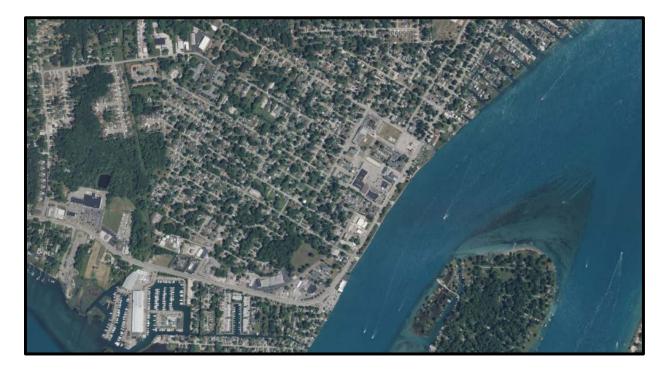
# Development Analysis Former Algonac Community School Building

1216 Saint Clair Boulevard

Algonac, Michigan



Prepared for:



The City of Algonac 805 St. Clair River Drive Algonac, Michigan 48001

Prepared by:



George J. Hartman Architects, P.C. 6905 Telegraph Road Suite 101 Bloomfield Hills, Michigan 48301

June 6, 2022

# Development Analysis Former Algonac Community School Building June 6, 2022

#### **Development Analysis Summary**

This development analysis was undertaken to determine the possible uses for the abandoned Algonac Community School Building located at 1216 Saint Clair Boulevard in Algonac, Michigan. The analysis will describe the existing conditions of the building and site and define possible development options for the building and site.

#### **Algonac Regional Information**

The City of Algonac is located at the southern end of the St. Clair River in St. Clair County. Algonac is approximately 50 miles northeast of downtown Detroit and 27 miles south of Port Huron. Based on the 2020 census, the population of Algonac is 4,057. The city area is 1.73 square miles.

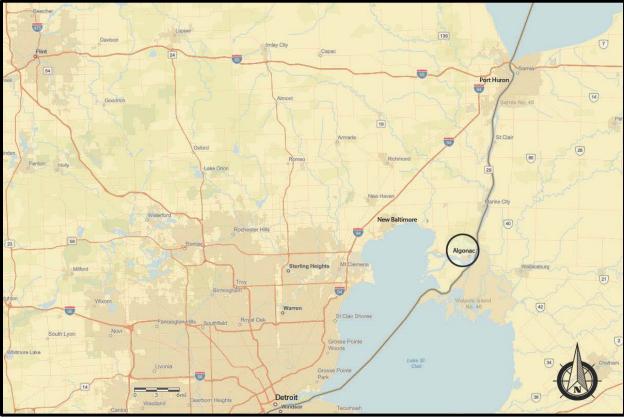


Figure 1: Regional map

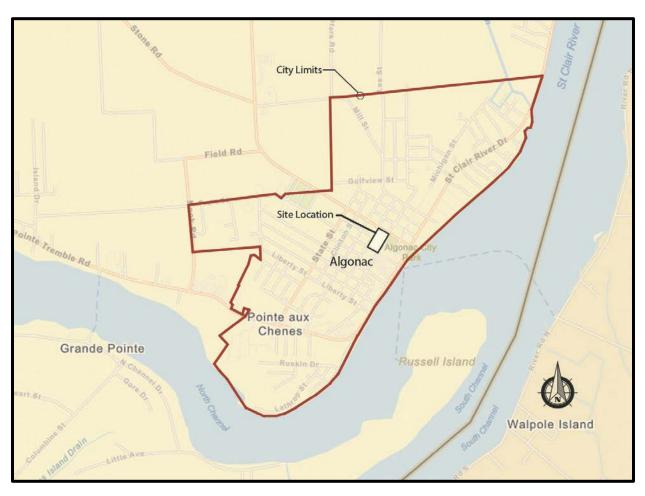


Figure 2: Algonac map enlarged

## Site & Location Information

The Algonac Community School Building occupies the land located between Fruit St. on the southerly side, Smith St. on the northerly side, Saint Clair Boulevard on the westerly side and Washington St. on the easterly side. The land is dimensionally 265 feet by 540 feet plus a vacated portion of Washington St. of 30 feet by 240 feet on the northeasterly side of the property. Total land area is approximately 3.45 acres. The land area does not include the adjoining property on which the skate park and ball field exist.

Based upon the legal description on file in the assessor's records, it appears that a portion of the Saint Clair Boulevard right-of-way may have been combined in the land area at some point in time. The records indicate a "5 foot strip of Saint Clair Boulevard" in the legal description. This would explain the 265 foot property depth dimension. Most likely this dimension was 260 feet when originally platted as individual lots of 60 feet by 120 feet plus a 20 foot alley.



