**LABOR AGREEMENT BETWEEN THE**

**SIGNATORY MASONRY CONTRACTORS' ASSOCIATION OF ARIZONA,**

**&**

Arizona Historic Masonry LLC **ROC#** 271838

**AND THE**

**BRICKLAYERS AND ALLIED CRAFTWORKERS UNION LOCAL NO. 3, ARIZONA, NEW MEXICO and TEXAS**

**CHARTERED BY THE**

**INTERNATIONAL UNION OF BRICKLAYERS AND ALLIED CRAFTWORKERS**

**COVERING ALL COMMERCIAL AND RESIDENTIAL WORK IN THE JURISDICTION PROVIDED HEREIN IN THE STATE OF ARIZONA**

**JULY 1, 2010 to JUNE 30, 2013**

**(Bricklayers and Stonemasons Agreement)**

**BAC #3 Negotiations Committee:**
**James Cahill, Ralph Ruggerio, Dan Conaway, Jim Vogel,**

## SIGNATURE PAGE

We, the undersigned Employer, on behalf of the parent firm, all subsidiaries and corporate related firms, companies and/or corporations hereby become signatory to this Agreement and agree to abide by the full terms and conditions of this Agreement effective as of this date.

The Foregoing Labor Agreement Executed this 20th day of May, 2011 by:

FOR THE EMPLOYER: FOR THE UNION:

[redacted]

Title

opeiu #30
afl-cio

**4) TRIGGER MECHANISM:**

4.1) BAC # 3 and the S.M.C.A. came to an agreement regarding the TARGETED WAGE RATE. Both parties agreed this was a temporary wage cut and that a "trigger mechanism" would be devised to bring Bricklayer wages back up as reported hours to the trust funds go up. The full CBA is still in force when both parties agreed in principal and formed a L/M committee to finalize the details of the "trigger mechanism".

4.2) The L/M committee met in early 2009 and decided that they would go back one (1) year, to March, 2008 to March 2009 for the reference point of the reported hours; March 2008 hours – 67,812.25 to March 2009 hours – 56,539.50. A difference of 11,539.75 hours, (100%), the total hourly wage cut was $6.15, (100%).

4.3) L/M agreed to the following: When there was three **(3) consecutive** months of growth **over the 56539.5 hours, that same percentage would be added to the base rate of MRP.**

*Example:* ***Hours reported first month is 63120, second 62845 and the third month is 63260. Three month average (189225/3) of 63075 mean value. Mean value of 63075 less 56539 is an increase of 6536 hours. 6536/19959 hours = .33% increase, $6.15 * .33¢ = $2.03 wage increase. (MRP $18.00 + Adj $ 2.03 = New MRP Rate of $20.03)***

**4.4) When wage increase(s) to any MRP are to go into effect it shall be determined by L/M committee.**

**5) SIGNATURES:**

**On this** 20th **day of** May**, in the year of** 2011 **the parties below agree to all the terms of the MARKET RECOVERY PLAN PHASE 1 for the term of June 31st, 2010 to July 1st, 2013.**

FOR THE EMPLOYER: FOR THE UNION:

[redacted]

**PAGE 3**

# ADDENDUM (A)
# ARIZONA BRICKLAYERS and STONEMASONS WAGE

PAGE 1

(*) For the Period of July 1, 2010 through June 30, 2013

CBA WAGE RATE:

| | |
|---|---|
| **Total Package** | **$29.20** |
| Health and welfare | $ 2.94 |
| Local Pension | $ .90 |
| IPF (IU Pension) | $ .50 |
| IPF-PPA | $ .08 |
| JA&TC | $ .15 |
| SMCA ADM. Fund | $ .01 |
| Base Rate | $24.62 |
| Vacation Fund | $ -**.50 (post tax)** |
| Union dues check-off | $ -.73 |
| **Take home** | **$23.39** |

- Union dues check-off is 2.5% of total package
- Foreman wage rate is 10% over Base Rate, sub-Foreman wage is 5% over Base Rate

(*) Market Recovery Plan 1 (MRP1) is a targeted wage only applicable to Signatory Contractors that have signed the full CBA and follow the MRP1 Memorandum of Understanding.

**ZONE SYSTEM & PAY:** (Radius miles from the intersection of CENTRAL AVE & WASHINGTON St., Phoenix, AZ,. Standardized map to be used and both parties are responsible to get the right map.

**ZONE SYSTEM:**
**Zone A** will be within a 50 mile radius from the geographic center from a jointly agreed uniform map. **Zone B** will start at 50 radius miles from the geographic center. **Zone C** will start at 75 radius miles from the geographic center. **Zone D** will start at 100 radius miles from the geographic center. **Zone E** will start at over 200 radius miles from the geographic center.

**FREE ZONES:**
Any covered projects in; Kingman, Prescott, Flagstaff, Holbrook, Showlow, Safford, and Yuma and said project(s) are within 50 driven road miles from said city hall and or town center and a covered worker who resides within the area(s) described, it will be at the discretion of the employer(s) bound to this agreement to pay said covered worker(s) zone pay. All other covered workers will receive the appropriate zone pay.

The parties concerned agree to the terms described in this addendum.

For t[redacted]

For t[redacted]



AZ BRK 000380

# ADDENDUM (A)
## ARIZONA BRICKLAYERS and STONEMASONS WAGE

PAGE 2

**ZONE PAY RATES:**

| | | |
|---|---|---|
| Zone A | 0 - 50 Miles | Base Rate |
| Zone B | 50 - 75 Miles | Base Rate plus $2.00 per hour |
| Zone C | 75 - 100 Miles | Base Rate plus $3.00 per hour |
| Zone D | 100 - 200 Miles | Base Rate plus $3.50 per hour |
| Zone E | Over 200 Miles | Base Rate plus $6.50 per hour |

***• ZONE A will be temporarily increased to a 60 mile radius for six (6) months, June 16th, 2010 to December 16th, 2010, on December 17th, 2010, ZONE A will return to a 50 mile radius. It is further agreed that L / M will revisit this issue on November 16th, 2010.***

**APPRENTICES:**

Bricklayers and Stonemason Apprentices shall be as follows, provided however, that no apprentice shall receive an increase in pay at the end of any period unless his/her progress on the job and related technical instruction is satisfactory to the Joint Committee:

**FIRST YEAR:**

- 01 to 04 months - 50%
- 05 to 08 months – 55%
- 09 to 12 months - 60%

**SECOND YEAR:**

- 12 to 18 months - 65%
- 18 to 24 months - 75%

**THIRD YEAR:**

- 24 to 30 months - 85%
- 30 to 36 months - 95%

The [redacted]

For [redacted]

For [redacted]

# ADDENDUM (MRP 1)
## ARIZONA BRICKLAYERS and STONEMASONS WAGE

*MARKET RECOVERY PROGRAM 1 (MRP1) WAGE RATE:

| | |
|---|---|
| **Total Package** | **$22.50** |
| Health and welfare | $ 2.94 |
| Local Pension | $ .90 |
| IPF (IU Pension) | $ .50 |
| JA&TC | $ .15 |
| SMCA ADM. Fund | $ .01 |
| Base Rate | $18.00 |
| Vacation Fund | **$ -.25 (post tax)** |
| Union dues check-off | $ -.56 |
| **Take home** | **$17.19** |

- Union dues check-off is 2.5% of total package
- Foreman wage rate is 10% over Base Rate; sub-Foreman wage is 5% over Base Rate

(*) Market Recovery Plan 1 (MRP1) is a targeted wage only applicable to Signatory Contractors that have signed the full CBA and follow the MRP1 Memorandum of Understanding.

**ZONE SYSTEM & PAY:**

| | | |
|---|---|---|
| Zone A | 0 - 60 Miles | Base Rate |
| Zone B | 61 - 100 Miles | Base Rate plus $16.00 per day |
| Zone C | 101 - 150 Miles | Base Rate plus $25.00 per day |
| Zone D | 151 - 200 Miles | Base Rate plus $28.00 per day |
| Zone E | Over 201 Miles | Base Rate plus $40.00 per day |

All other terms and conditions of the SIGNATORY MASONRY CONTRACTORS of ARIZONA and INDEPENDENT MASONRY CONTRACTORS of ARIZONA Collective Bargaining Agreement(s) between BAC # 3 AZ-NM-TX will be observed.

The parties concerned agree to the terms described in this addendum.

For the [redacted]

For the [redacted]

## ADDENDUM PW (PROBATIONARY WORKER)
## ARIZONA BRICKLAYERS and STONEMASONS WAGE

| | |
|---|---|
| **Total Package** | **$17.00** |
| Health and welfare | $ 2.94 |
| Local Pension | $ .90 |
| IPF (IU Pension) | $ .50 |
| IPF-PPA | $ .00 |
| JA&TC | $ .15 |
| SMCA ADM. Fund | $ .01 |
| Base Rate | $12.50 |
| Vacation Fund | $ -.25 |
| Union dues check-off | $ -.43 |
| **Take home** | **$11.82** |

• Union dues check-off is 2.5% of total package

PROBATIONARY WORKERS are as described in ARTICLE III and ARTICLE XVIII of this agreement. After ______ months of covered employment it will be at the discretion of the signatory employer bound to the agreement(s) as to advance the probationary worker to MRP1, Full CBA rate or place the said worker into the JA&TC program.

**ZONE SYSTEM & PAY:** All jobs over 60 miles from the CENTRAL & WASHINGTON in Phoenix, AZ from an agreed to uniform map to be used by both parties.

| | | |
|---|---|---|
| Zone A | 0 - 60 Miles | Base Rate |
| Zone B | 61 - 100 Miles | Base Rate plus $16.00 per day |
| Zone C | 101 - 150 Miles | Base Rate plus $25.00 per day |
| Zone D | 151 - 200 Miles | Base Rate plus $28.00 per day |
| Zone E | Over 201 Miles | Base Rate plus $40.00 per day |

All other terms and conditions of the SIGNATORY MASONRY CONTRACTORS of ARIZONA and INDEPENDENT MASONRY CONTRACTORS of ARIZONA Collective Bargaining Agreement(s) between BAC # 3 AZ-NM-TX will be observed.

The parties concerned agree to the terms described in this addendum.

For the [redacted]

For the [redacted]

# ADDENDUM (B) MRP1-R
# ARIZONA BRICKLAYERS and STONEMASONS WAGE
# RESIDENTIAL MASONRY SCALE

(*) For the Period of July 1, 2010 through June 30, 2013

MRP 1 RESIDENTIAL MASONRY WAGE RATE:

| | |
|---|---|
| **Total Package** | **$18.00** |
| Health and welfare | $ 2.94 |
| Local Pension | $ .90 |
| IPF (IU Pension) | $ .25 |
| IPF-PPA | $ .04 |
| JA&TC | $ .15 |
| SMCA ADM. Fund | $ .01 |
| Base Rate | $13.71 |
| Vacation Fund | $ -.25 **(post tax)** |
| Union dues check-off | $ -.45 |
| **Take home** | **$13.06** |

- Union dues check-off is 2.5% of total package
- Foreman wage rate is 10% over Base Rate, sub-Foreman wage is 5% over Base Rate

(*) Market Recovery Plan 1 (MRP1) is a targeted wage only applicable to Signatory Contractors that have signed the full CBA and follow the MRP1 Memorandum of Understanding.

**ZONE SYSTEM & PAY:** All jobs over 60 miles from the CENTRAL & WASHINGTON in Phoenix, AZ from an agreed to uniform map to be used by both parties.

**ZONE PAY:**

| | | |
|---|---|---|
| Zone A | 0 - 60 Miles | Base Rate |
| Zone B | 61 - 100 Miles | Base Rate plus $16.00 per day |
| Zone C | 101 - 150 Miles | Base Rate plus $25.00 per day |
| Zone D | 151 - 200 Miles | Base Rate plus $28.00 per day |
| Zone E | Over 201 Miles | Base Rate plus $40.00 per day |

**APPRENTICES:**
Bricklayers and Stonemason Apprentices shall be as follows, provided however, that no apprentice shall receive an increase in pay at the end of any period unless his/her progress on the job and related technical instruction is satisfactory to the Joint Committee:

**FIRST YEAR:** 01 to 04 months - 50%, 05 to 08 months – 55%, 09 to 12 months - 60%
**SECOND YEAR:**12 to 18 months – 65%, 18 to 24 months - 75%
**THIRD YEAR:** 24 to 3O months - 85%, 30 to 36 months - 95%

The parties concerned agree to the terms described in this addendum.

Fo[redacted]

Fo[redacted]

Union of Bricklayers and Allied
International
Craftworkers

# LABOR AGREEMENT BETWEEN THE

# SIGNATORY REFRACTORY CONTRACTORS

# AND THE

# BRICKLAYERS AND ALLIED CRAFTWORKERS UNION LOCAL NO. 3, ARIZONA, NEW MEXICO and TEXAS

# CHARTERED BY THE

# INTERNATIONAL UNION OF BRICKLAYERS AND ALLIED CRAFTWORKERS

# COVERING ALL REFRACTORY WORK IN THE JURISDICTION PROVIDED HEREIN IN THE STATE OF

# ARIZONA

**JULY 1, 2006 to JUNE 30, 2009**

**(REFRACTORY CONSTRUCTION AGREEMENT)**

**BRICKLAYERS' AGREEMENT**
**FOR**
**REFRACTORY CONSTRUCTION**
**BETWEEN**
**BRICKLAYERS AND ALLIED CRAFTWORKERS**
**LOCAL UNION #3 AZNMTX**
**AND**
**SIGNATORY REFRACTORY CONTRACTORS**

To improve mobility of manpower, to increase efficiency and competitiveness, to foster the principles of collective bargaining, to promote closer working relationships between employer and employees engaged in the refractory industry, to provide a peaceful means for the settlement of grievances and disputes, to eliminate strikes and lockouts, to promote safe working sites, to encourage and support refractory training programs, to develop uniform working conditions for this specialized segment of the construction industry, and to establish rates of wages*, benefit contributions, hours and conditions of employment. We the signatory contractors and the Bricklayers and Allied Craftworkers Local Union #3AZNMTX, do adopt the following Agreement as the basis of our relations.

The Bricklayers and Allied Craftworkers Local Union #3 AZNMTX shall hereinafter be referred to collectively as the "Union". The individual signatory contractors shall hereinafter be referred to as the "Employer."

* All references made in this agreement to wages, wage package, or gross wage rate shall hereinafter indicate total compensation (base wage rate plus fringe benefits contributions).

## ARTICLE I. DURATION

This Agreement, executed to be effective July 1,2006 between this Union and individual signatory Employers, and shall remain in effect for three (3) years and shall be automatically continued yearly thereafter unless notice of modification or termination is given by certified mail in writing by either party to the other at least sixty (60) days but no more than ninety (90) days prior to the anniversary date. The parties may at any time mutually agree to change or amend any part of this Agreement and such changes or modifications shall not affect the continuing nature of this Agreement.

## ARTICLE VII WAGE RATES AND FRINGE BENEFITS

A. The Foreman shall receive $3.00 per hour and the General Forman shall receive $7.00 per hour over the Journeymen scale. [illegible] one Foreman per shift is allowed. This provision is not related to the Union's Bylaws.

B. On industrial stacks over one hundred (100) feet in height, employees shall receive and additional two dollars (2.00) per [illegible]

C. The following journeyman wage scales shall prevail [illegible] dates specified and shall continue until the expiration date:

| Effective Date: | Base Rate | Fringe | Total Base+Benefits |
|---|---|---|---|
| July 1st, 2006 | $21.50 | $4.29 | $25.[illegible] |
| July [illegible], 2007 | $xx.xx | $x.xx | [illegible].29 |
| July [illegible], 2008 | $xx.xx | $x.xx | [illegible].79 |

**Fringe Benefit**
**July 1, 2006**

| | |
|---|---|
| Health & Welfare | $2.94 |
| Local Pension | $ .85 |
| IU Pension | $ .50 |
| Apprentice Training | $ .00 |
| IMI | $ .00 |
| SMCA Adm. Fund | $ .00 |
| Annuity | $ .00 |
| Total | $4.29 |

## ARTICLE VII. WAGE RATES AND FRINGE BENEFITS

A. The Foreman shall receive $3.00 per hour and the General Forman shall receive $7.00 per hour over the Journeymen scale. Only one Foreman per shift is allowed. This provision is not related to the Union's Bylaws.

D. On industrial stacks over one hundred (100) feet in height, employees shall receive and additional two dollars (2.00) per hour.

E. The following journeyman wage scales shall prevail on the dates specified and shall continue until the expiration date:

| **Effective Date:** | **Base Rate** | **Fringe** | **Total Base+Benefits** |
|---|---|---|---|
| July 1st,2006 | $21.50 | $4.29 | $25.79 |
| July 1st,2007 | $21.95 | $5.34 | $27.29 |
| July 1st,2008 | $21.95 | $6.84 | $28.79 |

**Fringe Benefits as of**
**July 1, 2008**

| | |
|---|---|
| Health & Welfare | $2.94 |
| Local Pension | $ .90 |
| IU Pension | $2.85 |
| Apprentice Training | $ .15 |
| IMI | $ |
| SMCA Adm. Fund | $ |
| Annuity | $ |
| Total | $6.84 |



AZ BRK 000390

C. Apprentice and Mason Helper wage scales shall be based on the following percentages of the Journeyman wage scale:

| APPRENTICES | MASON HELPER RESERVED |
|---|---|
| 01 to 04 months - 50% | |
| 05 to 08 months - 55% | |
| 09 to 12 months - 60% | |
| 12 to 18 months - 65% | |
| 18 to 24 months - 75% | |
| 24 to 30 months - 85% | |
| 30 to 36 months - 95% | |

D. The Union shall have the option of allocating a portion or all of the increases in wage rates for the various benefit funds specified in Article VII.

E. Union Dues Deductions: Upon receiving the written authorization form from the employee, the following deductions for dues and special assessments of the Union shall be withheld.

F. Journeyman: Employee deductions for journeyman are to be deducted from the journeyman wage scale for dues check-off of 2.5 % of the total base wage and fringe package per each hour worked. The deduction is to be remitted in the same manner as Health and Welfare Contributions.

G. Apprentices: Deducted from Apprentices shall be a dues check-off of 2.50 % o the Journeyman total wage and fringe package for each hour worked. The deduction is to be reported and remitted in the same manner as Health and Welfare Contributions.

H. Employer Contributions: In addition to the wages and other payments herein provided for, the Contractor(s) agrees, beginning on July 1, 2006, and continue for the duration of this Agreement and for any renewals or extensions thereto, to pay the specified contributions to the following designated funds.

**International Pension Fund.**

A. The contribution to the Bricklayers and Trowel Trades international Pension Fund shall be a total of $1.50 for each hour or portion thereof, for which a covered employee receives pay.

B. The payments required above shall be made to the Bricklayers and Trowel Trades International Pension Fund, which was established under an Agreement and Declaration of Trust, dated July 1,1972.

**Arizona Bricklayers & Ceramic Tilelayers Pension Fund**

A. The contribution to the Arizona Bricklayers Pension Fund shall be a total of 90 cents ($.90) for each hour or portion thereof, for which a covered employee receives pay.

B. The payments required above shall be made to the Northwest Bricklayers Fund, which was established under an Agreement and Declaration of Trust, dated July 1,1960.

**Arizona Bricklayers And Ceramic Tilelayers Health And Welfare Trust Fund**

A. The contribution to the Bricklayers and Allied Crafts Workers Local # 3 AZNMTX Health and Welfare Fund shall be a total of two dollars and ninety four cents ($2.94) for each hour or portion thereof, for which a covered employee receives pay.

B. The payments required above shall be made to the Bricklayers and Allied Crafts Workers Local # 3 AZNMTX Health and Welfare Fund, which was established under an Agreement and Declaration of Trust, dated April 1,1998.

**Arizona Bricklayers and Tilelayers Apprenticeship And Education Trust Fund**

A. The contribution to the AZNMTX Bricklayers And Tilelayers Apprenticeship And Education Trust Fund shall be a total of ($x.xx) for each hour or portion thereof, for which a covered employee receives pay.

B. The payments required above shall be made to the AZNMTX Bricklayers and Tilesetters Apprenticeship and Education Trust Fund, which was established under an Agreement and Declaration of Trust, dated March 1, 2001.

**International Masonry institute (IMI)**

A. The contribution to the International Masonry Institute (IMI) shall be a total of 0% gross wage for each hour or portion thereof, for which a covered employee receives pay.

B. The payments required above shall be made to the International Masonry Institute, which was established under an Agreement and Declaration of Trust, 14 March 1981, as the successor trust to the predecessor International Masonry Institute (established under an Agreement and Declaration of Trust, 22 July 1970) and/or to the predecessor international Masonry Apprenticeship Trust (establish under an Agreement and Declaration of Trust,6 November 1974.

**Bricklayers and Trowel Trades**
**International Retirement Savings Plan**
**BAC Save**

A. The Employer hereby agrees to participate in BAC SAVE - The Bricklayers and Trowel Trades International Retirement Savings Plan (the Plan) on behalf of all employees represented for purposes of collective bargaining under this Agreement and other employees as permitted under the Plan.

B. Effective July 1,2006 the Employer will contribute ($x.xx) for each hour or portion thereof, for which a covered employee receives pay, to BAC Save (the Plan). If employees elect to contribute additional amounts out of their own pay, the Employer, upon payroll reductions from participating employees wages, in accordance with Erisa and the relevant tax code provisions. The Employer will forward the hourly contributions and any withheld sum to IPF or its successor at such time, and in such form and manner as required pursuant to the Plan and Declaration of Trust and the requirements of law. Each employee shall have the opportunity to change the amount of wages so deferred at intervals specified in the Plan and Declaration of Trust.

| Form 5500<br>Department of the Treasury<br>Internal Revenue Service<br>Department of Labor<br>Employee Benefits Security Administration<br>Pension Benefit Guaranty Corporation | **Annual Return/Report of Employee Benefit Plan**<br>This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).<br>**▸ Complete all entries in accordance with the instructions to the Form 5500.** | OMB Nos. 1210-0110 1210-0089<br>**2018**<br>**This Form is Open to Public Inspection** |
|---|---|---|

## Part I Annual Report Identification Information

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

**A** This return/report is for:
- [X] a multiemployer plan
- [ ] a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- [ ] a single-employer plan
- [ ] a DFE (specify) ____

**B** This return/report is:
- [ ] the first return/report
- [ ] the final return/report
- [ ] an amended return/report
- [ ] a short plan year return/report (less than 12 months)

**C** If the plan is a collectively-bargained plan, check here. . . . . . . . . . ▸ [X]

**D** Check box if filing under:
- [X] Form 5558
- [ ] automatic extension
- [ ] the DFVC program
- [ ] special extension (enter description)

## Part II Basic Plan Information—enter all requested information

| | |
|---|---|
| **1a** Name of plan<br>ARIZONA BRICKLAERS PENSION TRUST FUND | **1b** Three-digit plan number (PN) ▸ 001<br>**1c** Effective date of plan 01/01/1960 |
| **2a** Plan sponsor's name (employer, if for a single-employer plan)<br>Mailing address (include room, apt., suite no. and street, or P.O. Box)<br>City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)<br>BOARD OF TRUSTEES - ARIZONA BRICKLAYERS PENSION TRUST FUND<br>PO BOX 43170<br>PHOENIX, AZ 85080-3170<br>PO BOX 43170<br>PHOENIX, AZ 85080-3170 | **2b** Employer Identification Number (EIN) 51-6119487<br>**2c** Plan Sponsor's telephone number 602-324-0545<br>**2d** Business code (see instructions) 525100 |

**Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.**

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

| | | | |
|---|---|---|---|
| **SIGN HERE** | Filed with authorized/valid electronic signature.<br>**Signature of plan administrator** | 10/01/2019<br>Date | STEVE MAYHER<br>Enter name of individual signing as plan administrator |
| **SIGN HERE** | Filed with authorized/valid electronic signature.<br>**Signature of employer/plan sponsor** | 10/02/2019<br>Date | RICHARD CRAWFORD<br>Enter name of individual signing as employer or plan sponsor |
| **SIGN HERE** | **Signature of DFE** | Date | Enter name of individual signing as DFE |

| | | | |
|---|---|---|---|
| **3a** | Plan administrator's name and address [X] Same as Plan Sponsor | **3b** Administrator's EIN | |
| | | **3c** Administrator's telephone number | |
| **4** | If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: | **4b** EIN | |
| **a** | Sponsor's name | **4d** PN | |
| **c** | Plan Name | | |
| **5** | Total number of participants at the beginning of the plan year | **5** | 676 |
| **6** | Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines **6a(1), 6a(2), 6b, 6c,** and **6d**). | | |
| **a(1)** | Total number of active participants at the beginning of the plan year | **6a(1)** | 43 |
| **a(2)** | Total number of active participants at the end of the plan year | **6a(2)** | 66 |
| **b** | Retired or separated participants receiving benefits | **6b** | 262 |
| **c** | Other retired or separated participants entitled to future benefits | **6c** | 303 |
| **d** | Subtotal. Add lines **6a(2)**, **6b**, and **6c** | **6d** | 631 |
| **e** | Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. | **6e** | 63 |
| **f** | Total. Add lines **6d** and **6e** | **6f** | 694 |
| **g** | Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) | **6g** | |
| **h** | Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested | **6h** | |
| **7** | Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item) | **7** | 11 |

**8a** If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

1B

**b** If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

| **9a** Plan funding arrangement (check all that apply) | **9b** Plan benefit arrangement (check all that apply) |
|---|---|
| **(1)** [ ] Insurance | **(1)** [ ] Insurance |
| **(2)** [ ] Code section 412(e)(3) insurance contracts | **(2)** [ ] Code section 412(e)(3) insurance contracts |
| **(3)** [X] Trust | **(3)** [X] Trust |
| **(4)** [ ] General assets of the sponsor | **(4)** [ ] General assets of the sponsor |

**10** Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

**a Pension Schedules**

**(1)** [X] **R** (Retirement Plan Information)

**(2)** [X] **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary

**(3)** [ ] **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

**b General Schedules**

**(1)** [X] **H** (Financial Information)

**(2)** [ ] **I** (Financial Information – Small Plan)

**(3)** [ ] ___ **A** (Insurance Information)

**(4)** [X] **C** (Service Provider Information)

**(5)** [X] **D** (DFE/Participating Plan Information)

**(6)** [ ] **G** (Financial Transaction Schedules)

| **SCHEDULE MB (Form 5500)** Department of the Treasury Internal Revenue Service; Department of Labor Employee Benefits Security Administration; Pension Benefit Guaranty Corporation | **Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information** This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ **File as an attachment to Form 5500 or 5500-SF.** | OMB No. 1210-0110 **2018** **This Form is Open to Public Inspection** |
|---|---|---|

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

| | |
|---|---|
| **A** Name of plan<br>ARIZONA BRICKLAERS PENSION TRUST FUND | **B** Three-digit plan number (PN) ▶ 001 |
| **C** Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF<br>BOARD OF TRUSTEES - ARIZONA BRICKLAYERS PENSION TRUST FUND | **D** Employer Identification Number (EIN)<br>51-6119487 |

**E** Type of plan: (1) [X] Multiemployer Defined Benefit (2) [ ] Money Purchase (see instructions)

**1a** Enter the valuation date: Month 01 Day 01 Year 2018

| | | |
|---|---|---|
| **b** Assets | | |
| (1) Current value of assets | 1b(1) | 31222412 |
| (2) Actuarial value of assets for funding standard account | 1b(2) | 30229407 |
| **c** (1) Accrued liability for plan using immediate gain methods | 1c(1) | 31919681 |
| (2) Information for plans using spread gain methods: | | |
| (a) Unfunded liability for methods with bases | 1c(2)(a) | |
| (b) Accrued liability under entry age normal method | 1c(2)(b) | |
| (c) Normal cost under entry age normal method | 1c(2)(c) | |
| (3) Accrued liability under unit credit cost method | 1c(3) | 31919681 |
| **d** Information on current liabilities of the plan: | | |
| (1) Amount excluded from current liability attributable to pre-participation service (see instructions) | 1d(1) | |
| (2) "RPA '94" information: | | |
| (a) Current liability | 1d(2)(a) | 48254353 |
| (b) Expected increase in current liability due to benefits accruing during the plan year | 1d(2)(b) | 95745 |
| (c) Expected release from "RPA '94" current liability for the plan year | 1d(2)(c) | 2346671 |
| (3) Expected plan disbursements for the plan year | 1d(3) | 2631671 |

**Statement by Enrolled Actuary**

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

**SIGN HERE**

| | |
|---|---|
| | 09/18/2019 |
| Signature of actuary | Date |
| KEVIN M. CAMPE | 17-05356 |
| Type or print name of actuary | Most recent enrollment number |
| MILLIMAN, INC. | 312-726-0677 |
| Firm name | Telephone number (including area code) |

71 S. WACKER DRIVE, 31ST FLOOR, CHICAGO, IL 60606-4637

Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

**2** Operational information as of beginning of this plan year:

| | | |
|---|---|---|
| **a** Current value of assets (see instructions) | **2a** | 31222412 |

| **b** "RPA '94" current liability/participant count breakdown: | **(1)** Number of participants | **(2)** Current liability |
|---|---|---|
| **(1)** For retired participants and beneficiaries receiving payment | 325 | 28914622 |
| **(2)** For terminated vested participants | 303 | 17395185 |
| **(3)** For active participants: | | |
| **(a)** Non-vested benefits | | 222900 |
| **(b)** Vested benefits | | 1721646 |
| **(c)** Total active | 66 | 1944546 |
| **(4)** Total | 694 | 48254353 |

| | | |
|---|---|---|
| **c** If the percentage resulting from dividing line 2a by line 2b(4), column (2), is less than 70%, enter such percentage | **2c** | 64.70% |

**3** Contributions made to the plan for the plan year by employer(s) and employees:

| **(a)** Date (MM-DD-YYYY) | **(b)** Amount paid by employer(s) | **(c)** Amount paid by employees | **(a)** Date (MM-DD-YYYY) | **(b)** Amount paid by employer(s) | **c)** Amount paid by employees |
|---|---|---|---|---|---|
| 07/01/2018 | 96625 | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | **Totals ►** 3(b) | 96625 | 3(c) 0 |

**4** Information on plan status:

| | | |
|---|---|---|
| **a** Funded percentage for monitoring plan's status (line 1b(2) divided by line 1c(3)) | **4a** | 94.7% |
| **b** Enter code to indicate plan's status (see instructions for attachment of supporting evidence of plan's status). If code is "N," go to line 5 | **4b** | C |

**c** Is the plan making the scheduled progress under any applicable funding improvement or rehabilitation plan? ☒ Yes ☐ No

**d** If the plan is in critical status or critical and declining status, were any benefits reduced (see instructions)? ☐ Yes ☒ No

| | | |
|---|---|---|
| **e** If line d is "Yes," enter the reduction in liability resulting from the reduction in benefits (see instructions), measured as of the valuation date | **4e** | |
| **f** If the rehabilitation plan projects emergence from critical status or critical and declining status, enter the plan year in which it is projected to emerge. If the rehabilitation plan is based on forestalling possible insolvency, enter the plan year in which insolvency is expected and check here ☒ | **4f** | 2040 |

**5** Actuarial cost method used as the basis for this plan year's funding standard account computations (check all that apply):

**a** ☐ Attained age normal **b** ☐ Entry age normal **c** ☒ Accrued benefit (unit credit) **d** ☐ Aggregate

**e** ☐ Frozen initial liability **f** ☐ Individual level premium **g** ☐ Individual aggregate **h** ☐ Shortfall

**i** ☐ Other (specify):

| | | |
|---|---|---|
| **j** If box h is checked, enter period of use of shortfall method | **5j** | |

**k** Has a change been made in funding method for this plan year? ☒ Yes ☐ No

**l** If line k is "Yes," was the change made pursuant to Revenue Procedure 2000-40 or other automatic approval? ☒ Yes ☐ No

| | | |
|---|---|---|
| **m** If line k is "Yes," and line l is "No," enter the date (MM-DD-YYYY) of the ruling letter (individual or class) approving the change in funding method | **5m** | |

**6** Checklist of certain actuarial assumptions:

| | | | | | |
|---|---|---|---|---|---|
| **a** Interest rate for "RPA '94" current liability | **6a** | 2.98% | | | |
| | | Pre-retirement | | Post-retirement | |
| **b** Rates specified in insurance or annuity contracts | | ☐ Yes ☐ No ☒ N/A | | ☐ Yes ☐ No ☒ N/A | |
| **c** Mortality table code for valuation purposes: | | | | | |
| (1) Males | **6c(1)** | 13P | | 13P | |
| (2) Females | **6c(2)** | 13FP | | 13FP | |
| **d** Valuation liability interest rate | **6d** | 6.50% | | 6.50% | |
| **e** Expense loading | **6e** | 581.5% | ☐ N/A | % | ☒ N/A |
| **f** Salary scale | **6f** | % | ☒ N/A | | |
| **g** Estimated investment return on actuarial value of assets for year ending on the valuation date | **6g** | 6.1% | | | |
| **h** Estimated investment return on current value of assets for year ending on the valuation date | **6h** | 15.8% | | | |

