Appendix A. Mitigation Tracking Spreadsheet

Summary of Impacts and Mitigation for the Proposed Action

#	Mitigation	Impact	Mitigation	Responsi-	Timing/Phase that
	Category	impace	Commitment	ble Party	Mitigation will be Implemented
1	Transportation	Temporary road closures or detours may be required during construction. Along with the road closures, sidewalks may also be detoured for safe pedestrian access.	Vasquez Boulevard and existing surrounding streets will remain open to traffic during construction. Short- term road closures may be allowed for construction activities.	CDOT, Contractor, and Commerce City	During Construction, Temporary Construction Mitigation Measure
2	Transportation	Temporary road closures or detours may be required during construction. Along with the road closures, sidewalks may also be detoured for safe pedestrian access.	Adequate and safe vehicle and pedestrian/bicycle detours will be in place to allow mobility to be maintained throughout the Study Area.	CDOT, Contractor, and Commerce City	During Construction, Temporary Construction Mitigation Measure
3	Transportation	Due to the changes in the direct connections for the west side frontage road (Dexter Street) at the Vasquez/60th intersection, new and improved local road connections are included in the recommendations to maintain and improve access for vehicular, truck, and multimodal access to the properties located west of Vasquez Boulevard between 58th Avenue and 63rd Avenue.	The new local roadways shall be constructed before work on Vasquez Boulevard begins to maintain access to all businesses during construction and provide construction phasing.	CDOT and Contractor	During Construction, Temporary Construction Mitigation Measure

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4	Air Quality	Temporary construction impacts of the Project would generate criteria pollutant, mobile source air toxics (MSAT), and greenhouse gas (GHG) emissions. Sources of construction emissions include construction equipment, worker vehicles, material handling, project implementation and detouring vehicles.	The contractor shall submit any required Air Pollutant Emission Notice(s) (APEN) to the Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division, and the CDOT Region 1 Air Quality Specialist and the CDOT Engineer, for concurrent review prior to the Preconstruction meeting for the Project.	Contractor	Pre-Construction, Temporary Construction Mitigation Measure
5	Air Quality	Temporary construction impacts of the Project would generate criteria pollutant, MSAT, and GHG emissions. Sources of construction emissions include construction equipment, worker vehicles, material handling, project implementation and detouring vehicles.	A Fugitive Dust Control Plan will be required, and the contractor shall be responsible for compliance of the Plan.	Contractor	Pre-Construction, Temporary Construction Mitigation Measure

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6	Noise	Temporary construction noise impacts are anticipated. Properties within or adjoining the Study Area may be exposed to noise caused by temporary construction activities of the Project. Construction noise impacts are anticipated to be from tools, heavy machinery and construction vehicles operating during construction hours.	The contractor shall prepare a draft Construction Noise Mitigation Plan, and submit the plan to the CDOT Region 1 Noise Specialist and the CDOT Engineer for review prior to the pre-construction meeting for the Project. The Contractor shall get CDOT approval of the plan prior to starting construction.	Contractor	Pre-Construction, Temporary Construction Mitigation Measure
7	Noise	Temporary construction noise impacts are anticipated. Properties within or adjoining the Study Area may be exposed to noise caused by temporary construction activities of the Project. Construction noise impacts are anticipated to be from tools, heavy machinery and construction vehicles operating during construction hours.	Follow the Final Construction Noise Mitigation Plan. Applicable city (Section 6-2011 of Commerce City's Municipal Code) and the State Noise Statute (C.R.S. 25-12- 102) shall be followed during construction. Section 6-2011 of the city's Municipal Code states that noise emanating from construction-related activities and equipment is permitted between the hours of 7 a.m. and 8 p.m. This limit does not supersede the State Noise Statute (C.R.S. 25-12- 102).	Contractor	Construction, Temporary Construction Mitigation Measure

