December 15, 2014

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Ms. Carol Densmore
Michigan Department of Treasury
School Bond Qualification and Loan Program
430 W. Allegan Street
Lansing, MI 48922
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## RE: Berkeley School District

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Application for Preliminary Qualification of Bonds
Opinion regarding cost estimates
No. SBL 63-050-4-K12-10-02
```


## Dear Ms. Densmore:

Please be advised that Stantec jointly developed and concurs with the estimates prepared by McCarthy \& Smith, Inc. in the Application for Preliminary Qualification of Bonds based on our historical costs for recently completed projects of similar size and scope. We are confident that the estimates are appropriate for the proposed scope of work.


Lee A. Andrea, AIA, NCARB, LEED AP
Principal

# c: Dennis McDavid, Berkeley School District Larry Gallagher, Berkeley School District Bill McCarthy, McCarthy \& Smith, Inc. <br> Jeffrey J. Soles, Thru Law <br> Paul Staider, Staider, Barch \& Associates 

December 8, 2014

## Jeffery J. Soles

Thrun Law Firm, P.C. 2900 West Road; Suite 400
East Lansing, MI 48823

## RE: Berkley School District

Application for Preliminary Qualification of Bonds
Opinion regarding cost estimates
No. SBL 63-050-4-K12-10-02

Dear Mr. Soles:

Enclosed are two draft copies of the Preliminary Qualification Documents for the referenced project. Please deliver to Treasury by Tuesday, December 9 for our scheduled meeting on Monday, December 15.

Let me know if you need anything else.


Lee A. Andrea, AIA, NCARB, LEED AP
Principal

## Enclosure

c: Dennis McDavid, Berkley School District Larry Gallagher, Berkley School District Bill McCarthy, McCarthy \& Smith, Inc. Paul Stauder, Stauder, Barch \& Associates

December 3, 2014

Ms. Carol Densmore<br>School Bond Qualification Bond and Loan Program<br>State of Michigan<br>Michigan Department of Treasury<br>School Bond Loan Program<br>430 W. Allegan, $4^{\text {th }}$ Floor<br>Lansing, MI 48922

Re: Berkley School District - Application for Preliminary Qualification of Bonds - May 2015 Bond Election

Subj: Confirmation of Cost
Dear Ms. Densmore:

McCarthy \& Smith, Inc., as the Construction Manager for Berkley School District, has worked with the project architect, Stantec, to establish cost estimates for the proposed Berkley School District May 2015 Bond issue election. We believe these estimates to be appropriate for the proposed work. Cost estimates for new construction slightly exceeds the current $\$ 209.00$ per square foot for Oakland County due to the limited size of the additions proposed.

A schedule addressing the Owner's goals has been prepared, and provides for a reasonable approach to the construction activities required for the project.

Please contact me if you have any questions.
Sincerely,

## Wullenow. Punts <br> William T. McCarthy <br> President

WTM:mbd
Attachments

## C: Mr. Dennis McDavid, Barkley School District <br> Mr. Larry Gallagher, Barkley School District <br> Mr. Lee Andrea, Stantec <br> File

## BONDING PROPOSAL

Shall Berkley School District, Oakland County, Michigan, borrow the sum of not to exceed Fifty-Eight Million Nine Hundred Fifty Thousand Dollars $(\$ 58,950,000)$ and issue its general obligation unlimited tax bonds therefor, for the purpose of:
erecting, furnishing and equipping additions to school buildings; remodeling, furnishing and refurnishing, and equipping and re-equipping school buildings; acquiring, installing and equipping or re-equipping school buildings for instructional technology; and developing and improve the sites?

The following is for informational purposes only:
The estimated millage that will be levied for the proposed bonds in 2015 is 3.00 mills ( $\$ 3.00$ on each $\$ 1,000$ of taxable valuation). The maximum number of years the bonds may be outstanding, exclusive of any refunding, is twenty-five (25) years. The estimated simple average annual millage anticipated to be required to retire this bond debt is 4.17 mills ( $\$ 4.17$ on each $\$ 1,000$ of taxable valuation).

The school district does not expect to borrow from the State to pay debt service on the bonds. The total amount of qualified bonds currently outstanding is $\$ 12,435,000$. The total amount of qualified loans currently outstanding is $\$-0-$. The estimated computed millage rate may change based on changes in certain circumstances.
(Pursuant to State law, expenditure of bond proceeds must be audited, and the proceeds cannot be used for repair or maintenance costs, teacher, administrator or employee salaries, or other operating expenses.)

# Application for Preliminary Qualification of Bonds 

## School Bond Qualification and Loan Program <br> for

Berkley School District

## Table of Contents

| Page Title | Page No. |
| :--- | :---: |
| Certificate | $\underline{1}$ |
| Financial Summary | $\underline{2}$ |
| Enrollment Projections | $\underline{3}$ |
| Project Sheet* | $\underline{4}$ |
| Building Utilization | $\underline{5}$ |
| Facility Condition Assessment | $\underline{6}$ |
| Utilization Summary | $\underline{7}$ |
| Facility Summary | $\underline{8}$ |
| Cost Summary | $\underline{9}$ |
| *Include building floor/site plans and activity/cost estimates for each project. |  |

## Application Attachments

(Please "X" all that apply)

| $X$ |
| :---: |
| $X$ |
| $X$ |
| $X$ |
| $X$ |
|  |
| $X$ |
| $X$ |
| $X$ |
|  |
| $X$ |

Debt service projection support
Existing debt schedules
Construction fund/bond issuance cost schedules
Enrollment projections (prepared by an approved service provider)
Comparison of the current proposal to previous defeated proposal
Letter addressing classroom capacity utilization rate
Architect's statement regarding closing/demolition of existing facility
Letter addressing new construction costs exceeding the cost per square foot parameter
Architect/Construction manager's opinion regarding cost estimates
Status of unaudited bonds
Useful Life Calculation Worksheet
For additional information about the School Bond Qualification and Loan Program, visit: www.michigan.gov/sblf

## Application for Preliminary Qualification of Bonds

Issued under authority of Public Act 92 of 2005, as amended
Michigan Department of Treasury
Bureau of State and Authority Finance
School Bond Qualification and Loan Program
430 West Allegan Street
Lansing, Michigan 48922
Telephone: (517) 335-0994


MAILING INSTRUCTIONS:
Return TWO originally signed copies to your bond counsel by OVERNIGHT MAIL.
Return ONE originally signed copy to your financial consultant.
Return ONE originally signed copy to your architectural firm.
Return ONE originally signed copy to your construction management firm, if applicable.
Retain ONE originally signed copy for your files.

## CONTACT PERSON: Person to whom questions and correspondence concerning this application should be directed.



## Financial Summary

Financial information provided as of :



## C. School Bond Loan Participation:

| Mandatory Final Loan Repayment Date: |  | 2046 |
| :---: | :---: | :---: |
| Current School Bond Loan Fund Balance: |  | 0 |
| Estimated School Bond Loan Fund Balance as of Election Date |  | 0 |
| Beginning Date in School Bond Loan Fund |  | n/a |
| Projected School Bond Loan Fund End Date |  | n/a |
| Estimated School Bond Loan Fund Interest Rate |  | 5.00\% |
| Maximum School Bond Loan Fund Balance |  | n/a |
| Maximum School Bond Loan Fund Balance Year |  | n/a |
| Initial Computed Millage |  | n/a |
| Estimated Duration of Computed Millage |  | n/a |
| Est Amt to be Borrowed on Existing Bonds | Principal: | 0 |
|  | Interest: | 0 |
| Est Amt to be Borrowed on Proposed Bonds | Principal: | 0 |
|  | Interest: | 0 |

## D. Property Tax Assumptions:

Tax Year
Current Taxable Value
Prior 5 Year Average Growth Rate
Prior 20 Year Average Growth Rate
Projected Growth Rate Used Years 1-5
Projected Growth Rate Used Years 6+ Property Taxes Levied in Winter Property Taxes Levied in Summer
Any material tax appeals pending in the district? (If district is aware of any event or circumstance that could

| 2014 |
| ---: |
| $890,089,958$ |
| $-2.39 \%$ |
| $2.43 \%$ |
| $-2.39 \%$ |
| $2.43 \%$ |
| $0 \%$ |
| $100 \%$ |
| no |

## E. Millage

| Total Estimated Proposed Millage for Next Tax Year | 7.00 |
| :--- | ---: |
| Estimated Duration of Millage Levy | 25 years |
| Maximum millage without SBLF participation | 7.76 |
| 1st Year Millage Increase | 3.00 |

## F. Key Financial Measures:

Interest to Bond Ratio
Bonded Debt to Taxable Value
Total Debt to Taxable Value
Weighted Average Maturity of Bonds
120\% of Average Useful Life of Assets
Total Current Bond Debt plus School Bond Loan Debt

| $70.61 \%$ |
| ---: |
| $8.02 \%$ |
| $8.02 \%$ |
| 15.69 |
| 35.44 |
| $15,265,000$ |

## G. Bond Issuance

| Amount | Dated <br> Date | Construction Fund |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Beg. Date | End Date |  |
| Series1 | $58,950,000$ | $06 / 25 / 15$ | $06 / 01 / 15$ | $11 / 01 / 18$ |
| Series2 |  |  |  |  |
| Series3 |  |  |  |  | significantly affect its future, disclosure must be included.)

## H. Certification:

The financial impact presented herin is based on certain assumptions regarding interst rates and taxable value growth rates.
Actual millage rates may be subject to adjustment based on differences in these assumptions, actual intersert rates, and future taxable value growth.
Prepared By: $\qquad$

## BERKLEY SCHOOL DISTRICT

EXISTING UNLIMITED TAX DEBT: BEFORE ADDITIONAL BONDING

* NIC calculated from: 05/01/14

2005 REFUNDING BONDS - UTQ
Original Amount: $\quad \$ 9,425,000$ Net Interest Cost: 4.470\%
Maturities >= 2016 Callable 5/1/15 @ 100.00

|  | Fiscal | $\$ 7,005,000$ | Current Interest Bonds Dated |  |  |  |
| :---: | :---: | ---: | :---: | :---: | :---: | ---: | 06/23/05

2009 REFUNDING BONDS - UTQ
Original Amount: $\$ 16,480,000$
Net Interest Cost: 3.130\%
Non-Callable

| \$8,260,000 |  | Current Interest Bonds Dated |  | 05/28/09 | TOTAL DEBT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interest | Interest |  | Principal |  |  |  |
| Due | Due | Interest | Due | Total | Total | Total |
| Nov 1 | May 1 | Rate | May 1 | P\&I | Principal | P\&I |
| \$162,641 | \$162,641 | 3.500\% | \$1,630,000 | \$1,955,283 | \$2,830,000 | \$3,476,158 |
| 134,116 | 134,116 | 3.500\% | 1,635,000 | 1,903,233 | 2,945,000 | 3,474,108 |
| 105,504 | 105,504 | 3.750\% | 1,645,000 | 1,856,008 | 3,060,000 | 3,472,933 |
| 74,660 | 74,660 | 4.00\% / 3.80\% | 1,655,000 | 1,804,320 | 3,190,000 | 3,474,033 |
| 42,375 | 42,375 | 5.000\% | 1,695,000 | 1,779,750 | 3,240,000 | 3,386,550 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| 0 | 0 | 0.000\% | 0 | 0 | 0 | 0 |
| \$519,296 | \$519,296 |  | \$8,260,000 | \$9,298,593 | \$15,265,000 | \$17,283,780 |

BEFORE ADDITIONAL BONDING
BERKLEY SCHOOL DISTRICT COUNTY OF OAKLAND, STATE OF MICHIGAN

Schedule of Estimated Millage Needed to Retire Bonded Debt

| Notes: | Collection Cycle <br> July Levy: $100 \%$ |
| :--- | :--- |

Current Levy 4.0000

| Taxable Value Growth History |  |  |
| :---: | ---: | :---: |
| 2009 | $\$ 1,008,061,600$ |  |
| 2010 | $932,444,830$ | $(7.50 \%)$ |
| 2011 | $879,328,330$ | $(5.70 \%)$ |
| 2012 | $862,250,550$ | $(1.94 \%)$ |
| 2013 | $870,934,100$ | $1.01 \%$ |
| 2014 | $890,089,958$ | $2.20 \%$ |
|  | $(2.39 \%)$ |  |


| Tax Year | $\begin{gathered} \text { F/Y } \\ \text { End } \\ 6-30, \end{gathered}$ | Existing Debt $\$ 15,265,000$ | Capitalized or Accrued Interest | Plus: <br> 7.00\% <br> Allow for Deling. | (Use) of Funds on Hand \$203,207 | Net <br> Existing Debt | Projected Txbl Value [1] | Growth Rate | Mills <br> Needed <br> All <br> Debt | Net <br> District Payments \$17,329,798 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | 2015 | \$3,476,158 | \$0 | \$249,225 | (\$165,023) | \$3,560,360 | \$890,089,958 | 2.20\% | 4.00 | \$3,560,360 |
| 2015 | 2016 | 3,474,108 |  |  | $(38,184)$ | 3,435,923 | 898,990,858 | 1.00\% | 3.82 | 3,435,923 |
| 2016 | 2017 | 3,472,933 |  |  | 0 | 3,472,933 | 912,475,720 | 1.50\% | 3.81 | 3,472,933 |
| 2017 | 2018 | 3,474,033 |  |  | 0 | 3,474,033 | 930,725,235 | 2.00\% | 3.73 | 3,474,033 |
| 2018 | 2019 | 3,386,550 |  |  | 0 | 3,386,550 | 949,339,740 | 2.00\% | 3.57 | 3,386,550 |
| 2019 | 2020 | 0 |  |  | 0 | 0 | 968,326,534 | 2.00\% | 0.00 | 0 |
| 2020 | 2021 | 0 |  |  | 0 | 0 | 987,693,065 | 2.00\% | 0.00 | 0 |
| 2021 | 2022 | 0 |  |  | 0 | 0 | 1,007,446,926 | 2.00\% | 0.00 | 0 |
| 2022 | 2023 | 0 |  |  | 0 | 0 | 1,027,595,865 | 2.00\% | 0.00 | 0 |
| 2023 | 2024 | 0 |  |  | 0 | 0 | 1,048,147,782 | 2.00\% | 0.00 | 0 |
| 2024 | 2025 | 0 |  |  | 0 | 0 | 1,069,110,738 | 2.00\% | 0.00 | 0 |
| 2025 | 2026 | 0 |  |  | 0 | 0 | 1,090,492,953 | 2.00\% | 0.00 | 0 |
| 2026 | 2027 | 0 |  |  | 0 | 0 | 1,112,302,812 | 2.00\% | 0.00 | 0 |
| 2027 | 2028 | 0 |  |  | 0 | 0 | 1,134,548,868 | 2.00\% | 0.00 | 0 |
| 2028 | 2029 | 0 |  |  | 0 | 0 | 1,157,239,845 | 2.00\% | 0.00 | 0 |
| 2029 | 2030 | 0 |  |  | 0 | 0 | 1,180,384,642 | 2.00\% | 0.00 | 0 |
| 2030 | 2031 | 0 |  |  | 0 | 0 | 1,203,992,335 | 2.00\% | 0.00 | 0 |
| 2031 | 2032 | 0 |  |  | 0 | 0 | 1,228,072,182 | 2.00\% | 0.00 | 0 |
| 2032 | 2033 | 0 |  |  | 0 | 0 | 1,252,633,625 | 2.00\% | 0.00 | 0 |
|  |  | \$17,283,780 | \$0 | \$249,225 |  | \$17,329,798 |  |  |  | \$17,329,798 |

[1] Includes
\$0
of Equivalent IFT Valuations \& Less DDA/TIFA Debt Captures of
$\$ 0$
kcg

BEFORE ADDITIONAL BONDING
BERKLEY SCHOOL DISTRICT COUNTY OF OAKLAND, STATE OF MICHIGAN

[1] Includes
\$0
of Equivalent IFT Valuations \& Less DDA/TIFA Debt Captures of
$\$ 0$
kcg

# \$58,950,000 

## SCHEDULE OF ESTIMATED CONSTRUCTION FUND EARNINGS

| Date | EXPENDITURE ACTIVITY |  |  | Month | Payout \% | Construction Fund Balance | Interest Rate | Projected Interest Earned |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Construction Projects | Other Fees and Costs | Totals |  |  |  |  |  |
| Jun 15 |  |  |  |  |  | \$58,950,000 |  |  |
| Jun 15 | \$150,313 | \$966,036 | \$1,116,349 | 1 | 1.89\% | 57,833,651 | 0.25\% | \$12,049 |
| Jul 15 | 298,732 |  | 298,732 | 2 | 2.39\% | 57,546,968 | 0.25\% | 11,989 |
| Aug 15 | 311,679 |  | 311,679 | 3 | 2.92\% | 57,247,278 | 0.25\% | 11,927 |
| Sep 15 | 254,545 |  | 254,545 | 4 | 3.35\% | 57,004,660 | 0.25\% | 11,876 |
| Oct 15 | 324,626 |  | 324,626 | 5 | 3.90\% | 56,691,909 | 0.25\% | 11,811 |
| Nov 15 | 363,468 |  | 363,468 | 6 | 4.51\% | 56,340,252 | 0.25\% | 11,738 |
| Dec 15 | 293,386 |  | 293,386 | 7 | 5.00\% | 56,058,603 | 0.25\% | 11,679 |
| Jan 16 | 367,066 |  | 367,066 | 8 | 5.62\% | 55,703,216 | 0.25\% | 11,605 |
| Feb 16 | 218,648 |  | 218,648 | 9 | 5.99\% | 55,496,173 | 0.25\% | 11,562 |
| Mar 16 | 675,948 |  | 675,948 | 10 | 7.14\% | 54,831,787 | 0.25\% | 11,423 |
| Apr 16 | 1,352,533 |  | 1,352,533 | 11 | 9.42\% | 53,490,677 | 0.25\% | 11,144 |
| May 16 | 1,661,326 |  | 1,661,326 | 12 | 12.23\% | 51,840,495 | 0.25\% | 10,800 |
| Jun 16 | 2,245,041 |  | 2,245,041 | 13 | 16.02\% | 49,606,254 | 0.25\% | 10,335 |
| Jul 16 | 3,376,495 |  | 3,376,495 | 14 | 21.72\% | 46,240,093 | 0.25\% | 9,633 |
| Aug 16 | 4,129,032 |  | 4,129,032 | 15 | 28.70\% | 42,120,695 | 0.25\% | 8,775 |
| Sep 16 | 4,212,861 |  | 4,212,861 | 16 | 35.81\% | 37,916,609 | 0.25\% | 7,899 |
| Oct 16 | 2,625,899 |  | 2,625,899 | 17 | 40.25\% | 35,298,609 | 0.25\% | 7,354 |
| Nov 16 | 1,873,363 |  | 1,873,363 | 18 | 43.41\% | 33,432,599 | 0.25\% | 6,965 |
| Dec 16 | 1,724,020 |  | 1,724,020 | 19 | 46.33\% | 31,715,545 | 0.25\% | 6,607 |
| Jan 17 | 1,178,131 |  | 1,178,131 | 20 | 48.32\% | 30,544,021 | 0.25\% | 6,363 |
| Feb 17 | 1,290,426 |  | 1,290,426 | 21 | 50.50\% | 29,259,958 | 0.25\% | 6,096 |
| Mar 17 | 1,459,056 |  | 1,459,056 | 22 | 52.96\% | 27,806,998 | 0.25\% | 5,793 |
| Apr 17 | 1,881,114 |  | 1,881,114 | 23 | 56.14\% | 25,931,677 | 0.25\% | 5,402 |
| May 17 | 1,881,114 |  | 1,881,114 | 24 | 59.32\% | 24,055,966 | 0.25\% | 5,012 |
| Jun 17 | 3,390,810 |  | 3,390,810 | 25 | 65.04\% | 20,670,168 | 0.25\% | 4,306 |
| Jul 17 | 3,558,469 |  | 3,558,469 | 26 | 71.05\% | 17,116,005 | 0.25\% | 3,566 |
| Aug 17 | 3,558,469 |  | 3,558,469 | 27 | 77.07\% | 13,561,102 | 0.25\% | 2,825 |
| Sep 17 | 3,977,617 |  | 3,977,617 | 28 | 83.78\% | 9,586,310 | 0.25\% | 1,997 |
| Oct 17 | 2,418,485 |  | 2,418,485 | 29 | 87.87\% | 7,169,822 | 0.25\% | 1,494 |
| Nov 17 | 1,344,061 |  | 1,344,061 | 30 | 90.14\% | 5,827,255 | 0.25\% | 1,214 |
| Dec 17 | 647,456 |  | 647,456 | 31 | 91.23\% | 5,181,013 | 0.25\% | 1,079 |
| Jan 18 | 0 |  | 0 | 32 | 91.23\% | 5,182,093 | 0.25\% | 1,080 |
| Feb 18 | 0 |  | 0 | 33 | 91.23\% | 5,183,172 | 0.25\% | 1,080 |
| Mar 18 | 111,596 |  | 111,596 | 34 | 91.42\% | 5,072,656 | 0.25\% | 1,057 |
| Apr 18 | 111,596 |  | 111,596 | 35 | 91.61\% | 4,962,116 | 0.25\% | 1,034 |
| May 18 | 278,991 |  | 278,991 | 36 | 92.08\% | 4,684,159 | 0.25\% | 976 |
| Jun 18 | 557,982 |  | 557,982 | 37 | 93.03\% | 4,127,152 | 0.25\% | 860 |
| Jul 18 | 1,394,956 |  | 1,394,956 | 38 | 95.38\% | 2,733,056 | 0.25\% | 569 |
| Aug 18 | 1,115,965 |  | 1,115,965 | 39 | 97.27\% | 1,617,661 | 0.25\% | 337 |
| Sep 18 | 1,115,965 |  | 1,115,965 | 40 | 99.15\% | 502,033 | 0.25\% | 105 |
| Oct 18 | 278,991 |  | 278,991 | 41 | 99.62\% | 223,146 | 0.25\% | 46 |
| Nov 18 | 223,193 |  | 223,193 | 42 | 100.00\% | 0 | 0.25\% | 0 |
|  | \$58,233,425 | \$966,036 | \$59,199,461 |  |  |  |  | \$249,461 |


| Breakdown of Estimated Other Fees and Costs |  |  |  |
| :---: | :---: | :---: | :---: |
| OTHER FEES: |  | OTHER COSTS: |  |
| Municipal Advisory Council Fee | \$400 | Election, Notice of Sale, Bond Printing, etc. | \$31,101 |
| Auditor's Subsequent Events Review | 2,000 | Capitalized Interest: $\quad$ x mos. @ x\% | 0 |
| Bond Attorney | 70,005 | Bond Discount 1.250\% | 736,875 |
| Construction Manager (Incl. in Construction Costs) | sts) 0 | Bond Insurance | 0 |
| Financial Consultant | 63,957 | Other | 0 |
| Qualification of Bonds | 15,600 | TOTAL OTHER COSTS: | \$767,976 |
| Other: |  | TOTAL OTHER FEES AND COSTS | \$966,036 |
| Credit Ratings \$39,598 | \$39,598 | Total Project Cost | \$59,199,461 |
| Official Statement Printing \& Mailing 5,500 | 5,500 | Less Original Issue Premium | 0 |
| Treasury Filing 1,000 | 1,000 46,098 | Less Construction Fund Earnings | 249,461 |
| TOTAL OTHER FEES | \$198,060 | AMOUNT OF BOND ISSUE | \$58,950,000.00 |
|  |  | Estimated Construction Fund Deposit | \$57,983,964 |

STAUDER, BARCH \& ASSOCIATES, INC.
