

Facility Conditions  
**Town of Hayward**  
Hayward, Wisconsin

Project No. 1902

July 27, 2020

REVISED



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## ▪ Introduction

This report is a summary of opinions by the design team of Legend Architecture LLC (buildings), Cooper Engineering (site and structure) and Timper Associates Engineers, LLC (plumbing, HVAC and electrical) that reviewed three of the Town of Hayward buildings during the months of January through April in the year 2019. This narrative is a companion to the previously prepared "Feasibility Study" dated April 9, 2019. The intent is not to be a Facility Condition Assessment to professional standards, but to simply disclose the condition of the three existing buildings. The three building are as follows: Main Building – housing the Town Hall, Fire Hall, Police Department and Highway Maintenance Shop; Metal Storage Building – housing highway and fleet supplies and equipment; Salt Storage Building. The existing buildings currently sit on a parcel approximately 4.5 acres. There is an additional parcel of approximately 3.1 acres that includes partial road right-of-ways. This additional parcel also has a building, not here-in addressed, that is used by the local Lion's Club organization.

## ▪ What is Planning

All too often, municipalities begin the process of facility planning before fully exploring the relationship of facilities to the achievement of their vision for services in the community. Specific and obvious space needs become a singular focus for a committee. In their zeal to provide for a growing use of the facilities for the growing population, and to do so at minimum cost, solutions "planned" by building committees can be, and frequently are, shortsighted in relationship to the potential for an expanded municipality system that a growing population suggests. Even when a committee is broader minded with regard to the evaluation of needs, the resulting facility is often a collection of spaces which respond to needs which are current, not the needs of the community not yet involved. While we cannot predict the future with regard to required needs or changes, we can step back from immediate, identifiable needs and reflect on the mission and vision of the Township. In so doing, we can create facility development plans which effectively support the delivery of programs far more responsive to the needs of our tax payers and community. Planning is a process about Vision and Commitment to an effective municipality, about defining Priorities, about understanding Benefits and Consequences, and about building Consensus in a community. Planning is not about inexpensive quick-fixes. It is not about responding to the personal desires of a few vocal leaders.

## How We Plan

The “Feasibility Study” process was actually initiated with an internal study conducted by the Township which identified “inequitable facilities” as the most critical issue in the Township. This basically means the existing facilities do not meet the current standards of required operations for the associated departments. The extension of the study to a formal procedure by the Town Board started the planning process.

The planning process focused on building consensus through meetings and tours which allowed each member of the planning group an equal voice in defining priorities of the Township facilities and in moving from priorities to specific solutions.

Through these meetings and tours, priorities were established and then presented to the Township for review.

With clearly stated priorities, as stated in “TOWN OF HAYWARD FACILITY PLAN COMMITTEE ORDINANCE, HAYWARD, WISCONSIN Ord 20-001,” the Board formed a Facility Plan Committee to produce a long-term proposed Facility Plan for the Town of Hall structures. This information included specific needs and deficiencies that could be quantified and identified as additional space needed for a given program or activity.

### ▪ Successful Solutions

The process of consensus building, continued with the meetings being utilized at the committee level to confirm the priorities that had been identified previously and to afford opportunity for this additional level of input from a different group of users and from a different perspective.

Results from the meetings could then be analyzed and compiled in a fashion that would provide meaningful data from which to determine the study direction and the modifications that would be required at each facility to meet the study criteria established by the Township.

Solutions to space needs in general involve additions to facilities or remodeling of existing spaces to accommodate programs already in existence; however, in recognizing that ultimately cost is going to be an important issue on which decisions will be based, reassignment of space needs to be a consideration as well.

Reassigning space, in many cases, is overlooked because it involves more in depth coordination efforts between the Architect and Planning Committee. In essence, it usually represents cost savings during construction due to the more efficient use of existing space. It also provides opportunity to provide new space for programs that benefit from newer construction and the application of new technology or simply newer and more inspirational surroundings.