**7** New amortization bases established in the current plan year:

| **(1)** Type of base | **(2)** Initial balance | **(3)** Amortization Charge/Credit |
|---|---|---|
| 1 | 40534 | 4048 |
| 4 | 10616 | 1060 |
| | | |

**8** Miscellaneous information:

| | | |
|---|---|---|
| **a** If a waiver of a funding deficiency has been approved for this plan year, enter the date (MM-DD-YYYY) of the ruling letter granting the approval | **8a** | |
| **b(1)** Is the plan required to provide a projection of expected benefit payments? (See the instructions.) If "Yes," attach a schedule. | | ☒ Yes ☐ No |
| **b(2)** Is the plan required to provide a Schedule of Active Participant Data? (See the instructions.) If "Yes," attach a schedule. | | ☒ Yes ☐ No |
| **c** Are any of the plan's amortization bases operating under an extension of time under section 412(e) (as in effect prior to 2008) or section 431(d) of the Code? | | ☐ Yes ☒ No |
| **d** If line c is "Yes," provide the following additional information: | | |
| (1) Was an extension granted automatic approval under section 431(d)(1) of the Code? | | ☐ Yes ☐ No |
| (2) If line 8d(1) is "Yes," enter the number of years by which the amortization period was extended | **8d(2)** | |
| (3) Was an extension approved by the Internal Revenue Service under section 412(e) (as in effect prior to 2008) or 431(d)(2) of the Code? | | ☐ Yes ☐ No |
| (4) If line 8d(3) is "Yes," enter number of years by which the amortization period was extended (not including the number of years in line (2)) | **8d(4)** | |
| (5) If line 8d(3) is "Yes," enter the date of the ruling letter approving the extension | **8d(5)** | |
| (6) If line 8d(3) is "Yes," is the amortization base eligible for amortization using interest rates applicable under section 6621(b) of the Code for years beginning after 2007? | | ☐ Yes ☐ No |
| **e** If box 5h is checked or line 8c is "Yes," enter the difference between the minimum required contribution for the year and the minimum that would have been required without using the shortfall method or extending the amortization base(s) | **8e** | |

**9** Funding standard account statement for this plan year:

**Charges to funding standard account:**

| | | | |
|---|---|---|---|
| **a** Prior year funding deficiency, if any | **9a** | | 0 |
| **b** Employer's normal cost for plan year as of valuation date | **9b** | | 323660 |
| **c** Amortization charges as of valuation date: | | Outstanding balance | |
| (1) All bases except funding waivers and certain bases for which the amortization period has been extended | **9c(1)** | 12626177 | 1940919 |
| (2) Funding waivers | **9c(2)** | | 0 |
| (3) Certain bases for which the amortization period has been extended | **9c(3)** | | 0 |
| **d** Interest as applicable on lines 9a, 9b, and 9c | **9d** | | 147198 |
| **e** Total charges. Add lines 9a through 9d | **9e** | | 2411777 |

**Credits to funding standard account:**

| | | | | |
|---|---|---|---|---|
| **f** Prior year credit balance, if any | | | 9f | 2560844 |
| **g** Employer contributions. Total from column (b) of line 3 | | | 9g | 96625 |
| | | Outstanding balance | | |
| **h** Amortization credits as of valuation date | 9h | 8375059 | | 1032153 |
| **i** Interest as applicable to end of plan year on lines 9f, 9g, and 9h | | | 9i | 236636 |
| **j** Full funding limitation (FFL) and credits: | | | | |
| (1) ERISA FFL (accrued liability FFL) | 9j(1) | 4872138 | | |
| (2) "RPA '94" override (90% current liability FFL) | 9j(2) | 13190130 | | |
| (3) FFL credit | | | 9j(3) | |
| **k** (1) Waived funding deficiency | | | 9k(1) | |
| (2) Other credits | | | 9k(2) | |
| **l** Total credits. Add lines 9f through 9i, 9j(3), 9k(1), and 9k(2) | | | 9l | 3926258 |
| **m** Credit balance: If line 9l is greater than line 9e, enter the difference | | | 9m | 1514481 |
| **n** Funding deficiency: If line 9e is greater than line 9l, enter the difference | | | 9n | |

| | | |
|---|---|---|
| **9 o** Current year's accumulated reconciliation account: | | |
| (1) Due to waived funding deficiency accumulated prior to the 2018 plan year | 9o(1) | 0 |
| (2) Due to amortization bases extended and amortized using the interest rate under section 6621(b) of the Code: | | |
| (a) Reconciliation outstanding balance as of valuation date | 9o(2)(a) | 0 |
| (b) Reconciliation amount (line 9c(3) balance minus line 9o(2)(a)) | 9o(2)(b) | 0 |
| (3) Total as of valuation date | 9o(3) | 0 |
| **10** Contribution necessary to avoid an accumulated funding deficiency. (See instructions.) | 10 | |
| **11** Has a change been made in the actuarial assumptions for the current plan year? If "Yes," see instructions. | | ☒ Yes ☐ No |

| SCHEDULE R (Form 5500) | Retirement Plan Information | OMB No. 1210-0110 |
|---|---|---|
| Department of the Treasury Internal Revenue Service<br>Department of Labor Employee Benefits Security Administration<br>Pension Benefit Guaranty Corporation | This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).<br>▶ **File as an attachment to Form 5500.** | **2018**<br>**This Form is Open to Public Inspection.** |

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

**A** Name of plan
ARIZONA BRICKLAERS PENSION TRUST FUND

**B** Three-digit plan number (PN) ▶ 001

**C** Plan sponsor's name as shown on line 2a of Form 5500
BOARD OF TRUSTEES - ARIZONA BRICKLAYERS PENSION TRUST FUND

**D** Employer Identification Number (EIN)
51-6119487

## Part I Distributions

**All references to distributions relate only to payments of benefits during the plan year.**

**1** Total value of distributions paid in property other than in cash or the forms of property specified in the instructions ............ **1** 

**2** Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits):

EIN(s): ____________________ ____________________

**Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.**

**3** Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year ............ **3** 0

## Part II Funding Information

(If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)

**4** Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ............ ☐ Yes ☐ No ☒ N/A

**If the plan is a defined benefit plan, go to line 8.**

**5** If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. **Date:** Month ________ Day ________ Year ________

**If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.**

**6 a** Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) ............ **6a** 

**b** Enter the amount contributed by the employer to the plan for this plan year ............ **6b** 

**c** Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount) ............ **6c** 

**If you completed line 6c, skip lines 8 and 9.**

**7** Will the minimum funding amount reported on line 6c be met by the funding deadline? ............ ☐ Yes ☐ No ☐ N/A

**8** If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ............ ☐ Yes ☐ No ☒ N/A

## Part III Amendments

**9** If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box ............ ☐ Increase ☐ Decrease ☐ Both ☒ No

## Part IV ESOPs

(see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.

**10** Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ............ ☐ Yes ☐ No

**11 a** Does the ESOP hold any preferred stock? ............ ☐ Yes ☐ No

**b** If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ............ ☐ Yes ☐ No

**12** Does the ESOP hold any stock that is not readily tradable on an established securities market? ............ ☐ Yes ☐ No

## Part V Additional Information for Multiemployer Defined Benefit Pension Plans

**13** Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

**a** Name of contributing employer RECON REFRACTORY CONSTRUCTION

**b** EIN 33-0429815 **c** Dollar amount contributed by employer 8752

**d** Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month 06 Day 30 Year 2019

**e** Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) 0.90
(2) Base unit measure: ☒ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify):

**a** Name of contributing employer JT THORPE AND SONS

**b** EIN 94-0925270 **c** Dollar amount contributed by employer 5123

**d** Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month 06 Day 30 Year 2019

**e** Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) 0.90
(2) Base unit measure: ☒ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): ____________

**a** Name of contributing employer M A G CONSTRUCTION

**b** EIN 86-0549748 **c** Dollar amount contributed by employer 24540

**d** Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month 06 Day 30 Year 2019

**e** Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) 0.90
(2) Base unit measure: ☒ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): ____________

**a** Name of contributing employer HUFF AND SONS CONSTRUCTION

**b** EIN 86-0363578 **c** Dollar amount contributed by employer 21135

**d** Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month 06 Day 30 Year 2019

**e** Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) 0.90
(2) Base unit measure: ☒ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): ____________

**a** Name of contributing employer

**b** EIN **c** Dollar amount contributed by employer

**d** Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month ______ Day ______ Year ______

**e** Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) ____________
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): ____________

**a** Name of contributing employer

**b** EIN **c** Dollar amount contributed by employer

**d** Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month ______ Day ______ Year ______

**e** Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) ____________
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): ____________

**14** Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

| | | |
|---|---|---|
| **a** The current year | **14a** | |
| **b** The plan year immediately preceding the current plan year | **14b** | |
| **c** The second preceding plan year | **14c** | |

**15** Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

| | | |
|---|---|---|
| **a** The corresponding number for the plan year immediately preceding the current plan year | **15a** | |
| **b** The corresponding number for the second preceding plan year | **15b** | |

**16** Information with respect to any employers who withdrew from the plan during the preceding plan year:

| | | |
|---|---|---|
| **a** Enter the number of employers who withdrew during the preceding plan year | **16a** | |
| **b** If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers | **16b** | |

**17** If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

## Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

**18** If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

**19** If the total number of participants is 1,000 or more, complete lines (a) through (c)

**a** Enter the percentage of plan assets held as:
Stock: ______% Investment-Grade Debt: ______% High-Yield Debt: ______% Real Estate: ______% Other: ______%

**b** Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

**c** What duration measure was used to calculate line 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify):

# ARIZONA BRICKLAYERS' PENSION TRUST FUND

## Financial Statements and Independent Auditor's Report

## For the Years Ended December 31, 2018 and 2017

## ARIZONA BRICKLAYERS' PENSION TRUST FUND

## CONTENTS

BALDWIN & BALDWIN PLLC
PO Box 65585
PHOENIX, ARIZONA 85082
(480) 736-9200

ROBERT H. BALDWIN
DAVID R. BALDWIN
PAMELA D. MULLINS

## INDEPENDENT AUDITOR'S REPORT

To the Board of Trustees of
Arizona Bricklayers Pension Trust Fund

We have audited the accompanying financial statements of Arizona Bricklayers Pension Trust Fund, which comprise the statements of net assets available for benefits as of December 31, 2018 and 2017, the related statements of changes in net assets available for benefits for the years then ended, and the statement of accumulated plan benefits as of December 31, 2017, the related statement of changes in accumulated plan benefits for the year then ended, and the related notes to the financial statements.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, information regarding the Plan's net assets available for benefits as of December 31, 2018 and changes therein for the year then ended and its financial status as of December 31, 2017, and changes therein for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## Report on Supplemental Information

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The supplemental schedules of *Schedule of Assets (Held at End of Year)* as of December 31, 2018 and the *Schedule of Reportable Transactions* for the year ended December 31, 2018 are presented for the purpose of additional analysis and are not a required part of the financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. Such information is the responsibility of the Plan's management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Baldwin & Baldwin PLLC

Phoenix, Arizona
August 1, 2019

## ARIZONA BRICKLAYERS' PENSION TRUST FUND
## Statements of Net Assets Available for Benefits
## December 31, 2018 and 2017

| | 2018 | 2017 |
|---|---|---|
| **Assets:** | | |
| Investments, at fair value: | | |
| Cash equivalents | $ 129,078 | $ 126,026 |
| Common collective trusts | 1,609,393 | 1,495,607 |
| 103-12 Investment Entities | 4,051,755 | 4,762,259 |
| Mutual funds | 20,742,186 | 24,687,766 |
| Total investments | 26,532,412 | 31,071,658 |
| Receivables: | | |
| Employer contributions | 7,568 | 9,760 |
| Interest and dividends | 12,163 | 7,442 |
| Total receivables | 19,731 | 17,202 |
| Prepaid expenses | 165,072 | 166,909 |
| Cash | 67,814 | 26,611 |
| Total assets | 26,785,029 | 31,282,380 |
| **Liabilities:** | | |
| Accounts payable | 54,649 | 59,968 |
| Total liabilities | 54,649 | 59,968 |
| **Net assets available for benefits:** | **$ 26,730,380** | **$ 31,222,412** |

The accompanying notes are an integral part of these financial statements.

## ARIZONA BRICKLAYERS' PENSION TRUST FUND
## Statements of Changes in Net Assets Available for Benefits
## For the Years Ended December 31, 2018 and 2017

| | 2018 | 2017 |
|---|---|---|
| **Additions to net assets attributed to:** | | |
| Investment (loss) income: | | |
| Net (depreciation) appreciation in fair value of investments | $ (2,996,691) | $ 3,522,016 |
| Interest | 1,727 | 1,295 |
| Dividends | 456,578 | 376,342 |
| Capital gains distributions | 568,381 | 488,097 |
| | (1,970,005) | 4,387,750 |
| Less: investment expenses | (114,119) | (114,765) |
| Net investment (loss) income | (2,084,124) | 4,272,985 |
| Withdrawal liability interest | - | 105,775 |
| Contributions from employer | 96,625 | 98,153 |
| Class action settlements | 1,689 | - |
| Total additions | (1,985,810) | 4,476,913 |
| **Deductions from net assets attributed to:** | | |
| Benefits paid directly to participants | 2,191,783 | 2,218,739 |
| Administrative expenses | 314,439 | 263,845 |
| Total deductions | 2,506,222 | 2,482,584 |
| **Net (decrease) increase in net assets** | **(4,492,032)** | **1,994,329** |
| Net assets at beginning of year | 31,222,412 | 29,228,083 |
| Net assets at end of year | $ 26,730,380 | $ 31,222,412 |

The accompanying notes are an integral part of these financial statements.

**ARIZONA BRICKLAYERS' PENSION TRUST FUND**
**Statement of Accumulated Plan Benefits**
**December 31, 2017**

| | |
|---|---|
| Actuarial present value of accumulated plan benefits | |
| Vested benefits: | |
| Participants currently receiving payments | $ 21,267,152 |
| Other participants | 10,543,056 |
| Total vested benefits | 31,810,208 |
| Non-vested benefits | 109,473 |
| **Total actuarial present value of accumulated plan benefits** | **$ 31,919,681** |

**Statement of Changes in Accumulated Plan Benefits**
**For the Year Ended December 31, 2017**

| | |
|---|---|
| Actuarial present value of accumulated plan benefits at beginning of year | $ 32,114,128 |
| Increase (decrease) during the year attributed to: | |
| Reduction in discount period | 2,016,444 |
| Benefits accumulated plus actuarial (gain) / loss | (2,768) |
| Benefit payments | (2,218,739) |
| Change in assumptions | 10,616 |
| Net decrease | (194,447) |
| **Actuarial present value of accumulated plan benefits at end of year** | **$ 31,919,681** |

The accompanying notes are an integral part of these financial statements.

## NOTE A – DESCRIPTION OF PLAN

The following description of the Arizona Bricklayers' Pension Trust Fund (the Plan) is provided for general information purposes only. Participants should refer to the Plan agreement for more complete information.

### *General*

The Plan was formed in 1960 under an agreement between the Arizona Masonry Contractors Association and the B.A.C.I.U. of A. No. 3 (the Union). The Plan is a defined benefit pension plan covering eligible employees of contributing employers, as defined in the Plan. It is subject to the provisions of the Employee Retirement Security Act of 1974 (ERISA).

The Plan is funded through employer contributions which are paid on the basis of a certain sum for each hour worked by participants covered by the collective bargaining agreement in effect between the Employer and the Union.

### *Administration of Plan*

The administration of the Plan is the responsibility of the Plan's board of trustees, which is comprised of union and employer trustees. The investments of the Plan are managed by several investment managers. Wells Fargo Bank serves as custodian of the Plan's investments.

### *Funding policy*

It is the funding policy of the Board of Trustees of the Plan to provide for contributions to be made to the Plan in amounts such that all participants' benefits will be fully provided for by the time they retire. A funding method change was approved in 2006 to be effective January 1, 2005. The actuarial value of assets was set to the market value of assets as of January 1, 2005. Thereafter, market value gains or losses are recognized over a five-year period. The Plan's contributions for 2017 exceeded the minimum funding requirements of ERISA as calculated by the Plan's actuary.

Although it has not expressed any intention to do so, the Board of Trustees has the right under the Plan to agree to discontinue contributions and to terminate the Plan at any time subject to the provisions set forth in ERISA.

### *Pension benefits*

Employees with ten or more years of service (or five years, if the participant has at least one year pension credit earned after January 1, 1993) are entitled to a regular pension payable monthly, beginning at normal retirement age (65). Effective January 1, 2004, the monthly pension amount per Pension Credit earned after December 31, 2003 has been reduced from $43.00 to $30.00. Effective for annuity starting dates on or after July 1, 2008, the $43 rate will apply through January 1, 2007 and the $30 rate will apply after January 1, 2007.

The Plan permits early retirement at ages 55-64 with at least ten years of service, the benefit amount otherwise payable being subject to reduction to account for the additional years of benefits payments. The regular and early retirement payments discussed above are guaranteed for a minimum of 36 months.

## NOTE A – DESCRIPTION OF PLAN – continued

Unless specifically rejected by the participant and consented to by the spouse, all pensions for married participants who retire at age 55 or older are paid in the form of a 50% joint and survivor annuity.

***Death and disability benefits***
The surviving spouse of a deceased vested participant who has not retired is eligible to receive a survivor's annuity. The survivor's annuity is payable for life; the monthly amount is 50% of the benefit the participant would have received had the participant retired on a husband-and-wife pension the day before the participant died. If the participant died prior to age 55, the survivor's annuity is deferred until the participant would have attained age 55 had the participant lived.

If a participant dies prior to retirement and the husband-and-wife pension has been rejected, the total amount of contributions credited to the participant's account is paid as a lump-sum to the designated beneficiary. If the husband-and-wife pension has not been rejected, the surviving spouse may (within a specified period of time) elect to receive the lump-sum payment instead of the lifetime monthly pension otherwise payable.

A participant who becomes totally and permanently disabled (1) for any type of work with at least 10 years of pension credit (or five years, for annuity starting dates on or after January 1, 2009), or (2) for work in the trade with at least 15 years of pension credit is entitled to receive a monthly disability benefit equal to a regular pension computed as if the participant were age 65 at the time of becoming totally disabled.

## NOTE B – SUMMARY OF ACCOUNTING POLICIES

The following are the significant accounting policies followed by the Plan.

***Basis of accounting***
The accompanying financial statements are prepared on the accrual basis of accounting. Under this method of accounting, additions and deductions to net assets available for benefits are identified with specific periods of time and are recorded as earned and incurred, respectively, without regard to the date of receipt or payment.

The Plan maintains its financial records using the modified accrual method of accounting, under which additions and deductions to net assets available for benefits are recognized when measurable and available to finance expenditures of the current period. Expenditures are generally recorded when the liability is paid. Adjustments are prepared at each year-end to adjust the financial records to the accrual method of accounting.

## NOTE B – SUMMARY OF ACCOUNTING POLICIES – continued

***Use of estimates***

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein, disclosure of contingent assets and liabilities, and the actuarial present value of accumulated plan benefits at the date of the financial statements, and changes therein. Actual results could differ from those estimates.

***Investment valuation and income recognition***

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note D for a discussion of fair value measurements. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net (depreciation) appreciation includes the Plan's gains and losses on investments bought and sold as well as held during the year.

***Contributions***

Contributions are recorded during each year based upon hours reported by employers. Employer contributions receivable is based upon actual contributions received subsequent to December 31, for hours worked prior to December 31, therefore there is no allowance for uncollectible receivables.

No provision has been made for subsequent receipt of additional delinquent moneys covering hours worked during December or prior months, as the financial effect is expected to be immaterial. Employer contributions are due by the 15th of the month following the month in which the hours were worked, amounts not paid by then are deemed delinquent.

***Payment of benefits***

Benefit payments to participants are recorded upon distribution.

***Actuarial present value of accumulated plan benefits***

Accumulated plan benefits are those future periodic payments, including lump sum distributions that are attributable under the Plan's provisions to the service participants have rendered. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated participants or their beneficiaries, (b) beneficiaries of participants who have died, and (c) present participants or their beneficiaries. Benefits under the Plan are based on pension credits earned by the participant. Benefits payable under all circumstances – retirement, death, disability, and inactive participants – are included, to the extent they are deemed attributable to participant service rendered to the valuation date.

## NOTE B – SUMMARY OF ACCOUNTING POLICIES – continued

The actuarial present value of accumulated plan benefits is determined by an actuary from Milliman, Inc. for the year ended December 31 2017 and an actuary from The Segal Company for the year ended December 31, 2016, and is that amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal or retirement) between the valuation date and the expected payment.

The significant actuarial assumptions used in the valuation as of December 31, 2017 were: (a) life expectancy of participants (the RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally from 2014 with mortality improvement using Scale MP-2015 for health participants and the RP-2014 Disabled Retiree Mortality Table was used for disabled participants), (b) retirement age assumptions (for active participants a percentage of participants reaching retirement age is assumed and varies from 6% of active participants at age 55 to 100% of active participants at age 65, inactive participants reaching retirement age is assumed and varies from 3% of inactive participants at age 55 to 100% of inactive participants at age 65), and (c) investment return (6.50%). During the year ended December 31, 2017, the actuary changed the assumption for decrement timing. Decrement timing changed from beginning of year for retirement and middle of year for all other decrements to middle of year for all decrements, except that retirement is assumed to occur at beginning of year at 100% retirement age. The effect of this change was to increase the benefit obligation by $10,616 which is included in the accompanying statements of accumulated plan benefits and changes in accumulated plan benefits. The foregoing actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits. The computations of the actuarial present value of accumulated plan benefits were made as of January 1, 2018. Had the valuations been performed as of December 31, there would be no material differences.

***Employers' withdrawal liability***
Were the Plan deemed to be terminated, withdrawing employers could be subject to a withdrawal liability for their share of any unfunded present value of vested benefits as of the last day of the preceding Plan year. The present value of vested benefits for the withdrawal liability is computed using PBGC interest rate assumptions which vary from the interest rate used in the Plan's annual actuarial valuations. The Plan's actuary determined that as of December 31, 2017, the actuarial present value of vested plan benefits for withdrawal liability purposes is $44,235,039.

***Subsequent events***
The Plan has evaluated subsequent events through August 1, 2019, the date the financial statements were available to be issued.

## NOTE C – PLAN TERMINATION

In the event the Plan terminates, the net assets of the Plan will be allocated, as prescribed by ERISA and its related regulation, generally to provide the following benefits in the order indicated:

1. Benefits attributable to participant contributions, taking into account those paid out before termination.
2. Annuity benefits that former participants or their beneficiaries have been receiving for at least three years, or that participants eligible to retire for that three-year period would have been receiving if they had retired with benefits in the normal form of annuity under the Plan. The priority amount is limited to the lowest benefit that was payable (or would have been payable) during those three years. The amount is further limited to the lowest benefit that would be payable under Plan provisions in effect at any time during the five years preceding Plan termination.
3. Other vested benefits insured by the Pension Benefit Guaranty Corporation (PBGC) (a U.S. government agency) up to the applicable limitations.
4. All other vested benefits (that is, vested benefits not insured by the PBGC).
5. All nonvested benefits.

Certain benefits under the Plan are insured by the PBGC if the Plan terminates. Generally, the PBGC guarantees most vested normal age retirement benefits, early retirement benefits, and certain disability and survivors pensions. However, the PBGC does not guarantee all types of benefits under the Plan, and the amount of benefit protection is subject to certain limitations. Vested monthly benefits are guaranteed at $11, plus 75% of the next $33 of the accrual rate, times the number of participant's years of service credit.

There is a statutory ceiling on the amount of any individual's monthly benefit that the PBGC guarantees. A benefit increase which has been in effect under the Plan for less than 60 months is not guaranteed by the PBGC, even though the total benefits may fall under the aforementioned ceiling.

Whether all participants receive their benefits should the Plan terminate at some future time will depend on the sufficiency, at that time, of the Plan's net assets to provide for accumulated benefit obligations and may also depend on the level of benefits guaranteed by the PBGC.

## NOTE D – FAIR VALUE MEASUREMENTS

Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 820, *Fair Value Measurements and Disclosures*, provides the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy are described as follows:

## NOTE D – FAIR VALUE MEASUREMENTS – continued

- Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.
- Level 2 – Inputs to the valuation methodology include
  - Quoted prices for similar assets or liabilities in active markets
  - Quoted prices for identical or similar assets or liabilities in inactive markets
  - Inputs other than quoted prices that are observable for the asset or liability
  - Inputs that are derived principally from or corroborated by observable market data by correlation or other means

  If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.
- Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2018 and 2017.

- *Cash and equivalents* – Valued at the closing price reported in the active market in which the individual security is traded.
- *Mutual funds* – Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the SEC. These funds are required to publish their daily net asset value (NAV) and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.
- *Common collective trusts and 103-12 investment entities* – Valued at net asset value (NAV) of units held. The NAV is used as a practical expedient to estimate fair value. The NAV is based on the fair value of the underlying investments held by the Plan less its share of liabilities. This practical expedient is not used when it is determined to be probable that the Plan will sell the investment for an amount different than the reported NAV.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

## NOTE D – FAIR VALUE MEASUREMENTS – continued

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2018 and 2017:

| | Assets at Fair Value as of December 31, 2018 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| Cash and equivalents | $ 129,078 | $ - | $ - | $ 129,078 |
| Mutual funds | 20,742,186 | - | - | 20,742,186 |
| Total assets in the fair value hierarchy | 20,871,264 | - | - | 20,871,264 |
| Investments measured at NAV: | | | | |
| Common, collective trusts | - | - | - | 1,609,393 |
| 103-12 Investment entities | - | - | - | 4,051,755 |
| Investments at fair value | $ 20,871,264 | $ - | $ - | $ 26,532,412 |

| | Assets at Fair Value as of December 31, 2017 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| Cash and equivalents | $ 126,026 | $ - | $ - | $ 126,026 |
| Mutual funds | 24,687,766 | - | - | 24,687,766 |
| Total assets in the fair value hierarchy | 24,813,792 | - | - | 24,813,792 |
| Investments measured at NAV: | | | | |
| Common, collective trusts | - | - | - | 1,495,607 |
| 103-12 Investment entities | - | - | - | 4,762,259 |
| Investments at fair value | $ 24,813,792 | $ - | $ - | $ 31,071,658 |

***Transfers between levels***

The availability of observable market data is monitored to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions or model-based valuation techniques may require the transfer of financial instruments from one fair value level to another. In such instances, the transfer is reported at the beginning of the reporting period.

We evaluate the significance of transfers between levels based upon the nature of the financial instrument and size of the transfer relative to total net assets available for benefits. For the years ended December 31, 2018 and 2017, there were no significant transfers in or out of levels 1, 2 or 3.

The Plan also holds other assets and liabilities not measured at fair value on a recurring basis, including accrued interest and dividends, prepaid expenses, accounts payable, and other receivables and liabilities. The fair value of these assets approximates the carrying amounts in the accompanying financial statements due to the short maturities of the instruments.

## NOTE D – FAIR VALUE MEASUREMENTS – continued

***Fair value of investments that calculate net asset value***

The following table summarizes investments measured at fair value based on net asset value (NAVs) per share as of December 31, 2018 and 2017, respectively:

| December 31, 2018 | Fair Value | Unfunded Commitments | Redemption Frequency (if curently) eligible) | Redemption Notice Period |
|---|---|---|---|---|
| Common, collective trust | | | | |
| ASB Allegiance Real Estate Fund (a) | $ 1,609,393 | $ - | Quarterly | None |
| 103-12 Investment entities | | | | |
| Rothschild Small/Mid Cap Fund (b) | $ 1,163,967 | $ - | Monthly | 5 Days |
| PanAgora Risk Parity Multi-Asset Fund (c) | $ 2,887,788 | $ - | Bi-monthly | 6 Days |

| December 31, 2017 | Fair Value | Unfunded Commitments | Redemption Frequency (if curently) eligible) | Redemption Notice Period |
|---|---|---|---|---|
| Common, collective trust | | | | |
| ASB Allegiance Real Estate Fund (a) | $ 1,495,607 | $ - | Quarterly | None |
| 103-12 Investment entities | | | | |
| Rothschild Small/Mid Cap Fund (b) | $ 1,658,526 | $ - | Monthly | 5 Days |
| PanAgora Risk Parity Multi-Asset Fund (c) | $ 3,103,733 | $ - | Bi-monthly | 6 Days |

*(a)* ASB Allegiance Real Estate Fund is a common collective trust with an objective to provide employee benefit plans access to systematic investment in real property on a commingled basis with other such plans. The real estate investments of the Plan may consist of debt or equity interest of any kind in or relating to real property as the Trustee (Chevy Chase Trust Company) may in its discretion select, including but not limited to: (1) interests in limited partnerships or other entity forms which invest in real property, (2) loans or debt obligations secured by mortgages or other interests in real property, (3) mortgages on the fee, leasehold, or other interests in real property, or (4) equity interests or equity participation in improved or unimproved real property, either in the form of direct ownership, or other forms of interest in the entity owning or developing such real property.

*(b)* Rothschild Small/Mid Cap Fund is a 103-12 investment entity who's objective is to achieve long-term capital appreciation by investing in a portfolio of small and medium capitalization companies defined as companies whose market capitalizations fall within the range of the Russell 2500® index at the time of purchase. The Fund invests at least 95% of its assets in equity securities. The Fund may also invest in exchange-traded funds whose underlying investments are primarily equity securities that fall within the above noted capitalization range. The remainder of the Funds' assets may be invested in fixed income securities, repurchase agreements, money market securities, and money market funds. Notice for redemption must be provided to the Fund at least 5 days prior to calendar month-end with payments made on the 5$^{th}$ business day of the month.

## NOTE D – FAIR VALUE MEASUREMENTS – continued

(c) *PanAgora Risk Parity Multi-Asset Fund* is a 103-12 investment entity. The fund's objective is to balance risk exposures in a given portfolio in an optimal fashion, so as to avoid risk concentration – be it across classes, or within asset class using hedging instruments. Redemption is permitted bi-monthly with a notice period of 6 days.

## NOTE E – RISKS AND UNCERTAINTIES

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the statement of net assets available for benefits.

Plan contributions are made, and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates and participant data, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

The Plan is funded by contributions from employers who work mainly in Arizona and are signatory to the collective bargaining agreement.

Amounts held in financial institutions occasionally are in excess of the Federal Deposit Insurance Corporation (FDIC) and Securities Investor Protection Corporation limits. The cash and equivalents in a Wells Fargo Bank money market account is not insured or guaranteed by the FDIC or any other government agency. The Plan deposits its cash with high quality financial institutions, and management believes the Plan is not exposed to significant credit risk on those amounts.

## NOTE F – TAX STATUS

The Plan obtained its latest determination letter on July 17, 2015, in which the Internal Revenue Service states that the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue code (IRC). The Plan has been amended since receiving the determination letter. However, the board of trustees believe that the Plan is currently designed and being operated in compliance with the applicable requirements of the IRC.

Accounting principles generally accepted in the United States of America require plan management to evaluate tax positions taken by the Plan and recognize a tax liability if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The plan administrator believes it is no longer subject to income tax examinations for years prior to 2015.

## NOTE G – TRANSACTIONS WITH PARTIES IN INTEREST

Certain Plan investments represent money market funds managed by Wells Fargo Bank. Wells Fargo Bank is a custodial agent as defined by the Plan, and therefore, these transactions qualify as party-in-interest transactions under ERISA. Fees paid by the Plan for investment management services were included as a reduction of the return on each fund. The Plan also contracts with a third party administrator, consultants, attorneys, and auditors who are all known to be parties in interest.

## NOTE H – INVESTMENT AND ADMINISTRATIVE EXPENSES

The following table presents investment and administrative expenses for the years ended December 31, 2018 and 2017:

| | 2018 | 2017 |
|---|---|---|
| Investment expenses: | | |
| Custodial fees | $ 20,406 | $ 20,643 |
| Investment evaluation fees | 50,838 | 48,893 |
| Investment management fees | 42,875 | 45,229 |
| Total investment expenses | $ 114,119 | $ 114,765 |

| | 2018 | 2017 |
|---|---|---|
| Administrative expenses: | | |
| Administrative fees and expenses | $ 84,641 | $ 83,829 |
| Audit and payroll compliance fees | 12,780 | 13,850 |
| Bank fees | 2,775 | 2,965 |
| Consultant fees | 54,629 | 58,500 |
| Insurance expense | 36,872 | 37,217 |
| Legal fees | 107,393 | 55,565 |
| Miscellaneous expenses | 2,118 | 526 |
| Postage | 3,501 | 3,577 |
| Preservation of records | 2,536 | 2,604 |
| Printing and supplies | 6,996 | 3,744 |
| Travel, conference and meeting expenses | 198 | 1,468 |
| Total administrative expenses | $ 314,439 | $ 263,845 |

## NOTE I – PENSION PROTECTION ACT AND MULTIEMPLOYER PENSION REFORM ACT FILING OF CRITICAL STATUS

For the year beginning January 1, 2016, the Plan was certified by its actuary to be in endangered status with a projection to be in critical status within 5 years, within the meaning of the Pension Protection Act of 2006 (PPA) as updated by the Multiemployer Pension Reform Act of 2014 (MPRA). Under the PPA as updated by MPRA, the trustees are permitted to, and have elected to, classify the Plan as in critical status for 2016, therefore requiring the trustees of the Plan to adopt a rehabilitation plan and establish steps and benchmarks to improve the Plan's funding status. The trustees adopted a rehabilitation plan, as required by the PPA as updated by the MPRA, on May 5, 2016. The rehabilitation plan consists of benefit changes effective January 1, 2017.

