PHED/ED COMMITTEE #1
October 12, 2015
Discussion

MEMORANDUM

October 8, 2015

TO: Planning, Housing, and Economic Development Committee
Education Committee

FROM: Vivian Yao, Legislative Analyst

SUBJECT: **Piney Branch Elementary School Pool**

The Planning, Housing and Economic Development (PHED) and Education Committees will be briefed on long-term options for using the Piney Branch Elementary School Pool space and meeting the aquatic facility needs of residents in the down county.

The following individuals are expected to participate in this discussion:

- Gabriel Albornoz, Director, Montgomery County Recreation Department (MCRD)
- James Song, Director, Department of Facilities Management, Montgomery County Public Schools (MCPS)

I. BACKGROUND

A. Operating and Budget History

In 1971, the Piney Branch Pool opened as a community feature of the then new Piney Branch Middle School. (The middle school later changed to an elementary school in response to community needs.) The school was built with multiple community services functions incorporated into the facility. In addition to the educational facilities of the school, the building housed the community pool and a health clinic. The pool and health clinic were both staffed and operated by Montgomery County Government.

The Recreation Department operated the pool from 1971 to 2001. Due to budget constraints, the Department suspended operating the facility, and the Silver Spring YMCA began operations of the facility in 2002. In August 2007, the YMCA provided notice that they would suspend operations and stated that the pool did not have the amount of users that they originally anticipated. In addition, the YMCA continued to experience maintenance problem related to the pool water temperature and humidity.

In the spring of 2008, the County funded $126,000 to repair the pool pak and boiler system. Adventist Community Services of Greater Washington (Adventist)began operating the pool in FY09 after receiving $206,000 in start-up grant funding from the County. Although the funding did not continue after FY09, Adventist informed the County in the fall of 2013 that it could no longer operate the pool without financial assistance. Thus, the Council approved $145,000 funding in the Recreation Department's budget for Adventist to operate the pool in FY15 and FY16. The Council understood that the City of Takoma Park would contribute $5,000 to support pool operations in FY15.

The Recreation Department's FY16 budget also includes $15,000 for pool maintenance. However, the Department reports that it has provided significant additional supports to the pool above the amount allocated in the Department's budget. MCPS also contributes approximately $50,000 per year for pool utilities.

B. Pool Use

The following table provides comparative information on the Piney Branch ES Pool in relation to other public aquatic facilities in the County. See also ©1-2 for additional budget and use data. Overall, the data show that pool use is much lower than other public aquatic facilities that operate year-round. The Council has received much community input advocating for funding to support the continued operation of the pool. The testimony emphasized the importance of providing swim lessons for students at the school as well as the opportunity for pool use by Takoma Park residents and individuals who live outside of the city.

Center Name	Total Budget	Revenue Recorded	# Serviced Count
* Bethesda Pool	$101,308	$3,102,653	66,563
Germantown Indoor Swim Center	$817,378	$394,743	616,133
Germantown Pool	$173,484	$90,950	50,088
Glenmont Pool	$214,758	$74,892	63,586
Kennedy Shriver Aquatics Center	$967,229	$362,176	795,611
Long Branch Pool	$93,759	$32,590	19,607
Martin Luther King - Indoor Pool	$876,015	$328,651	393,511
Martin Luther King - Outdoor Pool	$221,993	$41,713	55,703
Olney Pool	$851,972	$274,146	572,828
Piney Branch Pool [1]	$210,000	$86,258	17,875
Upper County Pool	$116,073	$25,981	14,626
Western County Pool	$111,016	$34,070	34,178
TOTAL	$4,754,985	$4,848,821	2,700,307

** Revenue collection is recorded in a central location for all site memberships & admissions for easier system-to-system transition*

*** This data is retrieved from Oracle: BI Tool; Due to data integration challenges, the system does not accurately display actual revenue received by site*

[1] Piney Branch Pool operational functions and a portion of maintenance are addressed by Adventist Community Services thru a Non-Competitive Grant allocated as part of the Recreation Fund in FY15

Several factors affecting use of the Piney Branch Pool include its geographic location, parking for pool users, the size of the pool and limited room for expansion on-site, and limited day use while school is in session.

C. Recreation Facility Development Plan 2010-2030

The current Recreation Facility Development Plan 2010-2030 (Plan) sets out goals and objectives for the development of recreation facilities to serve the needs of the Montgomery County population over the 20 year period. The plan recommends exploring available sites for the development of an urban combined Community Recreation and Aquatic Center in Silver Spring. The Plan notes that the community has no other community recreation facilities, is well served by mass transit, and has significant pedestrian access. The Plan envisioned larger regional-serving facilities placed strategically in population centers with excellent access to a variety of public transportation systems. The areas highlighted in the Plan cluster around the central core of current underserved populations and future population growth areas.

The Department reports that it had been approached by Adventist Hospital several years ago to explore a partnership to build an aquatic center on its Takoma Park campus. Although the Executive expressed interest in pursuing a partnership, discussions did not continue. There is currently no project in the FY15-20 Capital Improvements Program for an aquatic facility in the Silver Spring area.

D. MCPS Overcrowding Considerations

MCPS is currently conducting a comprehensive capacity study to address overutilization of elementary schools in the Down County Consortium, which includes Piney Branch Elementary School. If this review process results in a recommendation for additional classroom space at Piney Branch Elementary School, it would be necessary to consider whether the facility could accommodate both the pool and additional classroom space. MCPS could examine the feasibility and cost of adding classroom space above the pool as one option, given the limited footprint of the school.

II. Facility Assessment and Capital Options

Given the age of the facility and ongoing deterioration, the Council recognized the need to assess the condition and safety of the facility as well as explore options for continued use. The Council funded a facility assessment that was completed in FY15 (©4-31). The Future Options Report (Report) details the current condition of the pool and provides cost estimates and a summary of the work required to make necessary repairs to the pool, to bring the pool into ADA compliance, to separate the pool from the school, and to convert the pool to a gym.[2] The

[2] The Report explains that "it is not intended to provide in-depth analysis of either the existing conditions or the future options. It is a brief overview based on visual observation and existing drawings. Further study will be needed to explore the preferred option(s) and a detailed POR and test-fit will need to be developed for a more accurate budget."

reports also highlights unresolved issues including parking, construction staging areas, school bathroom facilities, and school storage space (©26).

The following table summarizes different options for the long-term use of the pool. Council staff notes that the Report assesses construction costs, but not all costs associated with a capital project including planning, design, supervision, site improvements and utilities, and furniture, fixtures and equipment costs. For the items in the table assessed by the Report, the reported construction costs as well as total project costs developed by the Department of General Services are provided.

Future Options Report Scenarios

Option #	Description	Future Options Report Cost	Total Cost	©
1	Repair and replace equipment; current operations	$2.96 million	$2.96 million	14-15
2	Option 1; ADA improvements; upgrades to aquatic play equipment	$5.4 million	$7.389 million	16-19
3	Option 2; separate pool from the school including locker room HVAC	$6.64 million	$10.891 million	20-26
4	Convert pool to gym	$3.24 million	$6.941 million	27-29

Other Possible Scenarios

5	Convert pool to classroom space	n/a	t/b/d	n/a
6	Build addition including pool and classroom space above	n/a	t/b/d	n/a
7	Add Recreation Center and Aquatic Center project to the CIP to trigger site selection process	n/a	t/b/d	n/a

Council staff makes the following observations for the Committees' consideration in assessing the options for future pool use:

- **The operational viability of the pool in its current state is still unknown.** Although certain structures and equipment have deteriorated or are reaching the end of their service life, it is not clear from the Report how long the pool can continue to safely operate without repair or replacement. The report recommends that the swimming pool should be inspected annually to monitor condition of the structural elements. Without taking the steps described Option 1 of the Report, the Recreation Department will likely to continue to expend more than what is budgeted annually for pool maintenance to keep the facility operational.

- **The opportunities for increased use of the pool are limited**. Many steps can be taken to increase the appeal and usability of the space; however, the geographic location of the facility and limited footprint of the pool would continue to impact the facility's ability to draw users from outside of the immediate area. Moreover, the Report makes clear that if acceptable off-site parking in the vicinity cannot be made available, the lack of parking would be a major impediment to use of the pool during school hours.

- **Separating the space from the school will not be cost effective.** It does not appear that use of the amenity would increase enough through expanded hours to warrant the significant investment in separating the facilities, either for a pool or a gym. Given the geographic location and parking limitations, the facility would not likely attract users or satisfy needs from other parts of the County. Thus Council staff does not believe that the revenue increase from additional hours would approach the upfront cost, even over time.

- **Any operator will require ongoing County (or other) subsidy to operate the pool.** Recent experience has demonstrated that revenues can reasonably be expected to be below costs; use is not likely to increase to a degree that will change that equation.

III. Operating Challenges

Operating experience for many years shows that the pool does not generate sufficient revenue to cover its costs. All recent operators including the Recreation Department, YMCA and Adventist have been unsuccessful in realizing sufficient revenue to support to pool operations. Although Adventist has kept the pool operating for the benefit of users beginning in FY09, it is not clear whether the organization is interested continuing in this role in the long term.

Consequently, policy makers may want to consider not only the long-term capital plans for the pool, but the operational plans as well. The Committees may be interested in hearing what other options may exist for pool management. Could fiscal and administrative oversight improve if operations were managed by either recreation departments of the County or the City of Takoma Park? At what cost? Council staff notes that Adventist has been able to reduce its operating cost by using volunteers and staff invested in maintaining the pool program.

IV. Discussion Issues

The Recreation Facility Development Plan 2010-2030 calls for addressing the aquatic service needs of residents in the down county. The Committees may need to determine what strategies should be implemented to meet this goal and to what extent the Piney Branch ES Pool should be part of this strategy. In doing so, the Committees may want to consider the following questions.

- **Continued Funding for Operations**: Because of the barriers identified with pool use and the history of pool operations over many years, it appears that pool revenue will not

support the cost of pool operations, and additional funding will consistently be needed to subsidize pool operations. Do the Committees support this ongoing expense?

- **MCPS Plans for Pool Space:** What are MCPS's recommendations for future use of the existing pool space? How much would it cost to build an addition for classroom space or pool and classroom space? If the school system is interested in converting the pool space to classrooms to address overcrowding problems, what would be the timeframe for making a decision and moving forward with a project?

- **Capital Options for Piney Branch and/or Another Aquatics Facility in Down County:** If MCPS's capacity needs do not preclude keeping the pool for long-term use, which capital options are the Committees interested in pursuing? Would the Committees be interested in exploring the possibility of adding a project to the FY17-23 CIP for a larger-use recreation and aquatic center in the down county area? Would funding to renovate the existing pool be more effectively spent on a larger facility with better amenities and parking?

- **Long-term Operations:** Should operations in the long-term be assumed by an entity other than Adventist Community Services? Would another operator be able to provide better fiscal or administrative oversight of pool operations? How much would it cost for the Recreation Department or the City of Takoma Park to assume operations of the pool?

