

(If a firm has branch offices, complete for each specific branch office seeking work.)

1. **REVISED ADSP013-00003465: Annual Request for Qualifications**

a.	FIRM (OR BRANCH OFFICE) NAME:	HDR
b.	FIRM (OR BRANCH OFFICE) STREET:	3200 E. Camelback Road, Suite 350
c.	FIRM (OR BRANCH OFFICE) CITY:	Phoenix
d.	FIRM (OR BRANCH OFFICE) STATE:	Arizona
e.	FIRM (OR BRANCH OFFICE) ZIP CODE:	85018
f.	YEAR ESTABLISHED:	1959

(g1).	OWNERSHIP - TYPE:	Private Corporation
(g2)	OWNERSHIP - SMALL BUSINESS STATUS:	

h.	POINT OF CONTACT NAME AND TITLE:	David Skinner, Department Manager
i.	POINT OF CONTACT TELEPHONE NUMBER:	602.522.7700
j.	POINT OF CONTACT E-MAIL ADDRESS:	David.Skinner@hdrinc.com
k.	NAME OF FIRM (If block 1a is a branch office):	

2. **EMPLOYEES BY DISCIPLINE**

a. Discipline Title	b. Function: Primary (P) or Secondary (S)	c. No. of Employees - Firm	d. No. of Employees - Branch
Administrative	P	820	13
Aeronautical Engineer	S	2	1
Archaeologist	P	86	1
Architect	P	689	11
CADD Technician	P	571	18
Civil Engineer	P	676	8
Construction Inspector	P	238	29
Construction Manager	P	216	6
Electrical Engineer	P	263	6
Environmental Engineer	P	98	1
Environmental Scientist	P	385	2
GIS Specialist	P	96	2
Geologist	P	102	2
Mechanical Engineer	P	176	9
Planner: Urban/Regional	P	221	8
Sanitary Engineer	P	244	5
Security Specialist	P	12	1
Soils Engineer	P	50	2
Structural Engineer	P	254	13
Technician/Analyst	P	1,156	12
Transportation Engineer	P	745	16
Water Resources Engineer	P	240	2
Public Relations	P	450	6
Other Employees	P	788	
Total		8,578	165

(If a firm has branch offices, complete for each specific branch office seeking work.)

1. **REVISED ADSP013-00003465: Annual Request for Qualifications**

a.	FIRM (OR BRANCH OFFICE) NAME:	HDR
b.	FIRM (OR BRANCH OFFICE) STREET:	101 North 1 st Avenue, Suite 1950
c.	FIRM (OR BRANCH OFFICE) CITY:	Phoenix
d.	FIRM (OR BRANCH OFFICE) STATE:	Arizona
e.	FIRM (OR BRANCH OFFICE) ZIP CODE:	85003
f.	YEAR ESTABLISHED:	2005

(g1).	OWNERSHIP - TYPE:	Private Corporation
(g2).	OWNERSHIP - SMALL BUSINESS STATUS:	

h.	POINT OF CONTACT NAME AND TITLE:	Jason Mikkelsen, Managing Principal
i.	POINT OF CONTACT TELEPHONE NUMBER:	602.792.8800
j.	POINT OF CONTACT E-MAIL ADDRESS:	Jason.Mikkelsen@hdrinc.com
k.	NAME OF FIRM (If block 1a is a branch office):	

2. EMPLOYEES BY DISCIPLINE

a. Discipline Title	b. Function: Primary (P) or Secondary (S)	c. No. of Employees - Firm	d. No. of Employees - Branch
Administrative	P	820	3
Civil Engineer	P	676	1
Landscape Architect	P	2	7
Planner: Urban/Regional	P	221	
Technician/Analyst	P	1,156	2
Transportation Engineer	P	745	6
Public Relations	P	450	2
Other Employees	P	788	1
Total		8,578	24

(If a firm has branch offices, complete for each specific branch office seeking work.)

1. **REVISED ADSP013-00003465: Annual Request for Qualifications**

a.	FIRM (OR BRANCH OFFICE) NAME:	HDR
b.	FIRM (OR BRANCH OFFICE) STREET:	5210 E. Williams Circle, Suite 350
c.	FIRM (OR BRANCH OFFICE) CITY:	Tucson
d.	FIRM (OR BRANCH OFFICE) STATE:	Arizona
e.	FIRM (OR BRANCH OFFICE) ZIP CODE:	85711
f.	YEAR ESTABLISHED:	1985

(g1).	OWNERSHIP - TYPE:	Private Corporation
(g2)	OWNERSHIP - SMALL BUSINESS STATUS:	

h.	POINT OF CONTACT NAME AND TITLE:	David Skinner, Department Manager
i.	POINT OF CONTACT TELEPHONE NUMBER:	602.522.7700
j.	POINT OF CONTACT E-MAIL ADDRESS:	David.Skinner@hdrinc.com
k.	NAME OF FIRM (If block 1a is a branch office):	

2. EMPLOYEES BY DISCIPLINE

a. Discipline Title	b. Function: Primary (P) or Secondary (S)	c. No. of Employees - Firm	d. No. of Employees - Branch
Administrative	P	820	3
Architect	P	689	1
CADD Technician	P	571	6
Civil Engineer	P	676	6
Environmental Scientist	P	385	1
Land Surveyor	P	32	4
Structural Engineer	P	254	1
Technician/Analyst	P	1,156	5
Transportation Engineer	P	745	4
Public Relations	P	450	1
Railroad Experts	P	80	1
Other Employees	P	788	
Total		8,578	33

(If a firm has branch offices, complete for each specific branch office seeking work.)

1. **REVISED ADSP013-00003465: Annual Request for Qualifications**

a.	FIRM (OR BRANCH OFFICE) NAME:	HDR
b.	FIRM (OR BRANCH OFFICE) STREET:	2060 Briargate Parkway, Suite 120
c.	FIRM (OR BRANCH OFFICE) CITY:	Colorado Springs
d.	FIRM (OR BRANCH OFFICE) STATE:	Colorado
e.	FIRM (OR BRANCH OFFICE) ZIP CODE:	80920-7699
f.	YEAR ESTABLISHED:	2006

(g1).	OWNERSHIP - TYPE:	Private Corporation
(g2)	OWNERSHIP - SMALL BUSINESS STATUS:	

h.	POINT OF CONTACT NAME AND TITLE:	Bob Preston, AICP, Vice President
i.	POINT OF CONTACT TELEPHONE NUMBER:	719.272.8800
j.	POINT OF CONTACT E-MAIL ADDRESS:	Bob.preston@hdrinc.com
k.	NAME OF FIRM (If block 1a is a branch office):	

2. EMPLOYEES BY DISCIPLINE

a. Discipline Title	b. Function: Primary (P) or Secondary (S)	c. No. of Employees - Firm	d. No. of Employees - Branch
Administrative	P	820	9
CADD Technician	P	571	3
Civil Engineer	P	676	3
Environmental Scientist	P	385	1
Landscape Architect	P	38	1
Planner: Urban/Regional	P	221	28
Sanitary Engineer	P	244	1
Technician/Analyst	P	1,156	3
Transportation Engineer	P	745	3
Water Resources Engineer	P	240	2
Management Scientists	P	80	2
Public Relations	P	450	8
Total		8,578	74

3. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST YEAR

a. Approximate No. of Projects	b. Experience	c. Revenue Index Number (see below)
19	Air Pollution control	3
25	Airports, terminals & Hanger; freight handling	7
630	Bridges	10
430	Construction Management	10
25	Dams (Concrete, arch)	5
110	Dams (earth, rock); dikes; levees	8
650	Enviro. Impact studies, assessments, or statements	10
530	Environmental remediation	10
1200	Highways; streets; airfield paving; parking lots	10
30	Industrial buildings; manufacturing plants	5
200	Planning (site, installation, and project)	8
1500	Power Generation, Transmission, Distribution	10
900	Railroad: Rapid Transit	10
75	Rivers: Canals; Waterways; Flood Control	7
650	Sewage Collection; Treatment and Disposal	10
580	Solid Wastes; Incineration; Landfill	9
710	Surveying; Platting; Mapping; Flood Plain Studies	6
760	Storm Water Handling & Facilities	7
600	Testing & Inspection Services	7
820	Traffic & Transportation Engineering	10
650	Water Resources; Hydrology; Ground Water	9
450	Water Supply; Treatment and Distribution	10

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

- | | |
|---|---|
| 1. Less than \$100,000 | 6. \$2 million to less than \$5 million |
| 2. \$100,000 to less than \$250,000 | 7. \$5 million to less than \$10 million |
| 3. \$250,000 to less than \$500,000 | 8. \$10 million to less than \$25 million |
| 4. \$500,000 to less than \$1 million | 9. \$25 million to less than \$50 million |
| 5. \$1 million to less than \$2 million | 10. \$50 million or greater |

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Mike Bertram, PE	b. ROLE IN THIS CONTRACT Sr. Transportation Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 26	2. WITH CURRENT FIRM 8
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Tucson and Phoenix, AZ			

e. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Civil Engineering	f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Civil, Arizona, No. 37538 PE, Civil, Washington, No. 28987
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g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
 Mike Bertram's 25 years of public transportation experience have involved serving many public agencies including Arizona Department of Transportation, Pima County Department of Transportation, City of Tucson, Town of Marana, and Town of Oro Valley. His experience includes: project management; highway, arterial and interchange design; design concept reports; project assessment reports; hydraulic reports and drainage design; retaining wall layouts; channelization; cost estimating; and special provisions.

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) Year Completed	
		Professional Services	Construction (if applicable)
1)	Arizona Department of Transportation, Arizona DOT-Tucson, I-10, Congress to 29th Street, Tucson, AZ	2010	2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project design manager and post design corridor manager responsible for coordinating the preparation of final plans, specifications, estimate, environmental documentation and Post Design Services for this project that reconstructed a 6.5-mile section of I-10 from Prince Road to 29th Street. As of February 2011, this is the largest single project bid in ADOT history. The project includes ensuring consistency and compiling the following four design segments into a single bid package: Prince Road to Grant Road; Grant Road to St. Mary's Road, St. Mary's Road to 29th Street; and, Freeway Management System Prince Road to 29th Street. Cost: \$213 million		
2)	Arizona Department of Transportation, I-10, Ina Road TI to Ruthrauff Road TI, Tucson, AZ	2012	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager, responsible for the preparation of a design concept report, environmental assessment, implementation plan, and preliminary design packages for this 5-mile section of I-10 through the northwestern portion of greater Tucson. The segmentation of this \$385 million project into fundable construction projects has already been integrated into the ADOT Five-Year Highway Construction Program which involved conducting public involvement activities to ensure local and agency concurrence with the proposed long-range plan. This plan and concept included an engineering and NEPA environmental evaluation of TI alternatives at four existing interchanges and preparation of an Environmental Assessment with a determination of impacts and mitigation for the preferred action. This project also identifies and evaluates the requirements for joint project agreements between the State of Arizona and local jurisdictions prior to final design. Cost: \$6,300,000 (fee)		
3)	City of Tucson, Downtown Links - Stevens Avenue, Tucson, AZ	2011	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Engineer. Downtown Links is a design project recently initiated by the Tucson Department of Transportation that will provide links between Barraza-Aviation Parkway and Interstate 10, Broadway Boulevard and the 4th Avenue shopping district, and Downtown and the neighborhoods to its north. These Downtown Links have been conceived as a modest, four-lane roadway on the north side of the railroad tracks, enhanced pedestrian and bicycle access routes, and the connection of Barraza-Aviation Parkway to 22nd Street and Interstate 10. Enhancements on this corridor will provide more efficient access to Downtown, new and safer underpasses, railroad crossings and sidewalks. Cost: \$12,100,000 (fee)		

4)	(1) TITLE AND LOCATION <i>(City and State)</i> Pima County Department of Transportation, La Cañada Drive, Ina to Calle Concordia, Tucson, AZ	(2) Year Completed	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project manager and project engineer for both HDR and internally at Pima County for this Regional Transportation Authority funded project that involved the preparation of a Design Concept Report (DCR), Environmental Mitigation and Assessment Report (EAMR), Preliminary and Final Design Engineering Documentation to widen 3 miles of La Canada Drive from a rural two-lane section to a four-lane urban section with paved shoulders, curb and gutter, sidewalks and public use trail, north of River Road to south of Ina Road. The project included federal funding, so the environmental process also included following ADOT and FHWA procedures and guidelines for a Categorical Exclusion (CE). Key design tasks included the preparation of the following reports: survey and mapping; traffic; air quality; noise analysis; cultural resources; hazardous materials; biological evaluation; utility impacts; geotechnical; lighting; joint use utility trench; pavement; and drainage. The project also involved extensive coordination with the public, government agencies and utilities and the preparation of a Nationwide Clean Water Act 404 Permit application. The project is currently under construction. Cost: \$2,700,000 (fees)	Professional Services 2003	Construction <i>(if applicable)</i> 2011