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8	Environmental Justice	During construction, business owners, residents in the area, and travelers of the corridor may be impacted by limited access and traffic congestion.	Pedestrian detours will be provided (where needed) with signing and Americans with Disabilities Act compliant access to improve the safety of travelers in the area and to allow for access during construction.	CDOT and Contractor	Construction, Temporary Construction Mitigation Measure
9	Environmental Justice	During construction, business owners, residents in the area, and travelers of the corridor may be impacted by limited access and traffic congestion.	Local businesses will be informed of the Project's construction activities and access to the businesses will be maintained throughout construction.	CDOT and Contractor	Pre-Construction and Construction, Temporary Construction Mitigation Measure
10	Environmental Justice	The census tracts of the Study Area are comprised of Environmental Justice populations, which will experience the most direct impacts from construction burdens.	Distribution of Spanish translated materials and intentional outreach to Limited English Proficient communities will continue through all Project phases.	CDOT and Contractor	Pre-Construction, Temporary Construction Mitigation Measure

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11	Recreational Resources	Temporary impacts may occur during construction due to delays, detours, and short-term closures of Vasquez Boulevard, Parkway Drive, 60th Avenue and Forest Drive. Construction could create delays for users traveling to park properties, but access to the park would remain open during construction.	All park access will remain open during construction.	CDOT and Contractor	Construction, Temporary Construction Mitigation Measure
12	Recreational Resources	The work will be within road ROW, outside of the legal boundary of Veterans Memorial Park, and therefore does not constitute a Section 4(f) use. However, the Land and Water Conservation Fund boundary extends outside of the legal park boundary and encompasses a portion of the road ROW where this work is taking place, which constitutes a Section 6(f) impact.	Coordination with CPW for the Section 6(f) impact will be complete prior to construction.	CDOT	Pre-Construction, Permanent Construction Mitigation Measure

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13	Hazardous Materials	The Project has the potential to impact hazardous materials from sites associated with Potential Environmental Conditions (PECs) in the Study Area and in the surrounding area.	Contractors and workers shall comply with CDOT's latest Revision of Section 250 - Environmental, Health and Safety Management (EHSM) of the Standard Specifications for Road and Bridge Construction	CDOT and Contractor	Construction, Temporary Construction Mitigation Measure
14	Hazardous Materials	The Project has the potential to impact hazardous materials from sites associated with PECs in the Study Area and in the surrounding area.	Prior to construction, a Project-specific MMP will be prepared that details site- specific standard operating procedures regarding the identification, sampling, handling and disposal of wastes and hazardous materials that could be encountered during construction	CDOT and Contractor	Pre-Construction, Permanent Construction Mitigation Measure
15	Hazardous Materials	The Project has the potential to impact hazardous materials from sites associated with PECs in the Study Area and in the surrounding area.	The contractor shall complete a Health and Safety Plan to address potential wastes and hazardous materials that could be uncovered during construction	Contractor	Construction, Permanent Construction Mitigation Measure

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16	Hazardous Materials	The Project has the potential to impact hazardous materials from sites associated with PECs in the Study Area and in the surrounding area.	Workers shall be alert during excavations for any visual or olfactory signs of contamination. If gas, soil and/or groundwater contamination is encountered, work will stop immediately, and the procedures outlined in the Section 250 and subsection 107.25.(b) of CDOT's Standard Specifications for Road and Bridge Construction shall be followed.	Contractor	Construction, Temporary Construction Mitigation Measure
17	Hazardous Materials	The Project has the potential to impact hazardous materials from sites associated with PECs in the Study Area and in the surrounding area.	Prior to construction, the contractor shall identify any painted metal items that could be impacted during construction. If painted metal items identified in the Study Area are slated for removal and disposal, the contractor shall test for lead-based paint and, if present, removing, disposing, or recycling of the painted components shall be done in compliance with CDOT Section 250 - EHSM (including, but not limited to, Section 250.04) and all applicable Occupational Safety and Health Administration, local, state and federal regulations.	Contractor	Pre-Construction, Temporary Construction Mitigation Measure

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18	Hazardous Materials	The Project has the potential to impact hazardous materials from sites associated with PECs in the Study Area and in the surrounding area.	Structural excavation, such as caisson and retaining wall construction, may require the dewatering of contaminated groundwater. If dewatering is necessary, groundwater brought to the surface will be managed according to Section 107.25 of the CDOT Standard Specifications for Road and Bridge Construction and permitted by the CDPHE and Environment Water Quality Control Division, in accordance with Section 402 of the Clean Water Act	CDOT and Contractor	Construction, Temporary Construction Mitigation Measure
19	Hazardous Materials	The Project has the potential to impact hazardous materials from sites associated with PECs in the Study Area and in the surrounding area.	If any drinking water and groundwater monitoring wells are located within the proposed construction area, the wells will be abandoned and plugged according to CDOT Section 202.02 in Standard Specifications for Road and Bridge Construction and in conformance with the Colorado Department of Natural Resources Division of Water Resources State Engineer Water Well Construction Rules, specifically Rule 16, "Standards for Plugging, Sealing, and Abandoning Wells and Boreholes"	CDOT and Contractor	Construction, Permanent Construction Mitigation Measure