- **Role of the City of Takoma Park:** What is the appropriate role and contribution of the City of Takoma Park in operating the facility or financing equipment replacement and renovation of the pool, assuming that the majority of users live in the immediate vicinity of the pool? Would it be appropriate for the City to take responsibility for operating the pool and making a significant contribution toward its renovation, similar to the relationship that the City of Gaithersburg[3] has with the pool at Gaithersburg Middle School? If the fact that Takoma Park residents pay into the County's recreation tax is a barrier to asking that the City take on these responsibilities for its residents, would a legislative change exempting Takoma Park resident contribution to the County's recreation tax make sense?

The packet contains the following attachments:

F:\Yao\Recreation\Aquatics\Piney Branch Pool 101215 final.doc

[3] The City of Gaithersburg funds and operates the pool at Gaithersburg Middle School. When the pool was recently renovated to address structural and non-structural issues, the City, MCPS, and the County contributed equally to the renovation costs. The County's contribution supported the significant use of the pool by non-City, County residents. Consequently, the City agreed to waive the non-resident cost differential for all uses by non-City, County residents.

RECREATION FACILITIES
Aquatics Centers/Sites
FY 2015

Center Name	Personnel Budget	Operating Budget	Total Budget	FTE Count	Revenue Recorded	# Serviced Count
* Bethesda Pool	$80,738	$20,570	**$101,308**	3.4	$3,102,653	66,563
Germantown Indoor Swim Center	$716,748	$100,630	**$817,378**	20.1	$394,743	616,133
Germantown Pool	$141,484	$32,000	**$173,484**	6.0	$90,950	50,088
Glenmont Pool	$188,388	$26,370	**$214,758**	8.0	$74,892	63,586
Kennedy Shriver Aquatics Center	$831,539	$135,690	**$967,229**	22.4	$362,176	795,611
Long Branch Pool	$70,139	$23,620	**$93,759**	3.0	$32,590	19,607
Martin Luther King - Indoor Pool	$734,475	$141,540	**$876,015**	19.1	$328,651	393,511
Martin Luther King - Outdoor Pool	$177,623	$44,370	**$221,993**	7.5	$41,713	55,703
Olney Pool	$714,522	$137,450	**$851,972**	19.5	$274,146	572,828
Piney Branch Pool [1]	$0	$210,000	**$210,000**	0.0	$86,258	17,875
Upper County Pool	$91,503	$24,570	**$116,073**	3.9	$25,981	14,626
Western County Pool	$92,246	$18,770	**$111,016**	3.9	$34,070	34,178
TOTAL	**$3,839,405**	**$915,580**	**$4,754,985**	**116.6**	**$4,848,821**	**2,700,307**

** Revenue collection is recorded in a central location for all site memberships & admissions for easier system-to-system transition*

*** This data is retrieved from Oracle: BI Tool; Due to data integration challenges, the system does not accurately display actual revenue received by site*

[1] **Piney Branch Pool operational functions & a portion of maintenance are addressed by Adventist Community Services thru a Non-Competitive Grant allocated as part of the Recreation Fund in FY15**

Piney Branch Revenue is recorded & received by Adventist Community Services

Facilities are staffed as following:

3-4 Career Recreation Specialist (001015) G21 *Positioned at each facility*

Additional staffing: S Class Seasonals make up the remainder of the FTE count (*1040 hours per staff*)

** Serviced Count = for all pool activities (includes spectators & participants)*

RECREATION FACILITIES
Aquatics Centers/Sites
FY 2014

Center Name	Personnel Budget	Operating Budget	Total Budget	FTE Count	Actual Revenue	# Serviced Count
* Bethesda Pool	$80,738	$20,570	**$101,308**	3.4	$3,141,990	47,095
Germantown Indoor Swim Center	$703,883	$100,630	**$804,513**	20.1	$410,110	702,735
Germantown Pool	$141,484	$32,000	**$173,484**	6.0	$73,759	47,741
Glenmont Pool	$188,388	$26,370	**$214,758**	8.0	$76,023	57,912
Kennedy Shriver Aquatics Center	$805,297	$135,690	**$940,987**	22.4	$668,311	556,793
Long Branch Pool	$70,139	$23,620	**$93,759**	3.0	$31,025	28,246
Martin Luther King - Indoor Pool	$698,504	$141,540	**$840,044**	19.1	$327,056	419,398
Martin Luther King - Outdoor Pool	$177,623	$44,370	**$221,993**	7.5	$28,418	53,594
Olney Pool	$684,465	$137,450	**$821,915**	19.5	$492,753	497,926
Piney Branch Pool [1]	$0	$10,000	**$10,000**	0.0	$85,748	16,992
Upper County Pool	$91,503	$24,570	**$116,073**	3.9	$25,131	20,721
Western County Pool	$92,246	$18,770	**$111,016**	3.9	$35,267	33,892
TOTAL	**$3,734,270**	**$715,580**	**$4,449,850**	**116.6**	**$5,395,591**	**2,483,045**

** Revenue collection is recorded in a central location for all site memberships & admissions far easier system-to-system transition*

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[1] Piney Branch Pool costs were absorbed by Adventist Community Services in FY14; not funded in Recreation's operational budget

Piney Branch Revenue is recorded & received by Adventist Community Services

Facilities are staffed as following:

3-4 Career Recreation Specialist (001015) G21 *Positioned at each facility*

Additional staffing: S Class Seasonals make up the remainder of the FTE count (*1040 hours per staff*)

** Serviced Count = for all pool activities (includes spectators & participants)*

OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

May 14, 2015

TO: George Leventhal, President
Montgomery County Council

FROM: Timothy L. Firestine, Chief Administrative Officer

SUBJECT: Report on the Piney Branch Pool

Please see the attached report regarding the Piney Branch Pool conducted by NOA Architecture Planning Interiors in cooperation with the Department of General Services and the Department of Recreation. The Facilities Division of Montgomery County Public Schools (MCPS) was also consulted.

The report details the current condition of the pool as well as cost estimates and summary of the work necessary to 1) repair and replace operating equipment and other necessary repairs; 2) bring the pool into ADA compliance; 3) separate the pool from the school; and 4) conversion to another possible use. It is important to note that on page 26 of the report there are several outstanding issues that will require further analysis to determine additional cost estimates. These include parking issues and staging areas as well as conversion of school storage space for exit stairs.

As you know, this facility is the property of MCPS. Therefore, the Board of Education will need to address how this project would fit in the Capital Improvements Program for MCPS. If you have any questions, please do not hesitate to contact my office.

TLF:rsd

Attachments

c: Larry Bowers, Interim Superintendent, Montgomery County Public Schools
David Dise, Director, Department of General Services
Gabriel Albornoz, Director, Department of Recreation

MONTGOMERY COUNTY
Department of General Services
Division of Building Design and Construction

Future Options Preliminary Report
PINEY BRANCH E.S. INDOOR POOL
7510 Maple Ave. Takoma Park, MD 20912

NDA Architecture Planning Interiors www.ndaarchitects.com

APRIL 28, 2015

(F)

Piney Branch Elementary School Indoor Pool Future Options Preliminary Report

4.28.2015

Table of Contents

Introduction:

The pool at Piney Branch E.S. was opened in 1971 as a community feature integrated with the school and a health clinic. Because it is integrated into the school building, the current security requirements make it impossible for the pool to be operated during school hours for community use. The operating hours are currently restricted to after hours and Sundays.

The building is 44 years old , and to the best of our knowledge no major renovation was carried out since its construction in 1971, with the exception of some interior accessibility improvements which mostly do not comply with the current ADA requirements.

The purpose of this report is to explore the following future options for presentation to the County Council:

1. Repair or replace all operational equipment in need of replacement currently or has reached approximately 75% of their service life to make the systems new and continue the current operation.

2. Make ADA/accessibility improvements in addition to Option 1, and add aquatic play equipment.

3. Complete physical separation of the pool facilities from the school by providing an independent access and fire exit with a stair to the higher grade in the back.

4. An option that also has to be considered is to fill in the pool and use the space as a gym which can also be rented to the community when needed.

Note:

This report is not intended to provide in-depth analysis of either the existing conditions or the future options. It is a brief overview based on visual observation and existing drawings. Further study will be needed to explore the preferred option(s) and a detailed POR and test-fit will need to be developed for a more accurate budget.

Piney Branch Elementary School Indoor Pool Future Options Preliminary Report

4.28.2015

Findings:

The Site The Piney Branch Elementary School is situated on 7 lots at the intersection of Maple and Grant Avenues in Takoma Park, Maryland.

The exact location of the building with respect to the property line on the North should be verified by a field survey.

The pool is located on the W/NW corner of the school on the Grant Avenue side. It is presently used by the students during school hours and by Community members after- hours and on Sundays.

If it begins to be used by those other than the school occupants during school hours additional parking would be required. (10 to 37 parking spaces depending on the occupant load of the pool.1 per 25 required to be accessible).

The school administration claims that all available parking on site is needed by the school and there are no parking spaces that can be allocated for use by the pool patrons during school hours.

Shared use of the school parking lot by the pool patrons is allowed by the school only after 5:00pm on weekdays, and during the weekends.

Therefore if acceptable off-site parking in the near vicinity can not be made available, parking could be a major impediment for the use of the pool during school hours.

There is street parking along the Maple Avenue and along the Grant Avenue across from the school.
The Library and the Community Center on the adjacent parcel also have parking lots open to public use.

Street parking on Maple Ave.