Figure 3: Area Site Map

The building site is bounded on the southerly side by St. Catherine's Church & School, on the east by multiple-family housing and open park space, on the north by single family housing and on the west by single family housing. The site was originally platted as single lots of 60 feet in width by 120 feet in depth, with the lots fronting on Saint Clair Boulevard and Washington Street on the east and west side of the property. Clay Street originally ran east and west through the center of the property but was abandoned as was the northerly portion of Washington Street. A 20 foot alley easement existed along the rear lot lines running north and south. Parking for the building is provided through a combination of perpendicular street parking, parallel street parking, and an on-site parking lot on the south side of the school. A small playground exists at the southeast corner of the site.

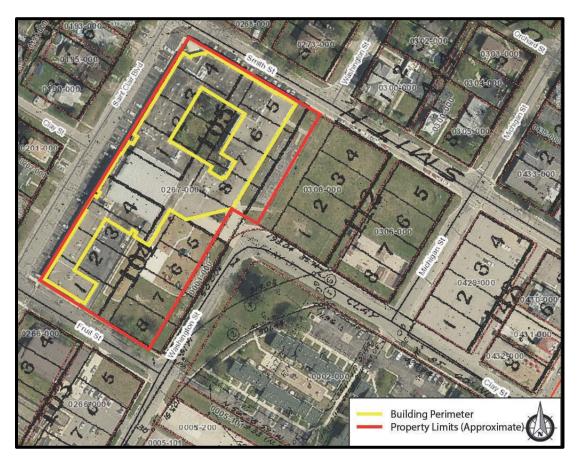


Figure 4: Legal Property Information Map

#### **General Building Information**

The Algonac Community School Building is comprised of the school and an attached Board of Education office building. The school was built in several phases with the original building constructed about 1963 and an addition added to the east side of the school at a later date. The Board of Education building was also added at a later date. The school portion of the building had significant renovations performed in 2011. Any improvements to the Board of Education building are unknown.

The area of the school building is approximately 61,121 square feet on the main floor level. There is a small stage mezzanine and balcony viewing area in the gymnasium that occupy approximately 2,000 square feet. Above the stage area is a mechanical mezzanine of 900 square feet. The attached Board of Education building is approximately 7,918 square feet of area on one level. Total area of the buildings is approximately 69,039 square feet.

The school building layout is rectangular in shape and surrounds an internal courtyard which has a large tree of local interest. Construction of the school building varies based on location and year constructed. The west and north classrooms are constructed of masonry bearing walls of concrete

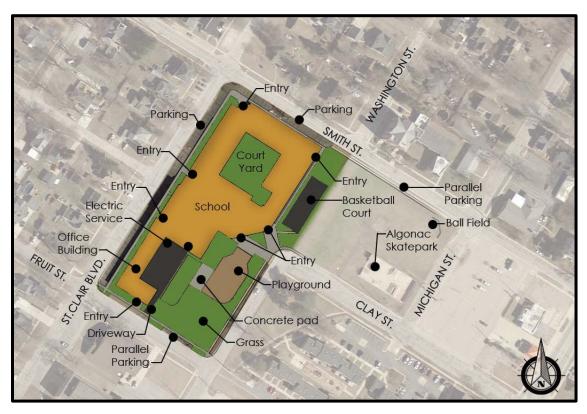


Figure 5: Enlarged Site Map

block and brick veneer. Interior walls are concrete block. The flat roof over this area is constructed of flat wood roof trusses with wood tongue & groove roof decking. The condition and type of roofing material and insulation over this area is unknown although it is a ballasted membrane type. Roof trusses are supported by bearing walls and steel beams.

The east classrooms are newer addition construction and have masonry bearing walls of concrete block and brick veneer on the exterior walls and concrete block on the interior walls. The roof in these areas is metal decking on steel joists supported by concrete block walls and steel beams. The condition and type of roofing material and insulation over this area is unknown although it is a ballasted type of roof.

The gymnasium area is masonry bearing concrete block walls with steel bowstring trusses most likely supported from concealed steel columns. The supporting roof deck appears to be a gypsum type supported on structural bulb tees. The condition and type of roofing material and insulation over this area is unknown although it is a membrane type. The boiler room and stage area appear to be of similar gypsum deck construction.

Floor construction is slab on grade concrete for all main levels of the building. Mezzanine areas are concrete on steel joist and steel beam framing. Flooring varies in areas from carpet to vinyl tile to exposed concrete. Restrooms are typically ceramic tile.