Regardless of the challenges that are presented, successful solutions rely heavily on the ability of the Township, Architect and Community to work together as a team toward goals that support programs and provide for the highest level of input and participation in the study process and its ultimate recommendations.

This brief assessment documents the findings and results of the existing Township facilities for the Town of Hayward. It is intended to cover the information at a level of detail appropriate for anyone who wishes to understand the process and the justification for the intended actions to follow as a result of this research.

- **Summary**

In general the facilities exhibit signs of age and are representative of buildings that are near the end of their life cycle. All of these buildings would require significant dollars to retrofit and correct existing deficiencies to see them into the future.

- **Confirming Existing Conditions**

As a part of the initial process, tours of the existing buildings were conducted with Timper Associates Engineers, LLC, who specializes in plumbing, HVAC, and electrical disciplines. The purpose of the walk-thru was to identify issues in each of the facilities that might not be apparent to the everyday user and to assess the implications of bringing each of the facilities up to current Code compliance status. Many of these issues have to do with the efficiency and functional status of building equipment such as toilets, sinks, boilers, air handlers, lighting, and electrical systems as well as life safety issues such as exit distances and fireproof ratings of building components.

Legend Architecture LLC also conducted a separate tour to assess such items as energy efficiency, handicap accessibility and the structural system to determine its relative condition. These are aspects of the facilities that have a profound impact on its ability to serve as a functioning building into the future. Insulation, doors, windows and exterior wall and roof materials complied with building codes at time of construction, but in most cases do not comply with current building codes. All of the existing buildings do not comply with the current version of the Americans with Disabilities Act portion of the building code. If a building's structural system is in any way compromised, or has been altered by changes made in the past, it may prove to be cost prohibitive to use the existing facility as the basis for expansion.

- **Impact of Proper Maintenance**

In many cases what is discussed, relative to building maintenance, is equipment and devices that are worn out or reaching the point of "life cycle" which is to say they are either failing or about to. What we actually found at the facilities were well cared for and maintained systems which have been in service longer than is normally expected or equipment which had been repaired or partially replaced as necessary to maintain a functioning system.

In general, what was discovered was that the facilities have been very well maintained and that an effective short and long term maintenance program is in place. This doesn't mean all the equipment and systems are running like new, but it does mean they are functioning at an acceptable level and should failure occur, there is a managed process to provide for repair or replacement.

- **Specific Findings:**

- **A. Exterior Site Conditions**

The existing site conditions for the Main Building (housing the Town Hall, Fire Hall, Police Department and Highway Maintenance Shop) have several features to consider:

1. Geometric Alignment of the building and driveway layouts
2. Condition of the Pavements and other driving surfaces
3. Management of the Stormwater Runoff (drainage and treatment)
4. Condition and appearance of the Landscaping

**A1 Geometric Alignment:**

The driveway location at the access to STH 77 should be shifted westerly to align directly across from Davis Avenue. Consideration to improve access would be to add in a right turn lane for westbound travelers, and convert the existing bypass lane on STH 77 as the through lane and then create two opposing left turn lanes to improve the intersection safety. The approximate cost of the driveway and STH 77 improvements is estimated to cost up to \$120,000. This effort could be reduced if timed to coincide with any STH 77 scheduled improvements or maintenance work.

It appears the alignment for the existing driveways within the facility work well to serve all buildings. It appears overflow parking needs are handled by allowing visitors to park on the grass lawn area to the west of the primary driveway. This works acceptably well in the summer since the native soils are relatively granular and support occasional vehicular traffic without much damage to the lawn. The overflow areas may work okay into early November and take care of November election parking if there is not too much snow at election time. Early spring elections and well attended meetings may require wintertime overflow parking to the north side of the building. Cost to improve overflow parking is difficult to assign but if the existing lot is used and some signage and pavement lines placed, the cost could be as low as \$5,000. If a 72 stall asphalt paved lot is added to the site (approximately 120' x 200') the cost is expected to be up to \$100,000 depending on the location, available drainage, and need for lighting.