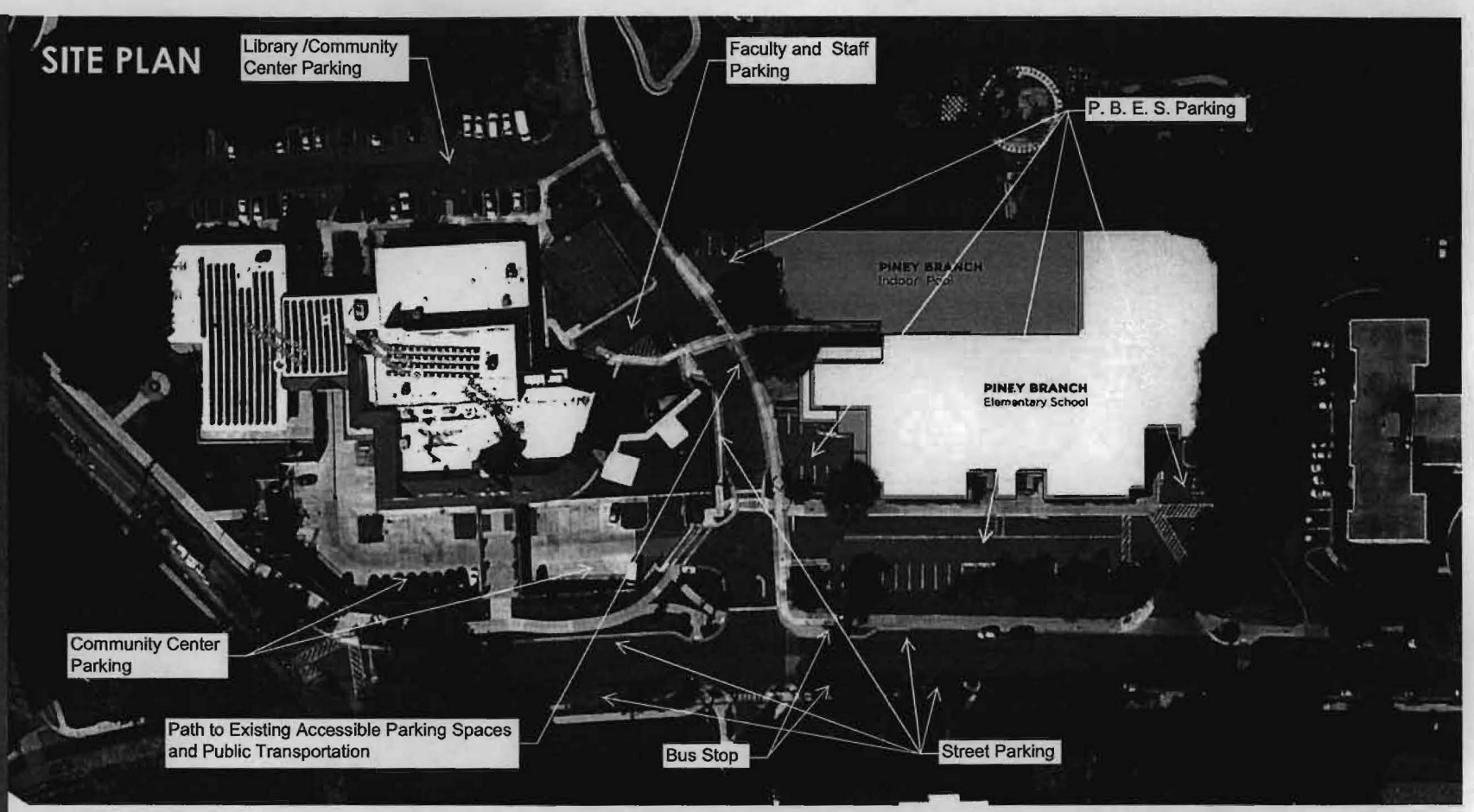
Street Parking on Grant Ave.

Parking lots on the North and South of the Takoma Park Community Center

A parking study is needed to determine if any excess capacity exists in these areas which can be used by the pool patrons.

Public transportation is available to the site. There is a bus stop conveniently located at the corner of the school property, at the intersection of Maple and Grant avenues.

Please see the site plan on the next page.



MONTGOMERY COUNTY
Department of General Services
Division of Building Design and Construction

NOA architecture Planning Interiors www.noaarchitects.com

Future Options Preliminary Report
PINEY BRANCH E.S. INDOOR POOL
7510 Maple Ave. Takoma Park, MD 20912

APRIL 28, 2015

(7)

Architectural:

Signs of wear and tear and general ageing can be seen throughout. But no extreme deterioration was readily observable with the exception of moisture issues, corroding and spalling concrete around the pool equipment room, and significant corrosion on the stainless steel doors and frames around the pool caused by the humid and chloramine laden atmosphere in this area.

There seems to have been previous accessibility improvements made in the toilet and showers, but there are quite a number ADA compliance issues which are outlined under Option #2 of this study.

Structural:

As seen in Photo # 1 below, the main girders supporting the roof are exhibiting minor corrosion at their ends. Although a close-up inspection could not be performed to determine the exact extent of corrosion; observed corrosion appeared to be minor and mostly at the surface of the beams.

Photo #1 - Corrosion at Beam Ends

The Filter Room, which is located below the pool level, sustained a considerable amount of corrosion due to the presence of chemicals within the area. Spalled concrete was observed at the slabs, walls, beams and other reinforced concrete members within the area. It was observed that the concrete cover over the reinforcement was typically 3/4" or less on all exposed reinforcement.

Furthermore, the precast slab (Photo #4) has been corroding as well. Structural steel angles in the middle portion of the precast slab require cleaning and painting.

Photo #2 - Slab Corrosion at Filter Room Entrance

Photo #3 - Slab Corrosion within the Filter Room

Photo #4 - Corroding Steel Angles at Precast Covers

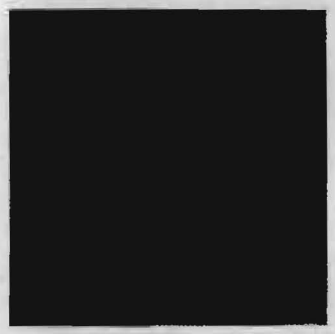


Photo #5 - Corrosion at Bottom of Beam

Spalling concrete was observed within the Pool Equipment Room. Although the room walls and slabs were coated with a cementitious material, there are visible spalls on the walls and slabs.

Photo #6 - Corroding Steel Angles at Precast Covers

Photo #7 - Corroding Steel Angles at Precast Covers

Deteriorated mortar joints and brick were noted on the facade.

A deteriorated steel lintel was observed above the exterior door on the Southwest comer of the building.

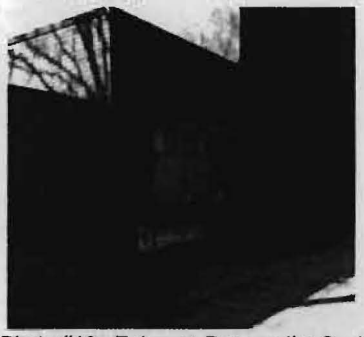


Photo #10 - Entrance Door on the Southwest Comer

The swimming pool itself appears to be fair condition. There were no visible signs of settlement, splitting or cracking which were indicative of an immediate structural instability.

The swimming pool should be inspected annually to monitor the condition of the structural elements.

It should be noted that not every component of the existing building was reviewed due to lack of access and presence of interior finishes. Furthermore, existing structural drawings of the structure were not available for our review during our site visit.

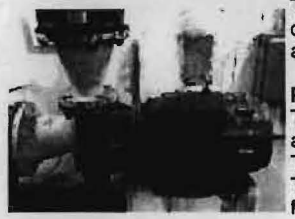
Pool and Pool Equipment:

Swimming Pool Structure and Finishes:

The 42' x 75' six lane swimming pool structure is in excellent condition for the age of the facility. The pool tank is watertight and appears to be free of any structural deficiencies. The ceramic tile pool finish should be re-grouted .

The pool deck equipment is in Good to Fair condition showing normal wear and tear on the equipment. I would suggest budgeting replacing the handicap lift and the handicap stairs.

The pool waterslide is in very good condition and other than checking to see if the metal support structure is properly electrically bonded, it should continue to provide good service for 10 or more years.



Swimming Pool Mechanical Systems:
The swimming pool filtration and mechanical systems are in fair condition and show some noticeable deterioration in several areas as noted under Option #1.

Pump, Strainer, Filter and Valves:
The pump is in good condition but needs the pump base repaired and the pump secured to the concrete support base.
The pool hair and lint strainer is in good condition
The filter tank is in good condition and should continue to operate for at least 10 more years.

The pool control valves are in good condition and other than supporting, painting and tagging the pipes and valves, should operate normally for 10 or more years.

Surge/Balance Tank:
This pool configuration uses an open surge tank with a rim elevation well below pool water level. This configuration depends on a diaphragm operated float valve to control the water level in the open tank. If the valve malfunctions, the pool water overflow the tank rim and drains the pool and could potentially flood the pool mechanical room.

Chemical Treatment System:
The chemical Treatment system is in good condition. The chemical treatment piping should be redone in schedule 80 PVC and color coded.
It would be wise to add a chemical room with its own dedicated ventilation system.

Water Quality:
It would be wise to consider adding a UV disinfection and chloramine destruct system to enhance the water quality and the Natatorium air quality.

Pool Heating:
The pool is heated by a hot water heat exchanger that is showing considerable age and by a heat recovery system that is relatively new.

Consideration should be given to replacing the hot water heat exchanger in the next five years.

Air Quality in the Natatorium:
The configuration of the supply and return air for the pool space could be dramatically improved by adding some of the newer systems on the market today.

Mechanical Electrical Plumbing:

The swimming pool is served by an independent HAVC system located on a second floor mechanical room near the swimming pool roof and consisting of a boiler, air conditioning units and circulating pumps.

HVAC

The lockers areas are served by the school HVAC system. This system provides heating, cooling and exhaust.

The pool heating system consists of a gas fired boiler, piping and circulating pumps. The pumps circulate heating hot water through duct mounted heating coils to heat the air supply to the swimming pool. A piping branch delivers heating hot water to the pool water heat exchanger to heat the pool water and maintain water temperature.

There are two packaged air conditioning units (AHU-1 & 2) with associated remote condensers (CU-1 and CU-2) located on the roof above the mechanical room. AHU-1 & 2 supply conditioned air to the pool through a system of aluminum ductwork and supply registers located high and to the sides of the swimming pool. Two large wall mounted return registers return pool air back to the AHU's to complete the cycle and condition the return air. A fresh air intake with a ceiling register terminating outside the building at an entryway, provide the code required ventilation air. Fresh air is sucked into each AHU and mixed with return air from the pool to provide code required ventilation.

The AHU's provide cooling and dehumidification. The duct mounted heating coils described above heat the supply air to the pool.

The control system serving the heating and cooling equipment is pneumatic and obsolete.

There is a heat recovery heat exchanger used to preheat the pool water using the heat rejected from the AHU's compressors.

The baseboard heater providing space heating is old and in poor condition.

The mechanical room housing the equipment described above is very well kept, clean and in very good condition. Luminaires are obsolete and in poor condition.

Based on the serial numbers, the boiler was manufactured in 1990 and the AHU's and associated condensers were manufactured in 1999. The drawings for the pool were prepared in 1999. Therefore the main HVAC equipment serving the pool is approximately 15 years old.

(10)

The average life for this equipment is approximately 20 years. Although equipment is very well maintained, we estimate that due to the corrosive environment of the pool, this equipment will not last much longer than its average life of 20 years.

The ductwork is in excellent condition; aluminum sheet metal is very resistant to a pool environment. Pumps and fittings such as air separator, expansion tank, heat recovery heat exchangers and duct coils are in excellent condition. Some valves show signs of leakage.

The average life for pumps is 30 years. Given the good maintenance that the equipment is receiving, we would estimate that pumps will last another 15 years.

There are two ancillary spaces adjacent to the pool: a storage room and the pool equipment room. Both have a common hallway leading to the pool. All the metal trim and doors in this area show signs of heavy corrosion caused by the pool chemicals.

Two exhaust fans provide exhaust for these two rooms. The exhaust system does not operate properly due to the lack of an opening for the air to be introduced into these two rooms. The door leading to the pool must be propped open for the fans to provide the required exhaust. Furthermore, the pool equipment room lacks any air movement and the exhaust fan installed for its ventilation cannot produce adequate ventilation and air movement.