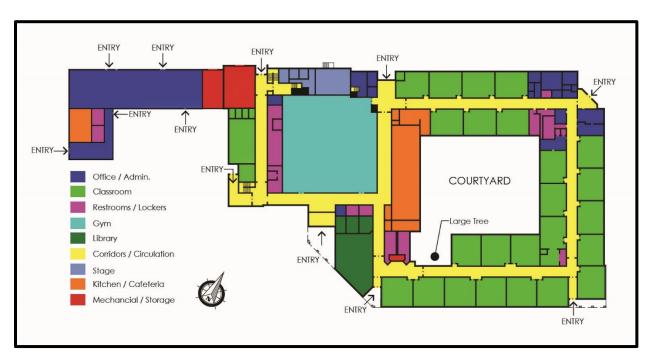


Figure 6: Building Floor Plan

Exterior windows are newer aluminum frame insulating glass systems. Some windows are ventilating type.

Ceilings in classrooms and corridors are typically suspended acoustical ceilings. In some of the older areas of the building, the suspended ceiling conceals older ceiling tiles on furring support systems which have been left partially in place. There is no ceiling system in the gymnasium or mechanical spaces.

The building is serviced by municipal sewer and water along with natural gas.

The electrical distribution systems appear to be newer and in good condition. Most of the power systems were shut down during the time of observation. Power is fed to on-site electrical switchgear underground and then into the building electrical distribution switches located in various locations in the building. Lighting systems vary but are generally fluorescent troffer lights in the suspended acoustical ceilings with some incandescent fixtures as accent lighting. Ceiling and lighting systems appear to have been part of the 2011 renovation work. Gymnasium lights are ceiling hung industrial fluorescent troffers.

Building heating and cooling is provided by several different types of equipment. Heating is generally provided via a hot water system by boilers in the main mechanical room. These appear to be newer boiler units. Air conditioning for the classrooms is provided by individual room through-wall units with outdoor compressors located in the courtyard. Several areas of the building are provided with heating and cooling by roof top mounted units. The gymnasium area is served by a new forced air indoor system located on the mechanical mezzanine above the stage

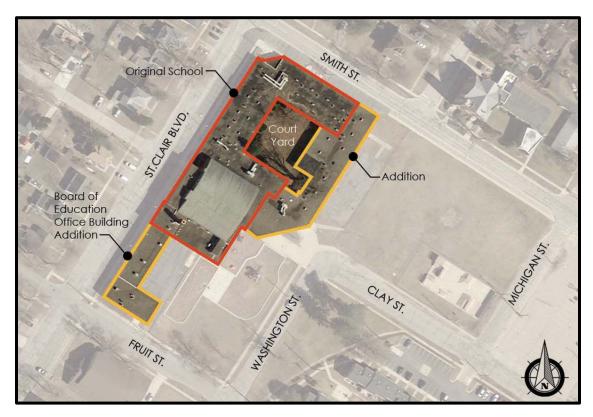


Figure 7: Building Roof Plan & Construction Phasing

area. The library, cafeteria and some other areas are serviced by forced air heating and cooling systems located on the roof. The building has no fire suppression system.

Restrooms have been renovated, most likely with the 2011 renovation. Fixtures are in good condition. Compliance with accessibility codes for the original building restrooms is questionable due to the limited space in those rooms. The addition restroom appears to be accessible compliant. The gym locker rooms do not appear to be accessible compliant.

A commercial kitchen serves the cafeteria area. The cafeteria has a small stage at one end.

Overall, the building is in good structural shape. While there has been minor vandalism inside the building, it appears to be water-tight and in sound condition. No significant roof leaks were visible. Interior damage is minimal with some graffiti and broken glass. Furnishings that have been left in the building have been damaged with debris strewn about.

It is anticipated that any original ceiling tile systems that remain in the building may contain small quantities of asbestos. Visible piping insulation appeared to be newer type and therefore asbestos free, although there is no way to determine if any older pipe insulation containing asbestos is concealed in walls or above ceilings. Some floor tile that was visible may contain small amounts of asbestos. It is possible that there may be more asbestos type floor tile located underneath newer floor coverings such as carpet. The window systems are newer so the possibility of asbestos in window glazing does not exist.

The Board of Education building is constructed similar to the school building. Exterior walls are brick veneer on concrete block and vinyl siding on wood framing. The interior is divided into offices and conference rooms and the walls are frame style. The roof is supported by steel beams and columns. The roof is a stone ballasted type on membrane on insulation. The exterior windows are newer aluminum frame insulating glass units.

Ceilings are suspended acoustical ceilings with fluorescent lights. Flooring is vinyl tile and carpet. Restrooms are not accessible compliant. The building has a small commercial style kitchen.