Check if project performed with current firm

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Jim Christensen, PE	b. ROLE IN THIS CONTRACT Transportation Design Manager	c. YEARS EXPERIENCE	
		1. TOTAL 28	2. WITH CURRENT FIRM 24
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Civil Engineering		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Civil, Arizona, No. 24589 PE, Civil, California, No. C44676	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Jim Christensen has 28 years of experience in agency and municipal public works planning, design, and construction. His expertise includes all aspects of project development from inception through construction. He has successfully completed a wide range of projects including facilities, interchange improvements, new roundabouts, roadway widening and reconstruction, freeways, and other public works projects. His work on these projects includes state and federal environmental reviews, design, construction contract administration, and program management. He is experienced in the development of preliminary and final design documents, preparation of cost estimates, and specification writing.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, I-17/SR 69 Cordes Junction Traffic Interchange, Cordes Junction, AZ	(2) Year Completed	
		Professional Services 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for this CMAR project that reconfigured the interchange to improve safety and the operational characteristics of the interchange by segregating local traffic from through traffic, reducing congestion and delays. A new directional ramp, full diamond traffic interchange on I-17, half diamond interchange on SR 69, and two-way frontage road will replace the existing interchange and loop ramps. Cost: \$5,700,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, South Mountain Corridor Environmental Impact Statement and Location/Design Concept Report, Phoenix, AZ	(2) Year Completed	
		Professional Services 2014	Construction (if applicable) 2020 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Transportation engineer for the assessment of the new 26-mile South Mountain Freeway Corridor, which consists of completing an EIS and Location/Design Concept Report for ADOT. Ultimately, the selected alternative will be environmentally sensitive and economically viable; a legally defensible environmental document securing federal dollars for project construction; and an implementation plan that permits ADOT to proceed with final design and construction in a logical, cost-effective sequence. Cost: \$22,800,000 (fee)		
3)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, SR 303L Final Design, Thomas to Camelback, Glendale and Goodyear, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for this project to provide construction plans, technical specifications, quantity computations, and related construction documents for construction of this new freeway with traffic interchanges at Indian School Road and Camelback Road. Cost: \$4,700,000 (fee)		
4)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, I-17/SR 74 Carefree Highway TI, Phoenix, AZ	(2) Year Completed	
		Professional Services	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager for the final design for a reconstructed interchange at I-17. The project changed a simple diamond interchange into a partial cloverleaf. The work included a new bridge to be constructed at I-17 at SR 74 (Carefree Highway). The project included new reinforced concrete box culverts, pipe culverts, retention areas, roadway widening to six lanes, and ramp relocations. Cost: \$1,600,000 (fee)		

(1) TITLE AND LOCATION <i>(City and State)</i> Arizona Department of Transportation, I-10/SR 303L System TI (sub to Aztec), AZ, Glendale and Goodyear, AZ	(2) Year Completed	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE 5) Project manager for this project providing roadway designs for the I-10/SR 303L system interchange including constructability reviews; drainage design, hydrologic analysis, and hydraulic design; traffic study, traffic analysis, and signal design; earthwork modeling; and design of three structures including PS&E; and the Final Bridge Selection Report. Cost: \$3,700,000 (fee)	Professional Services 2010	Construction <i>(if applicable)</i> <input checked="" type="checkbox"/> Check if project performed with current firm

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Scott Miller	b. ROLE IN THIS CONTRACT Transit Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 19	2. WITH CURRENT FIRM 7
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) Master of Public Administration, Public Administration, 2000 BS, Urban Planning, 1994		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Scott Miller is a senior transportation planner with 19 years of transportation planning and technology experience in both the private and public sectors. His experience includes operations and capital facility planning, neighborhood-level service planning, community involvement, long-range transportation planning, Federal Title VI compliance, ADA compliance, intelligent transportation system planning, and transit fare collection systems. In addition, he has extensive experience with GIS including data analysis, new system implementation, and integration with external business applications.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) City of Tucson, Major Transit Investment Study - Alternatives Analysis/Environmental Assessment, Tucson, AZ	(2) Year Completed	
		Professional Services 2009	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Transit operations planning support services through the development and definition of several components of the operating plan. Services included the development of simulated streetcar passenger schedules (time tables) for each operating day, staffing requirements by position (operators, maintenance technicians, supervisors, etc.) and a detailed system operations and maintenance cost estimate. In addition, Scott assisted with a review of fare collection methods and alternatives. Cost: \$4,600,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) Maricopa Association of Governments, MAG Regional Transit Framework Study, AZ	(2) Year Completed	
		Professional Services 2009	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager responsible for overseeing transit operating and capital planning, public involvement and the development of financial projections for recommended public transportation investments. The purpose of the study was to assess long range demand for public transit service in Maricopa County, Arizona, an area that is home to nearly 4 million people. Transit demand was measured through two methods: the regional travel demand model and an off-model GIS based analysis. Long range transit operations and capital recommendations were developed through year 2030, with consideration for longer term recommendations up to year 2050. The results of the study identified transit operations and capital facility needs including park-and-rides, transit centers and operations and maintenance facilities. The study was submitted for inclusion in the state's long range transportation plan and may serve as the basis for future transit investments. Cost: \$980,000 (fee)		
3)	(1) TITLE AND LOCATION (City and State) Valley Metro / RPTA, Regional Transportation Plan Evaluation Services, Phoenix, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for the operating and capital component for this comprehensive evaluation of the public transportation element of the 2006-2026 Regional Transportation Plan (RTP). The financial element of the plan evaluation included a review of the revenue and expenditure assumptions (including feasibility of plan implementation), twenty-year cash flow program, equitable distribution of expenditures and capital bonding requirements. The service operations and capital infrastructure element included an evaluation of the appropriateness of plan elements, system connectivity, service routing, service/facility phasing, facility capacity and vehicle requirements. Cost: \$1,366,000 (fee)		

	(1) TITLE AND LOCATION <i>(City and State)</i> Maricopa Association of Governments, MAG Southeast Corridor Major Investment Study, Maricopa County, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable)
4)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager responsible for overseeing transit operating and capital planning, public involvement and the development of financial projections for recommended public transportation investments. The purpose of the study was to assess long range demand for public transit service in Maricopa County, Arizona, an area that is home to nearly 4 million people. Transit demand was measured through two methods: the regional travel demand model and an off-model GIS based analysis. Long range transit operations and capital recommendations were developed through year 2030, with consideration for longer term recommendations up to year 2050. The results of the study identified transit operations and capital facility needs including park-and-rides, transit centers and operations and maintenance facilities. The study was submitted for inclusion in the state's long range transportation plan and may serve as the basis for future transit investments. Cost: \$389,000		
	(1) TITLE AND LOCATION <i>(City and State)</i> Valley Metro, Planning Support Services, Phoenix, AZ	(2) Year Completed	
		Professional Services 2012	Construction (if applicable)
5)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for the operating and capital component for this comprehensive evaluation of the public transportation element of the 2006-2026 Regional Transportation Plan (RTP). The financial element of the plan evaluation included a review of the revenue and expenditure assumptions (including feasibility of plan implementation), twenty-year cash flow program, equitable distribution of expenditures and capital bonding requirements. The service operations and capital infrastructure element included an evaluation of the appropriateness of plan elements, system connectivity, service routing, service\facility phasing, facility capacity and vehicle requirements. Cost: \$2,700,000		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME John Misik, PE	b. ROLE IN THIS CONTRACT Senior Structural Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 35	2. WITH CURRENT FIRM 8
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Civil Engineering, 1978		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Arizona, No. 20475 PE, California, No. 47624 PE, Nevada, No. 9970 PE, Pennsylvania, No. 032764	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) John has 34 years of experience as project manager and project engineer in the design of transportation structures and other civil related projects. His background also includes conceptual design studies, transit (light rail), and bridge design, responsibility for final plans, specifications and cost estimates, supervision of subconsultants, utility coordination and project budgets and schedules.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, ADOT Bridge Design & Drainage On-call, AZ	(2) Year Completed	
		Professional Services 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Task manager responsible for various bridge repair task orders through the On-call Highway Bridge and Drainage Design Services Contract. The task orders have included structural assessments, in-depth inspections, project assessment reports, and final design plans and specifications. Duties included task manager for the I-19/Potero Road Bridge in Nogales, Arizona. The existing Potero Road Bridge, a conventionally reinforced box girder bridge, exhibited moderate torsional distress after approximately 30 years of service. The project included performing an initial assessment report detailing rehabilitation and replacement alternatives, and assisting ADOT with management and design tasks for the preferred rehabilitation option. Cost: \$1,281,000		
2)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, South Mountain Corridor Environmental Impact Statement and Location/Design Concept Report, Phoenix, AZ	(2) Year Completed	
		Professional Services 2014	Construction (if applicable) 2020 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Structural quality control reviewer for the assessment of the 26-mile South Mountain Freeway Corridor, which consists of completing an EIS and Location/Design Concept Report for ADOT. Ultimately, the selected alternative will be environmentally sensitive and economically viable; a legally defensible environmental document securing federal dollars for project construction; and an implementation plan that permits ADOT to proceed with final design and construction in a logical, cost-effective sequence. Cost: \$2 billion (construction)		
3)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, I-17/SR 69 Cordes Junction Traffic Interchange, Cordes Junction, AZ	(2) Year Completed	
		Professional Services 2013	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Lead structural engineer for the project that will improve the operational characteristics of the interchange and segregate local traffic from through traffic reducing congestion and delays and includes a new full diamond traffic interchange on the I-17 north of the existing interchange. The intersection of the realigned SR 69 and existing SR 69 will be a half diamond interchange. Mr. Misik's specific duties include roadway and structures design of seven bridges, on-and off-site drainage, utilities coordination, and traffic control. Cost: \$6,000,000		

<p>(1) TITLE AND LOCATION <i>(City and State)</i> Arizona Department of Transportation, SR 303L Final Design, Thomas to Camelback, Glendale and Goodyear, AZ</p>	<p>(2) Year Completed</p>	
<p>4) (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Lead structural engineer for the design of dual 229-foot-long, two-span, precast prestressed AASHTO Type V I grinder bridges to carry the Loop 303 over Indian School Road as part of a project involving the design of two miles of new urban freeway. Assist with the preparation of construction plans, technical specifications, quantity computations and related construction documents including: structural selection reports, structural design, traffic design, foundation investigations (roadway and bridge) and roadway drainage reports. Cost: \$4,700,000 (fee)</p>	<p>Professional Services 2011</p>	<p>Construction (if applicable)</p>
<p>(1) TITLE AND LOCATION <i>(City and State)</i> City of Scottsdale, Crosscut Canal Multi-use Path Improvements, Scottsdale, AZ</p>	<p>(2) Year Completed</p>	
<p>5) (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Structural designer for the project which consisted of path design, drainage design, design of an ADA compliant approach ramp, retaining walls and screen walls or other aesthetic features, utility coordination and relocations, signing, striping, landscaping, path lightening improvements as well as public involvement. The new multi-use path parallels the existing crosscut canal, replacing the existing sub-standard path. The path design complies with AASHTO and the City's current Design Standards and Policy Manual. Mr. Misik assisted with the preparation of an initial Design Concept Report including order of magnitude cost estimates, right-of-way requirements, utility impacts, maintenance and operations for corridor facilities, and environmental considerations. The inclusion of screen walls, landscape and irrigation improvements were determined through the public involvement and design concept report stage of the project. Cost: \$1,100,000</p>	<p>Professional Services 2008</p>	<p>Construction (if applicable)</p>

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Brian Bombardier, PE	b. ROLE IN THIS CONTRACT Senior Transportation Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 22	2. WITH CURRENT FIRM 17
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) M.S., Civil Engineering, 1993 B.S., Civil Engineering, 1991		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Civil, Arizona, No. 30002 PE, California, No. 80238	

g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Bombardier is a senior transportation engineer and project manager specializing in complex urban freeway and interchange planning, design and reconstruction projects and serves as the chairman of HDR's national Interchange Practice Group. His expertise focuses on developing and evaluating creative solutions for freeway and interchange projects and frequently participates in value engineering and peer review exercises around the country to help solve the most challenging urban freeway problems. In addition, he has extensive experience in environmental coordination, project coordination and management, final design plan preparation, roadway design, digital terrain modeling, construction feasibility, traffic control, and cost and quantity estimates.