Both exhaust fans, controls, switches and ductwork are in very poor condition and need immediate replacement.

There is a shell & tube heat exchanger located in the pool room. This heat exchanger takes heating hot water from the boiler located in the main mechanical room and maintains the temperature of the pool water. The heat exchanger, valves and controls are in extremely poor condition.

The lighting serving locker areas, the pool and storage areas is fluorescent and obsolete.

The lighting fixtures serving the pool room and storage room are in extremely poor condition due to the corrosive atmosphere in which they operate.

The supply and exhaust registers in the locker areas are in adequate condition although some show signs of corrosion.

Piney Branch Elementary School Indoor Pool Future Options Preliminary Report

4.28.2015

EQUIPMENT TYPE	QTTY	MANUFACTURER	MODEL No	SERIAL No.
ITEM 1				
MAIN MECHANICAL ROOM				
Replace Boiler	1	Duramax/AO Smith	DB-720-D110E-116	116-J90-5312
Replace AHU-1 with 30A disconnect switch	1	Pool-Com-Pak	AW-2600VH	991037
Replace CU-1 with 30A disconnect switch	1	"	PAC-84	990-107
Replace AHU-2 with 30A disconnect switch	1	Pool-Com-Pak	AW-2600VH	991038
Replace CU-2 with 30A disconnect switch	1	"	PAC-84	990-108
Replace Valves 2"	10			
Replace Valves 1.5"	4			
Replace pneumatic controls w/ DDC controls	1			
Replace Hydronic baseboard heater and 1" valves: 6 Ft, 10,000 BHR	1			
Replace Luminaires: 1x4. 2 tube T5	9			
Pool				
Replace luminaires-hi bay w/ controls & wiring	18			
Replace Fluorescent 2x4	6			
New Controls and wiring for luminaires				
Storage room exhaust				
Note: Replacement of exhaust equipment must be accompanied by a redesign so that the exhaust system will perform adequately.				
New Centrigugal fan (500 CFM)	1			
New S.S. 12x12 ductwork	40 ft.			
New Intake louver-20x14	1			
New Roof cap/gooseneck(12x12)	1			
New Electrical 30A disconnect switch and #10 wiring	1			
New Luminaires 1x4 W/ switch and wiring	2			

Equipment List - new & replaced

Pool equipment room

Note: Replacement of exhaust equipment must be accompanied by a redesign so that the exhaust system will perform adequately.

New Exhaust Fan 3000 CFM & controls	1
New Make-up air louver-36x16	1
New Al. Exhaust louver (24x24)	1
New S.S. Ductwork-24x12	100 LF
New Al. registers 14x10	6
Replace 1x4 luminaires-vapor proof W/ switch and wiring	8
Replace Shell and tube heat exchanger: 20"dia x 60" long with piping, valves and controls	1
Replace Pump Electrical 60A disconnect switch and #8 wiring	1

Pool room ante room

Replace 1x4 luminaires-vapor proof W/ switch and wiring	3
Replace Ventilation louver-24x12	1
Replace Wall/clg heater 4 kw; 277-1-60	1

ITEM 4

POSSIBLE GYMANSIUM

New Gas fired HVAC unit-10 ton	2
New Supply/return air concentric duct	2
New luminires-hi bay w/ controls & wiring	18
New FA devices	6
New sprinkler system	
New Clg. propeller fans 52" dia+controls-Leading Edge Mfr.	6

Equipment List - new & replaced continued

Item 1:

Repair or replace all operational equipment in need of replacement currently or has reached 75% of their service life to make the systems new and continue the current operation.

Architectural:
Replace the existing corroded stainless steel doors and frames with new stainless steel doors and frames (Type 317LMN or more corrosion resistant stainless steel), with ADA compliant new hardware.

Structural:
Clean all steel beam ends by sandblasting and coat them with a zinc rich paint. A minimum of 36" long section should be pained on both ends of the beams. During the painting process, beam bearing plates should be inspected. If bearing plates are found to be deteriorated they should be removed and replaced. Also, the waterproofing membrane on the exterior walls should be checked to ensure that there is no water infiltrating from the perimeter walls.

Spalled concrete within the Filter Room shall be repaired by removal and replacement of deteriorated concrete in accordance with ICRI concrete repair guidelines.

Required shoring and concrete repairs shall be designed by a registered professional engineer; and, the repairs shall be performed by an experienced concrete repair contractor. Upon completion of concrete repairs, the walls and the soffit of the elevated slab should be painted with a breathable elastomeric coating to help reduce chemical intrusion into concrete. During our cursory site visit we noted the following concrete repair quantities:

300 SF wall repairs (min. 4" thick)

300 SF of overhead repairs (min 4" thick)

250 SF of slab on grade repairs (min. 4" thick)

50 SF of full depth slab repairs

50 SF of beam repairs (min. 4" thick)

It shall be understood these concrete repair quantities are based on our cursory inspection and actual repair quantities may vary substantially.

The deteriorated steel lintel, noted above, will need to be removed and replaced with a new hot dip galvanized steel beam.

Deteriorated mortar joints shall be repaired by tuckpointing, cracked and damaged bricks shall be removed and replaced.

Swimming Pool:

Piping Systems:

The pipe hangers for schedule 40 piping system are in poor condition and should be replaced.

One of the gutter discharge pipes is broken at the connection to the main gutter line and needs immediate repair.

The chemical treatment piping should be re-piped using schedule 80 PVC from the liquid chlorine feeder to the point of chemical injection.

The 4" gutter line over the surge tank should be re-pipe with two 4" butterfly valves and the existing home made "strainer" removed.

The vacuum line is broken somewhere beyond the filter room and should be capped off and abandoned.

Surge/Balance Tank:

If the pool is to remain in service for the next 10 to 20 years, install a stainless steel, closed top tank to eliminate this potential problem. The cost of the tank would be approximately $40,000.

Chemical Treatment System:

The chemical Treatment system is in good condition. The chemical treatment piping should be redone in schedule 80 PVC and color coded.

It would be wise to add a chemical room with its own dedicated ventilation system.

Water Quality:

Add a UV disinfection and chloramine destruct system to enhance the water quality and the Natatorium air quality. The cost of a high quality UV system such as Hanovia would be approximately $40,000.

Air Quality in the Natatorium:

The configuration of the supply and return air for the pool space could be dramatically improved by adding some of the newer systems on the market today. A chlorine removal system such as a Paddock Evacuator® could improve air quality for both the staff and the users.

A budget cost for an Evacuator would be approximately $90,000.

Mechanical Electrical Plumbing:

Although the existing HVAC system is well maintained and in good condition, we recommend that the main heating and cooling equipment consisting of boiler, AHU-1, AHU-2, associated condensers located on the roof and associated controls be replaced in kind. The new control system should be state of the art Direct Digital Control. Luminaires should be replaced.

The space baseboard heater must be replaced.

Isolation valves show signs of deterioration and should be replaced to assure that adequate maintenance is performed on the equipment.

The circulating pumps and heat exchanger are in good condition and in our opinion do not require replacement; they can last another 10-15 years.

Piping appears to be in good condition. However, due to potential leaking of swimming pool chlorinated water into the boiler loop, we recommend that a section of piping be cut and examined to determine its actual interior condition.

The exhaust and make-up air system for the pool room, storage room and vestibule must be replaced. The new system must be designed properly to ensure adequate ventilation and removal of chemical fumes.

Lighting in the pool area should be replaced with high bay, energy efficient LED fixtures with automatic controls consisting of motion detectors. Pool room and storage room lighting fixtures must be replaced with energy efficient LED fixtures. Lighting fixtures in the locker rooms should be replaced with energy efficient LED fixtures and controls consisting of motion detectors.

The pool water heat exchanger, valves, piping and controls must be replaced.

The supply and exhaust registers serving the locker areas may be replaced for aesthetic reasons. Operation though, is adequate.

All ductwork supplying the pool and storage areas and serving the lockers should be internally cleaned.

Item 2:

Make ADA/accessibility improvements in addition to Option 1, and add some aquatic play equipment.

In addition to the scope outlined under Option 1, the following further improvements are recommended;

Architectural:
Accessibility improvements:

This narrative covers only issues related to the pool and locker rooms area. Any issues concerning the rest of the school building and site are mentioned.

Please see the sketch SK-1 for locations referenced on the key plan.

1. NW Parking Lot:

   It is assumed that the patrons of the swimming pool will use the parking spaces in the NW corner.

   The paved surfaces in the parking area in this corner exceed the allowable running and cross slopes (ADAAG 405.2 & 405.3).

   There does not seem to be sufficient area to provide a ramp without losing parking spaces which are already too few. There are 3 potential solutions that we can think of:

   1. Re-grade the entire parking area on the NW to lower the slope between the exit walkway and the parking spaces and designate one as accessible.
   2. Add one accessible parking space next to the exit walkway by paving and regrading a portion of the planter between the loading dock and the walkway. This would involve cutting down one of the 2 tress in the planter.
   3. Use the school parking lot on the South.

2. NW Parking lot:

   Provide a post mounted accessible parking sign that complies with Maryland Accessibility Code COMAR 05.02.02.00.

3. Outdoor Areas:

   Provide building and directional signs with raised characters (ADAAG 703).

4. Exterior Doors:

   Adjust the closers and hardware on the exterior doors to minimize the door force needed to open the doors and the closing speed complies with ADA requirements (ADAAG 404.2.8 & 2.9).

4a Replace the existing exit doors on the pool side with automatic sliding doors that comply with life safety and building codes as well as ADA. Relocate the inner door to the outside of the motion sensor range so that both doors are never open at the same time.

5. Interior general:

   Adjust the door closers and hardware on interior doors so that the doors can be swung 90 degrees with a maximum of 5lb force (ADAAG 404.2.9).

6. Interior general:

   Provide room and directional signs with raised characters (ADAAG 703).

7. Pool Area:

   Provide a guardrail at a maximum of 27" above finished floor, around aquatic equipment where vertical clearance falls below 80" with no barrier below (ADAAG 307.4).

8. Pool Area:

   At NE and SE corners of the pool, replace existing floor finish where cross slope exceeds 1:48 with new tile finish to match with cross not exceeding 1:48 (ADAAG 403).

   Provide new leveling concrete under new finish to achieve ADA compliant slopes (typical at all areas where the existing floor finish needs to be replaced to due to slopes exceeding the allowable). Re-set floor drains per the new finished floor level as needed.

9. Pool Area / Clean Corridor:

   Replace the door and frame between the Pool and the Clean Corridor with new stainless steel door and frame and glazed sidelite, to comply with ADAAG Figure 404.2.4.1(a) with 18" from the latch side to the wall on the pull side.

   Provide ADA compliant hardware on new door (ADAAG 404.2.7 thru ADAAG 404.2.10).

