

# Interpretive Plan



for the

## Thunder Tree – Sand Creek Lateral Cultural Heritage Site Wayside Signage

City of Aurora Colorado



by

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**Aurora  
History Museum  
& Historic Sites**

11/04/2024



## **Acknowledgments**

The following people were invaluable to the development of this plan, providing necessary input, feedback and other assistance when needed. Their contribution was made not only for the following interpretive plan, but also the cultural heritage site nomination, as well as for their encouragement and enthusiasm with this project. This plan would not have been possible without their assistance.

Tom Leskiw – Tom is the person who provided all the impetus for the designation of this important Aurora Cultural Heritage Site and he and his wife provided valuable input to this plan.

T. Scott Williams – As the director of the historic preservation program in Aurora, Scott provided exemplary support for this site’s nomination and this signage project.

Chris Geddes – Chris is a true champion and expert staff person for the Aurora Historic Preservation program. She was instrumental in finalizing the nomination and coordinating all the logistics to nominate this cultural site.

Courtney Mosca – As the assistant historic preservation staff person, Courtney greatly revised and provided additional information on the Sand Creek Lateral which aided in the development of this plan.

Robert M. Pyle – Thank you for your review, wit and your advocacy. Aurora and the High Line Canal are so lucky to have heard your voice.





## **Introduction**

At the March 12, 2024 meeting of the Aurora Historic Preservation Commission, the Thunder Tree & Sand Creek Lateral of the High line Canal was accepted as a City Cultural Heritage Site. The overall objective of the Cultural Heritage Sites Program is to build community awareness of the cultural heritage values of significant sites across the City and to ensure that residents and visitors gain a better understanding and a richer appreciation of a particular place and the people associated with it. Cultural heritage significance is a concept which helps us understand the value of specific places and the people associated with those places. Cultural Heritage Sites that are likely to be of significance are those that help us understand the past, enrich the present and contribute to the education of future generations. This type of designation does not come with any restrictions on use or alteration, however the Commission does monitor the condition of all Landmarks and Cultural Heritage Sites and will try to mitigate loss or harm by working with the owner(s) to facilitate preservation of these resources. Education and outreach is a key component of any Landmark program and it is the desire of the Commission and those that have come forward advocating for this designation to have a wayside interpretive sign placed near this designated resource. This mini interpretive plan outlines the desired interpretive plan and content of the sign for the “Thunder Tree & Sand Creek Lateral, Cultural Heritage Site”.

## **A Definition of Interpretation**

Interpreters connect visitors to important natural, cultural and historical resources at parks, nature centers, historical sites, aquariums, zoos and anywhere that people come to learn about places. NAI (the National Association for Interpretation) defines interpretation as "a purposeful approach to communication that facilitates meaningful, relevant and inclusive experiences that deepen understanding, broaden perspectives and inspire engagement with the world around us."





## Plan goal structure:

The goal hierarchy contained in this section reflects the following structure:

City of Aurora management purposes/goals (City wide and departmentally)



Interpretive goals



Objectives (Outcomes)

## GOALS

### Overall Management Goals



*A sense of community is defined by the connections among people and shaped by shared culture, experiences and history p. 84*

*Aurora Places Plan – Aurora’s Comprehensive Master Plan adopted Oct 2018*



### Historic Resources and Preservation

The city recognizes that preservation of its historic and cultural resources is important to the community at large and that the city should play an active role in the protection and preservation of Aurora’s heritage through education, advocacy, training and partnerships. The Historic Preservation Ordinance, first adopted in 1985, creates a process for establishing historic landmarks, both historical and archeological.(p. 84)

Historic preservation is achieved through a partnership among the City Council, the Historic Preservation Commission, various city departments, the Aurora History Museum, the Aurora Historical Society, private property owners and others in the community. These





partnerships provide shared cultural and economic benefits to the Aurora community. (p. 84)

From: *Aurora Places, comprehensive plan Oct 2018*



### **Interpretive Tie-In Design**

The High Line Canal Conservancy is a key partner in the preservation of the High Line Canal through the Denver -Metro area. This non-profit entity has long advocated and organized around the preservation of this 71 plus mile historic resource. They have also recently been awarded major outdoor Colorado grants to facilitate the interpretation and enhancement of the canal for recreational uses. In 2016 a reconnaissance level historic survey recommended that interpretation of historic features be considered. A full Interpretive Plan for the Canal is under development.