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, I-10; SR 101L to I-17, Phoenix, AZ	(2) Year Completed	
		Professional Services 2010	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Lead engineer for a Design Concept Report (DCR) for the expansion of 10 miles of an existing urban freeway in the western Phoenix. Conceptual design focused on physical, environmental, operational, geometric and political constraints. Study evaluated multiple widening scenarios for general purpose, HOV, HOT, and high capacity transit alternatives and included two existing and one new system interchange. Cost: \$2,450,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, South Mountain Corridor Environmental Impact Statement and Location/Design Concept Report, Phoenix, AZ	(2) Year Completed	
		Professional Services 2014	Construction (if applicable) 2020 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Transportation engineer responsible for geometric design and concept development associated with the assessment of the new 22-mile South Mountain Freeway Corridor, which consists of completing an EIS and Location/Design Concept Report for ADOT. Ultimately, the selected alternative will lead to an implementation plan that permits ADOT to proceed with final design and construction in a logical, cost-effective sequence. Cost: \$2 billion (construction)		
3)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, SR 30; SR 85 to SR 202L Environmental Assessment and Location/Design Concept Report, Phoenix, AZ	(2) Year Completed	
		Professional Services Ongoing	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Lead engineer for two Location/Design Concept Reports (L/DCRs) for a new urban freeway in the Southwest Phoenix metropolitan area totaling 25 miles in length for ADOT. Conceptual design focused on physical, environmental, operational, geometric and political constraints. Cost: \$2+ Billion (construction)		
4)	(1) TITLE AND LOCATION (City and State) Arizona Department of Transportation, SR 89/Perkinsville Road and SR 89/Road 4 North Roundabouts, Chino Valley, AZ	(2) Year Completed	
		Professional Services 2012	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for the scoping and preliminary engineering of two new multi lane elliptical-shaped modern roundabouts. Unique elliptical shapes were dictated by the challenging right-of-way constraints, unbalanced traffic loading, in-lane truck requirements, utility impacts, and drainage detention requirements. Cost: \$350,000 (fee)		

	(1) TITLE AND LOCATION <i>(City and State)</i> Arizona Department of Transportation, US 60/Vicksburg Road Roundabouts, La Paz County, AZ	(2) Year Completed	
		Professional Services 2009	Construction (if applicable) 2010
5)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for the final design and construction support of a new single lane modern roundabout in western Arizona with the highest rural accident rate in the state. Federal safety funds were used to construct this project that was complicated by heavy truck use, localized roadway flooding issues, and utility coordination, and lighting design. Cost: \$2 Million (Construction)		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Mike Barton, PE	b. ROLE IN THIS CONTRACT Traffic Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 26	2. WITH CURRENT FIRM 8
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. Tucson, AZ			

e. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Engineering, Civil Engineering, University of Arizona, 1987	f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Traffic Operations Engineer, National Registration, No. 1496 PE, Civil, Arizona, No. 25955 PE, Civil, Colorado, No. 31453 PE, Civil, Florida, No. 53519 PE, Civil, Maryland, No. 20550 PE, Civil, Michigan, No. 39564 PE, Civil, Nevada, No. 13800 PE, Civil, New Mexico, No. 12932 PE, Civil, Utah, No. 363318-2202
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g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Barton has 26 years civil engineering experience in Tucson. His experience covers a wide variety of transportation projects ranging from planning to final design. He is familiar with computer-aided analysis and design tools including traffic simulation modeling. He has served numerous clients both locally and nationwide. His responsibilities have included project management, public participation, project development, the design of roadway geometry, right-of-way, pavement marking, signing, traffic control, traffic signal plans, and quality control review. He currently is a member of the National Committee for Uniform Traffic Control Devices (NCUTCD), Signals Technical Committee (STC), which keeps him abreast of state of the art in the traffic engineering field.

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) City of Tucson, Downtown Links - Stevens Avenue, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for this design project initiated by the Tucson Department of Transportation to provide links between Barraza-Aviation Parkway and Interstate 10, Broadway Boulevard and the 4th Avenue shopping district, and Downtown and the neighborhoods to its north. These Downtown Links have been conceived as a modest, four-lane roadway on the north side of the railroad tracks, enhanced pedestrian and bicycle access routes, and the connection of Barraza-Aviation Parkway to 22nd Street and Interstate 10. Enhancements on this corridor will provide more efficient access to Downtown, new and safer underpasses, railroad crossings and sidewalks. Cost: \$12,106,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) City of Tucson, Tucson Modern Streetcar Program Management Consultant, Tucson, AZ, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) 2014 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Provided planning, environmental, and program management services for the Tucson Modern Streetcar Project. The 3.9-mile modern streetcar line was recommended as the Locally Preferred Alternative and local funding was approved through the Regional Transportation Authority Plan. Cost: \$24,050,000		
3)	(1) TITLE AND LOCATION (City and State) Pima County Dept. of Transportation, La Cholla Boulevard, Ruthrauff to River, Tucson, AZ	(2) Year Completed	
		Professional Services 2012	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Traffic Engineer. The purpose of the project was to widen La Cholla Boulevard to a six-lane divided roadway from Ruthrauff Road to River Road to improve safety, reduce congestion, improve operations, and increase mobility. Improvements included two new three-lane bridges over the Rillito River, additional travel lanes, raised landscaped medians, multiuse lanes, outside curbs and storm drains, sidewalks, and screening and noise mitigation for adjacent residential areas. Cost: \$3,200,000 (fee)		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Audrey Unger, PMP	b. ROLE IN THIS CONTRACT Environmental Planner	c. YEARS EXPERIENCE	
		1. TOTAL 11	2. WITH CURRENT FIRM 10
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. - Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) Master Environmental Planning, Environmental Policy & Management, 2003 B.S., Environmental Sciences/Studies, 1992		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Project Management Professional, National Registration, No. 1322755	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Ms. Unger is the Environmental Sciences Section Manager supervising a large group of interdisciplinary professionals including biologists, noise, air, water, and cultural resources specialists. Ms. Unger is a certified project manager, environmental planner, and biologist. Her areas of expertise include National Environmental Policy Act (NEPA) compliance, environmental justice, social conditions, Environmental Management Systems (EMS), sustainability, conceptual master planning, and brownfields redevelopment.			

H. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) Year Completed	
	Professional Services	Construction (if applicable)
Arizona Department of Transportation, South Mountain Corridor Environmental Impact Statement and Location/Design Concept Report, Phoenix, AZ	2014 (est.)	2020 (est.)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Environmental specialist and a member of a very small core team writing, coordinating, and reviewing the Draft Environmental Impact Statement. In addition, she prepared the Sections 4(f) and 6(f) technical report and assisted with the biological technical report for the South Mountain Corridor Environmental Impact Statement. At its inception, this was the largest transportation project in the Phoenix area and included the unique challenge of providing an analysis of the lack of prudent and feasible alternatives to converting 32 acres of South Mountain Park, arguably, the largest municipal park in the world and an important Traditional Cultural Property, to a transportation function. As this project has developed almost every scenario of direct use of a Section 4(f) property has occurred. The NEPA process for this project involves a proactive, innovative public outreach program and coordination with multiple jurisdictions, including the Gila River Indian Community, Federal Highway Administration, U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers, Environmental Protection Agency, Bureau of Indian Affairs, Arizona Department of Environmental Quality, State Historic Preservation Office, Maricopa Association of Governments, and City of Phoenix. Cost: \$2 billion (construction)		
Canadian National Railway, EJE Merger - Environmental Impact Study, Chicago, IL	2009	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Environmental planner for an environmental impact statement for the Surface Transportation Board's Section of Environmental Analysis (SEA) that described the potential effects of the Canadian National Railway's acquisition of the Elgin, Joliet and Eastern Railroad around the outskirts of Chicago. HDR conducted an extensive outreach program of scoping meetings, agency stakeholder meetings, and public meetings on the Draft EIS. Cost: \$5,590,000		
Department of Homeland Security, Customs and Border Patrol, Western Sector Tactical Infrastructure Program Management Support Contract 2010	2010	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Program manager for all 4 sectors; (Project manager for Tucson and Yuma) associated with program management for the Office of Border Patrol (OBP), Customs and Border Protection (CBP), Department of Homeland Security, through the U.S. Army Corps of Engineers Engineering and Construction Support Office (ECSO), Fort Worth, Texas. Cost: \$479,000 (fee)		
4) (1) TITLE AND LOCATION (City and State)	(2) Year Completed	

Kittelson & Associates, Inc., Silverbell Road, Grant Road to Ina Road, Tucson, AZ		Professional Services 2012	Construction (if applicable)
(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm	
Environmental planner for a Design Concept Report that addresses elements associated with the widening of Silverbell Road including alignment, right-of-way acquisition areas, drainage conveyance issues, an access control plan, and traffic analyses. In addition, environmental and cultural issues, concerns and appropriate mitigation measures will be identified. In addition, environmental and cultural issues, concerns and appropriate mitigation measures will be identified. Cost: \$851,000			
(1) TITLE AND LOCATION (<i>City and State</i>)		(2) Year Completed	
Nebraska Dept. of Environmental Quality, Keystone XL Pipeline Supplemental EIS, NE		Professional Services 2013	Construction (if applicable)
(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm	
5)	Deputy project manager responsible for day-to-day management of the Evaluation Report (function equivalent to an EIS), specifically analyzing the environmental, social, economic, and other impacts of the proposed route and in providing for a full and careful agency and public review. The schedule for the Evaluation was extremely aggressive. The Draft Evaluation Report was published in less than two months after receipt of Keystone's Supplemental Environmental Report, and a Final Evaluation Report in only 28 days following the close of the comment period. HDR also worked very closely with the Department of State as they prepare their Supplemental Environmental Impact Statement. The Keystone XL pipeline project is currently one of the most scrutinized energy projects in the nation. Cost: \$5,600,000 (fee)		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Scott Stapp	b. ROLE IN THIS CONTRACT Environmental Planner	c. YEARS EXPERIENCE	
		1. TOTAL 35	2. WITH CURRENT FIRM 8

d. FIRM NAME AND LOCATION (City and State)
HDR Engineering, Inc. - Phoenix, AZ

e. EDUCATION (DEGREE AND SPECIALIZATION)
Master of Science, Biology, University of North Dakota, 1978
Bachelor of Arts, Biology, Indiana University
Bloomington, 1974

f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Scott Stapp is a senior environmental planner with over 30 years of experience in a wide variety of environmental projects. He is knowledgeable in the mandates of federal, state, and local environmental policies, procedures, and regulations including many state and local air quality control regulations; state and local environmental regulations, the 1990 Clean Air Act Amendments, Clean Water Act; Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); and the National Environmental Policy Act (NEPA). He has completed environmental documents from simple categorical exclusions to the complexity of Environmental Impact Statements. Scott has extensive experience in project management and has worked in all environmental areas, including air and noise, solid and liquid waste disposal, water pollution control, water supply, natural resources, cultural resources, and hazardous materials. He is also extremely well versed in the public involvement process and has conducted numerous public hearings and public information meetings.

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) Year Completed	
		Professional Services	Construction (if applicable)
1)	Arizona Department of Transportation, South Mountain Corridor Environmental Impact Statement and Location/Design Concept Report, Phoenix, AZ	2014	2020 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Serves as the lead environmental planner, senior advisor, and author of several sections of the Environmental Impact Statement (EIS), the assessment of the new 22-mile South Mountain Freeway Corridor, which consists of completing an EIS and Location/Design Concept Report for ADOT. Ultimately, the selected alternative will be environmentally sensitive and economically viable; a legally defensible environmental document securing federal dollars for project construction; and an implementation plan that permits ADOT to proceed with final design and construction in a logical, cost-effective sequence. Cost: \$2 billion (construction)		
2)	Arizona Department of Transportation, North South Corridor Study Environmental Impact Statement and Location/Design Concept Report, Pinal County, AZ	2015 (est.)	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Environmental planner for this project providing environmental services and evaluating alternatives for the proposed North-South Freeway in Pinal County from US 60 South to I-10. Alternatives will include tolling and Public Private Partnerships as a potential funding source. Cost: \$5,139,000 (fee)		
3)	Kittelson & Associates, Inc., Silverbell Road, Grant Road to Ina Road, Tucson, AZ	2012	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Senior environmental planner for a Design Concept Report that addresses elements associated with the widening of Silverbell Road including alignment, right-of-way acquisition areas, drainage conveyance issues, an access control plan, and traffic analyses. In addition, environmental and cultural issues, concerns and appropriate mitigation measures will be identified. In addition, environmental and cultural issues, concerns and appropriate mitigation measures will be identified. Cost: \$818,000 (fee)		

	(1) TITLE AND LOCATION <i>(City and State)</i> Pima County Dept. of Transportation, La Cañada Drive, River Road to Ina Road, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) 2014 (est.)
4)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Environmental lead for this project that consists of widening the existing roadway from River Road to Ina road to a four-lane divided roadway in order to improve safety, reduce congestion, improve operations, and increase mobility. Potential improvements include additional travel lanes; a raised landscape median; multi-use lanes; outside curbs and storm drains; provisions for pedestrians, equestrians, and other uses; and, screening and noise mitigation for adjacent residential areas. Cost: \$4,989,000		
	(1) TITLE AND LOCATION <i>(City and State)</i> URS - Tucson, Twin Peaks TI, Tucson, AZ	(2) Year Completed	
		Professional Services 2009	Construction (if applicable)
5)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for the environmental efforts. Project involved the planning, design, environmental clearance, and construction of a new I-10 traffic interchange at Twin Peaks Road. The environmental assessment resulted in a Finding of No Significant Impact by the FHWA. HDR provided support for extensive 401/404 permitting, including design of on-site mitigation, which was the first project of its type in Arizona after implementation of new Corps regulations, and final traffic noise mitigation analysis, as well as overall environmental oversight. Cost: \$263,000		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Kurt Watzek	b. ROLE IN THIS CONTRACT Environmental Planning, Biology	c. YEARS EXPERIENCE	
		1. TOTAL 28	2. WITH CURRENT FIRM 13
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc.- Tucson, AZ			

e. EDUCATION (DEGREE AND SPECIALIZATION) Master of Landscape Architecture, Landscape Architecture, 1992 Bachelor of Arts, Biological/life Sciences, 1985	f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
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g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Watzek is a senior environmental planner with 28 years of experience in environmental analysis, site evaluation, environmental permitting compliance, and planning. Mr. Watzek is currently the ADOT Environmental On-call contract manager providing environmental clearances and working closely on interdisciplinary support efforts, including cultural resources, biology, hydrology, Section 404/401, and engineering. He has coordinated various National Environmental Policy Act and state environmental policy efforts on a wide variety of projects across Arizona.