   Replace existing floor finish with new tile finish to match, to reduce the slope at transition to ½" maximum at 1:2 maximum slope (ADAAG 303 & 404.2.5).

10. Gym / Clean Corridor:

    Replace the door and frame between the Clean Corridor and the Gym with new stainless steel door and frame and glazed sidelite, to comply with ADAAG Figure 404.2.4.1(a) with 18" from the latch side to the wall on the pull side.

    Provide ADA compliant hardware on new door (ADAAG 404.2.7 thru ADAAG 404.2.10).

11. Clean Corridor:

    Replace one drinking fountain with an accessible model. Create an alcove in existing masonry chase wall for the new drinking fountain (ADAAG 211).

12. Clean Corridor / Lockers (Boys & Girls):

    The doors do not comply with ADAAG 404.2.4.

    Provide automatic door openers for doors between the Clean Room and the Locker Rooms.

13. Locker Rooms (Boys & Girls):

    Replace existing floor finish where the running slope exceeds 1:20 and cross slope exceeds 1:48 with new tile finish to match with slopes not exceeding the allowable limits (ADAAG 403).

14. Locker Rooms (Boys & Girls):

    At least 5% of the existing lockers and benches must be accessible. There must be an accessible route through the door and to all elements required to be accessible in the room. Operating mechanisms provided on accessible lockers must also meet ADAAG provisions for their operation and height.

    Benches must have a clear floor space positioned to allow persons using wheelchairs or other mobility devices to approach parallel to the short end of a bench seat.

    Benches must have seats that are a minimum of 20 inches to a maximum of 24 inches in depth and 42 inches minimum in length. The seat height should be a minimum of 17 inches to a maximum of 19 inches above the finished floor. If the bench is not located next to a wall, the bench must have back support that is 42 inches minimum in length and extends from a point 2 inches maximum above the seat to a point 18 inches minimum above the bench. Benches must be strong enough to withstand a vertical or horizontal force of 250 pounds applied at any point on the seat, fastener, mounting device, or supporting structure.

15. Locker Rooms – Lavatories (Boys & Girls):

    Insulate the hot water supply and drain pipes (ADAAG 606.5) (Boys & Girls)

    Wrong fixture is insulated in existing installation.

16. Locker Rooms – Lavatories (Boys & Girls):

    Provide new ADA compliant soap dispenser at accessible height and within reach range (ADAAG 606.1 – Advisory)

17. Locker Rooms – Lavatories and Toilets (Boys):

    Relocate the privacy panel next to the urinal to provide a minimum of 15" clearance on each side the centerline of the fixture (ADAAG 605.3).

    Re-install the paper towel dispenser within ADAAG reach range.

18. Locker Rooms – Toilets (Boys & Girls):

    The existing accessible toilets are not wheelchair accessible.

    Replace existing accessible toilets with new wheelchair accessible toilets that comply with ADAAG 604.8.1 thru 604.9.7

19. Locker Rooms – Showers (Boys & Girls):

    The existing accessible shower enclosures do not meet ADAAG 608.2.1. 36" x 36" dimensional requirement is not minimum. It is absolute.

    Replace the existing accessible showers with new ADA compliant showers (ADAAG 608).

    Transfer type showers (ADAAG 608.2.1) seem to be the most suitable for the spaces that are available.

20. Locker Rooms – (Girls):

    Relocate one of the dryers to accessible reach height (ADAAG 308).

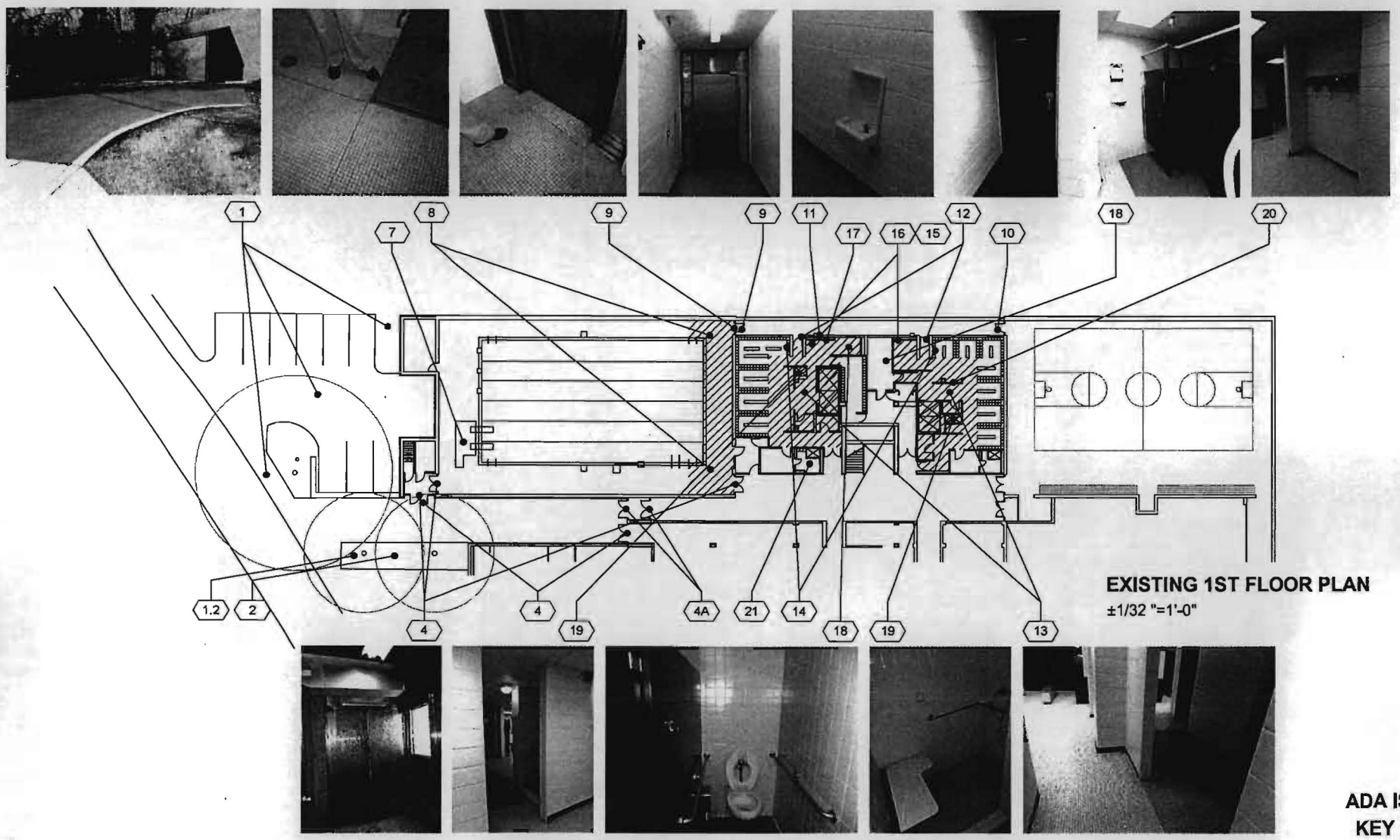
21. The Toilet/shower area in the Office does not meet ADA requirements.

Mechanical Electrical Plumbing:
In order to prepare the area for ADA accessibility, the plumbing must be re-arranged in certain areas. New plumbing consisting of waste, vent, cold water and hot water piping must be provided and connected to the existing plumbing system.

The HVAC supply and exhaust registers must be relocated to accommodate the new layout.

New lighting fixtures must be provided for the area being remodeled. Due to the fact that the existing lighting fixtures are obsolete and an exact match will be not available, replacement of all the lighting fixtures in the locker rooms should be planned. New lighting should be of the energy efficient LED lights with automatic controls consisting of motion detectors.

New fire alarm devices connected to the existing Fire Alarm system must be provided in the renovated area.



EXISTING 1ST FLOOR PLAN

±1/32 "=1'-0"

ADA ISSUES KEY PLAN

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INDOOR POOL - PINEY BRANCH E.S.

7510 Maple Ave., Takoma Park, MD 20912

Preliminary - 4.28.15

SK-1

Piney Branch Elementary School Indoor Pool Future Options Preliminary Report

4.28.2015

Swimming Pool Improvements:

Provide new Aquatic Play Equipment:

12-ft Floating Gator with stainless Steel anchor and tether

21-ft Floating Snake

Basketball Goal

Climbing Wall - Three wide for Multiple Climbers

Item 3:

Complete physical separation of the pool facilities from the school by providing an independent access and fire exit with a stair to the higher grade in the back.

In addition to the scope outlined under Options 1 & 2, the following improvements are recommended;

Architectural:
The replacement of the corroded stainless steel doors outlined in Option #1 apply to this option also.

All accessibility improvements outlined in option #2 also apply.

The areas to the South of the Pool (Office, Clean Corridor, Lockers/Toilets/Showers) will need to be completely reconfigured and a rear exist stair will need to be added at the end of the Clean Corridor.

Please see sketches SK-2 thru SK-5.

Structural:
The potential stair opening area at the B Level slab was observed to be in fair condition with no observable deflection, cracking or other structural issues indicative of an immediate structural instability.

This area is located above at the corridor connecting the locker rooms and the gym. If an opening is to be made in the area, the edges of the slab opening would need to be supported with steel beams and two steel posts would need to be paced to support the new steel beams — see photo #9.

Further analysis will need to be made to determine the exact amount of required retrofitting for the new opening.

In case the original structural drawings cannot be located, further investigation will need to be performed in the field to determine the slab thickness and the reinforcement within the slab.

There will be retrofitting necessary for making the openings to place the glass blocks into the perimeter masonry wall. Existing reinforcement within the wall needs to be determined by performing additional field testing or structural drawings needs to be provided.

Photo #9 - Planned new Opening thru the B Level Slab

Mechanical Electrical Plumbing:
In order to prepare the area for accessibility during the week and on weekends, the entire locker rooms area must be redesigned and new corridors provided.