Heating and cooling is provided by roof top equipment.



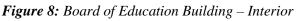




Figure 9: Board of Education Building – Interior



Figure 10: Board of Education Building – Interior



Figure 11: Board of Education Building – Interior



Figure 12: North Entrance of school building



Figure 14: Parking Lot behind Board of Education



Figure 16: Board of Education S.W. Wing



Figure 13: Southeast Elevation from Fruit St.



Figure 15: South Entrance Board of Education



Figure 17: View from Washington Street



Figure 18: Gym & Stage



Figure 20: Roof Construction at addition



Figure 22: Courtyard



Figure 19: Typical Corridor



Figure 21: Typical Classroom



Figure 23: Main Mechanical Room

## **Current Land Use, Zoning and Master Plan Information**

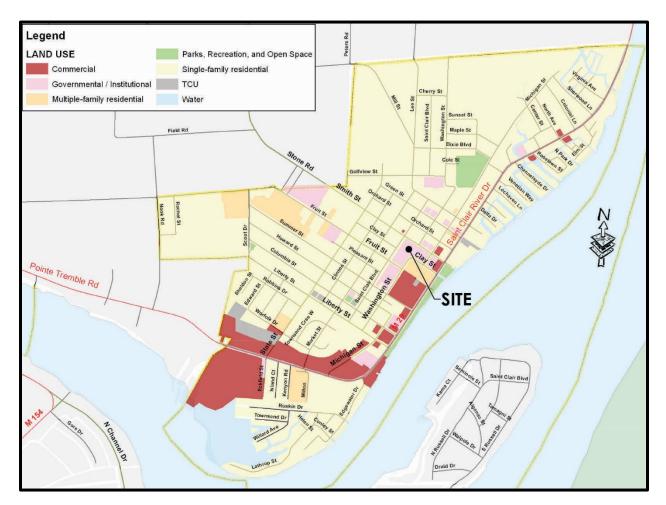


Figure 24: Current Land Use Map – from City of Algonac 2019 Master Plan

#### **Current Land Use**

The subject site is currently listed as Governmental / Institutional use on the 2019 Current Land Use Map. The property is adjoined on the east side by Governmental / Institutional and Multiple Family Residential Use, on the north and west sides by Single Family Residential Use, and on the south side by Governmental / Institutional Use.

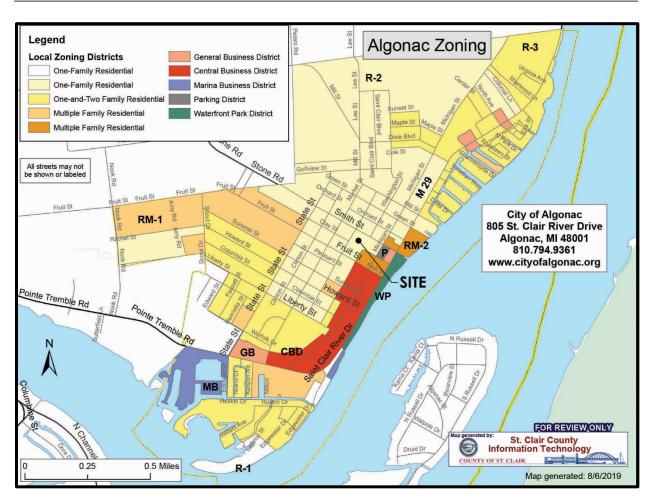


Figure 25: Zoning Map – City of Algonac

## **Current Zoning**

The subject site is currently zoned as R-2 One Family Residential. The school use in this zoning district is permitted as a principal use. Surrounding property to the east is zoned R-2 One Family Residential and RM-2 Multiple Family Residential High Rise, to the north and west is R-2 One Family Residential, and to the south R-2 One Family Residential. The southeast corner of the property abuts the CBD Central Business District zoning.

