

Trinity Lutheran Church

Existing Facility Conditions Survey

Our evaluation of the Trinity Lutheran Church's existing facility focused on two issues. The first was simply to take inventory of the physical space. The second was to quantify capital expenditures that will be required or can reasonably be anticipated to maintain the facility in its current configuration. A matrix summarizing building inventory is attached, as is a preliminary cost model for capital expenditures. It should be noted that no scalable drawings were available to establish quantities. Interior dimensions were measured to establish the approximate area of finished spaces, but detailed measurement to confirm wall thicknesses or discover chases was not performed. Major exterior elements were measured to establish length, but in many instances heights and roof pitches were approximated. We believe the quantities used in establishing probable costs to be within approximately 5% of actual.

Similarly, this costs projected should be recognized for what they are. We intend to provide "order of magnitude" cost projections to assist with master planning and prioritization decisions. The costs projected represent neither the least expensive nor most extravagant solution to the work identified. Rather, they are intended to provide a reasonable solution that is in keeping with the quality of the existing facility.

We have organized the capital expenditures into 6 categories: 1. urgent items; 2. recommended or requested life-safety upgrades; 3. infrastructure and systems; 4. accessibility; 5. cosmetic items; and 6. sitework. With the exception of life-safety upgrades, these were not intended as improvements, but simply as reinvestment to maintain the status quo. It should be noted that unless the existing facility is substantially altered, expanded, or converted to a different use, none of the life-safety upgrades would be required. The building is "grandfathered" based on the codes in force at the time the building was constructed and at the time that remodeling work, such as the elevator project, was performed. However, since the facility committee voiced concern and its members indicated that they felt fire suppression should be provided in the "do nothing" alternative, we have included projections for that work and related work as well.

Urgent Repairs: We only observed one major element that we consider in urgent need of correction. The exposed wood and stucco need to be replaced throughout. In some locations the wood has warped over an inch from its original location and water is penetrating the building envelope. We observed water coming through the overhang below the windows in rooms 310/312. We also observed uneven discoloration of the stucco when it was raining. This indicates different amounts and severity of fracturing of the surface. In our experience there are no effective, permanent patching techniques for this condition. We also suspect that in some areas there may be damage, most probably rot, in the framing members. The extent of concealed damage cannot be estimated with any accuracy without opening up the skin for visual inspection. For this reason we have projected a complete replacement of this material with an allowance for partial replacement of framing. Further investigation is required to establish the necessity of, and correct budget amount required for framing replacement.

In addition to this item there are several lesser items that also require immediate attention. These items all pertain to exterior elements. The steps at the northwest leading from the sanctuary have been displaced and need to be re-set. This will require minimal material, but will be labor and

hoisting equipment intensive. There are also several areas of broken or depressed sidewalk that need to be replaced. In addition, the stonewall supporting the east end of the drive-through awning is moving. The foundation should be underpinned to prevent further rotation and the structure at the canopy must be stabilized since the rotation has reduced the bearing area available for the south beam.

Life-Safety Upgrades: The following observations are offered in the event that Trinity Lutheran Church wants to voluntarily comply with life-safety codes. Two things should be understood here. First, Trinity Lutheran Church is not required correct deficiencies relative to current code now and will not be required to do so in the future unless there is a change in use, reconfiguration or expansion of the facility, or a change in state or local statutes.

There is a proposed change to the code that is currently pending approval. Our sources indicate that it will most likely be approved in September 2002. The impact of this change is that existing buildings with type A, B & E occupancies that are sprinklered do not have to meet fire resistive construction requirements for corridors. Churches fall under group A (Assembly). A 1-hour separation will still be required between separate types of occupancies such as an education wing (Group E).

Life-safety issues in the facility are complex and difficult to resolve fully. The only areas in the building that have adequate smoke protection are the elevator lobbies and the lower level corridor serving the classrooms. However, the adjacent areas are not monitored and there are no code-compliant smoke or fire separations in the building except at the boiler room. Even the classrooms used for pre-school are unprotected. There is a fire alarm annunciator in the classroom area adjacent to the south stair, however it is initiated by smoke detection in the corridor, not in the classroom. On both the lower and upper levels the south corridor fails to provide a safe egress pathway because it is interrupted by a large room that traverses the corridor path before it reaches the exit stairs. Even the stairways fail to meet egress requirements because they provide neither smoke nor fire separation.

Egress pathways are also of concern for the nursery and the tower room. Both have only a single means of egress. Although the tower room is served by the elevator as well as the stair, only the stair can be used in a fire emergency. In addition, the central stair is open and cannot be closed without drastically impacting traffic and capacity of the lobbies it serves. The north and south stairs serving the stage and rooms at the west end of the Fellowship Hall each have multiple doors common to the stairwell. These stairwells cannot be brought into compliance with current code without abandoning those spaces.

We have projected costs for addressing these and other life-safety concerns because of comments by the facility committee. The elements with the greatest potential impact on improving life-safety are a fire suppression system and full fire alarm system with both smoke and heat detection. Installation of both systems is complicated by the fact that most of the ceilings in the building are inaccessible and many are hard plaster. Installing these systems in an aesthetically acceptable manner will require demolition and replacement of most ceilings. Our pricing is based on concealed sprinkler heads that would only project below the ceiling when activated. Alternate sprinkler heads could be used that would not require ceiling work, but sprinkler heads and probably some piping would be visible.

Infrastructure: There are two significant infrastructural issues that will need to be addressed in time. Lighting levels and color are very poor in several areas. In most of these areas the number of fixtures is probably sufficient, but the lumen output and the discoloration of the diffusers or lenses have been deteriorated by age. We recommend upgrading lighting throughout the building except where new fixtures have been provided by recent remodeling. If a fire suppression systems is to be installed the lighting will likely have to be replaced because of the ceiling replacements. For this reason the lighting should not be upgraded ahead of the fire suppression installation.