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20	Hazardous Materials	The Project has the potential to impact hazardous materials from sites associated with PECs in the Study Area and in the surrounding area.	Contractor shall consult with CDOT Property Management regarding any property acquisitions and/or impacts during preparation of the MMP.	CDOT and Contractor	Pre-Construction, Permanent Construction Mitigation Measure
21	Utilities	The Project would require that some above ground utility features and connections be shifted to avoid the proposed travel lanes and sidewalks. The grading to be performed poses a risk to underground utilities could be hit and damaged during construction and result in safety, environmental and/or cost impacts of varying scales.	Subsurface utilities have been identified and utility coordination will continue throughout the design process to identify opportunities to avoid and minimize potential utility impacts. Utility owners are responsible for relocation except where agreements specify another entity. Most utility relocation will take place before construction. Utilities owned by CDOT will be relocated by the contractor during construction.	CDOT	Pre-Construction

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22	Utilities	The Project would require that some above ground utility features and connections be shifted to avoid the proposed travel lanes and sidewalks. The grading to be performed poses a risk to underground utilities could be hit and damaged during construction and result in safety, environmental and/or cost impacts of varying scales.	Additional Subsurface Utility Engineering investigations will occur as needed to reduce unexpected utility encounters. Utility owners are responsible for relocation except where agreements specify another entity. Most utility relocation will take place before construction. Utilities owned by CDOT will be relocated by the contractor during construction.	CDOT and Contractor	Construction, Permanent Construction Mitigation Measure
23	Biological Resources	The following five federal-listed species occur in the South Platte River, downstream from the Study Area, and have potential to be affected by water depletion to the South Platte River Basin: Whooping Crane, interior Least Tern, Piping Plover, pallid sturgeon, and western prairie fringed orchid.	For pallid sturgeon, Piping Plover, Whooping Crane, interior Least Tern, and western prairie fringed orchid, the water used for this Project will be reported to the United States Fish and Wildlife Service (USFWS) at the year's end after the completion of the Project as per the consultation and Programmatic Biological Assessment between FHWA and USFWS.	CDOT	Construction and Post- Construction, Temporary Construction Mitigation Measure

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24	Biological Resources	During construction, the Project may result in ground disturbance to prairie dog burrows which could also impact Burrowing Owls that require the burrows for nesting and roosting.	Prior to construction, the contractor shall conduct new surveys for the presence of active prairie dog colonies and follow CDOT's Impacted Black-tailed Prairie Dog Policy (CDOT 2009). For unavoidable impacts to the colony along Dahlia Street, trapping and removal may be required due to the surrounding development constraints.	Contractor	Pre-Construction, Permanent Construction Mitigation Measure
25	Biological Resources	During construction, the Project may result in ground disturbance to prairie dog burrows which could also impact Burrowing Owls that require the burrows for nesting and roosting.	If construction activities occur between March 15 and October 31, the contractor shall also follow CDOT's Revision of Section 240 of the CDOT Standard Specifications for Road and Bridge Construction for Prairie Dog Management and Colorado Parks and Wildlife's Recommended Survey Protocols and Actions to Protect Nesting Burrowing Owls.	CDOT and Contractor	Pre-Construction, Permanent Construction Mitigation Measure