Municipal Bond Financial and Marketing Consultants
3989 Research Park Drive
Ann Arbor, Michigan 48108
kcg
Phone (734) 668-6688 Fax (734) 668-6723
12/15/14

PQ Millage
USING ANTICIPATED TV GROWTH
\$58,950,000
BERKLEY SCHOOL DISTRICT COUNTY OF OAKLAND, STATE OF MICHIGAN PROPOSED 2015 SCHOOL BUILDING AND SITE BONDS (GENERAL OBLIGATION - UNLIMITED TAX)
Schedule of Estimated Millage Needed to Retire Bonded Debt

| QUALIFIED |  |  |
| :---: | :---: | :---: |
|  | F/Y | Existing |
| Tax | End | Debt |
| Year | 6-30, | \$15,265,000 |
| 2014 | 2015 | \$3,476,158 |
| 2015 | 2016 | 3,474,108 |
| 2016 | 2017 | 3,472,933 |
| 2017 | 2018 | 3,474,033 |
| 2018 | 2019 | 3,386,550 |
| 2019 | 2020 | 0 |
| 2020 | 2021 | 0 |
| 2021 | 2022 | 0 |
| 2022 | 2023 | 0 |
| 2023 | 2024 | 0 |
| 2024 | 2025 | 0 |
| 2025 | 2026 | 0 |
| 2026 | 2027 | 0 |
| 2027 | 2028 | 0 |
| 2028 | 2029 | 0 |
| 2029 | 2030 | 0 |
| 2030 | 2031 | 0 |
| 2031 | 2032 | 0 |
| 2032 | 2033 | 0 |
| 2033 | 2034 | 0 |
| 2034 | 2035 | 0 |
| 2035 | 2036 | 0 |
| 2036 | 2037 | 0 |
| 2037 | 2038 | 0 |
| 2038 | 2039 | 0 |
| 2039 | 2040 | 0 |
| 2040 | 2041 | 0 |


| Interest Due Nov 1 | Interest | Principal |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Due | Interest | Due | Total |
|  | May 1 | Rate | May 1 | P\&/ |
| \$0 | \$0 | 5.000\% | \$0 | \$0 |
| 1,031,625 [1] | 1,473,750 | 5.000\% | 350,000 | 2,855,375 |
| 1,465,000 | 1,465,000 | 5.000\% | 0 | 2,930,000 |
| 1,465,000 | 1,465,000 | 5.000\% | 125,000 | 3,055,000 |
| 1,461,875 | 1,461,875 | 5.000\% | 250,000 | 3,173,750 |
| 1,455,625 | 1,455,625 | 5.000\% | 3,400,000 | 6,311,250 |
| 1,370,625 | 1,370,625 | 5.000\% | 3,595,000 | 6,336,250 |
| 1,280,750 | 1,280,750 | 5.000\% | 1,680,000 | 4,241,500 |
| 1,238,750 | 1,238,750 | 5.000\% | 1,760,000 | 4,237,500 |
| 1,194,750 | 1,194,750 | 5.000\% | 1,850,000 | 4,239,500 |
| 1,148,500 | 1,148,500 | 5.000\% | 1,940,000 | 4,237,000 |
| 1,100,000 | 1,100,000 | 5.000\% | 2,040,000 | 4,240,000 |
| 1,049,000 | 1,049,000 | 5.000\% | 2,140,000 | 4,238,000 |
| 995,500 | 995,500 | 5.000\% | 2,250,000 | 4,241,000 |
| 939,250 | 939,250 | 5.000\% | 2,360,000 | 4,238,500 |
| 880,250 | 880,250 | 5.000\% | 2,480,000 | 4,240,500 |
| 818,250 | 818,250 | 5.000\% | 2,605,000 | 4,241,500 |
| 753,125 | 753,125 | 5.000\% | 2,735,000 | 4,241,250 |
| 684,750 | 684,750 | 5.000\% | 2,870,000 | 4,239,500 |
| 613,000 | 613,000 | 5.000\% | 3,015,000 | 4,241,000 |
| 537,625 | 537,625 | 5.000\% | 3,165,000 | 4,240,250 |
| 458,500 | 458,500 | 5.000\% | 3,320,000 | 4,237,000 |
| 375,500 | 375,500 | 5.000\% | 3,490,000 | 4,241,000 |
| 288,250 | 288,250 | 5.000\% | 3,660,000 | 4,236,500 |
| 196,750 | 196,750 | 5.000\% | 3,845,000 | 4,238,500 |
| 100,625 | 100,625 | 5.000\% | 4,025,000 | 4,226,250 |
| 0 | 0 | 5.000\% | 0 | 0 |
| \$22,902,875 | \$23,345,000 |  | \$58,950,000 | \$105,197,875 |


|  | July Levy: 100\% |  | Taxable Value Growth History |  |  | Dated: Delivered: Bond Term: Average Life: 20\% Project Useful Life: 1:5 Ratio: NIC: <br> [2] Debt/TV: |  | $\begin{gathered} \text { Jun } 25,15 \\ \text { Jun } 25,15 \\ 24 \text { yrs, } 10 \mathrm{mos} \\ 15.690 \\ 35 \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { Interest Factor } \\ 0.785 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Proposed Levy Current Levy Net Increase | 7.00 | $\begin{aligned} & 2009 \\ & 2010 \\ & 2011 \\ & 2012 \\ & 2013 \\ & 2014 \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline \$ 1,008,061,600 \\ 932,444,830 \\ 879,328,330 \\ 862,250,550 \\ 870,934,100 \\ 890,089,958 \end{array}$ | $\begin{gathered} (7.50 \%) \\ (5.70 \%) \\ (1.94 \%) \\ 1.01 \% \\ 2.20 \% \end{gathered}$ |  |  |  |  |
|  |  | 4.00 |  |  |  |  |  |  |  |
|  |  | 3.00 |  |  |  |  |  |  |  |
|  | Plus: <br> 7.00\% <br> Allow for <br> Deling. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | true |  |
|  |  |  |  |  |  |  |  | 5.000\% |  |
|  |  |  | Average Growth | Rate: | (2.39\%) |  |  | 8.02\% |  |
|  |  | (Use) of Funds on Hand \$203,207 | Net Existing Proposed Deb | Projected Txbl Value [3] | Growth Rate |  |  | 8.02\% <br> Mills <br> Levied <br> Qual. <br> Debt | Net <br> District Payments \$122,527,673 |
| Total Existing \& Proposed Debt |  |  |  |  |  | Debt/(TV+IFT-CMills Needed <br> This <br> Issue <br> Avg 3.72${ }^{2}$ | Mills <br> Needed All Qual. Debt |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| \$3,476,158 | \$249,225 | (\$165,023) | \$3,560,360 | \$890,089,958 | 2.20\% |  | 4.00 | 4.00 | \$3,560,360 |
| 6,329,483 |  | $(20,970)$ | 6,308,513 | 901,216,082 | 1.25\% | 3.18 | 7.00 | 7.00 | 6,308,513 |
| 6,402,933 |  | $(17,214)$ | 6,385,718 | 914,734,324 | 1.50\% | 3.17 | 6.98 | 6.98 | 6,385,718 |
| 6,529,033 |  | 0 | 6,529,033 | 933,029,010 | 2.00\% | 3.27 | 7.00 | 7.00 | 6,529,033 |
| 6,560,300 |  | 0 | 6,560,300 | 951,689,590 | 2.00\% | 3.33 | 6.89 | 6.89 | 6,560,300 |
| 6,311,250 |  | 0 | 6,311,250 | 970,723,382 | 2.00\% | 6.50 | 6.50 | 6.50 | 6,311,250 |
| 6,336,250 |  | 0 | 6,336,250 | 990,137,850 | 2.00\% | 6.40 | 6.40 | 6.40 | 6,336,250 |
| 4,241,500 |  | 0 | 4,241,500 | 1,009,940,607 | 2.00\% | 4.20 | 4.20 | 4.20 | 4,241,500 |
| 4,237,500 |  | 0 | 4,237,500 | 1,030,139,419 | 2.00\% | 4.11 | 4.11 | 4.11 | 4,237,500 |
| 4,239,500 |  | 0 | 4,239,500 | 1,050,742,207 | 2.00\% | 4.03 | 4.03 | 4.03 | 4,239,500 |
| 4,237,000 |  | 0 | 4,237,000 | 1,071,757,052 | 2.00\% | 3.95 | 3.95 | 3.95 | 4,237,000 |
| 4,240,000 |  | 0 | 4,240,000 | 1,093,192,193 | 2.00\% | 3.88 | 3.88 | 3.88 | 4,240,000 |
| 4,238,000 |  | 0 | 4,238,000 | 1,115,056,036 | 2.00\% | 3.80 | 3.80 | 3.80 | 4,238,000 |
| 4,241,000 |  | 0 | 4,241,000 | 1,137,357,157 | 2.00\% | 3.73 | 3.73 | 3.73 | 4,241,000 |
| 4,238,500 |  | 0 | 4,238,500 | 1,160,104,300 | 2.00\% | 3.65 | 3.65 | 3.65 | 4,238,500 |
| 4,240,500 |  | 0 | 4,240,500 | 1,183,306,386 | 2.00\% | 3.58 | 3.58 | 3.58 | 4,240,500 |
| 4,241,500 |  | 0 | 4,241,500 | 1,206,972,514 | 2.00\% | 3.51 | 3.51 | 3.51 | 4,241,500 |
| 4,241,250 |  | 0 | 4,241,250 | 1,231,111,964 | 2.00\% | 3.45 | 3.45 | 3.45 | 4,241,250 |
| 4,239,500 |  | 0 | 4,239,500 | 1,255,734,204 | 2.00\% | 3.38 | 3.38 | 3.38 | 4,239,500 |
| 4,241,000 |  | 0 | 4,241,000 | 1,280,848,888 | 2.00\% | 3.31 | 3.31 | 3.31 | 4,241,000 |
| 4,240,250 |  | 0 | 4,240,250 | 1,306,465,865 | 2.00\% | 3.25 | 3.25 | 3.25 | 4,240,250 |
| 4,237,000 |  | 0 | 4,237,000 | 1,332,595,183 | 2.00\% | 3.18 | 3.18 | 3.18 | 4,237,000 |
| 4,241,000 |  | 0 | 4,241,000 | 1,359,247,086 | 2.00\% | 3.12 | 3.12 | 3.12 | 4,241,000 |
| 4,236,500 |  | 0 | 4,236,500 | 1,386,432,028 | 2.00\% | 3.06 | 3.06 | 3.06 | 4,236,500 |
| 4,238,500 |  | 0 | 4,238,500 | 1,414,160,669 | 2.00\% | 3.00 | 3.00 | 3.00 | 4,238,500 |
| 4,226,250 |  | 0 | 4,226,250 | 1,442,443,882 | 2.00\% | 2.93 | 2.93 | 2.93 | 4,226,250 |
| 0 |  | 0 | 0 | 1,471,292,760 | 2.00\% |  | 0.00 | 0.00 | 0 |
| \$122,481,655 | \$249,225 | (\$203,207) | \$122,527,673 |  |  |  |  |  | \$122,527,673 |

$\begin{array}{rr}\text { Dated: } & \text { Jun 25, } 15 \\ \text { Delivered: } & \text { Jun } 25,15\end{array}$

NOTE: The Mills to be Levied is $\overline{\overline{\text { estimated. The actual millage shall be }} \text { determined } \overline{\overline{\text { ANNUALLY by the Department of Treasury. }} \text {. }} \text {. }{ }^{\text {The }} \text {. }}$
2] Includes $\$ 0$ of Existing LTNQ Debt and $\$ 12,435,000$ of Existing UT Debt as of Dated Date.
[3] Includes $\$ 0$ of Equivalent IFT Valuations and Less DDA/TIFA Debt Captures of $\$ 0$

PQ Millage St

## USING STATUTORY TV GROWTH

## \$58,950,000 <br> BERKLEY SCHOOL DISTRICT COUNTY OF OAKLAND, STATE OF MICHIGAN PROPOSED 2015 SCHOOL BUILDING AND SITE BONDS (GENERAL OBLIGATION - UNLIMITED TAX)

|  | FUALIFIED |
| :--- | :--- |
| Existing |  |


|  | F/Y | Existing |
| :--- | :--- | :--- |
| Tax | End | Debt |


| Tax <br> Year | End <br> $6-30$, | Debt <br> $\$ 15,265,000$ |
| :---: | ---: | ---: |
| 2014 | 2015 | $\$ 3,476,158$ |
| 2015 | 2016 | $3,474,108$ |
| 2016 | 2017 | $3,472,933$ |
| 2017 | 2018 | $3,474,033$ |
| 2018 | 2019 | $3,386,550$ |
| 2019 | 2020 | 0 |
| 2020 | 2021 | 0 |
| 2021 | 2022 | 0 |
| 2022 | 2023 | 0 |
| 2023 | 2024 | 0 |
| 2024 | 2025 | 0 |
| 2025 | 2026 | 0 |
| 2026 | 2027 | 0 |
| 2027 | 2028 | 0 |
| 2028 | 2029 | 0 |
| 2029 | 2030 | 0 |
| 2030 | 2031 | 0 |
| 2031 | 2032 | 0 |
| 2032 | 2033 | 0 |
| 2033 | 2034 | 0 |
| 2034 | 2035 | 0 |
| 2035 | 2036 | 0 |
| 2036 | 2037 | 0 |
| 2037 | 2038 | 0 |
| 2038 | 2039 | 0 |
| 2039 | 2040 | 0 |
| 2040 | 2041 | 0 |

Schedule of Estimated Millage Needed to Retire Bonded Debt

| Interest <br> Due <br> Nov 1 | Interest | Principal |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Due | Interest | Due | Total |
|  | May 1 | Rate | May 1 | P\&/ |
| \$0 | \$0 | 4.500\% | \$0 | \$0 |
| 928,463 [1] | 1,326,375 | 4.500\% | 350,000 | 2,604,838 |
| 1,318,500 | 1,318,500 | 4.500\% | 0 | 2,637,000 |
| 1,318,500 | 1,318,500 | 4.500\% | 125,000 | 2,762,000 |
| 1,315,688 | 1,315,688 | 4.500\% | 250,000 | 2,881,375 |
| 1,310,063 | 1,310,063 | 4.500\% | 3,400,000 | 6,020,125 |
| 1,233,563 | 1,233,563 | 4.500\% | 3,595,000 | 6,062,125 |
| 1,152,675 | 1,152,675 | 4.500\% | 1,680,000 | 3,985,350 |
| 1,114,875 | 1,114,875 | 4.500\% | 1,760,000 | 3,989,750 |
| 1,075,275 | 1,075,275 | 4.500\% | 1,850,000 | 4,000,550 |
| 1,033,650 | 1,033,650 | 4.500\% | 1,940,000 | 4,007,300 |
| 990,000 | 990,000 | 4.500\% | 2,040,000 | 4,020,000 |
| 944,100 | 944,100 | 4.500\% | 2,140,000 | 4,028,200 |
| 895,950 | 895,950 | 4.500\% | 2,250,000 | 4,041,900 |
| 845,325 | 845,325 | 4.500\% | 2,360,000 | 4,050,650 |
| 792,225 | 792,225 | 4.500\% | 2,480,000 | 4,064,450 |
| 736,425 | 736,425 | 4.500\% | 2,605,000 | 4,077,850 |
| 677,813 | 677,813 | 4.500\% | 2,735,000 | 4,090,625 |
| 616,275 | 616,275 | 4.500\% | 2,870,000 | 4,102,550 |
| 551,700 | 551,700 | 4.500\% | 3,015,000 | 4,118,400 |
| 483,863 | 483,863 | 4.500\% | 3,165,000 | 4,132,725 |
| 412,650 | 412,650 | 4.500\% | 3,320,000 | 4,145,300 |
| 337,950 | 337,950 | 4.500\% | 3,490,000 | 4,165,900 |
| 259,425 | 259,425 | 4.500\% | 3,660,000 | 4,178,850 |
| 177,075 | 177,075 | 4.500\% | 3,845,000 | 4,199,150 |
| 90,563 | 90,563 | 4.500\% | 4,025,000 | 4,206,125 |
| 0 | 0 | 4.500\% | 0 | 0 |


| July Levy: $100 \%$ |  | Taxable Value Growth History |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Proposed Levy | 7.00 | 2009 | $\$ 1,008,061,600$ |  |
| Current Levy | 4.00 | 2010 | $932,444,830$ | $(7.50 \%)$ |
|  | Net Increase | 3.00 | 2011 | $879,328,330$ |


$\begin{array}{cc}.5 \text { Ratio: } & 35 \\ \text { NIC. } & 4.500\end{array}$
2] Debt/TV: $\quad 4.500 \%$
[2] Debt/TV: $8.02 \%$
(TV+IFT-Captures).

| Mills Needed | Mills | Mills |
| :---: | :---: | :---: |
| This | Needed | Levied |
| Issue | All Qual. | Qual. |

\$203,207

Interest Facto
0.706

Net
District Payments $\$ 117,902,886$ \$17,902,886
$\$ 3,560,360$ $6,081,926$
$6,068,767$ $6,068,767$
$6,236,033$ $6,236,033$
$6,267,925$ 6,020,125 6,062,125 3,985,350
3,989,750
$4,000,550$
$4,007,300$
$4,007,300$
$4,020,000$
$4,020,000$
$4,028,200$
4,041,900
4,050,650
$4,064,450$
$4,077,850$
$4,077,850$
$4,090,625$
$4,102,550$
$4,118,400$
$4,18,400$
$4,132,725$
$4,145,300$
$4,145,300$
$4,165,900$
4,178,850
$4,199,150$
$4,206,125$
\$117,902,886

1] 4 mos, 6 days interest
$2]$ Includes $\$ 0$ of Existing LTNQ Debt and $\$ 12,435,000$ of Existing UT Debt as of Dated Date.
[3] Includes $\$ 0$ of Equivalent IFT Valuations and Less DDA/TIFA Debt Captures of

## BERKLEY SCHOOL DISTRICT

 TAXABLE VALUE HISTORY| 1 | 2014 | $890,089,958$ | $2.20 \%$ | 20 Year Average Growth |
| ---: | ---: | ---: | ---: | :--- |
| 2 | 2013 | $870,934,100$ | $1.01 \%$ |  |
| 3 | 2012 | $862,250,550$ | $-1.94 \%$ | $2.43 \%$ |
| 4 | 2011 | $879,328,330$ | $-5.70 \%$ |  |
| 5 | 2010 | $932,444,830$ | $-7.50 \%$ |  |
| 6 | 2009 | $1,008,061,600$ | $-1.12 \%$ |  |
| 7 | 2008 | $1,019,434,218$ | $0.58 \%$ |  |
| 8 | 2007 | $1,013,509,340$ | $5.07 \%$ |  |
| 9 | 2006 | $964,607,520$ | $4.08 \%$ |  |
| 10 | 2005 | $926,808,846$ | $6.65 \%$ |  |
| 11 | 2004 | $869,025,335$ | $5.13 \%$ |  |
| 12 | 2003 | $826,630,586$ | $5.00 \%$ |  |
| 13 | 2002 | $787,240,515$ | $5.82 \%$ |  |
| 14 | 2001 | $743,921,077$ | $5.75 \%$ |  |
| 15 | 2000 | $703,451,827$ | $4.56 \%$ |  |
| 16 | 1999 | $672,800,835$ | $4.59 \%$ |  |
| 17 | 1998 | $643,273,240$ | $4.79 \%$ |  |
| 18 | 1997 | $613,847,750$ | $3.79 \%$ |  |
| 19 | 1996 | $591,427,780$ | $2.06 \%$ |  |
| 20 | 1995 | $579,467,140$ | $3.70 \%$ |  |
| 21 | 1994 | $558,800,470$ |  |  |



| Grade | Preceding <br> 5-Year <br> Enrollment | (Year) <br> Current <br> Enrollment | (Year) <br> Projected 5-Year <br> Enrollment | (Col 4-Col 3) / Col 3 <br> Projected Enrollment <br> Change (\%) |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |


| Explanation of Method Selected <br> Projection Method 1 |
| :---: |
|  |
|  |


| Source: | Middle Cities Education Association |
| ---: | :--- |
| Prepared By: | Stantec |

Subtotals by School District's Grade Configuration: *

| K-5 | 1,995 | 1,925 | $-3.64 \%$ |
| :--- | ---: | ---: | ---: |
| K-8 | 3,071 | 2,899 | $-5.93 \%$ |
| $6-8$ | 1,076 | 974 | $-10.47 \%$ |
| $9-12$ | 1,266 | 1,312 | $3.51 \%$ |
| GENERAL ED TOTAL | 4,337 | 4,211 | $-2.99 \%$ |


| *Examples of possible grade configurations |  |  |
| :---: | :---: | :---: |
| $\mathrm{K}-5$ | $\mathrm{~K}-8$ | $\mathrm{~K}-12$ |
| $6-8$ | $5-6$ | $5-8$ |
| $9-12$ | $10-12$ | $7-12$ |


| Early Childhood | 308 | Non-general ed student count should not be included in the general ed student count listed above unless discussed with and determined by your enrollment service provider. |
| :---: | :---: | :---: |
| Special Education | 110 |  |
| Alternative Education |  |  |
| Adult Education |  |  |
| NON-GEN ED TOTAL | 418 |  |

Project Sheet


## Type of Project:



Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)

| Asbestos abatement, replacment of mechanical systems with newer, more efficient systems. |
| :--- |


|  | Total | Proposal/Series 1 | Proposal/Series 2 | Proposal/Series 3 |
| :---: | :---: | :---: | :---: | :---: |
| New Construction | \$367,025 | \$367,025 |  |  |
| Remodeling | \$2,901,662 | \$2,901,662 |  |  |
| Construction Contingencies | \$249,963 | \$249,963 |  |  |
| Instructional Technology | \$83,191 | \$83,191 |  |  |
| Loose Furnishing/Equipment | \$294,591 | \$294,591 |  |  |
| Buses | \$0 | \$0 |  |  |
| Site Work | \$64,149 | \$64,149 |  |  |
| Site Acquisition | \$0 | \$0 |  |  |
| Architectural Fees and Costs | \$245,690 | \$245,690 |  |  |
| CM Fees and Costs | \$197,054 | \$197,054 |  |  |
| Estimated Costs | \$4,403,326 | \$4,403,326 | \$0 | \$0 |


|  | Certificate by Registered Architect |  |
| :--- | :--- | :--- |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |
|  |  |  |
| Lee A. Andrea, AIA | Stantec Architecture, Inc. |  |
| $1 / 5 / 2015$ | Printed Name | 45478 |
| Date | lee.andrea@stantec.com | 248.336 .4881 |

BERKLEY SCHOOL DISTRICT
MAY 2015 BOND PROGRAM

Angell Elementary School

| No. | Item/Description | Action | Qty. | Unit | Unit Cost |  | Subtotal | Indirect Cost |  | 2015 Bond ope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Site Work |  |  |  |  |  |  |  |  |  |  |
| Site |  |  |  |  |  |  |  |  |  |  |
| BE-11 | Site Drainage and Earthwork for addition | Add landscape drain tile system. | 4140.00 | SF | \$ 15.00 | \$ | 62,100.00 | 1.033 | \$ | 64,149.30 |
|  |  |  |  |  |  |  |  |  | \$ | 64,149.30 |
| 2. Remodeling |  |  |  |  |  |  |  |  |  |  |
| Exterior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |
| BE-01 | Overhangs/Soffits | Provide aluminum soffit panels. | 1320.00 | LF | \$ 20.00 | \$ | 26,400.00 | 1.033 | \$ | 27,271.20 |
| BE-02 | Brick Veneer at Base of Walls | Control roof drainage where possible and replace brick. | 1300.00 | SF | \$ 26.33 | \$ | 34,225.00 | 1.033 | \$ | 35,354.42 |
| BE-06 | Metal Stair Treads/Ramp Railings | Replace with aluminum treads. | 50.00 | LF | \$ 71.50 | \$ | 3,575.00 | 1.033 | \$ | 3,692.98 |
| BE-07 | Steel Doors and Frames | Replace with aluminum frames and fiberglass reinforced panel doors. | 3.00 | EA | \$ 3,200.00 | \$ | 9,600.00 | 1.033 | \$ | 9,916.80 |
| BE-08 | Stone Window Sills | Replace sills | 75.00 |  | \$ 30.00 | \$ | 2,250.00 | 1.033 | \$ | 2,324.25 |
| BE-09 | Entrance Canopy Soffits | Provide aluminum soffit panels. | 510.00 | SF | \$ 20.00 | \$ | 10,200.00 | 1.033 | \$ | 10,536.60 |
| BE-10 | Roof Membrane | Remove and replace with new insulation and singleply membrane. | 3450.00 | SF | \$ 10.00 | \$ | 34,500.00 | 1.033 | \$ | 35,638.50 |
| BE-12 | Clerestory Windows | Replace with aluminum frames and insulating glass. | 65.00 | SF | \$ 80.00 | \$ | 5,200.00 | 1.033 | \$ | 5,371.60 |
|  |  |  |  |  |  |  |  |  | \$ | 130,106.35 |
| Interior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |
| BI-04 | Gypsum Board Soffits | replace | 100.00 | SF | \$ 10.00 | \$ | 1,000.00 | 1.033 | \$ | 1,033.00 |
| $\mathrm{Bl}-05$ | Stair Wall | replace wall | 250.00 | SF | \$ 5.00 | \$ | 1,250.00 | 1.033 | \$ | 1,291.25 |
| BI-06 | Resilient flooring and concrete floor topping | Replace concrete topping and resilient flooring | 650.00 | SF | \$ 10.50 | \$ | 6,825.00 | 1.033 | \$ | 7,050.23 |
| AB-11 | Boy's and Girl's Toilet Rooms | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes, stalls and automatic door operators. | 900.00 | SF | \$ 71.20 | \$ | 64,080.00 | 1.033 | \$ | 66,194.64 |
| BI-01 | Original Wood Doors and Frames | Replace with wood doors and hardware. | 55.00 | EA | \$ 1,301.36 | \$ | 71,575.05 | 1.033 | \$ | 73,937.02 |
| BI-03 | Corridor Carpet | Replace carpet and resilient base. | 6170.00 | SF | \$ 4.50 | \$ | 27,765.00 | 1.033 | \$ | 28,681.25 |
|  | Classroom Flooring | Assoicated with mechanical system replacement | 17700.00 | SF | \$ 4.50 | \$ | 79,650.00 | 1.033 | \$ | 82,278.45 |

Angell Elementary School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost | $\begin{gathered} \hline \text { Proposed } 2015 \text { Bond } \\ \text { Scope } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Classroom Ceiling | Assoicated with mechanical system replacement | 17700.00 | SF | \$ | 5.50 | \$ | 97,350.00 | 1.033 | \$ | 100,562.55 |
|  | Corridor Ceiling | Assoicated with mechanical system replacement | 6170.00 | SF | \$ | 4.50 | \$ | 27,765.00 | 1.033 | \$ | 28,681.25 |
|  | Visual Display Boards | Assoicated with mechanical system replacement | 20.00 | CR | \$ | 1,200.00 | \$ | 24,000.00 | 1.033 | \$ | 24,792.00 |
|  | Classroom Painting | Assoicated with mechanical system replacement | 20.00 | CR | \$ | 600.00 | \$ | 12,000.00 | 1.033 | \$ | 12,396.00 |