The second major infrastructural issue is the windows. Conversations with staff indicated that although the majority of windows in the building have no thermal breaks whatever, they 'do not frost over or have water condense on them during cold weather. Nevertheless, at some time in the future they will need to be replaced. Their replacement will be complicated by the way they are set in the masonry walls. Care will have to be taken to ensure that the stone is not damaged and replacement estimates should anticipate some repair of the openings and cleaning of the stone. We would not recommend replacement of any of the leaded glass.

A lesser infrastructural issue is the exterior stonework. For the most part, the exterior stone is in excellent condition. However, there are isolated areas where stone sills have moved or where mortar joints have deteriorated. The quantity of this is very small and probably does not warrant wholesale restoration. Therefore we have not included it here, but recommend that some funds be set-aside in the annual budget for facility maintenance to have repairs performed on an as-needed basis.

Accessibility: Existing accommodations satisfy the legal barometer of "reasonable accommodation." Therefore the issue of accessibility is reduced from a "need" to a "want". The only current need is for a service call on the lift at the east entrance and a probable replacement of the contact point, which is no longer reliable. However, there are several "wants". There are only two accessible restrooms. One is the unisex restroom off the narthex. The other is the women's restroom in the lower level. All but one of the remaining restrooms are landlocked. We therefore recommend that the men's restroom adjacent to the music room on the upper floor be reconfigured for accessibility converted to a barrier-free unisex restroom and that the balance be retained as they are.

The facility committee commented that the lack of a grade-level entrance was a concern. We have provided an allowance for ADA compliant exterior ramping at the north entrance to the narthex.

Cosmetics: Cosmetic issues are generally very good throughout. Exceptions are minimal, but comprehensive planning should provide for their refurbishment. The three rooms east of the choir loft are the most needy. In addition to their interior finishes, which should be replaced entirely, the window openings require reconstruction because of severe water damage.

Site work: The only site work required to maintain the current facility is replacement of broken concrete walk/apron at the covered east entrance and minimal sidewalk replacement. The largest of these areas is at the bottom of the ramp leading from the north end of the narthex.

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Updated 12 Aug 02

Estimated Figures

	Quantity	Units	Unit Prices	Extension
Urgent Items				
Re-surface exterior skin and overhangs at stucco	6,000	sf	\$ 22	\$ 132,000
Miscellaneous Exterior wood replacement	1	ls	\$ 10,000	\$ 10,000
Re-set the exterior northwest steps leading from the sanctuary	1	ls	\$ 3,000	\$ 3,000
Underpin and stabilize stone wall at east end of drive-through canopy	1	ls	\$ 10,000	\$ 10,000
Miscellaneous sidewalk repair not included under Site work	600	ls	\$ 5	\$ 3,000
Recommended life-safety upgrades				
Fire alarm system	52,000	sf	\$ 2	\$ 91,000
Fire suppression system	1	ls	\$ 135,000	\$ 135,000
Ceiling replacements to accommodate suppression system installation	42,400	sf	\$ 3	\$ 127,200
Provide fire rated rolling doors at kitchens	4	ea	\$ 1,500	\$ 6,000
Fire separation at classroom wing	1	ls	\$ 5,000	\$ 5,000
Fire separation at office wing	1	ls	\$ 5,000	\$ 5,000
Rated separation at the north stair – main level (S2)	1	ea	\$ 1,500	\$ 5,000
Rated isolation of north central stair (S3) at the upper and lower levels	1	ls	\$ 10,000	\$ 10,000
Isolate Central Stair (S4) at lower level, and upper level	1	ls	\$ 28,000	\$ 28,000
Rated Separation at southeast stair (S5)	3	levels	\$ 5,000	\$ 15,000
Rated separation at south stair (S6)	3	levels	\$ 5,000	\$ 15,000
Rated separation at the northwest stair (S7)	1	ls	\$ 7,500	\$ 7,500
Smoke separation at the southwest stair (S8)	1	ls	\$ 7,500	\$ 7,500
Continue corridor through room 100	1	ls	\$ 15,000	\$ 15,000
Continue corridor through room 300	1	ls	\$ 15,000	\$ 15,000
Provide direct egress from nursery	1	ls	\$ 10,000	\$ 10,000
Clear out room 320 and provide fire rated door assembly	1	ls	\$ 1,500	\$ 1,500
Provide additional exit lighting	1	ls	\$ 4,000	\$ 4,000
Provide emergency lighting w/battery backup	24	ea	\$ 450	\$ 10,800
Infrastructure and systems				
Upgrade lighting	42,400	sf	\$ 5	\$ 212,800
Provide sealants and glazing compound at all windows	1	ls	\$ 25,000	\$ 25,000
Window Replacements-excludes all leaded glass	1	ls	\$ 110,000	\$ 110,000

Accessibility

Reconfigure upper level men's room adjacent to music room, as unisex barrier-free restroom	1 ls	\$	5,000	\$	5,000
Remove existing ramp and provide ADA compliant ramp at north entrance to narthex	1 ls	\$	35,000	\$	35,000

Cosmetic Issues

Renovation of rooms 314, 316, 318 and adjoining hallway	634 sf	\$	40	\$	25,360
Plaster repairs	1 ls	\$	2,500	\$	2,500

Landscaping Issues

Replace broken concrete at drive-through and misc. broken walks (does not include broken walk at north entry to narthex or sunken sidewalks which are included under urgent repairs)	2,500 sf	\$	5	\$	12,500
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Subtotal (rounded):

\$1,096,000**General Conditions****\$ 40,000****Constructing Contingency****\$ 114,000****Consulting Fees****\$ 150,000****Project Total:****\$1,400,000**