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) Year Completed	
		Professional Services	Construction (if applicable)
1)	ADOT Environmental On-call, Statewide (2000 to present)	Tasks under 2009 contract are still underway	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Task manager and environmental planner responsible for environmental clearances for a wide variety of highway related projects. Charged with completing all components in the preparation of environmental clearances and determinations for various state and federally funded highway projects. Activities included scoping, budgeting, data inventory and analysis, and document preparation. Project activities typically included Section 404 and 401 permits, cultural resources, protected and sensitive status plants and wildlife, land ownership, socioeconomic impacts, and noise and air quality. Coordination with various agencies and groups including Tribal governments, Arizona Department of Agriculture, U.S. Army Corps of Engineers, Arizona Game and Fish Department, State Land Department, USDA Forest Service, and Bureau of Land Management. Cost: Average \$500,000 annually (fee)		
2)	City of Peoria, 84th Avenue Streetscape, Phase II, Peoria, Arizona	2010	2011
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Environmental planner for this project that included a community visioning workshop; traffic, drainage, utility, right-of-way, and survey studies to understand the existing conditions; and design that included landscape, site furniture, traffic calming, and public art opportunities. Cost: \$462,247 (fee)		
3)	Arizona Department of Transportation, South Mountain Corridor Environmental Impact Statement and Location/Design Concept Report, Phoenix, AZ	2014	2020 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Environmental scientist providing Section 404 guidance and biology lead for the 26-mile South Mountain Freeway Corridor, which consists of completing an EIS and Location/Design Concept Report. Ultimately, the selected alternative will be environmentally sensitive and economically viable; a legally defensible environmental document securing federal dollars for project construction; and an implementation plan that permits ADOT to proceed with final design and construction in a logical, cost-effective sequence. Cost: \$2 billion (construction)		
4)	Element Power US, LLC, Renewable Energy (Utility Scale Solar) Permitting, Engineering Design and Site Development, AZ	2010	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Environmental planner providing professional services associated with the development of a solar energy project on a 1,059-acre privately owned parcel. The project will require a Maricopa County Comprehensive Plan Amendment (CPA), and a Special Use Permit (SUP). Cost: \$469,000 (fee)		

	(1) TITLE AND LOCATION <i>(City and State)</i> URS Greiner, ADOT SR 202L Design-Build, Phoenix, AZ	(2) Year Completed	
5)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Environmental planner for this project involving the widening of approximately 9 miles of SR 202L in the cities of Phoenix and Tempe, Arizona. Provided Clean Water Act Section 404 and biology guidance. HDR was responsible for designing 9 of the 19 new bridge structures, maintenance of traffic, roadway design, and lighting design. Cost: \$4,630,000 (fee)	Professional Services 2011	Construction (if applicable)

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME J.D. Taylor, P.E.	b. ROLE IN THIS CONTRACT Civil Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 37	2. WITH CURRENT FIRM 9
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. - Tucson			
e. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Civil Engineering, Tennessee Technological University, 1976		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Arizona, No. 23743 PE, Colorado, No. 22852 PE, Texas, No.11370	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Taylor has 37 years of civil engineering experience in transportation projects for numerous city, county and state agencies which includes structural, roadway, railroad and streetcar design. The last 20 years have been focused in southern Arizona on projects for the City of Tucson, Pima County and the State of Arizona Departments of Transportation. He is highly experienced with computer-aided analysis and design tools such as MicroStation and InRoads and has conducted training sessions to educate others on the use of these tools. In addition to project design responsibilities, such as roadway geometrics, right-of-way delineation, utility relocations, signing and pavement markings, he also has experience in project management, quality control reviews, design presentations to the public, assisting clients in the bidding process, advising clients on construction issues, assisting contractors during the construction phase, budgeting and schedule controls. Most of his projects have involved multi-disciplinary design groups which had to be coordinated and approved by a variety of Federal, State and local agencies and utility companies. He is member of the American Society of Civil Engineers.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) ADOT, I-10, Ina Road TI to Ruthrauff Road TI, Tucson, AZ	(2) Year Completed	
		Professional Services 2012	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Lead roadway designer who wrote the DCR for the ultimate project covering the four interchanges from Ina Road to Ruthrauff Road and led the roadway design effort for the segment from the Orange Grove TI to the Ruthrauff Road TI. The project deliverables included 15% DCR plans and Phase 2 (30%) plans for the individual construction packages of the I-10 Ruthrauff Road TI and the I-10 Orange Grove Rd to Sunset Rd TI. The design for the I-10 Sunset Road TI required planning and coordination with PCDOT for their planned improvements along Sunset Road. Cost: \$6,300,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) ADOT, I-10, Prince Road to Grant Road, Tucson, AZ	(2) Year Completed	
		Professional Services 2006	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager responsible for coordinating the final Plans, Specifications, and Estimates, environmental documentation and Post Design Services for the first segment, from Prince Road to Grant Road. This was part of a project that consisted of a \$213 million reconstruction of a 6.5-mile section of I-10 from Prince Road to 29th Street. Cost: \$1,838,000 (fee)		
3)	(1) TITLE AND LOCATION (City and State) City of Tucson, Downtown Links - Stevens Avenue, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Roadway engineer for this design project recently initiated by the Tucson Department of Transportation that will provide links between Barraza-Aviation Parkway and Interstate 10, Broadway Boulevard and the 4th Avenue shopping district, and Downtown and the neighborhoods to its north. Cost: \$12,106,000 (fee)		
4)	(1) TITLE AND LOCATION (City and State) City of Tucson, Tucson Modern Streetcar Program Management Consultant, Tucson, AZ, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) 2014 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Roadway engineer for this project providing planning, environmental, and program management services for the Tucson Modern Streetcar Project. The goals of the 3.9 mile modern streetcar project are to connect the region's two largest activity centers (Downtown and the University of Arizona), improve transit service in the corridor, support population and employment growth, and create economic development. Cost: \$24,050,000		

	(1) TITLE AND LOCATION <i>(City and State)</i> Pima County Dept. of Transportation, La Cañada Drive, River Road to Ina Road, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) 2014 (est.)
5)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Roadway engineer for this project that consists of widening the existing roadway from River Road to Ina road to a four-lane divided roadway in order to improve safety, reduce congestion, improve operations and increase mobility. Potential improvements include additional travel lanes; a raised landscape median; multi-use lanes; outside curbs and storm drains; provisions for pedestrians, equestrians and other uses; and, screening and noise mitigation for adjacent residential areas. Cost: \$4,989,000		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Rick Pargas, PE	b. ROLE IN THIS CONTRACT Roadway Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 19	2. WITH CURRENT FIRM 17
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. - Tucson			
e. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Civil Engineering, University of Arizona, 1994		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Civil, Arizona, No. 32331	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Rick Pargas has 19 years of project management and design engineering experience which includes a number of predesign and final design projects. His duties include development of roadway plans, final construction documents and project coordination with the client and subconsultants. He has coordinated with utility companies, right-of-way section, and environmental consultants to obtain clearances for projects as needed. Mr. Pargas is proficient in the use of Microstation and Inroads.			

His major ADOT projects include the SR 90, Whetstone to Huachuca City; I-10 Frontage Roads; Ina Road to Sunset Road, and I-10, Picacho Peak TI to Pinal Air Park TI. He also managed 12 ADOT on-call project TOs totaling \$1.2M in design fees, including Sahuarita Corridor (SR-982) Environmental Overview and Reassessment. He was also significantly involved in the design of SR 82 Widening at Fairbanks Construction Documents; US-191, SR 266 to Old Country Club Road; and SR 90, San Pedro River to SR 80.

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) ADOT, I-10, Prince Road to Grant Road, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project engineer for this design project recently initiated by the Tucson Department of Transportation that will provide links between Barraza-Aviation Parkway and Interstate 10, Broadway Boulevard and the 4th Avenue shopping district, and Downtown and the neighborhoods to its north. Cost: \$12,106,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) City of Tucson, Tucson Modern Streetcar Program Management Consultant, Tucson, AZ, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) 2014 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Provided planning, environmental, and program management services for the Tucson Modern Streetcar Project. The 3.9-mile modern streetcar line was recommended as the Locally Preferred Alternative and local funding was approved through the Regional Transportation Authority Plan. Cost: \$24,050,000		
3)	(1) TITLE AND LOCATION (City and State) ADOT, I-10, Prince Road to Grant Road, Tucson, AZ	(2) Year Completed	
		Professional Services 2006	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project engineer for this project coordinating the final Plans, Specifications, and Estimates, environmental documentation and Post Design Services for the first segment, from Prince Road to Grant Road. This was part of a project that consisted of a \$213 million reconstruction of a 6.5-mile section of I-10 from Prince Road to 29th Street. Cost: \$1,838,000 (fee)		
4)	(1) TITLE AND LOCATION (City and State) Pima County Dept. of Transportation, La Cañada Drive, River Road to Ina Road, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) 2014 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Drainage engineer for this \$46 million Regional Transportation Authority funded project that involves the preparation of a Design Concept Report (DCR), Environmental Mitigation and Assessment Report (EAMR), Preliminary and Final Design Engineering Documentation to widening La Canada Drive from a rural two-lane section to a four-lane urban section with paved shoulders. Assisted in finalizing the drainage plans, cost estimate and Special Provisions. Cost: \$4,989,000		

(1) TITLE AND LOCATION <i>(City and State)</i> Arizona Department of Transportation, I-19 Duval Mine Road Traffic Interchange, Sahuarita, AZ	(2) Year Completed	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE 5) Roadway engineer for the design of an interstate freeway interchange, the crossing arterial roadway, and the approaches, ramps, and other elements of the interface between the two arterials. The project improved the traffic flow and capacity of Duval Mine Road and ramps at the I-19 interchange. This project also required special cross-drainage measures and 404 permitting. An especially extensive public outreach effort was undertaken to deal with the active and assertive communities of Sahuarita and Green Valley. Cost: \$1,740,000	Professional Services 2006	Construction (if applicable)

 Check if project performed with current firm

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Tom Galeziewski, PE	b. ROLE IN THIS CONTRACT Senior Water Treatment Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 35	2. WITH CURRENT FIRM 20
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc.- Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Civil Engineering, University of Notre Dame, 1978		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Civil, Arizona, No. 21284 PE, Civil, California, No. C-39561	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Galeziewski brings over 34 years of local experience providing a wide range of engineering services for clients. Mr. Galeziewski was recognized as 'Engineer of the Year' for the AZ Water Association at their annual conference in 2009. His experience also includes pilot plant studies, water quality evaluation studies, source water analysis, site planning, design management, regulatory permitting, facility startup, and operational analyses. He has made numerous presentations and conducted workshops for local communities/associations regarding arsenic treatment technologies. As both Vice President and a Senior Professional Associate in HDR, Mr. Galeziewski is recognized as one of our leading technical experts on water related designs.			

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State) Salt River Pima Maricopa Indian Community, Arsenic Treatment Design for Montebello and EDA Well Sites	(2) Year Completed	
		Professional Services 2010	Construction (if applicable)
1)	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project manager of a multi-disciplined team to design arsenic treatment for the EDA and Montebello Well Sites, which are part of the water supply system for the Salt River Pima-Maricopa Indian Community (SRPMIC). The wells were producing water with arsenic concentrations that exceeded the new revised maximum contaminant level (MCL) of 10 ppb stipulated in the recently enacted Arsenic Rule. For the Montebello Well, Tom conducted a preliminary evaluation of treatment technologies that included adsorption media, ion exchange, and coagulation filtration. The adsorption process using granular iron media without pH adjustment was selected as the preferred treatment technology. Tom was responsible for the preparation of the design plans and specifications for the project, obtaining the Building Safety permits, and managing bid phase and construction administration services. For the EDA Well, Tom led the hydrogeologic and well modification subconsultants in evaluating well modifications to reduce the arsenic concentration to acceptable levels without the need for treatment. Cost: \$590,000		
	(1) TITLE AND LOCATION (City and State) Central Arizona Project, Potable Water Treatment System, Arizona	(2) Year Completed	
		Professional Services 2010	Construction (if applicable)
2)	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project manager for the study and design for the potable water treatment and delivery systems. To comply with state and federal Occupational Safety and Health (OSHA) requirements, the CAP must provide potable water at each of their pumping plants that currently do not have potable water. Eleven of CAP's 15 pumping plants do not have potable water and of those 11 plants, the CAP identified eight as being too remote to economically connect to a public water system. To address this, HDR was hired to study and design potable water treatment and delivery systems for the eight remote pump station sites. The project will consist of a small package treatment system in each pumping plant to treat raw Colorado River (canal) water to potable standards for drinking, washing, showering, first aid (emergency showers, eyewash stations, injury cleaning, etc.), and eating (food preparation and washing). Each system will include appurtenances such as storage tanks, booster pumps, hydro-pneumatic tanks, valves, and controls. With the addition of the treatment system, each plant's existing domestic water system needs to be severed from the rest of the plant's water systems, disinfected, tested, and put into service meeting all requirements of a potable water system. Cost: \$561,200		