The Thunder Tree marker should tie into the High Line Canal's signage design and branding. Wayfinding on the Canal proper (approx. ½ mile South of the Thunder Tree it is hoped will guide and direct travelers on the Canal to this designated site. The Thunder Tree sign should likewise include an overall map to re-direct and direct people back to the main High Line Canal and tie in with the Canal's interactive online map.



### **Interpretive Goal:**

The Thunder Tree – Sand Creek Lateral provides an example to educate the public on how the City promotes the preservation of historic places through its historic preservation program in partnership with other organizations and entities.

**Objective:** Interpretive media for the Thunder Tree – Sand Creek Lateral will highlight the relationship of the City of Aurora aim to educate the public about efforts to preserve Aurora's past in partnership with other organizations such as the High Line Canal Conservancy.

**Indicator:** Hits or visits to internet links (QR code) to the High Line Canal Conservancy and the Aurora Historic Preservation Commission (and its Landmark program) will increase after the Thunder Tree signage is installed,.





**Objective:** To Educate the public that the Thunder Tree is located on the last remaining physical segment of the San Creek Lateral of the High Line Canal, which has several historic water features seen in Del Mar Park today.

**Indicator:** Visitors seeing the Thunder Tree will also visit the nearby historical features in Del Mar Park and make further inquires on its history and use.

**Objective:** The Thunder Tree and the Sand Creek Lateral is located in Del Mar Park, a large park that was developed in the 1950's adjacent to one of the largest City's pools and Center for Active Adults.

**Indicator:** Families and residents enjoying Del Mar Parks many amenities will learn more about the history of the Thunder Tree, the High Line Canal and efforts to preserve the natural environment within the City.



## **Management Goal**

### **An Authentic Aurora – From: *Aurora Places, comprehensive plan Oct 2018 page 96***

Principle: The creation of great places, the preservation of traditionally unique places and effective marketing and promotion are essential to improving Aurora's image.

**Goal:** Create distinctive destinations that attract people from around the region and the world.

**Goal:** Use Aurora's heritage and historic resources as a basis for community events, urban design and community pride.

**Goal:** Use diverse cultural resources and the arts in urban districts and other placetypes to create destinations.





## Practices



### Placetypes

- Protect and highlight Aurora’s cultural and historic resources and places.



### The Image of the City

- Survey, evaluate, preserve and enhance historical resources to add special character to urban districts, neighborhoods and other districts.



### Interpretive Goal:

We want to promote a visitor experience to all people seeing the Thunder Tree’s on-site interpretation signage,

**Objective:** The ribbon-cutting ceremony will include the notable scholar Robert M. Pyle author of the “*Thunder Tree, Lessons from an Urban Wildland*” along with other dignitaries and representatives from the High Line Canal Conservancy etc. The City advertise the event widely to the public through the City’s communications team department and even Aurora’s TV channel.

**Indicator:** The opening and dedication of the Thunder Tree sign will be attended by a large and diverse number of people from the community and will attract others as a destination spot for birdwatchers, butterfly watchers, professional lepidopterists, hikers and history/environmental advocates.

## Themes

**Significance Point A: The Thunder Tree represents the spot where researcher Robert Pyle started his lifelong efforts at protecting the natural environment.**

### Theme:

This “Thunder Tree” saved two boys lives and inspired advocacy for the natural world.





**Significance Point B: The Sand Creek Lateral represents an important formal extension of the High Line Canal that spurred development, industry and governmental use and growth.**



**Theme:**

The Sand Creek Lateral was an important High Line Canal extension.



### **Targeted Audiences and Prescriptions to Reach Them**

1. Park Visitors

Walkers, Runners, Bicyclists

2. Seniors

Those individuals going to and from the Center for Active Adults

3. Families with children

Families using the City pool and other recreational offerings

4. Nature and Historic Preservation advocates

Bird watchers, butterfly watchers and historic preservation supporters



### **Park Visitors**

It has been observed that some of the main audiences that are likely to engage with interpretative signage for the Thunder Tree/Sand Creek Lateral are walkers, runners and bicyclists that use the existing trail system in Del Mar Park for recreational and transportation purposes. Capturing and enticing their attention is a key goal to creating a







successful interpretive experience. Below are some characteristics that may typify obstacles and opportunities posed by capturing this group:

Characteristic:	Obstacle or Opportunity:	Implication:
Travel on the trail near the tree and site now	Travel fast and may miss the wayside sign	Place wayfinding sign on the High Line Canal proper (located approx. ½ mile South to alert them of the opportunity and to slow down for pedestrian traffic.
May not stop unless needed or easy	Create an incentive to stop	Have a park bench next to the interpretive sign to encourage resting and then reading the interpretive sign
Often travel fast	Make them slow down with a reduced ped-crossing sign	Order and install a reduced speed signs along with a path before and after the trail sign
Need for wayfinding information tying in the site with the High Line Canal trail and other pedestrian/bike trails	May want information about other points of interest	Concise information and a QR code for more information on the High Line Canal and other background information on the site.



### **Interpretive Prescriptions for the Park Visitors Audience:**

Park Visitors	Wayfinding on trail along High Line proper, slow down signs and park bench needed. QR code for ADA access and additional information
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Please see the prescriptions wayfinding section that will aid visitor engagement for these multiple audiences below.





## Seniors

Seniors from the surrounding neighborhood are an audience that may likely engage with the Thunder Tree interpretive sign. This group may take the path around the Del Mar Pool to go to the City's Center for Active Adults. A key aspect of attracting their attention is wayfinding to the sign location and accommodation for their mobility needs. Some "seniors" may be wheelchair assisted therefore a concrete or stable ground turning point with easy access and ADA enhancements are recommended.

Characteristic:	Obstacle or Opportunity:	Implication:
May travel slowly getting to the Center for Active Adults or shopping nearby	Create an incentive to stop with a bench to encourage rest	A bench would aid those Seniors that are able to rest and read the interpretive sign.
May need the aid of wayfinding direction to know about the interpretive visitor experience	Need directions to get to the sign/site	Place wayfinding signs near the High Line Canal proper as well as near the Center for Active Adults.
Some of the Seniors may need ADD assistance	Make sure the path to the sign is wheelchair/stroller accessible; also make the sign accessible in terms of Web Content Accessibility Guidelines (WCAG)	Cement path to the sign, QR code link to WCAG tools for the sign to hear the audio assisted transcription of the sign and additional information



### Interpretive Prescriptions for Seniors:

Seniors	Wayfinding from Center for Active Adults and park bench to encourage a stop. Wheelchair turning point and ADA and QR code for accessibility needs
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Please see the prescriptions wayfinding section that will aid visitor engagement for multiple audiences below.



### Families with children

Del Mar pool brings a large number of families with children to the Park. As such the interpretive visitor experience for the Thunder Tree and Sand Creek Lateral must attract the attention of families with small school-age children. One way to do this is with graphics and images that capture their attention. Many children are tactile learners so it is suggested that the interpretive panel incorporate a tactile element in the design if feasible. A touchable recreation of the bark of the tree or leaf might be considered.

Characteristic:	Obstacle or Opportunity:	Implication:
Travel to the pool, playground or recreational aspects of the Park.	Need for an attention-getting method aimed at young people's learning styles	Have strong visual images and a possible tactile recreation of a leaf or wood bark would help to draw attention and possibly enable an older adult to assist in reading the text.
Like to explore natural areas	Must convey the dangers and the careful respect needed to care for the Thunder Tree and the historic features of the Sand Creek Lateral	Use a moral message to protect the resource, drawing similarities to a young person's yard or home.
May have a need to hear or learn more than what is on the sign	Give more detailed information, along with audio ADA and additional learning items	Communicate more information and learning options with museum/school programming and on-line resources and accessibility





### **Interpretive Prescriptions for Families with children:**

Families with children	Incorporate strong visual images, possible tactile elements with the sign, moral appeal message for safety and protection, on-line information for additional learning and accessibility needs.
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Please see the prescriptions wayfinding section for the trail head that will aid visitor engagement for multiple audiences below.



### **Nature and Historic Preservation Advocates**

Nature and Historic Preservation advocates often enthusiasts go out of their way to discover and support sites of noted interest. While typically heritage enthusiasts are a small number in a given population. Studies have shown that heritage and natural world advocates (like bird and butterfly watch) tourists bring in a large number of direct and indirect economic benefits to a community (see for example with archaeology and historic resources: <https://www.archaeologybenefitscolorado.com>). While highlighting the Thunder Tree- Sand Creek Lateral in a suburban setting will likely bring negligible economic benefit to the City of Aurora it adds an important piece to the larger perceived values supported by the City, encouraging responsible growth and making Aurora a destination City. Clearly the opportunity to recruit more nature and heritage enthusiasts must continue.