# SUPPLEMENTAL INFORMATION

# ARIZONA BRICKLAYERS' PENSION TRUST FUND
## Supplemental Information
## Schedule of Assets (Held at End of Year)
## December 31, 2018

**EIN # 51-6119487 - Plan 001**
**Form 5500 - Schedule H, Line 4i:**

| (A) | (B) | (C) | | | (D) | (E) |
|---|---|---|---|---|---|---|
| | | Description | | | | |
| | Identity of Issue, Borrower, Lessor or Similar Party | Maturity Date | Interest Rate | Units or Par Value | Ending Balance - Cost | Current Value |
| | **CASH EQUIVALENTS:** | | | | | |
| | WFB Institutional Bank Deposit account | N/A | N/A | 129,078 | $ 129,078 | $ 129,078 |
| | **Total Cash Equivalents** | | | | 129,078 | 129,078 |
| | **COMMON COLLECTIVE TRUSTS:** | | | | | |
| | ASB Allegiance Real Estate Fund | N/A | N/A | 1,037 | 840,927 | 1,609,393 |
| | **Total Common Collective Trusts** | | | | 840,927 | 1,609,393 |
| | **103-12 INVESTMENT ENTITIES** | | | | | |
| | Rothschild Small/Mid Cap Fund | N/A | N/A | 963,862 | 977,406 | 1,163,967 |
| | PanAgora Risk Parity Multi-Asset Fund | N/A | N/A | 176,070 | 3,000,000 | 2,887,788 |
| | **Total 103-12 Investment Entities** | | | | 3,977,406 | 4,051,755 |
| | **MUTUAL FUNDS** | | | | | |
| | American Funds Europacific Growth Fund | N/A | N/A | 83,058 | 3,797,149 | 3,736,789 |
| | Dodge & Cox International Stock Fund | N/A | N/A | 101,715 | 4,105,196 | 3,754,292 |
| | John Hancock Disciplined Value Fund | N/A | N/A | 116,563 | 2,180,876 | 2,087,646 |
| | Metropolitan West Total Return Bond Fund | N/A | N/A | 330,138 | 3,586,808 | 3,430,130 |
| | Natixis Loomis Sayles Growth Fund | N/A | N/A | 150,625 | 1,733,316 | 2,153,937 |
| | Vanguard 500 Index Fund | N/A | N/A | 9,140 | 1,339,308 | 2,115,369 |
| | Carillon Reams Core Plus Bond Fund | N/A | N/A | 110,742 | 3,539,246 | 3,464,023 |
| | **Total Mutual Funds** | | | | 20,281,899 | 20,742,186 |
| | **TOTAL INVESTMENTS** | | | | **$ 25,229,310** | **$ 26,532,412** |

# ARIZONA BRICKLAYERS' PENSION TRUST FUND
## Supplemental Information
## Schedule of Reportable Transactions
## For the Year Ended December 31, 2018

**EIN 51-6119487 - Plan 001**
**Form 5500 Schedule H - Line 4j:**

| (A) Identity of Party Involved | (B) Description of Asset | (C) Purchase Price | (D) Selling Price | (E) Lease Rental | (F) Expenses Incurred | (G) Cost of Asset | (H) Value on Date of Transaction | (I) Net Gain or (Loss) |
|---|---|---|---|---|---|---|---|---|
| **SINGLE TRANSACTION BY ISSUE:** | | | | | | | | |
| No transactions qualified for this report | | | | | | | | |
| **SERIES OF TRANSACTIONS BY BROKER:** | | | | | | | | |
| No transactions qualified for this report | | | | | | | | |
| **SERIES OF TRANSACTIONS BY ISSUE:** | | | | | | | | |
| WFB Institutional Bank Deposit account | Money Market Fund | $ 2,582,898 | $ - | $ - | $ - | $ 2,582,898 | $ 2,582,898 | $ - |
| WFB Institutional Bank Deposit account | Money Market Fund | $ - | $ 2,580,659 | $ - | $ - | $ 2,580,659 | $ 2,580,659 | $ - |
| **SINGLE TRANSACTIONS BY BROKER:** | | | | | | | | |
| No transactions qualified for this report | | | | | | | | |

# ARIZONA BRICKLAYERS' PENSION TRUST FUND
## Supplemental Information
## Schedule of Assets (Held at End of Year)
## December 31, 2018

**EIN # 51-6119487 - Plan 001**
**Form 5500 - Schedule H, Line 4i:**

| (A) | (B) | (C) | | | (D) | (E) |
|---|---|---|---|---|---|---|
| | | Description | | | | |
| | Identity of Issue, Borrower, Lessor or Similar Party | Maturity Date | Interest Rate | Units or Par Value | Ending Balance - Cost | Current Value |
| | **CASH EQUIVALENTS:** | | | | | |
| | WFB Institutional Bank Deposit account | N/A | N/A | 129,078 | $ 129,078 | $ 129,078 |
| | **Total Cash Equivalents** | | | | 129,078 | 129,078 |
| | **COMMON COLLECTIVE TRUSTS:** | | | | | |
| | ASB Allegiance Real Estate Fund | N/A | N/A | 1,037 | 840,927 | 1,609,393 |
| | **Total Common Collective Trusts** | | | | 840,927 | 1,609,393 |
| | **103-12 INVESTMENT ENTITIES** | | | | | |
| | Rothschild Small/Mid Cap Fund | N/A | N/A | 963,862 | 977,406 | 1,163,967 |
| | PanAgora Risk Parity Multi-Asset Fund | N/A | N/A | 176,070 | 3,000,000 | 2,887,788 |
| | **Total 103-12 Investment Entities** | | | | 3,977,406 | 4,051,755 |
| | **MUTUAL FUNDS** | | | | | |
| | American Funds Europacific Growth Fund | N/A | N/A | 83,058 | 3,797,149 | 3,736,789 |
| | Dodge & Cox International Stock Fund | N/A | N/A | 101,715 | 4,105,196 | 3,754,292 |
| | John Hancock Disciplined Value Fund | N/A | N/A | 116,563 | 2,180,876 | 2,087,646 |
| | Metropolitan West Total Return Bond Fund | N/A | N/A | 330,138 | 3,586,808 | 3,430,130 |
| | Natixis Loomis Sayles Growth Fund | N/A | N/A | 150,625 | 1,733,316 | 2,153,937 |
| | Vanguard 500 Index Fund | N/A | N/A | 9,140 | 1,339,308 | 2,115,369 |
| | Carillon Reams Core Plus Bond Fund | N/A | N/A | 110,742 | 3,539,246 | 3,464,023 |
| | **Total Mutual Funds** | | | | 20,281,899 | 20,742,186 |
| | **TOTAL INVESTMENTS** | | | | **$ 25,229,310** | **$ 26,532,412** |

AZ BRK 000425

# ARIZONA BRICKLAYERS' PENSION TRUST FUND
## Supplemental Information
## Schedule of Reportable Transactions
## For the Year Ended December 31, 2018

**EIN 51-6119487 - Plan 001**
**Form 5500 Schedule H - Line 4j:**

| (A) Identity of Party Involved | (B) Description of Asset | (C) Purchase Price | (D) Selling Price | (E) Lease Rental | (F) Expenses Incurred | (G) Cost of Asset | (H) Value on Date of Transaction | (I) Net Gain or (Loss) |
|---|---|---|---|---|---|---|---|---|
| **SINGLE TRANSACTION BY ISSUE:** | | | | | | | | |
| No transactions qualified for this report | | | | | | | | |
| **SERIES OF TRANSACTIONS BY BROKER:** | | | | | | | | |
| No transactions qualified for this report | | | | | | | | |
| **SERIES OF TRANSACTIONS BY ISSUE:** | | | | | | | | |
| WFB Institutional Bank Deposit account | Money Market Fund | $ 2,582,898 | $ - | $ - | $ - | $ 2,582,898 | $ 2,582,898 | $ - |
| WFB Institutional Bank Deposit account | Money Market Fund | $ - | $ 2,580,659 | $ - | $ - | $ 2,580,659 | $ 2,580,659 | $ - |
| **SINGLE TRANSACTIONS BY BROKER:** | | | | | | | | |
| No transactions qualified for this report | | | | | | | | |

# 2018 Schedule MB, line 4b -
# Illustration Supporting Actuarial Certification of Status
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001



EIN 51-6119487 / 001

**March 30, 2018**

**Illustration Supporting Actuarial Certification of Status (Schedule MB, line 4b)**
**ACTUARIAL STATUS CERTIFICATION AS OF JANUARY 1, 2018 UNDER IRC SECTION 432**

This is to certify that Segal Consulting, a Member of The Segal Group, Inc. ("Segal") has prepared an actuarial status certification under Internal Revenue Code Section 432 for the Arizona Bricklayers Pension Trust Fund as of January 1, 2018 in accordance with generally accepted actuarial principles and practices. It has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing and compliance requirements under federal law. This certification may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The measurements shown in this actuarial certification may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); differences in statutory interpretation and changes in plan provisions or applicable law.

This certification is based on the January 1, 2017 actuarial valuation, dated January 22, 2018. This certification reflects the changes in the law made by the Multiemployer Pension Reform Act of 2014 (MPRA). Additional assumptions required for the projections (including those under MPRA), and sources of financial information used are summarized in Exhibit VI.

Segal Consulting does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretations on which this certification is based reflect Segal's understanding as an actuarial firm.

This certification was based on the assumption that the Plan was qualified as a multiemployer plan for the year.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial certification is complete and accurate. As required by IRC Section 432(b)(3)(B)(iii), the projected industry activity is based on information provided by the plan sponsor. In my opinion, the projections are based on reasonable actuarial estimates, assumptions and methods that (other than projected industry activity) offer my best estimate of anticipated experience under the Plan.

Laura L. Mitchell, FCA, MAAA
Vice President & Consulting Actuary
Enrolled Actuary No. 17-06098

# 2018 Schedule MB, line 4b -
# Illustration Supporting Actuarial Certification of Status
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001



**Certificate Contents**

# 2018 Schedule MB, line 4b -
# Illustration Supporting Actuarial Certification of Status
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001

**Actuarial Status Certification as of January 1, 2018 under IRC Section 432 for the Arizona Bricklayers Pension Trust Fund**

EIN 51-6119487 / 001

**EXHIBIT I**
**Status Determination as of January 1, 2018**

| Status | Condition | Component Result | Final Result |
|---|---|---|---|
| **Critical Status:** | | | |
| **I. Initial critical status tests:** | | | |
| C1. | A funding deficiency is projected in four years? | Yes | Yes |
| C2. (a) | A funding deficiency is projected in five years, | Yes | |
| (b) | AND the present value of vested benefits for non-actives is more than present value of vested benefits for actives, | Yes | |
| (c) | AND the normal cost plus interest on unfunded actuarial accrued liability (unit credit basis) is greater than contributions for current year? | Yes | Yes |
| C3. (a) | A funding deficiency is projected in five years, | Yes | |
| (b) | AND the funded percentage is less than 65%? | No | No |
| C4. (a) | The funded percentage is less than 65%, | No | |
| (b) | AND the present value of assets plus contributions is less than the present value of benefit payments and administrative expenses over seven years? | N/A | No |
| C5. | The present value of assets plus contributions is less than the present value of benefit payments and administrative expenses over five years? | No | No |
| **II. Emergence test:** | | | |
| C6. (a) | Was in critical status for the immediately preceding plan year, | Yes | |
| (b) | AND EITHER a funding deficiency is projected for the plan year or any of the next nine plan years, without regard to the use of the shortfall method but taking into account any extension of amortization periods under ERISA Section 304(d)(2) or ERISA Section 304 as in effect prior to PPA'06, | Yes | |
| (c) | OR insolvency is projected for the current year or any of the 30 succeeding plan years? | Yes | |
| | **Plan did NOT emerge?** | | Yes |

# 2018 Schedule MB, line 4b -
# Illustration Supporting Actuarial Certification of Status
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001

**Actuarial Status Certification as of January 1, 2018 under IRC Section 432 for the Arizona Bricklayers Pension Trust Fund**

EIN 51-6119487 / 001

**EXHIBIT I (continued)**
**Status Determination as of January 1, 2018**

| Status | Condition | Component Result | Final Result |
|---|---|---|---|
| **III. In Critical Status? (If C1-C6 is Yes, then Yes)** | | | Yes |
| **IV. Determination of critical and declining status:** | | | |
| C7. (a) | Any of (C1) through (C5) are Yes? | Yes | Yes |
| (b) | AND EITHER Insolvency is projected within 15 years? | No | No |
| (c) | OR | | |
| (i) | The ratio of inactives to actives is at least 2 to 1, | Yes | |
| (ii) | AND insolvency is projected within 20 years? | No | No |
| (d) | OR | | |
| (i) | The funded percentage is less than 80%, | No | |
| (ii) | AND insolvency is projected within 20 years? | No | No |
| **In Critical and Declining Status?** | | | No |
| **Endangered Status:** | | | |
| E1. (a) | Is not in critical status, | No | |
| (b) | AND the funded percentage is less than 80%? | N/A | No |
| E2. (a) | Is not in critical status, | No | |
| (b) | AND a funding deficiency is projected in seven years? | N/A | No |
| **In Endangered Status? (Yes when either (E1) or (E2) is Yes)** | | | No |
| **In Seriously Endangered Status? (Yes when BOTH (E1) and (E2) are Yes)** | | | No |
| **Neither Critical Status Nor Endangered Status:** | | | |
| **Neither Critical nor Endangered Status?** | | | No |

This certification also notifies the IRS that the Plan is making the scheduled progress in meeting the requirements of its rehabilitation plan, based on information received from the sponsor and based on the annual standards of the rehabilitation plan. The annual standards of the rehabilitation plan set the Unaudited Fund Assets as $23,000,000 as of January 1, 2018 and $22,500,000 as of January 1, 2019. The projected assets as of each of those dates exceeds the annual standard.

## 2018 Schedule MB, line 4b -
## Illustration Supporting Actuarial Certification of Status
## Arizona Bricklayers Pension Trust Fund
## EIN 51-6119487 PN 001



**EXHIBIT II**
**Summary of Actuarial Valuation Projections**

The actuarial factors as of January 1, 2018 (based on projections from the January 1, 2017 valuation certificate):

| | | | |
|---|---|---|---|
| **I. Financial Information** | | | |
| 1. Market value of assets | | | $31,235,118 |
| 2. Actuarial value of assets | | | 30,264,701 |
| 3. Reasonably anticipated contributions | | | |
| a. Upcoming year | | | 45,000 |
| b. Present value for the next five years | | | 193,083 |
| c. Present value for the next seven years | | | 254,824 |
| 4. Reasonably anticipated withdrawal liability payments | | | 0 |
| 5. Projected benefit payments | | | 2,384,818 |
| 6. Projected administrative expenses (beginning of year) | | | 275,487 |
| **II. Liabilities** | | | |
| 1. Present value of vested benefits for active participant | | | 914,663 |
| 2. Present value of vested benefits for non-active participants | | | 31,012,214 |
| 3. Total unit credit accrued liability | | | 31,950,330 |
| 4. Present value of payments | **Benefit Payments** | **Administrative Expenses** | **Total** |
| a. Next five years | $10,332,176 | $1,219,250 | $11,551,426 |
| b. Next seven years | 13,698,426 | 1,609,123 | 15,307,549 |
| 5. Unit credit normal cost plus expenses | | | 318,866 |
| 6. Ratio of inactive participants to active participants | | | 12.6600 |
| **III. Funded Percentage (I.2)/(II.3)** | | | 94.7% |
| **IV. Funding Standard Account** | | | |
| 1. Credit Balance as of the end of prior year | | | $2,569,449 |
| 2. Years to projected funding deficiency | | | 3 |
| **V. Projected Year of Emergence** | | | N/A |
| **VI. Years to Projected Insolvency** | | | 23 |

# 2018 Schedule MB, line 4b -
# Illustration Supporting Actuarial Certification of Status
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001

**Actuarial Status Certification as of January 1, 2018 under IRC Section 432 for the Arizona Bricklayers Pension Trust Fund**

EIN 51-6119487 / 001

**EXHIBIT III**

**Funding Standard Account Projections**

The table below presents the Funding Standard Account Projections for the Plan Years beginning January 1.

| | Year Beginning January 1, | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** |
| 1. Credit balance (BOY) | $1,552,118 | $2,569,449 | $1,475,083 | $396,120 | ($632,977) | ($1,669,612) | ($2,769,629) | ($3,893,487) | ($4,377,514) | ($5,283,909) |
| 2. Interest on (1) | 100,888 | 167,014 | 95,880 | 25,748 | (41,144) | (108,525) | (180,026) | (253,077) | (284,538) | (343,454) |
| 3. Normal cost | 37,213 | 43,379 | 43,487 | 43,596 | 43,705 | 43,814 | 43,924 | 44,034 | 44,144 | 44,254 |
| 4. Administrative expenses | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 |
| 5. Net amortization charges | 918,208 | 909,156 | 827,792 | 715,008 | 659,169 | 655,305 | 610,443 | (59,039) | 307,899 | 260,311 |
| 6. Interest on (3), (4) and (5) | 80,010 | 79,821 | 74,540 | 67,217 | 63,593 | 63,349 | 60,441 | 16,931 | 40,790 | 37,704 |
| 7. Expected contributions | 2,157,250 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 |
| 8. Interest on (7) | 70,111 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 |
| 9. Full-funding limit credit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. Credit balance (EOY): (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8) + (9) | $2,569,449 | $1,475,083 | $396,120 | ($632,977) | ($1,669,612) | ($2,769,629) | ($3,893,487) | ($4,377,514) | ($5,283,909) | ($6,198,656) |

| | **2027** | **2028** | **2029** | **2030** | **2031** | **2032** | **2033** | **2034** | **2035** |
|---|---|---|---|---|---|---|---|---|---|
| 1. Credit balance (BOY) | ($6,198,656) | ($7,059,571) | ($7,775,119) | ($8,432,952) | ($9,203,873) | ($9,541,298) | ($10,085,529) | ($10,674,970) | ($11,308,482) |
| 2. Interest on (1) | (402,913) | (458,872) | (505,383) | (548,142) | (598,252) | (620,184) | (655,559) | (693,873) | (735,051) |
| 3. Normal cost | 44,365 | 44,476 | 44,587 | 44,698 | 44,810 | 44,922 | 45,034 | 45,147 | 45,260 |
| 4. Administrative expenses | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 | 275,487 |
| 5. Net amortization charges | 153,824 | (35,326) | (133,301) | (67,376) | (521,578) | (348,100) | (338,977) | (333,685) | (329,559) |
| 6. Interest on (3), (4) and (5) | 30,789 | 18,502 | 12,140 | 16,433 | (13,083) | (1,799) | (1,199) | (847) | (572) |
| 7. Expected contributions | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 |
| 8. Interest on (7) | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 | 1,463 |
| 9. Full-funding limit credit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. Credit balance (EOY): (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8) + (9) | ($7,059,571) | ($7,775,119) | ($8,432,952) | ($9,203,873) | ($9,541,298) | ($10,085,529) | ($10,674,970) | ($11,308,482) | ($11,987,686) |

# 2018 Schedule MB, line 4b -
# Illustration Supporting Actuarial Certification of Status
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001

**Actuarial Status Certification as of January 1, 2018 under IRC Section 432 for the Arizona Bricklayers Pension Trust Fund**

EIN 51-6119487 / 001

**EXHIBIT IV**
**Funding Standard Account – Projected Bases Assumed Established After January 1, 2017**

**Schedule of Funding Standard Account Bases**

| Type of Base | Date Established | Base Established | Amortization Period | Amortization Payment |
|---|---|---|---|---|
| Actuarial Loss | 1/ 1/2018 | $55,110 | 15 | $5,503 |
| Actuarial Gain | 1/ 1/2019 | (53,009) | 15 | (5,294) |
| Actuarial Gain | 1/ 1/2020 | (53,663) | 15 | (5,359) |
| Actuarial Gain | 1/ 1/2021 | (556,338) | 15 | (55,557) |
| Actuarial Gain | 1/ 1/2022 | (531,006) | 15 | (53,027) |

# 2018 Schedule MB, line 4b -
# Illustration Supporting Actuarial Certification of Status
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001



**EXHIBIT VI**

**Actuarial Assumptions and Methodology**

The actuarial assumptions and plan of benefits are as used in the January 1, 2017 actuarial valuation certificate, dated January 22, 2018, except as specifically described below. We also assumed that experience would emerge as projected, except as described below. The calculations are based on a current understanding of the requirements of ERISA Section 305 and IRC Section 432.

**Asset Information:** The financial information as of December 31, 2017 was based on an unaudited financial statement provided by the Fund Administrator.

For projections after that date, the assumed administrative expenses and the benefit payments were projected based on the January 1, 2017 actuarial valuation. The projected net investment return was assumed to be 6.5% of the average market value of assets for Plan Years beginning after December 31, 2017. Any resulting investment gains or losses due to the operation of the asset valuation method are amortized over 15 years in the Funding Standard Account.

**Projected Industry Activity:** As required by Internal Revenue Code Section 432, assumptions with respect to projected industry activity are based on information provided by the plan sponsor. Based on this information, the number of active participants is assumed to be 50 and, on the average, contributions will be made for each active for 1,000 hours each year.

**Future Normal Costs:** Based on the assumed industry activity and the unit credit cost method, the Normal Cost is adjusted to reflect the assumed number of active participants. It is also increased by 0.25% per year due to generational mortality being assumed.

**Solvency Projection:** No new entrants are projected to receive benefit payments.

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The ultimate cost of a pension plan is the excess of actual benefits and administrative expenses paid over actual net investment return on plan assets during the plan's existence until the last payment has been made to the last participant. A plan's "actuarial cost method" determines the expected incidence of actuarial costs by allocating portions of the ultimate cost to each plan year. The cost method is thus a budgeting tool to help ensure that a plan will be adequately and systematically funded and accounted for. Annual contributions are also affected by a plan's "asset valuation method" (as well as plan provisions, actuarial assumptions, and actual plan demographic and investment experience each year).

## Actuarial Cost Method

The actuarial cost method used for determining the Plan's ERISA funding requirements and the FASB ASC Topic 960 values is the Unit Credit method. Under this method, an accrued benefit is determined at each active participant's assumed retirement age based on compensation and service at both the beginning and the end of the current year. The Plan's Normal Cost is the sum of the present value of the excess of each active participant's accrued benefit at the end of the current year over that at the beginning of the current year. The Plan's accrued liability is the sum of (a) the present value of each active participant's accrued benefit at the beginning of the current year plus (b) the present value of each inactive participant's benefits.

## Asset Valuation Method

Five-year smoothing method. The actuarial value of assets is equal to the market value of assets adjusted to recognize differences between the expected value of assets and the actual market value of assets over 5 years at a rate of 20% per year. The expected value of assets for the year is the market value of assets at the valuation date for the prior year brought forward with interest at the valuation rate to the current year plus contributions minus benefit payments, all adjusted with interest at the valuation rate to the valuation date for the current year. The actuarial value of assets cannot be less than 80% or more than 120% of the market value of assets.

## Changes in Actuarial Methods Since Prior Valuation

There has been a change in enrolled actuary for the plan and a change in the business organization providing the actuarial services to the plan. This change meets the requirements for automatic approval under Revenue Procedure 2000-40 Section 4.03.

# ECONOMIC ASSUMPTIONS

## Interest Rates

**ERISA minimum funding:** 6.50% per year (net of investment-related expenses)

**FASB ASC Topic 960:** 6.50% per year (net of investment-related expenses)

**Withdrawal liability:** To the extent the present value of vested benefits is matched by the market value of plan assets, the interest assumption is the PBGC interest rates for December of 2017 of 2.34% for the first 20 years and 2.63% thereafter. To the extent the present value of vested benefits is not matched by the market value of plan assets, the interest assumption utilized is the same as used for minimum funding (6.50%).

**Current Liability (RPA'94):** 2.98% per year, updated annually, as mandated by the IRS.

## Administrative Expenses

Expected expenses payable from the trust are explicitly loaded to the normal cost. For the current valuation, the loading for expenses (assumed to be payable mid-year) is $285,000.

## Mortality

**ERISA minimum funding, FASB ASC Topic 960, and withdrawal liability:**

Healthy Participants: RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally from 2014 with mortality improvement using Scale MP-2015.

Disabled Participants: RP-2014 Disabled Retiree Mortality Tables

**RPA '94 Current Liability:** RP-2014 Mortality Tables projected for mortality improvement, updated annually, as mandated by the IRS.

## Retirement

Annual rates of retirement are shown in the following table for active and terminated vested participants who are eligible to retire.

| Age | Active | Terminated Vested |
|---|---|---|
| 55 - 59 | 6.0% | 3.0% |
| 60 - 61 | 13.0 | 6.5 |
| 62 | 50.0 | 25.0 |
| 63 – 64 | 30.0 | 15.0 |
| 65+ | 100.0 | 100.0 |

## Termination

Annual rates of termination are based on age. Sample rates are shown in the following table.

| Age | Termination Rate |
|---|---|
| 25 | 43.5% |
| 30 | 37.2 |
| 35 | 33.6 |
| 40 | 31.8 |
| 45 | 31.0 |
| 50 | 31.2 |
| 55 | 27.0 |
| 60 | 27.3 |
| 65 | 0.0 |

Termination rates do not apply when a participant is eligible to retire. In addition, termination rates do not apply for determining the present value of vested benefits for withdrawal liability purposes.

## Disability

Annual rates of termination are based on age. Sample rates are shown in the following table.

| Age | Disability Rate |
|---|---|
| 25 | 0.04% |
| 30 | 0.06 |
| 35 | 0.07 |
| 40 | 0.11 |
| 45 | 0.18 |
| 50 | 0.30 |
| 55 | 0.50 |
| 60 | 0.81 |
| 65 | 0.00 |

Disability rates do not apply for determining the present value of vested benefits for withdrawal liability purposes.

## Decrement Timing

Decrements are assumed to occur at the middle of the year, except that retirement is assumed to occur at begininng of year at 100% retirement age.

## Form of Payment

Married participants are assumed to elect the 100% Husband-and-Wife form of payment.

Non-married participants are assumed to elect the life annuity form of payment.

## Projection of Future Service and Benefit Accruals

0.8333 Pension Credits per year.

## Marital Characteristics

**For participants not in pay status:** 75% of participants are assumed to be married to a spouse of the opposite sex. Males are assumed to be 2 years older than females.

**For participants in pay status:** Actual birth dates of beneficiaries are included in the census data, where relevant.

**For beneficiaries:** Actual birth dates are included in the census data, where relevant.

## Benefits Not Valued

None.

## Special Data Adjustments

**For participants without date of birth in data:** Assumed to be average age of participants with similar characteristics.

## Rationale for Significant Assumptions

**Investment Return:** The plan's historical investment performance, along with expected returns for each asset class and assumed inflation rate, is considered. It is based on the Plan's investment policy, including target asset allocation.

**Mortality Rates:** The plan is not large enough to develop a credible mortality table based exclusively on plan experience. We have relied on published mortality tables in which credible mortality experience was analyzed. The assumption selected is reasonable for the contingency being measured and is not anticipated to produce significant cumulative actuarial gains or losses over the measurement period

**Other Demographic Assumptions:** Except where noted, all demographic assumptions are based on the actuary's judgment and continual review of experience.

**2018 Schedule MB, line 6 -**
**Summary of Plan Provisions**
**Arizona Bricklayers Pension Trust Fund**
**EIN 51-6119487 PN 001**

This summary of plan provisions is intended to only describe the essential features of the Plan. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself.

## Definitions

**Accrued Benefit:** The monthly accrued benefit payable at Normal Retirement shall be an amount determined by multiplying the number of Pension Credits earned during each of the Participant's Period(s) of Accrual times the Accrual rate appropriate as shown in the following schedule:

| Period of Accrual Ending Between | Bricklayers Accrual Rate During Period of Accrual | Tilelayers Accrual Rate During Period of Accrual |
|---|---|---|
| Before January 1, 1960 | $13.75 | $ 12.00 |
| January 1, 1960 – June 30, 1965 | 61.00 | 12.00 |
| July 1, 1965 – December 31, 1995 | 61.00 | 61.00 |
| January 1, 1996 – December 31, 2006 | 43.00 | 43.00 |
| January 1, 2007 & thereafter | 30.00 | 30.00 |

**Actuarially Equivalent:** Equality in value such that the present value of the amount under any form of payment is essentially the same as the present value of the amount under the single life annuity. Actuarially equivalent factors are based on the RP-2014 Blue Collar Mortality Table (male rates for participants and female rates for beneficiaries) and an interest rate of 7.0%.

**Plan Effective Date:** January 1, 1960; the Plan was last amended effective May 5, 2016.

**Plan Year:** The 12-month period beginning January 1 and ending December 31.

**Pension Credit:** A full year is credited for each employment year in which 1,200 or more hours of service are credited. Partial years of Pension Credit are credited if 300 or more hours are worked in an employment year.

**Vesting Service:** A full year is credited for each employment year in which 1,000 or more hours are worked. No partial years of Vesting Service are credited.

## Eligibility for Participation

The earliest January 1 or July 1 next following the 12 consecutive-month period during which the employee completes 300 Hours of Service in Covered Employment.

## Normal Retirement

**Normal Retirement Date:** The later of the first day of the month coincident with or next following the attainment of age 65 or the participant's 5th anniversary of participation.

**Normal Retirement Benefit:** The Accrued Benefit.

## Early Retirement

**Early Retirement Date:** The first day of the month coincident with or next following the attainment of age 55 and 10 years of Pension Credit.

**Early Retirement Benefit:** The Accrued Benefit, actuarially reduced for commencement prior to Normal Retirement Date.

## Deferred Retirement

**Deferred Retirement Date:** The first day of the month coincident with or next following the date of termination of service if it occurs after the Normal Retirement Date.

**Deferred Retirement Benefit:** The greater of (i) the Accrued Benefit determined as of the Deferred Retirement Date or (ii) the Accrued Benefit determined as of the Normal Retirement Date and actuarially increased to the Deferred Retirement Date.

## Termination

**Termination Date:** The date of termination of service other than for reasons of retirement, disability, or death.

**Termination Benefit:** The Accrued Benefit, multiplied by the vested percentage in the following table, payable at the Normal Retirement Date, or payable as of the first day of any month coincident with or next following attainment of age 55 if at least 10 years of Pension Credit have been completed (actuarially reduced for commencement prior to Normal Retirement Date).

| Years of Vesting Service | Vested Percentage |
|---|---|
| Less than 5 | 0% |
| 5 or more | 100% |

## Preretirement Death

**Preretirement Death Benefit Eligibility:** Surviving spouses of participants with a vested Accrued Benefit who die before commencement of payments, provided they have been married at least one year.

**Preretirement Death Benefit:** 50% of the benefit which would have been payable had the deceased participant instead terminated service on the date of death, survived to his earliest possible benefit commencement date, elected the 50% Husband-and-Wife pension, and died on that same date.

## Disability Retirement

**Disability Retirement Eligibility:** Under age 65 and attainment of 5 years of Pension Credit (15 years of Pension Credit for work in the trade)

**Disability Retirement Benefit:** The Accrued Benefit, determined as of the disability separation date.

## Forms of Payment

**Normal Forms:** Life annuity if single, 100% Husband-and-Wife Pension if married.

**Optional Forms:** Life annuity, 50% Husband-And-Wife Pension, and 75% Husband-and-Wife Pension.

The Husband-and-Wife Pension includes a pop-up feature.

## Changes in Principal Plan Provisions Since Prior Valuation

None.