|  | Bookshelves | Assoicated with mechanical system replacement | 20.00 | CR | \$ | 750.00 | \$ | 15,000.00 | 1.033 | \$ | 15,495.00 |
|  | VUV wall opening | Assoicated with mechanical system replacement | 20.00 | CR | \$ | 3,000.00 | \$ | 60,000.00 | 1.033 | \$ | 61,980.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 504,372.63 |
| Academic | Program Improvements |  |  |  |  |  |  |  |  |  |  |
|  | Create Kindergarten wing to improve the security of the main entry. Relocate kindergarten (in room 1) and young 5 to SE wing to reduce cross-traffic through entry vestibule |  | 1440.00 | SF | \$ | 120.00 | \$ | 172,800.00 | 1.033 | \$ | 178,502.40 |
|  | Create controlled vestibule in current entry hall by main office |  | 460.00 | SF | \$ | 120.00 | \$ | 55,200.00 | 1.033 | \$ | 57,021.60 |
|  | Renovate room 14 for classroom use. |  | 800.00 | SF | \$ | 70.00 | \$ | 56,000.00 | 1.033 | \$ | 57,848.00 |
|  | Renovate room 1 for music (larger space). Convert current music room to classroom. |  | 1200.00 | SF | \$ | 120.00 | \$ | 144,000.00 | 1.033 | \$ | 148,752.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 442,124.00 |
| Code/Safe |  |  |  |  |  |  |  |  |  |  |  |
| AB-03 | Built-in Storage Cabinets | Provide fire rated doors and frames. | 9.00 | EA |  | 2,405.55 | \$ | 21,649.95 | 1.033 | \$ | 22,364.40 |
| AB-06 | Stair Handrail/Guardrail | Add handrail/guardrail | 82.00 | FT | \$ | 110.98 | \$ | 9,100.00 | 1.033 | \$ | 9,400.30 |
| AB-08 | Barrier Free Toilet Room Doors | Add automatic door operators. | 2.00 | EA | \$ | 2,725.00 | \$ | 5,450.00 | 1.033 | \$ | 5,629.85 |
|  |  |  |  |  |  |  |  |  |  | \$ | 37,394.55 |
| Building S | ystems Replacement/ Energy Efficiency |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system. | 41000.00 | SF | \$ | 1.75 | \$ | 71,750.00 | 1.033 | \$ | 74,117.75 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures. | 41.00 | EA | \$ | 300.00 | \$ | 12,300.00 | 1.033 | \$ | 12,705.90 |

Angell Elementary School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost | Proposed 2015 Bond Scope |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BS-3 | Boiler Room EPO | Install Boiler Room EPO system. | 1.00 | LS | \$ | 2,720.00 | \$ | 2,720.00 | 1.033 | \$ | 2,809.76 |
| BS-4 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. Test and corrective actions in budget. | 1.00 | EA | \$ | 5,000.00 | \$ | 5,000.00 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 94,798.41 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mechanical System |  | 41000.00 | SF | \$ | 26.00 | \$ | 1,066,000.00 | 1.033 | \$ | 1,101,178.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 1,101,178.00 |
| Plumbing |  |  |  |  |  |  |  |  |  |  |  |
| PS-1 | Sump Pump - West | Add drain tile and sump pump to serve west tunnel. | 1.00 | LS | \$ | 14,000.00 | \$ | 14,000.00 | 1.033 | \$ | 14,462.00 |
| PS-2 | Sump Pump | Replace with heavy duty commercial duplex system. | 1.00 | LS | \$ | 5,600.00 | \$ | 5,600.00 | 1.033 | \$ | 5,784.80 |
| PS-3 | Domestic Water Pipe | Replace with copper pipe. | 20000.00 | SF | \$ | 3.25 | \$ | 65,000.00 | 1.033 | \$ | 67,145.00 |
| PS-4 | Water Meter Isolation Valves | Replace three (3), $3^{\prime \prime}$ gate valves. | 3.00 | EA | \$ | 2,750.00 | \$ | 8,250.00 | 1.033 | \$ | 8,522.25 |
| PS-5 | Sanitary Pipe | Replace accessible portions. | 10000.00 | SF | \$ | 4.25 | \$ | 42,500.00 | 1.033 | \$ | 43,902.50 |
| PS-6 | Water Cooler | Add two (2) new water coolers. | 2.00 | EA | \$ | 4,450.00 | \$ | 8,900.00 | 1.033 | \$ | 9,193.70 |
|  |  |  |  |  |  |  |  |  |  | \$ | 149,010.25 |
| Electrical |  |  |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Replace the original distribution equipment with new. | 1.00 | EA | \$ | 24,500.00 | \$ | 24,500.00 | 1.033 | \$ | 25,308.50 |
| ES-2 | Electrical Panels | Replace the original panels with new, larger panels in new locations. | 7.00 | EA | \$ | 4,875.00 | \$ | 34,125.00 | 1.033 | \$ | 35,251.13 |
| ES-3 | Electrical Receptacles/Exit Lighing | Replace all receptacles with tamper resistant type receptacles. | 1.00 | EA | \$ | 2,300.00 | \$ | 2,300.00 | 1.033 | \$ | 2,375.90 |
| ES-6 | Exterior Lighting | Replace with more efficient LED fixtures. | 7.00 | EA | \$ | 520.00 | \$ | 3,640.00 | 1.033 | \$ | 3,760.12 |
| ES-8 | Uninterruptible Power Supply | Provide 5 kVA UPS to serve Key Fob entry, PA and Phones | 1.00 | EA | \$ | 11,300.00 | \$ | 11,300.00 | 1.033 | \$ | 11,672.90 |

Angell Elementary School

| No. | Item/Description | Action | Qty. | Unit | Unit Cost |  | Subtotal | Indirect Cost |  | ed 2015 Bond Scope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES-10 | Newer TVSS Electrical Panels (New Item) |  | 1.00 | EA | \$ 3,000.00 | \$ | 3,000.00 | 1.033 | \$ | 3,099.00 |
| ES-11 | Newer TVSS Electrical Panels (New Item) | Replace existing TVSS on panels are blown and not protecting circuits | 4.00 | EA | \$ 2,000.00 | \$ | 8,000.00 | 1.033 | \$ | 8,264.00 |
|  | Classroom Lighting |  | 17700.00 | SF | \$ 6.00 | \$ | 106,200.00 | 1.033 | \$ | 109,704.60 |
|  | Corridor Lighting |  | 6170.00 | SF | \$ 6.00 | \$ | 37,020.00 | 1.033 | \$ | 38,241.66 |
|  |  |  |  |  |  |  |  |  | \$ | 237,677.81 |
| Air Conditioning |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | \$ | - |
| Asbestos Abatement |  |  |  |  |  |  |  |  |  |  |
|  | Asbestos Abatement- flooring,ceiling,etc. |  | 41000.00 | SF | \$ 5.00 | \$ | 205,000.00 | 1.000 | \$ | 205,000.00 |
|  |  |  |  |  |  |  |  |  | \$ | 205,000.00 |
| 3. New Construction |  |  |  |  |  |  |  |  |  |  |
| New Construction |  |  |  |  |  |  |  |  |  |  |
|  | Addition: Art room (larger space). |  | 1700.00 | SF | \$ 209.00 | \$ | 355,300.00 | 1.033 | \$ | 367,024.90 |
|  |  |  |  |  |  |  |  |  | \$ | 367,024.90 |
| 4. Instructional Technology |  |  |  |  |  |  |  |  |  |  |
|  | Educational Technology |  | 1.00 | LS | \$ 83,191.43 | \$ | 83,191.43 | 1.00 | \$ | 83,191.43 |
|  |  |  |  |  |  |  |  |  | \$ | 83,191.43 |
| 5. Loose Furnishings/Equipment |  |  |  |  |  |  |  |  |  |  |
|  | Equipment |  | 1.00 | LS | \$ 134,294.74 | \$ | 134,294.74 | 1.00 | \$ | 134,294.74 |
|  | Technology Infrastructure |  | 1.00 | LS | \$ 137,696.16 | \$ | 137,696.16 | 1.000 | \$ | 137,696.16 |
|  | Furniture Replacement |  | 1.00 | EA | \$ 20,000.00 | \$ | 20,000.00 | 1.130 | \$ | 22,600.00 |
|  |  |  |  |  |  |  |  |  | \$ | 294,590.90 |
| \$ 3,710,618.52 |  |  |  |  |  |  |  |  |  |  |
| Site |  |  |  |  |  |  |  |  | \$ 64,149.30 |  |
| Remodeling |  |  |  |  |  |  |  |  | \$ | 2,901,661.99 |
| New Construction |  |  |  |  |  |  |  |  | \$ 367,024.90 |  |
| Subtotal |  |  |  |  |  |  |  |  | \$ | 3,332,836.19 |
| Construction Contingency |  |  |  |  |  |  | 7.5\% |  | \$ | 249,962.71 |
| Subtotal |  |  |  |  |  |  |  |  | \$ | 3,582,798.90 |
| CM Fees and Costs |  |  |  |  |  |  | 5.5\% |  | \$ | 197,053.94 |
|  | Subtotal |  |  |  |  |  |  |  | \$ | 3,779,852.84 |
|  | Architectural Fees and Costs |  |  |  |  |  | 6.5\% |  | \$ | 245,690.43 |
|  | Instructional Technology |  |  |  |  |  |  |  | \$ | 83,191.43 |
|  | Loose Furnishing/Equipment |  |  |  |  |  |  |  | \$ | 294,590.90 |
|  | Total Project Cost |  |  |  |  |  |  |  | \$ | 4,403,325.61 |


| Project <br> No. | 1 |
| :---: | :---: |

## Name of School Building Angell Elementary School

| Existing/Adequate | List \# of Teaching Stations |  | Capacity Factor | $=$ | Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  | x | 20 | = | 0 |
| (3-5) Upper Elementary |  | x | 25 | $=$ | 0 |
| (6-8) Junior High |  | x | 22.5 | = | 0 |
| (9-12) High School |  | x | 21.25 | $=$ | 0 |
| Sub Totals | 0 |  |  |  | 0 |
| Remodeled | List \# of Teaching Stations | X | Capacity Factor | $=$ | Capacity |
| (K-2) Lower Elementary | 10 | X | 20 | = | 200 |
| (3-5) Upper Elementary | 9 | x | 25 | $=$ | 225 |
| (6-8) Junior High |  | x | 22.5 | = | 0 |
| (9-12) High School |  | x | 21.25 | = | 0 |
| Sub Totals | 19 |  |  |  | 425 |



1 List the number of teaching station in appropriate column.

2 Calculate total capacity using the applicable capacity factor.

3 Enter five (5) year projected enrollment.

4 Calculate building utilization rate.

5 Attach floor and site plan of the building. Show the rooms and category (adequate, remodeled, proposed new, closed). Number the teaching stations in consecutive order.

| Facility to be Closed | List \# of Teaching $\mathbf{x}$ Stations | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary | $\mathbf{X}$ | 20 | 0 |
| (3-5) Upper Elementary | X | 25 | 0 |
| (6-8) Junior High | X | 22.5 | 0 |
| (9-12) High School | X | 21.25 | 0 |
| Total Teaching Stations | 0 |  |  |
| Square Footage for Closed Facility |  | Total Capacity | 0 |

Please transfer applicable information to the Utilization Summary on Page 7 of the application.

## mezzanine


second floor
first floor

Teaching Stations
Stantec
BERKLEY SCHOOL DISTRICT


Site Plan Concept for:
Angell Elementary School Berkley School District Berkley, Michigan


## Facility Condition Assessment

 Air temperature is inconsistent throughout building. Lack of adequate fresh air ventilation leads to odors

| Life Safety Section |  |  | Yes |
| :---: | :--- | :---: | :---: |
| No | N/A |  |  |
| 1. | Lighted exit signs are present at each entrance/exit and are clearly visible. |  |  |
| 2. | Fire suppression equipment is present in kitchen, science rooms and corridors. |  |  |
| 3. | Washroom facilities have barrier free accessibility. | X |  |
| 4. | Building access is limited to select, controlled entries. | X |  | Washrooms have limited barrier free accessiblity.


| Structural Section |  | Yes | No | N/A |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |  |
| 2. | Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |  |
| 3. | Roof structure does not show visible signs of damage. | X |  |  |
| 4. | Building exterior is intact and does not show visible deterioration beyond normal aging. | X |  |  |

4. Building exterior is intact and does not show visible deterioration beyond normal aging Overall assessment or comments:

|  |  | Nes | No |
| :---: | :--- | :---: | :---: |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. |  |  |
| 3. | Water drains quickly from sinks. | X |  |
| 4. | Floor area near toilets and sinks is dry. | X |  | Overall assessment or comments:


| Electrical Section |  | Yes | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. |  |  |
| 2. | Electrical controls are safely protected and accessible. | X |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. | X |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

|  | Lee A. Andrea, AIA |  | Stantec Architecture, Inc. |
| :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248 |
| Date | E-mail Address | Fax Number | Area Code and |

Project Sheet


## Type of Project:



Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)
Asbestos abatement, replacment of mechanical systems with newer, more efficient systems.

Estimated Cost of Proposed Construction Project: (Attach analysis showing how cost estimates were calculated.)


| Certificate by Registered Architect |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |  |  |
|  | Lee A. Andrea, AIA |  | Stantec Architecture, Inc. | 45478 |
| Signature | Printed Name |  | Firm Name and License Numb |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248.336.4880 |  |
| Date | E-mail Address | Fax Number | Area Code and Telephone N |  |

BERKLEY
Burton Elementary School


Burton Elementary School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost | Proposed 2015 BondScope |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AB-04 | Stair Guardrai//Handrail | Add guardrails/handrails | 64 | LF | \$ | 175.00 | \$ | 11,200.00 | 1.033 | \$ | 11,569.60 |
| AB-05 | Barrier Free Toilet Room Doors | Add automatic door operators. | 2 | EA | \$ | 2,700.00 | \$ | 5,400.00 | 1.033 | \$ | 5,578.20 |
| AB-10 | Emergency Egress | Add emergency egress window (requires modifications to masonry wall). | 1 | LS | \$ | 5,500.00 | \$ | 5,500.00 | 1.033 | \$ | 5,681.50 |
|  |  |  |  |  |  |  |  |  |  | \$ | 22,829.30 |
| Building Systems Replacement/ Energy Efficiency |  |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system | 49000 | SF | \$ | 1.75 | \$ | 85,750.00 | 1.033 | \$ | 88,579.75 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures | 52 | EA | \$ | 300.00 | \$ | 15,600.00 | 1.033 | \$ | 16,114.80 |
| BS-3 | Boiler Room EPO | Install Boiler Room EPO system. | 1 | LS | \$ | 2,720.00 | \$ | 2,720.00 | 1.033 | \$ | 2,809.76 |
| BS-4 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. Test and corrective actions in budget. | 1 | EA | \$ | 5,000.00 | \$ | 5,000.00 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 112,669.31 |
| Mechanical |  |  |  |  |  |  |  |  |  |  |  |
|  | Mechanical Systems |  | 49000 | SF | \$ | 24.00 | \$ | 1,176,000.00 | 1.033 | \$ | 1,214,808.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 1,214,808.00 |
| Plumbing |  |  |  |  |  |  |  |  |  |  |  |
| PS-1 | Sump Pump | Rebuild existing unit. | 1 | LS | \$ | 6,700.00 | \$ | 6,700.00 | 1.033 | \$ | 6,921.10 |
| PS-2 | Domestic Water Pipe | Replace with copper pipe. | 20000 | SF | \$ | 3.75 | \$ | 75,000.00 | 1.033 | \$ | 77,475.00 |
| PS-3 | Water Meter Isolation Valves | Replace three (3), ${ }^{\prime \prime}$ " gate valves. | 3 | EA | \$ | 2,750.00 | \$ | 8,250.00 | 1.033 | \$ | 8,522.25 |
| PS-4 | Sanitary Pipe | Replace accessible portions. | 10000 | SF | \$ | 4.00 | \$ | 40,000.00 | 1.033 | \$ | 41,320.00 |
| PS-5 | Water Cooler | Provide new bi-level electric water coolers. | 3 | EA | \$ | 4,450.00 | \$ | 13,350.00 | 1.033 | \$ | 13,790.55 |
|  |  |  |  |  |  |  |  |  |  | \$ | 148,028.90 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Original electrical distribution equipment is obsolete and a safety concern. | 1 | EA |  | 15,900.00 | \$ | 15,900.00 | 1.033 | \$ | 16,424.70 |
| ES-2 | Electrical Panels | Original electrical panels are obsolete and are sometimes located behind doors. | 8 | EA | \$ | 4,875.00 | \$ | 39,000.00 | 1.033 | \$ | 40,287.00 |
| ES-5 | Exterior Lighting | Lighting fixtures are in disrepair. | 7 | EA | \$ | 520.00 | \$ | 3,640.00 | 1.033 | \$ | 3,760.12 |
| ES-7 | Uninterruptible Power Supply | Maintain operation during power interruptions | 1 | EA | \$ | 11,655.00 | \$ | 11,655.00 | 1.033 | \$ | 12,039.62 |
| ES-8 | Newer TVSS Electrical Panels (New Item) |  | 1 | EA | \$ | 3,000.00 | \$ | 3,000.00 | 1.033 | \$ | 3,099.00 |
| ES-9 | Newer TVSS Electrical Panels (New Item) | Replace existing TVSS on panels are blown and not protecting circuits | 5 | EA | \$ | 2,000.00 | \$ | 10,000.00 | 1.033 | \$ | 10,330.00 |
|  | Corridor Lighting |  | 6780 | SF | \$ | 6.00 | \$ | 40,680.00 | 1.033 | \$ | 42,022.44 |
|  | Classroom Lighting |  | 23700 | EA | \$ | 6.00 | \$ | 142,200.00 | 1.033 | \$ | 146,892.60 |
|  |  |  |  |  |  |  |  |  |  | \$ | 274,855.48 |

Burton Elementary School


| Project <br> No. | 2 |
| :---: | :---: |

## Name of School Building Burton Elementary School

| Existing/Adequate | List \# of Teaching Stations |  | Capacity Factor | $=$ | Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  | X | 20 | = | 0 |
| (3-5) Upper Elementary |  | x | 25 | $=$ | 0 |
| (6-8) Junior High |  | x | 22.5 | = | 0 |
| (9-12) High School |  | x | 21.25 | $=$ | 0 |
| Sub Totals | 0 |  |  |  | 0 |
| Remodeled | List \# of Teaching Stations | X | Capacity Factor | $=$ | Capacity |
| (K-2) Lower Elementary | 12 | X | 20 | = | 240 |
| (3-5) Upper Elementary | 10 | x | 25 | $=$ | 250 |
| (6-8) Junior High |  | x | 22.5 | = | 0 |
| (9-12) High School |  | x | 21.25 | = | 0 |
| Sub Totals | 22 |  |  |  | 490 |



1 List the number of teaching station in appropriate column.

2 Calculate total capacity using the applicable capacity factor.

3 Enter five (5) year projected enrollment.

4 Calculate building utilization rate.

5 Attach floor and site plan of the building. Show the rooms and category (adequate, remodeled, proposed new, closed). Number the teaching stations in consecutive order.

| Facility to be Closed | List \# of Teaching $\mathbf{X}$ Stations | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary | x | $20=$ | 0 |
| (3-5) Upper Elementary | X | 25 | 0 |
| (6-8) Junior High | $\mathbf{X}$ | 22.5 | 0 |
| (9-12) High School | $\mathbf{X}$ | 21.25 | 0 |
| Total Teaching Stations | 0 |  |  |
| Square Footage for Closed Facility |  | Total Capacity | 0 |

Please transfer applicable information to the Utilization Summary on Page 7 of the application.



Site Plan Concept for:
Burton Elementary School Berkley School District
Berkley, Michigan


## Facility Condition Assessment

 Air temperature is inconsistent throughout building. Lack of adequate fresh air ventilation leads to odors

| Life Safety Section | Yes | No | N/A |
| :---: | :---: | :---: | :---: |
| 1. Lighted exit signs are present at each entrance/exit and are clearly visible. | X |  |  |
| 2. Fire suppression equipment is present in kitchen, science rooms and corridors. | X |  |  |
| 3. Washroom facilities have barrier free accessibility. |  | X |  |
| 4. Building access is limited to select, controlled entries. | X |  |  |
| Washrooms have limited barrier free accessiblity. |  |  |  |
| Structural Section | Yes | No | N/A |
| 1. Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |  |
| 2. Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |  |
| 3. Roof structure does not show visible signs of damage. | X |  |  |
| 4. Building exterior is intact and does not show visible deterioration beyond normal aging. | X |  |  |


|  |  | Nes | No |
| :---: | :--- | :---: | :---: |
| Nechanical Section |  |  |  |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. | X |  |
| 3. | Water drains quickly from sinks. |  |  |
| 4. | Floor area near toilets and sinks is dry. |  |  | Overall assessment or comments:


| Electrical Section |  | Nos | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. | X |  |
| 2. | Electrical controls are safely protected and accessible. |  |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. |  |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

| Lee A. Andrea, AIA |  |  | Stantec Architecture, Inc. | 45478 |
| :---: | :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248. |  |
| Date | E-mail Address | Fax Number | Area Code an |  |

Project Sheet


## Type of Project:



Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)


Estimated Cost of Proposed Construction Project: (Attach analysis showing how cost estimates were calculated.)

