to a single trunk

2. Hardy and Adaptable - relatively fast-growing trees

3. Size - On average, it stands about 12'-20' feet tall and wide

Pros:

1. Native species to California

- 2. Low maintenance
- 3. Drought tolerant
- 4. Grows quickly

5. Attracts wildlife (ie hummingbirds) as it is brightly colored

- 6. Flowers in spring
- 7. Long lived +100 years

Cons:

1. The leaves can be a litter problem if they are not regularly picked up.

2. Short flowering season.

"Toscarora" crepe myrtle





Lagerstroemia (Crape Myrtle) 'Tuscarora'

1. Decidious - Takes 5 - 10 years to mature

2. Hardy and Adaptable - tolerates a wide range of soil conditions. Needs good drainage.

3. Size - up to 15 feet tall and horizontal spread may be wider at maturity.

Pros:

- 1. Easy to maintain form with annual maintenance.
- 2. Drought tolerant once established
- 3. Seasonal color pinkish red flowers during summer months.
- 4. Live more than 50 years when properly maintained.
- 5. Resistant to Powdery Mildew.

CONS:

- 1. Moderate resistance to aphids.
- 2. Crepe myrtles produce pollen that can trigger allergic reactions in sensitive individuals.

Sterling Silver Linden

Fall color - summer fragrant flowers - two in each of 4 planters



Tilia tomentosa Sterling Silver Linden

- 1. Foliage ornamental shade tree, broad oval shape with fragrant flowers early summer
- 2. Size mature height 45 ft, spread 30 ft. High canopy with 6 foot clearance from ground.
- 3. Adaptable and dense deciduous tree with outstanding gold leaves in fall.
- 4. 70 year or more life expectancy.

Pros:

- 1. Seasonal color in fall.
- 2. Drought tolerant & heat resistent.
- 3. Subtle clusters of fragrant yellow flowers in early summer.
- 4. Low maintenance.
- 5. 'Sterling' cultivar does not attract aphids so does not produce sticky sap.
- 6. One of the first trees to leaf out and often last to drop their gold leaves in fall.
- 7. Lower branches can be removed to create high canopy.

Cons:

- 1. Initially slow growing one to two feet per year until established.
- 2. Flowers and fruit are considered by some to be very messy.
- 3. Potential pollen producer.

"Keith Davey" Chinese pistache

Fall color - two in each of 4 planters (alternative to Linden trees)



Pistacia Chinensis 'Keith Davey' Keith Davey Chinese Pistache

1. Deciduous. Foliage: fall color in shades of orange, red, and yellow.

2. Hardy and Adaptable - tolerates a wide range of soil conditions, from sandy to clay

3. Size - up to 40 feet tall and 50 feet wide at maturity.

Pros:

1. Large size provides shade during the spring and summer months.

2. Low-maintenance – male species has no messy fruits.

3. Drought tolerant once they are established.

4. Fall color is stunning.

5. Longevity - lifespan up to 100 years

6. Nonallergenic

7. Deep, non-aggressive roots make it a sturdy tree.

8. This cultivar does not produce pollen.

Cons:

1. Disease - susceptible to conditions such as verticillium wilt (affects the tree's vascular system) and root rot(fungal disease). Both of these diseases can be treated.

2. Girdling Roots - potential issue is girdling roots are roots that circle around the trunk

and prevent the flow of water and nutrients up the stem, and sugars down the stem.

3. Initally slow growing.

'Pink Dawn' Chitalpa





Chitalpa tashkentensis 'Pink Dawn' Pink chitalpa

- 1. Medium size deciduous tree with a dome shaped canopy can be multi trunk shrub or pruned to single trunk tree and growing rapidly to 20-30 ft. tall and as wide.
- 2. Clusters of pink, fragrant flowers from late spring into early summer.
- 3. Narrow leaves provide filtered shade.

PROS:

- 1. Drought tolerant.
- 2. Blooms for several months and attracts butterflies and bees.
- 3. Fast growing several feet a year.
- 4. Decidious but don't usually drop all their leaves.
- 5. "Pink Dawn" cultivar does not produce fruit.
- 6. Low maintenance.

CONS:

- 1. Prone to aphid infestations and verticillium.
- **2.** The floral scent may be too much for some.
- **3.** It has a short trunk.

"Swan Hill" Fruitless olive

Evergreen - One each near the office entrance & fountain



- OLEA EUROPAEA 'SWAN HILL"
- Swan Hill fruitless olive
- ▶ 1. Foliage: grey green color evergreen
- ▶ 2. Hardy and Adaptable can handle a range of temperatures and different soil
- conditions, slow growing
- ▶ 3. Size up to 15'-20' feet tall and wide at maturity.

Pros:

- ► 1. Low maintenance
- 2. Drought tolerant
- ► 3. Year-round interest and greenery.
- 4. Tree has biblical references which may be of interest.
- ► 5. Longevity lifespan up to 300-600 years
- 6. Little or no pollen.
- ► 7. Swan Hill has been grafted onto disease-resistant rootstock making it less susceptible to disease.
- Cons:
- 1. Pests and diseases branch and twig borer.

Timeline Estimate

- APR 2022 JUN 2023 Design Phase
- SEP 2023 MAR 2024

SEP 2024 - JAN 2025

- APR MAY 2024
- ▶ JUN JUL 2024

Agency processing phase -City Review Construction documents phase Bid assistance & contract negotiations phase Construction administration

(depending on weather conditions)

Next Steps

- After church forum May 19
- Information on <u>www.fccpa.org</u> & breezeway
 - Stage arbor
 - Benches
 - Lighting
 - Plantings
 - Pavers