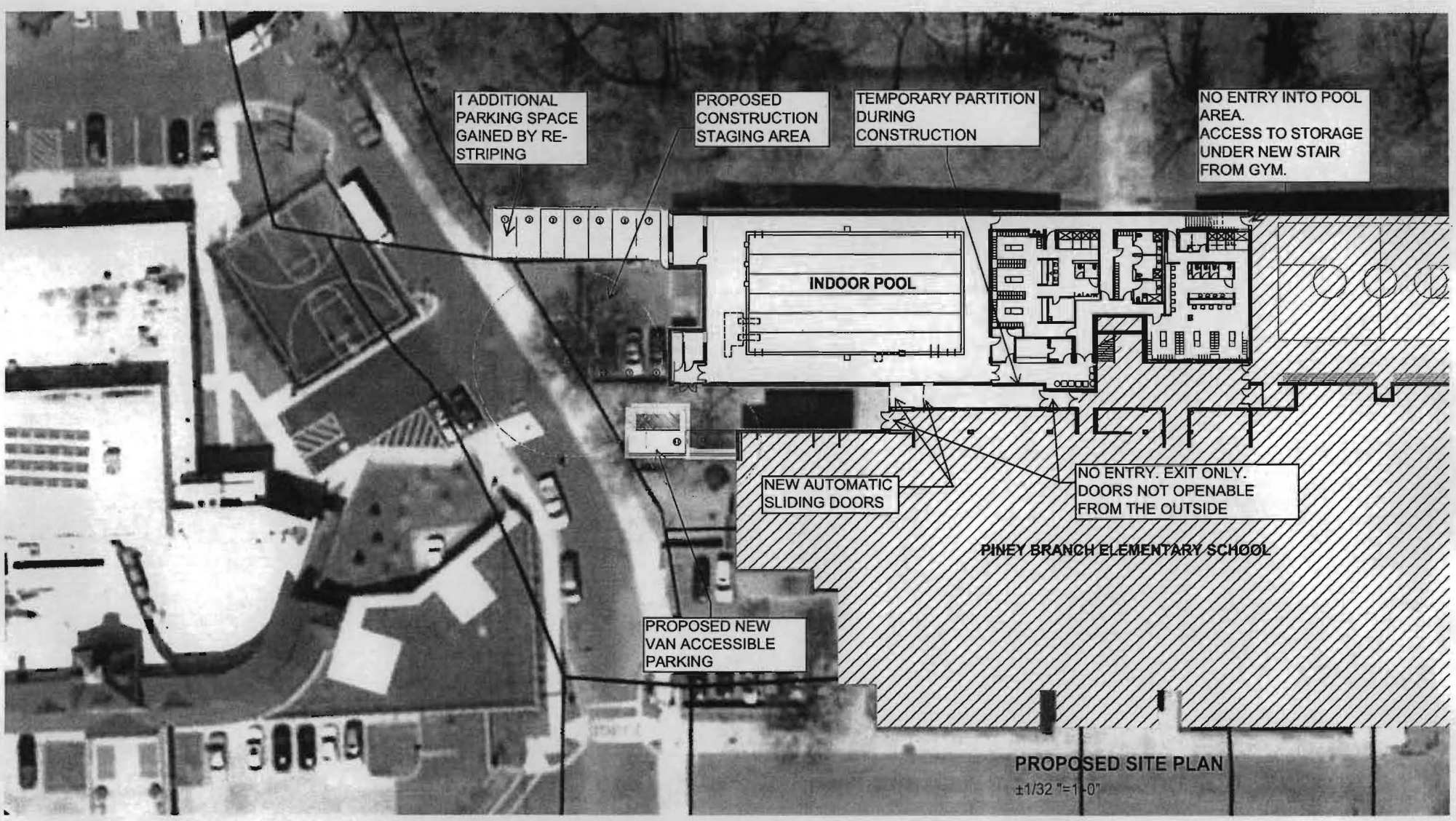
New plumbing consisting of plumbing fixtures, waste, vent, cold water and hot water piping must be provided and connected to the existing school plumbing system.

The HVAC supply registers, exhaust registers and ductwork must be reconfigured and connected back to the existing HVAC system to serve the new areas. We estimate that the capacity of the existing heating, cooling and ventilation system will be more than adequate since locker room area is being replaced with corridors which have a much lower HVAC requirements than lockers and bathrooms.

New lighting fixtures must be provided for the entire area being remodeled. New lighting should be of the energy efficient LED lights with automatic controls consisting of motion detectors.

New fire alarm devices connected to the existing Fire Alarm system must be provided in the renovated area.

(20)



PROPOSED SITE PLAN
±1/32 "=1'-0"

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SK-2

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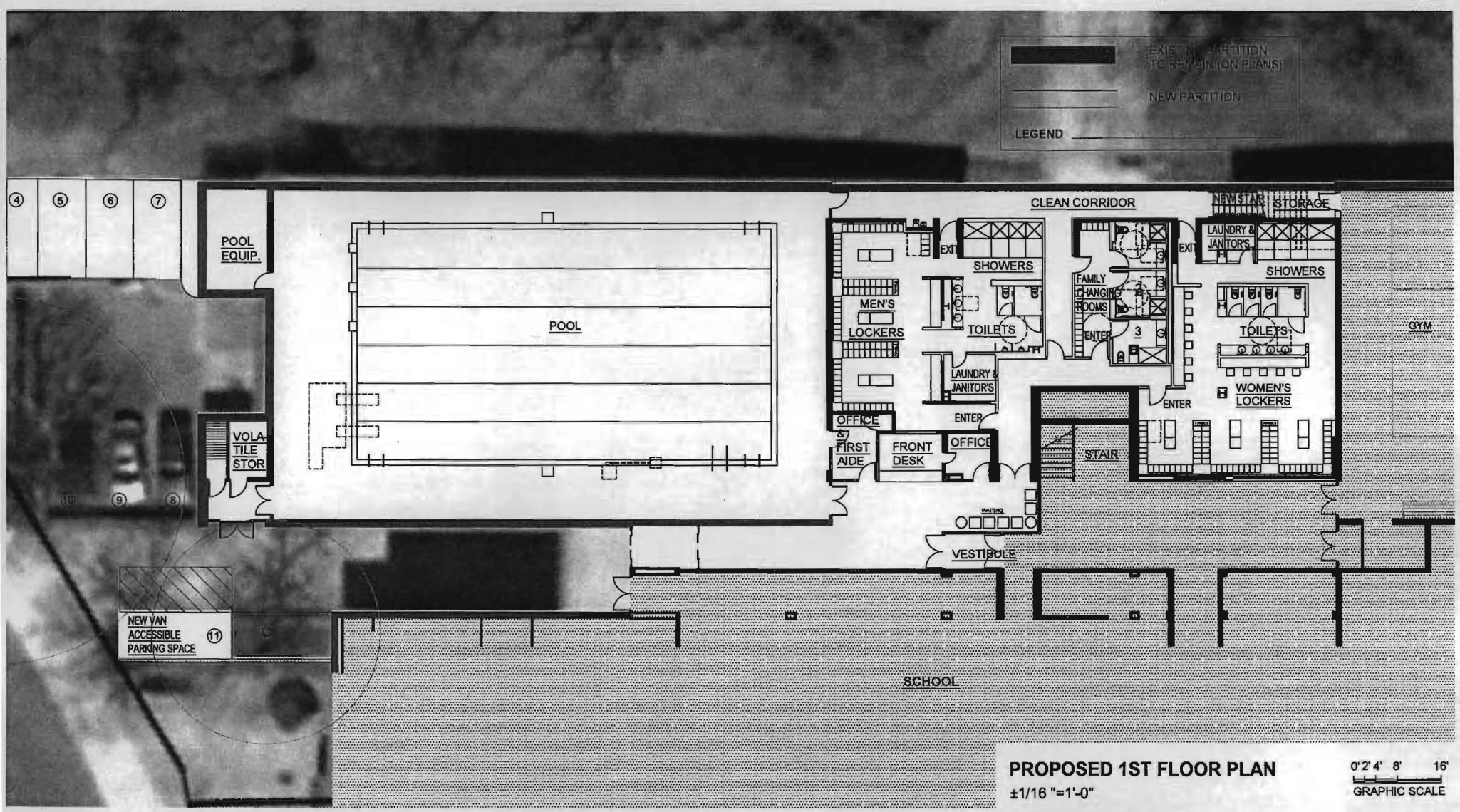

PROPOSED 1ST FLOOR PLAN

±1/16 "=1'-0"

0' 2' 4' 8' 16'

GRAPHIC SCALE

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SK-3

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PROPOSED LOCKER AREA - ENLARGED

±1/8 "=1'-0"

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SK-4

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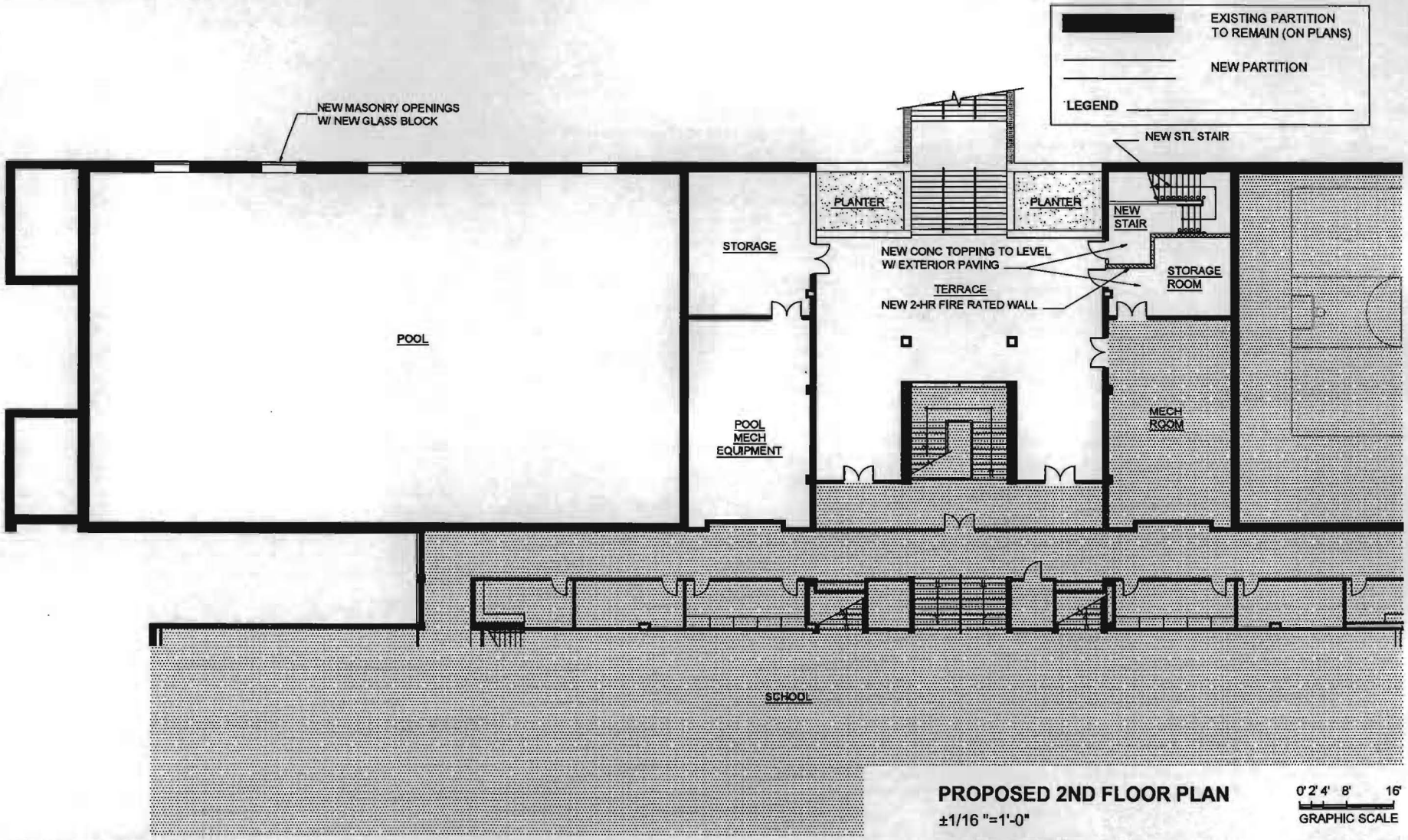

PROPOSED 2ND FLOOR PLAN

±1/16 "=1'-0"

0' 2' 4' 8' 16'
GRAPHIC SCALE

INDOOR POOL - PINEY BRANCH E.S.