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26	Biological Resources	Migratory birds have the potential to be impacted by clearing/grubbing of ground vegetation, trimming/removal of trees, and construction noise.	A migratory bird survey will be conducted prior to construction if work is scheduled to take place between April 1st and August 31st. Pre-construction surveys are valid for seven days and would need to be repeated if work does not commence within that time period.	CDOT and Contractor	Pre-Construction, Permanent Construction Mitigation Measure
27	Biological Resources	Migratory birds have the potential to be impacted by clearing/grubbing of ground vegetation, trimming/removal of trees, and construction noise.	Comply with the requirements of the Migratory Bird Treaty Act according to CDOT Revised Section 240 for Protection of Migratory Birds.	CDOT and Contractor	Pre-Construction, Permanent Construction Mitigation Measure
28	Biological Resources	Noxious and invasive weeds are also present in the Study Area and construction activities have the potential for introducing and spreading them.	An Integrated Noxious and Invasive Weed Management Plan will be prepared by CDOT prior to construction to address the control methods to be used to stop the continued spread of noxious and invasive weed species.	CDOT and Contractor	Pre-Construction, Temporary Construction Mitigation Measure
29	Water Quality	The Project will result in a net increase in impervious area of approximately 2.8 acres (16% increase over existing conditions) that would contribute to increased highway stormwater runoff.	Three potential permanent water quality facilities are included for the Project as mitigation.	CDOT and Contractor	Construction, Permanent Construction Mitigation Measure

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30	Water Quality	Additional temporary water quality impacts have the potential to occur during construction.	A spill prevention, control and countermeasure plan will be developed and implemented for the Project construction site to establish standard operating procedures and require employee training to minimize the accidental release of pollutants that could contaminate stormwater runoff.	Contractor	Pre-Construction, Temporary Construction Mitigation Measure
31	Water Quality	Additional temporary water quality impacts have the potential to occur during construction.	A SWMP will be prepared by CDOT to outline and detail erosion and sediment control within the Study Area during initial, interim and final construction phases. The Contractor shall implement the SWMP during all construction activities.	CDOT and Contractor	Pre-Construction, Temporary Construction Mitigation Measure
32	Visual Resources	The Project will improve the current poor natural and built conditions by planting trees along Vasquez Boulevard, where possible.	During the creation of the landscaping plans, new tree locations will be determined to create a better visual environment for pedestrians.	CDOT and Contractor	Construction, Permanent Construction Mitigation Measure

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33	Archaeological Resources	Due to widespread prior disturbance, there is no demonstrated potential for significant intact archaeological deposits and no impacts are anticipated to occur from activities associated with the Project.	Should previously unidentified archaeological resources be discovered during any phase of construction, work will stop until the CDOT Senior Staff Archaeologist is contacted and the resources have been evaluated and appropriate Section 106 of the National Historic Preservation Act compliance coordination and actions have occurred, as necessary. The contractor shall comply with Section 107.23 of the CDOT Standard Specification for Road and Bridge Construction (Archaeological and Paleontological Discoveries).	CDOT and Contractor	Construction, Permanent Construction Mitigation Measure
34	Paleontological Resources	The Study Area is underlain at variable depth by the Cretaceous, Paleocene Denver and Arapahoe Formations. While no previously recorded fossil localities are known to occur within the Study Area, there is a potential for impacts if these formations are reached by excavation during construction.	The CDOT staff Paleontologist, will be provided final design plans depicting major excavation (such as for large caissons, underpasses, etc.) to determine the need to conduct a survey prior to construction.	CDOT and Contractor	Construction, Permanent Construction Mitigation Measure

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35	Paleontological Resources	The Study Area is underlain at variable depth by the Cretaceous, Paleocene Denver and Arapahoe Formations. While no previously recorded fossil localities are known to occur within the Study Area, there is a potential for impacts if these formations are reached by excavation during construction.	If disturbance yields any subsurface bones or other potential fossils anywhere within the Project during construction, then work in the area should cease immediately and the CDOT Staff Paleontologist, should be notified as soon as possible to assess their significance and make further recommendations. The Contractor shall comply with Section 107.23 of the CDOT Standard Specification for Road and Bridge Construction.	CDOT and Contractor	Construction, Permanent Construction Mitigation Measure
36	Right-of-Way	CDOT is committed to maintaining open communication with property owners and stakeholders affected by the Project.	CDOT will continue to meet with and advise property owners of the acquisition process throughout Project development relative to the impact on their property.	CDOT	Construction, Permanent Construction Mitigation Measure
37	Right-of-Way	Across the 23 impacted properties, approximately 4.99 acres of ROW acquisition, 0.34 acres of permanent easement and 2.31 acres of temporary easement are required	The acquisition of any property interests will comply with state and federal requirements, including the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. A CDOT Right-of-Way Specialist will be assigned to each property owner and tenant to assist them with this process.	CDOT	Construction, Permanent Construction Mitigation Measure