**A2 Pavements:**

The asphalt pavement apron located east of the building appears to be approximately 12 years old and is free of significant cracking. It appears that asphalt portion of the lot will have another 10 years of service life prior to any significant repair work.

The remaining asphalt pavements appear to be in the 20 year age, and there is a significant amount of cracking in the asphalt. This cracking has been maintained by sealing the cracks, and that effort does extend the life of the pavement significantly. The cracking occurs more and more as the pavement ages and becomes more brittle and less flexible. There are a few locations in the asphalt pavement where the pavement has settled a bit, and this has allowed some puddles to remain and the water is not able to drain away. This standing water will continue to soak into the soil below the pavements at those locations, and the pavement deterioration will accelerate at the puddle locations.

Due to the age of the pavement and the amount of cracking present, the repair recommended will be to replace the existing asphalt pavement within the next 5 years. In some cases pavements can be simply overlaid with an additional layer of asphalt pavement to extend the life, but in this case all the existing cracks will rapidly extend through the new pavement reducing the effective life. If appearance is an important factor (as it may at a commercial shopping center) then the entire asphalt surface could be seal coated after all cracks are filled, and this would clean up the appearance until the asphalt pavement could be replaced within the next 5 years. The asphalt pavement as it currently exists will last longer than 10 years, but it will require more and more attention each year to keep it in an acceptable driving condition. The approximate cost for a new parking lot constructed on site is expected to cost approximately \$4.80 to \$5 per square foot (SF) for one with 4" asphalt surface sufficient for truck traffic. If spot replacement of base materials, and the existing surface is pulverized in place for reuse to strengthen the base, then the cost is expected to be in the range from \$2.50 to \$3 per SF. The existing site has approximately 27,500 SF of asphalt pavement. The estimated cost to replace the existing pavement, excluding the east apron, and update the pavement markings is \$100,000.

The gravel surfaces all look generally in good condition and it is anticipated soft areas that may surface are rapidly corrected by placing some gravel on the yielding locations.

There is a concrete sidewalk at the front entry to the Town Hall, and that concrete surface has some wear on the surface most likely due to the salt use in the winter, rather than foot traffic causes. The concrete has one significant crack that does not appear to be displaced. There also is concrete surfacing present around the building that has been overlaid with asphalt pavement. The asphalt has detached from the concrete in locations, and some of those locations create a potential tripping hazard and should be repair to eliminate the hazard. The recommended repair is to replace the concrete sidewalk and asphalt, placed some base material and new asphalt pavement at those locations, or replace with concrete sidewalk. The estimated cost to replace the sidewalk with a similar width and location is \$2,500 including removals. To install a new sidewalk from the northwest side of the lot along the west side to the front entry is estimated to cost \$8,500 to \$10,000. This would provide a designated walkway if overflow parking is placed north of the existing facility.

### **A3 Stormwater Runoff:**

The drainage for the majority of the site seems to flow away properly. There are some settled area in the pavement that could be patched and the grade adjusted upward to eliminate the puddling. It appears the majority of the drainage from the site flows to a natural low area to the west of the parcel and infiltrates into the ground, or flow to the east on into a self-contained pond. It does not appear there is any discharge from the site that flows directly through ditches or piping to the south and into the Namekagon River causing a present concern regarding stormwater quality. Future redevelopment on the site will need to incorporate stormwater treatment features. Although there is no cost if the existing asphalt areas can be reconstructed to shed the water over the surface, there will be a cost to manage stormwater runoff as part of any significant site work that includes land disturbance over 1 acre. An approximate budget amount for some piping and basin stormwater treatment system constructed on site as part of other improvements is \$50,000. It is very likely the costs could and will be less, but some sites are challenging and require more piping to convey the runoff, and that can add to the costs significantly.



#### **A4 Landscaping:**

The grass lawn areas are typical for the sandy soils that are native to the community and appear well established.

