I. Services to be Provided

Proposers will submit a single proposal and are invited to bid on all Service Categories as interested, with full understanding of the intent to award.

The Services to be Provided for each category is as follows:

A. General Pension Consultant

General Services

- a. Review and provide written opinions as an independent fiduciary on reports prepared by CalPERS staff (Staff), as requested by the CalPERS Board of Administration Investment Committee (Board).
- b. Provide opinions on matters relevant to the prudent and optimal management of the retirement system as requested by the Board.
- c. Proactively Inform the Committee of any concern or Issue Identified through their normal course of business that could present CalPERS with new opportunities or expose the System to Investment, operational, or reputational risks.
- Identify and create a peer benchmark for the Public Employees'
 Retirement Fund (Total Fund). The benchmark for the Total Fund will hereafter be referred to as the CalPERS Peer Universe.
- e. Identify and create a peer benchmark for each component of the Affiliate Trusts In components where a peer exists. The benchmarks for Affiliate Trusts will hereafter be referred to as the Affiliates Peer Universe.
- f. Provide review and analysis for the Total Fund relative to the CalPERS Peer Universe.
- g. Provide review and analysis for each component of the Affiliate Trusts relative to the appropriate Affiliates Peer Universe, as requested by the Board.
- h. Attend all CalPERS Board of Administration Investment Committee (IC) meetings.

- i. Attend CalPERS Board Committees and other sub-committee meetings, as requested.
- j. Provide research, detailed market analysis and trends, and advice on specific Investment topics, as requested by the Board.
- k. Inform the Board of any market conditions that arise which could potentially create undue risk to the System and any component of the System.
- I. Provide guidance and opinions to the Board regarding all opportunistic strategy investments.

Asset Allocation

- Serve as the lead Investment consultant in the periodic Asset Liability Management (ALM) review by providing the following services:
 - (i) Coordinate with the Board's private-asset consultants to define the market opportunity set and asset classes relevant to CalPERS.
 - (ii) Coordinate with the Board's private-asset consultants to form an assessment and perspective regarding the benchmarks used for the various asset classes.
 - (iii) Coordinate with the Board's private-asset consultants to establish capital market assumptions for the opportunity set used in the modeling process.
 - (iv) Development of estimates and forecasts used in the modeling process.
- b. Provide guidance to the Board by providing the following services:
 - (i) Provide guidance to the Board on the benefits and risks of using a risk factor-based asset allocation approach versus a traditional asset class- based asset allocation approach.
 - (ii) Provide guidance to the Board on the Issues, costs, benefits and risks of illiquid asset classes versus more liquid asset classes.
 - (iii) Provide guidance to the Board on the issues, costs, benefits and risks of private versus public asset classes,

- and knowledge around public market alternatives to private asset classes.
- (iv) Provide guidance to the Board on alternative benchmarks.
- (v) Participate In the presentation and dialog during ALM workshop sessions with the Board, or the designated subcommittee of the Board.
- (vi) Provide an opinion on Board decisions relative to ALM, to include whether decisions were based on reasonable estimates and assumptions and developed by processes comporting with best business practices.
- (vii) Develop analytic frameworks and communication materials.

3. Affiliate Trusts

- a. Participate In discussions on ALM for the Affiliate Trusts.
- b. Review and provide feedback on ALM plan developed by Staff, and review and provide an opinion on Investment Committee agenda items for ALM.

4. Risk Management

- a. Review and provide opinions to the Board on the risk characteristics and the risk profile of the Total Fund, Including analysis relative to the CalPERS Peer Universe.
- Review and provide opinions to the Board on the risk characteristics and the risk profile of each of the Affiliate Trusts, as appropriate, including analysis relative to the appropriate Affiliate Peer Universe.

5. Performance

- a. Review and approve all requests for benchmark replacements and modifications.
- Review and provide an opinion on the Total Fund Policy
 Benchmark, as defined In Policy and components of the Total
 Fund Policy benchmark, as requested by the Board.