Characteristic:	Obstacle or Opportunity:	Implication:
Committed to seeing authentic landmark experiences	Knowing about the site/interpretation	Make sure the site is advertised in the landmark brochure and with partner nature groups.





May want to explore other sites and get involved in more Aurora Museum programs	Knowing about other sites and museum opportunities	Add information on the interpretive materials to encourage involvement in other historic preservation, museum and other park programs
May want more information	Extend the opportunity with more on-line information and links to groups for participation and involvement	Include a QR code to a website with more information and links to the High Line Canal resources, other landmarks and Park nature programs



**Interpretive Prescriptions for Nature and Historic Preservation advocates:**

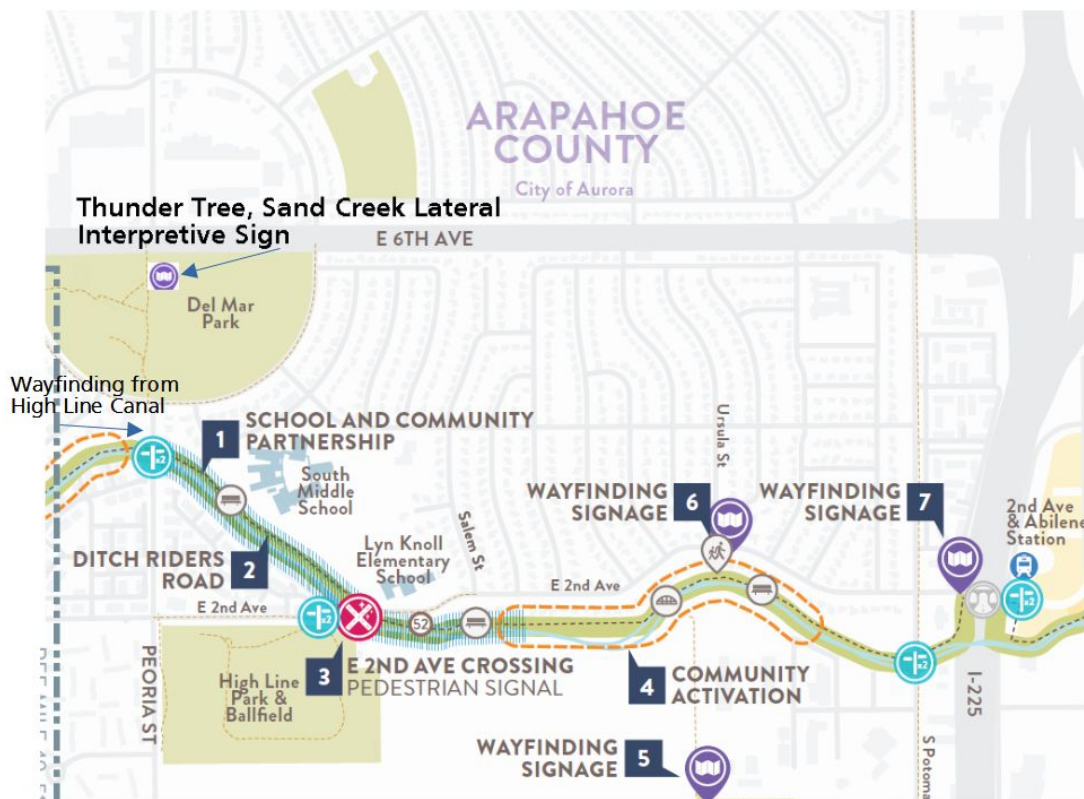
Nature and Historic Preservation advocates	Cross promotion with historic preservation and nature groups (internal City and external), encourage participation in historic preservation and nature programs, include more information on-line via a website and a QR code
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## Wayfinding to the Cultural Heritage Site Wayside Sign (for Multiple Audiences)

All of the targeted audiences require directional signage ((wayfinding) to know where to view the interpretive signage and the actual Thunder Tree and the remaining historic elements of the Sand Creek Lateral. Wayfinding directional signs should also tie in the main High Line Canal and its resources and recreational opportunities. As such it is recommended that the following locations have wayfinding signs directing pedestrian/bicycle traffic to the Cultural Heritage Site interpretive sign:



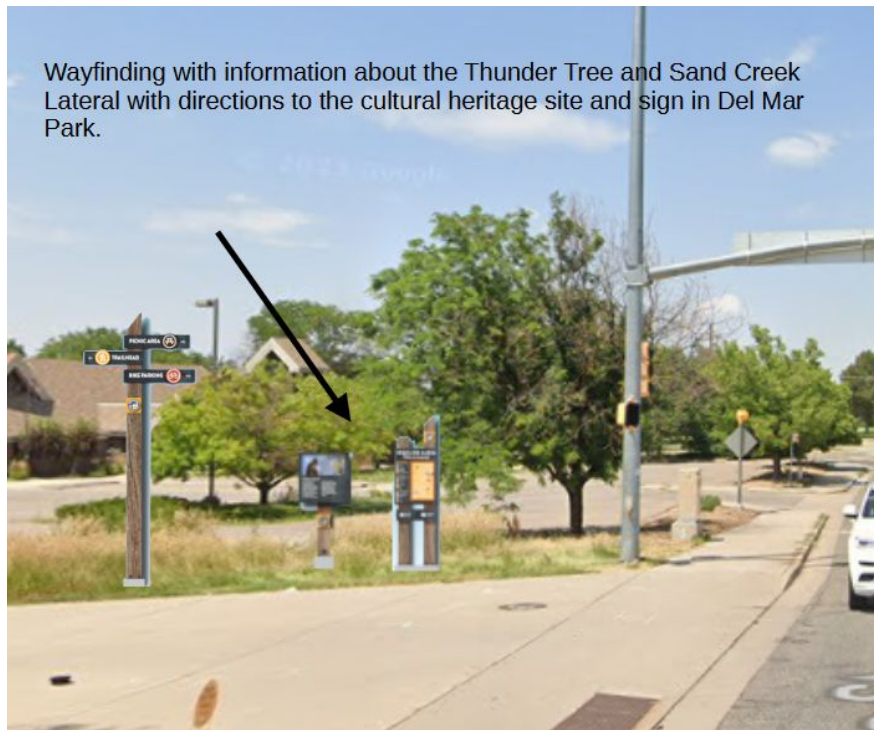
*General location of the proposed Thunder Tree – Sand Creek Lateral Interpretive Sign and Wayfinding signs along the High Line Canal. (source: The Plan for the High Line Canal, A Collaborative Framework for our Regional Legacy 2009)*





Wayfinding on Peoria and the HLC

*Wayfinding should be located on the High Line Canal proper directing people to the Thunder Tree, Sand Creek Lateral sign in Del Mar Park. Signage should follow High Line Canal branding guidelines.*



Wayfinding with information about the Thunder Tree and Sand Creek Lateral with directions to the cultural heritage site and sign in Del Mar Park.

*Closeup of the recommended wayfinding and information on how to visit the Thunder Tree, Sand Creek Lateral in Del Mar Park, along trail to the North.*





*Possible companion wayfinding sign within Del Mar Park proper across Del Mar Circle and Peoria.*



*Possible wayfinding sign (following the High Line Canal brand style guidelines) along the existing cement trail next to the remnants of the Sand Creek lateral.*







*Alternative wayfinding style sign(s) using international icons based on NPS UniGuide Standards. Using this style aids in multi-language communication. Wayfinding signs may also be placed near the Center for Active Adults and the swimming pool.*



*Option 1: Conceptual placement of the Thunder Tree, Sand Creek Lateral Interpretive Sign and optional park bench (following the High Line Canal Conservancy standards and guidelines).*





*Option 2: Conceptual placement of the Thunder Tree, Sand Creek Lateral Interpretive Sign and bench with standard City Wayside sign and suggested accompanying High Line Canal Conservancy monument marker.*

### **Theme Hierarchy Delivery**

The wayside sign should generally follow the High Line Canal Conservancy Standards and Guidelines in terms of layout to give consistency to the visitor interpretive experience along the High Line Canal. It is suggested that the Thunder Tree interpretive information be accompanied by the artist rendering by Houghton Mifflin from the first edition of the Thunder Tree book and a woodcut artistic rendering by Robert Pyle's late wife Thea Linnaea Pyle. Artist permissions or copyright acknowledgments may need to be obtained in order to use either of these. Since the interpretive plan and the sign covers two related resources it is suggested that there be two main sections to the interpretive panel focusing on their respective themes (see above).