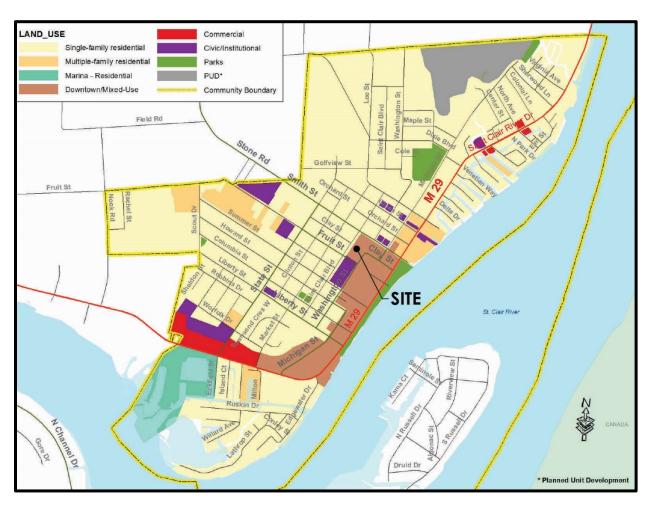


Figure 26: Future Land Use Map – from City of Algonac 2019 Master Plan

## Future Land Use – 2019 Master Plan

The 2019 Master Plan Future Land Use Map indicates that the subject property would be appropriately zoned for a Downtown / Mixed Use designation. This use would be consistent with the property to the east which is designated as Downtown / Mixed Use. The north and west abutting property is classified as Single Family Residential which is consistent with the lands current zoning and use. The land to the south is classified Civic / Institutional which is also consistent with the lands current zoning and use.

## **DEVELOPMENT CONCEPTS**

## **Residential Development Concepts**

The following development concepts are intended to show possible alternatives available for redevelopment of the community school site within the context allowed per the City of Algonac Zoning Ordinance. The concepts should be considered as generic in nature and are not final, engineered designs. Building footprints are of sufficient size to represent a typical plan. Some of the concepts assume full demolition and removal of the school building while others repurpose the building in whole or in part. Some concepts may require rezoning approval, variances, planning approvals and City Council approvals. Development options beyond what is presented here are possible, however those potential development options require more intense research and planning.

Washington Street has been abandoned between Clay Street and Smith Street and one-half of the right-of-way given to the properties on each side of the street. Re-establishing Washington Street adds value to a number of the development concepts by increasing the street frontage available for access to the property.

Clay Street does not currently run through the property, although older records indicate it may have been planned as a through street at one point in time. To re-establish Clay Street through the property may diminish the potential value of the site and provides little benefit to traffic flow. For the development concepts presented in this report, Clay Street was not shown as being reestablished, although it could be in some of the concepts with the resulting reduction in developable land.

The residential development concepts eliminate the current perpendicular street parking along Saint Clair Boulevard and Smith Street. These concepts also eliminate the parallel parking along Fruit Street. The intent is that conventional parallel street parking will be established as in other neighborhoods.



Figure 27: One-Family Residential Concept (Zone R-1)

# **R-1 One Family Residential**

The current property zoning of R-2 One Family Residential will allow for development of larger lots than originally planned for the subject property without a need for rezoning. If desired, the land could be rezoned to R-1 although there is no need to do this. R-1 lots increase in width from the 60 foot width of the underlying R-2 zoning to 90 feet in width (80 foot minimum required by R-1) by 130 feet deep. Homes can front on Saint Clair Boulevard and Washington Street (reestablishing Washington Street where currently abandoned is required). This design allows for 12 private homes with attached garages and private drives and backyards in a conventional layout.



Figure 28: One-Family Residential Concept (Zone R-2)

## **R-2 One Family Residential**

The current property zoning of R-2 One Family Residential allows for development of 18 lots 60 feet wide by 130 feet deep. The surrounding properties to the north, west and south are zoned R-2 so the continued use as R-2 is appropriate. The R-2 zoning creates a logical transition from the RM-1 Multiple Family Low-Rise and CBD Central Business District to the east. Homes can front on Saint Clair Boulevard and Washington Street (re-establishing Washington Street where currently abandoned is required). This design allows for 18 private homes with attached garages and private drives and backyards in a conventional layout.



Figure 29: One-Family Residential Concept (Zone R-3)

## R-3 One & Two Family Residential – One Family Concept

To achieve more density than permitted by the current R-2 zoning will require a change in zoning. A rezoning to R-3 will create a zoning that will allow for a higher density of one family homes or allow a further increase in density by allowing for two family homes (duplexes) on a lot. R-3 zoning allows for 50 foot wide lots. This will increase the density from the R-2 allowed 18 lots to 20 lots at R-3. Homes can front on Saint Clair Boulevard and Washington Street (re-establishing Washington Street where currently abandoned is required). This design allows for 20 private homes with attached garages and private drives and backyards in a conventional layout.