- c. Review and provide written opinions of custom benchmarks, as requested by the Board.
- d. Assist the Board in establishing appropriate performance benchmarks for public and private asset class in the context of the total CalPERS fund.
- e. Report on the Investment performance of the Total Fund and provide an analysis of CalPERS Investment performance compared to CalPERS Peer Universe. The analysis should include recommendations and justifications for recommendations on any Issues In the analysis that would hinder the Board's ability to meet CalPERS long-term Investment objectives.
- f. Report on the Investment performance of the Affiliate Trusts and provide an analysis of CalPERS investment performance compared to the Affiliates Peer Universe. The analysis should Include recommendations and justifications for recommendations on any Issues In the analysis that would hinder the Board's ability to meet CalPERS long term Investment objectives.
- g. Prepare a one (1) page annual report on the Investment performance for the CalPERS Annual Comprehensive Financial Report (ACFR).
- h. Analyze for reasonableness the benchmarks, measurements, and appropriateness of all factors within Staff performance plans, compared to Industry peers.
- i. Validate year-end, quantitative measurements on Staff performance plans.

6. Investment Policy Review

- a. Monitor and review how Staff is adhering to the Policies.
- b. Review, analyze, and provide an independent recommendation on Investment Policies, Investment Policy and Procedures Guidelines (IPPG's), as proposed by Staff, outside advisors, or specialty consultants. The review and recommendation should ensure that the Policies:
 - (i) Meet Industry standards,

- (ii) Are consistent with other Policies,
- (iii) Use best practices,
- (iv) Align with CalPERS Investment Beliefs,
- (v) Reflect the Board's accepted risk tolerance, and
- (vi) Assist the Board In meeting the long-term Investment objectives of CalPERS.
- Provide written recommendations for amendments and/or modifications to any Policy, including IPPGs related to the Policy, and provide detailed justification for recommendations
- d. Prepare and present reports and recommendations for reviewing and updating Policy criteria and objectives which include strategies for public and private asset classes/programs.

7. External Manager Review

- a. Review and provide an opinion on the process used to identify and source external managers, as requested by the Board.
- b. Provide advice to the Board on questions or issues that arise in the course of administering the external manager programs on strategic Issues related to structure, policy, and benchmarks.
- c. Review and opine on Investment management fees and related expenses, as requested by the Board.

8. Investment Office (INVO) Program Review

a. Benchmark the internal INVO programs against industry standards, best practices, and if applicable, the appropriate component of CalPERS Peer Universe or Affiliates Peer Universe. Provide a written report to the Board.

B. Scope of Services for Each Private Asset Class (Private Debt, Private Equity, Real Estate, and Infrastructure)

1. General Services

a. Common Duties

- (i) Maintain a total fund perspective when performing the services of this contract.
- (ii) Provide input on the private asset class component of the CalPERS investment portfolio, as requested by the Committee.
- (iii) Attend all CalPERS Board of Administration Investment Committee (IC) meetings.
- (iv) Attend CalPERS Board Committees and other subcommittees, as requested.
- (v) Research and make recommendations for use of potential and innovative investment strategies and securities.

b. Research and Analysis

- (i) Prepare comprehensive analysis and provide advice on specific investment issues as requested by the Committee.
- (ii) Prepare and present analysis on current issues as they may pertain to the CalPERS' investment portfolio.

c. Investment Training

- (i) Provide training to the Committee on investment topics covered under this contract.
- (ii) Conduct workshops on specific issues designated by the Committee.

d. Additional Duties or Activities

(i) Other duties or activities as may be required consistent with and contemplated by the foregoing.

Asset Allocation

- a. Participate in the periodic Asset Liability Management (ALM) review by providing the following services:
 - (i) Support the General Pension Investment Board Consultant's work to define the market opportunity set and asset classes relevant to CalPERS, provide perspective regarding the benchmark used for the private asset class,

and provide perspective on capital market assumptions used in the ALM modeling process.

3. Risk Management

a. Review and provide opinions to the Board on the risk characteristics and the risk profile of the private asset class program, including analysis relative to peers.