3)	(1) TITLE AND LOCATION <i>(City and State)</i> City of Phoenix, South Mountain Reservoir 1-ES3 Pipeline Modifications, Phoenix, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable)
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for design and construction administration services for the new pipeline project. The project consists of a new inlet pipe from the 60-inch Zone 1 pressure transmission main into the South Mountain reservoir; a new discharge structure inside the reservoir including modifications to the existing membrane liner to accommodate the new penetration. The tie-in connection to the existing 60-inch PCCP Zone 1 pressure transmission main with 48-inch and 60-inch isolation butterfly valves and valve vaults. Testing and disinfection of the reservoir will be preformed at completion of construction. Specific duties will be Construction Quality Assurance (CQA) On-site Field Representative responsible for the quality assurance monitoring and documentation of all construction activities. Cost: \$243,000 (fee)		
4)	(1) TITLE AND LOCATION <i>(City and State)</i> City of Phoenix, Reservoir 1-ES1, Zone 3A and Zone 0S Aeration Study and Design, Phoenix, AZ	(2) Year Completed	
		Professional Services 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for the study. Water quality sampling by the City of Phoenix identified three pressure zones with elevated TTHM levels which need to be addressed for compliance with the Stage 2 Disinfectants/Disinfection By-products (D/DBP) Rule by April 1, 2012. HDR is reviewing operational data and previous system analyses for the Reservoir 1-ES1 site, Pressure Zone 3A, and Pressure Zone 0S. Based on this information, and additional analyses conducted during the study, various mitigation strategies, including reservoir aeration, water source change, and water distribution within the pressure zone will be developed for implementation. Cost: \$146,000 (fee)		
5)	(1) TITLE AND LOCATION <i>(City and State)</i> City of Phoenix, Reservoir 1-ES1 Chlorination and Recirculation Improvements, Phoenix, AZ	(2) Year Completed	
		Professional Services 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for the evaluation of chlorine feed capabilities, dosing points, residual sampling locations, as well as investigated options for chlorination/mixing improvements of the reservoir to improve water quality and reduce chlorine demand. Cost: \$243,000		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Tim Thomure, PE, PMP	b. ROLE IN THIS CONTRACT Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 20	2. WITH CURRENT FIRM 5
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc.- Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) Master of Engineering, Engineering (Water Resources Engineering), University of Arizona, 2009 Certificate, Environmental Policy & Mngmt (Graduate Certificate in Water Policy), University of Arizona, 2009 Bachelor of Arts, Geography (Physical and Social Geography), University of Illinois Urbana-Champaign, 1991		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Project Management Professional, United States National Registration, No. 1328089 PE, Civil, Arizona, No. 51974	

g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Mr. Thomure has 20 years of experience working in public utilities, private industry, and consulting. His areas of expertise include integrated resource planning, public policy development, capital program/project management, water distribution infrastructure, recharge project development, and strategic planning. Mr. Thomure is HDR's Water Business Group Manager for Arizona and New Mexico with project responsibilities throughout the southwest. He is also HDR's Water Reuse Practice Lead. Mr. Thomure supervises a team of 35 engineers located in Arizona and New Mexico and currently serves as the project manager, principal engineer, or principal investigator for a series of active water infrastructure projects.

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) Year Completed	
		Professional Services	Construction (if applicable)
1)	City of Phoenix, Steel Tank Reservoir Rehabilitation Program, Phoenix, AZ	Ongoing	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for condition assessment, design, and construction administration and inspection services for the assessment and rehabilitation the City's 36 steel tanks. Condition assessments included coatings, structural elements, cathodic protection, general performance, and overall site. The program includes developing an overall approach to assess and rehabilitate the tanks, as well as strategic plan, a master Preventative Maintenance (PM) Schedule, and optional assessment services. Cost: \$858,000		
2)	Metro Domestic Water Improvement District, Central Arizona Project Water Recovery System Cost Study, Tucson, AZ	2009	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager for a study that evaluated recharge and recovery as a viable treatment and supply alternative for Metro Water District. This project generated cost opinions for the development of a recovery system from the existing recharge project to the presumed new location for a mechanical treatment system and would serve as the entry to the transmission and delivery system. Cost: \$15,000		
3)	Pima County Wastewater, Water and Energy Sustainability Center Reclamation Facility, Support Services, Pima County, AZ	2012	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager assisting with project scheduling, technical writing, and review of the 2012 Plan Update. Under the City's On-call, the Water Dept (Tucson Water) is preparing a 2012 Update to the Utility's long-range water resources plan. Much of the work required to complete the Update is being conducted by in-house staff. This project's scope of services deems work performed by HDR is to compile the information developed by in-house staff and the results of the Recycled Water Master Plan into the 2012 Update documents. Cost: \$250,000 (Fee)		

	(1) TITLE AND LOCATION <i>(City and State)</i> Tucson Water, On-call Planning Services, Water Plan 2000-2050: 2012 Update, Tucson, AZ	(2) Year Completed	
		Professional Services 2013	Construction (if applicable)
4)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager assisting with project scheduling, technical writing, and review of the 2012 Plan Update. Under the City's On-call, the Water Dept. (Tucson Water) prepared a 2012 Update to the Utility's long-range water resources plan. Much of the work required to complete the Update was conducted by in-house staff. HDR compiled the information developed by in-house staff and the results of the Recycled Water Master Plan into the 2012 Update documents. Cost: \$100,000		
	(1) TITLE AND LOCATION <i>(City and State)</i> Tucson Water, Reservoir and Tank Rehabilitation Program, Tucson, AZ	(2) Year Completed	
		Professional Services	Construction (if applicable) 2015 (est.)
5)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Program manager for this multi-year program involving condition assessment, condition assessment, rehabilitation design, and construction administration for 34 concrete reservoirs and 34 steel storage tanks. Facilities to be rehabilitated under this program range from less than 1 MG to 60 MG in size and were constructed from 1950 to the present day. The program includes all potable and reclaimed water storage facilities within the Tucson Water system. Cost: \$2,600,000 (four reservoirs as of August 2013)		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Jon Boitano, PE	b. ROLE IN THIS CONTRACT Water/Wastewater Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 9	2. WITH CURRENT FIRM 2
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Tucson, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) Master of Science, Environmental Engineering, University of Arizona, 2006 Bachelor of Science, Biological Systems Engineering, University of Arizona, 2004		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Civil, Arizona, No. 48793 PE, Civil, California, No. 80753	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Boitano has nine years of experience in the design, assessment, and rehabilitation of water and wastewater infrastructure. Mr. Boitano has designed wells, reservoirs, booster stations, water mains, sanitary sewer lift stations, sanitary sewer main, and other aspects of water and sewer systems. Mr. Boitano has also worked with a number of mining companies to design potable and process water systems. He is especially experienced in the relocation of water and wastewater distribution and conveyance systems, and is an expert in the planning and implementation of sanitary sewer bypasses for construction projects.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) City of Phoenix, Steel Tank Reservoir Rehabilitation Program, Phoenix, AZ	(2) Year Completed	
		Professional Services Ongoing	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project engineer for condition assessment, design, and construction administration and inspection services for the assessment and rehabilitation the City's 36 steel tanks. Condition assessments included coatings, structural elements, cathodic protection, general performance, and overall site. The program includes developing an overall approach to assess and rehabilitate the tanks, as well as strategic plan, a master Preventative Maintenance (PM) Schedule, and optional assessment services. Cost: \$858,000		
2)	(1) TITLE AND LOCATION (City and State) City of Tucson, Downtown Links - Stevens Avenue, Tucson, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project engineer responsible for water pipeline and sewer relocation design resulting from roadway improvements. Downtown Links is a design project recently initiated by the Tucson Department of Transportation that will provide links between Barraza-Aviation Parkway and Interstate 10, Broadway Boulevard and the 4th Avenue shopping district, and Downtown and the neighborhoods to its north. These Downtown Links have been conceived as a modest, four-lane roadway on the north side of the railroad tracks, enhanced pedestrian and bicycle access routes, and the connection of Barraza-Aviation Parkway to 22nd Street and Interstate 10. Enhancements on this corridor will provide more efficient access to Downtown, new and safer underpasses, railroad crossings and sidewalks. Cost: \$12,106,000 (fee)		
3)	(1) TITLE AND LOCATION (City and State) Metro Domestic Water Improvement District, La Cañada Water Transmission Main (Phase 1), Tucson, AZ	(2) Year Completed	
		Professional Services 2009	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project engineer for alignment evaluation and design of 8,000 LF of 16- and 20-inch potable water transmission main. This transmission main improved connectivity within the Metro Water system, conveys Metro Water's treated Central Arizona Project (CAP) water, and provides a means to distribute treated CAP water to the neighboring Flowing Wells Irrigation District. Cost: \$295,000 (fee)		

<p>(1) TITLE AND LOCATION <i>(City and State)</i> U.S. Customs and Border Patrol, Department of Homeland Security, Ajo Border Patrol Station, Tucson Engineering subcontract, Why (Rocky Point Junction), AZ</p>	(2) Year Completed	
<p>4) (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project engineer responsible for the ADEQ permitting of the onsite commercial septic system which had a design capacity of nearly 14,000 gallons per day. The project consisted of the design of a major expansion of the new Ajo Border Patrol facility located on a 41-acre site. The stormwater permitting work included the development of a site specific Stormwater Pollution Prevention Plan (SWPPP) according to the Arizona Pollutant Discharge Elimination System (AZPDES) regulations. Cost: \$341,300 (fee)</p>	Professional Services 2011	Construction (if applicable)
<p>(1) TITLE AND LOCATION <i>(City and State)</i> Pima County Wastewater, Water and Energy Sustainability Center Reclamation Facility, Support Services, Pima County, AZ</p>	(2) Year Completed	
<p>5) (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project engineer for design review and construction monitoring services. Pima County Regional Wastewater Reclamation Department (PCRWRD) issued a service contract to design, build, and operate (DBO) a new 32-MGD water reclamation facility. The HDR team provided design reviews, construction monitoring, and inspection services on an "as needed" basis for oversight of the DBO contract. Design reviews were provided during multiple phases including review of service contract requirements and compliance with design requirements. A specific area of emphasis was the structural design and construction quality of several large water-bearing concrete structures. Cost: \$250,000 (fee)</p>	Professional Services 2012	Construction (if applicable)

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Bethany McDonald, PE	b. ROLE IN THIS CONTRACT Senior Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 17	2. WITH CURRENT FIRM 2
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Chemical Engineering, Tulane University, 1996		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Arizona, No. 37330	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Ms. McDonald has 17 years of experience as an engineer and project manager in the design, construction, and condition assessment of municipal and private water and wastewater projects. Her experience includes condition assessment, detailed design, materials procurement, construction management, and various engineering studies for a variety of municipal and industrial facilities. For eight years Ms. McDonald's focus has been primarily on the assessment of Pre-stressed Concrete Cylinder Pipe (PCCP) pipelines particularly within the City of Phoenix, where she has managed multiple projects focused on the study and assessment of water infrastructure. Prior to joining HDR, Bethany managed a project delivery group for a primary condition assessment company, delivering over 800 miles of pipeline inspection across North America.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) City of Phoenix, Steel Tank Reservoir Rehabilitation Program, Phoenix, AZ	(2) Year Completed	
		Professional Services Ongoing	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project engineer for condition assessment, design, and construction administration and inspection services for the assessment and rehabilitation the City's 36 steel tanks. Condition assessments included coatings, structural elements, cathodic protection, general performance, and overall site. The program includes developing an overall approach to assess and rehabilitate the tanks, as well as strategic plan, a master Preventative Maintenance (PM) Schedule, and optional assessment services. Cost: \$858,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) City of Phoenix, Transmission Main Inspection and Assessment Program, Phoenix, AZ	(2) Year Completed	
		Professional Services Ongoing	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project engineer assisting the City in developing their large water main inspection and assessment program. The purpose of this program is to provide inspection and assessment of Phoenix's prestressed concrete cylinder pipelines (PCCP) (approximately 150 miles), 42-inch and larger. This program includes training City staff in the implementation of the program, assisting the City with the inspection and assessment of high priority PCCP pipelines, and to provide specialty inspection services as needed. Cost: \$3,650,000 (fee)		
3)	(1) TITLE AND LOCATION (City and State) Tucson Water, Reservoir and Tank Rehabilitation Program, Tucson, AZ	(2) Year Completed	
		Professional Services	Construction (if applicable) 2014 (est.)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project engineer for this multi-year comprehensive asset management program involving condition assessment, rehabilitation design, and construction administration for 34 concrete reservoirs ranging from 2 MG to 60 MG; and 34 steel tanks up to 2 MG in size and were constructed from 1950 to the present day. The program includes all potable and reclaimed water storage facilities within the Tucson Water system. Within a two year time span (May 2010 through May 2013), a total of 34 steel tank inspections and 33 concrete reservoir condition assessments had been completed. Rehabilitation designs have been completed or initiated for seven reservoirs and construction activities began in winter 2011-2012. These water containing structures represent approx. \$250 million in total assets. Cost: \$2,600,000 (four reservoirs as of August 2013)		
4)	(1) TITLE AND LOCATION (City and State) City of Cheyenne, Cheyenne BOPU Little Snake River Condition Assessment, Cheyenne, WY	(2) Year Completed	
		Professional Services 2011	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Inspection. HDR provided a condition assessment and remaining life evaluation for the Little Snake Diversion System, which is part of Cheyenne's water supply system. The assessment and evaluation of the prestressed concrete cylinder pipe (PCCP) play a key role in protecting the security of Cheyenne's water supply and the surrounding environment. Cost: \$466,000 (fee)		