# 2018 Schedule MB, line 4c -
# Documentation Regarding Progress Under Rehabilitation Plan
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001

Segal Consulting

*March 30, 2018*

*Internal Revenue Service*
*Employee Plans Compliance Unit*
*Group 7602 (TEGE:EP:EPCU)*
*230 S. Dearborn Street*
*Room 1700 - 17th Floor*
*Chicago, IL 60604*

*To Whom It May Concern:*

*As required by ERISA Section 305 and the Internal Revenue Code (IRC) Section 432, we have completed the actuarial status certification as of January 1, 2018 for the following plan:*

*Name of Plan: Arizona Bricklayers Pension Trust Fund*
*Plan number: EIN 51-6119487 / 001*
*Plan sponsor: Board of Trustees, Arizona Bricklayers Pension Trust Fund*
*Address: 2550 West Union Hills Drive, Suite 290, Phoenix, Arizona 85027*
*Phone number: 602.249.3582*

*As of January 1, 2018, the Plan is in critical status but not declining status.*

*This certification also notifies the IRS that the Plan is making the scheduled progress in meeting the requirements of its rehabilitation plan, based on information received from the sponsor and based on the annual standards of the rehabilitation plan.*

*If you have any questions on the attached certification, you may contact me at the following:*

*Segal Consulting*
*330 North Brand Boulevard, Suite 1100*
*Glendale, CA 91203*
*Phone number: 818.956.6700*

*Sincerely,*

*Laura L. Mitchell, FCA, MAAA*
*Vice President & Consulting Actuary*
*Enrolled Actuary No. 17-06098*

# 2018 Schedule MB, line 4f
# Cash Flow Projections
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001



**EXHIBIT V**
**Solvency Projection**

The table below presents the projected Market Value of Assets for the Plan Years beginning January 1, 2017 through 2041.

| | Year Beginning January 1, | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| 1. Market Value at beginning of year | $27,271,763 | $31,235,118 | $30,556,144 | $29,823,842 | $29,019,955 | $28,157,547 | $27,232,902 | $26,222,807 |
| 2. Contributions | 2,157,250 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 |
| 3. Withdrawal liability payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. Benefit payments[1] | 2,218,739 | 2,384,818 | 2,393,724 | 2,416,954 | 2,423,025 | 2,429,011 | 2,453,561 | 2,453,406 |
| 5. Administrative expenses | 231,983 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 |
| 6. Interest earnings | 4,256,827 | 1,945,844 | 1,901,422 | 1,853,067 | 1,800,617 | 1,744,366 | 1,683,466 | 1,617,815 |
| 7. Market Value at end of year: (1)+(2)+(3)-(4)-(5)+(6) | $31,235,118 | $30,556,144 | $29,823,842 | $29,019,955 | $28,157,547 | $27,232,902 | $26,222,807 | $25,147,216 |
| 8. Available resources: (1)+(2)+(3)-(5)+(6) | $33,453,857 | $32,940,962 | $32,217,566 | $31,436,909 | $30,580,572 | $29,661,913 | $28,676,368 | $27,600,622 |
| | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
| 1. Market Value at beginning of year | $25,147,216 | $24,005,219 | $22,795,280 | $21,535,003 | $20,217,987 | $18,833,330 | $17,387,509 | $15,882,917 |
| 2. Contributions | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 |
| 3. Withdrawal liability payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. Benefit payments[1] | 2,450,009 | 2,443,919 | 2,416,502 | 2,392,116 | 2,374,716 | 2,346,785 | 2,312,686 | 2,275,071 |
| 5. Administrative expenses | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 |
| 6. Interest earnings | 1,548,012 | 1,473,980 | 1,396,225 | 1,315,100 | 1,230,059 | 1,140,964 | 1,048,094 | 951,518 |
| 7. Market Value at end of year: (1)+(2)+(3)-(4)-(5)+(6) | $24,005,219 | $22,795,280 | $21,535,003 | $20,217,987 | $18,833,330 | $17,387,509 | $15,882,917 | $14,319,364 |
| 8. Available resources: (1)+(2)+(3)-(5)+(6) | $26,455,228 | $25,239,199 | $23,951,505 | $22,610,103 | $21,208,046 | $19,734,294 | $18,195,603 | $16,594,435 |

[1] The projected benefit payments are based on a closed group, i.e., no new participants entering the plan. If such new entrants were reflected, in our judgement, this would not change the conclusion that the plan is projected to become insolvent in 2040, under the assumptions used. This projection is not intended to be used for any purpose other than this certification.

# 2018 Schedule MB, line 4f
# Cash Flow Projections
# Arizona Bricklayers Pension Trust Fund
# EIN 51-6119487 PN 001



**EXHIBIT V (continued)**
**Solvency Projection**

| | Year Beginning January 1, | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **2033** | **2034** | **2035** | **2036** | **2037** | **2038** | **2039** | **2040** |
| 1. Market Value at beginning of year | $14,319,364 | $12,702,257 | $11,037,073 | $9,312,553 | $7,544,957 | $5,722,156 | $3,847,843 | $1,906,413 |
| 2. Contributions | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 | 45,000 |
| 3. Withdrawal liability payments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. Benefit payments | 2,228,508 | 2,173,268 | 2,125,906 | 2,059,061 | 2,001,251 | 1,936,389 | 1,883,398 | 1,822,894 |
| 5. Administrative expenses | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 | 285,000 |
| 6. Interest earnings | 851,401 | 748,084 | 641,386 | 531,465 | 418,450 | 302,076 | 181,968 | 57,741 |
| 7. Market Value at end of year: (1)+(2)+(3)-(4)-(5)+(6) | $12,702,257 | $11,037,073 | $9,312,553 | $7,544,957 | $5,722,156 | $3,847,843 | $1,906,413 | ($98,740) |
| 8. Available resources: (1)+(2)+(3)-(5)+(6) | $14,930,765 | $13,210,341 | $11,438,459 | $9,604,018 | $7,723,407 | $5,784,232 | $3,789,811 | $1,724,154 |

| | **2041** |
|---|---|
| 1. Market Value at beginning of year | ($98,740) |
| 2. Contributions | 45,000 |
| 3. Withdrawal liability payments | 0 |
| 4. Benefit payments[1] | 1,754,860 |
| 5. Administrative expenses | 285,000 |
| 6. Interest earnings | (70,383) |
| 7. Market Value at end of year: (1)+(2)+(3)-(4)-(5)+(6) | ($2,163,983) |
| 8. Available resources: (1)+(2)+(3)-(5)+(6) | ($409,123) |

[1] The projected benefit payments are based on a closed group, i.e., no new participants entering the plan. If such new entrants were reflected, in our judgement, this would not change the conclusion that the plan is projected to become insolvent in 2040, under the assumptions used. This projection is not intended to be used for any purpose other than this certification.

**2018 Schedule MB, line 8b(1) -**
**Schedule of Projection of Expected Benefit Payments**
**Arizona Bricklayers Pension Trust Fund**
**EIN 51-6119487 PN 001**

| Plan Year | Expected Annual Benefit Payments |
|---|---|
| 2018 | 2,341,959 |
| 2019 | 2,365,734 |
| 2020 | 2,400,262 |
| 2021 | 2,411,794 |
| 2022 | 2,419,339 |
| 2023 | 2,445,346 |
| 2024 | 2,449,016 |
| 2025 | 2,452,152 |
| 2026 | 2,449,678 |
| 2027 | 2,424,722 |

## 2018 Schedule MB, lines 9c and 9h -
## Schedule of Funding Standard Account Bases
## Arizona Bricklayers Pension Trust Fund
## EIN 51-6119487 PN 001

### Charges and Credits for Funding Standard Account

The amortization charges and credits for the Funding Standard Account for the plan year beginning January 1, 2018 are determined below.

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. | Charges as of January 1, 2018 | | | | | |
| | | Date Established | Description | Amortization Amount | Years Remaining | Outstanding Balance |
| | a. | January 1, 1979 | Plan Amendment | $58,396 | 1 | $58,396 |
| | b. | January 1, 1980 | Plan Amendment | 107,412 | 2 | 208,267 |
| | c. | January 1, 1991 | Plan Amendment | 2,883 | 3 | 8,131 |
| | d. | January 1, 1996 | Change in Assumptions | 13,199 | 8 | 85,590 |
| | e | January 1, 2001 | Change in Assumptions | 33,624 | 13 | 307,948 |
| | f. | January 1, 2004 | Actuarial Loss | 17,678 | 1 | 17,678 |
| | g. | January 1, 2005 | Actuarial Loss | 11 | 2 | 20 |
| | h. | January 1, 2005 | Change in Assumptions | 1,233 | 17 | 13,274 |
| | i. | January 1, 2006 | Actuarial Loss | 1,163 | 3 | 3,280 |
| | j. | January 1, 2008 | Actuarial Loss | 44,868 | 5 | 198,575 |
| | k. | January 1, 2009 | Actuarial Loss | 561,113 | 6 | 2,892,918 |
| | l. | January 1, 2009 | Plan Amendment | 108,369 | 6 | 558,713 |
| | m. | January 1, 2010 | Plan Amendment | 1,879 | 7 | 10,976 |
| | n. | January 1, 2011 | Actuarial Loss | 34,390 | 8 | 222,999 |
| | o. | January 1, 2012 | Actuarial Loss | 106,483 | 9 | 754,834 |
| | p. | January 1, 2013 | Actuarial Loss | 189,155 | 10 | 1,448,191 |
| | q. | January 1, 2014 | Change in Assumptions | 217,653 | 11 | 1,782,328 |
| | r. | January 1, 2016 | Actuarial Loss | 53,979 | 13 | 494,380 |
| | s. | January 1, 2016 | Change in Assumptions | 366,599 | 13 | 3,357,582 |
| | t. | January 1, 2017 | Actuarial Loss | 15,724 | 14 | 150,947 |
| | u. | January 1, 2018 | Actuarial Loss | 4,048 | 15 | 40,534 |
| | v. | January 1, 2018 | Change in assumptions | 1,060 | 15 | 10,616 |
| | w. | Total | | 1,940,919 | | 12,626,177 |
| 2. | Credits as of January 1, 2018 | | | | | |
| | | Date Established | Description | Amortization Amount | Years Remaining | Outstanding Balance |
| | a. | January 1, 1991 | Change in Assumptions | $3,760 | 3 | $10,605 |
| | b. | January 1, 2003 | Change in Assumptions | 14,624 | 15 | 146,447 |
| | c. | January 1, 2006 | Change in Assumptions | 34,503 | 18 | 383,354 |
| | d. | January 1, 2007 | Actuarial Gain | 49,169 | 4 | 179,390 |
| | e. | January 1, 2007 | Change in Assumptions | 186,471 | 19 | 2,131,824 |
| | f. | January 1, 2010 | Actuarial Gain | 268,703 | 7 | 1,569,499 |
| | g. | January 1, 2014 | Actuarial Gain | 119,681 | 11 | 980,045 |
| | h. | January 1, 2015 | Actuarial Gain | 65,925 | 12 | 572,824 |
| | i. | January 1, 2015 | Change in Asset Method | 100,113 | 7 | 584,762 |
| | j. | January 1, 2017 | Plan Amendment | 189,204 | 14 | 1,816,309 |
| | k. | Total | | 1,032,153 | | 8,375,059 |
| 2. | 3. | Net outstanding balance [(1w) - (2k)] | | | | 4,251,118 |
| 3. | 4. | Credit Balance as of January 1, 2018 | | | | 2,560,844 |
| 4. | 5. | Waived funding deficiency | | | | 0 |
| 5. | 6. | Balance test result [(3) - (4) - (5)] | | | | 1,690,274 |
| 6. | 7. | Unfunded Actuarial Accrued Liability as of January 1, 2018 | | | | 1,690,274 |

| SCHEDULE MB (Form 5500) | Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information | OMB No. 1210-0110 |
|---|---|---|
| Department of the Treasury Internal Revenue Service<br>Department of Labor Employee Benefits Security Administration<br>Pension Benefit Guaranty Corporation | This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).<br>▶ **File as an attachment to Form 5500 or 5500-SF.** | **2018**<br>**This Form is Open to Public Inspection** |

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

| | |
|---|---|
| **A** Name of plan<br>Arizona Bricklayers Pension Trust Fund | **B** Three-digit plan number (PN) ▶ 001 |
| **C** Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF<br>Board of Trustees - Arizona Bricklayers Pension Trust Fund | **D** Employer Identification Number (EIN)<br>51-6119487 |

**E** Type of plan: (1) [X] Multiemployer Defined Benefit (2) [ ] Money Purchase (see instructions)

| | | |
|---|---|---|
| **1a** Enter the valuation date: Month 1 Day 1 Year 2018 | | |
| **b** Assets | | |
| (1) Current value of assets | 1b(1) | 31,222,412 |
| (2) Actuarial value of assets for funding standard account | 1b(2) | 30,229,407 |
| **c** (1) Accrued liability for plan using immediate gain methods | 1c(1) | 31,919,681 |
| (2) Information for plans using spread gain methods: | | |
| (a) Unfunded liability for methods with bases | 1c(2)(a) | |
| (b) Accrued liability under entry age normal method | 1c(2)(b) | |
| (c) Normal cost under entry age normal method | 1c(2)(c) | |
| (3) Accrued liability under unit credit cost method | 1c(3) | 31,919,681 |
| **d** Information on current liabilities of the plan: | | |
| (1) Amount excluded from current liability attributable to pre-participation service (see instructions) | 1d(1) | |
| (2) "RPA '94" information: | | |
| (a) Current liability | 1d(2)(a) | 48,254,353 |
| (b) Expected increase in current liability due to benefits accruing during the plan year | 1d(2)(b) | 95,745 |
| (c) Expected release from "RPA '94" current liability for the plan year | 1d(2)(c) | 2,346,671 |
| (3) Expected plan disbursements for the plan year | 1d(3) | 2,631,671 |

**Statement by Enrolled Actuary**

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

**SIGN HERE** Kevin M. Campe — 09/18/2019

Signature of actuary — Date

Kevin M. Campe — 17-05356

Type or print name of actuary — Most recent enrollment number

Milliman, Inc. — (312)726-0677

Firm name — Telephone number (including area code)

71 S. Wacker Drive, 31st Floor
Chicago IL 60606-4637

Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

**2** Operational information as of beginning of this plan year:

| | | | |
|---|---|---|---|
| **a** Current value of assets (see instructions) | **2a** | | 31,222,412 |
| **b** "RPA '94" current liability/participant count breakdown: | | **(1)** Number of participants | **(2)** Current liability |
| **(1)** For retired participants and beneficiaries receiving payment | | 325 | 28,914,622 |
| **(2)** For terminated vested participants | | 303 | 17,395,185 |
| **(3)** For active participants: | | | |
| **(a)** Non-vested benefits | | | 222,900 |
| **(b)** Vested benefits | | | 1,721,646 |
| **(c)** Total active | | 66 | 1,944,546 |
| **(4)** Total | | 694 | 48,254,353 |
| **c** If the percentage resulting from dividing line 2a by line 2b(4), column (2), is less than 70%, enter such percentage | **2c** | | 64.70 % |

**3** Contributions made to the plan for the plan year by employer(s) and employees:

| **(a)** Date (MM-DD-YYYY) | **(b)** Amount paid by employer(s) | **(c)** Amount paid by employees | **(a)** Date (MM-DD-YYYY) | **(b)** Amount paid by employer(s) | c) Amount paid by employees |
|---|---|---|---|---|---|
| 07/01/2018 | 96,625 | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | **Totals ►** **3(b)** | 96,625 | **3(c)** 0 |

**4** Information on plan status:

| | | |
|---|---|---|
| **a** Funded percentage for monitoring plan's status (line 1b(2) divided by line 1c(3)) | **4a** | 94.7 % |
| **b** Enter code to indicate plan's status (see instructions for attachment of supporting evidence of plan's status). If code is "N," go to line 5 | **4b** | C |

**c** Is the plan making the scheduled progress under any applicable funding improvement or rehabilitation plan? ☒ Yes ☐ No

**d** If the plan is in critical status or critical and declining status, were any benefits reduced (see instructions)? ☐ Yes ☒ No

| | | |
|---|---|---|
| **e** If line d is "Yes," enter the reduction in liability resulting from the reduction in benefits (see instructions), measured as of the valuation date | **4e** | |
| **f** If the rehabilitation plan projects emergence from critical status or critical and declining status, enter the plan year in which it is projected to emerge. If the rehabilitation plan is based on forestalling possible insolvency, enter the plan year in which insolvency is expected and check here ☒ | **4f** | 2040 |

**5** Actuarial cost method used as the basis for this plan year's funding standard account computations (check all that apply):

**a** ☐ Attained age normal **b** ☐ Entry age normal **c** ☒ Accrued benefit (unit credit) **d** ☐ Aggregate

**e** ☐ Frozen initial liability **f** ☐ Individual level premium **g** ☐ Individual aggregate **h** ☐ Shortfall

**i** ☐ Other (specify):

| | | |
|---|---|---|
| **j** If box h is checked, enter period of use of shortfall method | **5j** | |

**k** Has a change been made in funding method for this plan year? ☒ Yes ☐ No

**l** If line k is "Yes," was the change made pursuant to Revenue Procedure 2000-40 or other automatic approval? ☒ Yes ☐ No

| | | |
|---|---|---|
| **m** If line k is "Yes," and line l is "No," enter the date (MM-DD-YYYY) of the ruling letter (individual or class) approving the change in funding method | **5m** | |

**6** Checklist of certain actuarial assumptions:

| | | Pre-retirement | | Post-retirement | |
|---|---|---|---|---|---|
| **a** Interest rate for "RPA '94" current liability | 6a | | | 2.98 % | |
| **b** Rates specified in insurance or annuity contracts | | ☐ Yes ☐ No ☒ N/A | | ☐ Yes ☐ No ☒ N/A | |
| **c** Mortality table code for valuation purposes: | | | | | |
| (1) Males | 6c(1) | 13P | | 13P | |
| (2) Females | 6c(2) | 13FP | | 13FP | |
| **d** Valuation liability interest rate | 6d | 6.50 % | | 6.50 % | |
| **e** Expense loading | 6e | 581.5% | ☐ N/A | % | ☒ N/A |
| **f** Salary scale | 6f | % | ☒ N/A | | |
| **g** Estimated investment return on actuarial value of assets for year ending on the valuation date | 6g | | | 6.1 % | |
| **h** Estimated investment return on current value of assets for year ending on the valuation date | 6h | | | 15.8 % | |

**7** New amortization bases established in the current plan year:

| (1) Type of base | (2) Initial balance | (3) Amortization Charge/Credit |
|---|---|---|
| 1 | 40,534 | 4,048 |
| 4 | 10,616 | 1,060 |
| | | |

**8** Miscellaneous information:

| | | |
|---|---|---|
| **a** If a waiver of a funding deficiency has been approved for this plan year, enter the date (MM-DD-YYYY) of the ruling letter granting the approval | 8a | |
| **b(1)** Is the plan required to provide a projection of expected benefit payments? (See the instructions.) If "Yes," attach a schedule. | | ☒ Yes ☐ No |
| **b(2)** Is the plan required to provide a Schedule of Active Participant Data? (See the instructions.) If "Yes," attach a schedule. | | ☒ Yes ☐ No |
| **c** Are any of the plan's amortization bases operating under an extension of time under section 412(e) (as in effect prior to 2008) or section 431(d) of the Code? | | ☐ Yes ☒ No |
| **d** If line c is "Yes," provide the following additional information: | | |
| (1) Was an extension granted automatic approval under section 431(d)(1) of the Code? | | ☐ Yes ☐ No |
| (2) If line 8d(1) is "Yes," enter the number of years by which the amortization period was extended | 8d(2) | |
| (3) Was an extension approved by the Internal Revenue Service under section 412(e) (as in effect prior to 2008) or 431(d)(2) of the Code? | | ☐ Yes ☐ No |
| (4) If line 8d(3) is "Yes," enter number of years by which the amortization period was extended (not including the number of years in line (2)) | 8d(4) | |
| (5) If line 8d(3) is "Yes," enter the date of the ruling letter approving the extension | 8d(5) | |
| (6) If line 8d(3) is "Yes," is the amortization base eligible for amortization using interest rates applicable under section 6621(b) of the Code for years beginning after 2007? | | ☐ Yes ☐ No |
| **e** If box 5h is checked or line 8c is "Yes," enter the difference between the minimum required contribution for the year and the minimum that would have been required without using the shortfall method or extending the amortization base(s) | 8e | |

**9** Funding standard account statement for this plan year:

**Charges to funding standard account**:

| | | Outstanding balance | |
|---|---|---|---|
| **a** Prior year funding deficiency, if any | 9a | | 0 |
| **b** Employer's normal cost for plan year as of valuation date | 9b | | 323,660 |
| **c** Amortization charges as of valuation date: | | | |
| (1) All bases except funding waivers and certain bases for which the amortization period has been extended | 9c(1) | 12,626,177 | 1,940,919 |
| (2) Funding waivers | 9c(2) | | 0 |
| (3) Certain bases for which the amortization period has been extended | 9c(3) | | 0 |
| **d** Interest as applicable on lines 9a, 9b, and 9c | 9d | | 147,198 |
| **e** Total charges. Add lines 9a through 9d | 9e | | 2,411,777 |

| | | | |
|---|---|---|---|
| **Credits to funding standard account**: | | | |
| **f** Prior year credit balance, if any | | **9f** | 2,560,844 |
| **g** Employer contributions. Total from column (b) of line 3 | | **9g** | 96,625 |
| | Outstanding balance | | |
| **h** Amortization credits as of valuation date **9h** | 8,375,059 | | 1,032,153 |
| **i** Interest as applicable to end of plan year on lines 9f, 9g, and 9h | | **9i** | 236,636 |
| **j** Full funding limitation (FFL) and credits: | | | |
| **(1)** ERISA FFL (accrued liability FFL) **9j(1)** | 4,872,138 | | |
| **(2)** "RPA '94" override (90% current liability FFL) **9j(2)** | 13,190,130 | | |
| **(3)** FFL credit | | **9j(3)** | |
| **k** **(1)** Waived funding deficiency | | **9k(1)** | |
| **(2)** Other credits | | **9k(2)** | |
| **l** Total credits. Add lines 9f through 9i, 9j(3), 9k(1), and 9k(2) | | **9l** | 3,926,258 |
| **m** Credit balance: If line 9l is greater than line 9e, enter the difference | | **9m** | 1,514,481 |
| **n** Funding deficiency: If line 9e is greater than line 9l, enter the difference | | **9n** | |

| | | |
|---|---|---|
| **9 o** Current year's accumulated reconciliation account: | | |
| **(1)** Due to waived funding deficiency accumulated prior to the 2018 plan year | **9o(1)** | 0 |
| **(2)** Due to amortization bases extended and amortized using the interest rate under section 6621(b) of the Code: | | |
| **(a)** Reconciliation outstanding balance as of valuation date | **9o(2)(a)** | 0 |
| **(b)** Reconciliation amount (line 9c(3) balance minus line 9o(2)(a)) | **9o(2)(b)** | 0 |
| **(3)** Total as of valuation date | **9o(3)** | 0 |
| **10** Contribution necessary to avoid an accumulated funding deficiency. (See instructions.) | **10** | |

**11** Has a change been made in the actuarial assumptions for the current plan year? If "Yes," see instructions. ☒ Yes ☐ No

**2018 Schedule MB, line 8b(2) -**
**Schedule of Active Participants Data**
**Arizona Bricklayers Pension Trust Fund**
**EIN 51-6119487 PN 001**

## Active Participants by Age and Service

The number of active participants summarized by attained age and years of credited service as of January 1, 2018 is shown below.

| | Years of Credited Service | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Under 1 | 1–4 | 5–9 | 10–14 | 15–19 | 20–24 | 25–29 | 30–34 | 35–39 | 40+ | Total |
| **Unknown** | 20 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| **Under 25** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **25–29** | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| **30–34** | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| **35–39** | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| **40–44** | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| **45–49** | 0 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| **50–54** | 1 | 3 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 9 |
| **55–59** | 1 | 1 | 1 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 10 |
| **60–64** | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 4 |
| **65–69** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **70+** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 26 | 15 | 7 | 4 | 6 | 8 | 0 | 0 | 0 | 0 | 66 |

**2018 Schedule MB, line 11**
**Justification for Change in Actuarial Assumptions**
**Arizona Bricklayers Pension Trust Fund**
**EIN 51-6119487 PN 001**

The actuarial assumptions used in this valuation are the same as those used in the prior valuation except as follows:

- Decrement timing changed from beginning of year for retirement and middle of year for all other decrements to middle of year for all decrements, except that retirement is assumed to occur at beginning of year at 100% retirement age.

- For current liability purposes (RPA '94), interest rate changed from 3.05% to 2.98% per year and the statutory mortality tables have been updated as required by law.

# ARIZONA BRICKLAYERS PENSION TRUST FUND

## REHABILITATION PLAN

Adopted May 5, 2016

### INTRODUCTION

Section 305(b) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and Section 432(b) of the Internal Revenue Code of 1986, as amended (the "Code"), require an annual actuarial status determination for multiemployer pension plans like the Arizona Bricklayers Pension Trust Fund (the "Plan"). A certification of endangered or critical status requires specific action from the Plan's Board of Trustees (the "Board"). As required by law, on March 30, 2016 the Plan's actuary certified to the U.S. Department of the Treasury and the Board of Trustees that the Plan is in endangered status for the plan year beginning January 1, 2016 and is projected to be in critical status within the next five years. On April 20, 2016, the Board of Trustees elected to enter the critical status as of January 1, 2016. The notification of the actuarial zone status certification and subsequent Trustee action was sent on April 26, 2016, to all Plan Participants, participating unions, and participating Employers.

Pursuant to section 305(e) of ERISA and Section 432(e) of the Code, the Board is required to develop and maintain a "rehabilitation plan" that is generally intended to enable the Plan to cease to be in critical status by the end of the Plan's "rehabilitation period." However, if the Trustees determine, based upon exhaustion of all reasonable measures, that the Plan cannot be expected to emerge by the end of the Plan's rehabilitation period, the rehabilitation plan should be designed to enable the Plan to cease to be in critical status at a later date, or if this is not reasonable, to forestall possible insolvency.

In general, a rehabilitation plan consists of various remedies, including one or more schedules made up of benefit adjustments and/or contribution rate increases, intended to enable the plan to meet the above statutory requirement for emergence from critical status. The schedule(s) are presented to the bargaining parties for adoption. Based on the timing of collective bargaining agreements in effect as of April 26, 2016, the Board of Trustees has determined that the Plan's Rehabilitation Period is the ten-year period beginning January 1, 2017 and ending December 31, 2026.

This rehabilitation plan must be based on reasonably anticipated experience and on reasonable actuarial assumptions.

Accordingly, the Board has adopted this Rehabilitation Plan ("Rehabilitation Plan") that reflects reasonable measures to forestall insolvency until the plan year ending December 31, 2037. The projected insolvency date is the plan year ending December 31, 2037. This Rehabilitation Plan:

1. Specifies the Rehabilitation Period;

2. Defines Actuarial Equivalence;
3. Includes two (2) schedules (Default Schedule and Preferred Schedule) of benefit and contribution changes that will be provided to the bargaining parties, one of which must be implemented as part of future collective bargaining agreements that are entered into or renewed after the date the schedules and/or Rehabilitation Plan are provided to local unions and contributing employers;
4. Describes how the Default Schedule will be automatically implemented if there is no agreement between the bargaining parties by the date imposed by ERISA and the Code;
5. Provides annual standards for meeting the requirements of the Rehabilitation Plan and describes how the Rehabilitation Plan will be updated from time to time;
6. Describes alternatives considered by the Trustees in exhausting all reasonable measures and developing this Rehabilitation Plan; and
7. Explains why the Trustees concluded that there are no reasonable measures that would enable the Plan to emerge from critical status by the end of the Rehabilitation Period or at a later time.

### REHABILITATION PERIOD

ERISA and the Code require that the Rehabilitation Period begin on the earlier of the second anniversary of the date of adoption of the rehabilitation plan or the first day of the first Plan Year following the expiration of the collective bargaining agreements in effect on the due date for the actuarial certification for the initial critical status year (March 30, 2016) covering at least 75% of the active participants in the Plan. The Board determined, based on information about the expiration of the current collective bargaining agreements, that the Rehabilitation Period will begin on January 1, 2017.

### REHABILITATION PLAN STANDARD, ALTERNATIVES CONSIDERED, EXHAUSTION OF ALL REASONABLE MEASURES TO EMERGE FROM CRITICAL STATUS AND TO FORESTALL INSOLVENCY

The Plan consists of employers in the masonry industry, which industry declined significantly during the great recession and has not yet fully recovered. Eventual recovery remains uncertain. The significant decline in the industry caused a reduction in the number of employers and active participants in the Plan from 30 to 10 current employers and 579 to 33 active participants from 2007 to 2015. This includes two large employers that left the Plan to continue as "non-union" employers. As a result, there are insufficient contributions to the Plan to sustain the plan at a healthy level as required by ERISA and the Code.

The Board considered numerous actions and alternatives for possibly enabling the Plan to emerge from critical status either by the end of the Rehabilitation Period or as soon as reasonably possible after the Rehabilitation Period. The Board reviewed various scenarios modeled by the Plan actuary, which were based on reasonable assumptions as to future Plan investment returns, levels of covered employment, participant lifespans in retirement, and other contingencies.

The Board determined that, based on reasonable assumptions and exhaustion of all reasonable measures, the Plan cannot reasonably be expected to emerge from critical status by the end of the Rehabilitation Period or at a later time. For example, one of the alternatives considered showed that, even if all adjustable benefits were eliminated and future accrual rates were reduced to the 1.00% of contribution level, hourly contribution rates would need to increase by at least $3.85 per hour (from $0.90 to $4.75 per hour) over the ten-year Rehabilitation Period in order for the Plan to be able to emerge from critical status by the end of the Rehabilitation Period. The Board concluded that such contribution rate increases were unreasonable, would likely create a domino effect of the remaining employers going out of business and involved considerable risk to the Plan and Plan participants.

The significant increase in hourly contribution rates would make the employers uncompetitive when bidding for new work, resulting in less work for the employers and thus less work for the active participants.

The Board also considered the effect that eliminating all Plan benefits would have on active participants and determined that if all early retirement benefits and certain other benefits were eliminated, there would be very little incentive for participants to remain union employees.

Taking into consideration the above reasons and analyzing multiple options and alternatives for rehabilitation plan benefit reduction and contribution rate increases that can be adopted by the statutory deadline of November 25, 2016, the Board determined that, based on reasonable assumptions and exhaustion of all reasonable measures, the Plan cannot reasonably be expected to emerge from critical status by the end of the Rehabilitation Period or at a later time and intend to implement reasonable measures in order to forestall insolvency.

### REHABILITATION PLAN: DEFINITION OF ACTUARIAL EQUIVALENCE

For purposes of this Rehabilitation Plan, "actuarially equivalent" shall be determined using the RP-2014 Blue Collar Mortality Table, Male for participants and RP-2014 Blue Collar Mortality Table, Female for beneficiaries with seven percent annual interest rate. Benefits under this rehabilitation plan shall be actuarially equivalent to a single life annuity.

The Board has considered and is considering alternatives to determine whether the Plan and its participants would benefit from a merger or other methods to have the Plan emerge from critical status within the rehabilitation period or at a later date. The Board has contacted another pension plan board to determine whether a merger would be a viable option for the Plan. The Board has determined that a merger and the other methods considered are not in the best interest of the Plan and the Plan's participants at this point but continues to explore all available options.

## Rehabilitation Plan: Benefit Changes and Schedules

### *Benefit Changes*

Notwithstanding anything contained in this Rehabilitation Plan, Plan Participants with an Annuity Starting Date prior to January 1, 2017, beneficiaries in pay status prior to January 1, 2017, or Alternate Payees in pay status prior to January 1, 2017, shall not be subject to any benefit modifications under this Rehabilitation Plan.

Participants who become subject to a Schedule of the Rehabilitation Plan through the process of collective bargaining, or the equivalent for any non-bargained Participants, or who have the Default Schedule imposed unilaterally as a result of their bargaining representatives or employer failing to agree upon contribution rates consistent with a Schedule, shall have their benefits determined based on the terms of the applicable Schedule effective with the effective date of the collective bargaining agreement (or participation agreement) that is consistent with the Schedule, or if applicable, the date the Default Schedule is imposed.

Participants with an Annuity Starting Date on or after January 1, 2017, who do not become subject to a Schedule, shall have their benefits modified consistent with the Preferred Schedule.

### *Schedules*

The Rehabilitation Plan includes the attached Default Schedule and Preferred Schedule, which describe supplemental contributions to be made by the Employers and benefit changes that will be made by the Plan to correspond to the contribution rates adopted by the bargaining parties or Employer.

### *Implementation of Benefit Changes and Schedules*

If a Participant has had terms consistent with a Schedule implemented on his or her behalf by his bargaining unit or Employer, while a member of such bargaining unit or employee of such Employer, and subsequently, through cessation of work in Covered Employment, is no longer a member of such bargaining unit or is no longer employed by such Employer, benefits payable upon Participant's subsequent retirement shall be payable based on the terms of such Schedule, subject to any updates to the Schedule in the interim, as described below.

Pension benefits for a beneficiary or alternate payee of a Participant or pensioner shall be determined on the same basis as pension benefits for the Participant or pensioner to whom they relate.