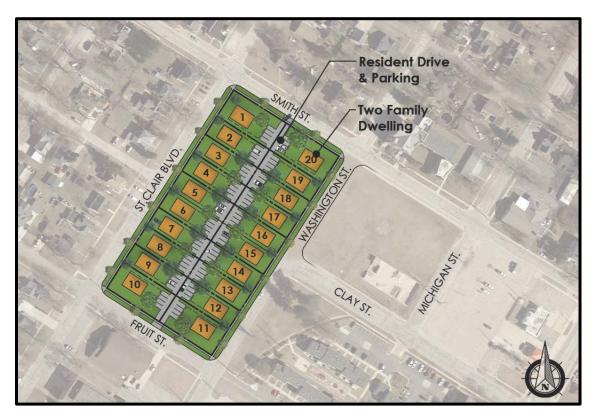


Figure 30: Two-Family Residential Concept (Zone R-3)

## R-3 One & Two Family Residential – Two Family Concept

Rezoning to R-3 will allow for development of two family homes (duplexes). The two family homes could be developed as side by side duplexes or as a two story unit with one unit above the other. The concept shown here is of the two story style with one unit over the other. This layout creates a total of 20 two family homes (total of 40 dwellings) without garages. Parking is placed in the rear lots by establishing a drive (former alley location) running north-south through the middle of the property. This layout allows for usable backyard space.



Figure 31: Multiple Family Residential Townhome Concept (Zone RM-1)

## **RM-1** Multiple Family Residential – Low Rise – Townhome Concept

Rezoning to RM-1 will allow for development of townhome style attached dwellings which can be one or two story apartments or condominiums. Each unit has a single car garage with a shared drive between two units. The layout shown in this concept is for 6 buildings of 6 units in each building for a total of 36 units utilizing Saint Clair Boulevard and Washington Street for unit access. This layout achieves a more convention neighborhood appearance where an internal road is a less conventional appearance for the neighborhood. Many other configurations are possible depending on the marketing desire.



Figure 32: Multiple Family Residential Low Rise Apartment Concept (Zone RM-1)

## **RM-1** Multiple Family Residential – Low Rise – Apartment Concept

This RM-1 rezoning concept presents a more typical two story apartment style layout. These units can be apartments or condominiums. Each unit has a single car garage with additional parking off of an internal road. The layout shown in this concept is for 6 buildings of 4 units per floor for a total of 8 units in each building for a total of 48 units on site. Property access is off of Fruit Street and Smith Street. There is no vehicle access off of Saint Clair Boulevard or Washington Street. Re-establishing Washington Street is an option with this concept but is not necessary for property access.



Figure 33: Multiple Family Residential High Rise Apartment Concept (Zone RM-2)

#### **RM-2** Multiple Family Residential – High Rise – Apartment Concept

This concept of RM-2 zoning shows two apartment buildings located at the north and south ends of the property. The height of the buildings and the number of units in each building will be dependent on the actual amount of parking available on site and the amenities offered in the buildings. For purposes of this concept, the buildings are considered to have 3 floors and 24 units per building for a total of 48 units on the site. Parking is provided on-site between the two buildings and accessed off of Saint Clair Boulevard and Washington Street. Continuing Clay Street through the site is possible in this concept. Re-establishing Washington Street is an option with this concept but not necessary for property access.

## CBD – Central Business & GB – General Business Concepts

Development of the subject site under the CBD and GB zoning categories offers a multitude of possibilities for uses and configurations. The concepts presented here for CBD & GB development are just several possible ideas. Whether CBD or GB zoning is chosen, the property needs to be rezoned to be developed under these zonings. Parking requirements for the CBD and GB zoning may be difficult to achieve depending on the size and use group(s) of the development. The building repurpose concepts maintain the current street parking configuration to achieve ordinance required parking quantities.



Figure 34: Mixed Use Commercial & Multi-Family Concept

## Mixed Use Commercial & Multi-Family Concept

The existing building is removed in total from the site to begin with a clean slate. The mixed use commercial & multi-family concept presented assumes a street level retail use. The second floor can be professional office space or residential and an optional third floor can be residential. The size of the development will be dependent on the amount of parking and landscape area that can be provided on the site. The building faces Washington Street which is re-established and the building façade is meant to replicate a "downtown" feel. Parking is in the rear of the building with access from Fruit Street and Smith Street with no access to Saint Clair Boulevard. Landscape buffering to the residential areas is utilized to separate the commercial impact on the residential neighborhood.

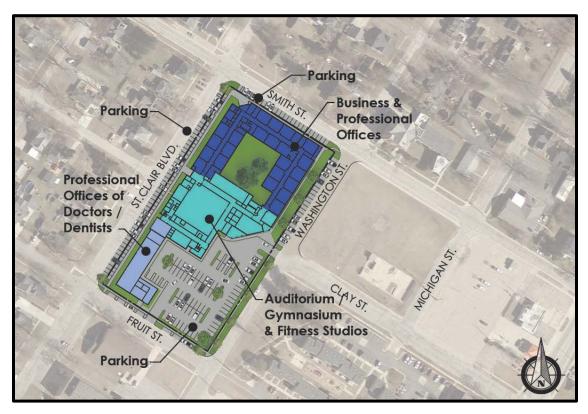


Figure 35: Repurpose / Mixed Use Concept

# **Mixed Use Commercial Concept**

The mixed use commercial concept repurposes the existing building. The classroom and office areas of the building can be converted to business and professional offices and the gymnasium area can be converted to health and fitness uses. The street parking remains in its current configuration. The playground area is removed to create additional parking areas. Washington Street is re-established to create more parking. The site may not be able to provide an adequate amount of parking with the re-use of the entire building. A reduction in the overall building size may be required.