<p>(1) TITLE AND LOCATION <i>(City and State)</i> Southern Nevada Water Authority, Stages I & II Condition Assessment, Design, Bidding, and Construction Support Services, Las Vegas, NV</p>	<p>(2) Year Completed</p>	
<p>5) (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE</p> <p>Inspection technology lead for the condition assessment of approximately 108 miles of the Stage I and II laterals over a three-year period, and provided recommendations addressing areas of concern identified on the laterals. Laterals that were evaluated were 24 to 108 inches in diameter of welded steel pipe, asbestos cement pipe (ACP), and reinforced concrete pressure pipe (RCPP). Cost: \$4,600,000 (fee)</p>	<p>Professional Services 2012</p>	<p>Construction (if applicable)</p>

Check if project performed with current firm

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Ed Junod, PE, LEED AP B D + C	b. ROLE IN THIS CONTRACT Senior Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 25	2. WITH CURRENT FIRM 14
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Phoenix, AZ			
e. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Civil Engineering, Arizona State University, 1988		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) LEED AP Building Design + Construction, United States National Registration, No. 10466849 PE, Civil, Arizona, No. 26852 PE, Civil, Washington, No. 33119	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Junod has over 25 years of experience in water and wastewater treatment, flood control engineering, ground water, grading and drainage, water distribution system and waste water collection planning and design, raw water wellfield and pipeline planning and design, reservoir assessment, sewage lift stations, pump stations, and construction administration. His experience in municipal wastewater treatment has involved the predesign, design, and construction administration of wastewater and water reclamation facilities, effluent dechlorination studies, evaluation of alternative disinfection methods, and the predesign, design, and construction administration of reclaimed water pumping and distribution systems. Mr. Junod's experience in water resources includes program management of combined sewer overflow projects, the feasibility and analysis of storm water retainage structures, ground water transfer studies, and levee improvement projects.			

H. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) Year Completed	
	Professional Services	Construction (if applicable)
City of Scottsdale, Job Order Contract Pump Back Rehabilitation, Scottsdale, AZ	2012	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm 1) Senior project manager responsible for repairs, maintenance, replacement, and post design services including construction observation of the wet well rehabilitation and piping replacement at both the North and the Northwest Pump Back facilities. Resulting from facility maintenance activities, a catastrophically deteriorated buried pipe was discovered in the NW yard piping. HDR provided evaluation and recommendations for repairs. HDR also performed testing and analysis on portions of exposed piping at the North station to determine its level of deterioration and provide recommended corrective measures. Additionally, HDR provided recommendations for repairs, maintenance, replacement, and post design services including construction observation of the wet well and piping at the North facility, including the West and East influent force mains entering the facility. Cost: \$370,000 (fee)		
City of Scottsdale, Reclaimed Water Distribution System Evaluation and Conceptual Design Improvements, Scottsdale, AZ	2013	2013
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm 2) Senior project manager for a detailed analysis of the RWDS primary booster pump stations (BPSs) and assessment of the system for its overall condition and production capacity. The RWDS was constructed in 1993 and modified to expand capacity in 1996 and 2001. The system provides reclaimed water for irrigation purposes to multiple golf courses in North Scottsdale. Services consisted of reviewing prior work conducted on the system and investigations, conducting a field examination of the primary RWDS BPS facilities, and updating and implementing the new RWDS hydraulic model to evaluate design alternatives to extend the design life of the RWDS system for the next 20 year period. Two comprehensive documents were created; one a Condition Assessment Report of the RWDS, and the other an Improvement Recommendations Report. HDR prepared detailed cost estimates and an analysis of funding to create an improvement schedule. Mr. Junod also served as the senior project manager for the oversight of the City's Job Order Contractor (JOC). Cost: \$851,000 (fee) \$1,800,000 construction cost		

	(1) TITLE AND LOCATION <i>(City and State)</i> MGC Contractors, Inc., Site 115 Chlorination System Improvements, Scottsdale, AZ	(2) Year Completed	
		Professional Services 2013	Construction (if applicable)
3)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Senior project manager. Site 115 is a City owned and operated Arsenic Treatment Facility. The site receives flow from multiple well sites and from the incoming CAP pipeline. The facility serves as both a well site arsenic treatment facility and a booster pump station. Additionally, the site has chlorination provisions to provide a chlorine residual in the site's treated water effluent. Since the site's commissioning and start up in 2005, facility changes have had a negative impact on the capacity of the chlorination system. The existing chlorination system is housed in one room; however, it has two pressure sources and five delivery locations. HDR analyzed the existing system and provided improvement recommendation to the system so that the delivery pressure and the desired capacity of the chlorination system can be met. In addition to increasing system performance, HDRs recommendation included the addition of two new chlorine injection points. These new injection points will then replace the existing injection points located at the booster pump station discharge headers. Cost: \$34,200 (fee)		
	(1) TITLE AND LOCATION <i>(City and State)</i> City of Phoenix Water Services Dept., Zone 1, 1A, and 2 Water Infrastructure Improvements Design Services, Phoenix, AZ	(2) Year Completed	
		Professional Services 2009	Construction (if applicable) 2013
4)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Senior project manager responsible for design and construction administration services for water infrastructure improvements identified for the area referred to as Zone 1, Zone 1A, and Zone 2 Water Infrastructure Improvements. Program improvements include as many as two new booster pump stations, five new pressure reducing valve stations, and several miles of pipe ranging from 16- to 60-inches in diameter. HDR provided design and post-design services. HDR prepared bid documents for the Zone 2A-B12 booster pump station located within the 64th Street reservoir site. Design included a 20 MGD vertical turbine booster pump station along with 1,000 linear feet of new 36-, 48-, and 60-inch water mains. Piping configuration at the booster pump station site was designed allowing for future replacement of the two existing booster pump stations 2C-B1 and 3B-B1. Project tasks included finalizing the capacity of the booster pump station and a reconfiguration of the interconnecting piping of the four existing reservoirs. Cost: \$702,600 (fee); \$32.3 million (entire project)		
	(1) TITLE AND LOCATION <i>(City and State)</i> City of Apache Junction, Water Infrastructure Improvements (On-call) at Public Works Facility, Apache Junction, AZ	(2) Year Completed	
		Professional Services 2011	Construction (if applicable)
5)	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager responsible for the evaluation and design of the potable water storage and pumping improvements at its Public Works Facility. These improvements included a new 1 MG capacity storage tank and upgrades to an existing booster pump station at the site. Phase 1 included conducting a condition assessment of the existing booster pump station and its use with new 1 MG tank. Provided recommendations for rehabilitation and upgrades to this facility. Summarized and discussed the pros and cons of the types of materials available for construction of the new 1 MG tank (specifically, concrete and steel). Included a typical life cycle cost analysis of each material as constructed following various AWWA design standards. Evaluated and discusses pros and cons of the various construction delivery methods available for the new tank, as well as estimated delivery schedules for each. These methods included traditional design-bid-build, construction manager at risk, design-build, and turn key (i.e., tank manufacturer design and construction). Developed budgetary level construction cost opinions for the recommended improvements to the booster station and tank. Provided a report summarizing the observations, evaluations, recommendations, and construction cost opinions developed. Following the recommendations of the Phase 1 report, the City and Water District elected to construct a new 1 MG capacity prestressed concrete reservoir (AWWA D110, Type I) using a traditional design-bid-build delivery method. Design Phase services included design of the new 1 MG tank, piping, and appurtenances, and assisting the City and Water District during the bid phase. Cost: \$157,500 (fee); \$1.5 million construction cost		

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Jim Mendenhall, AICP	b. ROLE IN THIS CONTRACT Master Planning Lead	c. YEARS EXPERIENCE	
		1. TOTAL 38	2. WITH CURRENT FIRM 16
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Colorado Springs, CO			
e. EDUCATION (DEGREE AND SPECIALIZATION) MS, Systems Management-Logistics, University of Southern California; BS, Industrial Arts, Pittsburg State University		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) American Institute of Certified Planners (AICP)	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Mendenhall is a retired U.S. Army Major (Logistics) and senior DOD Real Property Master Planner with extensive military facilities, infrastructure and utilities planning experience. He has been involved in addressing DOD master planning issues through many separate NGB, USACE and other master planning task orders or contracts worldwide and has extensive experience with the AZARNG CFMO.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) Real Property Development Plan Update, Arizona ARNG	(2) Year Completed	
		Professional Services 2006	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager/master planner on task to update the State-Level Real Property Development Plan (previously developed by HDR Nakata Planning Group) to reflect all facilities and real property holdings owned, leased, occupied, and under the control of the ARNG in the sites for which services have been contracted. Final products included an updated existing conditions report and analysis, organizational profiles, facility requirements analysis, and future development recommendations. Cost: \$185,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) Camp Navajo, Arizona ARNG, Installation Master Plan, AZ	(2) Year Completed	
		Professional Services 2009	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager/master planner on this project that provided an Installation Master Plan for an Arizona Army National Guard asset. The installation had a unique concept of operations and had three missions: (1) Operate a National Guard training site (2) Provide command and control of the Arizona Army National Guard force structure in Northern Arizona (3) Provide depot-level storage services to various DoD customers. HDR Colorado Springs previously developed the statewide Real Property Development Plan for all state of Arizona ARNG assets, including Camp Navajo, under Mr. Mendenhall's direction. Cost: \$140,000 (fee)		
3)	(1) TITLE AND LOCATION (City and State) FY11 Asset Management, Sustainability and Planning Support, DLA New Cumberland, PA and San Joaquin, CA	(2) Year Completed	
		Professional Services 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Master planner for this project to provide Installation Master Plans, Net Zero Energy Studies and a Sustainability Plan for two major Defense Logistics Agency (DLA) Distribution installations. Mr. Mendenhall was the lead real property master planner on the Installation Master Plans executed for both installations and responsible for leading the industrial mission, work-flow & logistics analysis and developing space optimization recommendations. Cost: \$2,384,000 (fee)		
4)	(1) TITLE AND LOCATION (City and State) SDARNG Statewide Real Property Master Plan (RPMP), SD	(2) Year Completed	
		Professional Services 2011	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project manager/master planner responsible for the preparation of the statewide Real Property Master Plan for the South Dakota ARNG. Mr. Mendenhall led to completion the preparation of a statewide RPDP that addressed a SDARNG "regionalization" initiative. Project included force structure and demographics analyses, requirements analyses, site development plans for 61 separate installations and SDSFIE-compatible GIS. Cost: \$403,000 (fee)		

5)	(1) TITLE AND LOCATION <i>(City and State)</i> OR ARNG Training Center Land Use Plans, Umatilla Training Center, OR	(2) Year Completed	
		Professional Services 2012	Construction (if applicable)
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Master Planner. In an effort to mitigate the existing training operations constraints and to maximize the usable operational footprint/area needed by ORNG, HDR was contracted to assist the Oregon Military Department (OMD) in developing a Training Center Land Use Plan (TCLUP) for a regional training center. Cost: \$150,000 (fee)	<input checked="" type="checkbox"/> Check if project performed with current firm	