The Board has full discretion to determine from time to time whether, given the financial condition of the Plan, to further reduce adjustable or non-protected benefits of any Participant or beneficiary in accordance with Code section 432(e)(8)(A)(iii) or to apply for benefit suspensions, partition, and facilitated mergers.

The Board shall have the full, absolute, and unlimited discretionary power and authority to interpret, apply, and administer the Rehabilitation Plan and Schedules. The exercise of such power and authority by the Board shall be final and binding on all parties, subject to any appeal procedures in the Plan and shall be given the fullest deference allowed by law.

*Automatic Imposition of Default Schedule or Prior Schedule, as Updated*

If a collective bargaining agreement providing for Contributions to the Plan that was in effect on January 1, 2016 expires and after receiving the Schedules, the bargaining parties fail to adopt an agreement with terms consistent with any of the Schedules, the Default Schedule will be implemented automatically 180 days after the date on which the collective bargaining agreement expires, but no earlier than 180 days after receiving the Schedules. Upon automatic imposition of the Default Schedule as required by ERISA and the Code, the benefits and contribution rates will be adjusted accordingly. For non-collective bargaining agreement employers the same Schedule that is imposed on the bargaining parties will apply as of the date the Schedule is imposed on the bargaining parties.

If a collective bargaining agreement providing for contributions in accordance with a Schedule expires, and after receiving one or more updated Schedules the bargaining parties fail to adopt a contribution schedule consistent with the updated Rehabilitation Plan and any of its Schedules, then 180 days after the date of expiration of such agreement the Schedule applicable to the expired agreement, as updated and in effect on such date of expiration, will be automatically imposed.

*Annual Standards for Meeting the Rehabilitation Requirements*

Based on reasonable assumptions, the Plan is projected to become insolvent. The year of projected insolvency will vary each year as actual experience differs from the assumptions. The Trustees recognize the possibility that actual experience could be less favorable than the reasonable assumptions used for the Rehabilitation Plan and the need to update the Rehabilitation plan on an annual basis. It is understood the actuary will perform updated actuarial projections each year to monitor the improvement or deterioration in the Plan's status, and that the Trustees will evaluate any additional reasonable measures for forestalling insolvency.

Effective January 1, 2017, the following benchmarks are to be used in determining whether scheduled progress is being met:

| For Determination as of Jan 1 | Unaudited Fund Assets as of Date Shown | For Determination as of Jan 1 | Unaudited Fund Assets as of Date Shown |
|---|---|---|---|
| 2017 | $23,000,000 | 2032 | $7,500,000 |

| | | | |
|---|---|---|---|
| 2018 | 23,000,000 | 2033 | 5,500,000 |
| 2019 | 22,500,000 | 2034 | 3,500,000 |
| 2020 | 22,000,000 | 2035 | 1,500,000 |
| 2021 | 21,500,000 | 2036 | 1,000,000 |
| 2022 | 21,000,000 | 2037 | 0 |
| 2023 | 20,000,000 | 2038 | 0 |
| 2024 | 19,000,000 | 2039 | 0 |
| 2025 | 18,000,000 | 2040 | 0 |
| 2026 | 17,000,000 | 2041 | 0 |
| 2027 | 15,500,000 | 2042 | 0 |
| 2028 | 14,000,000 | 2043 | 0 |
| 2029 | 12,500,000 | 2044 | 0 |
| 2030 | 11,000,000 | 2045 | 0 |
| 2031 | 9,000,000 | 2046 | 0 |

***Annual Updating of Rehabilitation Plan***

Each year the Plan's actuary will review and certify the status of the Plan under ERISA and the Code and whether, starting with the beginning of the Rehabilitation Period, the Plan is making scheduled progress in meeting the requirements of this Rehabilitation Plan. If the Board determines that it is necessary in light of updated information, the Board will revise the Rehabilitation Plan and present updated schedules to the bargaining parties, which may prescribe additional benefit reductions and/or higher contribution rates.

Notwithstanding subsequent changes to the Schedules, a schedule of contribution rates provided by the Board and relied upon by the bargaining parties in negotiating a collective bargaining agreement shall remain in effect for the duration of that collective bargaining agreement.

However, a collective bargaining agreement that is renewed or extended will need to include terms consistent with one of the Schedules in effect at the time of the renewal or extension.

## ADDITIONAL ADMINISTRATIVE ISSUES

For non-bargaining unit employees employed by Employers who also contribute on behalf of bargaining unit employees the Schedule and implementation date is the same as the Schedule and first implementation date for that Employer's bargaining unit employees. For non-bargaining unit employees not employed by an Employer that contributes pursuant to a collective bargaining agreement, the implementation date is the earlier of the Employer's adoption of a Schedule or 180 days following the first day of the first plan year beginning after the Employer is provided the Schedules.

The Board recognizes that it is possible a Participant may change Employers, or that an Employer may negotiate terms consistent with a Schedule different from the one it originally adopted. If, as a result of such an event, the Participant becomes covered by first one Schedule and then another, and the second Schedule provides a higher level of benefits and contributions than the first, then benefits accrued up to the effective date of the second Schedule (the "Change Date") will be determined under the first Schedule, and benefits accruing after the Change Date will be determined under the second Schedule. However if the second Schedule provides a lower level of benefits and contributions than the first, the terms of the second Schedule shall govern with respect to all benefits earned by the Participant, except that the accrued Normal Retirement benefit as of a given Change Date shall not be reduced merely due to such a change of schedules.

## TRUSTEE APPROVAL

Effective as specified herein, the Plan's Board of Trustees hereby adopts this Rehabilitation Plan on May 5, 2016.

[redacted]

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## DEFAULT SCHEDULE

**The following benefit changes shall take effect under this Schedule upon its implementation, but not prior to January 1, 2017, and allowing for legally required participant notification:**

- Disability benefits under Article III, Sections 6 through 9 of the Plan are eliminated for all Participants that have not already (before implementation of this Schedule) satisfied all applicable eligibility requirements for such benefits.
- The Early Retirement adjustment factors described in Article III, Section 5 of the Plan shall be replaced with factors that provide a benefit that is actuarially equivalent to the Regular Pension, but shall in no event provide an Early Retirement benefit that is greater than otherwise provided in Article III Section 5.
- The Pre-Retirement Death Benefit under Article V, Section 1 (a)( 1 ) of the Plan 1s eliminated.
- The post-retirement guarantee of 36 monthly payments under Article V, Section l(b) is eliminated.
- Under Plan Section 3.03(a) ("Future Service Benefit"), the applicable multiplier of $30 shall be reduced to $9, for Pension Credit earned after implementation of this Schedule.
- Any additional contributions specifically required by this Schedule shall not be credited toward benefit accruals.
- The Delayed Retirement benefit adjustment factors described in Article VII, Section 5(c) and (d) of the Plan shall be replaced with factors that provide a benefit that is actuarially equivalent to the Regular Pension, but shall in no event provide a Delayed Retirement benefit that is greater than otherwise provided in Article VII, Section 5.
- The adjustment factors for all pensions described in Article IV (Husband-and-Wife pensions) of the Plan shall be replaced with factors that provide a benefit that is actuarially equivalent to the Regular Pension, but shall in no event provide for a benefit that is greater than otherwise provided in Article IV for the respective pension selected.

### Contributions

Immediately upon implementation of this Default Schedule, the Employer shall increase its contribution rate by $3.85 per hour, with no further increases required thereafter. This increase shall be with respect to the required contribution rate in effect immediately prior to implementation of this Schedule (disregarding statutory surcharges).

## PREFERRED SCHEDULE

**The following benefit changes shall take effect under this Schedule upon its implementation, but not prior to January 1, 2017, and allowing for legally required participant notification:**

- For all Participants who have not already (before implementation of this Schedule) satisfied all applicable eligibility requirements for Disability benefits under Article III, Sections 6 through 9 of the Plan, the availability of such benefits shall be limited to individuals who had 1,000 or more hours of work in Covered Employment for a signatory contractor in the 12-months prior to onset of disability.
- The Early Retirement adjustment factors described in Article III, Section 5 of the Plan shall be replaced with factors that provide a benefit that is actuarially equivalent to the Regular Pension, but shall in no event provide an Early Retirement benefit that is greater than otherwise provided in Article III Section 5.
- The Pre-Retirement Death Benefit under Article V, Section I (a)(l ) of the Plan Is eliminated.
- The post-retirement guarantee of 36 monthly payments under Article V, Section I (b) of the Plan is eliminated.
- Any additional contributions specifically required by this Schedule shall not be credited toward benefit accruals.
- The Delayed Retirement benefit adjustment factors described in Article VII, Section 5(c) and (d) of the Plan shall be replaced with factors that provide a benefit that is actuarially equivalent to the Regular Pension, but shall in no event provide a Delayed Retirement benefit that is greater than otherwise provided in Article VII, Section 5.
- The adjustment factors for all pensions described in Article IV (Husband-and-Wife pensions) of the Plan shall be replaced with factors that provide a benefit that is actuarially equivalent to the Regular Pension, but shall in no event provide for a benefit that is greater than otherwise provided in Article IV for the respective pension selected.

**Contributions**

The Employers shall not be required to increase their contribution rates at this time, but the ability for Employers to increase the contribution rates in the future shall be reviewed by the Board from time to time.

2656453.1

# Arizona Bricklayers' Pension Trust Fund

## January 1, 2018 Actuarial Valuation

Prepared by:

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# January 1, 2018 Actuarial Valuation of the Arizona Bricklayers' Pension Trust Fund

The actuarial valuation of the Arizona Bricklayers' Pension Trust Fund (the "Plan") for the plan year beginning January 1, 2018 has been completed in accordance with our understanding of the minimum funding requirements under ERISA and the Pension Protection Act of 2006 as well as the applicable sections of the Internal Revenue Code (IRC), including all regulations and guidance issued to date. It also has been completed in accordance with our understanding of FASB ASC Topic 960 for determining plan accounting requirements. The valuation results contained in this report are based on the actuarial methods (Appendix A), actuarial assumptions (Appendix B), and principal plan provisions (Appendix C) summarized in the appendices.

## Purpose of the Valuation

In general, the actuarial valuation determines the current level of employer contributions that, taking into account prior funding, will accumulate assets sufficient to meet benefit payments and administrative expenses when due under the terms of the Plan. This report has been prepared for the Arizona Bricklayers' Pension Trust Fund as of January 1, 2018 to:

- Calculate the Minimum Required Contribution for the plan year beginning January 1, 2018.
- Calculate the Maximum Deductible Contribution for the 2018 fiscal year.
- Determine the actuarial Present Value of Accumulated Plan Benefits as of December 31, 2017 for purposes of disclosing the Plan's liabilities under FASB ASC Topic 960.
- Determine the Plan's unfunded vested benefit liability as of December 31, 2017 for withdrawal liability purposes calculated in accordance with the requirements of the Multiemployer Pension Plan Amendments Act of 1980.
- Review the Plan's funded status.
- Review the experience for the plan year ending December 31, 2017, including the performance of the Plan's assets during the year and changes in the Plan's participant demographics that impact liabilities.
- Provide operational information required for governmental agencies and other interested parties.

## Limited Distribution

Milliman's work is prepared solely for the internal business use of the Board of Trustees of the Arizona Bricklayers' Pension (the "Plan Sponsor") and may not be provided to third parties without our prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a release, subject to the following exceptions:

- The Plan Sponsor may provide a copy of Milliman's work, in its entirety, to the Plan's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Plan.
- The Plan Sponsor may distribute certain work product that Milliman and the Plan Sponsor mutually agree is appropriate as may be required by the Pension Protection Act of 2006.

Any third party recipient of this work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

## Reliance

In preparing this report, we relied, without audit, on information (both written and oral) supplied by the Plan Sponsor. This information includes, but is not limited to, plan documents and summaries, participant data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is incomplete or inaccurate, our results may be different and our calculations may need to be revised.

## Limited Use

Actuarial computations for purposes other than determining the contribution requirements for an ongoing plan (such as for assessing benefit security upon potential plan termination) may yield significantly different results from those shown in this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on plan funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurements.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

## Certification

In our opinion, each assumption used, other than those assumptions mandated directly by the Internal Revenue Code and regulations thereon, is individually reasonable (taking into account the experience of the Plan and reasonable expectations) and, in combination, such other assumptions offer our best estimate of anticipated experience under the Plan.

On the basis of the foregoing, we hereby certify that to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States promulgated by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Respectfully submitted,

[redacted]

| | |
|---|---|
| Principal and Consulting Actuary | Principal and Consulting Actuary |
| Enrolled Actuary Number 17-05356 | Enrolled Actuary Number 17-07456 |

February 1, 2019

Date

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# Summary of Results

## A. Overview

| | Actuarial Valuation for Plan Year Beginning | |
|---|---|---|
| | 1/1/2017 | 1/1/2018 |
| **Assets** | | |
| Market Value of Assets (MVA) | $27,271,763 | $31,222,412 |
| Investment yield in prior plan year (MVA) | 6.37% | 15.84% |
| Actuarial Value of Assets (AVA) | $28,804,406 | $30,229,407 |
| Investment yield in prior plan year (AVA) | 4.26% | 6.13% |
| Prior Year Contributions (excluding withdrawal liability income) | $80,007 | $98,153 |
| **Valuation Liabilities** | | |
| Valuation interest rate | 6.50% | 6.50% |
| Normal Cost | $312,700 | $323,660 |
| Present value of benefits (PVB) | 32,261,182 | 32,122,845 |
| Actuarial Accrued Liability (AAL) | 32,114,128 | 31,919,681 |
| Unfunded Actuarial Accrued Liability (AAL - AVA) | 3,309,722 | 1,690,274 |
| Present Value of Accrued Benefits (PVAB) | 32,114,128 | 31,919,681 |
| Funded percentage (PVAB) | | |
| ▪ Based on Market Value of Assets (MVA ÷ PVAB) | 84.92% | 97.82% |
| ▪ Based on Actuarial Value of Assets (AVA ÷ PVAB) | 89.69% | 94.70% |
| Present Value of Vested Benefits (PVVB) | $32,087,264 | $31,810,208 |
| Funded percentage (PVVB) | | |
| ▪ Based on Market Value of Assets (MVA ÷ PVVB) | 84.99% | 98.15% |
| ▪ Based on Actuarial Value of Assets (AVA ÷ PVVB) | 89.77% | 95.03% |
| **Credit Balance and Contribution Information** | | |
| Credit Balance at end of prior plan year | $1,552,118 | $2,560,844 |
| Minimum Required Contribution (before Credit Balance) | 1,310,917 | 1,312,534 |
| Minimum Required Contribution (after Credit Balance) | 0 | 0 |
| Maximum Deductible Contribution | 36,046,252 | 36,894,906 |
| **Withdrawal Liability** | | |
| Present Value of Vested Benefits for withdrawal liability | $45,816,356 | $44,235,039 |
| Value of assets used for withdrawal liability | 27,271,763 | 31,222,412 |
| Unfunded Present Value of Vested Benefits | 18,544,593 | 13,012,627 |
| Withdrawal liability interest rate | 1.98% 1st 20 years<br>2.67% thereafter | 2.34% 1st 20 years<br>2.63% thereafter |
| Unamortized balance of Affected Benefits pools | $0 | $1,912,956 |

| | Actuarial Valuation for Plan Year Beginning | |
|---|---|---|
| | 1/1/2017 | 1/1/2018 |
| **Participant Data** | | |
| Active participants | 43 | 66 |
| Terminated vested participants | 312 | 303 |
| Retired participants | 224 | 218 |
| Disabled participants | 45 | 44 |
| Beneficiaries* | 62 | 63 |
| Total participants | 686 | 694 |
| Total monthly benefits in pay status | $188,464 | $186,229 |
| Average monthly benefit in pay status | 569 | 573 |
| **Certification Status** | Critical Status | Critical Status |

*Includes 10 and 11 alternate payees as of January 1, 2017 and January 1, 2018 respectively.

## B. Contributions for the 2017 Plan Year

**Minimum Required Contribution and Credit Balance**

The Plan's Minimum Required Contribution (MRC), prior to the application of the Credit Balance, consists of two components:

- Gross Normal Cost, which consists of the cost of benefits allocated to the next plan year and administrative expenses expected to be paid in the next plan year, and
- Amortization payment to pay for past liabilities.

If contributions do not meet these costs, the Plan's Credit Balance, which was built up through contributions in excess of Minimum Required Contributions in past years, may be used to offset the costs. The Plan's contribution requirements and expected contributions for the current year and preceding plan years are shown below:

| Plan Year | Normal Cost | Net Amortization Payment | MRC Before Credit Balance | MRC After Credit Balance | Contribution (including withdrawal liability income) | Credit Balance at End of Plan Year |
|---|---|---|---|---|---|---|
| 2017 | 312,700 | 918,208 | 1,310,917 | 0 | 2,160,248 | 2,560,844 |
| 2018 | 323,660 | 908,766 | 1,312,534 | 0 | 59,400 * | 1,475,774 |

** Expected based on 66 actives working an average of 1,000 hours and a $0.90 per hour contribution rate.*

In order to maintain the Plan's Credit Balance at the current level, contributions of approximately $1.3 million are required for the plan year beginning January 1, 2018. If contributions are greater/less than this level, the Credit Balance will increase/decrease during the plan year.

## C. Funded Percentage and Actuarial Certification Results

The following table shows the actual funded percentage along with each plan year's zone status and the year of projected funding deficiency that was reported in the actuarial certification. The funded percentage is equal to the Actuarial Value of Assets divided by the Present Value of Accrued Benefits. Please note the funded percentage shown below is based on audited assets while the funded percentage seen in the actuarial certification is based on unaudited assets, which may create a slight discrepancy between what is shown below and the actuarial certification with respect to the funded percentage. The Annual Funding Notice to participants must be distributed within 120 days of the end of the plan year and will show the funded percentage for 2016, 2017 and 2018, as shown below.

| Plan Year | PPA Funded Percentage | Year of Projected Funding Deficiency | Zone Status |
|---|---|---|---|
| 2016 | 85.6% | 12/31/2020 | Critical* |
| 2017 | 89.7% | 12/31/2021 | Critical |
| 2018 | 94.7% | 12/31/2020 | Critical |

*Certified endangered status but Trustees elected to enter critical status.

## D. Plan Experience

**Actuarial Liability**

Liability experience for the 2017 plan year was more favorable than expected, generating a net actuarial gain of $0.06 million.

**Market Value of Assets (MVA)**

Asset experience for the 2017 plan year was more favorable than expected, generating a net actuarial gain of approximately $2.52 million. The rate of return on market assets was approximately 15.84% versus the assumed rate of return of 6.50%.

**Actuarial Value of Assets (AVA)**

Asset experience for the 2017 plan year was less favorable than expected, generating a net actuarial loss of approximately $0.10 million. The rate of return on actuarial assets was approximately 6.13% versus the assumed rate of return of 6.50%.

## E. Participant Information

The following table shows the number of participants included in this valuation, along with comparable information from the past several valuations.

| Plan Year | Active Participants | Terminated Vested Participants | Retirees, Beneficiaries, and Disabled Participants | Total |
|---|---|---|---|---|
| 2016 | 66 | 318 | 339 | 723 |
| 2017 | 43 | 312 | 331 | 686 |
| 2018 | 66 | 303 | 325 | 694 |

## F. Actuarial Methods and Assumptions

The methods and assumptions used in this valuation are the same as those used in the prior valuation except as follows:

- There has been a change in enrolled actuary for the plan and a change in the business organization providing the actuarial services to the plan. This change meets the requirements for automatic approval under Revenue Procedure 2000-40 Section 4.03.
- The assumed timing of decrements was changed from beginning of year for retirement and middle of year for all other decrements to middle of year for all decrements, except that retirement is assumed to occur at begininng of year at 100% retirement age.
- For current liability purposes (RPA '94): The interest rate was changed from 3.05% to 2.98% in accordance with IRS guidance. The statutory mortality tables also have been updated as required by law.
- For withdrawal liability purposes: The PBGC interest rates were changed from 1.98% for first 20 years and 2.67% thereafter to 2.34% for first 20 years and 2.63% thereafter.

Please see Appendix A and Appendix B for a complete summary of all methods and assumptions used in this valuation.

## G. Plan Provisions

This valuation reflects the plan provisions in effect on January 1, 2018, which are the same provisions that were valued in the January 1, 2017 actuarial valuation report. In determining the present value of vested benefits for withdrawal liability purposes, the plan changes due to the implementation of the Rehabilitation Plan were first recognized in this valuation.

Please see Appendix C for a detailed summary of plan provisions.

# Exhibits

## Exhibit 1

### Summary of Market Value of Assets

The summary of plan assets on a market-value basis as of January 1, 2018 is shown below.

| | |
|---|---|
| 1. Assets | |
| a. 103-12 investment entities | $4,762,259 |
| b. Cash and equivalents | 152,637 |
| c. Common collective trusts | 1,495,607 |
| d. Contributions receivable | 9,760 |
| e. Interest and dividends receivables | 7,442 |
| f. Prepaid expenses | 166,909 |
| g. Mutual funds | 24,687,766 |
| h. Total | 31,282,380 |
| 2. Liabilities | |
| a. Accounts payable | 59,968 |
| b. Total | 59,968 |
| 3. Total [(1h) - (2b)] | $31,222,412 |

## Exhibit 2

### Summary of Income and Disbursements

The change in the Market Value of Assets from January 1, 2017 to January 1, 2018 is shown below.

| | | |
|---|---|---|
| 1. | Market Value of Assets as of January 1, 2017* | $27,271,763 |
| 2. | Income | |
| | a. Employer contributions | 98,153 |
| | b. Withdrawal liability income | 2,062,095 |
| | c. Net investment income | 4,272,985 |
| | d. Total | 6,433,233 |
| 3. | Disbursements | |
| | a. Administrative expenses | 263,845 |
| | b. Benefit payments | 2,218,739 |
| | c. Total | 2,482,584 |
| 4. | Net increase / decrease [(2d) - (3c)] | 3,950,649 |
| 5. | Market Value of Assets as of January 1, 2018 [(1) + (4)] | $31,222,412 |

*Excludes $1,956,320 in withdrawal liability receivable.

## Exhibit 3

### Asset (Gain) / Loss for Prior Plan Year on Market Value of Assets

The Asset (Gain) / Loss is the difference between the expected and actual values of the Market Value of Assets. An asset gain is negative because it represents a decrease from the expected unfunded Actuarial Accrued Liability. The Asset (Gain) / Loss for the plan year ending December 31, 2017 is determined below.

| | |
|---|---|
| 1. Expected Market Value of Assets | |
| a. Market Value of Assets as of December 31, 2016 | $27,271,763 |
| b. Employer contributions for plan year | 2,160,248 |
| c. Benefit payments | 2,218,739 |
| d. Administrative expenses | 263,845 |
| e. Expected investment return based on 6.50% interest rate | 1,751,758 |
| f. Expected Market Value of Assets as of December 31, 2017 [(a) + (b) - (c) - (d) + (e)] | 28,701,185 |
| 2. Market Value of Assets as of December 31, 2017 | 31,222,412 |
| 3. Asset (Gain) / Loss [(1f) - (2)] | (2,521,227) |
| 4. Estimated investment return on Market Value of Assets | 15.84% |

## Exhibit 4

### Actuarial Value of Assets

The Actuarial Value of Assets is the Market Value of Assets less a weighted average of asset gains / (losses) over a four-year period (five-year smoothing), but it must be within 80% to 120% of the Market Value of Assets. The Actuarial Value of Assets as of January 1, 2018 is determined below.

| | | | | |
|---|---|---|---|---|
| 1. Market Value of Assets as of December 31, 2017 | | | | $31,222,412 |
| 2. Unrecognized asset gains / (losses) for the plan years ending | | | | |
| | Plan Year Ending | Gain / (Loss) for Year | Percent Unrecognized | Amount Unrecognized |
| | a. December 31, 2017 | $2,521,227 | 80% | 2,016,982 |
| | b. December 31, 2016 | (33,229) | 60% | (19,937) |
| | c. December 31, 2015 | (2,510,099) | 40% | (1,004,040) |
| | d. December 31, 2014 | 0 | 20% | 0 |
| | e. Total | | | 993,005 |
| 3. Preliminary Actuarial Value of Assets as of January 1, 2018 [(1) - (2e)] | | | | 30,229,407 |
| 4. Actuarial Value of Assets as of January 1, 2018 [(3), but not < 80% x (1), nor > 120% x (1)] | | | | 30,229,407 |

## Exhibit 5

### Asset (Gain) / Loss for Prior Plan Year on Actuarial Value of Assets

The Asset (Gain) / Loss is the difference between the expected and actual values of the Actuarial Value of Assets. An asset gain is negative because it represents a decrease from the expected unfunded Actuarial Accrued Liability. The Asset (Gain) / Loss for the plan year ending December 31, 2017 is determined below.

| | |
|---|---|
| 1. Expected Actuarial Value of Assets | |
| a. Actuarial Value of Assets as of January 1, 2017 | $28,804,406 |
| b. Employer contributions for plan year | 2,160,248 |
| c. Benefit payments | 2,218,739 |
| d. Administrative expenses | 263,845 |
| e. Expected investment return based on 6.50% interest rate | 1,851,379 |
| f. Expected Actuarial Value of Assets as of January 1, 2018 [(a) + (b) - (c) - (d) + (e)] | 30,333,449 |
| 2. Actuarial Value of Assets as of January 1, 2018 | 30,229,407 |
| 3. Asset (Gain) / Loss [(1f) - (2)] | 104,042 |
| 4. Estimated investment return on Actuarial Value of Assets | 6.13% |

# Exhibit 6

## Actuarial Balance Sheet

The total plan requirements compared to the total value of plan resources as of January 1, 2018 is shown below.

| Plan Requirements | | |
|---|---|---|
| 1. | Present value of active participant benefits | |
| | a. Retirement | $943,264 |
| | b. Termination | 277,763 |
| | c. Death | 8,014 |
| | d. Disability | 42,077 |
| | e. Total | 1,271,118 |
| 2. | Present value of inactive participant benefits | |
| | a. Retired participants | 15,989,231 |
| | b. Terminated vested participants | 9,584,575 |
| | c. Beneficiaries | 2,627,676 |
| | d. Disabled participants | 2,650,245 |
| | e. Total | 30,851,727 |
| 3. | Total plan requirements [(1e) + (2e)] | 32,122,845 |
| **Plan Resources** | | |
| 4. | Actuarial Value of Assets | $30,229,407 |
| 5. | Unfunded Actuarial Accrued Liability | 1,690,274 |
| 6. | Present value of future Normal Costs | 203,164 |
| 7. | Total plan resources | 32,122,845 |

## Exhibit 7

### Normal Cost and Unfunded Actuarial Accrued Liability

The Normal Cost is the amount allocated to the current plan year under the Plan's actuarial cost method. The Actuarial Accrued Liability is the accumulation of all prior Normal Costs. The unfunded Actuarial Accrued Liability is the excess (deficiency) of the Actuarial Accrued Liability over the Actuarial Value of Assets. The employer Normal Cost and the unfunded Actuarial Accrued Liability as of January 1, 2017 and January 1, 2018 are determined below.

| | 1/1/2017 | 1/1/2018 |
|---|---|---|
| 1. Normal Cost | | |
| a. Beginning of year Normal Cost | $37,213 | $47,494 |
| b. Beginning of year loading for administrative expenses | 275,487 | 276,166 |
| c. Total | 312,700 | 323,660 |
| 2. Actuarial Accrued Liability | | |
| a. Pensioners and beneficiaries | 21,725,065 | 21,267,152 |
| b. Inactive participants with vested rights | 9,312,351 | 9,584,575 |
| c. Active participants | 1,076,712 | 1,067,954 |
| d. Total | 32,114,128 | 31,919,681 |
| 3. Actuarial Value of Assets | 28,804,406 | 30,229,407 |
| 4. Unfunded Actuarial Accrued Liability [(2d) - (3)] | 3,309,722 | 1,690,274 |

## Exhibit 8

### Funding Standard Account for Prior Plan Year

The Funding Standard Account for the plan year ending December 31, 2017 is determined below.

| | |
|---|---|
| 1. Outstanding balances as of January 1, 2017 | |
| a. Amortization charges | $13,757,898 |
| b. Amortization credits | 8,896,058 |
| 2. Charges to Funding Standard Account | |
| a. Funding deficiency as of January 1, 2017 | 0 |
| b. Normal Cost as of January 1, 2017 | 312,700 |
| c. Amortization charges as of January 1, 2017 | 1,950,361 |
| d. Interest on (a), (b), and (c) to end of plan year | 147,099 |
| e. Total | 2,410,160 |
| 3. Credits to Funding Standard Account | |
| a. Credit Balance as of January 1, 2017 | 1,552,118 |
| b. Employer contributions for plan year | 2,160,248 |
| c. Amortization credits as of January 1, 2017 | 1,032,153 |
| d. Interest on (a), (b), and (c) to end of plan year | 226,485 |
| e. Full funding credit | 0 |
| f. Total | 4,971,004 |
| 4. Credit Balance / (funding deficiency) as of December 31, 2017 | 2,560,844 |

## Exhibit 9

### Current Annual Cost and Minimum Required Contribution

The Current Annual Cost is the Plan's cost under the minimum funding requirements prior to the recognition of the full funding limitation and any Credit Balance. The Minimum Required Contribution is the amount needed to avoid a funding deficiency in the Funding Standard Account. These amounts for the plan year beginning January 1, 2018 are determined below.

| | |
|---|---|
| 1. Charges for plan year | |
| a. Funding deficiency as of January 1, 2018 | $0 |
| b. Normal Cost | 323,660 |
| c. Amortization charges (on $12,626,177) | 1,940,919 |
| d. Interest on (a), (b), and (c) to end of plan year | 147,198 |
| e. Additional funding charge | 0 |
| f. Total | 2,411,777 |
| 2. Credits for plan year | |
| a. Amortization credits (on $8,375,059) | 1,032,153 |
| b. Other credits | 0 |
| c. Interest on (a) and (b) to end of plan year | 67,090 |
| d. Total | 1,099,243 |
| 3. Current Annual Cost for plan year [(1f) - (2d)] | 1,312,534 |
| 4. Full funding credit for plan year | |
| a. Full funding limitation | 13,190,130 |
| b. Full funding credit [(3) - (4a), but not < $0] | 0 |
| 5. Credit Balance for plan year | |
| a. Credit Balance as of January 1, 2018 | 2,560,844 |
| b. Interest on (a) to end of plan year | 166,455 |
| c. Total | 2,727,299 |
| 6. Minimum Required Contribution for plan year [(3) - (4b) - (5c), but not < $0] | 0 |

## Exhibit 10

### Actuarial (Gain) / Loss for Prior Plan Year

The Actuarial (Gain) / Loss for the prior plan year is the difference between the expected and actual unfunded Actuarial Accrued Liability as of the beginning of the current plan year. The Actuarial (Gain) / Loss for the plan year ending December 31, 2017 is determined below.

| | |
|---|---|
| 1. Unfunded Actuarial Accrued Liability as of January 1, 2017 | $3,309,722 |
| 2. Normal Cost as of January 1, 2017 | 312,700 |
| 3. Interest on (1) and (2) to end of plan year | 235,457 |
| 4. Subtotal [(1) + (2) + (3)] | 3,857,879 |
| 5. Employer contributions for plan year | 2,160,248 |
| 6. Interest on (5) to end of plan year | 58,507 |
| 7. Subtotal [(5) + (6)] | 2,218,755 |
| 8. Changes in Actuarial Accrued Liability | |
| a. Plan amendments | 0 |
| b. Changes in actuarial assumptions | 10,616 |
| c. Changes in cost method | 0 |
| d. Total | 10,616 |
| 9. Expected unfunded Actuarial Accrued Liability as of January 1, 2018 [(4) - (7) + (8d)] | 1,649,740 |
| 10. Actual unfunded Actuarial Accrued Liability as of January 1, 2018 | 1,690,274 |
| 11. Actuarial (Gain) / Loss on Actuarial Value of Assets | 104,042 |
| 12. Actuarial (Gain) / Loss on Actuarial Accrued Liability [(10) - (9) - (11)] | (63,508) |
| 13. Total Actuarial (Gain) / Loss for prior plan year [(10) - (9)] | 40,534 |

# Exhibit 11

## Charges and Credits for Funding Standard Account

The amortization charges and credits for the Funding Standard Account for the plan year beginning January 1, 2018 are determined below.