|  | Total | Proposal/Series 1 | Proposal/Series 2 | Proposal/Series 3 |
| :---: | :---: | :---: | :---: | :---: |
| New Construction | \$280,666 | \$280,666 |  |  |
| Remodeling | \$2,988,140 | \$2,988,140 |  |  |
| Construction Contingencies | \$248,228 | \$248,228 |  |  |
| Instructional Technology | \$94,017 | \$94,017 |  |  |
| Loose Furnishing/Equipment | \$329,986 | \$329,986 |  |  |
| Buses | \$0 | \$0 |  |  |
| Site Work | \$40,907 | \$40,907 |  |  |
| Site Acquisition | \$0 | \$0 |  |  |
| Architectural Fees and Costs | \$243,986 | \$243,986 |  |  |
| CM Fees and Costs | \$195,687 | \$195,687 |  |  |
| Estimated Costs <br> (Not including election or bond issuance costs) | \$4,421,618 | \$4,421,618 | \$0 | \$0 |


| Certificate by Registered Architect |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |  |  |
| Lee A. Andrea, AIA |  |  | Stantec Architecture, Inc. | 45478 |
| Signature | Printed Name |  | Firm Name and License Num |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248.336.4880 |  |
| Date | E-mail Address | Fax Number | Area Code and Telephone |  |

## BERKLEY SCHOOL DISTRICT

MAY 2015 BOND PROGRAM
BERKLEY

## Pattengill Elementary School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | 2015 Bond <br> cope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Site Work |  |  |  |  |  |  |  |  |  |  |  |
| Site Work |  |  |  |  |  |  |  |  |  |  |  |
| BE-11 | Earthwork for addition and Site Drainage |  | 2,640 | SF | \$ | 15.00 | \$ | 39,600.00 | 1.033 | \$ | 40,906.80 |
|  |  |  |  |  |  |  |  |  |  | \$ | 40,906.80 |
| 2. Remodeling |  |  |  |  |  |  |  |  |  |  |  |
| Exterior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
| BE-01 | Overhangs/Soffits | Provide aluminum soffit panels. | 1,450 | SF | \$ | 31.47 | \$ | 45,625.00 | 1.033 | \$ | 47,130.63 |
| BE-02 | Stone Veneer | Replace stone. | 50 | SF | \$ | 75.00 | \$ | 3,750.00 | 1.033 | \$ | 3,873.75 |
| BE-04 | Roof Fascia | Replace fascia, correct roof drainage, replace wall in Boiler Room | 1 | LS | \$ | 2,000.00 | \$ | 2,000.00 | 1.033 | \$ | 2,066.00 |
| BE-05 | Brick Veneer at Parapet | Replace brick | 350 | SF | \$ | 25.00 | \$ | 8,750.00 | 1.033 | \$ | 9,038.75 |
| BE-06 | Entrance Canopy Soffits | Provide aluminum soffit panels. | 950 | SF | \$ | 20.00 | \$ | 19,000.00 | 1.033 | \$ | 19,627.00 |
| BE-07 | Brick Veneer | Control roof drainage where possible and replace brick. | 100 | SF | \$ | 15.00 | \$ | 1,500.00 | 1.033 | \$ | 1,549.50 |
| BE-09 | Metal Stair Treads | Replace with aluminum treads and replace concrete. | 36 | LF | \$ | 82.24 | \$ | 2,960.52 | 1.033 | \$ | 3,058.22 |
| BE-10 | Stone Window Sills | Replace sills and sealant. | 75 | LF | \$ | 30.00 | \$ | 2,250.00 | 1.033 | \$ | 2,324.25 |
|  |  |  |  |  |  |  |  |  |  | \$ | 88,668.09 |
| Interior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
| BI-04 | Water Leak | Correct water leak. | 1 | LS | \$ | 1,500.00 | \$ | 1,500.00 | 1.033 | \$ | 1,549.50 |
| AB-09 | Boy's and Girl's Toilet Rooms | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes, stalls and automatic door operators. | 1,920 | SF | \$ | 71.20 | \$ | 136,704.00 | 1.033 | \$ | 141,215.23 |
| BI-01 | Original Wood Doors and Frames |  | 45 | EA | \$ | 1,301.66 | \$ | 58,574.70 | 1.033 | \$ | 60,507.67 |
| BI-03 | Carpet | Replace carpet and resilient base. | 6,340 | SF | \$ | 4.50 | \$ | 28,530.00 | 1.033 | \$ | 29,471.49 |
|  | Corridor Ceilings | Assoicated with mechanical system replacement | 6,340 | SF | \$ | 4.50 | \$ | 28,530.00 | 1.033 | \$ | 29,471.49 |
|  | Classroom Ceilings | Assoicated with mechanical system replacement | 19,000 | SF | \$ | 5.50 | \$ | 104,500.00 | 1.033 | \$ | 107,948.50 |
|  | Classroom Flooring | Assoicated with mechanical system replacement | 19,000 | SF | \$ | 4.50 | \$ | 85,500.00 | 1.033 | \$ | 88,321.50 |

## Pattengill Elementary Schoo

| No. | Item/Description | Action | Qty. | Unit | Unit Cost |  | Subtotal |  | Indirect Cost | Proposed 2015 Bond Scope |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Visual display boards | Assoicated with mechanical system replacement | 24 | CR | \$ | 1,200.00 | \$ | 28,800.00 | 1.033 | \$ | 29,750.40 |
|  | Painting | Assoicated with mechanical system replacement | 24 | CR | \$ | 600.00 | \$ | 14,400.00 | 1.033 | \$ | 14,875.20 |
|  | Bookshelves | Assoicated with mechanical system replacement | 24 | CR | \$ | 750.00 | \$ | 18,000.00 | 1.033 | \$ | 18,594.00 |
|  | VUV wall opening | Assoicated with mechanical system replacement | 24 | CR | \$ | 3,000.00 | \$ | 72,000.00 | 1.033 | \$ | 74,376.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 596,080.98 |
| Academic Program Improvements |  |  |  |  |  |  |  |  |  |  |  |
|  | Renovate room 104 (music) to therapist office and resource room. |  | 800 | SF | \$ | 120.00 | \$ | 96,000.00 | 1.033 | \$ | 99,168.00 |
|  | Renovate current admin office, speech therapist office and resource room into music room (larger space) |  | 1,200 | SF | \$ | 120.00 | \$ | 144,000.00 | 1.033 | \$ | 148,752.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 247,920.00 |
| Code/ Safety |  |  |  |  |  |  |  |  |  |  |  |
| AB-01 | Built-in Storage Cabinet | Provide fire rated door and frame. | 1 | EA | \$ | 2,350.00 | \$ | 2,350.00 | 1.033 | \$ | 2,427.55 |
| AB-02 | Classroom Exits | Provide additional exit door to corridor. | 5 | EA | \$ | 4,800.00 | \$ | 24,000.00 | 1.033 | \$ | 24,792.00 |
| AB-04 | Stair Guardrail | Add guardrails. | 64 | LF | \$ | 157.81 | \$ | 10,099.84 | 1.033 | \$ | 10,433.13 |
| AB-06 | Kiln | Assure kiln is not in use when room is used for instructional purposes. Add sprinklers and stainless steel exhaust hood. | 1 | LS | \$ | 13,350.00 | \$ | 13,350.00 | 1.033 | \$ | 13,790.55 |
| AB-07 | Classroom Exits | Provide additional exit door to corridor. | 1 | EA | \$ | 4,800.00 | \$ | 4,800.00 | 1.033 | \$ | 4,958.40 |
|  |  |  |  |  |  |  |  |  |  | \$ | 56,401.63 |
| Building Systems Replacement/ Energy Efficiency |  |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system | 46000 | SF | \$ | 1.75 | \$ | 80,500.00 | 1.033 | \$ | 83,156.50 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures | 50 | EA | \$ | 300.00 | \$ | 15,000.00 | 1.033 | \$ | 15,495.00 |
| BS-3 | Boiler Room EPO | Install Boiler Room EPO system. | 1 | LS | \$ | 2,720.00 | \$ | 2,720.00 | 1.033 | \$ | 2,809.76 |

## Pattengill Elementary School

| No. | Item/Description | Action | Qty. | Unit | Unit Cost | Subtotal | Indirect Cost | $\begin{array}{\|c\|} \hline \text { Proposed } 2015 \text { Bond } \\ \text { Scope } \\ \hline \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BS-4 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. Test and corrective actions in budget. |  | EA | \$ 5,000.00 | \$ 5,000.00 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  | \$ | 106,626.26 |
| Mechanical |  |  |  |  |  |  |  |  |  |
|  | Mechanical System replacement |  | 46000 | sf | \$ 25.00 | \$ 1,150,000.00 | 1.033 | \$ | 1,187,950.00 |
|  |  |  |  |  |  |  |  | \$ | 1,187,950.00 |
| Plumbing |  |  |  |  |  |  |  |  |  |
| PS-1 | Sump Pump/Drain Tile | Add drain tile and sump pump to serve this area. |  | LS | \$ 14,000.00 | \$ 14,000.00 | 1.033 | \$ | 14,462.00 |
| PS-2 | Sump Pump | Replace with heavy duty commercial duplex sump system. | 1 | LS | \$ 5,600.00 | \$ 5,600.00 | 1.033 | \$ | 5,784.80 |
| PS-3 | Domestic Water Pipe | Replace with copper pipe. | 30000 | SF | \$ 3.75 | \$ 112,500.00 | 1.033 | \$ | 116,212.50 |
| PS-4 | Water Meter Isolation Valves | Replace three (3), $3^{\prime \prime}$ gate valves. | 6 | EA | \$ 2,750.00 | \$ 16,500.00 | 1.033 | \$ | 17,044.50 |
| PS-5 | Sanitary Pipe | Replace accessible portions. | 10000 | SF | \$ 4.75 | \$ 47,500.00 | 1.033 | \$ | 49,067.50 |
| PS-6 | Water Cooler | Replace with new bi-level water coolers. |  | EA | \$ 4,450.00 | \$ 17,800.00 | 1.033 | \$ | 18,387.40 |
|  |  |  |  |  |  |  |  | \$ | 220,958.70 |
| Electrical |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Replace the original distribution equipment with new. |  | EA | \$ 25,600.00 | \$ 25,600.00 | 1.033 | \$ | 26,444.80 |
| ES-2 | Electrical Panels | Replace the original panels with new, larger panels in new locations. |  | EA | \$ 4,875.00 | \$ 39,000.00 | 1.033 | \$ | 40,287.00 |
| ES-5 | Exterior Lighting | Replace with more efficient LED fixtures. |  | EA | \$ 691.42 | \$ 4,839.94 | 1.033 | \$ | 4,999.66 |
| ES-7 | Uninterruptible Power Supply | Provide 5 kVA UPS to serve Key Fob entry, PA and Phones |  | EA | \$ 11,300.00 | \$ 11,300.00 | 1.033 | \$ | 11,672.90 |
| ES-8 | Newer TVSS Electrical Panels (New Item) |  |  | EA | \$ 3,000.00 | \$ 3,000.00 | 1.033 | \$ | 3,099.00 |

## Pattengill Elementary School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | d 2015 Bond cope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES-9 | Newer TVSS Electrical Panels (New Item) | Replace existing TVSS on panels are blown and not protecting circuits | 4 | EA | \$ | 2,000.00 | \$ | 8,000.00 | 1.033 | \$ | 8,264.00 |
|  | Corridor Lighting | Assoicated with mechanical system replacement | 6340 | SF | \$ | 6.00 | \$ | 38,040.00 | 1.033 | \$ | 39,295.32 |
|  | Classroom Lighting | Assoicated with mechanical system replacement | 19000 | SF | \$ | 6.00 | \$ | 114,000.00 | 1.048 | \$ | 119,472.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Air Conditioning |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | \$ | - |
| Asbestos Abatement |  |  |  |  |  |  |  |  |  |  |  |
|  | Asbestos Abatement- flooring,ceiling,etc. |  | 46000 | SF | \$ | 5.00 | \$ | 230,000.00 | 1.000 | \$ | 230,000.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 230,000.00 |
| 3. New Construction |  |  |  |  |  |  |  |  |  |  |  |
| New Con | struction |  |  |  |  |  |  |  |  |  |  |
|  | Addition: New entry, security vestibule and main office at SW corner. |  | 1,300 | SF | \$ | 209.00 | \$ | 271,700.00 | 1.033 | \$ | 280,666.10 |
|  |  |  |  |  |  |  |  |  |  | \$ | 280,666.10 |
| 4. Instructional Technology |  |  |  |  |  |  |  |  |  |  |  |
|  | Educational Technology |  | 1 | LS | \$ | 94,017.42 | \$ | 94,017.42 | 1.00 | \$ | 94,017.42 |
|  |  |  |  |  |  |  |  |  |  | \$ | 94,017.42 |

## Pattengill Elementary School



| Site |  |  |
| :---: | :---: | :---: |
| Remodeling |  |  |
| New Construction |  |  |
| Subtotal |  |  |
| Construction Contingency | \$ | 0.08 |
| Subtotal |  |  |
| CM Fees and Costs | \$ | 0.06 |
| Subtotal |  |  |
| Architectural Fees and Costs | \$ | 0.07 |
| Instructional Technology |  |  |
| Loose Furnishing/Equipment |  |  |

40,906.80 2,988,140.34 280,666.10 3,309,713.24 248,228.49 3,557,941.74 195,686.80 3,753,628.53

 94,017.42 329,986.02

| Project <br> No. | 3 |
| :---: | :---: |

## Name of School Building Pattengill Elementary School

| Existing/Adequate | List \# of Teaching Stations | $\mathbf{X}$ | Capacity Factor | $=$ | Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  | X | 20 | = | 0 |
| (3-5) Upper Elementary |  | x | 25 | $=$ | 0 |
| (6-8) Junior High |  | X | 22.5 | = | 0 |
| (9-12) High School |  | X | 21.25 | = | 0 |
| Sub Totals | 0 |  |  |  | 0 |
| Remodeled | List \# of Teaching Stations | X | Capacity Factor | = | Capacity |
| (K-2) Lower Elementary | 7 | X | 20 | = | 140 |
| (3-5) Upper Elementary | 6 | X | 25 | $=$ | 150 |
| (6-8) Junior High |  | $\mathbf{x}$ | 22.5 | $=$ | 0 |
| (9-12) High School |  | X | 21.25 | = | 0 |
| Sub Totals | 13 |  |  |  | 290 |


| Proposed New | List \# of Teaching Stations |  | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  |  | 20 | 0 |
| (3-5) Upper Elementary |  |  | 25 | 0 |
| (6-8) Junior High |  |  | 22.5 | 0 |
| (9-12) High School |  |  | 21.25 | 0 |
| Sub Totals | 0 |  |  | 0 |
| Total Teaching Stations | 13 |  | Total Capacity | 290 |
| Current Gr. Structure | K-5 |  | Projected |  |
| Proposed Gr. Structure | K-5 |  | Enrollment |  |
| Utilization Percentage <br> (Projected 5-Year Enrollment / Total Capacity) |  |  |  | 101\% |

1 List the number of teaching station in appropriate column.

2 Calculate total capacity using the applicable capacity factor.

3 Enter five (5) year projected enrollment.

4 Calculate building utilization rate.

5 Attach floor and site plan of the building. Show the rooms and category (adequate, remodeled, proposed new, closed). Number the teaching stations in consecutive order.

| Facility to be Closed | List \# of Teaching $\mathbf{X}$ Stations | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary | x | $20=$ | 0 |
| (3-5) Upper Elementary | X | 25 | 0 |
| (6-8) Junior High | $\mathbf{x}$ | 22.5 | 0 |
| (9-12) High School | $\mathbf{x}$ | 21.25 | 0 |
| Total Teaching Stations | 0 |  |  |
| Square Footage for Closed Facility |  | Total Capacity | 0 |

Please transfer applicable information to the Utilization Summary on Page 7 of the application.

first floor

second floor

basement
Teaching Stations
Stantec
BERKLEY SCHOOL
DISTRICT


Site Plan Concept for:
Pattengill Elementary School Berkley School District Berkley, Michigan


## Facility Condition Assessment



| Life Safety Section |  |  | Yes |
| :---: | :--- | :---: | :---: |
| No | N/A |  |  |
| 1. | Lighted exit signs are present at each entrance/exit and are clearly visible. |  |  |
| 2. | Fire suppression equipment is present in kitchen, science rooms and corridors. |  |  |
| 3. | Washroom facilities have barrier free accessibility. | X |  |
| 4. | Building access is limited to select, controlled entries. | X |  | Washrooms have limited barrier free accessiblity.


| Structural Section |  | Yes | No | N/A |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |  |
| 2. | Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |  |
| 3. | Roof structure does not show visible signs of damage. | X |  |  |
| 4. | Building exterior is intact and does not show visible deterioration beyond normal aging | X |  |  |

4. Building exterior is intact and does not show visible deterioration beyond normal aging Overall assessment or comments:

|  |  | Nes | No |
| :---: | :--- | :---: | :---: |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. |  |  |
| 3. | Water drains quickly from sinks. | X |  |
| 4. | Floor area near toilets and sinks is dry. | X |  | Overall assessment or comments:


| Electrical Section |  | Yes | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. |  |  |
| 2. | Electrical controls are safely protected and accessible. | X |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. | X |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

|  | Lee A. Andrea, AIA |  | Stantec Architecture, Inc. |
| :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248 |
| Date | E-mail Address | Fax Number | Area Code and |

Project Sheet


## Type of Project:



Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)

| Asbestos abatement, replacment of mechanical systems with newer, more efficient systems. |
| :--- |


|  | Total | Proposal/Series 1 | Proposal/Series 2 | Proposal/Series 3 |
| :---: | :---: | :---: | :---: | :---: |
| New Construction | \$906,767 | \$906,767 |  |  |
| Remodeling | \$2,322,849 | \$2,322,849 |  |  |
| Construction Contingencies | \$250,937 | \$250,937 |  |  |
| Instructional Technology | \$68,116 | \$68,116 |  |  |
| Loose Furnishing/Equipment | \$269,642 | \$269,642 |  |  |
| Buses | \$0 | \$0 |  |  |
| Site Work | \$116,213 | \$116,213 |  |  |
| Site Acquisition | \$0 | \$0 |  |  |
| Architectural Fees and Costs | \$246,648 | \$246,648 |  |  |
| CM Fees and Costs | \$197,822 | \$197,822 |  |  |
| Estimated Costs | \$4,378,995 | \$4,378,995 | \$0 | \$0 |


|  | Certificate by Registered Architect |  |
| :--- | :--- | :--- |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |
|  |  |  |
| Lee A. Andrea, AIA | Stantec Architecture, Inc. |  |
| Signature | Printed Name | 45478 |
| $1 / 5 / 2015$ | lee.andrea@stantec.com | 248.336 .4881 |

BERKLEY SCHOOL DISTRICT
2015 BOND PROGRAM

Rogers Elementary School


## Rogers Elementary School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | 2015 Bond pe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Program Improvements |  |  |  |  |  |  |  |  |  |  |  |
|  | Renovate room 26 (current art) to kindergarten. |  | 1,200 | SF | \$ | 50.00 | \$ | 60,000 | 1.033 | \$ | 61,980.00 |
|  | Renovate rooms 5/7 (current kindergarten) to MP room/overflow cafeteria/ large group instruction |  | 1,560 | SF | \$ | 120.00 | \$ | 187,200 | 1.033 | \$ | 193,377.60 |
|  | Renovate room 16 and adjacent El room to support staff/resource room (larger space than in media center) |  | 830 | SF | \$ | 150.00 | \$ | 124,500 | 1.033 | \$ | 128,608.50 |
|  | Renovate vestibule at main office to improve visibility and security |  | 1 | LS | \$ | 10,000.00 | \$ | 10,000 | 1.033 | \$ | 10,330.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 394,296.10 |
| Code/Safety |  |  |  |  |  |  |  |  |  |  |  |
| AB-05 | Emergency Egress | Add emergency egress window (requires modifications to masonry wall). | 1 | LS | \$ | 3,100.00 | \$ | 3,100 | 1.033 | \$ | 3,202.30 |
|  |  |  |  |  |  |  |  |  |  | \$ | 3,202.30 |
| Building Systems Replacement/ Energy Efficiency |  |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system. | 37000 | SF | \$ | 1.75 |  | 64750 | 1.033 | \$ | 66,886.75 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures. | 40 | EA | \$ | 300.00 |  | 12000 | 1.033 | \$ | 12,396.00 |
| BS-3 | Boiler Room Emergency Power Off | Install new EPO system. | 1 | LS | \$ | 2,720.00 |  | 2720 | 1.033 | \$ | 2,809.76 |
| BS-4 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. Test and corrective actions in budget. | 1 | EA | \$ | 5,000.00 |  | 5000 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 87,257.51 |
| Mechanical |  |  |  |  |  |  |  |  |  |  |  |
| MS-01 | Building Controls | Provide new DDC controls throughout. | 37000 | SF | \$ | 4.50 |  | 166500 | 1.033 | \$ | 171,994.50 |
| MS-02A | Boilers | Two (2) new heating hot water boilers at $2,500 \mathrm{MBH}$ each and all associated trim and accessories | 2 | EA | \$ | 65,000.00 |  | 130000 | 1.033 | \$ | 134,290.00 |
| MS-02B | Hot Water System | Provide new chemical treatment for heating hot water system | 1 | EA | \$ | 2,000.00 |  | 2000 | 1.033 | \$ | 2,066.00 |
| MS-02C | Hot Water System | Provide coalescing air and dirt separator for heating hot water system | 1 | EA | \$ | 3,500.00 |  | 3500 | 1.033 | \$ | 3,615.50 |
| MS-02D | Hot Water System | Provide expansion tank for heating hot water system | 1 | EA | \$ | 3,500.00 |  | 3500 | 1.033 | \$ | 3,615.50 |
| MS-03 | HWH Pumps | Provide end-suction, base mounted pumps with VFDs |  | EA | \$ | 15,350.00 |  | 30700 | 1.033 | \$ | 31,713.10 |

## Rogers Elementary School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost | Subtotal | Indirect Cost |  | 2015 Bond pe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MS-04 | Pipe Insulation | Install new pipe insulation. | 150 | LF | \$ | 25.00 | 3750 | 1.033 | \$ | 3,873.75 |
| MS-05 | Gym Air Handling Unit | Replace with like and kind; approximate 2,000 CFM each. | 1 | LS | \$ | 42,360.00 | 42360 | 1.033 | \$ | 43,757.88 |
| MS-06 | Roof Mounted Heating and Ventilating Units | Replace with like and kind; 3,000 CFM. | 8 | EA | \$ | 25,230.00 | 201840 | 1.033 | \$ | 208,500.72 |
| MS-07 | Roof Hoods and Exhaust Fans | Provide new roof exhaust fans, average size is 600 CFM. | 5 | EA | \$ | 3,475.00 | 17375 | 1.033 | \$ | 17,948.38 |
| MS-08 | Office HVAC | Provide new heating only, hot water rooftop unit | 1 | EA | \$ | 16,500.00 | 16500 | 1.033 | \$ | 17,044.50 |
| MS-09 | Media Center HVAC | Replace existing steam rooftop unit with heating hot water and DX air conditioned media center rooftop unit | 1 | EA | \$ | 32,275.00 | 32275 | 1.033 | \$ | 33,340.08 |
| MS-10 | Media Center Perimeter HVAC | Replace existing steam rooftop unit with heating hot water and DX air conditioned media center rooftop unit | 1 | EA | \$ | 31,500.00 | 31500 | 1.033 | \$ | 32,539.50 |
| MS-11 | Head End Air Conditioning | Install new split air conditioning unit; approximately $1.5-$ tons. | 1 | EA | \$ | 9,000.00 | 9000 | 1.033 | \$ | 9,297.00 |
|  |  |  |  |  |  |  |  |  | \$ | 713,596.40 |
| Plumbing |  |  |  |  |  |  |  |  |  |  |
| PS-1 | Domestic Water Pipe | Replace with copper pipe. | 7400 | SF | \$ | 3.25 | 24050 | 1.033 | \$ | 24,843.65 |
| PS-2 | Water Meter Isolation Valves | Replace three (3) 3" gate valves. | 3 | EA | \$ | 1,830.00 | 5490 | 1.033 | \$ | 5,671.17 |
| PS-3 | Water Cooler | Install new bi-level electric water cooler. | 1 | EA | \$ | 5,100.00 | 5100 | 1.033 | \$ | 5,268.30 |
|  |  |  |  |  |  |  |  |  | \$ | 35,783.12 |
| Electrica |  |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Replace the original distribution equipment with new. | 1 | EA | \$ | 27,400.00 | 27400 | 1.033 | \$ | 28,304.20 |
| ES-2 | Electrical Panels lack space for new circuits | Replace the original panels with new, larger panels in new locations. | 6 | EA | \$ | 4,875.00 | 29250 | 1.033 | \$ | 30,215.25 |
| ES-5 | Exterior Lighting | Replace with more efficient LED fixtures. | 8 | EA | \$ | 520.00 | 4160 | 1.033 | \$ | 4,297.28 |
| ES-8 | Uninterruptible Power Supply | Provide 5 kVA UPS to serve Key Fob entry, PA and Phones | 1 | EA | \$ | 11,300.00 | 11300 | 1.033 | \$ | 11,672.90 |
| ES-9 | Newer TVSS Electrical Panels (New Item) |  | 1 | EA | \$ | 3,000.00 | 3000 | 1.033 | \$ | 3,099.00 |
| ES-10 | Existing TVSS Electrical Panels (New Item) | Replace existing TVSS on panels are blown and not protecting circuits | 4 | EA | \$ | 2,000.00 | 8000 | 1.033 | \$ | 8,264.00 |
|  | Classroom Lighting |  | 19640 | SF | \$ | 6.00 | 117840 | 1.033 | \$ | 121,728.72 |
|  | Corridor Lighting |  | 6244 | SF | \$ | 6.00 | 37464 | 1.033 | \$ | 38,700.31 |
|  |  |  |  |  |  |  |  |  | \$ | 246,281.66 |
| Air Conditioning |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | \$ | \$ |

## Rogers Elementary School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | d 2015 Bond cope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asbestos Abatement |  |  |  |  |  |  |  |  |  |  |  |
|  | Asbestos Abatement- flooring,ceiling,etc. |  | 37000 | SF | \$ | 5.00 |  | 185000 | 1.000 | \$ | 185,000.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 185,000.00 |
| 3. New Construction |  |  |  |  |  |  |  |  |  |  |  |
| New Construction |  |  |  |  |  |  |  |  |  |  |  |
|  | Addition: Art room , music room and entry at SE corner of building. |  | 4,200 | SF | \$ | 209.00 | \$ | 877,800 | 1.033 | \$ | 906,767.40 |
|  |  |  |  |  |  |  |  |  |  | \$ | 906,767.40 |
| 4. Instructional Technology |  |  |  |  |  |  |  |  |  |  |  |
|  | Educational Technology |  | 1 | LS | \$ | 68,116.26 | \$ | 68,116 | 1.000 | \$ | 68,116.26 |
|  |  |  |  |  |  |  |  |  |  | \$ | 68,116.26 |
| 5. Loose Furnishings/Equipment |  |  |  |  |  |  |  |  |  |  |  |
|  | Equipment |  | 1 | LS | \$ | 121,976.49 | \$ | 121,976 | 1.000 | \$ | 121,976.49 |
|  | Technology Infrastructure |  | 1 | LS | \$ | 125,065.92 |  | 125065.92 | 1.000 | \$ | 125,065.92 |
|  | Furniture Replacement |  | 1 | EA | \$ | 20,000.00 |  | 20000 | 1.130 | \$ | 22,600.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 269,642.41 |
|  |  |  |  |  |  |  |  |  |  |  | 3,683,587.85 |
|  | Site |  |  |  |  |  |  |  |  | \$ | 116,212.50 |
|  | Remodeling |  |  |  |  |  |  |  |  | \$ | 2,322,849.28 |
|  | New Construction |  |  |  |  |  |  |  |  | \$ | 906,767.40 |
|  | Subtotal |  |  |  |  |  |  |  |  | \$ | 3,345,829.18 |
|  | Construction Contingency |  |  |  |  |  |  | 7.5\% |  | \$ | 250,937.19 |
|  | Subtotal |  |  |  |  |  |  |  |  | \$ | 3,596,766.37 |
|  | CM Fees and Costs |  |  |  |  |  |  | 5.5\% |  | \$ | 197,822.15 |
|  | Subtotal |  |  |  |  |  |  |  |  | \$ | 3,794,588.52 |
|  | Architectural Fees and Costs |  |  |  |  |  |  | 6.5\% |  | \$ | 246,648.25 |
|  | Instructional Technology |  |  |  |  |  |  |  |  | \$ | 68,116.26 |
|  | Loose Furnishing/Equipment |  |  |  |  |  |  |  |  | \$ | 269,642.41 |
|  | Total Project Cost |  |  |  |  |  |  |  |  | \$ | 4,378,995.44 |


| Project <br> No. | 4 |
| :---: | :---: |


| Name of School Building |
| :--- |
| Rogers Elementary School |


| Existing/Adequate | List \# of Teaching Stations | $\mathbf{x}$ | Capacity Factor | = | Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  | X | 20 | = | 0 |
| (3-5) Upper Elementary |  | X | 25 | $=$ | 0 |
| (6-8) Junior High |  | X | 22.5 | = | 0 |
| (9-12) High School |  | X | 21.25 | = | 0 |
| Sub Totals | 0 |  |  |  | 0 |
| Remodeled | List \# of Teaching Stations | X | Capacity Factor | = | Capacity |
| (K-2) Lower Elementary | 9 | X | 20 | = | 180 |
| (3-5) Upper Elementary | 9 | X | 25 | = | 225 |
| (6-8) Junior High |  | X | 22.5 | $=$ | 0 |
| (9-12) High School |  | x | 21.25 | = | 0 |
| Sub Totals | 18 |  |  |  | 405 |



| Facility to be Closed | List \# of Teaching $\mathbf{X}$ Stations | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary | x | 20 | 0 |
| (3-5) Upper Elementary | X | 25 | 0 |
| (6-8) Junior High | $\mathbf{x}$ | 22.5 | 0 |
| (9-12) High School | $\mathbf{X}$ | 21.25 | 0 |
| Total Teaching Stations | 0 |  |  |
| Square Footage for Closed Facility |  | Total Capacity | 0 |

Please transfer applicable information to the Utilization Summary on Page 7 of the application.