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Leticia Soto-Daniels, PE, PMP, CEM	b. ROLE IN THIS CONTRACT Energy, Sustainability and Asset Management Lead	c. YEARS EXPERIENCE	
		1. TOTAL 14	2. WITH CURRENT FIRM 2
d. FIRM NAME AND LOCATION (City and State) HDR Engineering, Inc. – Colorado Springs, CO			
e. EDUCATION (DEGREE AND SPECIALIZATION) MS, Systems Design and Management, MIT BS, Electrical Engineer, Purdue		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) PE, Virginia, No. 0402045086 Project Management Professional (National) Certified Energy Manager	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Ms. Soto-Daniels is responsible for HDR's Federal Asset Management and Sustainability Program. Prior to joining HDR, Ms. Soto-Daniels served 20 years in the Navy of which 12 years she served as a Navy Civil Engineer Corps Officer. She has coordinated annual execution of \$60M in facilities programs and performed baseline assessments on a diverse inventory of owned and leased facilities producing a detailed facility-specific long range maintenance plan and implemented maintenance, recapitalization, and divestiture strategies to optimize inventory and maximize ROI.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) US Air Forces Europe Sustainable Infrastructure Assessments (SIA) Phase II, Aviano, Italy, Spagdahlem & Ramstein, Germany and Incirlik, Turkey	(2) Year Completed	
		Professional Services Ongoing	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Asset Management Technical Oversight. Ms. Soto-Daniels is providing Technical oversight on this Task Order which includes developing a building real property component inventory, tagging/bar coding all major equipment items, performing Level II energy audits, 9.9M SF facility condition assessments using the BUILDER™ Sustainment Management Systems (SMS) tool, space utilization studies, and a review of the Recurring Work Program (RWP) to ensure that major mechanical assets were accounted for and receiving proper levels of preventive maintenance (PM). Cost: \$5,900,000 (fee)		
2)	(1) TITLE AND LOCATION (City and State) Defense Logistics Agency (DLA) San Joaquin Sustainability Plan, CA	(2) Year Completed	
		Professional Services 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager, Sustainability Planner. Responsible for the coordination and execution of DLA's San Joaquin Installation Sustainability Plan. The Sustainability Plan covered five (5) sustainability components, energy use, water minimization, waste minimization, alternative fuels and greenhouse gas (GHG) mitigation. The study included ASHRE Level I screening analysis of all facilities to determine viable technologies to be further studied and four renewable energy scope areas (biomass, wind, solar and thermal). As part of the Sustainability Plan an Infrastructure Investment Strategy was developed. This Infrastructure Investment Strategy Plan provided DLA a list of projects to be executed based on best return on investment to ensure DLA met Executive Order Mandates for Energy, Waste and GHG reductions. Cost: \$1,005,000 (fee)		
3)	(1) TITLE AND LOCATION (City and State) ADP & Sustainability Plan, USAR Grand Prairie, TX	(2) Year Completed	
		Professional Services Ongoing	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Sustainability Planner. This project provides the Army Reserve with a comprehensive ADP and Sustainability Plan that optimizes the utilization of existing facilities for the 1,900 Army Reserve Soldiers and 18 organizations assigned to the Grand Prairie Reserve Complex. HDR completed the facility utilization study that optimizes the space utilizations for the Soldiers that drill at Grand Prairie, providing an updated facility layout to maximize efficiency. Cost: \$413,000 (fee)		
4)	(1) TITLE AND LOCATION (City and State) Marine Reserves Forces Command (MARFORRES) Facilities Survey and Studies Nationwide	(2) Year Completed	
		Professional Services Ongoing	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Program Manager, Asset Management Lead. HDR is providing services to conduct Facility Condition Assessments, Building Infrastructure Assessments, Real Property Inventory, Space Utilization, and Real Property Installed Equipment to include providing BUILDER™ Sustainment Management Systems (SMS) orientation and training. These assessments are to be done at 79 locations throughout CONUS. Cost: \$7,800,000 (fee)		

5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i> I-17/SR 69 Cordes Junction Traffic Interchange, Northern Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2013	CONSTRUCTION <i>(If applicable)</i>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER Arizona Department of Transportation	d. DOLLAR AMOUNT OF PROJECT \$6,043,000	e. TOTAL COST OF PROJECT \$50,000,000
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

This project, the first federally funded CMAR project by FHWA, improves safety and the operational characteristics of the interchange by segregating local traffic from through traffic, reducing congestion and delays. The TI is a vital link for seasonal traffic to Flagstaff and Prescott. A new directional ramp, full diamond TI on I-17, half diamond interchange on SR 69, and two-way frontage road replaced the existing interchange and loop ramps. The project was designed to accommodate future I-17 expansion and includes 7 new bridges, 2 roundabouts, local road improvements, on- and off-site drainage, utility relocations, lighting, and extensive traffic control. Construction began in August 2011 with final completion by June 2013.

Key Elements:

- I-17 realignment and widening
- Interchange and bridge design
- ADOT Bridge part of design team
- Phased bridge construction
- Construction sequencing and MOT
- Aesthetic coordination
- Utility coordination
- Final Design



5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

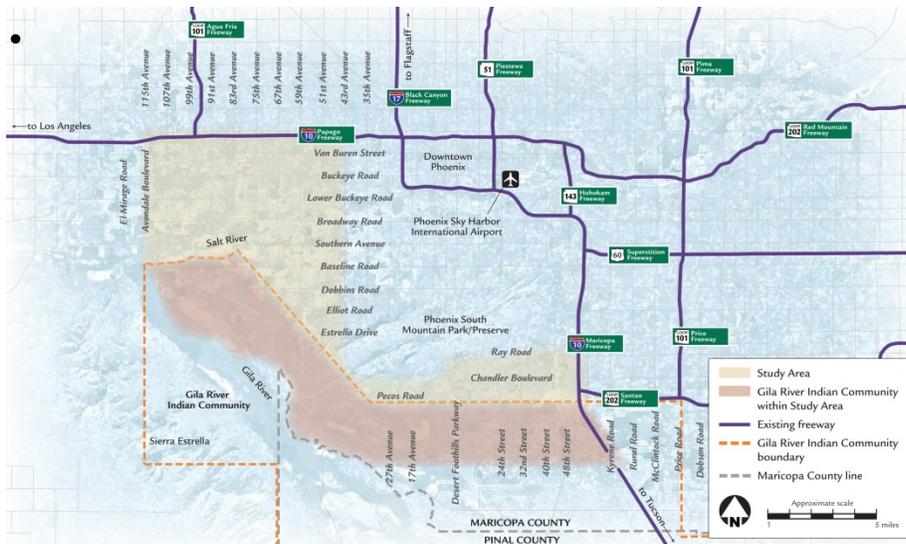
(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i> South Mountain Corridor Environmental Impact Statement and Location/Design Concept Report, Phoenix, AZ		b. YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION <i>(If applicable)</i> 2020 (estimated)
23. PROJECT OWNER'S INFORMATION			
c. PROJECT OWNER Arizona Department of Transportation	d. DOLLAR AMOUNT OF PROJECT \$22,800,000 (to date)	e. TOTAL COST OF PROJECT \$2,000,000,000 (estimated)	

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

HDR is assessing the 27-mile South Mountain Freeway Corridor by completing an EIS and L/DCR for ADOT. Ultimately, we will provide a selected alternative that is environmentally sensitive and economically viable; a legally defensible environmental document securing federal dollars for project construction; and an implementation plan that permits ADOT to proceed with final design and construction in a logical, cost-effective sequence. The EIS considers many variables including economic development and land use, environmental justice impacts, visual impacts, Section 4(f), cultural resources, Section 404, and noise impacts. The process includes a proactive, innovative public outreach program and coordination with multiple jurisdictions, including the Gila River Indian Community, Federal Highway Administration, U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers, Environmental Protection Agency, Bureau of Indian Affairs, Arizona Department of Environmental Quality, State Historic Preservation Office, Maricopa Association of Governments, and City of Phoenix. Key issues focus on:

- Community and Economic Impacts: Some alternatives would reduce city general funds by as much as 15 percent.
- Environmental Justice Impacts: Much of the area is characterized by low income, minority populations.
- Section 4(f) impacts: The 16,500-acre South Mountain Park, the largest municipal park in the country with over 3 million visitors per year, includes historic properties and traditional cultural property.
- Air Quality and Noise Impacts: Maricopa County has consistently been one of two fastest growing counties in the nation. Mobile Source Air Toxics (MSATs) are a primary concern.
- Visual Impacts: The transition from urban to natural setting in the South Mountains creates a local and accessible "escape" for residents, which would be disrupted by the freeway.
- HDR is also responsible for all GIS work related to this project, including developing project base maps and other figures, compiling data, and performing spatial analysis for use in the development of alternatives.



5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i>		b. YEAR COMPLETED	
Tucson Modern Streetcar Program Management Consultant, Tucson, AZ		PROFESSIONAL SERVICES 2014 (estimated)	CONSTRUCTION <i>(If applicable)</i> 2014 (estimated)
23. PROJECT OWNER'S INFORMATION			
c. PROJECT OWNER	d. DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT	
City of Tucson	\$12,200,000	\$24,050,000	

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

HDR is serving as the planning, environmental, and program manager for the Tucson Modern Streetcar Project. HDR has led the development of the Tucson Modern Streetcar Project from its inception in 2004 and has been the lead consultant in virtually all aspects of the project. The Tucson Modern Streetcar will connect Downtown Tucson, the 4th Avenue and Main Gate Business Districts, the University of Arizona, and the Arizona Health Sciences Center. The goals of the project are to connect the region's two largest activity centers (Downtown and the University of Arizona), improve transit service in the corridor, support population and employment growth, and create economic development. The modern streetcar line is 3.9 miles with 17 stops, and the planned frequency of operation is 10 minutes during the day and 20 minutes during the evening. The Tucson Modern Streetcar Project is currently in construction and is scheduled to begin operation in 2014.



Key Comparative Features

- First and largest streetcar to be awarded a competitive TIGER grant.
Route traverses a variety of neighborhoods, including a university, downtown, and an historic neighborhood.
- HDR is guiding the city through the management and startup of an entirely new rail system, incorporating the project through a university environment.
- Incorporating the project through a university environment required extensive coordination with the University of Arizona and other key stakeholders.
- Overwhelming community support for the project required extensive community outreach, even after the completion of the planning and environmental process.
- Designing and constructing the streetcar simultaneously with numerous other private and public projects required intensive coordination and verification that designs would interact successfully.
- Alternatives Analysis, Environmental Assessment, Program Management, FTA Coordination, USDOT TIGER Funding, Public Art, Bicycle Interface,
- Transit Oriented Development, Streetcar Maintenance Facility, Streetcar Systems Design, Engineering Oversight, Construction Management

5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i> Steel Tank Reservoir Rehabilitation Program, Phoenix, AZ	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2013	CONSTRUCTION <i>(If applicable)</i>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER City of Phoenix	d. DOLLAR AMOUNT OF PROJECT \$380,000 (first year engineering fee)	e. TOTAL COST OF PROJECT
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

HDR is providing condition assessment, design, and construction administration and inspection services for the assessment and rehabilitation of the City's 36 steel tanks (ranging from 10 KG to 3.5 MG). These tanks serve as potable water storage facilities within the City's water production and distribution system. Condition assessments included coatings, structural elements, cathodic protection, general performance, and overall site. The program includes developing an overall approach to assess and rehabilitate the tanks, as well as strategic plan, a master Preventative Maintenance (PM) Schedule, and optional assessment services. The services under this contract will be for one year with the option to extend for up to four additional one-year periods.



5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i> (Statewide) Real Property Development Plan Update, Arizona Army National Guard		b. YEAR COMPLETED	
		PROFESSIONAL SERVICES 2006	CONSTRUCTION <i>(If applicable)</i>
23. PROJECT OWNER'S INFORMATION			
c. PROJECT OWNER AZARNG CFMO	d. DOLLAR AMOUNT OF PROJECT \$185,000 (fees)	e. TOTAL COST OF PROJECT	

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

HDR Colorado Springs (formerly Nakata Planning Group) completed this project under a USACE Huntsville contract in support of HQ NGB and the AZARNG CFMO. The statewide Real Property Development Plan (RPDP) established the Arizona Army National Guard's (AZ ARNG's) strategic vision for future development of its facilities and installations. This plan was an update to the original statewide plan, also completed by HDR Colorado Springs in May 1999, and was driven by major force structure changes, trends in state demographics, and facility management strategies. Specific deliverables included updated:

- **RPDP report**
- **Tabulation of Existing & Required Facilities Dbase**
- **GIS-based Maps and Plans**
- **Site Development Plans for 10 sites**

The detailed Site Development Plans (site specific master plans) prepared for 10 AZARNG locations included:

- **Papago Park Military Reservation (PPMR), INSNO 04686, Phoenix**
- Camp Navajo, Installation Number (INSNO) 04655, Bellemont
- Douglas Armory, ISNO 04A60, Douglas
- Florence Unit Training Equipment Site (UTES), INSNO 04A80, Florence
- Silver Bell Army Heliport (SBAH), INSNO 04B03, Marana
- Mesa Armory, INSNO 04B05, Mesa
- Nogales Armory, INSNO 04B10, Nogales
- Sunnyslope Armory, INSNO 04B75, Phoenix
- Silverlake Armory, INSNO 04B85, Tucson
- Valencia Armory, INSNO 04B86, Tucson

Relevant Features

- Project for AZ ARNG
- Addressed statewide planning and programming needs for all AZARNG
- Updated RPDP originally developed by HDR Colorado Springs (formerly Nakata Planning Group)



Papago Park Military Reservation (PPMR) Site Development Plan. At the time was home to 39% of the AZ ARNG force structure including the Joint Forces Headquarters (JFHQ), United States Property and Fiscal Office (USPFO) and Army Aviation Support Facility (AASF) #1. Major facilities across PPMR were planned for the airfield, including a new AASF and vehicle equipment requirements. The statewide plan update included relocation of the Regional Training Institute (RTI) to Florence. The RPDP promoted effective use of AZ ARNG resources and included updated RPDP report, Executive Summary, CAD base maps and as-built space management floor plans, Tabulation of Existing and Required Facilities for statewide assets, and GIS-based Site Development Plans.

6. ADDITIONAL INFORMATION

a. PROVIDE ANY ADDITIONAL INFORMATION YOU FEEL MAY BE NECESSARY TO DESCRIBE YOUR FIRMS QUALIFICATIONS. (ATTACH ADDITIONAL SHEETS AS NEEDED.)

Headquartered in Omaha, Nebraska, HDR was founded in 1917 as the Henningson Engineering Company. The employee-owned company pioneered water and sewer systems for new cities and towns throughout the Midwest, helping them emerge from frontier status.

Today, HDR is an architecture, engineering and consulting firm with more than 8,600 professionals in 200 locations worldwide. All of them are committed to helping clients manage complex projects and make sound decisions.