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SK-5

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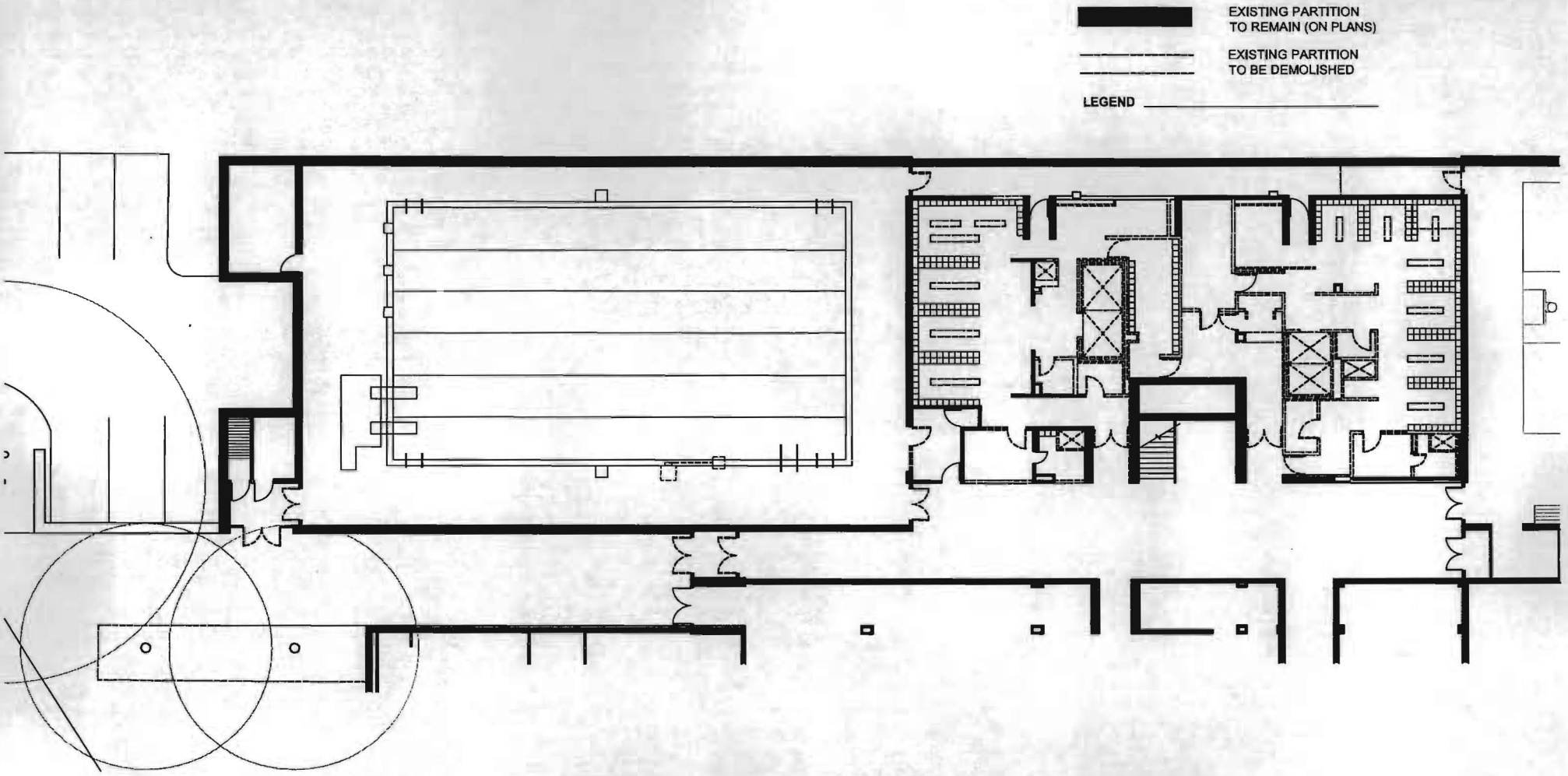

1ST FLOOR DEMOLITION PLAN

±1#16 "=1'-0"

0' 2' 4' 8' 16'
GRAPHIC SCALE

INDOOR POOL - PINEY BRANCH E.S.

7510 Maple Ave., Takoma Park, MD 20912

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D-1

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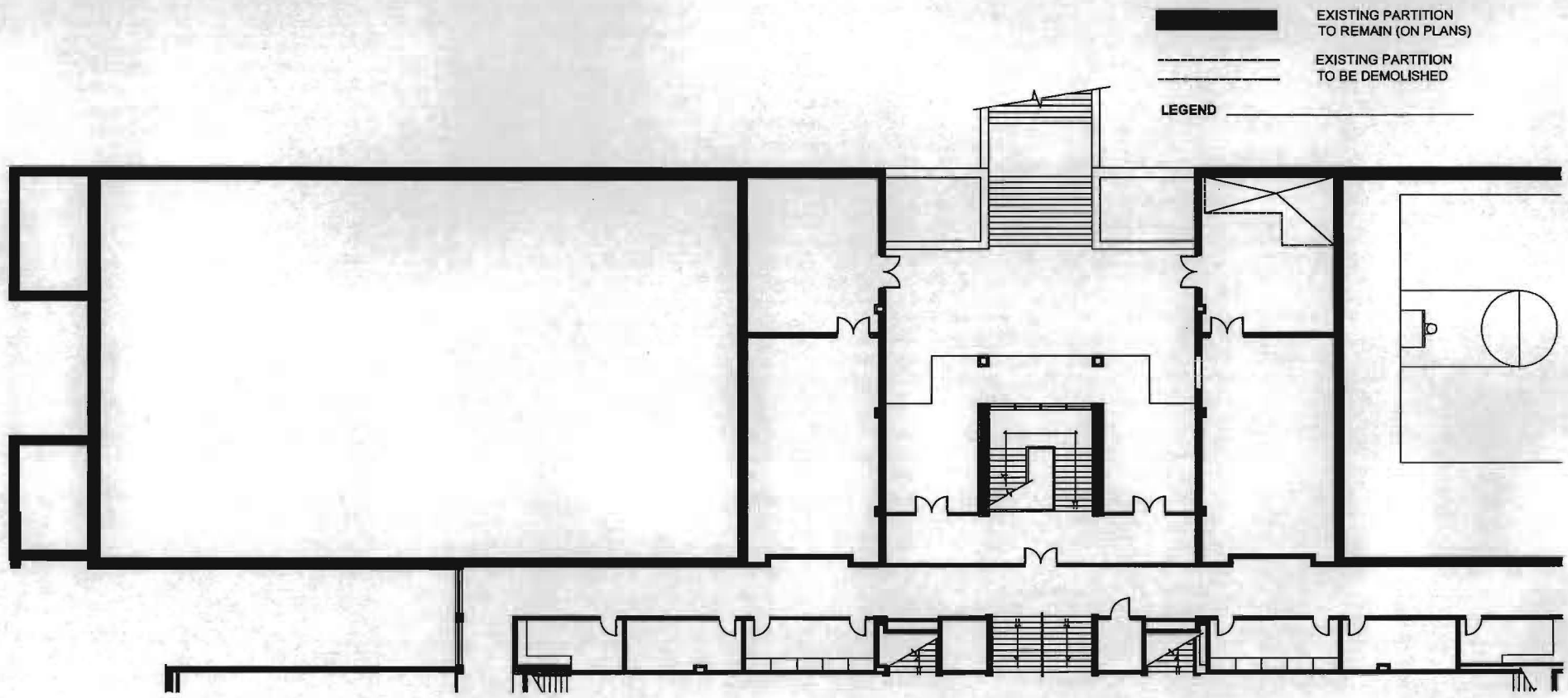

2ND FLOOR DEMOLITION PLAN

±1#16 "=1'-0"

0' 2' 4' 8' 16'
GRAPHIC SCALE

INDOOR POOL - PINEY BRANCH E.S.

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Preliminary - 4.28.15

D-2

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Item 4:

Fill in the pool and use the space as a gym which can also be rented to the community when needed.

Architectural:
Demolish all pool equipment and remove floor finishes in the main pool area.

Provide new concrete floor over high strength and non-degradable (40 to 100 psi) Extruded Polystyrene Foam (EPS) fill in the existing pool basin.

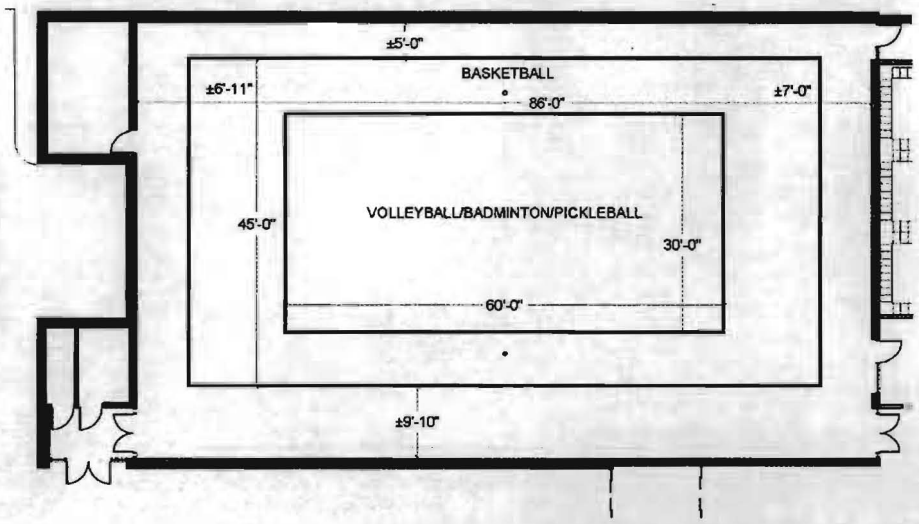
Seal all below grade pipe galleries.

Provide new wood gym flooring

Provide new gym equipment and sound absorbing acoustical panels on the walls and ceiling.

All accessibility improvements outlined in option #2 also apply with the exception of those related to the pool and the pool deck.

The pool equipment room in the basement will be used as storage.



Pool Equipment:
All pool equipment will be removed.

Mechanical Electrical Plumbing:
Since all existing pool HVAC equipment is reaching its terminal useful life, all the HVAC system presently serving the pool will be removed. The existing mechanical room will be emptied.