Teaching Stations
Stantec
BERKLEY SCHOOL DISTRICT


Site Plan Concept for:
Rogers Elementary School Berkley School District Berkley, Michigan


## Facility Condition Assessment



Air temperature is inconsistent throughout building. Lack of adequate fresh air ventilation leads to odors

| Life Safety Section |  | Yes | No | N/A |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Lighted exit signs are present at each entrance/exit and are clearly visible. | X |  |  |
| 2. | Fire suppression equipment is present in kitchen, science rooms and corridors. | X |  |  |
| 3. | Washroom facilities have barrier free accessibility. |  | X |  |
| 4. | Building access is limited to select, controlled entries. | X |  |  | Washrooms have limited barrier free accessiblity.


| Structural Section |  | Yes | No | N/A |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |  |
| 2. | Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |  |
| 3. | Roof structure does not show visible signs of damage. | X |  |  |
| 4. | Building exterior is intact and does not show visible deterioration beyond normal aging. | X |  |  | Overall assessment or comments:


| Mechanical Section | Nes | No | N/A |
| :---: | :--- | :---: | :---: |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. | X |  |
| 3. | Water drains quickly from sinks. | X |  |
| 4. | Floor area near toilets and sinks is dry. | X |  | Overall assessment or comments:


| Electrical Section |  | Nos | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. | X |  |
| 2. | Electrical controls are safely protected and accessible. |  |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. |  |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

| Lee A. Andrea, AIA |  |  | Stantec Architecture, Inc. | 45478 |
| :---: | :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248. |  |
| Date | E-mail Address | Fax Number | Area Code an |  |

Project Sheet


## Type of Project:



Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)

| Asbestos abatement, replacment of mechanical systems with newer, more efficient systems. |
| :--- |


| Estimated Cost of Proposed Construction Project: |  | (Attach analysis showing how cost estimates were calculated.) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Total | Proposal/Series 1 | Proposal/Series 2 | Proposal/Series 3 |
| New Construction | \$1,554,458 | \$1,554,458 |  |  |
| Remodeling | \$5,249,364 | \$5,249,364 |  |  |
| Construction Contingencies | \$526,556 | \$526,556 |  |  |
| Instructional Technology | \$181,894 | \$181,894 |  |  |
| Loose Furnishing/Equipment | \$639,895 | \$639,895 |  |  |
| Buses | \$0 | \$0 |  |  |
| Site Work | \$216,930 | \$216,930 |  |  |
| Site Acquisition | \$0 | \$0 |  |  |
| Architectural Fees and Costs | \$517,557 | \$517,557 |  |  |
| CM Fees and Costs | \$415,102 | \$415,102 |  |  |
| Estimated Costs | \$9,301,757 | \$9,301,757 | \$0 | \$0 |


|  | Certificate by Registered Architect |  |
| :--- | :--- | :--- |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |
|  |  |  |
| Lee A. Andrea, AIA | Stantec Architecture, Inc. |  |
| Signature | Printed Name | 45478 |
| $1 / 5 / 2015$ | lee.andrea@stantec.com | 248.336 .4881 |

BERKLEY SCHOOL DISTRICT

## Norup International School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | 2015 Bond pe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Site Work |  |  |  |  |  |  |  |  |  |  |  |
| Site Work |  |  |  |  |  |  |  |  |  |  |  |
| SC-02 | Student Drop-off | Add/modify student drop-off to the site. Figure shown to the right is an allowance. | 1 | LS | \$ | 150,000.00 | \$ | 150,000 | 1.033 | \$ | 154,950.00 |
| BE-07 | Sitework for addition and Site Drainage | Add landscape drain tile to storm system. | 4,000 | SF | \$ | 15.00 | \$ | 60,000 | 1.033 | \$ | 61,980.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 216,930.00 |
| 2. Remodeling |  |  |  |  |  |  |  |  |  |  |  |
| Exterior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
| BE-01 | Overhangs/Soffits | Provide aluminum soffit panels. | 1,630 | SF | \$ | 29.91 | \$ | 48,750 | 1.033 | \$ | 50,358.76 |
| BE-02 | Brick Veneer at Base of Walls | Replace brick. | 75 | SF | \$ | 25.00 | \$ | 1,875 | 1.033 | \$ | 1,936.88 |
| BE-04 | Steel Doors and Frames | Replace with aluminum frames and fiberglass reinforced panel doors. | 4 | EA | \$ | 3,200.00 | \$ | 12,800 | 1.033 | \$ | 13,222.40 |
| BE-05 | Curtain wall Panels | Replace panels. | 50 | SF | \$ | 31.00 | \$ | 1,550 | 1.033 | \$ | 1,601.15 |
|  |  |  |  |  |  |  |  |  |  | \$ | 67,119.18 |
| Interior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
| BI-07 | Below Stage Storage | Replace doors. | 8 | EA | \$ | 275.00 | \$ | 2,200 | 1.033 | \$ | 2,272.60 |
| AB-13 | Boy's and Girl's Toilet Rooms | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes, stalls and automatic door operators. | 1,800 | SF | \$ | 80.00 | \$ | 144,000 | 1.033 | \$ | 148,752.00 |
| AB-14 | Boy's and Girl's Toilet Rooms | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes and stalls. | 225 | SF | \$ | 80.00 | \$ | 18,000 | 1.033 | \$ | 18,594.00 |
| BI-01 | Original Hollow Metal, Wood Doors and Frames | Replace corridor doors with wood doors and hardware. | 85 | EA | \$ | 1,300.88 | \$ | 110,575 | 1.033 | \$ | 114,223.77 |
| BI-02 | Carpet | Replace carpet and resilient base. | 17,800 | SF | \$ | 4.50 | \$ | 80,100 | 1.033 | \$ | 82,743.30 |
|  | Corridor Ceilings | Assoicated with mechanical system replacement | 17,800 | SF | \$ | 4.50 | \$ | 80,100 | 1.033 | \$ | 82,743.30 |
|  | Classroom Ceilings | Assoicated with mechanical system replacement | 29,240 | SF | \$ | 5.50 | \$ | 160,820 | 1.033 | \$ | 166,127.06 |
|  | Classroom Flooring | Assoicated with mechanical system replacement | 28 | CR | \$ | 3,150.00 | \$ | 88,200 | 1.033 | \$ | 91,110.60 |
|  | Visual Display Boards | Assoicated with mechanical system replacement | 28 | CR | \$ | 1,200.00 | \$ | 33,600 | 1.033 | \$ | 34,708.80 |
|  | Painting | Assoicated with mechanical system replacement | 28 | CR | \$ | 600.00 | \$ | 16,800 | 1.033 | \$ | 17,354.40 |
|  | Bookshelves | Assoicated with mechanical system replacement | 28 | CR | \$ | 750.00 | \$ | 21,000 | 1.033 | \$ | 21,693.00 |
|  | VUV wall opening | Assoicated with mechanical system replacement | 28 | CR | \$ | 3,000.00 | \$ | 84,000 | 1.033 | \$ | 86,772.00 |
|  |  |  |  |  |  |  |  |  |  |  | , 94.83 |
| Academic Program Improvements |  |  |  |  |  |  |  |  |  |  |  |
|  | Renovate kitchen for use as choir room. |  | 2,000 | SF | \$ | 150.00 | \$ | 300,000 | 1.033 | \$ | 309,900.00 |
|  | Renovate current learning specialist/ resource room suite and room 105 (current choir) into larger learning specialist/resource room suite |  | 3,800 | SF | \$ | 120.00 | \$ | 456,000 | 1.033 | \$ | 471,048.00 |

Norup International School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost | Subtotal | Indirect Cost | Proposed 2015 BondScope |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Renovate (2) innovation labs into single larger lab. Repurpose portion of media center for computer lab use. |  | 1,800 | SF | \$ | 120.00 | \$ 216,000 | 1.033 | \$ | 223,128.00 |
|  |  |  |  |  |  |  |  |  | \$ | 1,004,076 |
| Code/ Safety |  |  |  |  |  |  |  |  |  |  |
| AB-02 | Stair guardrai//Handrail | Add guardrail/handrail | 80 | LF | \$ | 166.25 | \$ 13,300 | 1.033 | \$ | 13,738.90 |
| AB-06 | Open Stairs | Add fire rated separation including doors and frames. | 2 | EA | \$ | 15,000.00 | \$ 30,000 | 1.033 | \$ | 30,990.00 |
| AB-07 | Room Exits | Provide exit to exterior. | 1 | LS | \$ | 13,100.00 | \$ 13,100 | 1.033 | \$ | 13,532.30 |
| AB-15 | Bleacher Guardrails | Add removable guardrails to open ends of retractable bleachers. | 136 | LF | \$ | 80.00 | \$ 10,880 | 1.033 | \$ | 11,239.04 |
|  |  |  |  |  |  |  |  |  | \$ | 69,500.24 |
| Building Systems Replacement/ Energy Efficiency |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system. | 90000 | sf | \$ | 1.75 | 157500 | 1.033 | \$ | 162,697.50 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures. | 90 | EA | \$ | 300.00 | 27000 | 1.033 | \$ | 27,891.00 |
| BS-3 | Boiler Room EPO | Install boiler room emergency power off system. | 1 | LS | \$ | 2,720.00 | 2720 | 1.033 | \$ | 2,809.76 |
| BS-4 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. Test and corrective actions in budget. | 1 | EA | \$ | 5,000.00 | 5000 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  |  |  | 563.26 |
| Mechanical |  |  |  |  |  |  |  |  |  |  |
|  | Mechanical Systems Replacement |  | 90000 | SF | \$ | 20.00 | 1800000 | 1.033 | \$ | 1,859,400.00 |
|  |  |  |  |  |  |  |  |  |  | ,400.00 |
| Plumbing |  |  |  |  |  |  |  |  |  |  |
| PS-1 | Domestic Water Pipe | Replace with copper pipe. | 55000 | SF | \$ | 3.75 | 206250 | 1.033 | \$ | 213,056.25 |
| PS-2 | Water Meter Isolation Valves | Replace two (2) $3^{\prime \prime}$ gate valves. | 2 | EA | \$ | 1,830.00 | 3660 | 1.033 | \$ | 3,780.78 |
| PS-3 | Investigate Possible Waste Pipe Pitch Problem | Investigate and fix problem. | 1 | LS | \$ | 5,000.00 | 5000 | 1.033 | \$ | 5,165.00 |
| PS-4 | Electric Water Cooler | Replace/upgrade to new electric water cooler. | 6 | EA | \$ | 4,950.00 | 29700 | 1.033 | \$ | 30,680.10 |
| PS-5 | Sanitary Pipe | Replace accessible portions; some confined spaces. | 5000 | SF | \$ | 4.85 | 24250.2 | 1.033 | \$ | 25,050.46 |
| PS-6 | Investigate Water Issue Under Gym Floor | Investigate and fix problem. | 1 | LS | \$ | 15,000.00 | 15000 | 1.033 | \$ | 15,495.00 |
|  |  |  |  |  |  |  |  |  |  | 227.59 |

Norup International School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost | Subtotal | Indirect Cost |  | d 2015 Bond cope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Electrical |  |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Replace the original distribution equipment with new. | 1 | EA | \$ | 33,450.00 | 33450 | 1.033 | \$ | 34,553.85 |
| ES-2 | Electrical Panels | Replace the original panels with new, larger panels in new locations. | 15 | EA | \$ | 4,875.00 | 73125 | 1.033 | \$ | 75,538.13 |
| ES-6 | Exit Lighting Fixtures | Add exit signs. | 20 | EA | \$ | 300.00 | 6000 | 1.033 | \$ | 6,198.00 |
| ES-7 | Exterior Lighting | Replace with more efficient LED fixtures. | 10 | EA | \$ | 520.00 | 5200 | 1.033 | \$ | 5,371.60 |
| ES-9 | Uninterruptible Power Supply | Provide 5 kVA UPS to serve Key Fob entry, PA and Phones | 1 | EA | \$ | 11,300.00 | 11300 | 1.033 | \$ | 11,672.90 |
| ES-10 | Newer TVSS Electrical Panels (New Item) |  | 1 | EA | \$ | 3,000.00 | 3000 | 1.033 | \$ | 3,099.00 |
| ES-11 | Newer TVSS Electrical Panels (New Item) | Replace existing TVSS on panels are blown and not protecting circuits | 6 | EA | \$ | 2,000.00 | 12000 | 1.033 | \$ | 12,396.00 |
|  | Classroom Lighting |  | 29240 | EA | \$ | 6.00 | 175440 | 1.033 | \$ | 181,229.52 |
|  | Corridor Lighting |  | 17800 | SF | \$ | 6.00 | 106800 | 1.033 | \$ | 110,324.40 |
|  |  |  |  |  |  |  |  |  | \$ | 440,383 |
| Air Conditioning |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | \$ | - |
| Asbestos Abatement |  |  |  |  |  |  |  |  |  |  |
|  | Asbestos Abatement- flooring,ceiling,etc. |  | 90000 | SF | \$ | 5.00 | 450000 | 1.000 | \$ | 450,000.00 |
|  |  |  |  |  |  |  |  |  | \$ | 450,000.00 |
| 3. New Construction |  |  |  |  |  |  |  |  |  |  |
| New Construction |  |  |  |  |  |  |  |  |  |  |
|  | Addition: Prototype cafeteria/MP room, including orchestra space adjacent to main entry |  | 7,200 | SF | \$ | 209.00 | \$ 1,504,800 | 1.033 | \$ | 1,554,458.40 |
|  |  |  |  |  |  |  |  |  | \$ | 1,554,458.40 |
| 4. Instructional Technology |  |  |  |  |  |  |  |  |  |  |
|  | Educational Technology |  | 1 | LS | \$ | 181,894.09 | \$ 181,894 | 1.000 | \$ | 181,894.09 |
|  |  |  |  |  |  |  |  |  | \$ | 181,894.09 |

Norup International School


| Site |  |
| :--- | :--- |
| Remodeling |  |
| New Construction | $7.5 \%$ |
| Subtotal |  |
| Construction Contingency | $5.5 \%$ |
| Subtotal |  |
| CM Fees and Costs | $6.5 \%$ |
| Subtotal |  |
| Architectural Fees and Costs |  |
| Instructional Technology |  |
| Loose Furnishing/Equipment |  |

216,930.00
5,249,364
,554,458.40
7,020,752.89
$7,020,752.89$
$\mathbf{5 2 6}, 556.47$ $526,556.47$
$7,547,309.36$ $7,547,309.36$
$\mathbf{4 1 5 , 1 0 2 . 0 1}$ 415,102.01
$7,962,411.37$ 7,962,411.37 517,556.74 181,894.09
$639,895.11$

| Project <br> No. | 5 |
| :---: | :---: |


| Name of School Building |
| :--- |
| Norup International School |


| Existing/Adequate | List \# of Teaching Stations | $\mathbf{X}$ | Capacity Factor | = | Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  | x | 20 | = | 0 |
| (3-5) Upper Elementary |  | X | 25 | $=$ | 0 |
| (6-8) Junior High |  | X | 22.5 | = | 0 |
| (9-12) High School |  | X | 21.25 | $=$ | 0 |
| Sub Totals | 0 |  |  |  | 0 |
| Remodeled | List \# of Teaching Stations | $\mathbf{X}$ | Capacity Factor | = | Capacity |
| (K-2) Lower Elementary | 7 | X | 20 | = | 140 |
| (3-5) Upper Elementary | 9 | X | 25 | $=$ | 225 |
| (6-8) Junior High | 19 | X | 22.5 | $=$ | 428 |
| (9-12) High School |  | x | 21.25 | = | 0 |
| Sub Totals | 35 |  |  |  | 793 |


| Proposed New | List \# of Teaching Stations | $\times \underset{\text { Factor }}{\text { Capacity }}=$ | Capacity |
| :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  | X 20 | 0 |
| (3-5) Upper Elementary |  | X 25 | 0 |
| (6-8) Junior High |  | X 22.5 | 0 |
| (9-12) High School |  | X 21.25 | 0 |
| Sub Totals | 0 |  | 0 |
| Total Teaching Stations | 35 | Total Capacity | 793 |
| Current Gr. Structure | K-8 | Projected |  |
| Proposed Gr. Structure | K-8 | Enrollment |  |
| Utilization Percentage <br> (Projected 5-Year Enrollment / Total Capacity) |  |  | 93\% |


| Facility to be Closed | List \# of Teaching $\mathbf{x}$ Stations | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary | x | $20=$ | 0 |
| (3-5) Upper Elementary | X | 25 | 0 |
| (6-8) Junior High | X | 22.5 | 0 |
| (9-12) High School | X | 21.25 | 0 |
| Total Teaching Stations | 0 |  |  |
| Square Footage for Closed Facility |  | Total Capacity | 0 |

Please transfer applicable information to the Utilization Summary on Page 7 of the application.
1 List the number of teaching station in appropriate column.

2 Calculate total capacity using the applicable capacity factor.

3 Enter five (5) year projected enrollment.

4 Calculate building utilization rate.

5 Attach floor and site plan of the building. Show the rooms and category (adequate, remodeled, proposed new, closed). Number the teaching stations in consecutive order.



Site Plan Concept for:
Norup International School Berkley School District Berkley, Michigan

B ERKLEY SCHOOLS
(1) Stantec

UIRIDIS
Design Group

## Facility Condition Assessment



Air temperature is inconsistent throughout building. Lack of adequate fresh air ventilation leads to odors

| Life Safety Section |  |  | Nes |
| :---: | :--- | :---: | :---: |
| No | N/A |  |  |
| 1. | Lighted exit signs are present at each entrance/exit and are clearly visible. |  |  |
| 2. | Fire suppression equipment is present in kitchen, science rooms and corridors. |  |  |
| 3. | Washroom facilities have barrier free accessibility. |  |  |
| 4. | Building access is limited to select, controlled entries. |  |  | Washrooms have limited barrier free accessiblity.


| Structural Section |  | Yes | No | N/A |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |  |
| 2. | Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |  |
| 3. | Roof structure does not show visible signs of damage. | X |  |  |
| 4. | Building exterior is intact and does not show visible deterioration beyond normal aging. | X |  |  | 4. Building exterior is intact


|  |  | Nes | No |
| :---: | :--- | :---: | :---: |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. |  |  |
| 3. | Water drains quickly from sinks. | X |  |
| 4. | Floor area near toilets and sinks is dry. | X |  | Overall assessment or comments:


| Electrical Section |  | Yes | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. |  |  |
| 2. | Electrical controls are safely protected and accessible. | X |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. | X |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

| Lee A. Andrea, AIA |  |  | Stantec Architecture, Inc. | 45478 |
| :---: | :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336 .4881 | 248 |  |
| Date | E-mail Address | Fax Number | Area Code and |  |

Project Sheet


## Type of Project:



Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)

| Asbestos abatement, replacment of mechanical systems with newer, more efficient systems. |
| :--- |