1. Charges as of January 1, 2018

| | Date Established | Description | Amortization Amount | Years Remaining | Outstanding Balance |
|---|---|---|---|---|---|
| a. | January 1, 1979 | Plan Amendment | $58,396 | 1 | $58,396 |
| b. | January 1, 1980 | Plan Amendment | 107,412 | 2 | 208,267 |
| c. | January 1, 1991 | Plan Amendment | 2,883 | 3 | 8,131 |
| d. | January 1, 1996 | Change in Assumptions | 13,199 | 8 | 85,590 |
| e | January 1, 2001 | Change in Assumptions | 33,624 | 13 | 307,948 |
| f. | January 1, 2004 | Actuarial Loss | 17,678 | 1 | 17,678 |
| g. | January 1, 2005 | Actuarial Loss | 11 | 2 | 20 |
| h. | January 1, 2005 | Change in Assumptions | 1,233 | 17 | 13,274 |
| i. | January 1, 2006 | Actuarial Loss | 1,163 | 3 | 3,280 |
| j. | January 1, 2008 | Actuarial Loss | 44,868 | 5 | 198,575 |
| k. | January 1, 2009 | Actuarial Loss | 561,113 | 6 | 2,892,918 |
| l. | January 1, 2009 | Plan Amendment | 108,369 | 6 | 558,713 |
| m. | January 1, 2010 | Plan Amendment | 1,879 | 7 | 10,976 |
| n. | January 1, 2011 | Actuarial Loss | 34,390 | 8 | 222,999 |
| o. | January 1, 2012 | Actuarial Loss | 106,483 | 9 | 754,834 |
| p. | January 1, 2013 | Actuarial Loss | 189,155 | 10 | 1,448,191 |
| q. | January 1, 2014 | Change in Assumptions | 217,653 | 11 | 1,782,328 |
| r. | January 1, 2016 | Actuarial Loss | 53,979 | 13 | 494,380 |
| s. | January 1, 2016 | Change in Assumptions | 366,599 | 13 | 3,357,582 |
| t. | January 1, 2017 | Actuarial Loss | 15,724 | 14 | 150,947 |
| u. | January 1, 2018 | Actuarial Loss | 4,048 | 15 | 40,534 |
| v. | January 1, 2018 | Change in assumptions | 1,060 | 15 | 10,616 |
| w. | Total | | 1,940,919 | | 12,626,177 |

2. Credits as of January 1, 2018

| | Date Established | Description | Amortization Amount | Years Remaining | Outstanding Balance |
|---|---|---|---|---|---|
| a. | January 1, 1991 | Change in Assumptions | $3,760 | 3 | $10,605 |
| b. | January 1, 2003 | Change in Assumptions | 14,624 | 15 | 146,447 |
| c. | January 1, 2006 | Change in Assumptions | 34,503 | 18 | 383,354 |
| d. | January 1, 2007 | Actuarial Gain | 49,169 | 4 | 179,390 |
| e. | January 1, 2007 | Change in Assumptions | 186,471 | 19 | 2,131,824 |
| f. | January 1, 2010 | Actuarial Gain | 268,703 | 7 | 1,569,499 |
| g. | January 1, 2014 | Actuarial Gain | 119,681 | 11 | 980,045 |
| h. | January 1, 2015 | Actuarial Gain | 65,925 | 12 | 572,824 |
| i. | January 1, 2015 | Change in Asset Method | 100,113 | 7 | 584,762 |
| j. | January 1, 2017 | Plan Amendment | 189,204 | 14 | 1,816,309 |
| k. | Total | | 1,032,153 | | 8,375,059 |

| | | |
|---|---|---|
| 3. | Net outstanding balance [(1w) - (2k)] | 4,251,118 |
| 4. | Credit Balance as of January 1, 2018 | 2,560,844 |
| 5. | Waived funding deficiency | 0 |
| 6. | Balance test result [(3) - (4) - (5)] | 1,690,274 |
| 7. | Unfunded Actuarial Accrued Liability as of January 1, 2018 | 1,690,274 |

## Exhibit 12

### Current Liability

In accordance with IRS requirements, the Current Liability has been calculated at 2.98%. The Current Liability as of January 1, 2018 is determined below.

| | | Count | Vested Benefits | All Benefits |
|---|---|---|---|---|
| 1. | Current Liability | | | |
| | a. Active participants | 66 | $1,721,646 | $1,944,546 |
| | b. Terminated vested participants | 303 | 17,395,185 | 17,395,185 |
| | c. Retirees, beneficiaries, and disabled participants | 325 | 28,914,622 | 28,914,622 |
| | d. Total | 694 | 48,031,453 | 48,254,353 |
| 2. | Expected increase in Current Liability for benefit accruals during year | | | 95,745 |
| 3. | Expected distributions during year | | | 2,346,671 |
| 4. | Market Value of Assets | | | 31,222,412 |
| 5. | Current Liability funded percentage [(4) ÷ (1d)] | | | 64.70% |

## Exhibit 13

### Full Funding Limitation

The full funding limitation (FFL) for the plan year ending December 31, 2018 and the tax year ending December 31, 2018 is determined below.

| | Minimum Required Contribution | Maximum Deductible Contribution |
|---|---|---|
| 1. 100% Actuarial Accrued Liability (AAL) FFL | | |
| a. AAL as of January 1, 2018 | $31,919,681 | $31,919,681 |
| b. Normal Cost to end of year | 323,660 | 323,660 |
| c. Value of assets as of January 1, 2018 | | |
| i. Lesser of actuarial and market value | 30,229,407 | 30,229,407 |
| ii. Credit Balance | 2,560,844 | n/a |
| iii. Undeducted employer contributions | n/a | 0 |
| iv. Plan assets [(i) - (ii) - (iii)] | 27,668,563 | 30,229,407 |
| d. Interest to December 31, 2018 at 6.50% on (a), (b), & (civ) | 297,360 | 130,906 |
| e. 100% AAL FFL [(a) + (b) - (civ) + (d), but not <$0] | 4,872,138 | 2,144,840 |
| 2. Estimated Current Liability as of December 31, 2018 | | |
| a. Current Liability as of January 1, 2018 | 48,254,353 | 48,254,353 |
| b. Normal Cost to end of plan year | 95,745 | 95,745 |
| c. Estimated benefit disbursements to December 31, 2018 | 2,346,671 | 2,346,671 |
| d. Interest to December 31, 2018 at 2.98% on (a), (b), & (c) | 1,406,124 | 1,406,124 |
| e. Estimated EOY Current Liability [(a) + (b) - (c) + (d)] | 47,409,551 | 47,409,551 |
| 3. Estimated assets for Current Liability FFL | | |
| a. Actuarial Value of Assets as of January 1, 2018 | 30,229,407 | 30,229,407 |
| b. Estimated employee contributions to December 31, 2018 | 0 | 0 |
| c. Expenses | 276,166 | 276,166 |
| d. Estimated return to December 31, 2018 at 6.50% on (3a), (1ciii), (2c), (3b), & (3c) | 1,871,895 | 1,871,895 |
| e. Estimated assets as of December 31, 2018 [(3a) - (1ciii) - (2c) + (3b) - (3c) + (3d)] | 29,478,465 | 29,478,465 |
| 4. 90% Current Liability minimum funding limitation | | |
| a. 90% EOY RPA Current Liability [90% x (2e)] | 42,668,596 | 42,668,596 |
| b. 90% Current Liability FFL [(a) - (3e), but not < $0] | 13,190,130 | 13,190,130 |
| 5. Full funding limitation [maximum of (1e) and (4b)] | 13,190,130 | 13,190,130 |

## Exhibit 14

### Maximum Deductible Contribution under IRC Section 404

The Maximum Deductible Contribution under IRC Section 404 for the tax year beginning January 1, 2018 is determined below.

| | | |
|---|---|---|
| 1. | Minimum Required Contribution for plan year beginning January 1, 2018 | $0 |
| 2. | Preliminary Maximum Deductible Contribution under IRC Section 404 for tax year | |
| | a. Normal Cost | 323,660 |
| | b. 10-year amortization of unfunded Actuarial Accrued Liability | 220,775 |
| | c. Interest to earlier of tax year end or plan year end | 35,388 |
| | d. Total | 579,823 |
| 3. | Full funding limitation for tax year | 13,190,130 |
| 4. | Unfunded 140% of Current Liability as of December 31, 2018 | |
| | a. Current Liability (for IRC Section 404 purposes) projected to end of year | 47,409,551 |
| | b. Actuarial Value of Assets (for IRC Section 404 purposes) projected to end of year | 29,478,465 |
| | c. Unfunded 140% of Current Liability [140% × (a) - (b), but not less than $0] | 36,894,906 |
| 5. | Maximum Deductible Contribution under IRC Section 404 for tax year [maximum of (1) and (2d), but not greater than (3), nor less than (4c)] | 36,894,906 |

There are alternative calculations of the Maximum Deductible Contribution under IRC Section 404 that may produce a different amount than illustrated above. Additionally, deductibility of contributions to a defined contribution plan maintained for the same employees may be affected by the 25% of pay limitation for defined benefit and defined contribution plans combined. Employers should consult their tax advisors regarding the deductibility of contributions.

## Exhibit 15

### Present Value of Accumulated Plan Benefits

Accumulated Plan Benefits are benefits earned to date, based on pay history and service rendered to date, expected to be paid in the future to retired, terminated vested, and active participants, and beneficiaries of active or former participants. The Present Value of Accumulated Plan Benefits (determined on a plan continuation basis in accordance with FASB ASC Topic 960) as of January 1, 2017 and January 1, 2018 is shown below.

| | 1/1/2017 | 1/1/2018 |
|---|---|---|
| 1. Present Value of vested Accumulated Plan Benefits | | |
| a. Participants currently receiving payments | $21,725,065 | $21,267,152 |
| b. Other vested benefits | 10,362,199 | 10,543,056 |
| c. Total | 32,087,264 | 31,810,208 |
| 2. Present Value of non-vested Accumulated Plan Benefits | 26,864 | 109,473 |
| 3. Present Value of all Accumulated Plan Benefits [(1c) + (2)] | 32,114,128 | 31,919,681 |
| 4. Market Value of Assets | 27,271,763 | 31,222,412 |
| 5. Funded percentage on Market Value of Assets | | |
| a. Vested benefits [(4) ÷ (1c)] | 84.99% | 98.15% |
| b. All benefits [(4) ÷ (3)] | 84.92% | 97.82% |
| 6. Actuarial Value of Assets | $28,804,406 | $30,229,407 |
| 7. Funded percentage on Actuarial Value of Assets | | |
| b. Vested benefits [(6) ÷ (1c)] | 89.77% | 95.03% |
| c. All benefits [(6) ÷ (3)] | 89.69% | 94.70% |

## Exhibit 16

### Change in Present Value of Accumulated Plan Benefits

The change in the Present Value of Accumulated Plan Benefits (determined on a plan continuation basis in accordance with FASB ASC Topic 960) from January 1, 2017 to January 1, 2018 is shown below.

| | | |
|---|---|---|
| 1. | Present Value of all Accumulated Plan Benefits as of January 1, 2017 | $32,114,128 |
| 2. | Changes | |
| | a. Reduction in discount period | 2,016,444 |
| | b. Benefits accumulated plus actuarial (gain) / loss | (2,768) |
| | c. Benefit payments | (2,218,739) |
| | d. Plan amendments | 0 |
| | e. Change in assumptions | 10,616 |
| | f. Total | (194,447) |
| 3. | Present Value of all Accumulated Plan Benefits as of January 1, 2018 [(1) + (2f)] | 31,919,681 |

## Exhibit 17

### Unfunded Vested Benefit Liability for Withdrawal Liability Calculations

Withdrawal liability payments are based on unfunded vested benefit liability. Vested benefit liability is the present value of benefits earned to date, excluding benefits for non-vested participants and certain benefits such as death and disability benefits which are not considered vested. These liabilities have been determined as of December 31, 2016 and December 31, 2017. However, if there is a termination by mass withdrawal during the year, a separate calculation has to be performed.

| | |
|---|---|
| 1. Present Value of Vested Benefits at 6.50% | |
| a. Active participants | $963,008 |
| b. Retired participants | 15,989,231 |
| c. Terminated vested participants | 9,584,575 |
| d. Beneficiaries | 2,627,676 |
| e. Disabled participants | 2,650,245 |
| f. Total vested benefits | 31,814,735 |
| 2. Present Value of Vested Benefits at PBGC rates | |
| a. Active participants | 1,989,662 |
| b. Retired participants | 23,182,400 |
| c. Terminated vested participants | 20,056,959 |
| d. Beneficiaries | 3,624,227 |
| e. Disabled participants | 3,584,248 |
| f. Load for expenses | 393,429 |
| g. Total vested benefits | 52,830,925 |
| 3. Market Value of Assets | 31,222,412 |
| 4. Funded ratio [(3) ÷ (2g)] | 59.10% |
| 5. Vested benefit liability [(2g) x (4) + ((1f) x (1 - (4)))] | $44,235,039 |
| 6. Unfunded vested benefit liability [(5) - (3), but not less than $0] | 13,012,627 |
| 7. Unamortized balance of Affected Benefits pools* | 1,912,956 |

*Represents reduction in adjustable benefits due to Rehabilitation Plan.

## Exhibit 18

### Summary of Participant Data

A summary of participant data for the plan years beginning January 1, 2017 and January 1, 2018 is shown below.

| | 1/1/2017 | 1/1/2018 |
|---|---|---|
| 1. Active participants | | |
| a. Count | 43 | 66 |
| b. Average age | 48.0 | 47.3 |
| c. Average vesting service | 8.4 | 5.7 |
| d. Number with unknown age | 0 | 22 |
| 2. Retired participants | | |
| a. Count | 224 | 218 |
| b. Average age | 73.9 | 74.2 |
| c. Total annual benefits | $1,604,992 | $1,589,698 |
| d. Average annual benefit | 7,165 | 7,292 |
| 3. Terminated vested participants | | |
| a. Count | 312 | 303 |
| b. Average age | 53.2 | 54.2 |
| c. Total annual benefits | $1,607,650 | $1,558,184 |
| d. Average annual benefit | 5,153 | 5,142 |
| e. Number with unknown age | 1 | 1 |
| 4. Beneficiaries* | | |
| a. Count | 62 | 63 |
| b. Average age | 75.4 | 75.7 |
| c. Total annual benefits | $320,685 | $311,307 |
| d. Average annual benefit | 5,172 | 4,941 |
| 5. Disabled participants | | |
| a. Count | 45 | 44 |
| b. Average age | 71.3 | 72.3 |
| c. Total annual benefits | $335,892 | $333,750 |
| d. Average annual benefit | 7,464 | 7,585 |

*Includes 10 and 11 alternate payees as of January 1, 2017 and January 1, 2018 respectively.

## Exhibit 19

### Change in Participant Counts

The change in participant counts from January 1, 2017 to January 1, 2018 is shown below.

| | Active | Terminated Vested | Retired | Beneficiary* | Disabled | Total |
|---|---|---|---|---|---|---|
| As of 1/1/2017 | 43 | 312 | 224 | 62 | 45 | 686 |
| Retired | 0 | (5) | 5 | 0 | 0 | 0 |
| Received lump sum distribution | 0 | 0 | 0 | 0 | 0 | 0 |
| Benefit expired / lapsed | 0 | 0 | 0 | (1) | 0 | (1) |
| Terminated non-vested | (10) | 0 | 0 | 0 | 0 | (10) |
| Terminated vested | (4) | 4 | 0 | 0 | 0 | 0 |
| Disabled | 0 | 0 | 0 | 0 | 0 | 0 |
| Died with beneficiary | 0 | 0 | (1) | 1 | 0 | 0 |
| Died without beneficiary | 0 | (2) | (11) | (1) | (1) | (15) |
| Rehired | 5 | (5) | 0 | 0 | 0 | 0 |
| New during plan year | 32 | 0 | 0 | 0 | 0 | 32 |
| Net data adjustments | 0 | (1) | 1 | 2 | 0 | 2 |
| As of 1/1/2018 | 66 | 303 | 218 | 63 | 44 | 694 |

*Includes 10 and 11 alternate payees as of January 1, 2017 and January 1, 2018 respectively.

## Exhibit 20

### Active Participants by Age and Service

The number of active participants summarized by attained age and years of credited service as of January 1, 2018 is shown below.

| | Years of Credited Service | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | Under 1 | 1–4 | 5–9 | 10–14 | 15–19 | 20–24 | 25–29 | 30–34 | 35–39 | 40+ | Total |
| Unknown | 20 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| Under 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25–29 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 30–34 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 35–39 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 40–44 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 45–49 | 0 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| 50–54 | 1 | 3 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 9 |
| 55–59 | 1 | 1 | 1 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 10 |
| 60–64 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 4 |
| 65–69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 70+ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 26 | 15 | 7 | 4 | 6 | 8 | 0 | 0 | 0 | 0 | 66 |

# Appendices

# Appendix A – Summary of Actuarial Methods

The ultimate cost of a pension plan is the excess of actual benefits and administrative expenses paid over actual net investment return on plan assets during the plan's existence until the last payment has been made to the last participant. A plan's "actuarial cost method" determines the expected incidence of actuarial costs by allocating portions of the ultimate cost to each plan year. The cost method is thus a budgeting tool to help ensure that a plan will be adequately and systematically funded and accounted for. Annual contributions are also affected by a plan's "asset valuation method" (as well as plan provisions, actuarial assumptions, and actual plan demographic and investment experience each year).

## Actuarial Cost Method

The actuarial cost method used for determining the Plan's ERISA funding requirements and the FASB ASC Topic 960 values is the Unit Credit method. Under this method, an accrued benefit is determined at each active participant's assumed retirement age based on compensation and service at both the beginning and the end of the current year. The Plan's Normal Cost is the sum of the present value of the excess of each active participant's accrued benefit at the end of the current year over that at the beginning of the current year. The Plan's accrued liability is the sum of (a) the present value of each active participant's accrued benefit at the beginning of the current year plus (b) the present value of each inactive participant's benefits.

## Asset Valuation Method

Five-year smoothing method. The actuarial value of assets is equal to the market value of assets adjusted to recognize differences between the expected value of assets and the actual market value of assets over 5 years at a rate of 20% per year. The expected value of assets for the year is the market value of assets at the valuation date for the prior year brought forward with interest at the valuation rate to the current year plus contributions minus benefit payments, all adjusted with interest at the valuation rate to the valuation date for the current year. The actuarial value of assets cannot be less than 80% or more than 120% of the market value of assets.

## Changes in Actuarial Methods Since Prior Valuation

There has been a change in enrolled actuary for the plan and a change in the business organization providing the actuarial services to the plan. This change meets the requirements for automatic approval under Revenue Procedure 2000-40 Section 4.03.

# Appendix B – Summary of Actuarial Assumptions

## ECONOMIC ASSUMPTIONS

### Interest Rates

**ERISA minimum funding:** 6.50% per year (net of investment-related expenses)

**FASB ASC Topic 960:** 6.50% per year (net of investment-related expenses)

**Withdrawal liability:** To the extent the present value of vested benefits is matched by the market value of plan assets, the interest assumption is the PBGC interest rates for December of 2017 of 2.34% for the first 20 years and 2.63% thereafter. To the extent the present value of vested benefits is not matched by the market value of plan assets, the interest assumption utilized is the same as used for minimum funding (6.50%).

**Current Liability (RPA'94):** 2.98% per year, updated annually, as mandated by the IRS.

### Administrative Expenses

Expected expenses payable from the trust are explicitly loaded to the normal cost. For the current valuation, the loading for expenses (assumed to be payable mid-year) is $285,000.

### Mortality

**ERISA minimum funding, FASB ASC Topic 960, and withdrawal liability:**

Healthy Participants: RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally from 2014 with mortality improvement using Scale MP-2015.

Disabled Participants: RP-2014 Disabled Retiree Mortality Tables

**RPA '94 Current Liability:** RP-2014 Mortality Tables projected for mortality improvement, updated annually, as mandated by the IRS.

### Retirement

Annual rates of retirement are shown in the following table for active and terminated vested participants who are eligible to retire.

| Age | Active | Terminated Vested |
|---|---|---|
| 55 - 59 | 6.0% | 3.0% |
| 60 - 61 | 13.0 | 6.5 |
| 62 | 50.0 | 25.0 |
| 63 – 64 | 30.0 | 15.0 |
| 65+ | 100.0 | 100.0 |

### Termination

Annual rates of termination are based on age. Sample rates are shown in the following table.

| Age | Termination Rate |
|---|---|
| 25 | 43.5% |
| 30 | 37.2 |
| 35 | 33.6 |
| 40 | 31.8 |
| 45 | 31.0 |
| 50 | 31.2 |
| 55 | 27.0 |
| 60 | 27.3 |
| 65 | 0.0 |

Termination rates do not apply when a participant is eligible to retire. In addition, termination rates do not apply for determining the present value of vested benefits for withdrawal liability purposes.

## Disability

Annual rates of termination are based on age. Sample rates are shown in the following table.

| Age | Disability Rate |
|---|---|
| 25 | 0.04% |
| 30 | 0.06 |
| 35 | 0.07 |
| 40 | 0.11 |
| 45 | 0.18 |
| 50 | 0.30 |
| 55 | 0.50 |
| 60 | 0.81 |
| 65 | 0.00 |

Disability rates do not apply for determining the present value of vested benefits for withdrawal liability purposes.

## Decrement Timing

Decrements are assumed to occur at the middle of the year, except that retirement is assumed to occur at begininng of year at 100% retirement age.

## Form of Payment

Married participants are assumed to elect the 100% Husband-and-Wife form of payment.

Non-married participants are assumed to elect the life annuity form of payment.

## Projection of Future Service and Benefit Accruals

0.8333 Pension Credits per year.

## Marital Characteristics

**For participants not in pay status:** 75% of participants are assumed to be married to a spouse of the opposite sex. Males are assumed to be 2 years older than females.

**For participants in pay status:** Actual birth dates of beneficiaries are included in the census data, where relevant.

**For beneficiaries:** Actual birth dates are included in the census data, where relevant.

## Benefits Not Valued

None.

## Special Data Adjustments

**For participants without date of birth in data:** Assumed to be average age of participants with similar characteristics.

## CHANGES IN ACTUARIAL ASSUMPTIONS SINCE PRIOR VALUATION

Decrement timing changed from beginning of year for retirement and middle of year for all other decrements to middle of year for all decrements, except that retirement is assumed to occur at begininng of year at 100% retirement age.

**Withdrawal liability purposes:** PBGC interest rates changed from 1.98% for the first 20 years and 2.67% thereafter to 2.34% for first 20 years and 2.63% thereafter and form of payment assumption for non-married participants changed from 3-year Certain and Life form of payment to life annuity form of payment.

**Current liability purposes (RPA ’94):** Interest rate changed from 3.05% to 2.98% per year and the statutory mortality tables have been updated as required by law.

## Rationale for Significant Assumptions

**Investment Return:** The plan’s historical investment performance, along with expected returns for each asset class and assumed inflation rate, is considered. It is based on the Plan’s investment policy, including target asset allocation.

**Mortality Rates:** The plan is not large enough to develop a credible mortality table based exclusively on plan experience. We have relied on published mortality tables in which credible mortality experience was analyzed. The assumption selected is reasonable for the contingency being measured and is not anticipated to produce significant cumulative actuarial gains or losses over the measurement period

**Other Demographic Assumptions:** Except where noted, all demographic assumptions are based on the actuary’s judgment and continual review of experience.

# Appendix C – Summary of Principal Plan Provisions

This summary of plan provisions is intended to only describe the essential features of the Plan. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself.

## Definitions

**Accrued Benefit:** The monthly accrued benefit payable at Normal Retirement shall be an amount determined by multiplying the number of Pension Credits earned during each of the Participant's Period(s) of Accrual times the Accrual rate appropriate as shown in the following schedule:

| Period of Accrual Ending Between | Bricklayers Accrual Rate During Period of Accrual | Tilelayers Accrual Rate During Period of Accrual |
|---|---|---|
| Before January 1, 1960 | $13.75 | $ 12.00 |
| January 1, 1960 – June 30, 1965 | 61.00 | 12.00 |
| July 1, 1965 – December 31, 1995 | 61.00 | 61.00 |
| January 1, 1996 – December 31, 2006 | 43.00 | 43.00 |
| January 1, 2007 & thereafter | 30.00 | 30.00 |

**Actuarially Equivalent:** Equality in value such that the present value of the amount under any form of payment is essentially the same as the present value of the amount under the single life annuity. Actuarially equivalent factors are based on the RP-2014 Blue Collar Mortality Table (male rates for participants and female rates for beneficiaries) and an interest rate of 7.0%.

**Plan Effective Date:** January 1, 1960; the Plan was last amended effective May 5, 2016.

**Plan Year:** The 12-month period beginning January 1 and ending December 31.

**Pension Credit:** A full year is credited for each employment year in which 1,200 or more hours of service are credited. Partial years of Pension Credit are credited if 300 or more hours are worked in an employment year.

**Vesting Service:** A full year is credited for each employment year in which 1,000 or more hours are worked. No partial years of Vesting Service are credited.

## Eligibility for Participation

The earliest January 1 or July 1 next following the 12 consecutive-month period during which the employee completes 300 Hours of Service in Covered Employment.

## Normal Retirement

**Normal Retirement Date:** The later of the first day of the month coincident with or next following the attainment of age 65 or the participant's 5th anniversary of participation.

**Normal Retirement Benefit:** The Accrued Benefit.

## Early Retirement

**Early Retirement Date:** The first day of the month coincident with or next following the attainment of age 55 and 10 years of Pension Credit.

**Early Retirement Benefit:** The Accrued Benefit, actuarially reduced for commencement prior to Normal Retirement Date.

## Deferred Retirement

**Deferred Retirement Date:** The first day of the month coincident with or next following the date of termination of service if it occurs after the Normal Retirement Date.

**Deferred Retirement Benefit:** The greater of (i) the Accrued Benefit determined as of the Deferred Retirement Date or (ii) the Accrued Benefit determined as of the Normal Retirement Date and actuarially increased to the Deferred Retirement Date.

## Termination

**Termination Date:** The date of termination of service other than for reasons of retirement, disability, or death.

**Termination Benefit:** The Accrued Benefit, multiplied by the vested percentage in the following table, payable at the Normal Retirement Date, or payable as of the first day of any month coincident with or next following attainment of age 55 if at least 10 years of Pension Credit have been completed (actuarially reduced for commencement prior to Normal Retirement Date).

| Years of Vesting Service | Vested Percentage |
|---|---|
| Less than 5 | 0% |
| 5 or more | 100% |

## Preretirement Death

**Preretirement Death Benefit Eligibility:** Surviving spouses of participants with a vested Accrued Benefit who die before commencement of payments, provided they have been married at least one year.

**Preretirement Death Benefit:** 50% of the benefit which would have been payable had the deceased participant instead terminated service on the date of death, survived to his earliest possible benefit commencement date, elected the 50% Husband-and-Wife pension, and died on that same date.

## Disability Retirement

**Disability Retirement Eligibility:** Under age 65 and attainment of 5 years of Pension Credit (15 years of Pension Credit for work in the trade)

**Disability Retirement Benefit:** The Accrued Benefit, determined as of the disability separation date.

## Forms of Payment

**Normal Forms:** Life annuity if single, 100% Husband-and-Wife Pension if married.

**Optional Forms:** Life annuity, 50% Husband-And-Wife Pension, and 75% Husband-and-Wife Pension.

The Husband-and-Wife Pension includes a pop-up feature.

## Changes in Principal Plan Provisions Since Prior Valuation

None.

Milliman

# Arizona Bricklayers' Pension Trust Fund

## January 1, 2019 Actuarial Valuation

Prepared by:

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Issued May 5, 2020

# January 1, 2019 Actuarial Valuation of the Arizona Bricklayers' Pension Trust Fund

The actuarial valuation of the Arizona Bricklayers' Pension Trust Fund (the "Plan") for the plan year beginning January 1, 2019 has been completed in accordance with our understanding of the minimum funding requirements under ERISA and the Pension Protection Act of 2006 as well as the applicable sections of the Internal Revenue Code (IRC), including all regulations and guidance issued to date. It also has been completed in accordance with our understanding of FASB ASC Topic 960 for determining plan accounting requirements. The valuation results contained in this report are based on the actuarial methods (Appendix A), actuarial assumptions (Appendix B), and principal plan provisions (Appendix C) summarized in the appendices. In addition, Appendix D contains information about the Plan's risks.

## Purpose of the Valuation

In general, the actuarial valuation determines the current level of employer contributions that, taking into account prior funding, will accumulate assets sufficient to meet benefit payments and administrative expenses when due under the terms of the Plan. This report has been prepared for the Arizona Bricklayers' Pension Trust Fund as of January 1, 2019 to:

- Calculate the Minimum Required Contribution for the plan year beginning January 1, 2019.
- Calculate the Maximum Deductible Contribution for the 2019 fiscal year.
- Determine the actuarial Present Value of Accumulated Plan Benefits as of December 31, 2018 for purposes of disclosing the Plan's liabilities under FASB ASC Topic 960.
- Determine the Plan's unfunded vested benefit liability as of December 31, 2018 for withdrawal liability purposes calculated in accordance with the requirements of the Multiemployer Pension Plan Amendments Act of 1980.
- Review the Plan's funded status.
- Review the experience for the plan year ending December 31, 2018, including the performance of the Plan's assets during the year and changes in the Plan's participant demographics that impact liabilities.
- Provide operational information required for governmental agencies and other interested parties.

## Limited Distribution

Milliman's work is prepared solely for the internal business use of the Board of Trustees (the "Plan Sponsor") and may not be provided to third parties without our prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a release, subject to the following exceptions:

- The Plan Sponsor may provide a copy of Milliman's work, in its entirety, to the Plan's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Plan.
- The Plan Sponsor may distribute certain work product that Milliman and the Plan Sponsor mutually agree is appropriate as may be required by the Pension Protection Act of 2006.

Any third party recipient of this work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

## Reliance

In preparing this report, we relied, without audit, on information (both written and oral) supplied by the Plan Sponsor. This information includes, but is not limited to, plan documents and summaries, participant data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is incomplete or inaccurate, our results may be different and our calculations may need to be revised.

## Limited Use

Actuarial computations for purposes other than determining the contribution requirements for an ongoing plan (such as for assessing benefit security upon potential plan termination) may yield significantly different results from those shown in this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on plan funded status); and changes in plan provisions or applicable law. Except for the information provided in Appendix D, due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurements.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

## Certification

In our opinion, each assumption used, other than those assumptions mandated directly by the Internal Revenue Code and regulations thereon, is individually reasonable (taking into account the experience of the Plan and reasonable expectations) and, in combination, such other assumptions offer our best estimate of anticipated experience under the Plan.

On the basis of the foregoing, we hereby certify that to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States promulgated by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Respectfully submitted,

[redacted]

| | |
|---|---|
| Kevin Campe, EA, MAAA | Grant Camp, FSA, EA, MAAA |
| Principal and Consulting Actuary | Principal and Consulting Actuary |
| Enrolled Actuary Number 20-05356 | Enrolled Actuary Number 20-07456 |

May 5, 2020

## Table of Contents

# Summary of Results

## A. Overview

| | Actuarial Valuation for Plan Year Beginning | |
|---|---|---|
| | 1/1/2018 | 1/1/2019 |
| **Assets** | | |
| Market Value of Assets (MVA) | $31,222,412 | $26,730,380 |
| Investment yield in prior plan year (MVA) | 15.84% | -6.94% |
| Actuarial Value of Assets (AVA) | $30,229,407 | $28,962,201 |
| Investment yield in prior plan year (AVA) | 6.13% | 3.92% |
| Prior Year Contributions (excluding withdrawal liability income) | $98,153 | $96,625 |
| **Valuation Liabilities** | | |
| Valuation interest rate | 6.50% | 6.50% |
| Normal Cost | $323,660 | $324,493 |
| Present value of benefits (PVB) | 32,122,845 | 32,036,018 |
| Actuarial Accrued Liability (AAL) | 31,919,681 | 31,853,069 |
| Unfunded Actuarial Accrued Liability (AAL – AVA) | 1,690,274 | 2,890,868 |
| Present Value of Accrued Benefits (PVAB) | 31,919,681 | 31,853,069 |
| Funded percentage (PVAB) | | |
| ▪ Based on Market Value of Assets (MVA ÷ PVAB) | 97.82% | 83.92% |
| ▪ Based on Actuarial Value of Assets (AVA ÷ PVAB) | 94.70% | 90.92% |
| Present Value of Vested Benefits (PVVB) | $31,810,208 | $31,725,618 |
| Funded percentage (PVVB) | | |
| ▪ Based on Market Value of Assets (MVA ÷ PVVB) | 98.15% | 84.25% |
| ▪ Based on Actuarial Value of Assets (AVA ÷ PVVB) | 95.03% | 91.29% |
| Current Liability | $48,254,353 | $46,868,265 |
| Current Liability interest rate | 2.98% | 3.06% |
| **Credit Balance and Contribution Information** | | |
| Credit Balance at end of prior plan year | $2,560,844 | $1,514,481 |
| Minimum Required Contribution (before Credit Balance) | 1,312,534 | 1,322,347 |
| Minimum Required Contribution (after Credit Balance) | 0 | 0 |
| Maximum Deductible Contribution | 36,894,906 | 36,280,866 |
| **Withdrawal Liability** | | |
| Present Value of Vested Benefits for withdrawal liability | $44,235,039 | $41,194,771 |
| Value of assets used for withdrawal liability | 31,222,412 | 26,730,380 |
| Unfunded Present Value of Vested Benefits | 13,012,627 | 14,464,391 |
| Withdrawal liability interest rate | 2.34% 1st 20 years<br>2.63% thereafter | 2.84% 1st 20 years<br>2.76% thereafter |
| Unamortized balance of Affected Benefits pool | $1,912,956 | $1,833,850 |

| | Actuarial Valuation for Plan Year Beginning | |
|---|---|---|
| | 1/1/2018 | 1/1/2019 |
| **Participant Data** | | |
| Active participants | 66 | 54 |
| Terminated vested participants | 303 | 300 |
| Retired participants | 218 | 217 |
| Disabled participants | 44 | 42 |
| Beneficiaries* | 63 | 67 |
| Total participants | 694 | 680 |
| Total monthly benefits in pay status | $186,229 | $184,745 |
| Average monthly benefit in pay status | 573 | 567 |
| **Certification Status** | Critical | Critical and declining |

*Includes 11 alternate payees as of 1/1/2018 and 1/1/2019.