HDR is consistently ranked among the top architecture and engineering firms by leading industry publications including *Engineering News-Record*, *Modern Healthcare*, *Environmental Business Journal*, *Interiors*, and *Building Design and Construction*. For example, *Modern Healthcare* has ranked HDR in the top four healthcare design firms every year since 1978, and *ENR* has ranked HDR among the top 50 design firms since 1967. HDR has a leading role in landmark projects ranging from the Hoover Dam Bypass to design upgrades for the Pentagon and key projects in the Comprehensive Everglades Restoration Plan, the world's largest ecosystem restoration effort. Thousands of smaller projects across the nation are not as instantly recognizable, yet they improve the quality of life for residents of the communities where they take place.

While HDR's services have evolved to manage increasingly complex projects ranging from nanotechnology to infrastructure security, one thing that hasn't changed is commitment to the values upon which HDR was founded. These values include respect, integrity, empowerment, innovation, teamwork and responsibility. HDR's mission is to be a superior professional firm known for vision, value and service to our clients, our communities and employees.

As an integrated firm, HDR provides a total spectrum of services for our clients. Our staff of professionals represents hundreds of disciplines. They partner on blended teams worldwide to provide solutions beyond the scope of traditional A/E/C firms.

HDR's operating philosophy is to be an expertise-driven firm that delivers tailored solutions through a strong local presence. HDR's ability to draw upon companywide resources and expertise is a great strength in meeting and exceeding your expectations.

HDR provides a total spectrum of services for our clients in many markets.

Architecture

Academic
Civic
Corporate
Healthcare
Justice
Science + Technology

Federal

Architecture
Engineering
Planning
Environmental
Energy
Construction

Private Development

Civil Design
Environmental
Master Planning and Urban Design
Transportation Infrastructure

Transportation

Aviation
Highways and Local Roads
Freight Rail
Maritime
Transit

Water

Water
Wastewater
Water Resource Management

Resources

Industrial
Mining
Oil and Gas
Power
Waste

Transportation Planning Services



Key Areas of Transportation Planning Services

- Corridor and Site Studies
- Major Investment Studies
- Intermodal Planning
- Long-Range Planning
- Land Use Planning
- Travel Demand Forecasting
- Transit-Oriented Development
- Transportation Policy
- Toll Facility Planning
- Public Involvement
- Geographic Information Systems
- Interagency Coordination
- Bicycle and Pedestrian Planning

HDR's experience in developing effective plans for all the unique parts of transportation systems makes our professionals especially well prepared to integrate those parts in multimodal and intermodal facilities. Our approach features:

- ◆ Integrated consensus-building with all stakeholders
- ◆ Custom-tailored processes for clients' specific needs
- ◆ Elimination of redundant tasks and documents
- ◆ Focus on problem analysis before pursuing solutions
- ◆ Efficient search for non-competitive alternatives

Quality service and products and effective use of technology are trademarks of HDR planning services. HDR is attuned and responsive to the political realities of the planning process. Located in cities nationwide, access to any HDR office means access to shared resources of planners, environmental scientists and engineers who know the varying requirements and expectations of our clients.

Transportation Program Management Services



Key Areas of Transportation Program Management Services

Mobilization
Strategic Planning
Studies and Investigations
Design
Construction
Operations and Maintenance
Decommissioning/Closeout

HDR's program management supplements and enhances our clients' transportation programs with a full spectrum of project implementation services, including strategic planning, budgeting and estimating, environmental permitting, design management, construction management, and ongoing operational services. Whether managing a single project or an entire multidisciplinary program, we help improve our transportation clients' competitiveness with aggressive delivery, innovative technology and maximum value.

Our staff customizes program control systems to improve collaboration with clients and other team members. We use web-based electronic document management systems to prepare project documentation, plans, procedures and guidelines, allowing distant team members to interact in a virtual office with nothing more than an Internet connection and a web browser. These systems dramatically improve communication by tracking documents, monitoring schedule and cost, and providing design and construction reporting.

HDR delivers desired results through vision and teamwork. Whether we are leading an independent program or serving as an extension of our client's staff, we strive to exceed each client's goals through communication, trust and action.

We offer our transportation clients:

- ◆ A highly qualified team focused on the program's mission and goals
 - ◆ Continuity throughout the program's life-cycle
 - ◆ Flexibility and access to a wealth of resources
 - ◆ A single point of management responsibility
- Accelerated schedules and comprehensive financial controls

Traffic Services



Key Areas of Traffic Services

- Data Collection
- Traffic Signal Design and Timing
- Construction Staging
- Traffic Control Operations
- Analysis
- Traffic Impact Studies
- Intelligent Traffic Systems (ITS)
- Parking Studies
- Signing, Lighting and Striping Plans
- Traffic Calming
- Safety Studies

HDR provides a comprehensive range of traffic engineering services, assuring our clients the best objective solutions to their traffic engineering needs.

Economic growth is overloading the nation's transportation systems, and natural resource issues and financial constraints stress making better use of existing facilities. HDR's traffic engineers utilize the latest techniques and technology to make the most of the existing and planned facilities. Our approach focuses on creating the right solutions for each unique situation.

Since traffic issues are central to everyday life, HDR strives to excel in soliciting public input to build consensus in solutions. HDR draws from its technical expertise and depth of experience for strategies that foster high public acceptance.

HDR's staff includes recognized experts and leaders in emerging technologies and applications such as microscopic simulation. In addition to real world applications, we provide beta testing, in-house research and development, and training on the latest traffic software programs. With continued training to ensure mastery of emerging analysis and planning techniques and technologies, we can provide solutions for your most complex traffic challenges.

Structural Services



Structural engineering demands a wide range of specialized knowledge and experience. At HDR, this is particularly reflected in our broad range of bridge capabilities. HDR has engineered thousands of bridges spanning rivers, reservoirs and lakes, canyons, ravines, roadways, rail and transit lines. With sensitivity to function, environment, aesthetics and cost, HDR offers experience, staff and progressive design techniques for all bridges –long and short spans, simple to complex. HDR also offers planning, design and construction expertise for tunnel projects, including cut-and-cover, portal and approach structures.

Key Areas of Structural Services

- Long-Span Girder, Arch, Truss, and Cable-Stayed Bridges
- Steel and Concrete Box Girder Bridges
- Curved Girder Bridges
- Concrete Segmental Bridges
- Movable Bridges
- Pedestrian Bridges
- Short-Span Bridges
- Railroad Structures
- Bridge Inspection and Rating
- Bridge Rehabilitation, Widening and Upgrading
- Bridge Scour
- Seismic Retrofit
- Historic Renovation
- Research and Innovation
- Bridge Foundations
- Specialty Wall Systems
- Tunnels

Transit Services



Congestion that reigns on the nation's roadways is compelling authorities throughout the country to focus on transit solutions to mobility problems. From Seattle to South Florida, governments are developing creative transit plans to ease travelers' growing woes.

A diverse set of professional skills is essential to evaluate transit issues and develop feasible transit solutions. With its integrated, multi-disciplinary team of transportation engineers, environmental scientists and land use and transportation planners, HDR is a trusted partner on transit projects throughout the nation.

HDR's transit team thoroughly understands the coordination and communication requirements that set transit projects apart from many other public works projects. The frequency with which HDR is asked to perform services beyond its original scope is evidence of quality delivery in developing major U.S. transit systems. Repeat clients in Atlanta, Boston, Chicago, Dallas, Houston, Los Angeles, Miami, the Pacific Northwest, Phoenix, Pittsburgh, South Florida, Northern Virginia and Washington, D.C., rely on HDR for extended planning and engineering services for their transit systems.

Key Areas of Transit Services

- Transit planning
- Transit engineering
- Transit-oriented development
- Feasibility studies and corridor analyses
- Preliminary and final design
- Systems design
- Track, roadbed and yard design
- Maintenance facilities
- Passenger stations
- Structures and tunnels
- Light Rail Transit
- Streetcars
- People Movers
- Airport Transit
- Monorail
- Rapid Rail Transit
- Bus Rapid Transit
- Environmental
- Identification of capital and operational costs
- Construction engineering and inspection
- Program management
- Design-build

Environmental Services



Key Areas of Environmental Services

- Environmental impact statements
- Environmental impact assessments
- Endangered species
- Clean Water Act permits
- Wetland mitigation
- Air and noise analysis
- Alternatives analysis
- Hazardous and toxic materials
- Socioeconomic and cultural resources studies/analysis
- Context sensitive solutions
- Sustainability
- Aviation Hazard Assessment
- Best Management Practices
- Deicing
- Environmental Impact Studies and Technical Reports
- NEPA Environmental Assessments
- Permitting
- Planning and Design
- Stormwater/Drainage
- Underground Storage Tank Services
- Wetlands

Today's focus on protecting the environment is mirrored in the services HDR provides in support of airport development activities. HDR conducts aviation forecasting, airport demand and capacity analysis, airspace analysis, land use compatibility planning, and economics and market studies. Our technical and scientific experts address environmental issues that are critical to the public acceptance and successful project permit processes. In addition, HDR offers well-planned and executed public involvement programs.

HDR provides inventories, assessments and mitigation plans for major environmental issues. These include threatened and endangered species, wetlands and related permitting, air and noise analysis and related permitting, economic/socioeconomic analysis, agricultural analysis, impacts on cultural resources under Section 106, and impacts to public resources. HDR also assesses groundwater, surface water and stormwater impacts such as quality and quantity, National Pollution Discharge Elimination System (NPDES) and deicing management, hazardous waste, and wildlife hazards. These services refine options for airport improvements.

Providing environmental services for transportation projects is one of HDR's fastest growing areas. As in any transportation project, strong partnerships with our clients are key to providing exceptional and creative service in the quest for environmentally sustainable economic development.

Our staff has extensive experience in processing air, land, water and socioeconomic information to result in quality projects. Engineers and environmental scientists team to provide the right blend of technologies to creatively, effectively and efficiently meet the challenge of sustaining both economic growth and environmental quality.

Water Resources



Key Areas of Water Resources

Services

Stormwater Management and Flood Control

Dams and Hydropower

Water Quality

Environmental and Planning

Individual clients bring unique water resources project concerns to the engineering professionals at HDR. From wetland banking to stormwater management and NPDES permitting, we focus on their issues. As a result of repeat business, HDR is able to create engineering solutions by combining technology with practical applications to real world design challenges.

Implementing custom solutions to fit individual client needs within a budget allows HDR clients the opportunity to focus on building their communities. Today's highly regulated environment challenges communities to creatively manage resources and growth. At HDR we understand the complex circumstances leaders face when making infrastructure decisions.

Stormwater Management and Flood Control

HDR provides planning, preliminary engineering, management, and design services that develop effective, applicable solutions for stormwater problems.

Dams and Hydropower

HDR's professional dam specialists and hydropower experts provide clients with proven skills and experience in the design of powerhouses, dams, intakes, and other related facilities.

Water Quality

HDR's engineers use the newest technology combined with an integrated understanding of all the factors involved to help clients through various options and solutions for water quality concerns.

Environmental and Planning

Communities turn to HDR's solid scientific approach to plan effective strategies for the development of water resources plans or wetland banking concerns.

Federal Planning



Bottom Image: Camp Humphreys, South Korea Master Plan



HDR has over 50 years of dedicated experience in federal and DOD installation and facilities master planning and information systems development.

HDR has extensive experience serving DOD clients both as consultants and as veterans and former employees of federal agencies. Our project approach combines technical knowledge with an understanding of DOD agency goals and objectives. We work as an extension of their staff, operating as one team through open communication, trust, and respect.

Master Planning, Asset Management & GIS

HDR has supported the military on 1,000+ DOD installations around the world.

- Completed over 25 separate multiyear Indefinite Delivery Type (IDT) contracts for facilities master planning, programming and GIS services involving literally thousands of separate task orders for DOD facilities planning and GIS systems development.
- Received 19 Federal DOD planning awards.
- Hold 5 major (prime) term contracts for facilities master planning and GIS services across the globe and are the principal master planning subcontractor on many other term contracts with federal design agencies worldwide.

Featured Capabilities

- Installation Master Planning and Sustainability Planning
- Stationing Plans and Demographic Studies
- Facilities Utilization & Requirements Analyses
- Regional Planning and Capital Investment Analyses
- Business Case Analyses and Financial Return on Investment
- Infrastructure Capability Assessments & Beddown Plans
- Area Development Planning, Airfields, Range & Training Land, Ports
- Programming Documents including DD 1391s and Charrettes
- Cost Estimating & Economic Analyses for Master Planning
- IT Needs Assessments, GIS, CADD, and Electronic Master Planning
- Decision Support Systems Development

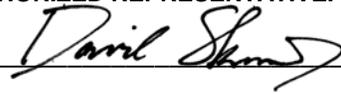
Full Service Capabilities

Augmented with HDR's full-service AE design and engineering expertise, we can offer solutions for any master planning context.

7. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

a. Percentage of Total Work Attributable to State, Federal and Municipal Government Work:	70%
b. Percentage of Total Work Attributable to Non-Government Work:	30%

8. AUTHORIZED REPRESENTATIVE. The foregoing is a statement of facts.

Signature: 

Date: December 12, 2013

Name: David R. Skinner, PE,

Title: Vice President, AZ Department Manager