## Estimated Cost of Proposed Construction Project: (Attach analysis showing how cost estimates were calculated.)

|  | Total | Proposal/Series 1 | Proposal/Series 2 | Proposal/Series 3 |
| :---: | :---: | :---: | :---: | :---: |
| New Construction | \$48,577 | \$48,577 |  |  |
| Remodeling | \$5,624,513 | \$5,624,513 |  |  |
| Construction Contingencies | \$435,166 | \$435,166 |  |  |
| Instructional Technology | \$194,693 | \$194,693 |  |  |
| Loose Furnishing/Equipment | \$681,741 | \$681,741 |  |  |
| Buses | \$0 | \$0 |  |  |
| Site Work | \$129,125 | \$129,125 |  |  |
| Site Acquisition | \$0 | \$0 |  |  |
| Architectural Fees and Costs | \$427,728 | \$427,728 |  |  |
| CM Fees and Costs | \$343,056 | \$343,056 |  |  |
| Estimated Costs <br> (Not including election or bond issuance costs) | \$7,884,599 | \$7,884,599 | \$0 | \$0 |


| Certificate by Registered Architect |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |  |  |
|  | Lee A. Andrea, AIA |  | Stantec Architecture, Inc. | 45478 |
| Signature | Printed Name |  | Firm Name and License Numb |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248.336.4880 |  |
| Date | E-mail Address | Fax Number | Area Code and Telephone N |  |

BERKLEY
Anderson Middle School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | $\begin{aligned} & \text { d } 2015 \text { Bond } \\ & \text { cope } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Site Work |  |  |  |  |  |  |  |  |  |  |  |
| Site Work |  |  |  |  |  |  |  |  |  |  |  |
| SC-02 | Sitework for addition and Student Drop-off | Add/modify student drop-off to the site. Figure shown to the right is an allowance. | 1.00 | LS | \$ | 125,000.00 | \$ | 125,000.00 | 1.033 | \$ | 129,125.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 129,125.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| BE-01 | Overhangs/Soffits | Provide aluminum soffit panels. | 1700.00 | SF | \$ | 29.78 | \$ | 50,625.01 | 1.033 | \$ | 52,295.63 |
| BE-02 | Brick Veneer at Base of Walls | Control roof drainage where possible and replace point brick. | 600.00 | SF | \$ | 15.00 | \$ | 9,000.00 | 1.033 | \$ | 9,297.00 |
| BE-04 | Entrance Canopy Columns/Stairs/Railings |  | 4.00 | EA | \$ | 437.50 | \$ | 1,750.00 | 1.033 | \$ | 1,807.75 |
| BE-06 | Steel Doors and Frames and door seals | Replace with aluminum frames and fiberglass reinforced panel doors. | 3.00 | EA | \$ | 3,333.47 | \$ | 10,000.41 | 1.033 | \$ | 10,330.42 |
| BE-07 | Entrance Canopy Soffits | Provide aluminum soffit panels. | 130.00 | SF | \$ | 20.00 | \$ | 2,600.00 | 1.033 | \$ | 2,685.80 |
| BE-08 | Roof Membrane | Remove and replace with new insulation and single-ply membrane. | 29900.00 | SF | \$ | 8.00 | \$ | 239,200.00 | 1.033 | \$ | 247,093.60 |
| BE-10 | Wood Fascia | Replace with aluminum fascia. | 220.00 | LF | \$ | 20.00 | \$ | 4,400.00 | 1.033 | \$ | 4,545.20 |
| BE-11 | Stone Window Sills | Provide sealant. | 750.00 | LF | \$ | 4.75 | \$ | 3,562.50 | 1.033 | \$ | 3,680.06 |
| BE-12 | Concrete Slab | Replace concrete. | 20.00 | SF | \$ | 115.00 | \$ | 2,300.00 | 1.033 | \$ | 2,375.90 |
| BE-13 | Concrete Stairs | Replace concrete. | 1.00 | LS | \$ | 2,500.00 | \$ | 2,500.00 | 1.033 | \$ | 2,582.50 |
| BE-14 | Roof Downspout | Replace downspout | 1.00 | LS | \$ | 1,500.00 | \$ | 1,500.00 | 1.033 | \$ | 1,549.50 |
|  |  |  |  |  |  |  |  |  |  | \$ | 338,243.36 |
| Interior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| B1-02 | Plastic Laminate Counter Tops | Replace with solid surface material and new sinks with point of use TMV. | 100.00 | LF | \$ | 240.00 | \$ | 24,000.00 | 1.033 | \$ | 24,792.00 |
| B1-04 | Casework Cabinets | Replace cabinets. | 15.00 | LF | \$ | 300.00 | \$ | 4,500.00 | 1.033 | \$ | 4,648.50 |
| B1-05 | Wood Cabinets and Counter Tops | Replace cabinets and provide epoxy counter tops. | 96.00 | LF | \$ | 350.00 | \$ | 33,600.00 | 1.033 | \$ | 34,708.80 |
| Bl-07 | Wood Floor | New finish | 1875.00 | SF | \$ | 3.50 | \$ | 6,562.50 | 1.033 | \$ | 6,779.06 |
| AB-07 | Boy's and Girl's Toilet Rooms | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes, stalls and automatic door operators. | 2050.00 | SF | \$ | 86.20 | \$ | 176,710.00 | 1.033 | \$ | 182,541.43 |
| AB-08 | Boy's and Girl's Locker Room Toilets | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes and stalls. | 210.00 | SF | \$ | 86.20 | S | 18,102.00 | 1.033 | \$ | 18,699.37 |
| B1-03 | Carpet | Replace carpet and resilient base. | 14000.00 | SF | \$ | 4.50 | \$ | 63,000.00 | 1.033 | \$ | 65,079.00 |
| $\mathrm{Bl}-10$ | Original Classroom Ceilings | STANTEC: Install new acoustical ceiling below existing as part of lighting replacement | 32000.00 | SF | \$ | 5.50 | \$ | 176,000.00 | 1.033 | \$ | 181,808.00 |
|  | Corridor Ceilings | Assoicated with mechanical system replacement | 14000.00 | SF | \$ | 4.50 | \$ | 63,000.00 | 1.033 | \$ | 65,079.00 |
|  | Classroom Flooring | Assoicated with mechanical system replacement | 32000.00 | SF | \$ | 3.50 | \$ | 112,000.00 | 1.033 | \$ | 115,696.00 |
|  | Visual Display Boards | Assoicated with mechanical system replacement | 40.00 | EA | \$ | 1,200.00 | \$ | 48,000.00 | 1.033 | \$ | 49,584.00 |
|  | Classroom Painting | Assoicated with mechanical system replacement | 40.00 | EA | \$ | 600.00 | \$ | 24,000.00 | 1.033 | \$ | 24,792.00 |

Anderson Middle School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost | Proposed 2015 BondScope |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bookshelves | Assoicated with mechanical system replacement | 40.00 | EA | \$ | 750.00 | \$ | 30,000.00 | 1.033 | \$ | 30,990.00 |
|  | VUV wall opening | Assoicated with mechanical system replacement | 40.00 | EA | \$ | 3,000.00 | \$ | 120,000.00 | 1.033 | \$ | 123,960.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Relocate main visitor entry to stairwell across from Catapa entry. Includes covered canopy and Sitework to emphasize new entry. |  | 300.00 | SF | \$ | 120.00 | \$ | 36,000.00 | 1.033 | \$ | 37,188.00 |
|  | Renovate room 129 (orchestra room) to improve finishes and acoustics. |  | 2000.00 | SF | \$ | 50.00 | \$ | 100,000.00 | 1.033 | \$ | 103,300.00 |
|  | Renovate room 125 (choir room) to improve finishes and acoustics |  | 1100.00 | SF | \$ | 50.00 | \$ | 55,000.00 | 1.033 | \$ | 56,815.00 |
|  | Renovate room 127 (Band room) to improve finishes and acoustics. |  | 2000.00 | SF | \$ | 120.00 | \$ | 240,000.00 | 1.033 | \$ | 247,920.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 445,223.00 |
| Code/Safety |  |  |  |  |  |  |  |  |  |  |  |
| AB-02 | Stair Guardrail | Add guardrail. | 100.00 | LF | \$ | 150.00 | \$ | 15,000.00 | 1.033 | \$ | 15,495.00 |
| AB-04 | Handrails at Stairs | Add handrails. | 75.00 | LF | \$ | 75.00 | \$ | 5,625.00 | 1.033 | \$ | 5,810.63 |
| AB-05 | Open Stairs | Add fire rated separation including doors and frames. Relocate ceiling lights. | 2.00 | EA | \$ | 15,500.00 | \$ | 31,000.00 | 1.033 | \$ | 32,023.00 |
| AB-06 | Room Exits | Provide emergency exit through Boy's Locker Room. | 1.00 | LS | \$ | 5,000.00 | \$ | 5,000.00 | 1.033 | \$ | 5,165.00 |
| AB-09 | Bleacher Guardrails | Add removable guardrails to open ends of retractable bleachers. | 136.00 | LF | \$ | 80.00 | \$ | 10,880.00 | 1.033 | \$ | 11,239.04 |
|  |  |  |  |  |  |  |  |  |  | \$ | 69,732.67 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system. | 96000.00 | SF | \$ | 1.75 | \$ | 168,000.00 | 1.033 | \$ | 173,544.00 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures. | 82.00 | EA | \$ | 300.00 | \$ | 24,600.00 | 1.033 | \$ | 25,411.80 |
| BS-3 | Boiler Room Emergency Power Off | Install boiler room emergency power off system. | 1.00 | LS | \$ | 2,720.00 | \$ | 2,720.00 | 1.033 | \$ | 2,809.76 |
| BS-4 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. | 1.00 | EA | \$ | 5,000.00 | \$ | 5,000.00 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 206,930.56 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mechanical system Replacement |  | 96000.00 | SF | \$ | 22.00 | \$ | 2,112,000.00 | 1.033 | \$ | 2,181,696.00 |
| MS-15 | Head End Fire Suppression | Install a chemical-based fire suppression system; will not damage the headend room equipment like a water-based system would. | 1.00 | EA | \$ | 35,000.00 | \$ | 35,000.00 | 1.033 | \$ | 36,155.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 2,217,851.00 |
| Plumbing |  |  |  |  |  |  |  |  |  |  |  |
| PS-1 | Domestic Water Pipe | Replace with copper pipe. | 48000.00 | SF | \$ | 3.75 | \$ | 180,000.00 | 1.033 | \$ | 185,940.00 |
| PS-2 | Water Meter Isolation Valves | Replace three (3) $3^{\prime \prime}$ gate valves. | 3.00 | EA | \$ | 1,830.00 | \$ | 5,490.00 | 1.033 | \$ | 5,671.17 |
| PS-3 | Investigate Possible Water Pipe Break | Investigate as necessary and replace. | 1.00 | LS | \$ | 15,000.00 | \$ | 15,000.00 | 1.033 | \$ | 15,495.00 |
| PS-4 | Electric Water Cooler | Replace/upgrade to new electric water cooler. | 6.00 | EA | \$ | 4,200.00 | \$ | 25,200.00 | 1.033 | \$ | 26,031.60 |
| PS-5 | Sanitary Pipe | Replace accessible portions; confined space. | 5000.00 | SF | \$ | 4.85 | \$ | 24,250.00 | 1.033 | \$ | 25,050.25 |
|  |  |  |  |  |  |  |  |  |  | \$ | 258,188.02 |
| Electrical |  |  |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Replace the original distribution equipment with new. | 1.00 | EA | \$ | 32,350.00 | \$ | 32,350.00 | 1.033 | \$ | 33,417.55 |
| ES-2 | Electrical Panels | Replace the original panels with new, larger panels in new locations. | 15.00 | EA | \$ | 4,875.00 | \$ | 73,125.00 | 1.033 | \$ | 75,538.13 |
| ES-4 | Original Lighting Fixtures | Replace with more efficient T 8 fluorescent fixtures. | 2.00 | EA | \$ | 9,000.00 | \$ | 18,000.00 | 1.033 | \$ | 18,594.00 |
| ES-5 | Exit Lighting Fixtures | Add exits signs. | 6.00 | EA | \$ | 300.00 | \$ | 1,800.00 | 1.033 | \$ | 1,859.40 |
| ES-6 | Exterior Lighting | Replace with more efficient LED fixtures. | 15.00 | EA | \$ | 520.00 | \$ | 7,800.00 | 1.033 | \$ | 8,057.40 |
| ES-8 | Back-up Generator | Provide generator back-up system to serve racks. | 1.00 | LS | \$ | 77,700.00 | \$ | 77,700.00 | 1.033 | \$ | 80,264.10 |
| ES-10 | Uninterruptible Power Supply | Provide $20 \mathrm{kVA} \mathrm{UPS} \mathrm{to} \mathrm{serve} \mathrm{racks} \mathrm{until} \mathrm{generator} \mathrm{starts}$. | 1.00 | EA | \$ | 30,890.00 | \$ | 30,890.00 | 1.033 | \$ | 31,909.37 |
| ES-11 | Electrical Panel | Add panel and move non-technology loads from technology panels. | 1.00 | EA | \$ | 4,875.00 | \$ | 4,875.00 | 1.033 | \$ | 5,035.88 |
| ES-12 | Uninterruptible Power Supply | Provide 5 kVA UPS to serve key fob entry, PA and phones. | 1.00 | EA | \$ | 11,300.00 | \$ | 11,300.00 | 1.033 | \$ | 11,672.90 |

## Anderson Middie School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost | Subtotal |  | Indirect Cost |  | $\begin{aligned} & 2015 \text { Bond } \\ & \text { cope } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES-13 | Newer TVSS Electrical Panels (New Item) |  | 1.00 | EA | \$ | 3,000.00 | \$ | 3,000.00 | 1.033 | \$ | 3,099.00 |
| ES-14 | Newer TVSS Electrical Panels (New Item) | Replace existing TVSS on panels are blown and not protecting circuits | 5.00 | EA |  | 2,000.00 | \$ | 10,000.00 | 1.033 | \$ | 10,330.00 |
| ES-3 | Original Lighting Fixtures | Replace with more efficient T 8 fluorescent fixtures. | 32000.00 | SF | \$ | 6.00 | \$ | 192,000.00 | 1.033 | \$ | 198,336.00 |
|  | Corridor Lighting |  | 14000.00 | SF | 6.00 |  | 84,000.00 |  | 1.033 | 86,772.00 |  |
|  |  |  |  |  |  |  | \$ | 564,885.72 |  |
| Air Conditioning |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | \$ | - |
| Asbestos Abatement |  |  |  |  |  |  |  |  |  |  |  |
|  | Asbestos Abatement-flooring, ceiling,etc. |  | 96000.00 | SF | \$ | 5.00 | \$ | 480,000.00 | 1 | \$ | 480,000.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 480,000.00 |
| 3. New ConstructionNew Construction |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Secure Entryway Addition |  | 225.00 | SF | \$ | 209.00 | \$ | 47,025.00 | 1.033 | s | 48,576.83 |
|  |  |  |  |  |  |  |  |  |  | \$ | 48,576.83 |
| 4. Instructional Technology |  |  |  |  |  |  |  |  |  |  |  |
|  | Educational Technology |  | 1.00 | LS | \$ | 194,693.24 | \$ | 194,693.24 | 1.00 | \$ | 194,693.24 |
|  |  |  |  |  |  |  |  |  |  | \$ | 194,693.24 |
| 5. Loose Furnishings/Equipment |  |  |  |  |  |  |  |  |  |  |  |
|  | Technology Infrastructure |  | 1.00 | LS | \$ | 322,250.88 | \$ | 322,250.88 | 1 | \$ | 322,250.88 |
|  | Equipment |  | 1.00 | LS | \$ | 314,290.52 | \$ | 314,290.52 | 1.00 | \$ | 314,290.52 |
|  | Furniture Replacement |  | 1.00 | EA | \$ | 40,000.00 | \$ | 40,000.00 | 1.13 | \$ | 45,200.00 |
|  |  |  |  |  |  |  |  |  |  | 5 | 681,741.40 |

Site
Remodeling
New Construct
New Construc
Subtotal
Construction Contingency
Subtotal
CM Fees and Costs
Subtotal
Architectu
Architectural Fees and Costs
Instructional Technology
Loose Furnishing/Equipment

7,884,599.35

| Project <br> No. | 6 |
| :---: | :---: |


| Name of School Building |
| :--- |
| Anderson Middle School |


| Existing/Adequate | List \# of Teaching Stations | $\mathbf{X}$ | Capacity Factor | = | Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  | x | 20 | = | 0 |
| (3-5) Upper Elementary |  | X | 25 | $=$ | 0 |
| (6-8) Junior High |  | X | 22.5 | = | 0 |
| (9-12) High School |  | X | 21.25 | $=$ | 0 |
| Sub Totals | 0 |  |  |  | 0 |
| Remodeled | List \# of Teaching Stations | $\mathbf{X}$ | Capacity Factor | = | Capacity |
| (K-2) Lower Elementary |  | X | 20 | = | 0 |
| (3-5) Upper Elementary |  | X | 25 | = | 0 |
| (6-8) Junior High | 30 | X | 22.5 | $=$ | 675 |
| (9-12) High School |  | x | 21.25 | = | 0 |
| Sub Totals | 30 |  |  |  | 675 |


| Proposed New | List \# of Teaching Stations |  | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  |  | 20 | 0 |
| (3-5) Upper Elementary |  |  | 25 | 0 |
| (6-8) Junior High |  |  | 22.5 | 0 |
| (9-12) High School |  |  | 21.25 | 0 |
| Sub Totals | 0 |  |  | 0 |
| Total Teaching Stations | 30 |  | Total Capacity | 675 |
| Current Gr. Structure <br> Proposed Gr. Structure | 6-8 | Projected 5-Year Enrollment |  | 577 |
|  | 6-8 |  |  |  |

Utilization Percentage

| Facility to be Closed | List \# of Teaching $\mathbf{X}$ Stations | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary | x | $20=$ | 0 |
| (3-5) Upper Elementary | x | 25 | 0 |
| (6-8) Junior High | $\mathbf{X}$ | 22.5 | 0 |
| (9-12) High School | x | $21.25=$ | 0 |
| Total Teaching Stations | 0 |  |  |
| Square Footage for Closed Facility |  | Total Capacity | 0 |

Please transfer applicable information to the Utilization Summary on Page 7 of the application.



Teaching Stations
Stantec


Site Plan Concept for:
Anderson Middle School Berkley School District Berkley, Michigan


## Facility Condition Assessment



Air temperature is inconsistent throughout building. Lack of adequate fresh air ventilation leads to odors

| Life Safety Section |  |  | Nes |
| :---: | :--- | :---: | :---: |
| No | N/A |  |  |
| 1. | Lighted exit signs are present at each entrance/exit and are clearly visible. |  |  |
| 2. | Fire suppression equipment is present in kitchen, science rooms and corridors. |  |  |
| 3. | Washroom facilities have barrier free accessibility. |  |  |
| 4. | Building access is limited to select, controlled entries. |  |  | Washrooms have limited barrier free accessiblity.


| Structural Section |  | Yes | No | N/A |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |  |
| 2. | Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |  |
| 3. | Roof structure does not show visible signs of damage. | X |  |  |
| 4. | Building exterior is intact and does not show visible deterioration beyond normal aging. | X |  |  | Overall assessment or comments:


|  |  | Nes | No |
| :---: | :--- | :---: | :---: |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. |  |  |
| 3. | Water drains quickly from sinks. | X |  |
| 4. | Floor area near toilets and sinks is dry. | X |  | Overall assessment or comments:


| Electrical Section |  | Yes | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. |  |  |
| 2. | Electrical controls are safely protected and accessible. | X |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. | X |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

| Lee A. Andrea, AIA |  |  | Stantec Architecture, Inc. | 45478 |
| :---: | :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336 .4881 | 248 |  |
| Date | E-mail Address | Fax Number | Area Code and |  |

## Project Sheet



Name of School Building:

Description of Proposal or Series 1 Project:
Addition to create new secure entry vestibule. General remodeling of interior and exterior of building. Renovation to improve program delivery. Remodeling to meet code and safety requirements. Upgrades to fire alarm system, emergency lighting, and phone systems. Mechanical system upgrades, including HVAC. Upgrades to plumbing system including replacement of domestic water and sanitary pipe, sump pump and water coolers. Replacement of electrical distribution system, panels, exit lighting and lighting fixtures. Asbestos abatement.

| Instructional Technology Description |
| :--- |
| Interactive classroom audio visual equipment and student computing <br> devices. |
| Site work associated with new addition. |
|  |

Type of Project:


Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)

```
Asbestos abatement, replacment of mechanical systems with newer, more efficient systems.
```

Estimated Cost of Proposed Construction Project: (Attach analysis showing how cost estimates were calculated.)


|  | Certificate by Registered Architect |  |
| :--- | :--- | :--- |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |
|  |  |  |
| Lee A. Andrea, AIA | Stantec Architecture, Inc. |  |
| $1 / 5 / 2015$ | Printed Name | 45478 |
| Signature | lee.andrea @stantec.com | 248.336 .4881 |



BE SCHOOLS
Berkley High School

| No. | Item/Description | Action | Qty. | Unit | Unit Cost |  | Subtotal |  | Indirect Cost | Proposed 2015 Bond Scope |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Site Work |  |  |  |  |  |  |  |  |  |  |  |
| Site Work |  |  |  |  |  |  |  |  |  |  |  |
|  | Sitework for addition |  | 1 | EA | \$ | 30,000.00 | \$ | 30,000.00 | 1.033 | \$ | 30,990.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 30,990.00 |
| 2.Remodeling |  |  |  |  |  |  |  |  |  |  |  |
| Exterior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
| BE-01 | Overhangs/Soffits | Provide aluminum soffit panels. | 450 | SF | \$ | 20.00 | \$ | 9,000.00 | 1.033 | \$ | 9,297.00 |
| BE-02 | Brick Veneer at Base of Walls | Control roof drainage where possible and replace brick. | 1,000 | SF | \$ | 20.50 | \$ | 20,500.00 | 1.033 | \$ | 21,176.50 |
| BE-06 | Steel Window Lintels | Lintel restoration | 250 | LF | \$ | 18.03 | \$ | 4,508.50 | 1.033 | \$ | 4,657.28 |
| BE-07 | Steel Doors and Frames | Replace with aluminum frames and fiberglass reinforced panel doors. | 2 | EA | \$ | 3,880.00 | \$ | 7,760.00 | 1.033 | \$ | 8,016.08 |
| BE-08 | Entrance Canopy Soffits | Provide aluminum soffit panels. | 200 | SF | \$ | 21.25 | \$ | 4,250.00 | 1.033 | \$ | 4,390.25 |
| BE-09 | Roof Membrane | Remove and replace with new insulation and single-ply membrane. | 4,990 | SF | \$ | 10.00 | \$ | 49,900.00 | 1.033 | \$ | 51,546.70 |
| BE-11 | Concrete Fascia and Soffit | Replace with aluminum fascia and soffit. | 200 | SF | \$ | 15.00 | \$ | 3,000.00 | 1.033 | \$ | 3,099.00 |
| BE-12 | Stone Window Sills | Provide sealant and/or replace stone sill. | 250 | LF | \$ | 30.00 | \$ | 7,500.00 | 1.033 | \$ | 7,747.50 |
| BE-13 | Metal Fascia Panels | Replace fascia | 100 | SF | \$ | 15.00 | \$ | 1,500.00 | 1.033 | \$ | 1,549.50 |
| BE-14 | Glazed Masonry Window Sills | Replace masonry sills. | 40 | LF | \$ | 75.00 | \$ | 3,000.00 | 1.033 | \$ | 3,099.00 |
| BE-15 | Basement Areaway | Add knee walls and sloped roof over areaway. | 280 | SF | \$ | 35.00 | \$ | 9,800.00 | 1.033 | \$ | 10,123.40 |
| BE-17 | Greenhouse | Replace greenhouse with aluminum structure with acrylic glazing. | 200 | SF | \$ | 143.00 | \$ | 28,600.00 | 1.033 | \$ | 29,543.80 |
| BE-21 | Brick wall structural movement | STANTEC: stabilize and replace wall between above 2nd floor windows. | 500 | SF | \$ | 15.00 | \$ | 7,500.00 | 1.033 | \$ | 7,747.50 |
|  |  |  |  |  |  |  |  |  |  | \$ | 161,993.51 |
| Interior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
| BI-02 | Wood Bleachers | Replace bleachers add center aisle and aisle handrails. | 1 | LS | \$ | 18,000.00 | \$ | 18,000.00 | 1.033 | \$ | 18,594.00 |
| BI-04 | Casework Cabinets | Replace cabinets and counter top. | 8 | LF | \$ | 413.00 | \$ | 3,304.00 | 1.033 | \$ | 3,413.03 |
| $\mathrm{Bl}-05$ | Ceiling Finishes | Replace Ceiling | 7,200 | SF | \$ | 4.50 | \$ | 32,400.00 | 1.033 | \$ | 33,469.20 |

Berkley High School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | d 2015 Bond cope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BI-06 | Ceramic Tile Floor | Replace ceramic tile floor. | 1,200 | SF | \$ | 15.00 | \$ | 18,000.00 | 1.033 | \$ | 18,594.00 |
| BI-08 | Ceramic Tile Floor | Replace ceramic tile floor. | 670 | SF | \$ | 15.00 | \$ | 10,050.00 | 1.033 | \$ | 10,381.65 |
| BI-12 | Misc. Wall Replacement | Investigation cause, replace walls. | 50 | LF | \$ | 70.50 | \$ | 3,525.00 | 1.033 | \$ | 3,641.33 |
| BI-13 | Wood Stage | New finish | 675 | SF | \$ | 3.50 | \$ | 2,362.50 | 1.033 | \$ | 2,440.46 |
| BI-14 | Seating Steps and Risers | replace | 1 | LS | \$ | 2,000.00 | \$ | 2,000.00 | 1.033 | \$ | 2,066.00 |
| BI-15 | Ceiling Drop | Replace ceiling drop. | 1,000 | SF | \$ | 5.75 | \$ | 5,750.00 | 1.033 | \$ | 5,939.75 |
| $\mathrm{BI}-16$ | Fixed Seating | Replace seating. | 110 | EA | \$ | 200.00 | \$ | 22,000.00 | 1.033 | \$ | 22,726.00 |
| BI-19 | Ceiling | New ceiling | 1,720 | SF | \$ | 4.50 | \$ | 7,740.00 | 1.033 | \$ | 7,995.42 |
| BI-21 | Door Thresholds | Provide metal thresholds. | 12 | LF | \$ | 172.50 | \$ | 2,070.00 | 1.033 | \$ | 2,138.31 |
| BI-22 | Floor Crack | Install expansion joint | 1 | LS | \$ | 1,200.00 | \$ | 1,200.00 | 1.033 | \$ | 1,239.60 |
| AB-08 | Boy's and Girl's Toilet Rooms | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes, stalls and automatic door operators. | 190 | SF | \$ | 71.20 | \$ | 13,528.00 | 1.033 | \$ | 13,974.42 |
| BI-01 | Original Hollow Metal, Wood Doors and Frames | Replace with wood doors and hardware. | 155 | EA | \$ | 1,300.00 | \$ | 201,500.00 | 1.033 | \$ | 208,149.50 |
| BI-03 | Carpet | Replace carpet and resilient base. | 2,500 | SF | \$ | 4.50 | \$ | 11,250.00 | 1.033 | \$ | 11,621.25 |
| Bl -10 | Acoustical Ceiling | Replace with lay-in acoustical panels and grid. | 1,760 | SF | \$ | 17.70 | \$ | 31,152.00 | 1.033 | \$ | 32,180.02 |
| BI-11 | Ceramic Tile Floor | Replace ceramic tile floor. | 480 | SF | \$ | 15.00 | \$ | 7,200.00 | 1.033 | \$ | 7,437.60 |
| BI-23 | Resilient Flooring | Replace resilient floor and base. | 2,215 | SF | \$ | 4.50 | \$ | 9,967.50 | 1.033 | \$ | 10,296.43 |
|  | Classroom Ceilings | Assoicated with mechanical system replacement | 69933 | SF | \$ | 5.50 | \$ | 384,631.50 | 1.033 | \$ | 397,324.34 |
|  | Corridor Ceilings | Assoicated with mechanical system replacement | 36982 | SF | \$ | 4.50 | \$ | 166,419.00 | 1.033 | \$ | 171,910.83 |
|  | Classroom Flooring | Assoicated with mechanical system replacement | 68 | EA | \$ | 3,600.00 | \$ | 244,800.00 | 1.033 | \$ | 252,878.40 |
|  | Classroom Painting | Assoicated with mechanical system replacement | 68 | EA | \$ | 600.00 | \$ | 40,800.00 | 1.033 | \$ | 42,146.40 |
|  | VUV Wall Opening | Assoicated with mechanical system replacement | 68 | EA | \$ | 3,000.00 | \$ | 204,000.00 | 1.033 | \$ | 210,732.00 |
|  | Bookshelves | Assoicated with mechanical system replacement | 68 | EA | \$ | 750.00 | S | 51,000.00 | 1.033 | \$ | 52,683.00 |
|  | Visual Display Boards | Assoicated with mechanical system replacement | 68 | EA | \$ | 1,200.00 | \$ | 81,600.00 | 1.033 | \$ | 84,292.80 |
|  |  |  |  |  |  |  |  |  |  | \$ | 1,628,265.73 |
| Academic Program Improvements |  |  |  |  |  |  |  |  |  |  |  |
|  | Renovate media center and adjacent computer labs (rooms 255,257 ) to provide additional student collaborative/ team project space. |  | 5,200 | SF | \$ | 90.00 | \$ | 468,000.00 | 1.033 | \$ | 483,444.00 |
|  | Renovate design center and room 130, 132, 134, 138 to provide up-to-date, flexible space for design, art and vocal music. |  | 6,100 | SF | \$ | 90.00 | \$ | 549,000.00 | 1.033 | \$ | 567,117.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 1,050,561.00 |
| Code/Safety |  |  |  |  |  |  |  |  |  |  |  |
| AB-02 | Stair Guardrail | Replace guardrail. | 15 | LF | \$ | 232.30 | \$ | 3,484.50 | 1.033 | \$ | 3,599.49 |
| AB-04 | Staff Toilets | Add grab bars. | 2 | EA | \$ | 600.00 | \$ | 1,200.00 | 1.033 | \$ | 1,239.60 |

## Berkley High Schoo

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost | Proposed 2015 BondScope |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AB-10 | Open Stairs | Add fire rated separation including doors and frames. Relocate ceiling lights. | 1 | EA | \$ | \$ 15,500.00 | \$ | 15,500.00 | 1.033 | \$ | 16,011.50 |