## B. Contributions for the 2018 Plan Year

**Minimum Required Contribution and Credit Balance**

The Plan's Minimum Required Contribution (MRC), prior to the application of the Credit Balance, consists of two components:

- Gross Normal Cost, which consists of the cost of benefits allocated to the next plan year and administrative expenses expected to be paid in the next plan year, and
- Amortization payment to pay for past liabilities.

If contributions do not meet these costs, the Plan's Credit Balance, which was built up through contributions in excess of Minimum Required Contributions in past years, may be used to offset the costs. The Plan's contribution requirements and expected contributions for the current year and preceding two plan years are shown below:

| Plan Year | Normal Cost | Net Amortization Payment | MRC Before Credit Balance | MRC After Credit Balance | Contribution (including withdrawal liability income) | Credit Balance at End of Plan Year |
|---|---|---|---|---|---|---|
| 2017 | 312,700 | 918,208 | 1,310,917 | 0 | 2,160,248 | 2,560,844 |
| 2018 | 323,660 | 908,766 | 1,312,534 | 0 | 96,625 | 1,514,481 |
| 2019 | 324,493 | 917,147 | 1,322,347 | 0 | 113,000 * | 407,000 |

** Based on preliminary financial information provided by the administrative office.*

In order to maintain the Plan's Credit Balance at the current level, contributions of approximately $1.3 million are required for the plan year beginning January 1, 2019. Because contributions are expected to be below this level, the Credit Balance is expected to decrease during the 2019 plan year.

## C. Funded Percentage and Actuarial Certification Results

The following table shows the actual funded percentage along with each plan year's zone status and the year of projected funding deficiency that was reported in the actuarial certification. The funded percentage is equal to the Actuarial Value of Assets divided by the Present Value of Accrued Benefits. Please note the funded percentage shown below is based on audited assets while the funded percentage seen in the actuarial certification is based on unaudited assets, which may create a slight discrepancy between what is shown below and the actuarial certification with respect to the funded percentage. The Annual Funding Notice to participants must be distributed within 120 days of the end of the plan year and will show the funded percentage for 2017, 2018 and 2019, as shown below.

| Plan Year | Projected Funded Percentage | Year of Projected Funding Deficiency | Year of Projected Insolvency | Zone Status |
|---|---|---|---|---|
| 2017 | 100.4% | 12/31/2021 | 12/31/2040 | Critical |
| 2018 | 94.7% | 12/31/2020 | 12/31/2040 | Critical |
| 2019 | 91.1% | 12/31/2020 | 12/31/2035 | Critical and declining |

## D. Risk Disclosure

The Plan's risk is the potential that future actuarial measurements will differ from the current measurements presented in this report because future experience is different than expected. Risks include investment risk, asset / liability mismatch risk, interest rate risk, longevity and other demographic risks, and contribution risk. As required by Actuarial Standard of Practice No. 51 *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions*, Appendix D provides information on the Plan's risks.

## E. Plan Experience

**Actuarial Liability**

Liability experience for the 2018 plan year was less favorable than expected, generating a net actuarial loss of $0.1 million.

**Market Value of Assets (MVA)**

Asset experience for the 2018 plan year was less favorable than expected, generating a net actuarial loss of approximately $4.0 million. The rate of return on market assets was approximately -6.9% versus the assumed rate of return of 6.5%.

**Actuarial Value of Assets (AVA)**

Asset experience for the 2018 plan year was less favorable than expected, generating a net actuarial loss of approximately $0.7 million. The rate of return on actuarial assets was approximately 3.9% versus the assumed rate of return of 6.5%.

## F. Participant Information

The following table shows the number of participants included in this valuation, along with comparable information from the past several valuations.

| Plan Year | Active Participants | Terminated Vested Participants | Retirees, Beneficiaries, and Disabled Participants | Total |
|---|---|---|---|---|
| 2017 | 43 | 312 | 331 | 686 |
| 2018 | 66 | 303 | 325 | 694 |
| 2019 | 54 | 300 | 326 | 680 |

## G. Actuarial Methods and Assumptions

The methods and assumptions used in this valuation are the same as those used in the prior valuation except as follows:

- For withdrawal liability purposes:
  - The PBGC interest rates were changed from 2.34% for first 20 years and 2.63% thereafter to 2.84% for first 20 years and 2.76% thereafter.
  - Disability and termination decrements previously not assumed for liability calculations are now included.
- For Current Liability purposes (RPA'94): The interest rate was changed from 2.98% to 3.06% in accordance with IRS guidance. (The statutory mortality tables also have been updated as required by law).

Please see Appendix A and Appendix B for a complete summary of all methods and assumptions used in this valuation.

## H. Plan Provisions

This valuation reflects the plan provisions in effect on January 1, 2019, which are the same provisions that were valued in the January 1, 2018 actuarial valuation report

Please see Appendix C for a detailed summary of plan provisions.

# Exhibits

# Exhibit 1

## Summary of Market Value of Assets

The summary of plan assets on a market-value basis as of December 31, 2018 is shown below.

| | | |
|---|---|---|
| 1. | Assets | |
| | a. 103-12 investment entities | $4,051,755 |
| | b. Cash and equivalents | 196,892 |
| | c. Common / collective trusts | 1,609,393 |
| | d. Contributions receivable | 7,568 |
| | e. Interest and dividends receivables | 12,163 |
| | f. Prepaid expenses | 165,072 |
| | g. Mutual funds | 20,742,186 |
| | h. Total | 26,785,029 |
| 2. | Liabilities | |
| | a. Accounts payable | 54,649 |
| | b. Total | 54,649 |
| 3. | Total<br>[(1h) - (2b)] | 26,730,380 |

## Exhibit 2

### Summary of Income and Disbursements

The change in the Market Value of Assets from December 31, 2017 to December 31, 2018 is shown below.

| | |
|---|---|
| 1. Market Value of Assets as of December 31, 2017 | $31,222,412 |
| 2. Income | |
| a. Employer contributions | 96,625 |
| b. Net investment income | (2,084,124) |
| c. Total | (1,987,499) |
| 3. Disbursements | |
| a. Administrative expenses | 312,750 |
| b. Benefit payments | 2,191,783 |
| c. Total | 2,504,533 |
| 4. Net increase / (decrease) [(2c) - (3c)] | (4,492,032) |
| 5. Market Value of Assets as of December 31, 2018 [(1) + (4)] | 26,730,380 |

## Exhibit 3

### Asset (Gain) / Loss for Prior Plan Year on Market Value of Assets

The Asset (Gain) / Loss is the difference between the expected and actual values of the Market Value of Assets. An asset gain is negative because it represents a decrease from the expected unfunded Actuarial Accrued Liability. The Asset (Gain) / Loss for the plan year ending December 31, 2018 is determined below.

| | | |
|---|---|---|
| 1. | Expected Market Value of Assets | |
| | a. Market Value of Assets as of December 31, 2017 | $31,222,412 |
| | b. Employer contributions for plan year | 96,625 |
| | c. Benefit payments | 2,191,783 |
| | d. Administrative expenses | 312,750 |
| | e. Expected investment return based on 6.50% interest rate | 1,952,432 |
| | f. Expected Market Value of Assets as of December 31, 2018 [(a) + (b) - (c) - (d) + (e)] | 30,766,936 |
| 2. | Market Value of Assets as of December 31, 2018 | 26,730,380 |
| 3. | Asset (Gain) / Loss [(1f) - (2)] | 4,036,556 |
| 4. | Estimated investment return on Market Value of Assets | -6.94% |

## Exhibit 4

### Actuarial Value of Assets

The Actuarial Value of Assets is the Market Value of Assets less a weighted average of asset gains / (losses) over a four-year period (five-year smoothing), but it must be within 80% to 120% of the Market Value of Assets. The Actuarial Value of Assets as of January 1, 2019 is determined below.

| | | | | |
|---|---|---|---|---|
| 1. | Market Value of Assets as of December 31, 2018 | | | $26,730,380 |
| 2. | Unrecognized asset gains / (losses) for the plan years ending | | | |
| | Plan Year Ending | Gain / (Loss) for Year | Percent Unrecognized | Amount Unrecognized |
| | a. December 31, 2018 | (4,036,556) | 80% | (3,229,245) |
| | b. December 31, 2017 | 2,521,227 | 60% | 1,512,736 |
| | c. December 31, 2016 | (33,229) | 40% | (13,292) |
| | d. December 31, 2015 | (2,510,099) | 20% | (502,020) |
| | e. Total | | | (2,231,821) |
| 3. | Preliminary Actuarial Value of Assets as of January 1, 2019 [(1) - (2e)] | | | 28,962,201 |
| 4. | Actuarial Value of Assets as of January 1, 2019 [(3), but not < 80% x (1), nor > 120% x (1)] | | | 28,962,201 |

## Exhibit 5

### Asset (Gain) / Loss for Prior Plan Year on Actuarial Value of Assets

The Asset (Gain) / Loss is the difference between the expected and actual values of the Actuarial Value of Assets. An asset gain is negative because it represents a decrease from the expected unfunded Actuarial Accrued Liability. The Asset (Gain) / Loss for the plan year ending December 31, 2018 is determined below.

| | |
|---|---|
| 1. Expected Actuarial Value of Assets | |
| a. Actuarial Value of Assets as of January 1, 2018 | $30,229,407 |
| b. Employer contributions for plan year | 96,625 |
| c. Benefit payments | 2,191,783 |
| d. Administrative expenses | 312,750 |
| e. Expected investment return based on 6.50% interest rate | 1,887,886 |
| f. Expected Actuarial Value of Assets as of January 1, 2019 [(a) + (b) - (c) - (d) + (e)] | 29,709,385 |
| 2. Actuarial Value of Assets as of January 1, 2019 | 28,962,201 |
| 3. Asset (Gain) / Loss [(1f) - (2)] | 747,184 |
| 4. Estimated investment return on Actuarial Value of Assets | 3.92% |

## Exhibit 6

### Actuarial Balance Sheet

The total plan requirements compared to the total value of plan resources as of January 1, 2019 is shown below.

| Plan Requirements | |
|---|---|
| 1. Present value of active participant benefits | |
| a. Retirement | $1,020,443 |
| b. Termination | 211,937 |
| c. Death | 8,160 |
| d. Disability | 40,107 |
| e. Total | 1,280,647 |
| 2. Present value of inactive participant benefits | |
| a. Retired participants | 15,597,830 |
| b. Terminated vested participants | 10,011,829 |
| c. Beneficiaries | 2,734,343 |
| d. Disabled participants | 2,411,369 |
| e. Total | 30,755,371 |
| 3. Total plan requirements [(1e) + (2e)] | 32,036,018 |
| **Plan Resources** | |
| 4. Actuarial Value of Assets | $28,962,201 |
| 5. Unfunded Actuarial Accrued Liability | 2,890,868 |
| 6. Present value of future Normal Costs | 182,949 |
| 7. Total plan resources | 32,036,018 |

# Exhibit 7

## Normal Cost and Unfunded Actuarial Accrued Liability

The Normal Cost is the amount allocated to the current plan year under the Plan's actuarial cost method. The Actuarial Accrued Liability is the accumulation of all prior Normal Costs. The unfunded Actuarial Accrued Liability is the excess (deficiency) of the Actuarial Accrued Liability over the Actuarial Value of Assets. The employer Normal Cost and the unfunded Actuarial Accrued Liability as of January 1, 2018 and January 1, 2019 are determined below.

| | 1/1/2018 | 1/1/2019 |
|---|---|---|
| 1. Normal Cost | | |
| a. Beginning of year Normal Cost | $47,494 | $48,327 |
| b. Beginning of year loading for administrative expenses | 276,166 | 276,166 |
| c. Total | 323,660 | 324,493 |
| 2. Actuarial Accrued Liability | | |
| a. Active participants | 1,067,954 | 1,097,698 |
| b. Retired participants | 15,989,231 | 15,597,830 |
| c. Terminated vested participants | 9,584,575 | 10,011,829 |
| d. Beneficiaries | 2,627,676 | 2,734,343 |
| e. Disabled participants | 2,650,245 | 2,411,369 |
| f. Total | 31,919,681 | 31,853,069 |
| 3. Actuarial Value of Assets | 30,229,407 | 28,962,201 |
| 4. Unfunded Actuarial Accrued Liability [(2f) - (3)] | 1,690,274 | 2,890,868 |

## Exhibit 8

### Funding Standard Account for Prior Plan Year

The Funding Standard Account for the plan year ending December 31, 2018 is determined below.

| | |
|---|---|
| 1. Outstanding balances as of January 1, 2018 | |
| a. Amortization charges | $12,626,177 |
| b. Amortization credits | 8,375,059 |
| 2. Charges to Funding Standard Account | |
| a. Funding deficiency as of January 1, 2018 | 0 |
| b. Normal Cost as of January 1, 2018 | 323,660 |
| c. Amortization charges as of January 1, 2018 | 1,940,919 |
| d. Interest on (a), (b), and (c) to end of plan year | 147,198 |
| e. Total | 2,411,777 |
| 3. Credits to Funding Standard Account | |
| a. Credit Balance as of January 1, 2018 | 2,560,844 |
| b. Employer contributions for plan year | 96,625 |
| c. Amortization credits as of January 1, 2018 | 1,032,153 |
| d. Interest on (a), (b), and (c) to end of plan year | 236,636 |
| e. Full funding credit | 0 |
| f. Total | 3,926,258 |
| 4. Credit Balance / (funding deficiency) as of December 31, 2018 | 1,514,481 |

## Exhibit 9

### Current Annual Cost and Minimum Required Contribution

The Current Annual Cost is the Plan's cost under the minimum funding requirements prior to the recognition of the full funding limitation and any Credit Balance. The Minimum Required Contribution is the amount needed to avoid a funding deficiency in the Funding Standard Account. These amounts for the plan year beginning January 1, 2019 are determined below.

| | |
|---|---|
| 1. Charges for plan year | |
| a. Funding deficiency as of January 1, 2019 | $0 |
| b. Normal Cost | 324,493 |
| c. Amortization charges (on $12,225,543) | 1,949,300 |
| d. Interest on (a), (b), and (c) to end of plan year | 147,797 |
| e. Additional funding charge | 0 |
| f. Total | 2,421,590 |
| 2. Credits for plan year | |
| a. Amortization credits (on $7,820,194) | 1,032,153 |
| b. Other credits | 0 |
| c. Interest on (a) and (b) to end of plan year | 67,090 |
| d. Total | 1,099,243 |
| 3. Current Annual Cost for plan year [(1f) - (2d)] | 1,322,347 |
| 4. Full funding credit for plan year | |
| a. Full funding limitation | 13,286,136 |
| b. Full funding credit [(3) - (4a), but not < $0] | 0 |
| 5. Credit Balance for plan year | |
| a. Credit Balance as of January 1, 2019 | 1,514,481 |
| b. Interest on (a) to end of plan year | 98,441 |
| c. Total | 1,612,922 |
| 6. Minimum Required Contribution for plan year [(3) - (4b) - (5c), but not < $0] | 0 |

## Exhibit 10

### Actuarial (Gain) / Loss for Prior Plan Year

The Actuarial (Gain) / Loss for the prior plan year is the difference between the expected and actual unfunded Actuarial Accrued Liability as of the beginning of the current plan year. The Actuarial (Gain) / Loss for the plan year ending December 31, 2018 is determined below.

| | |
|---|---|
| 1. Unfunded Actuarial Accrued Liability as of January 1, 2018 | $1,690,274 |
| 2. Normal Cost as of January 1, 2018 | 323,660 |
| 3. Interest on (1) and (2) to end of plan year | 130,906 |
| 4. Subtotal [(1) + (2) + (3)] | 2,144,840 |
| 5. Employer contributions for plan year | 96,625 |
| 6. Interest on (5) to end of plan year | 3,091 |
| 7. Subtotal [(5) + (6)] | 99,716 |
| 8. Changes in Actuarial Accrued Liability | |
| a. Plan amendments | 0 |
| b. Changes in actuarial assumptions | 0 |
| c. Changes in cost method | 0 |
| d. Total | 0 |
| 9. Expected unfunded Actuarial Accrued Liability as of January 1, 2019 [(4) - (7) + (8d)] | 2,045,124 |
| 10. Actual unfunded Actuarial Accrued Liability as of January 1, 2019 | 2,890,868 |
| 11. Actuarial (Gain) / Loss on Actuarial Value of Assets | 747,184 |
| 12. Actuarial (Gain) / Loss on Actuarial Accrued Liability [(10) - (9) - (11)] | 98,560 |
| 13. Total Actuarial (Gain) / Loss for prior plan year [(10) - (9)] | 845,744 |

## Exhibit 11

### Charges and Credits for Funding Standard Account

The amortization charges and credits for the Funding Standard Account for the plan year beginning January 1, 2019 are determined below.

1. Charges as of January 1, 2019

| | Date Established | Description | Amortization Amount | Years Remaining | Outstanding Balance |
|---|---|---|---|---|---|
| a. | January 1, 1980 | Plan Amendment | $107,411 | 1 | $107,411 |
| b. | January 1, 1991 | Plan Amendment | 2,883 | 2 | 5,589 |
| c. | January 1, 1996 | Change in Assumptions | 13,199 | 7 | 77,096 |
| d. | January 1, 2001 | Change in Assumptions | 33,624 | 12 | 292,155 |
| e. | January 1, 2005 | Actuarial Loss | 10 | 1 | 10 |
| f. | January 1, 2005 | Change in Assumptions | 1,233 | 16 | 12,824 |
| g. | January 1, 2006 | Actuarial Loss | 1,163 | 2 | 2,255 |
| h. | January 1, 2008 | Actuarial Loss | 44,868 | 4 | 163,698 |
| i. | January 1, 2009 | Actuarial Loss | 561,113 | 5 | 2,483,372 |
| j. | January 1, 2009 | Plan Amendment | 108,369 | 5 | 479,616 |
| k. | January 1, 2010 | Plan Amendment | 1,879 | 6 | 9,688 |
| l. | January 1, 2011 | Actuarial Loss | 34,390 | 7 | 200,869 |
| m. | January 1, 2012 | Actuarial Loss | 106,483 | 8 | 690,494 |
| n. | January 1, 2013 | Actuarial Loss | 189,155 | 9 | 1,340,873 |
| o. | January 1, 2014 | Change in Assumptions | 217,653 | 10 | 1,666,379 |
| p. | January 1, 2016 | Actuarial Loss | 53,979 | 12 | 469,027 |
| q. | January 1, 2016 | Change in Assumptions | 366,599 | 12 | 3,185,396 |
| r. | January 1, 2017 | Actuarial Loss | 15,724 | 13 | 144,012 |
| s. | January 1, 2018 | Actuarial Loss | 4,048 | 14 | 38,858 |
| t. | January 1, 2018 | Change in Assumptions | 1,060 | 14 | 10,177 |
| u. | January 1, 2019 | Actuarial Loss | 84,457 | 15 | 845,744 |
| v. | Total | | 1,949,300 | | 12,225,543 |

2. Credits as of January 1, 2019

| | Date Established | Description | Amortization Amount | Years Remaining | Outstanding Balance |
|---|---|---|---|---|---|
| a. | January 1, 1991 | Change in Assumptions | $3,760 | 2 | $7,290 |
| b. | January 1, 2003 | Change in Assumptions | 14,624 | 14 | 140,391 |
| c. | January 1, 2006 | Change in Assumptions | 34,503 | 17 | 371,526 |
| d. | January 1, 2007 | Actuarial Gain | 49,169 | 3 | 138,685 |
| e. | January 1, 2007 | Change in Assumptions | 186,471 | 18 | 2,071,801 |
| f. | January 1, 2010 | Actuarial Gain | 268,703 | 6 | 1,385,348 |

| | | | | | |
|---|---|---|---|---|---|
| g. | January 1, 2014 | Actuarial Gain | 119,681 | 10 | 916,288 |
| h. | January 1, 2015 | Actuarial Gain | 65,925 | 11 | 539,847 |
| i. | January 1, 2015 | Change in Asset Method | 100,113 | 6 | 516,151 |
| j. | January 1, 2017 | Plan Amendment | 189,204 | 13 | 1,732,867 |
| k. | Total | | 1,032,153 | | 7,820,194 |

| | |
|---|---|
| 3. Net outstanding balance [(1v) - (2k)] | 4,405,349 |
| 4. Credit Balance as of January 1, 2019 | 1,514,481 |
| 5. Waived funding deficiency | 0 |
| 6. Balance test result [(3) - (4) - (5)] | 2,890,868 |
| 7. Unfunded Actuarial Accrued Liability as of January 1, 2019, minimum $0 | 2,890,868 |

## Exhibit 12

### Current Liability

In accordance with IRS requirements, the Current Liability has been calculated at 3.06%. The Current Liability as of January 1, 2019 is determined below.

| | | Count | Vested Benefits | All Benefits |
|---|---|---|---|---|
| 1. | Current Liability | | | |
| | a. Active participants | 54 | $1,629,565 | $1,892,368 |
| | b. Terminated vested participants | 300 | 17,416,159 | 17,416,159 |
| | c. Retirees, beneficiaries, and disabled participants | 326 | 27,559,738 | 27,559,738 |
| | d. Total | 680 | 46,605,462 | 46,868,265 |
| 2. | Expected increase in Current Liability for benefit accruals during year | | | 90,669 |
| 3. | Expected benefit disbursements during year | | | 2,370,424 |
| 4. | Market Value of Assets | | | 26,730,380 |
| 5. | Current Liability funded percentage [(4) ÷ (1d)] | | | 57.03% |

## Exhibit 13

### Full Funding Limitation

The full funding limitation (FFL) for the plan year ending December 31, 2019 and the tax year ending December 31, 2019 is determined below.

| | Minimum Required Contribution | Maximum Deductible Contribution |
|---|---|---|
| 1. 100% Actuarial Accrued Liability (AAL) FFL | | |
| a. AAL as of January 1, 2019 | $31,853,069 | $31,853,069 |
| b. Normal Cost to end of year | 324,493 | 324,493 |
| c. Value of assets as of January 1, 2019 | | |
| i. Lesser of actuarial and market value | 26,730,380 | 26,730,380 |
| ii. Credit Balance | 1,514,481 | n/a |
| iii. Undeducted employer contributions | n/a | 0 |
| iv. Plan assets [(i) - (ii) - (iii)] | 25,215,899 | 26,730,380 |
| d. Interest to December 31, 2019 at 6.50% on (a), (b), & (civ) | 452,508 | 354,067 |
| e. 100% AAL FFL [(a) + (b) - (civ) + (d), but not <$0] | 7,414,172 | 5,801,249 |
| 2. Estimated Current Liability as of December 31, 2019 | | |
| a. Current Liability as of January 1, 2019 | 46,868,265 | 46,868,265 |
| b. Expected increase for benefit accruals to December 31, 2019 | 90,669 | 90,669 |
| c. Estimated benefit disbursements to December 31, 2019 | 2,370,424 | 2,370,424 |
| d. Interest to December 31, 2019 at 3.06% on (a), (b), & (c) | 1,400,949 | 1,400,949 |
| e. Estimated EOY Current Liability [(a) + (b) - (c) + (d)] | 45,989,459 | 45,989,459 |
| 3. Estimated assets for Current Liability FFL | | |
| a. Actuarial Value of Assets as of January 1, 2019 | 28,962,201 | 28,962,201 |
| b. Estimated benefit disbursements to December 31, 2019 | 2,370,424 | 2,370,424 |
| c. Estimated employee contributions to December 31, 2019 | 0 | 0 |
| d. Estimated administrative expenses to December 31, 2019 | 276,166 | 276,166 |
| e. Estimated return to December 31, 2019 at 6.50% on (3a), (1ciii), (3b), (3c), & (3d) | 1,788,766 | 1,788,766 |
| f. Estimated assets as of December 31, 2019 [(3a) - (1ciii) - (3b) + (3c) - (3d) + (3e)] | 28,104,377 | 28,104,377 |
| 4. 90% Current Liability minimum funding limitation | | |
| a. 90% EOY RPA Current Liability [90% x (2e)] | 41,390,513 | 41,390,513 |
| b. 90% Current Liability FFL [(a) - (3f), but not < $0] | 13,286,136 | 13,286,136 |
| 5. Full funding limitation [maximum of (1e) and (4b)] | 13,286,136 | 13,286,136 |

# Exhibit 14

## Maximum Deductible Contribution under IRC Section 404

The Maximum Deductible Contribution under IRC Section 404 for the tax year beginning January 1, 2019 is determined below.

| | | |
|---|---|---|
| 1. | Minimum Required Contribution for plan year beginning January 1, 2019 | $0 |
| 2. | Preliminary Maximum Deductible Contribution under IRC Section 404 for tax year | |
| | a. Normal Cost | 324,493 |
| | b. 10-year amortization of unfunded Actuarial Accrued Liability | 377,590 |
| | c. Interest to earlier of tax year end or plan year end | 45,635 |
| | d. Total | 747,718 |
| 3. | Full funding limitation for tax year | 13,286,136 |
| 4. | Unfunded 140% of Current Liability as of December 31, 2019 | |
| | a. Current Liability (for IRC Section 404 purposes) projected to end of year | 45,989,459 |
| | b. Actuarial Value of Assets (for IRC Section 404 purposes) projected to end of year | 28,104,377 |
| | c. Unfunded 140% of Current Liability [140% × (a) - (b), but not less than $0] | 36,280,866 |
| 5. | Maximum Deductible Contribution under IRC Section 404 for tax year [maximum of (1) and (2d), but not greater than (3), nor less than (4c)] | 36,280,866 |

There are alternative calculations of the Maximum Deductible Contribution under IRC Section 404 that may produce a different amount than illustrated above. Additionally, deductibility of contributions to a defined contribution plan maintained for the same employees may be affected by the 25% of pay limitation for defined benefit and defined contribution plans combined. Employers should consult their tax advisors regarding the deductibility of contributions.

## Exhibit 15

### Present Value of Accumulated Plan Benefits for Pension Protection Act of 2006 (PPA)

Accumulated Plan Benefits are benefits earned to date, based on pay history and service rendered to date, expected to be paid in the future to retired, terminated vested, and active participants, and beneficiaries of active or former participants. The Present Value of Accumulated Plan Benefits for PPA as of January 1, 2018 and January 1, 2019 is shown below.

| | 1/1/2018 | 1/1/2019 |
|---|---|---|
| 1. Present Value of vested Accumulated Plan Benefits | | |
| a. Participants currently receiving benefits | $21,267,152 | $20,743,542 |
| b. Other participants | 10,543,056 | 10,982,076 |
| c. Total | 31,810,208 | 31,725,618 |
| 2. Present Value of non-vested Accumulated Plan Benefits | 109,473 | 127,451 |
| 3. Present Value of all Accumulated Plan Benefits [(1c) + (2)] | 31,919,681 | 31,853,069 |
| 4. Market Value of Assets | 31,222,412 | 26,730,380 |
| 5. Funded percentage on Market Value of Assets | | |
| a. Vested benefits [(4) ÷ (1c)] | 98.15% | 84.25% |
| b. All benefits [(4) ÷ (3)] | 97.82% | 83.92% |
| 6. Actuarial Value of Assets | $30,229,407 | $28,962,201 |
| 7. Funded percentage on Actuarial Value of Assets | | |
| b. Vested benefits [(6) ÷ (1c)] | 95.03% | 91.29% |
| c. All benefits [(6) ÷ (3)] | 94.70% | 90.92% |

## Exhibit 16

### FASB ASC Topic 960 Present Value of Accumulated Plan Benefits

Accumulated Plan Benefits are benefits earned to date, based on pay history and service rendered to date, expected to be paid in the future to retired, terminated vested, and active participants, and beneficiaries of active or former participants. The Present Value of Accumulated Plan Benefits (determined on a plan continuation basis in accordance with FASB ASC Topic 960) as of December 31, 2018 is shown below.

| | Benefits | Expenses* | Total |
|---|---|---|---|
| 1. Present Value of vested Accumulated Plan Benefits | | | |
| a. Participants in pay status | $20,743,542 | $1,609,115 | $22,352,657 |
| b. Participants not in pay status | 10,982,076 | 851,900 | 11,833,976 |
| c. Total | 31,725,618 | 2,461,015 | 34,186,633 |
| 2. Present Value of non-vested Accumulated Plan Benefits | 127,451 | 9,886 | 137,337 |
| 3. Present Value of all Accumulated Plan Benefits [(1c) + (2)] | 31,853,069 | 2,470,901 | 34,323,970 |

*Present value of future administrative expenses was calculated using an interest rate of 6.5% and anticipated annual expenses of $285,000 for the 2019 plan year and 2% annual increases thereafter. The length of the projection period is equal to the duration of the plan's liabilities (approximately 11 years as of December 31, 2018).

## Exhibit 17

### Change in FASB ASC Topic 960 Present Value of Accumulated Plan Benefits

The change in the Present Value of Accumulated Plan Benefits (determined on a plan continuation basis in accordance with FASB ASC Topic 960) from December 31, 2017 to December 31, 2018 is shown below.

| | | |
|---|---|---|
| 1. | Present Value of all Accumulated Plan Benefits as of December 31, 2017* | $34,390,582 |
| 2. | Changes | |
| | a. Reduction in discount period | 2,165,276 |
| | b. Benefits accumulated plus actuarial (gain) / loss | (40,105) |
| | c. Benefit payments | (2,191,783) |
| | d. Plan amendments | 0 |
| | e. Change in assumptions | 0 |
| | f. Total | (66,612) |
| 3. | Present Value of all Accumulated Plan Benefits as of December 31, 2018 [(1) + (2f)] | 34,323,970 |

*Restated to include present value of future administrative expenses of $2,470,901. This was calculated using an interest rate of 6.5% and anticipated annual expenses of $285,000 for the 2018 plan year and 2% annual increases thereafter. The length of the projection period is equal to the duration of the plan's liabilities (approximately 11 years as of December 31, 2017).

## Exhibit 18

### Unfunded Vested Benefit Liability for Withdrawal Liability Calculations

Withdrawal liability payments are based on unfunded vested benefit liability. Vested benefit liability is the present value of benefits earned to date, excluding benefits for non-vested participants and certain benefits such as death and disability benefits which are not considered vested. This exhibit shows the Plan's unfunded vested benefit liability as of December 31, 2018. However, if there is a termination by mass withdrawal during the year, a separate calculation has to be performed.

| | |
|---|---|
| 1. Present Value of Vested Benefits at 6.50% | |
| a. Active participants | $970,247 |
| b. Retired participants | 15,597,830 |
| c. Terminated vested participants | 10,011,829 |
| d. Beneficiaries | 2,734,343 |
| e. Disabled participants | 2,411,369 |
| f. Total vested benefits | 31,725,618 |
| 2. Present Value of Vested Benefits at PBGC rates | |
| a. Active participants | 1,743,222 |
| b. Retired participants | 21,455,672 |
| c. Terminated vested participants | 18,841,926 |
| d. Beneficiaries | 3,599,073 |
| e. Disabled participants | 3,090,307 |
| f. Load for expenses | 398,751 |
| g. Total vested benefits | 49,128,951 |
| 3. Market Value of Assets | 26,730,380 |
| 4. Funded ratio [(3) ÷ (2g)] | 54.41% |
| 5. Vested benefit liability [(2g) x (4) + ((1f) x (1 - (4)))] | $41,194,771 |
| 6. Unfunded vested benefit liability [(5) - (3), but not less than $0] | 14,464,391 |
| 7. Unamortized balance of Affected Benefits pools* | 1,833,850 |

* Pursuant to PBGC Technical Update 10-3 under the "simplified method," the initial amount of $1,912,956 as of December 31, 2017 is subject to a 15-year amortization at 6.5% interest rate and annual payments of $191,031.