There are volunteer growth areas along the perimeter of the site with native vegetation creating some natural screening. The playground and pavilion area have a nice selection of mixed tree growth and some low growth landscaping. There are several cedar trees along the west side of the building that have grown up tight against the existing building. This growth could be an issue as exterior building maintenance occurs. There is also a row of mature pine trees in the open area to the west of the parking lot, and this row of pines most likely works well as a partial windbreak for the developed portion of the lot. Removal of trees by commercial means will run from \$300 to \$1000 per large mature tree depending on the proximity to other structures and the need to remove the stump. The costs for tree removals immediately adjacent to the building, if not self-perform by Town Staff, would be expected to cost no more than \$1,000.

#### **B. Structural Conditions**

There are three individual buildings for which we are offering an evaluation – (1) Main Building which is a concrete block wall structure with a flat roof and timber framing, (2) the metal storage building and (3) the treated wood salt storage building.

All three buildings appear to be well into their expected life span even considering that they have been well maintained over time.

**B1 Main Building:**

This building's structure has the expectation for the longest life span given the materials of construction. With proper maintenance and repairs, this building was be expected to have a life span of up to 75 years. The original building was thought to be building in 1967. This part of the building is into year 53 with approximately 22 years remaining on the life span. There was an addition to the Fire Hall area in 1994. This part of the building is into year 26 with approximately 49 years remaining on the life span. Some of the current issues are the settlement cracks in the masonry walls and the need for continuous maintenance of the flat roof.

Seasonal temperature changes will continue to cause damage to the walls over time, eventually leading to the need for major repairs to the structural system. But those efforts can continue for decades. It is difficult to offer a related cost to these repairs without a much more in depth look at the specific structural systems and a detailed evaluation. An annual budget of \$10,000 for structural repair issues should cover small projects and the occasional larger project.

**B2 Storage Building:**

This metal building has metal siding panels and roof panels that are closer to the end of their expected life span (they are at approximately 90% of their useful life). It is unknown when this building was constructed, but it is assumed to be sometime after the original building was constructed and before the Fire Hall addition. Once corrosion begins, it will continue until the panels lose functionality. Replacement will need to be considered in the near future (5 to 10 years) for on-going use of this structure. A budget in current dollars of \$20 - \$30/square foot of total building area will provide an approximate repair cost for the roof and wall panels.

**B3 Salt Storage Building:**

This structure is in relatively good condition even though the environment is rough in terms of how the building is treated – loaded and unloaded with product. It will be necessary to consider on-going repairs to portions of the building due to this treatment – wall impact panels and siding. These comments do not address whether or not the building has adequate storage capacity. It is unknown when this building was constructed, but it is assumed to be sometime after the original building was constructed and before the Fire Hall addition.

**C. Building Materials (exterior & interior) and Handicap Accessibility (ADA)****C1 Main Building:**

The majority of the building exterior walls are constructed with concrete masonry units (CMU). The corners of the original building are showing signs of foundation failure. This also is causing a shift in the building that has caused movement at the east face near the highway maintenance overhead doors and south face near the fire hall overhead doors. Refer to the structural conditions in part B for structural integrity. The condition of the building materials are summarized later in this report. The handicap accessibility in the building and what is required to accommodate employees and general public is summarized later in this report.

Existing plumbing, HVAC and electrical systems are aged. Portions of the entire existing systems in general need to be replaced/upgraded to reduce future maintenance, to comply with current code requirements, and to increase energy efficiency. This will provide in general a more reliable building.

Handicap accessibility needs to be addressed as follows:

All exterior doors and interior doors are to be equipped with lever handles.

Doors with closers are to be adjusted to meet PSF opening capability.

Thresholds at exterior doors are to be wheelchair accessible.

The existing toilet rooms nearest to the meeting room need to be altered to one unisex toilet room.

Countertops that need to be accessed by the public need to be provided at a height of not more than 34" a.f.f.

Plumbing items are as follows:

Provide water service connection to City water as an option.

Provide building sewer connection to City sewer as an option.

Replace electric water heater with gas water heater.

Provide 2" interior truck fill.

Provide garage floor wastewater treatment (trench drains that discharge to garage catch basins).