| AB-11 | Automatic Door Operator | Replace door operator | 1 | LS | \$ | \$ 1,500.00 | \$ | 1,500.00 | 1.033 | \$ | 1,549.50 |
| AB-09 | Boy's and Girl's Toilet Rooms | Add automatic door operators. | 6 | EA | \$ | \$ 2,700.00 | \$ | 16,200.00 | 1.033 | \$ | 16,734.60 |
|  |  |  |  |  |  |  |  |  |  | \$ | 39,134.69 |
| Building Systems Replacement/ Energy Efficiency |  |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system. | 227000 | sf | \$ | \$ 1.75 | \$ | 397,250.00 | 1.033 | \$ | 410,359.25 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures. | 230 | EA | \$ | \$ 300.00 | \$ | 69,000.00 | 1.033 | \$ | 71,277.00 |
| BS-3 | Boiler Room Emergency Power Off | Install Boiler Room EPO system. | 2 | EA | \$ | \$ 2,720.00 | \$ | 5,440.00 | 1.033 | \$ | 5,619.52 |
| BS-4 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. Test and corrective actions in budget. | 1 | EA | \$ | \$ 5,000.00 | \$ | 5,000.00 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 492,420.77 |
| Mechanical |  |  |  |  |  |  |  |  |  |  |  |
|  | Mechanical System Replacement |  | 227000 | SF | \$ | \$ 21.00 | \$ | 4,767,000.00 | 1.033 | \$ | 4,924,311.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 4,924,311.00 |
| Plumbing |  |  |  |  |  |  |  |  |  |  |  |
| PS-1 | Sump Pump | Replace pumping portion of sump system. | 1 | LS | \$ | 6,700.00 | \$ | 6,700.00 | 1.033 | \$ | 6,921.10 |
| PS-2 | Sump Pump | Replace with heavy duty commercial duplex system. | 1 | LS | \$ | \$ 5,600.00 | \$ | 5,600.00 | 1.033 | \$ | 5,784.80 |
| PS-3 | Sump Pump | Replace with heavy duty commercial duplex system. | 1 | LS | \$ | \$ 8,800.00 | \$ | 8,800.00 | 1.033 | \$ | 9,090.40 |
| PS-4 | Domestic Water Pipe | Replace with copper pipe. | 6800 | SF | \$ | \$ 3.75 | \$ | 25,500.00 | 1.033 | \$ | 26,341.50 |
| PS-5 | Water Meter Isolation Valves | Replace three (3), $3^{\prime \prime}$ gate valves. | 3 | EA | \$ | 2,750.00 | \$ | 8,250.00 | 1.033 | \$ | 8,522.25 |
| PS-6 | Sanitary Pipe | Replace accessible portions. | 10000 | SF | \$ | 4.75 | \$ | 47,500.00 | 1.033 | \$ | 49,067.50 |
| PS-7 | Water Coolers | Add bi-level water coolers. | 10 | EA | \$ | 4,200.00 | \$ | 42,000.00 | 1.033 | \$ | 43,386.00 |
| PS-8 | Kitchen Prep Sink | Replace with rounded corner style to meet Code. | 1 | LS | \$ | 4,500.00 | \$ | 4,500.00 | 1.033 | \$ | 4,648.50 |
|  |  |  |  |  |  |  |  |  |  | \$ | 153,762.05 |

Berkley High School

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | $\begin{aligned} & \text { ed } 2015 \text { Bond } \\ & \text { Scope } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Electrical |  |  |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Replace the original distribution equipment with new. | 2 | EA | \$ | 32,350.00 | \$ | 64,700.00 | 1.033 | \$ | 66,835.10 |
| ES-2 | Electrical Panels | Replace the original panels with new, larger panels in new locations. | 20 | EA | \$ | 4,875.00 | \$ | 97,500.00 | 1.033 | \$ | 100,717.50 |
| ES-3 | Original Lighting Fixtures | Replace with more efficient T8 fluorescent fixtures. | 12 | EA | \$ | 6,000.00 | \$ | 72,000.00 | 1.033 | \$ | 74,376.00 |
| ES-4 | Exit Lighting Fixtures | Add Exit signs | 18 | EA | \$ | 300.00 | \$ | 5,400.00 | 1.033 | \$ | 5,578.20 |
| ES-5 | Exterior Lighting | Replace with efficient LED fixtures in east and west lots. | 33 | EA | \$ | 520.00 | \$ | 17,160.00 | 1.033 | \$ | 17,726.28 |
| ES-8 | Uninterruptible Power Supply | Provide 5 kVA UPS to serve Key Fob entry, PA and Phones | 1 | EA | \$ | 11,300.00 | \$ | 11,300.00 | 1.033 | \$ | 11,672.90 |
| ES-9 | Newer TVSS Electrical Panels (New Item) |  | 3 | EA | \$ | 3,000.00 | \$ | 9,000.00 | 1.033 | \$ | 9,297.00 |
|  | New Classroom Lighting Fixtures |  | 68 | CR | \$ | 6,000.00 | \$ | 408,000.00 | 1.033 | \$ | 421,464.00 |
|  | Corridor Lighting |  | 36982 |  | \$ | 6.00 | \$ | 221,892.00 | 1.033 | \$ | 229,214.44 |
|  |  |  |  |  |  |  |  |  |  | \$ | 936,881.42 |
| Air Conditioning |  |  |  |  |  |  |  |  |  |  |  |
| MS-24A | Little Theater Air Handling Unit | Install new HVAC unit in same location with chilled water cooling and steam heating. | 1 | LS | \$ | 5,508.00 | \$ | 5,508.00 | 1.033 | \$ | 5,689.76 |
| MS-23A | Gym/Café Air Handling Unit | Provide new air handling unit with chilled water coil and steam heating coil. | 1 | LS | \$ | 8,748.00 | \$ | 8,748.00 | 1.033 | \$ | 9,036.68 |
| MS-22A | North Academic Air Handling Unit | Provide new air handling unit with chilled water coil and steam heating coil. | 1 | LS | \$ | 8,748.00 | \$ | 8,748.00 | 1.033 | \$ | 9,036.68 |
| MS-11 | Chiller Plant | Install new chiller plant consisting of approximately two (2) 120-ton air-cooled chillers located on slab outdoors. Associated pumps and trim to be located indoors. | 227000 | LS | \$ | 4.50 | \$ | 1,021,500.00 | 1.033 | \$ | 1,055,209.50 |
| MS-10A | East Gym HVAC | One (1) new air handling unit with hot water heating and chilled water cooling with insulated supply and return ductwork; approximately 4,000 CFM. | 1 | EA | \$ | 42,500.00 | \$ | 42,500.00 | 1.033 | \$ | 43,902.50 |
| MS-06A | Classroom Unit Ventilators- HVAC | Install new vertical ducted DX HVAC Unit ventilators, ceiling and lights | 37 | EA | \$ | 8,970.57 | \$ | 331,911.00 | 1.033 | \$ | 342,864.06 |
| ES-10 | Upgrade Service for Additional A/C Loads |  | 1 | LS | \$ | 300,000.00 | \$ | 300,000.00 | 1.033 | \$ | 309,900.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 1,775,639.20 |
| Asbestos Abatement |  |  |  |  |  |  |  |  |  |  |  |
|  | Asbestos Abatement- flooring,ceiling,etc. |  | 227000 | SF | \$ | 4.00 | \$ | 908,000.00 | 1.000 | \$ | 908,000.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 908,000.00 |

Berkley High School

| No. | Item/Description | Action | Qty. | Unit | Unit Cost |  | Subtotal | Indirect Cost |  | d 2015 Bond cope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3. New Construction |  |  |  |  |  |  |  |  |  |  |
| New Construction |  |  |  |  |  |  |  |  |  |  |
|  | Controlled entry lobby at at main entrance | Addition: Entry/vestibule at current main entry | 800 | SF | \$ 225.00 | \$ | 180,000.00 | 1.033 | \$ | 185,940.00 |
|  |  |  |  |  |  |  |  |  | \$ | 185,940.00 |
| 4. Instructional Technology |  |  |  |  |  |  |  |  |  |  |
|  | Educational Technology |  | 1 | LS | \$ 461,471.78 | \$ | 461,471.78 | 1.000 | \$ | 461,471.78 |
|  |  |  |  |  |  |  |  |  | \$ | 461,471.78 |
| 5. Loose Furnishings/ Equipment |  |  |  |  |  |  |  |  |  |  |
|  | Equipment |  | 1 | LS | \$ 744,947.30 | \$ | 744,947.30 | 1.000 | \$ | 744,947.30 |
|  | Technology Infrastructure |  | 1 | LS | \$ 763,815.36 | S | 763,815.36 | 1.000 | \$ | 763,815.36 |
|  | Furniture Replacement |  | 1 | EA | \$ 80,000.00 | \$ | 80,000.00 | 1.130 | \$ | 90,400.00 |
|  |  |  |  |  |  |  |  |  | \$ | 1,599,162.66 |


| Site |  |
| :--- | :---: |
| Remodeling |  |
| New Construction | $7.5 \%$ |
| Subtotal |  |
| Construction Contingency |  |
| Subtotal | $5.5 \%$ |
| CM Fees and Costs | $6.5 \%$ |
| Subtotal |  |
| Architectural Fees and Costs | 6.5 |
| Instructional Technology |  |
| Loose Furnishing/Equipment |  |


| Project <br> No. | 7 |
| :---: | :---: |

## Name of School Building Berkley High School

| Existing/Adequate | List \# of Teaching Stations | $\mathbf{x}$ | Capacity Factor | $=$ | Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary |  | X | 20 | = | 0 |
| (3-5) Upper Elementary |  | X | 25 | $=$ | 0 |
| (6-8) Junior High |  | X | 22.5 | $=$ | 0 |
| (9-12) High School |  | x | 21.25 | $=$ | 0 |
| Sub Totals | 0 |  |  |  | 0 |
| Remodeled | List \# of Teaching Stations | $\mathbf{x}$ | Capacity Factor | $=$ | Capacity |
| (K-2) Lower Elementary |  | X | 20 | = | 0 |
| (3-5) Upper Elementary |  | x | 25 | $=$ | 0 |
| (6-8) Junior High |  | $\mathbf{x}$ | 22.5 | = | 0 |
| (9-12) High School | 67 | x | 21.25 | $=$ | 1,424 |
| Sub Totals | 67 |  |  |  | 1,424 |



1 List the number of teaching station in appropriate column.

2 Calculate total capacity using the applicable capacity factor.

3 Enter five (5) year projected enrollment.

4 Calculate building utilization rate.

5 Attach floor and site plan of the building. Show the rooms and category (adequate, remodeled, proposed new, closed). Number the teaching stations in consecutive order.

| Facility to be Closed | List \# of Teaching $\mathbf{X}$ Stations | $\begin{gathered} \text { Capacity } \\ \text { Factor } \end{gathered}=$ | Capacity |
| :---: | :---: | :---: | :---: |
| (K-2) Lower Elementary | x | $20=$ | 0 |
| (3-5) Upper Elementary | X | 25 | 0 |
| (6-8) Junior High | $\mathbf{X}$ | 22.5 | 0 |
| (9-12) High School | $\mathbf{x}$ | 21.25 | 0 |
| Total Teaching Stations | 0 |  |  |
| Square Footage for Closed Facility |  | Total Capacity | 0 |

Please transfer applicable information to the Utilization Summary on Page 7 of the application.



Teaching Stations
Stantec
(3ERKLEY SCHOOL DISTRICT


Site Plan Concept for:
Berkley High School Berkley School District Berkley, Michigan


## Facility Condition Assessment

 Air temperature is inconsistent throughout the building. Lack of adequate fresh air leads to odors.

| Life Safety Section |  |  | Yes |
| :---: | :--- | :---: | :---: |
| No | N/A |  |  |
| 1. | Lighted exit signs are present at each entrance/exit and are clearly visible. |  |  |
| 2. | Fire suppression equipment is present in kitchen, science rooms and corridors. |  |  |
| 3. | Washroom facilities have barrier free accessibility. | X |  |
| 4. | Building access is limited to select, controlled entries. | X |  | Overall assessment or comments:


| Structural Section |  | Nes | No |
| :---: | :--- | :---: | :---: |
| 1. | Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |
| 2. | Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |
| 3. | Roof structure does not show visible signs of damage. |  |  |
| 4. | Building exterior is intact and does not show visible deterioration beyond normal aging. |  |  | Overall assessment or comments:


| Mechanical Section | Nos | No |  |
| :---: | :--- | :---: | :---: |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. |  |  |
| 3. | Water drains quickly from sinks. |  |  |
| 4. | Floor area near toilets and sinks is dry. | X |  | Overall assessment or comments:


| Electrical Section |  | Yes | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. |  |  |
| 2. | Electrical controls are safely protected and accessible. | X |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. | X |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

| Lee A. Andrea, AIA |  |  | Stantec Architecture, Inc. | 45478 |
| :---: | :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248. |  |
| Date | E-mail Address | Fax Number | Area Code an |  |

## Project Sheet

| Project No. | 8 |  |  |
| :--- | :---: | :--- | :--- |
| Name of School Building: |  | Avery Building |  |


| Description of Proposal or Series 1 Project: | Instructional Technology Description |
| :--- | :---: |
| General remodeling of interior and exterior of building. Renovation to improve <br> security and program delivery. Upgrades to fire alarm system, emergency lighting, <br> and phone systems. Mechanical upgrades to hot water system and HVAC, <br> including replacement of unit ventilators. Upgrades to plambing system including <br> replacement of domestic water and water coolers. Replacement of electrical <br> distribution system, panels, receptacles. Asbestos abatement. Interactive <br> classroom audio visual equipment and student computing devices. |  |
|  |  |
|  |  |

## Type of Project:

| $\square$ New Building | $\rightarrow$ New Construction Square Ft |  | Cost per Sq Ft |
| :--- | :--- | :--- | :--- |
| $\square$ Addition(s) | $\rightarrow$ New Addition Square Ft. |  |  |
| $\square$ |  |  |  |
| $\square$ | Remodeling per Sq Ft |  |  |
| $\square$ | Technology and/or Buses |  |  |
| $\square$ |  |  |  |
| $\square$ | Site Work |  |  |
| $\square$ Facility Closing | $\rightarrow$ | Demolish <br>  | Sell or Lease |

Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)

| Asbestos abatement, replacment of mechanical systems with newer, more efficient systems. |
| :--- |

Estimated Cost of Proposed Construction Project: (Attach analysis showing how cost estimates were calculated.)


|  | Certificate by Registered Architect |  |
| :--- | :--- | :--- |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |
|  |  |  |
| Lee A. Andrea, AIA | Stantec Architecture, Inc. |  |
| $1 / 5 / 2015$ | Printed Name | 45478 |
| Signature | lee.andrea @stantec.com | 248.336 .4881 |

BERKLEY SCHOOL DISTRICT
MAY 2015 BOND PROGRAM

## Avery Center

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | 2015 Bond cope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Site Work |  |  |  |  |  |  |  |  |  |  |  |
| Site Work |  |  |  |  |  |  |  |  |  |  |  |
| BE-14 | Site Drainage | Add landscape drain tile to storm system. | 2,900 | SF | \$ | 15.00 | \$ | 43,500.00 | 1.033 | \$ | 44,935.50 |
|  |  |  |  |  |  |  |  |  |  | \$ | 44,935.50 |
| 2. Remodeling |  |  |  |  |  |  |  |  |  |  |  |
| Exterior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
| BE-01 | Overhangs/Soffits | Provide aluminum soffit panels. | 2,200 | SF | \$ | 20.00 | \$ | 44,000.00 | 1.033 | \$ | 45,452.00 |
| BE-02 | Brick Veneer at Base of Walls | Control roof drainage where possible and replace brick and glass block | 2,750 | SF | \$ | 15.36 | \$ | 42,240.00 | 1.033 | \$ | 43,633.92 |
| BE-03 | Sealant at Door and Window Openings |  | 1,400 | LF | \$ | 4.75 | \$ | 6,650.00 | 1.033 | \$ | 6,869.45 |
| BE-04 | Aluminum Windows/Steel Lintels |  | 650 | LF | \$ | 5.53 | \$ | 3,592.00 | 1.033 | \$ | 3,710.53 |
| BE-07 | Steel Doors and Frames | Replace with aluminum frames and fiberglass reinforced panel doors. | 5 | EA | \$ | 3,280.00 | \$ | 16,400.00 | 1.033 | \$ | 16,941.20 |
| BE-08 | Clerestory Windows | Replace with aluminum frames and insulating glass. | 400 | SF | \$ | 80.00 | \$ | 32,000.00 | 1.033 | \$ | 33,056.00 |
| BE-09 | Entrance Canopy Soffits | Provide aluminum soffit panels. | 1,600 | SF | \$ | 20.00 | \$ | 32,000.00 | 1.033 | \$ | 33,056.00 |
| BE-10 | Roof Membrane | Remove and replace with new insulation and single ply membrane. | 14,060 | SF | \$ | 10.00 | \$ | 140,600.00 | 1.033 | \$ | 145,239.80 |
| BE-11 | Entrance Canopy Columns |  | 19 | EA | \$ | 75.00 | \$ | 1,425.00 | 1.033 | \$ | 1,472.03 |
| BE-12 | Roof Drainage | Correct roof drainage and downspouts, replace brick. | 2,400 | SF | \$ | 15.25 | \$ | 36,600.00 | 1.033 | \$ | 37,807.80 |
| BE-15 | Brick Veneer | Replace brick | 100 | SF | \$ | 25.00 | \$ | 2,500.00 | 1.033 | \$ | 2,582.50 |
|  |  |  |  |  |  |  |  |  |  | \$ | 369,821.23 |
| Interior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |  |
| Bl-07 | Room Access | Add door and frame into corridor. | 1 | EA | \$ | 3,990.00 | \$ | 3,990.00 | 1.033 | \$ | 4,121.67 |
| BI-09 | Boy's and Girl's Toilet Rooms | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes, stalls and automatic door operators. | 1,410 | SF | \$ | 87.50 | \$ | 123,375.00 | 1.033 | \$ | 127,446.38 |
| BI-01 | Original Wood Doors and Frames | Replace with wood doors and hardware. | 50 | EA | \$ | 1,300.00 | \$ | 65,000.00 | 1.033 | \$ | 67,145.00 |
| Bl-06 | Original Acoustical Tile Ceilings | Replace with acoustical panels with concealed grid and new lighting (existing acoustic tile to remain). | 20,000 | SF | \$ | 5.50 | \$ | 110,000.00 | 1.033 | \$ | 113,630.00 |
| $\mathrm{BI}-03$ | Corridor Carpet | Replace carpet and resilient base. | 6,080 | SF | \$ | 4.50 | \$ | 27,360.00 | 1.033 | \$ | 28,262.88 |

Avery Center

| No. | Item/Description | Action | Qty. | Unit | Unit Cost |  | Subtotal |  | Indirect Cost | $\begin{gathered} \text { Proposed } 2015 \text { Bond } \\ \text { Scope } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BI-04 | Corridor Lay-in Acoustical Ceilings | Replace acoustical ceilings and grid. | 6,080 | SF | \$ | 4.50 | \$ | 27,360.00 | 1.033 | \$ | 28,262.88 |
|  | Classroom Flooring | Assoicated with mechanical system replacement | 20,000 | SF | \$ | 4.50 | \$ | 90,000.00 | 1.033 | \$ | 92,970.00 |
|  | Visual Display Boards | Assoicated with mechanical system replacement | 21 | CR | \$ | 1,200.00 | \$ | 25,200.00 | 1.033 | \$ | 26,031.60 |
|  | Classroom Painting | Assoicated with mechanical system replacement | 21 | CR | \$ | 600.00 | \$ | 12,600.00 | 1.033 | \$ | 13,015.80 |
|  | Bookshelves | Assoicated with mechanical system replacement | 21 | CR | \$ | 750.00 | \$ | 15,750.00 | 1.033 | \$ | 16,269.75 |
|  |  |  |  |  |  |  |  |  |  | \$ | 517,155.96 |
| Code/Safety |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | \$ | - |
| Building Systems Replacement/ Energy Efficiency |  |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system with smoke and CO detectors for Day Care. | 37000 | sf | \$ | 1.75 | \$ | 64,750.00 | 1.033 | \$ | 66,886.75 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures. | 29 | EA | \$ | 300.00 | \$ | 8,700.00 | 1.033 | \$ | 8,987.10 |
| BS-3 | Boiler Room Emergency Power Off | Install new EPO system. | 1 | LS | \$ | 2,720.00 | \$ | 2,720.00 | 1.033 | \$ | 2,809.76 |
| BS-4 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. Test and corrective actions in budget. | 1 | EA | \$ | 5,000.00 | \$ | 5,000.00 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 83,848.61 |
| Mechanical |  |  |  |  |  |  |  |  |  |  |  |
| MS-01 | Building Controls | Provide new DDC controls throughout. | 37000 | SF | \$ | 3.50 | \$ | 129,500.00 | 1.033 | \$ | 133,773.50 |
| MS-10 | Head End Air Conditioning | Install new split air conditioning unit; approximately $1.5-$ tons. | 1 | EA | \$ | 15,500.00 | \$ | 15,500.00 | 1.033 | \$ | 16,011.50 |
| MS-08 | Board Room HVAC | Replace with like and kind; 10-ton unit. | 1 | EA | \$ | 31,500.00 | \$ | 31,500.00 | 1.033 | \$ | 32,539.50 |
| MS-02 | Boilers | Two (2) new heating hot water boilers at $2,500 \mathrm{MBH}$ each and all associated trim and accessories | 2 | EA | \$ | 65,000.00 | \$ | 130,000.00 | 1.033 | \$ | 134,290.00 |
| MS-02A | Hot Water System | Provide new chemical treatment for heating hot water system | 1 | LS | \$ | 2,000.00 | \$ | 2,000.00 | 1.033 | \$ | 2,066.00 |
| MS-02B | Hot Water System | Provide coalescing air and dirt separator for heating hot water system | 1 | LS | \$ | 3,500.00 | \$ | 3,500.00 | 1.033 | \$ | 3,615.50 |

Avery Center

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost | $\begin{gathered} \text { Proposed } 2015 \text { Bond } \\ \text { Scope } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MS-02C | Hot Water System | Provide expansion tank for heating hot water system | 1 | LS | \$ | 4,100.00 | \$ | 4,100.00 | 1.033 | \$ | 4,235.30 |
| MS-03 | Hot Water Heating Pumps | Provide end-suction, base mounted pumps with VFDs | 4 | EA | \$ | 15,350.00 | \$ | 61,400.00 | 1.033 | \$ | 63,426.20 |
| MS-05 | Gym Air Handling Unit | Replace with like and kind; approximate 2,000 CFM each. | 2 | EA | \$ | 42,360.00 | \$ | 84,720.00 | 1.033 | \$ | 87,515.76 |
| MS-06 | Roof Mounted Heating and Ventilating Units | Replace with like and kind; 3,000 CFM. | 7 | EA | \$ | 20,000.00 | \$ | 140,000.00 | 1.033 | \$ | 144,620.00 |
| MS-07 | Roof Hoods and Exhaust Fans | Replace with like and kind. | 5 | EA | \$ | 2,000.00 | \$ | 10,000.00 | 1.033 | \$ | 10,330.00 |
| MS-09 | Ceiling Hung Unit Ventilator | Replace with like and kind; 2.5-ton unit. | 1 | EA | \$ | 15,000.00 | \$ | 15,000.00 | 1.033 | \$ | 15,495.00 |
| MS-11 | Head End Fire Suppression | Install a chemical-based fire suppression system; will not damage the headend room equipment like a waterbased system would. | 1 | EA | \$ | 35,000.00 | \$ | 35,000.00 | 1.033 | \$ | 36,155.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 684,073.26 |
| Plumbing |  |  |  |  |  |  |  |  |  |  |  |
| PS-1 | Domestic Water Pipe | Replace with copper pipe. | 15000 | SF | \$ | 3.75 | \$ | 56,250.00 | 1.033 | \$ | 58,106.25 |
| PS-2 | Water Meter Isolation Valves | Replace three (3) 3" gate valves. | 3 | EA | \$ | 1,830.00 | \$ | 5,490.00 | 1.033 | \$ | 5,671.17 |
| PS-3 | Water Coolers | Install new bi-level electric water cooler. | 2 | EA | \$ | 5,350.00 | \$ | 10,700.00 | 1.033 | \$ | 11,053.10 |
|  |  |  |  |  |  |  |  |  |  | \$ | 74,830.52 |
| Electrical |  |  |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Replace the original distribution equipment with new. | 1 | EA | \$ | 24,500.00 | \$ | 24,500.00 | 1.033 | \$ | 25,308.50 |
| ES-2 | Electrical Panels | Replace the original panels with new, larger panels in new locations. | 6 | EA | \$ | 4,875.00 | \$ | 29,250.00 | 1.033 | \$ | 30,215.25 |
| ES-3 | Electrical Receptacles | Replace all receptacles with tamper resistant type receptacles. | 60 | EA | \$ | 55.00 | \$ | 3,300.00 | 1.033 | \$ | 3,408.90 |
| ES-4 | Exterior Lighting | Replace with more efficient LED fixtures. | 14 | EA | \$ | 520.00 | \$ | 7,280.00 | 1.033 | \$ | 7,520.24 |
| ES-6 | Back-up Generator | Provide generator back-up system to serve racks. 15 kVA, 3 Phase | 1 | LS | \$ | 27,950.00 | \$ | 27,950.00 | 1.033 | \$ | 28,872.35 |
| ES-8 | Uninterruptible Power Supply | Provide UPS to serve racks until generator starts | 1 | EA | \$ | 30,815.00 | \$ | 30,815.00 | 1.033 | \$ | 31,831.90 |
| ES-9 | Electrical Panel | Add panel and move non-technology loads from technology panels. | 1 | EA | \$ | 4,875.00 | \$ | 4,875.00 | 1.033 | \$ | 5,035.88 |
| ES-10 | Uninterruptible Power Supply | Provide 5 kVA UPS to serve Key Fob entry, PA and Phones | 1 | EA | \$ | 11,300.00 | \$ | 11,300.00 | 1.033 | \$ | 11,672.90 |

Avery Center

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | $\begin{aligned} & \text { d } 2015 \text { Bond } \\ & \text { cope } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES-11 | Newer TVSS Electrical Panels (New Item) |  | 1 | EA | \$ | 3,000.00 | \$ | 3,000.00 | 1.033 | \$ | 3,099.00 |
| ES-12 | Newer TVSS Electrical Panels (New Item) | Replace existing TVSS on panels are blown and not protecting circuits | 4 | EA | \$ | 2,000.00 | \$ | 8,000.00 | 1.033 | \$ | 8,264.00 |
|  | Classroom Lighting |  | 20000 | SF | \$ | 6.00 | \$ | 120,000.00 | 1.033 | \$ | 123,960.00 |
|  | Corridor Lighting |  | 6080 | SF | \$ | 6.00 | \$ | 36,480.00 | 1.033 | \$ | 37,683.84 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Air Conditioning |  |  |  |  |  |  |  |  |  |  |  |
| MS-06A | Roof Mounted HVAC | Replace existing units with HVAC and insulated ductwork. | 7 | EA | \$ | 15,200.00 | \$ | 106,400.00 | 1.033 | \$ | 109,911.20 |
| MS-05A | Gym HVAC | Add DX rooftop unit with new distribution ductwork. | 2 | EA | \$ | 35,000.00 | \$ | 70,000.00 | 1.033 | \$ | 72,310.00 |
| ES-13 | Upgrade Service for Additional A/C Loads |  | 1 | LS | \$ | 100,000.00 | \$ | 100,000.00 | 1.033 | \$ | 103,300.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 285,521.20 |
| Asbestos Abatement |  |  |  |  |  |  |  |  |  |  |  |
|  | Asbestos Abatement- flooring,ceiling,etc. |  | 37000 | SF | \$ | 5.00 | \$ | 185,000.00 | 1.000 | \$ | 185,000.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 3. New Construction |  |  |  |  |  |  |  |  |  |  |  |
| New Construction |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | \$ | - |
| 4. Instructional Technology |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | \$ | - |

Avery Center

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | $\begin{aligned} & \text { d } 2015 \text { Bond } \\ & \text { cope } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5. Loose Furnishings/ Equipment |  |  |  |  |  |  |  |  |  |  |  |
|  | Equipment |  | 1 | LS | \$ | 142,027.15 | \$ | 142,027.15 | 1.00 | \$ | 142,027.15 |
|  | Technology |  | 1 | LS | \$ | 68,271.81 | \$ | 68,271.81 | 1.00 | \$ | 68,271.81 |
|  | Technology Infrastructure |  | 1 | LS | \$ | 125,351.52 | \$ | 125,351.52 | 1.000 | \$ | 125,351.52 |
|  | Furniture Replacement |  | 1 | EA | \$ | 15,000.00 | \$ | 15,000.00 | 1.130 | \$ | 16,950.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 352,600.48 |

## Site

## Remodeling

New Construction
Subtotal
Construction Contingency
Subtotal
CM Fees and Costs
Subtotal
Architectural Fees and Costs
Instructional Technology
Loose Furnishing/Equipment

Total Project Cos

2,914,659.50

44,935.50 2,517,123.52

2,562,059.02
192,154.43
2,754,213.45
151,481.74
2,905,695.19
188,870.19
$352,600.48$
$3,447,165.86$


## Facility Condition Assessment



Air temperature is inconsistent throughout building. Lack of adequate fresh air ventilation leads to odors

| Life Safety Section |  |  | Nes |
| :---: | :--- | :---: | :---: |
| No | N/A |  |  |
| 1. | Lighted exit signs are present at each entrance/exit and are clearly visible. | X |  |
| 2. | Fire suppression equipment is present in kitchen, science rooms and corridors. |  |  |
| 3. | Washroom facilities have barrier free accessibility. |  |  |
| 4. | Building access is limited to select, controlled entries. | X |  | Washrooms have limited barrier free accessiblity.