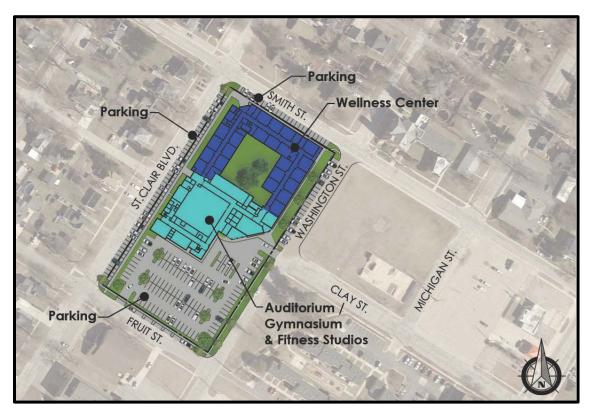


Figure 36: Repurpose / Health & Wellness Center Concept

# Health & Wellness Center Concept

This concept repurposes the existing building except for the south wing which is demolished. The gymnasium and auditorium/stage remain. Auxiliary spaces can become dance and fitness studios. The classroom wing can be converted into a mixed use Wellness Center with wellness clinics, health food cafes, juice bars, sport & fitness apparel retail and dance/fitness studios. Street parking remains along Smith Street, Saint Clair Boulevard and Fruit Street. Washington Street is re-established to create more street parking. The south end of the site becomes additional parking for the facility.

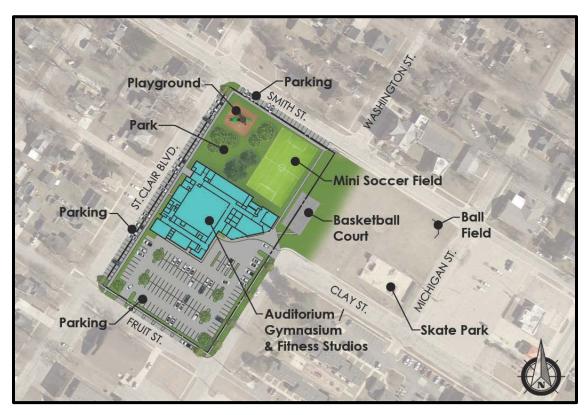


Figure 37: Repurpose / Community Center & Sport Park

# **Community Center & Sport Park Concept**

This concept maintains the existing school gymnasium and auxiliary spaces such as restrooms, locker rooms and large classroom spaces to create a community center. The center will have a gymnasium and stage, dance and fitness studios, and training rooms. The north classrooms and administrative offices as well as the south office building will be demolished. The north area of the site will be developed into a landscaped park for picnics and relaxation, a play structure and a mini-soccer field. This space will adjoin the existing basketball court / skate park / ball field site to the east. Washington Street remains abandoned between the two sites. The play area at the southeast of the site and the former office building land are converted to parking for the facility. The existing street parking on Fruit Street, Saint Clair Boulevard and Smith Street remain.

## **Development Costs Analysis**

Current construction costs are unpredictable due to the economic market. Costs cited in this report are based on per square foot estimates, known quantity-unit prices, and best-guess estimating.

Demographic Characteristics	Algonac		Michigan	
Total Population		4,196		10,077,331
Median Household Income	\$	48,925	\$	59,234
Bachelor's Degree or Higher		17.1%		30.0%
Employment Rate		53.4%		57.7%
Total Housing Units		2,091		4,570,173
Occupied Housing Units		1,891		4,041,760
Vacant Housing Units		200		528,413
Median Gross Rent	\$	726	\$	892
Homeownership Rate		68.5%		71.7%

Figure 38: Algonac Demographics (Source: 2020 American Community Survey 5-year Estimates)

One family residential construction should yield the lowest land development costs. The existence in the immediate area and along the street frontages of public utilities for sewer, water, natural gas, and electric is of benefit to low-intensity use like one family residential. The extension of Washington Street will increase land development costs by a nominal amount yet provide increased numbers of marketable residential lots. The recapture of the 5 foot strip along Saint Clair Boulevard will return the road greenbelt and right-of-way to pre-development standards. There is no benefit to extending Clay Street as this will add significant development costs in paving and utility infrastructure and will also diminish the number of marketable residential lots.