HVAC items are as follows:

Replace interior gas boiler.

Upgrade town hall area heating/cooling/ventilation system.

Upgrade town shop heating system.

Upgrade town shop ventilation system.

Electrical items are as follows:

Upgrade lighting with high efficiency LED lighting.

Upgrade power receptacles and connections.

Upgrade power distribution equipment.

The foundation failure at the corners of the existing building and related movement at the overhead doors should be repaired as soon as possible. It is not a life threatening situation at this time.

The exterior face of the CMU is in need of new paint. This is an important part of keeping moisture out of the cores of the CMU and ultimately out of the interior of the building.

The stone veneer at the Town Hall portion of the building should either tuck pointed (removed existing mortar that is cracked or deteriorating between stones) or completely removed and replaced with a different exterior building material, such as metal wall panels that are properly flashed and sealed to prevent moisture from entering the building.

The current rubber roofing system was replaced approximately 10 years ago. This should be looked at in approximately 10 years for complete replacement down to concrete deck and replace with a higher R-value insulation and adhered rubber membrane. This will also remove the additional weight on the roof by not reinstalling the roof ballast.

The concrete floor in the original Fire Hall does not drain properly and should be replaced with properly pitch floor to new trench drain(s). The concrete floor in the Highway maintenance area does not drain properly and should be replaced with properly pitch floor to new trench drain(s).

The interior finishes in the Fire Hall and Highway Maintenance just show age from equipment exhaust and would only need to be cleaned and updated to give the area a fresh look. The finishes in the Town Hall show signs of wear and tear. Updating finishes in the Town Hall would not be required at this time except for giving the areas a fresh look.

The plumbing, HVAC and electrical services and equipment will need to be updated/upgraded. See comments above in Section C.

An approximate budget amount for some the potential work listed for this building is approximately \$320,000 to \$380,000. It is very likely the costs could be less, but once the building demolition begins, some unknowns could appear that will need to be addressed.

### **C2 Highway Department Post Frame Building:**

This building is a post frame wood structure with wood wall girts, wood roof purlins and metal wall and roof panels. Approximately half the building is heated and half is unheated cold storage. Refer to the structural conditions in part B for structural integrity. The condition of the building materials are summarized later in this report. The handicap accessibility in the building and what is required to accommodate employees is summarized later in this report.

Handicap accessibility needs to be addressed as follows:

All exterior doors and interior doors are to be equipped with lever handles.

Doors with closers are to be adjusted to meet PSF opening capability.

Thresholds at exterior doors are to be wheelchair accessible.

A new unisex toilet room will need to be provided in the heated portion of this building.

Existing plumbing, HVAC and electrical systems are aged. Portions of the entire existing systems in general need to be replaced/upgraded to reduce future maintenance, to comply with current code requirements, and to increase energy efficiency. This will provide in general a more reliable building.

The wood framing members do not appear to have any structural defects. The exterior wall and roof metal are showing signs of deterioration (rust) and the exposed fastener gaskets are most likely dry rotted. The short term fix is to sand blast the rusted areas of the metal on walls and roof, patch any holes in the metal, make sure all the locations where fasteners (screws) are located have fasteners installed and then repaint the entire building. Painting will give the building a cosmetic facelift, but will need to be repainted every 5 to 7 years.

The second option would be to replace all the wall and roof metal with new metal. Walls would remain exposed fastener, but it is recommended to use concealed fasteners for the roof. The heated portion of the building will need to have the insulation inspected and replaced if wet at both the walls and roof. This option may extend the life of the building an additional 20 to 25 years. Interior wall finishes show signs of age, but would not to be replaced unless specific areas are damaged or access would be needed to accommodate other construction repairs or replacement.

The plumbing, HVAC and electrical services and equipment will need to be updated/upgraded. See comments above in Section C.

An approximate budget amount for some the potential work listed for this building is approximately \$40,000 to \$180,000. This is a very large range of potential costs due to optional level of construction referenced.