## Exhibit 19

### Summary of Participant Data

A summary of participant data for the plan years beginning January 1, 2018 and January 1, 2019 is shown below.

| | 1/1/2018 | 1/1/2019 |
|---|---|---|
| 1. Active participants | | |
| a. Count | 66 | 54 |
| b. Average age (excluding missing dates of birth) | 48.9 | 48.7 |
| c. Average vesting service | 5.7 | 6.6 |
| d. Number with unknown age | 22 | 7 |
| 2. Retired participants | | |
| a. Count | 218 | 217 |
| b. Average age | 74.2 | 74.6 |
| c. Total annual benefits | $1,589,698 | $1,564,384 |
| d. Average annual benefit | 7,292 | 7,209 |
| 3. Terminated vested participants | | |
| a. Count | 303 | 300 |
| b. Average age (excluding missing dates of birth) | 54.2 | 54.9 |
| c. Total annual benefits | $1,558,184 | $1,545,589 |
| d. Average annual benefit | 5,142 | 5,152 |
| e. Number with unknown age | 1 | 1 |
| 4. Beneficiaries* | | |
| a. Count | 63 | 67 |
| b. Average age | 75.7 | 76.8 |
| c. Total annual benefits | $311,307 | $332,934 |
| d. Average annual benefit | 4,941 | 4,969 |
| 5. Disabled participants | | |
| a. Count | 44 | 42 |
| b. Average age | 72.3 | 73.6 |
| c. Total annual benefits | $333,750 | $319,620 |
| d. Average annual benefit | 7,585 | 7,610 |

*Includes 11 alternate payees as of January 1, 2018 and January 1, 2019.

## Exhibit 20

### Change in Participant Counts

The change in participant counts from January 1, 2018 to January 1, 2019 is shown below.

| | Active | Terminated Vested | Retired | Beneficiary* | Disabled | Total |
|---|---|---|---|---|---|---|
| As of 1/1/2018 | 66 | 303 | 218 | 63 | 44 | 694 |
| Retired | 0 | (6) | 6 | 0 | 0 | 0 |
| Received lump sum distribution | 0 | 0 | 0 | 0 | 0 | 0 |
| Terminated non-vested | (27) | 0 | 0 | 0 | 0 | (27) |
| Terminated vested | (5) | 5 | 0 | 0 | 0 | 0 |
| Disabled | 0 | 0 | 0 | 0 | 0 | 0 |
| Died with beneficiary | 0 | 0 | (4) | 5 | (1) | 0 |
| Died without beneficiary | 0 | 0 | (3) | (1) | (1) | (5) |
| Rehired | 2 | (2) | 0 | 0 | 0 | 0 |
| New during plan year | 18 | 0 | 0 | 0 | 0 | 18 |
| Net data adjustments | 0 | 0 | 0 | 0 | 0 | 0 |
| As of 1/1/2019 | 54 | 300 | 217 | 67 | 42 | 680 |

*Includes 11 alternate payees as of January 1, 2018 and January 1, 2019.

## Exhibit 21

### Active Participants by Age and Service

The number of active participants summarized by attained age and years of credited service as of January 1, 2019 is shown below.

| | Years of Credited Service | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | <1 | 1–4 | 5–9 | 10–14 | 15–19 | 20–24 | 25–29 | 30–34 | 35–39 | 40+ | Total |
| <25 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 25–29 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 30–34 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 35–39 | 2 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 40–44 | 6 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| 45–49 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 50–54 | 2 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 55–59 | 0 | 2 | 1 | 1 | 2 | 2 | 2 | 0 | 0 | 0 | 10 |
| 60–64 | 1 | 1 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 6 |
| 65–69 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 70+ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 16 | 15 | 8 | 3 | 4 | 5 | 3 | 0 | 0 | 0 | 54 |


AZ BRK 000531

# Appendices

# Appendix A – Summary of Actuarial Methods

The ultimate cost of a pension plan is the excess of actual benefits and administrative expenses paid over actual net investment return on plan assets during the plan's existence until the last payment has been made to the last participant. A plan's "actuarial cost method" determines the expected incidence of actuarial costs by allocating portions of the ultimate cost to each plan year. The cost method is thus a budgeting tool to help ensure that a plan will be adequately and systematically funded and accounted for. Annual contributions are also affected by a plan's "asset valuation method" (as well as plan provisions, actuarial assumptions, and actual plan demographic and investment experience each year).

## Actuarial Cost Method

The actuarial cost method used for determining the Plan's ERISA funding requirements and the FASB ASC Topic 960 values is the Unit Credit method. Under this method, an accrued benefit is determined at each active participant's assumed retirement age based on compensation and service at both the beginning and the end of the current year. The Plan's Normal Cost is the sum of the present value of the excess of each active participant's accrued benefit at the end of the current year over that at the beginning of the current year. The Plan's accrued liability is the sum of (a) the present value of each active participant's accrued benefit at the beginning of the current year plus (b) the present value of each inactive participant's benefits.

## Asset Valuation Method

Five-year smoothing method. The actuarial value of assets is equal to the market value of assets adjusted to recognize differences between the expected value of assets and the actual market value of assets over 5 years at a rate of 20% per year. The expected value of assets for the year is the market value of assets at the valuation date for the prior year brought forward with interest at the valuation rate to the current year plus contributions minus benefit payments, all adjusted with interest at the valuation rate to the valuation date for the current year. The actuarial value of assets cannot be less than 80% or more than 120% of the market value of assets.

## Changes in Actuarial Methods Since Prior Valuation

None.

# Appendix B – Summary of Actuarial Assumptions

## Interest Rates

**ERISA minimum funding:** 6.50% per year (net of investment-related expenses)

**FASB ASC Topic 960:** 6.50% per year (net of investment-related expenses)

**Withdrawal liability:** To the extent the present value of vested benefits is matched by the market value of plan assets, the interest assumption is the PBGC interest rates for December 2018 of 2.84% for the first 20 years and 2.76% thereafter. To the extent the present value of vested benefits is not matched by the market value of plan assets, the interest assumption utilized is the same as used for minimum funding (6.50%).

**Current Liability (RPA'94):** 3.06% per year, updated annually, as mandated by the IRS.

## Administrative Expenses

Expected expenses payable from the trust are explicitly loaded to the normal cost. For the current valuation, the loading for expenses is $285,000, payable mid-year.

The present value of future administrative expenses for FASB ASC Topic 960 plan accounting was calculated using an interest rate of 6.5% and anticipated annual expenses of $285,000 for the 2019 plan year and 2% annual increases thereafter. The length of the projection period is equal to the duration of the plan's liabilities (approximately 11 years as of December 31, 2018).

## Mortality

**ERISA minimum funding, FASB ASC Topic 960, and withdrawal liability:**

Healthy Participants: RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally from 2014 with mortality improvement using Scale MP-2015.

Disabled Participants: RP-2014 Disabled Retiree Mortality Tables

**RPA '94 Current Liability:** RP-2014 Mortality Tables projected for mortality improvement, updated annually, as mandated by the IRS.

## Retirement

Annual rates of retirement are shown in the following table for active and terminated vested participants who are eligible to retire.

| Age | Active | Terminated Vested |
|---|---|---|
| 55 - 59 | 6.0% | 3.0% |
| 60 - 61 | 13.0 | 6.5 |
| 62 | 50.0 | 25.0 |
| 63 – 64 | 30.0 | 15.0 |
| 65+ | 100.0 | 100.0 |

## Termination

Annual rates of termination are based on age. Sample rates are shown in the following table.

| Age | Termination Rate |
|---|---|
| 25 | 43.5% |
| 30 | 37.2 |
| 35 | 33.6 |
| 40 | 31.8 |
| 45 | 31.0 |
| 50 | 31.2 |
| 55 | 27.0 |
| 60 | 27.3 |
| 65 | 0.0 |

Termination rates do not apply when a participant is eligible to retire.

## Disability

Annual rates of termination are based on age. Sample rates are shown in the following table.

| Age | Disability Rate |
|---|---|
| 25 | 0.04% |
| 30 | 0.06 |
| 35 | 0.07 |
| 40 | 0.11 |
| 45 | 0.18 |
| 50 | 0.30 |
| 55 | 0.50 |
| 60 | 0.81 |
| 65 | 0.00 |

## Decrement Timing

Decrements are assumed to occur at the middle of the year, except that retirement is assumed to occur at beginning of year at 100% retirement age.

## Form of Payment

Married participants are assumed to elect the 100% Husband-and-Wife form of payment.

Non-married participants are assumed to elect the life annuity form of payment.

## Projection of Future Service and Benefit Accruals

0.8333 Pension Credits per year.

## Marital Characteristics

**For participants not in pay status:** 75% of participants are assumed to be married to a spouse of the opposite sex. Males are assumed to be 2 years older than females.

**For participants in pay status:** Actual birth dates of beneficiaries are included in the census data, where relevant.

**For beneficiaries:** Actual birth dates are included in the census data, where relevant.

## Benefits Not Valued

None.

## Special Data Adjustments

**For participants without date of birth in data:** Assumed to be average age of participants with similar characteristics.

## Changes in Actuarial Assumptions Since Prior Valuation

**Withdrawal liability purposes:**

- PBGC interest rates changed from 2.34% for the first 20 years and 2.63% thereafter to 2.84% for first 20 years and 2.76% thereafter.
- Disability and termination decrements previously not assumed for liability calculations are now included.

**Current liability purposes (RPA ’94):** Interest rate changed from 2.98% to 3.06% per year and the statutory mortality tables have been updated as required by law.

## Rationale for Significant Assumptions

**Investment Return:** The plan’s historical investment performance, along with expected returns for each asset class and assumed inflation rate, is considered. It is based on the Plan’s investment policy, including target asset allocation.

**Mortality Rates:** The plan is not large enough to develop a credible mortality table based exclusively on plan experience. We have relied on published mortality tables in which credible mortality experience was analyzed. The assumption selected is reasonable for the contingency being measured and is not anticipated to produce significant cumulative actuarial gains or losses over the measurement period

**Other Demographic Assumptions:** Except where noted, all demographic assumptions are based on the actuary’s judgment and continual review of experience.

# Appendix C – Summary of Principal Plan Provisions

This summary of plan provisions is intended to only describe the essential features of the Plan. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself.

## Definitions

**Accrued Benefit:** The monthly accrued benefit payable at Normal Retirement shall be an amount determined by multiplying the number of Pension Credits earned during each of the Participant's Period(s) of Accrual times the Accrual rate appropriate as shown in the following schedule:

| Period of Accrual Ending Between | Bricklayers Accrual Rate During Period of Accrual | Tilelayers Accrual Rate During Period of Accrual |
|---|---|---|
| Before January 1, 1960 | $13.75 | $ 12.00 |
| January 1, 1960 – June 30, 1965 | 61.00 | 12.00 |
| July 1, 1965 – December 31, 1995 | 61.00 | 61.00 |
| January 1, 1996 – December 31, 2006 | 43.00 | 43.00 |
| January 1, 2007 & thereafter | 30.00 | 30.00 |

**Actuarially Equivalent:** Equality in value such that the present value of the amount under any form of payment is essentially the same as the present value of the amount under the single life annuity. Actuarially equivalent factors are based on the RP-2014 Blue Collar Mortality Table (male rates for participants and female rates for beneficiaries) and an interest rate of 7.0%.

**Plan Effective Date:** January 1, 1960; the Plan was last amended effective May 5, 2016.

**Plan Year:** The 12-month period beginning January 1 and ending December 31.

**Pension Credit:** A full year is credited for each employment year in which 1,200 or more hours of service are credited. Partial years of Pension Credit are credited if 300 or more hours are worked in an employment year.

**Vesting Service:** A full year is credited for each employment year in which 1,000 or more hours are worked. No partial years of Vesting Service are credited.

## Eligibility for Participation

The earliest January 1 or July 1 next following the 12 consecutive-month period during which the employee completes 300 Hours of Service in Covered Employment.

## Normal Retirement

**Normal Retirement Date:** The later of the first day of the month coincident with or next following the attainment of age 65 or the participant's 5th anniversary of participation.

**Normal Retirement Benefit:** The Accrued Benefit.

## Early Retirement

**Early Retirement Date:** The first day of the month coincident with or next following the attainment of age 55 and 10 years of Pension Credit.

**Early Retirement Benefit:** The Accrued Benefit, actuarially reduced for commencement prior to Normal Retirement Date.

## Deferred Retirement

**Deferred Retirement Date:** The first day of the month coincident with or next following the date of termination of service if it occurs after the Normal Retirement Date.

**Deferred Retirement Benefit:** The greater of (i) the Accrued Benefit determined as of the Deferred Retirement Date or (ii) the Accrued Benefit determined as of the Normal Retirement Date and actuarially increased to the Deferred Retirement Date.

## Termination

**Termination Date:** The date of termination of service other than for reasons of retirement, disability, or death.

**Termination Benefit:** The Accrued Benefit, multiplied by the vested percentage in the following table, payable at the Normal Retirement Date, or payable as of the first day of any month coincident with or next following attainment of age 55 if at least 10 years of Pension Credit have been completed (actuarially reduced for commencement prior to Normal Retirement Date).

| Years of Vesting Service | Vested Percentage |
|---|---|
| Less than 5 | 0% |
| 5 or more | 100% |

## Preretirement Death

**Preretirement Death Benefit Eligibility:** Surviving spouses of participants with a vested Accrued Benefit who die before commencement of payments, provided they have been married at least one year.

**Preretirement Death Benefit:** 50% of the benefit which would have been payable had the deceased participant instead terminated service on the date of death, survived to his earliest possible benefit commencement date, elected the 50% Husband-and-Wife pension, and died on that same date.

## Disability Retirement

**Disability Retirement Eligibility:** Under age 65 and attainment of 5 years of Pension Credit (15 years of Pension Credit for work in the trade)

**Disability Retirement Benefit:** The Accrued Benefit, determined as of the disability separation date.

## Forms of Payment

**Normal Forms:** Life annuity if single, 100% Husband-and-Wife Pension if married.

**Optional Forms:** Life annuity, 50% Husband-And-Wife Pension, and 75% Husband-and-Wife Pension.

The Husband-and-Wife Pension includes a pop-up feature.

## Changes in Principal Plan Provisions Since Prior Valuation

None.

# Appendix D – Risk Disclosure

The purpose of this appendix is to identify, assess, and provide illustrations of risks that are significant to the Plan, and in some cases to the Plan's participants.

The results of the actuarial valuation are based on one set of reasonable assumptions. However, it is almost certain that future experience will not exactly match the assumptions. As an example, investments may perform better or worse than assumed in any single year and over any longer time horizon. It is therefore important to consider the potential impacts of these potential differences when making decisions that may affect the future financial health of the Plan, or of the Plan's participants.

In addition, as plans mature they accumulate larger pools of assets and liabilities. This increases the potential risk to plan funding and the finances of those who are responsible for plan funding. As an example, it is more difficult for a plan sponsor to deal with the effects of a 10% investment loss on a plan with $1 Billion in assets and liabilities than if the same plan sponsor is responsible for a 10% investment loss on a plan with $1 Million in assets and liabilities. Since pension plans make long-term promises and rely on long-term funding, it is important to consider how mature the plan is today, and how mature it may become in the future.

Actuarial Standard of Practice No. 51 (ASOP 51) addresses these issues by providing actuaries with guidance for assessing and disclosing the risk associated with measuring pension liabilities and the determination of pension plan contributions. Specifically, it directs the actuary to:

- Identify risks that may be significant to the plan.
- Assess the risks identified as significant to the plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the plan's risks.

ASOP 51 states that if in the actuary's professional judgment, a more detailed assessment would be significantly beneficial in helping the individuals responsible for the plan to understand the risks identified by the actuary, then the actuary should recommend that such an assessment be performed.

This appendix uses the framework of ASOP 51 to communicate important information about significant risks to the Plan.

## Investment Risk

**Definition:** The potential that investment returns will be different than expected.

**Identification:** To the extent that actual investment returns differ from the assumed investment return, the Plan's future assets, funding contributions, and funded status may differ significantly from those presented in this valuation.

## Interest Rate Risk

**Definition:** The potential that interest rates will be different than expected.

**Identification:** The pension liabilities reported herein have been calculated by computing the present value of expected future benefit payments using the interest rates described in Appendix B. If interest rates in future valuations differ from this valuation, future pension liabilities, funding contributions, and funded status may differ significantly from those presented in this valuation. As a general rule, using a higher interest rate to compute the present value of future benefit payments will result in a lower pension liability, and vice versa. One aspect that can be used to estimate the impact of different interest rates is a plan's duration.

**Assessment:** If the interest rate changes by 1%, the estimated percentage change in pension liability is a plan's duration in years. The approximate duration of this Plan is approximately 11 years. As such, if the interest rate changes by 1%, the estimated change in pension liability is 11%.

## Demographic Risks

**Definition:** The potential that mortality or other demographic experience will be different than expected.

**Identification:** The pension liabilities reported herein have been calculated by assuming that participants will follow patterns of demographic experience (e.g., mortality, withdrawal, disability, retirement, form of payment election, etc.) as described in Appendix B. If actual demographic experience or future demographic assumptions are different from what is assumed to occur in this valuation, future pension liabilities, funding contributions, and funded status may differ significantly from those presented in this valuation.

## Contribution Risk

**Definition:** This is the possibility that actual future contributions deviate from expected future contributions.

**Identification:** The Plan is subject to the contribution risk that if contributions are lower than anticipated, investment income is lost in the intervening period and future collective bargaining agreements will need to have higher contribution rates.

## Covered Employment Risk

**Definition:** The potential that future covered employment is lower than expected due to a declining workforce in a company or industry, or a temporary workforce reduction due to market forces.

**Identification:** A reduction in the Plan's contribution base can potentially threaten its ability to recover from another market downturn.

## Employer Withdrawal Risk

**Definition:** The potential that contribution rate increases or benefit reductions will drive the bargaining parties to withdraw from the plan.

**Identification:** Employer withdrawals will reduce the Plan's contribution base and add pressure on the remaining participating employers and the Plan's investment returns to restore or strengthen the Plan's funded status.

## Business Risk

**Definition:** The potential that a company suffers a financial setback which impairs its ability to make contributions or withdrawal liability payments to the plan.

**Identification:** If contributions cannot be recovered, it will shift the weight of maintaining/improving the Plan's funded status upon the remaining employers of the Plan.

## Zone Status Risk

**Definition:** The potential that the plan will deteriorate to critical status such that the Trustees would need to take action to improve the plan's funded status through the development of a rehabilitation plan that increases contributions, reduces benefits, or both.

**Identification:** The type of benefit reductions and/or contribution rate increases would depend on the the zone status. Specifically critical plans can reduce features on all accrued benefits such as early retirement subsidies, but cannot reduce benefits to those in pay status. Critical and declining plans have the same tools as critical plans, but can also apply to the IRS and PBGC to reduce benefits to participants and beneficiaries in pay status.

**Assessment:** The Plan is currently in critical and declining status due to a projected insolvency within 20 years.

## Maturity Risk

**Definition:** This is the potential for total plan liabilities to become more heavily weighted toward inactive liabilities over time.

**Identification:** The Plan is subject to maturity risk because as plan assets and liabilities continue to grow, the impact of any gains or losses on the assets or liabilities also becomes larger.

**Assessment:** Currently assets are equal to approximately 275 times last year's contributions indicating a one-year asset loss of 10% would be equal to 27.5 times last year's contributions.

## Liquidity Risk

**Definition:** This is the potential that assets must be liquidated at a loss earlier than planned in order to pay for the Plan's benefits and operating costs. This risk is heightened for plans with negative cash flow, in which contributions do not exceed annual benefit payments plus expenses.

**Identification:** This Plan has high cash flow requirements because the sum of benefit payments plus expenses is significantly larger than contributions. The Plan also invests in illiquid assets such as real estate, private equity and hedge funds. As a result, there is a risk that assets may need to be liquidated during a down-market in order to pay benefits and expenses.

| Checklist Item #2 | Application for Approval of a Suspension of Benefits Under MPRA |
|---|---|
| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include a description of the proposed benefit suspension – calculated as if no other limitations apply – that includes:<br>• the suspension's effective date (and its expiration date, if applicable),<br>• whether the suspension provides for different treatment of participants and beneficiaries,<br>• a description of the different categories or groups of individuals affected, and<br>• how the suspension affects these individuals differently?<br>See section 2.02 of this revenue procedure.<br><br>A: Yes | The application filed on behalf of the Arizona Bricklayers' Pension Trust Fund sets forth the following proposed benefit suspension to be effective January 1, 2022:<br>• Maximum reduction in benefits to 110% of PBGC guaranteed benefits.<br><br>No special groups would be treated different except those required by law:<br>• Disability based benefits will not be reduced;<br>• Participants or beneficiaries who are at least 80 years of age on January 31, 2022, will have no reductions; and<br>• Participants or beneficiaries who are at least 75 years of age on January 31, 2022, will have a smaller benefit reduction.<br><br>The proposed suspension will remain in effective indefinitely. |

| **Checklist Item #5** | **Application for Approval of a Suspension of Benefits Under MPRA** |
| --- | --- |
| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include the plan actuary's certification of critical and declining status and the supporting illustrations, including:<br>• the plan-year-by-plan-year projections demonstrating projected insolvency during the relevant period, and<br>• separately identifying the available resources (and the market value of assets and changes in cash flow) during each of those years?<br>See section 3.01 of this revenue procedure.<br><br>A: Yes | The application filed on behalf of the Arizona Bricklayers' Pension Trust Fund includes an actuarial certification for the plan year beginning January 1, 2020 under IRC §432, which designates the Plan as meeting the "critical and declining" status for the plan year. The certification is attached as "2020 Critical and Declining PPA Status Certification." This document references the January 1, 2019 actuarial valuation which is also attached here as "2019 Actuarial Valuation Report".<br><br>A supplemental report that includes additional disclosures required by §3.01 of Revenue Procedure 2017-43 is attached as "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022". |

| **Checklist Item #6** | **Application for Approval of a Suspension of Benefits Under MPRA** |
|---|---|
| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include the plan actuary's certification that, taking into account the proposed suspension and, if applicable, a proposed partition, the plan is projected to avoid insolvency if the suspension takes effect, and the supporting illustrations, including:<br>• the plan-year-by-plan-year projections demonstrating projected solvency during the relevant period,<br>• separately identifying the available resources (and the market value of assets and changes in cash flow) during each of those years?<br>See section 3.02 of this revenue procedure.<br>A: Yes | See report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022" |

<table>
<tr><th>Checklist Item #8</th><th>Application for Approval of a Suspension of Benefits Under MPRA</th></tr>
<tr><td>Arizona Bricklayers’ Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001</td><td></td></tr>
<tr><td>Does the application include a demonstration that the limitations on individual suspensions are satisfied, including a description of each benefit based on disability, as defined under the plan, that is paid to an individual under the plan (without regard to whether the disability benefits are available to newly disabled participants) and calculations regarding:<br>• the guarantee-based limitation,<br>• the disability-based limitation,<br>• the age-based limitation, taking into account the guarantee based limitation, and<br>• if applicable, the age based limitation taking into account both the guarantee-based limitation and the disability-based limitation?<br>See section 4.01 of this revenue procedure.<br><br>A: Yes</td><td>Demonstrations that the limitations on individual suspension are satisfied. There are 8 examples:<br><br>1. Individual currently receiving benefits below 110% PBGC Guarantee (including contingent beneficiary)<br>2. Individual currently receiving benefits reduced to 110% PBGC Guarantee (including contingent beneficiary)<br>3. Individual currently receiving benefits between age 75 and 80 (including contingent beneficiary)<br>4. Individual currently receiving benefits over age 80 (including contingent beneficiary)<br>5. Individual currently receiving benefits based on disability (including contingent beneficiary)<br>6. Future retiree reduced to 110% PBGC Guarantee<br>7. Future retiree between age 75 and 80<br>8. Future disabled retiree<br><br>There are no future retirees below 110% of the PBGC Guarantee and there are no future retirees in the Plan who will be over age 80 as of January 31, 2022.</td></tr>
</table>

| **Checklist Item #9** | **Application for Approval of a Suspension of Benefits Under MPRA** |
|---|---|
| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include a demonstration that the proposed suspension is reasonably estimated to achieve the level necessary to avoid insolvency for the extended period, including illustrations regarding the plan's solvency ratio and available resources?<br><br>See section 4.01 of this revenue procedure.<br><br>A: Yes | See report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022" |

| **Checklist Item #11** | **Application for Approval of a Suspension of Benefits Under MPRA** |
|---|---|
| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include a demonstration that the proposed suspension is not projected to materially exceed the level necessary to avoid insolvency, including:<br><br>• the plan-year-by-plan-year projections demonstrating projected insolvency during the relevant period, and<br><br>• a separate identification of the available resources (and the market value of assets and changes in cash flow) during each of those years?<br><br>See section 4.03 of this revenue procedure.<br><br>A: Yes | N/A because this Plan is applying for a maximum suspension and partition. |

| **Checklist Item #12** | **Application for Approval of a Suspension of Benefits Under MPRA** |
|---|---|
| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include a demonstration that the proposed suspension is equitably distributed, including:<br>• information on the effect of the suspension on the plan in the aggregate,<br>• information on the effect of the suspension for different categories or groups,<br>• a list of the factors taken into account,<br>• an explanation of why none of the factors listed in § 432(e)(9)(D)(vi) were taken into account (if applicable),<br>• for each factor taken into account that is not one of the factors listed in § 432(e)(9)(D)(vi), an explanation why the factor is relevant, and<br>• an explanation of how any difference in treatment among categories or groups of individuals results from a reasonable application of the relevant factors?<br>See section 4.04 of this revenue procedure.<br><br>A: Yes | In accordance with Section 432(e)(9)(D)(vi), the proposed benefit suspension is distributed in an equitable manner across the Plan's participant and beneficiary population because all benefits will be reduced to the maximum allowable under MPRA.<br><br>See separate report for information on the effect of the suspension on the Plan participants in the aggregate as required per Section 4.04(1)(a) and (b) |

| **Checklist Item #20** | **Application for Approval of a Suspension of Benefits Under MPRA** |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application describe how the plan sponsor took into account - or did not take into account - in the determination that all reasonable measures have been taken to avoid insolvency, the impact of:<br><br>• benefit and contribution levels on retaining active participants and bargaining groups under the plan, and<br>• past and anticipated contribution increases under the plan on employer attrition and retention levels?<br><br>See section 5.03 of this revenue procedure.<br><br>A: Yes | The Trustees determination that all reasonable measures have been taken to avoid insolvency includes the consideration of the Plan factors specified in Section 432(e)(9)(C)(ii):<br><br>• Current and past contribution levels:<br><br>The Plan consists of employers in the masonry industry, which declined significantly during the great recession and has not yet fully recovered. Eventual recovery remains uncertain. The significant decline in the industry caused a reduction in the number of employers and active participants in the Plan from 30 to 10 employers and 579 to 54 active participants from 2007 to 2019. This includes two large employers that left the Plan to continue as "non-union" employers. As a result, there are insufficient contributions to the Plan to sustain the plan at a healthy level as required by ERISA and the Code. See "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022" for a summary of past and current contribution levels over the most recent 10 years.<br><br>• Levels of benefit accruals:<br><br>The current benefit accrual level is $30 per month per year of service. This rate was reduced from $43 effective for benefit accruals January 1, 2007 and after. The Board determined that further reducing the benefit accrual level and further eliminating adjustable benefits would leave very little incentive for participants to remain union employees and would therefore have a detrimental impact on the Plan's future funding.<br><br>• Prior reductions of adjustable benefits:<br><br>The benefit reductions in the Rehabilitation Plan include almost all adjustable benefit reductions.<br><br>• Prior suspension of benefits under Section 432(e)(9):<br><br>Not applicable as the Plan has not had a prior suspension of benefits under Section 432(e)(9). |

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| | • The impact on plan solvency of the subsidies and ancillary benefits available to active participants:<br><br>As noted above, almost all adjustable benefits have been eliminated under the Rehabilitation Plan.<br><br>• Compensation levels of active participants relative to employees in the participants' industry generally (see Application – OES data).<br><br>• Competitive and other economic factors facing contributing employers.<br><br>As noted above, the Plan consists of employers in the masonry industry, which declined significantly during the great recession and has not yet fully recovered. Additionally, two large employers withdrew to continue business as non-union employers.<br><br>• The impact of benefit and contribution levels on retaining active participants and bargaining groups under the plan.<br><br>During the implementation of the rehabilitation plan in 2016, the Board determined that even if all adjustable benefits were eliminated and future accrual rates were reduced to the 1.00% of contribution level, hourly contribution rates would need to increase by at least $3.85 per hour (from $0.90 to $4.75 per hour) over the ten-year Rehabilitation Period in order for the Plan to be able to emerge from critical status by the end of the Rehabilitation Period. The Board concluded that such contribution rate increases were unreasonable, would likely create a domino effect of the remaining employers going out of business and involved considerable risk to the Plan and Plan participants.<br><br>• The impact of past and anticipated contribution increases under the plan on employer attrition and retention levels.<br><br>As mentioned above, there are no further plans to increase the required contribution rate as that is anticipated to have a detrimental impact on the Plan's future funding.<br><br>• Measures undertaken by the plan sponsor to retain or attract contributing employers.<br><br>The Trustees' view is that having no future planned contribution rate increases is the only option to |

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| | retain contributing employers without negatively impacting the Plan’s future funding. |

| **Checklist Item #23** | **Application for Approval of a Suspension of Benefits Under MPRA** |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application indicate whether the plan sponsor is requesting approval from PBGC of a proposed partition under section 4233 of ERISA?<br><br>See section 6.02 of this revenue procedure.<br><br>A: Yes | The Trustees of the Arizona Bricklayers' Pension Trust Fund have applied for a partition effective January 1, 2022. Under the proposed partition, the guaranteed amounts for 188 terminated vested participants would be partitioned to the Successor Plan and paid for through financial assistance provided by the Pension Benefit Guaranty Corporation. Our analysis indicates that the level of financial assistance requested reasonably allows for the Plan to avoid insolvency. |

| Checklist Item #24 | Application for Approval of a Suspension of Benefits Under MPRA |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| If the answer to item 23 is yes, does the application specify the effective date of the proposed partition and include a plan-year-by-plan-year projection of the amount of the reduction in benefit payments attributable to the partition?<br><br>See section 6.02 of this revenue procedure.<br><br>A: Yes | See report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022" |

| **Checklist Item #25** | **Application for Approval of a Suspension of Benefits Under MPRA** |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include:<br>• a description of each of the assumptions used in the projections required under sections 3.01, 3.02, 4.02(1), 4.02(2), and 4.03 of this revenue procedure,<br>• supporting evidence for the selection of those assumptions, and<br>• an explanation of any differences among the assumptions used for various purposes?<br><br>See section 6.03 and Appendix B of this revenue procedure.<br><br>A: Yes | See report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022". |

| **Checklist Item #26** | **Application for Approval of a Suspension of Benefits Under MPRA** |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application describe the plan's experience with certain critical assumptions, including a disclosure for each of the 10 plan years immediately preceding the application that separately identifies:<br>• the total contributions,<br>• the total contribution base units,<br>• the average contribution rates,<br>• the withdrawal liability payments, and<br>• the rate of return on plan assets?<br><br>See section 6.04 of this revenue procedure. | See report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022". |

| **Checklist Item #27** | **Application for Approval of a Suspension of Benefits Under MPRA** |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include deterministic projections of the sensitivity of the plan's solvency ratio throughout the extended period by taking into account the more conservative assumptions of investment experience and future contribution base units than assumed elsewhere in the application?<br><br>See section 6.05 of this revenue procedure. | See report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022". |

| **Checklist Item #28** | **Application for Approval of a Suspension of Benefits Under MPRA** |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the plan include deterministic projections for each year in the extended period of:<br>• the value of plan assets<br>• the plan's accrued liability, and<br>• the plan's funded percentage?<br><br>See section 6.06 of this revenue procedure. | See report titled "Report of Required Actuarial Information - Application for Proposed Benefit Suspensions as of January 1, 2022". |

| **Checklist Item #35** | **Application for Approval of a Suspension of Benefits Under MPRA** |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include the required enrolled actuary information?<br><br>See section 7.04 of this revenue procedure.<br><br>A: Yes | The following information is being provided for the application on behalf of the Arizona Bricklayers' Pension Trust Fund:<br><br>Plan Actuary<br>Kevin Campe<br>Principal and Consulting Actuary<br>Enrolled Actuary No. 20-05356<br>Milliman, Inc.<br>71 South Wacker Drive, 31st Floor<br>Chicago, Illinois 60606<br>(312) 726-0677 |

| **Checklist Item #41** | **Application for Approval of a Suspension of Benefits Under MPRA** |
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| Arizona Bricklayers' Pension Trust Fund<br>EIN: 34-6666753<br>Plan No.: 001 | |
| Does the application include the two most recent actuarial valuation reports?<br><br>See section 7.10 of this revenue procedure.<br><br>A: Yes | Included as "2018 Actuarial Valuation Report" and "2019 Actuarial Valuation Report" are the January 1, 2018 and January 1, 2019 Actuarial Valuation Reports. |