| Structural Section |  | Yes | No | N/A |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |  |
| 2. | Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |  |
| 3. | Roof structure does not show visible signs of damage. | X |  |  |
| 4. | Building exterior is intact and does not show visible deterioration beyond normal aging. | X |  |  | Overall assessment or comments:


|  |  | Nes | No |
| :---: | :--- | :---: | :---: |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. |  |  |
| 3. | Water drains quickly from sinks. | X |  |
| 4. | Floor area near toilets and sinks is dry. | X |  | Overall assessment or comments:


| Electrical Section |  | Yes | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. |  |  |
| 2. | Electrical controls are safely protected and accessible. | X |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. | X |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

|  | Lee A. Andrea, AIA |  | Stantec Architecture, Inc. |
| :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |
| 1/5/2015 | lee.andrea@stantec.com | 248.336.4881 | 248 |
| Date | E-mail Address | Fax Number | Area Code and |

## Project Sheet

| Project No. | 9 |  |
| :--- | :---: | :---: |
| Name of School Building: |  | Tyndall Center |


| Description of Proposal or Series 1 Project: | Instructional Technology Description |
| :--- | ---: |
| General remodeling of interior and exterior of building. Renovation to improve <br> security. Remodeling to meet code and safety requirements. Upgrades to fire <br> alarm system, emergency lighting, and phone systems. Mechanical upgrades to hot <br> water system and HVAC, including replacement of unit ventilators. Upgrades to <br> plumbing system including replacement of domestic water and sanitary pipe and <br> water coolers. Replacement of electrical distribution system, panels, receptacles, <br> exit lighting and lighting fixtures. Asbestos abatement. Interactive classroom audio <br> visual equipment and student computing devices. |  |
|  |  |

## Type of Project:



Statement describing any existing environmental or usability problems the proposed project will address. (ex: asbestos, energy use, or ADA requirements)

| Asbestos abatement, replacment of mechanical systems with newer, more efficient systems. |
| :--- |

Estimated Cost of Proposed Construction Project: (Attach analysis showing how cost estimates were calculated.)


|  | Certificate by Registered Architect |  |
| :--- | :--- | :--- |
| I certify that the details of the proposed project(s) described above and the attached detail relative to the construction project(s) are true and correct to the best of my knowledge and belief. |  |  |
|  |  |  |
| Lee A. Andrea, AIA | Stantec Architecture, Inc. |  |
| $1 / 5 / 2015$ | Printed Name | 45478 |
| Signature | lee.andrea @stantec.com | 248.336 .4881 |

## BERKLEY SCHOOL DISTRICT

MAY 2015 BOND PROGRAM

## Tyndall Center

| No. | Item/Description | Action | Qty. | Unit | Unit Cost |  | Subtotal | Indirect Cost |  | 2015 Bond ope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Site Work |  |  |  |  |  |  |  |  |  |  |
| Site Work |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | \$ | - |
| 2. Remodeling |  |  |  |  |  |  |  |  |  |  |
| Exterior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |
| BE-01 | Aluminum Storefront and Doors | Replace with a better quality, higher thermal resistance storefront system with doors. | 1,350 | SF | \$ 75.00 | \$ | 101,250.00 | 1.033 | \$ | 104,591.25 |
| BE-02 | Foundation Wall | Add concrete sill wall or slab at building perimeter. | 600 | SF | \$ 22.00 | \$ | 13,200.00 | 1.033 | \$ | 13,635.60 |
| BE-03 | Fascia | Replace fascia panels with a more durable material. | 900 | SF | \$ 25.00 | \$ | 22,500.00 | 1.033 | \$ | 23,242.50 |
| BE-04 | Soffits | Replace soffits with a more durable material. | 1,100 | SF | \$ 25.00 | \$ | 27,500.00 | 1.033 | \$ | 28,407.50 |
| BE-04 | Steel Doors and Frames | Replace with aluminum frames and FRP doors. | 12 | EA | \$ 3,200.00 | \$ | 38,400.00 | 1.033 | \$ | 39,667.20 |
|  |  |  |  |  |  |  |  |  | \$ | 209,544.05 |
| Interior Architectural Replacement |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{Bl}-05$ | Accordion Folding Doors | Replace with Dutch style doors in HM frames. | 7 | EA | \$ 2,350.00 | \$ | 16,450.00 | 1.033 | \$ | 16,992.85 |
| AB-01 | Toilet Rooms | Provide new plumbing fixtures, lighting, floor/wall/ceiling finishes, stalls and automatic door operators. | 960 | SF | \$ 79.20 | \$ | 76,032.00 | 1.033 | \$ | 78,541.06 |
| BI-01 | Original Hollow Metal, Wood Doors and Frames | Replace with wood doors and hardware (Dutch style doors at classrooms). | 33 | EA | \$ 1,302.27 | \$ | 42,975.00 | 1.033 | \$ | 44,393.17 |
| BI-08 | Resilient Tile | Replace resilient floor and base. | 9,280 | SF | \$ 4.50 | \$ | 41,760.00 | 1.033 | \$ | 43,138.08 |
| BI-06 | Lay-in Acoustical Ceilings | Replace acoustical ceilings and grid (lighting covered in lighting section) | 11,680 | SF | \$ 5.50 | \$ | 64,240.00 | 1.033 | \$ | 66,359.92 |
| BI-04 | Lay-in Acoustical Ceilings | Replace acoustical ceilings and grid (lighting covered in lighting section) | 8,800 | SF | \$ 4.50 | \$ | 39,600.00 | 1.033 | \$ | 40,906.80 |
| BI-03 | Corridor Carpet | Replace carpet and resilient base. | 5,400 | SF | \$ 4.50 | \$ | 24,300.00 | 1.033 | \$ | 25,101.90 |
|  | Visual Display Boards | Assoicated with mechanical system replacement | 10 | CR | \$ 1,200.00 | \$ | 12,000.00 | 1.033 | \$ | 12,396.00 |
|  | Classroom Painting | Assoicated with mechanical system replacement | 10 | CR | \$ 600.00 | \$ | 6,000.00 | 1.033 | \$ | 6,198.00 |

Tyndall Center

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | $\begin{aligned} & 2015 \text { Bond } \\ & \text { ope } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bookshelves | Assoicated with mechanical system replacement | 10 | CR |  | 750.00 | \$ | 7,500.00 | 1.033 | \$ | 7,747.50 |
|  | VUV wall opening | Assoicated with mechanical system replacement | 10 | CR |  | 3,000.00 | \$ | 30,000.00 | 1.033 | \$ | 30,990.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 372,765.28 |
| Code/Safety |  |  |  |  |  |  |  |  |  |  |  |
| AB-02 | Exit Door Concrete Slabs | Replace concrete slabs at exit doors. | 120 | SF |  | 115.00 | \$ | 13,800.00 | 1.033 | \$ | 14,255.40 |
|  |  |  |  |  |  |  |  |  |  | \$ | 14,255.40 |
| Building Systems Replacement/ Energy Efficiency |  |  |  |  |  |  |  |  |  |  |  |
| BS-1 | Fire Alarm System | Install new addressable system with smoke and CO detectors for Day Care. | 24000 | SF | \$ | 1.75 | \$ | 42,000.00 | 1.033 | \$ | 43,386.00 |
| BS-2 | Emergency Lighting | Install new units in existing fixtures. | 20 | EA |  | 300.00 | \$ | 6,000.00 | 1.033 | \$ | 6,198.00 |
| BS-3 | Phone System - Alarms | Review all alarm sensors, replace bad alarm sensors and install fire/smoke alert sensors in all buildings. Includes boilers, refrigerators, panic buttons, sump pumps, carbon monoxide, headend environmental sensors, etc. Test and corrective actions in budget. |  | EA |  | 5,000.00 | \$ | 5,000.00 | 1.033 | \$ | 5,165.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 54,749.00 |
| Mechanical |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | \$ | 709,252.64 |
| Plumbing |  |  |  |  |  |  |  |  |  |  |  |
| PS-1 | Add Classroom Sinks | Second sink required by code. | 5 | EA |  | 1,200.00 | \$ | 6,000.00 | 1.033 | \$ | 6,198.00 |
| PS-2 | Domestic Water Pipe | Replace with copper pipe. | 19000 | SF | \$ | 3.25 | \$ | 61,750.00 | 1.033 | \$ | 63,787.75 |
| PS-3 | Water Meter Isolation Valves | Replace three (3), 2" gate valves. |  | EA |  | 1,750.00 | \$ | 5,250.00 | 1.033 | \$ | 5,423.25 |
| PS-4 | Sanitary Pipe | Replace accessible portions. | 10000 | SF | \$ | 4.35 | \$ | 43,500.00 | 1.033 | \$ | 44,935.50 |
| PS-5 | Water Coolers | Install all new drinking fountains. |  | EA |  | 3,000.00 | \$ | 24,000.00 | 1.033 | \$ | 24,792.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 145,136.50 |
| Electrical |  |  |  |  |  |  |  |  |  |  |  |
| ES-1 | Electrical Distribution System | Replace the original distribution equipment with new. |  | EA |  | 15,900.00 | \$ | 31,800.00 | 1.033 | \$ | 32,849.40 |

Tyndall Center


## Tyndall Center

| No. | Item/Description | Action | Qty. | Unit |  | Unit Cost |  | Subtotal | Indirect Cost |  | 2015 Bond <br> ope |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5. Loose Furnishing/ Technology |  |  |  |  |  |  |  |  |  |  |  |
|  | Equipment |  | 1 | LS | \$ | 80,722.34 | \$ | 80,722.34 | 1.000 | \$ | 80,722.34 |
|  | Technology |  | 1 | LS |  | 45,078.39 | \$ | 45,078.39 | 1.000 | \$ | 45,078.39 |
|  | Technology Infrastructure |  | 1 | LS |  | 82,766.88 | \$ | 82,766.88 | 1.000 | \$ | 82,766.88 |
|  | Furniture Replacement |  | 1 | EA | \$ | 15,000.00 | \$ | 15,000.00 | 1.130 | \$ | 16,950.00 |
|  |  |  |  |  |  |  |  |  |  | \$ | 225,517.61 |



Tyndall Building


## Facility Condition Assessment



Air temperature is inconsistent throughout building. Lack of adequate fresh air ventilation leads to odors

| Life Safety Section | Yes | No | N/A |
| :---: | :--- | :---: | :---: |
| 1. | Lighted exit signs are present at each entrance/exit and are clearly visible. |  |  |
| 2. | Fire suppression equipment is present in kitchen, science rooms and corridors. |  |  |
| 3. | Washroom facilities have barrier free accessibility. |  |  |
| 4. | Building access is limited to select, controlled entries. | X |  | Overall assessment or comments:


| Structural Section |  | Yes | No | N/A |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Inside masonry walls do not show visible signs of cracks beyond normal aging. | X |  |  |
| 2. | Surface cracks do not exist around perimeter of interior/exterior doors and windows. | X |  |  |
| 3. | Roof structure does not show visible signs of damage. | X |  |  |
| 4. | Building exterior is intact and does not show visible deterioration beyond normal aging. | X |  |  | Overall assessment or comments:


|  |  | Nes | No |
| :---: | :--- | :---: | :---: |
| 1. | Windows and exterior doors prevent inefficient air leakage. |  |  |
| 2. | Water pressure exists to wash hands, supply water fountains, and flush toilets. |  |  |
| 3. | Water drains quickly from sinks. | X |  |
| 4. | Floor area near toilets and sinks is dry. | X |  | Overall assessment or comments:


| Electrical Section |  | Yes | No |
| :---: | :--- | :---: | :---: |
| 1. | Lighting system provides adequate intensity, diffusion, and distribution of illumination. |  |  |
| 2. | Electrical controls are safely protected and accessible. | X |  |
| 3. | Classrooms have sufficient outlets to prevent regular use of electrical extension cords. | X |  |
| 4. | The proximity of electrical systems or panels is dry and free of standing water. | X |  | Overall assessment or comments:

## Certificate by Registered Architect

I certify that I have assessed the factors described above and that the conditions relative to the facility are true and correct to the best of my knowledge and belief.

| Lee A. Andrea, AIA |  |  | Stantec Architecture, Inc. | 45478 |
| :---: | :---: | :---: | :---: | :---: |
| Signature | Printed Name |  | Firm Name and License Number |  |
| 1/5/2015 | lee.andrea@stantec.com | 248.336 .4881 | 248 |  |
| Date | E-mail Address | Fax Number | Area Code and |  |

## Utilization Summary

Name of School District: Berkley School District

| Proj. No. | Name of School Facility | Current Grade Structure | Proposed Grade Structure | Projected 5-Year Enrollment | Adequate Pupil Capacity | Remodel Pupil Capacity | New Pupil Capacity | Total Pupil Capacity | Utilization \% | Closed Pupil Capacity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Angell Elementary School | K-5 | K-5 | 422 | 0 | 425 | 0 | 425 | 99\% | 0 |
| 2 | Burton Elementary School | K-5 | K-5 | 491 | 0 | 490 | 0 | 490 | 100\% | 0 |
| 3 | Pattengill Elementary School | K-5 | K-5 | 294 | 0 | 290 | 0 | 290 | 101\% | 0 |
| 4 | Rogers Elementary School | K-5 | K-5 | 381 | 0 | 405 | 0 | 405 | 94\% | 0 |
| 5 | Norup International School | K-8 | K-8 | 734 | 0 | 793 | 0 | 793 | 93\% | 0 |
| 6 | Anderson Middle School | 6-8 | 6-8 | 577 | 0 | 675 | 0 | 675 | 85\% | 0 |
| 7 | Berkley High School | 9-12 | 9-12 | 1,287 | 0 | 1,424 | 0 | 1,424 | 90\% | 0 |
| 8 | Avery Building | non-instructional |  |  |  |  |  |  |  |  |
| 9 | Tyndall Center | non-instructional |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
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Subtotals by School District's Grade Configuration

| Elementary School | K-5 | K-5 | 1588 | 0 | 1610 | 0 | 1610 | 99\% | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K-8 School | K-8 | K-8 | 734 | 0 | 793 | 0 | 793 | 93\% | 0 |
| Junior High/Middle School | 6-8 | 6-9 | 577 | 0 | 675 | 0 | 675 | 85\% | 0 |
| High School | 9-12 | 9-13 | 1287 | 0 | 1424 | 0 | 1424 | 90\% | 0 |
| Total: | K-12 | K-13 | 4186 | 0 | 4501 | 0 | 4501 | 93\% | 0 |


|  | Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 | Col. 6 | Col. 7 | Col. 8 | Col. 9 | Col. 10 | Col. 11 | Col. 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proj. <br> No. | Facility Type* | Name of School Facility | Address | City | Year Built | Year(s) Remodeled | Site Size (Acres) | Total Sq.Ft. | New Site (Acres) | Bldg In Use? Y/N | Sq Ft of Closed Facility | Disposition of Closed Facility** |
| 1 | Instructional | Angell Elementary School | 3849 Beverly | Berkley | 1921 | 1937,1952,1996 | 6.7 | 68,600 |  | Y |  |  |
| 2 | Instructional | Burton Elementary School | 26315 Scotia | Huntington Woods | 1923 | 1945,1953,1996 | 5.3 | 74,500 |  | Y |  |  |
| 3 | Instructional | Pattengill Elementary School | 3540 Morrison | Berkley | 1925 | 1949,1953,1996 | 4.1 | 67,000 |  | Y |  |  |
| 4 | Instructional | Rogers Elementary School | 2265 Hamilton | Berkley | 1952 | 1954,1996 | 3.4 | 63,700 |  | Y |  |  |
| 5 | Instructional | Norup International School | 14450 Manhattan | Oak Park | 1957 | 1960,1996 | 11.5 | 116,600 |  | Y |  |  |
| 6 | Instructional | Anderson Middle School | 3205 Catalpa | Berkley | 1956 | 1960,1996 | 9.5 | 105,638 |  | Y |  |  |
| 7 | Instructional | Berkley High School | 2325 Catalpa | Berkley | 1949 | $\begin{gathered} \text { 1953,1960,1974 } \\ 2001 \end{gathered}$ | 15.7 | 235,600 |  | Y |  |  |
| 8 | Non-Instructional | Avery Building | 14700 Lincoln | Oak Park | 1951 | 1953,1957,1996 | 9.0 | 42,567 |  | Y |  |  |
| 9 | Non-Instructional | Tyndall Center | 14501 Talbot | Oak Park | 1965 | 1996 | 5.5 | 22,922 |  | Y |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | --------- | --------- | ------- | --------- | ----- | --------- | 71 | 797,127 |  |  |  | ------ |


| *Facility Type: | ${ }^{* *}$ Closed Facility Ref: |
| :--- | :--- |
| Instructional | 1. Demolish |
| Non-Instructional | 2. Convert to non-instr. |
| Bus Garage | 3. Sell or lease |
| Storage | 4. Retain for future use |
| Stadium | 5. Undetermined |

Name of School District: Berkley School District $\quad$ District Code Number: 63-050

*Explanation of Miscellaneous Costs: $\qquad$

## 3881, Worksheet 1: Useful Life Calculation

A school district must demonstrate that the weighted average maturity of the qualified bond issue does not exceed $120 \%$ of the average reasonably expected useful life of the facilities, excluding land and site improvements, being financed with the proceeds of the qualified bonds.

The following table lists the recommended average useful life of the categories of assets that should be considered in this calculation. If a specific item is not listed, it should be assigned to the most closely related category.

| Asset Category | Useful Life <br> Years |
| :--- | :---: |
| New School Building | 40 |
| Building Improvements - interior and exterior remodeling such as plumbing, electrical, HVAC, fire <br> suppression, security systems, elevators, etc. | 30 |
| Roofing | 20 |
| Flooring | 10 |
| Furnishings and Equipment - furniture and fixtures that are not a structural component of a building such as <br> desks, chairs, tables, storage units, office equipment, copiers, fax machines, communications equipment, <br> kitchen equipment and appliances, athletic equipment, etc. | 10 |
| Technology Infrastructure - cables, networks, etc. | 10 |
| Buses | 6 |
| Technology (instructional and non-instructional) - computers, printers, scanners, etc. | 5 |

Use the worksheet below to calculate the weighted average useful life of assets included in projects funded by bond proceeds.

| Follow Column Instructions | $\rightarrow$ | Enter Value | Col. 1 <br> Col. 2 | Enter Value | Enter Value |  | Col. 4 <br> Col. 5 | Col. 6 $\div$ Col. 6 Total | Col. 3 x Col. 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Col. 1 | Col. 2 | Col. 3 | Col. 4 | Col. 5 |  | Col. 6 | Col. 7 | Col. 8 |
| Asset Type | Average Useful Life of Asset (in Years) | Time between Bonds Issue Date and Purchase | Useful Life of Asset from Bond Issue Date | Expenditure Amount | Allocation of Related Professional Fees |  | Costs (Incl. ated Fees) | $\begin{aligned} & \text { \% of Total } \\ & \text { Cost } \\ & \hline \end{aligned}$ | Average Useful Life of Assets (in years) |
| School Buildings | 40 | 3 | 43 | \$ | \$ - | \$ | - | 0.00\% | 0.00 |
| Building Improvements | 30 | 3 | 33 | \$ 45,318,391 | \$ 3,625,471 | \$ | 48,943,863 | 82.66\% | 27.28 |
| Roofing | 20 | 3 | 23 | \$ 527,482 | \$ 42,199 | \$ | 569,680 | 0.96\% | 0.22 |
| Flooring | 10 | 3 | 13 | \$ 1,760,039 | \$ 140,803 | \$ | 1,900,843 | 3.21\% | 0.42 |
| Furnishing/ Equipment | 10 | 3 | 13 | \$ 3,392,938 | \$ 271,435 | \$ | 3,664,373 | 6.19\% | 0.80 |
| Technology Infrastructure | 10 | 3 | 13 | \$ 2,385,126 | \$ 190,810 | \$ | 2,575,936 | 4.35\% | 0.57 |
| Technology (instr/noninstr) | 5 | 3 | 8 | \$ 1,441,279 | \$ 115,302 | \$ | 1,556,582 | 2.63\% | 0.21 |
| Buses | 6 | 3 | 9 | \$ | \$ - | \$ | - | 0.00\% | 0.00 |
| Total for purposes of determining weighted avg useful life |  |  |  | \$ 54,825,255 | \$ 4,386,020 | \$ | 59,211,276 | 100.00\% | 29.50 |
|  |  |  |  | 120\% of average useful life of assets |  |  |  | $\rightarrow$ | 35.40 |

## Berkley Public Schools

Useful Life Calculations
Project Backup

| Asset Type | Angell | Burton | Pattengill | Rogers | Norup | Anderson | Berkley | Avery | Tyndall | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School Buildings |  |  |  |  |  |  |  |  |  | \$ - |
| Building Improvements | \$ 2,748,013.57 | \$ 3,162,762.22 | \$ 2,870,347.35 | \$ 2,198,594.87 | \$ 5,075,510.59 | \$ 5,196,644 | \$ 11,654,338.77 | \$ 2,250,650.84 | \$ 1,989,360.19 | \$ 37,146,222 |
| Roofing | \$ 35,639 | \$ | \$ - | \$ | \$ | \$ 247,094 | \$ 4,390 | \$ 145,240 | \$ | \$ 432,362 |
| Flooring | \$ 118,010 | \$ 126,256 | \$ 117,793 | \$ 124,254 | \$ 173,854 | \$ 180,775 | \$ 412,240 | \$ 121,233 | \$ 68,240 | \$ 1,442,655 |
| Furnishing/ Equipment | \$ 156,895 | \$ 205,285 | \$ 329,986 | \$ 247,042 | \$ | \$ 636,541 | \$ 835,347 | \$ 227,249 | \$ 142,751 | \$ 2,781,097 |
| Technology Infrastructure | \$ 137,696 | \$ 137,696 | \$ | \$ 22,600 | \$ 639,895 | \$ 45,200 | \$ 763,815 | \$ 125,352 | \$ 82,767 | \$ 1,955,021 |
| Technology (instr/non-instr) | \$ 83,191 | \$ 97,992 | \$ 94,017 | \$ 68,116 | \$ 181,894 | \$ 194,693 | \$ 461,472 | \$ - | \$ | \$ 1,181,376 |
| Buses | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Total | \$ 3,279,444 | \$ 3,729,991 | \$ 3,412,144 | \$ 2,660,608 | \$ 6,071,154 | \$ 6,500,947 | \$ 14,131,604 | \$ 2,869,724 | \$ 2,283,118 | \$ 44,938,734 |