Residential development will require the total demolition of the school building and attached board of education building along with the removal of the playground features. Demolition costs for the entire facility are estimated at \$500,000. The listing price for the property is \$748,900. Road improvements to extend Washington Street and recreate Saint Clair Boulevard right-of-way is estimated at \$250,000. This equates to a developed land cost of \$1,498,900 or \$83,270 per lot for R-2 zoning with 18 lots.

Vacant land values for city lots in the surrounding neighborhoods varies between \$20,000 and \$50,000. The typical home price in Algonac varies between \$50,000 and \$500,000 with some homes higher or lower in value. Waterfront homes typically make up the higher priced homes while the neighborhood surrounding the site is in the \$150,000 to \$240,000 range. Assuming construction of a 2,000 square foot home at \$150 per square foot minimum will produce a developed home cost of \$383,270 without overhead and profit calculated in. Assuming a 15% overhead and profit, the sale price of the home would need to be \$440,000. This may place the home costs above the market level achievable in the immediate neighborhood.

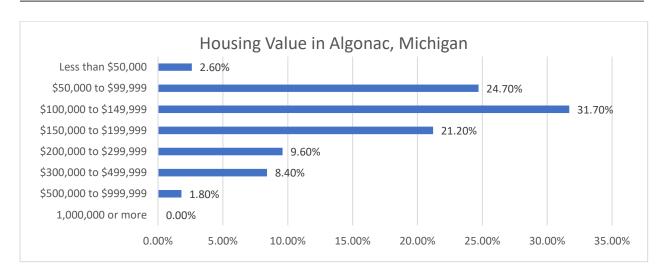


Figure 39: Housing Value (Source: 2020 American Community Survey 5-year Estimates)

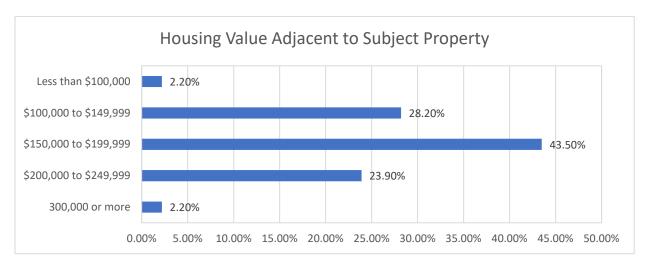


Figure 40: Housing Value Estimates (Zillow)

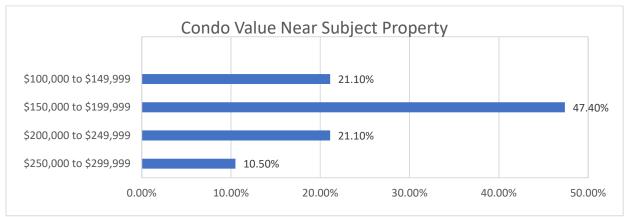


Figure 41: Condo Value Estimates (Zillow)

Two family residential construction costs and multiple family residential construction costs will be similar to those of one family construction, except for an increase in the cost of land development because of additional roads and parking requirements. Two family residential units can be developed and sold as condominiums or rented depending upon the design. Likewise, multiple family residential developments can be developed and sold as condominiums or rented depending on the design.

Commercial redevelopment of the building is more difficult to estimate cost of construction due to the many possible options for development. Demolition of the Board of Education wing of the building is estimated at \$80,000 to \$100,000. Demolition of the classroom wing to create a community center building are estimated at \$175,000 to \$225,000.

New commercial development costs are generally in the \$150 per square foot range although these fluctuate based on the development type and use. Land development costs are in the \$25 per square foot range, again depending on the complexity of the site development.

The current edition of the Michigan Building Code may play a significant role in the direction chosen for commercial redevelopment of the building. The portions of the building that have wood roof structure may not be code compliant or may require extensive removal and replacement with other materials to meet the code requirements for certain use group types. A full building fire suppression system may also be required to be installed. The building will need to be brought up to current accessibility code standards also. Some asbestos abatement may be required based upon a thorough inspection and testing process.

#### Conclusion

Whichever development method is selected, the market rate for construction costs, sales, rentals, and commercial leasing will be a key element of the direction chosen. Residential and commercial developments will increase property tax revenue for the improvements and in the case of commercial developments, personal property taxes on equipment.

While the Master Plan suggests a downtown, mixed use development, this may not be the most complimentary use for the existing neighborhood. This commercial zone may be to far off of the main commercial corridor for success.