4. Performance

- a. Review and provide written opinions of custom private asset class benchmarks, as requested by the Board.
- b. Report on the investment performance of the private asset class program and provide an analysis of CalPERS investment performance compared to CalPERS Peer Universe. The analysis should include recommendations and justifications for recommendations on any issues in the analysis that would hinder the Board's ability to meet CalPERS long-term investment objectives.
- c. Analyze for reasonableness the benchmarks, measurements, and appropriateness of all factors within private asset class program Staff performance plans, compared to industry peers.
- d. Validate year-end, quantitative measurements on private asset class program Staff performance plans.
- e. Assist the Committee in establishing appropriate performance benchmarks for private asset class in the context of the total CalPERS fund.
- f. Using the Performance reports produced by the CalPERS Master Custodian, prepare and present a semi-annual evaluation report on the performance of CalPERS' private asset class program including a comparison with the performance of other peer organizations.
- g. Provide CalPERS with semi-annual performance analysis on how the attribution of the private asset class program versus the Total Fund.

- h. Provide CalPERS with semi-annual performance reports of theoretical portfolios, i.e., market indices, benchmarks, and composite total fund portfolio.
- i. Present semi-annual performance reports to the Investment Committee of the Board.
- Advise the CalPERS Compensation Committee on investment incentive measures and objectives for the private asset class team members.

5. Investment Policy Review

- a. Monitor and review how Staff is adhering to the private asset class Program Policy.
- b. Review, analyze, and provide an independent recommendation on private asset class Program Investment Policies, Investment Policy and Procedures Guidelines (IPPG), as proposed by Staff, outside advisors, or specialty consultants. The review and recommendation should ensure that the Policies:
 - (i) Meet industry standards,
 - (ii) Are consistent with other Policies,
 - (iii) Use best practices,
 - (iv) Align with CalPERS Investment Beliefs,
 - (v) Reflect the Board's accepted risk tolerance, and
 - (vi) Assist the Board in meeting the long-term investment objectives of CalPERS.
- Provide written recommendations for amendments and/or modifications to any Policy, including IPPGs related to the Policy and provide detailed justification for recommendations.
- d. Prepare and present reports and recommendations for reviewing and updating Policy criteria and objectives which include strategies for private asset classes/programs.
- e. Contractor shall provide a review of the CalPERS private asset class Investment Policy, portfolio mix/asset allocation, and investment strategy relative to changes in the capital markets.

6. External Manager Review

- a. Review and provide an opinion on the process used to identify and source external managers, as requested by the Board.
- b. Provide advice to the Board on questions or issues that arise in the course of administering the external manager programs on strategic issues related to structure policy, and benchmarks.
- c. Review and opine on investment management fees and related expenses as requested by the Board.
- 7. Backup to the General Pension Investment Board Consultant Services

If directed by the Board the contractor shall provide consulting services in connection with the General Pension Investment Board Consultant contract and engagement as follows:

- a. Maintain general availability to meet the needs of the CalPERS Board of Administration Investment Committee (Committee) and Staff, including but not limited to, attending regular Committee meetings, and meetings with the Committee chair and/or vice-chair to discuss and prepare for Committee meetings.
- b. Provide written second opinions to those issued by the General Pension Investment Board as requested by the Committee.
- c. Provide independent analyses and recommendations on asset allocation strategies, investment policies, Investment Office programs, industry trends and views, general investment portfolio management, asset and sector performance and attribution assignments, and investment risk assessment, or other analyses, as requested by the Committee.
- d. Provide other consulting services which may include recommendations, opinions and/or advice on an issue relevant to the prudent management of the System, as requested by the Board.
- e. Prepare for, attend, and participate in Committee workshops as requested by the Committee for the Asset Allocation and Liability Workshop, assist in the development of assumptions, review and comment on materials, and participate in all pre-meetings.

8. Special Projects

a. CalPERS Board may request special projects related to the services listed in this section. CalPERS must approve in writing, in advance, any services performed under the Board Investment Consultant Agreements, as Special Projects.

Proposer must comply with the Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. § 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

Proposer is responsible for ensuring all products and services provided to CalPERS, including hosting services for electronic content, meet the accessibility requirements of the refreshed Section 508 of the Rehabilitation Act (29 U.S.C. § 794d) and all the applicable provisions of the Information and Communication Technology (ICT) Standards and Guidelines. These standards incorporate by reference all of the requirements of Web Content Accessibility Guidelines 2.0 AA success criteria. CalPERS reserves the right to ask for proof of conformance or to perform testing on any solution to verify conformance.