The HAVC system for the new gymnasium will consist of two 10 ton, packaged, electric cooling, gas fired roof top units located on the roof. In order to keep costs down, we recommend that concentric supply/return ductwork be provided. A wall mounted thermostat will provide automatic temperature control.

Gas piping will be connected to the existing gas piping serving the boiler. This piping will have adequate capacity to serve the gymnasium loads since the pool water heating load has been eliminated.

As an alternative, the supply and return ductwork presently serving the pool could be re-used if it is of proper size. A new HAVC system consisting of new boiler, new AHU's and new condensing units could be connected to the existing duct system. In our opinion, assuming that the existing ductwork has adequate capacity, this system will be more costly than the rooftop unit system due to the boiler and pumps required.

Lighting will consist of high bay, LED lighting fixtures and automatic controls consisting of motion detectors.

A sprinkler system consisting of piping and ceiling heads must be provided. This system will be connected to the schools system.

Fire alarm devices, required by code will be provided and connected to the existing Fire Alarm system.

Piney Branch Elementary School Indoor Pool Future Options Preliminary Report

4.28.2015

FORELLA GROUP, LLC	**ESTIMATE OF PROBABLE COST**	Baseline: 4/28/2015	Prepared by: PF/AD/MM/MB	Phase: Programmatic Cost Model
9495 Silver King Ct. Suite A Fairfax, VA 22031-4713	Project Name: Piney Branch ES Pool	ftp://forellegroup.com	Job no.: 151xx 1	AE: NOA
[703] 560-2200 Main [703] 277-9585 Direct	Project Location: Takoma Park, MD	Ref footer for current run date/time	File Name:	Owner: Bldg Design & Construction, DGS, Montgomery County

Column Field 1	Column Field 2	Column Field 3	Column Field 4	Column Field 5	Col Fld 6	Column Field 7	Column Field 8	Column Field 9	Column Field 10	Column Field 11	Column Field 12	Col Tot 7+9+11+SMU	Col Tot 8+10+12+SMU
Category Description	Subcategory	Subcategory	Subcategory	Computed Quantity	Unit of Meas	Material Net Unit Cost	Material Extension	Labor Net Unit Cost	Labor Extension	Equipment Net Unit Cost	Equipment Extension	Loaded Unit Cost	Loaded Extension

EXECUTIVE SUMMARY

OPTION 1 - REPAIR OR REPLACE ALL EQUIPMENT IN NEED OF CURRENTLY OR IN THE NEAR FUTURE TO MAKE THE SYSTEM NEW AND CONTINUE THE CURRENT OPERATION	
SITE WORK	0.00
ARCHITECTURAL	368,691.72
STRUCTURAL	222,413.73
MEP	922,974.96
SECURITY, F&E, IT ALLOWANCE	1,216,114.00
POOL EQUIPMENT ALLOWANCE EXCLUDING AQUATIC PLAY EQUIPMENT	232,286.88
OPTION 1 BASE TOTAL	2,962,480.30
OPTION 2 - ADA IMPROVMENTS AND UPGRADES TO THE AQUATIC PLAY EQUIPMENT, IN ADDITION TO OPTION 1	
OPTION 1 COSTS	1,746,366.29
ADA IMPROVEMENTS	537,857.03
AQUATIC PLAY EQUIPMENTS	153,027.68
OPTION 2 BASE TOTAL	2,437,251.00
OPTION 3 - COMPLETE PHYSICAL SEPARATION OF THE POOL FACILITIES FROM THE SCHOOL	
OPTION 1 COSTS	1,746,366.29
ADA IMPROVEMENTS	269,567.20
AQUATIC PLAY EQUIPMENT UPGRADE	153,027.68
SITE WORK	0.00
ARCHITECTURAL	1,333,159.66
STRUCTURAL	220,484.46
MEP	501,545.19
HAZARDOUS MATERIAL ABATEMENT	540,495.11
SECURITY, F&E, IT ALLOWANCE	1,216,114.00
OPTION 3 BASE TOTAL	5,970,868.60

Piney Branch Elementary School Indoor Pool Future Options Preliminary Report

4.28.2015

FORELLA GROUP, LLC	ESTIMATE OF PROBABLE COST	Baseline: 4/28/2015	Prepared by: PF/AA/MM/MS		Phase: Programmatic Cost Model
9495 Silver King Ct. Suite A Fairfax, VA 22031-4713	Project Name: Piney Branch ES Pool	ftp://forellagroup.com	Job no.: 151xx.1		AE: NOA
[703] 560-2200 Main [703] 277-9585 Direct	Project Location: Takoma Park, MD	Ref footer for current run date/time	File Name:		Owner: Bldg Design & Construction, DGS, Montgomery County

Column Field 1	Column Field 2	Column Field 3	Column Field 4	Column Field 5	Col Fld 6	Column Field 7	Column Field 8	Column Field 9	Column Field 10	Column Field 11	Column Field 12	Col Tot 7+9+11+SMU	Col Tot 8+10+12+SMU
Category Description	Subcategory	Subcategory	Subcategory	Computed Quantity	Unit of Meas	Material Net Unit Cost	Material Extension	Labor Net Unit Cost	Labor Extension	Equipment Net Unit Cost	Equipment Extension	Loaded Unit Cost	Loaded Extension

OPTION 3A - COMPLETE PHYSICAL SEPARATION OF THE POOL FACILITIES FROM THE SCHOOL INCLUDING STAND ALONE HVAC IN LOCKER AREA	
OPTION 1 COSTS INCLUDING SECURITY, F&E, IT ALLOWANCE	**1,746,366.29**
ADA IMPROVEMENTS	**259,567.20**
AQUATIC PLAY EQUIPMENT UPGRADE	**153,027.68**
SITE WORK	**0.00**
ARCHITECTURAL	**1,595,149.40**
STRUCTURAL	**233,672.11**
MEP	**902,235.62**
HAZARDOUS MATERIAL ABATEMENT	**540,495.11**
SECURITY, F&E, IT ALLOWANCE	**1,216,114.00**
OPTION 3 BASE TOTAL	**6,636,627.32**

OPTION 4 - CONVERT POOL INTO A SECOND GYM	
OPTION 1 COSTS	**591,105.45**
OPTION 2 COSTS	**497,867.03**
SITE WORK	**0.00**
ARCHITECTURAL	**675,780.26**
STRUCTURAL	**272,495.18**
MEP	**660,642.16**
HAZARDOUS MATERIAL ABATEMENT	**540,495.11**
OPTION 4 BASE TOTAL	**3,238,375.19**

Exclusions:

- Real estate acquisitions & leasing costs
- Owner's project & contract management
- Financing costs
- Insurance costs
- Legal expenses
- Regulatory expenses
- Design fees & expenses
- Property management, operations & maintenance
- Marketing, public relations & advertising
- Moving & storage costs
- Temporary facilities
- Owner paid inspections and testing
- Existing conditions
- Furniture, fixtures & equipment [FF&E]

Controlling cost:

Controlling cost, schedule and quality requires on going processes that commence at the programmatic phase and continue through to final acceptance and building occupancy. It should be noted that we exercise no control over fluctuating market conditions. We have employed our best judgment in analyzing the subject project. We cannot, however, guarantee that actual costs will not vary from the opinions we have provided.

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Unresolved issues and Assumptions:

1. The availability of parking is the most significant issue and a major unknown factor at this point. Originally this area was considered to be a walking community, and it was expected that the residents in the immediate and surrounding neighborhood would not mind walking to the facility. More information on parking needs to be gathered from Adventist if available. A detailed parking study needs to be conducted to explore and address the parking demand and the available space capacity in the area (on school/city property, street, etc.).

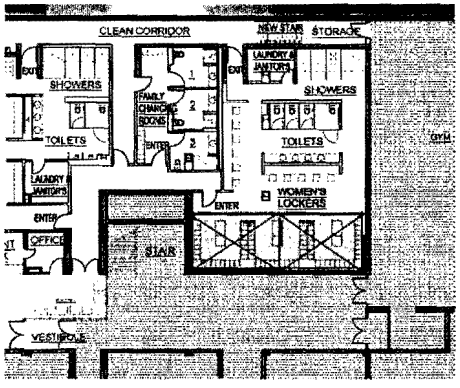
   So far, only very preliminary conversations have been held with MCPS Facilities staff, to garner general impressions and issues of concern regarding operation of the school. Further detailed discussions will be required to fully assess all potential impacts and find mitigation if possible

2. MCPS staff indicate that they cannot allow the parking area in the NW corner of the school directly outside of the pool to be used as staging area during construction and during school hours because parking in that area is critical to their operations and is used as staff parking which may not be available elsewhere.

   If the parking study proposed above, identifies the availability of parking capacity in the immediate vicinity, an arrangement may be worked out to provide reserved parking elsewhere for the staff during construction. The availability of the outdoor space directly outside the pool should be considered extremely important for the contractor.

3. MCPS staff indicate that if the locker area with the bathrooms is separated from the school, the part of the school in that vicinity would be left without adequate bathroom facilities. Therefore they do not accept losing access to the pool bathrooms from the school side.

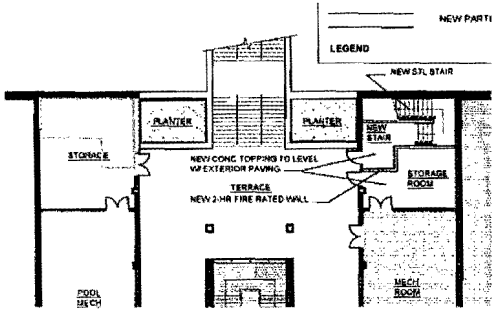
   It may be possible to overcome this problem by providing the school with additional bathrooms that are accessible only from the school side, which can be achieved by reducing the area of the lockers and the number of family changing rooms. This would result in additional costs and require a revised design as well as MCPS's agreement to accept fewer but new toilets & lavatories.



   An overall fixture count and calculation has to be performed to make sure that the total number fixtures available to the school does not fall below the code required minimum.

4. It is likely that the school will not agree to give up the storage that is needed to build the new stair to provide a second means of egress from the Lockers area below. An alternative solution that is acceptable to the school will need to be worked out.

   One option may be to build an enclosed space where the current planter is next to the storage area in question. Another could be to offer comparable storage elsewhere in the pool side, such as the area next to the pool mechanical room on the upper level. A third option can be locating the stair in the existing planter area, but that location will likely result in wasted space in the lockers areas below due to the circulation that would be needed around the stair. Further study is needed in consultation with the MCPS.



5. MCPS indicates a preference that any construction work be done after school hours and/or be completed in the summer season. It is assumed that this could be arranged, but would increase the construction cost. Therefore recommend careful evaluation together with the school to determine if certain types of interior work can be done during school hours.

6. The adoption of International Swimming Pool and Spa (ISPSC) code is currently being considered. If adopted, any impact that the new code may have will need to be assessed.

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