### **C3 Salt Storage Building:**

This building is constructed of creosote treated wood exterior walls and roof structure. Refer to the structural conditions in part B for structural integrity. This is not environmentally friendly under today's standards. This building has reached its life cycle and is undersized to meet today's requirements. The floor is in need of complete replacement. The walls have areas that need to have new materials replace the broken or deteriorated wood siding. The roof has leaks that should be patched to cure the short term fix or completely replace the roof to extend the life of the building until a new building can be constructed.

The wood framing members do not appear to have any structural defects. The exterior walls and roof are showing signs of deterioration and should be replaced. The floor should be removed and replaced with new asphalt. This option does not address the need for more area, but would extend the life of the building an additional 8 to 10 years.

There is no plumbing or HVAC in this building. New electrical lighting is recommended.

- **Considerations**

In developing options for consideration and keeping the established criteria of no preconceived plan in mind, it was important to remain flexible in regards to ultimate physical changes to the facilities affected. The Township's desire to provide the Facility Study and now a less cumbersome facility conditions report process creates a more focused response to the conditions of the existing buildings.

- **The Cost Issue**

Cost estimates or opinions of probable cost are provided based on information available regionally that is helpful in determining what a facility containing these approximate functions and features will cost to update. They should not be viewed as a guaranteed minimum or maximum because there are too many variables that affect these numbers; variables that the Township and the Community should have a say in determining and play a role in the process that ultimately defines what exactly is to be updated.

Experience has shown us that based on the information the Township and Community have provided us with, these numbers are within 10% of the costs required to achieve the needs established.

- **The Needs Issue**

Needs and associated costs are the two issues that everyone can identify with during any discussion about capital improvements planning and implementation. They are the two most important aspects of any proposed building program; however, they need to be considered alternately separately and together to ultimately arrive at the most appropriate solution for a given community. Certainly if all things considered present two solutions that are equal in every way and one is less expensive, the decision should be made on cost alone; but more often than not, the less costly option has a certain amount of compromise associated with it that may or may not be acceptable to those deciding on it.

Cost has a very important role in decision making. It is not, however, the only issue when deciding about the future of the facilities for the Town of Hayward.

- **Summary**

The following list is a summary of existing conditions that were observed by the design team during their on-site walk through(s) conducted from January through April in 2019 and the estimated costs to repair, update and replace:

**Site Cost Summary:**

A1 – Geometric Alignment:	\$ 100,000 to \$ 120,000
A2 – Pavements:	\$ 80,000 to \$ 100,000
A3 – Stormwater Runoff:	\$ 50,000 to \$ 60,000
A4 – Landscaping:	\$ 1,000 to \$ 2,000

**Structural and Buildings:**

B1/C1 – Main Building:	\$ 350,000 to \$ 400,000
B2/C2 – Highway Department Post Frame Building:	\$ 50,000 to \$ 200,000
B3/C3 – Salt Storage Building:	\$ 17,000 to \$ 20,000
<b>Total Opinion of Probable Construction Costs Only:</b>	<b>\$ 648,000 to \$ 902,000</b>

All estimates are assuming all work will be done by outside sources and construction costs are based on 2020 material and labor figures.



Links to Wisconsin Commercial Building Codes:

[http://docs.legis.wisconsin.gov/code/admin\\_code/sps/safety\\_and\\_buildings\\_and\\_environment/361\\_366/361](http://docs.legis.wisconsin.gov/code/admin_code/sps/safety_and_buildings_and_environment/361_366/361)

[http://docs.legis.wisconsin.gov/code/admin\\_code/sps/safety\\_and\\_buildings\\_and\\_environment/361\\_366/362](http://docs.legis.wisconsin.gov/code/admin_code/sps/safety_and_buildings_and_environment/361_366/362)

[http://docs.legis.wisconsin.gov/code/admin\\_code/sps/safety\\_and\\_buildings\\_and\\_environment/361\\_366/363](http://docs.legis.wisconsin.gov/code/admin_code/sps/safety_and_buildings_and_environment/361_366/363)

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