Executive Summary: Strategic Rationale for the Chosen Zip Line Landing Spot at Riverfront Park

The landing spot for the urban zip line at Riverfront Park has been carefully selected based on a variety of structural, environmental, and cultural factors. After thorough evaluation, the southeastern corner of Redband Park has been identified as the optimal location for the zip line landing platform. This site provides the necessary balance between operational safety, environmental protection, and community respect. Below is a detailed summary of the key factors supporting this decision.

1. Zip Line Starting Point

The starting point of the zip line was designated by the City of Spokane several years ago during the planning and renovation of Riverfront Park. Several main factors contributed to the designated takeoff point of the zip line.

- **CSO Tank Construction:** The CSO tank design and construction was built with the future construction of the zip line in mind. The designated takeoff point is at the corner of Place of Truths Plaza.
- **Riverfront Park:** By selecting the takeoff location at Place of Truths, the city hopes it will draw the more remote area to play a larger part of central Riverfront Park.
- **Place of Truths:** The takeoff location utilizes existing structures and ramps which will make the attraction more easily accessible to the public and minimize the disturbance of its construction.

2. Zip Line Trajectory and Safety Corridor

The zip line's trajectory is a critical factor in determining its landing spot. Designed to pass through the southernmost arch of the Monroe Street Bridge, the zip line has limited flexibility in altering its path. To preserve the view shed at Place of Truths and operational requirements, the zip line must start and terminate on the south side of the river.

- Safety Corridor Considerations: Zip lines require a "corridor" around the cable to account for potential swaying and movement caused by weather conditions or cable tension. The corridor prevents any collisions with nearby structures. Due to the encroachment of the bridge's archway on the northern side, the zip line's path is naturally pushed southward, making the southeastern corner of Redband Park the most viable and safe location for the landing platform. Moving too far south conflicts with the steep topographical features south of the functional corridor.
- **Proximity to the River Shoreline:** The bridge's arch prohibits the landing platform from being placed closer to the river, further solidifying the southeastern landing zone as the only suitable location.

3. Riparian Buffer Compliance

The riparian buffer, as outlined by the City of Spokane, is an essential environmental protection measure that limits development near sensitive water ecosystems.

• Location Minimal Intrusion to the Riparian Buffer: The chosen landing spot is situated nearly outside the riparian buffer, ensuring that the zip line minimizes disruption to the nearby river habitat. The zip line is seeking approval for a variance due to its proximity to the boundary line of the riparian buffer along with the other outlined factors. This location helps preserve the ecological integrity of the Spokane River while allowing the zip line to operate in harmony with the natural landscape. An attached viewing platform open to the public, complete with interpretive signage, improves public access and appreciation of the river.

4. Preserving Cultural and Archeological Integrity

Another crucial consideration is the cultural and historical significance of the Peaceful Valley community and the potential for archeological artifacts in Redband Park.

- Avoidance of Cultural Artifacts: Previous cultural resource surveys have identified nearly all of Redband park including the baseball field in Peaceful Valley as an area containing tribal artifacts, making it unsuitable for construction. The southeastern corner of Redband Park, however, consists of a basalt outcropping where no such artifacts have been found. Tribal archeologist Tom Williams has specifically recommended this site as the best and only location, ensuring the zip line does not interfere with any culturally significant areas.
- **Respect for the Community of Peaceful Valley:** By placing the landing spot away from the main activity areas of Peaceful Valley, the zip line avoids disruption to local residents and maintains the cultural and environmental integrity of the park. The chosen location minimizes traffic and other intrusion into the residential neighborhood of Peaceful Valley. A public meeting held with the HOA of Peaceful Valley verified their general approval of the location.

5. Optimal Elevation for Zip Line Operations

Zip lines require a specific elevation change to ensure smooth, safe rides for guests of varying body weights and types.

• Elevation Change for Inclusivity: The ideal elevation change for a zip line is between 5% and 10%, with 8% being the optimal range. This ensures that lighter riders (such as a 60-pound child) can reach the end of the line, while heavier riders (up to 285 pounds) can safely decelerate. The southeastern corner of Redband Park has been calculated to provide this ideal elevation change, making it the most inclusive option for a diverse range of guests and ensuring the zip line operates efficiently and safely for all

participants. Moving the landing north is too steep. Moving the location south creates conflict with topographical features.

6. Existing Infrastructure for Accessibility and Minimal Environmental Disruption

The southeastern landing spot has the added benefit of being located at the end of an existing path running from West Main Avenue down to Redband Park.

- Accessibility for All Guests: Use of the existing path allows for the use of golf carts to transport guests back to the starting point, including those with physical disabilities or limitations, making the zip line more ADA compliant and accessible to all members of the community.
- **Minimal Park Disruption:** The existing path reduces the need for any significant excavation or disturbance to Redband Park's natural landscape, preserving the park's aesthetics and ensuring that zip line guests do not intrude into the heart of Peaceful Valley. The existing path may require minimal improvements and maintenance to ensure the safe transportation of guests.

Conclusion

The southeastern corner of Redband Park is the most suitable landing spot for the zip line, based on key factors such as safety, environmental compliance, cultural preservation, and operational efficiency. The chosen site ensures the zip line corridor remains unobstructed, respects the riparian buffer, preserves cultural artifacts, and provides the optimal elevation for rider inclusivity. Additionally, the location leverages existing infrastructure to enhance accessibility while minimizing disruption to the park and surrounding community.

This site selection reflects a thoughtful and balanced approach to the design and operation of the zip line, ensuring it serves the community safely and responsibly while maintaining respect for Spokane's natural and cultural heritage.