Due to the limited space demands of the sign, several extra pieces of information about Robert Pyle's career and additional information about the High Line Canal Trail should be made available on line via a QR link. The QR code link could also support accessibility needs (i.e. closed captioning, contrast and visual assistance).






**Thunder Tree & Sand Creek Lateral of the High Line Canal Cultural Heritage Site**

*"When people connect with nature, it happens somewhere."* — Robert M. Pyle

**This "Thunder Tree" saved two boys lives and inspired advocacy for the natural world...**



You are standing near the site of the hollowed-out Plains Cottonwood tree that gave shelter to Robert (Bob) Michael Pyle and his brother Tom during a freak, intense thunderstorm on July 27, 1954. Their experience that day and at other times during their childhood gave rise to Bob's book, *The Thunder Tree: Lessons From An Urban Wildland*, published in 1993. In this part-childhood memoir, part description of the natural and cultural history of the landscape along the High Line Canal, Bob reflects:

*"Growing up on the wrong side of Denver to reach the mountains easily or often, I resorted to the tattered edges of the Great Plains on the back side of town. There I encountered a century-old irrigation channel known as the High Line Canal. Without a doubt, most of the elements of my life flowed from that."*


As you walk along the High Line Canal—savoring its sounds, smells and the ever-changing play of light across water and vegetation—we invite you to reflect on your own relationship with the natural world. And to consider how mighty trees like cottonwoods spring forth from barely visible seeds, their many gifts filling us with joy, wonder and curiosity.

Woodcut of Black-billed Magpie by Thea Linnaea Pyle

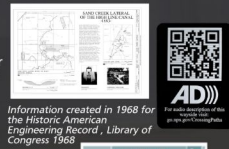
**Do you wonder what the ditch is before you?**

**It's the Sand Creek Lateral, an important High Line Canal extension.**


The Sand Creek Lateral, connected to the nearby High Line Canal, was the original water conveyor to Fitzsimons Army Post and passes through the center of what is now Del Mar Park. The Northern Colorado Irrigation Company constructed the waterway from 1882 to 1883. The creation of the Rocky Mountain Arsenal brought the northern 5.8 miles of the Sand Creek Lateral under the military facility's operation. The 15-mile lateral, an integral component of the largest canal system completed in Colorado, stimulated settlement and agricultural development of the area. It was an unlined, earthen ditch considerably smaller in dimensions than the main canal. Structures on the lateral included devices to control, carry, divert and measure the flow of water such as head works, drop checks and culverts. One can still see drop structures along the lateral near the Thunder Tree, here in Del Mar Park. You are encouraged to carefully explore and see these historic features.



Culvert from the Sand Creek Lateral (Library of Congress (HAER))



Information created in 1968 for the Historic American Engineering Record, Library of Congress 1968




To learn more about Robert M Pyle and his career please visit: <http://>

Aurora has a number of historic landmarks and the Historic Preservation Commission is dedicated to identifying and landmarking places that are significant to Aurora. Learn more by visiting the City of Aurora's historic preservation web site:

[https://www.auroragov.org/things\\_to\\_do/aurora\\_history\\_museum/historic\\_sites/explore\\_the\\_sites](https://www.auroragov.org/things_to_do/aurora_history_museum/historic_sites/explore_the_sites)

**Find Yourself**

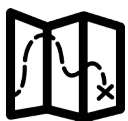
The High Line Canal meanders 71 miles across the Denver metro area, connecting 19 governmental jurisdictions. The Canal was designed to follow the high points of the topography, bringing just one foot less for every mile that it travels.



YOU ARE HERE

Signage plan by: INTERPRET SYSTEMS

*The conceptual thematic layout for the Thunder Tree, Sand Creek Lateral wayside sign (generally follows the High Line Canal Conservancy design standards). Please see the Wayside Signage Text Details section below for more text details. Not all of the proposed text is included in this mock-up.*



## Mapping the Visitor Experiences

The visitor flow in the information network for each targeted audience type reflects the typical sequence of information desired by the visitors. Basic orientation and virtual way-finding are key to direct visitors to the site and the visitor center. The targeted audience requires an information network necessary to support the success of each experience.

The interpretive experiences are layered, reflecting the need to serve different audiences. The layers are designed to stand alone, but also to pique interest in other interpretive opportunities that one may visit in-person on site or by conducting more research (with steps on how to make a research inquiry).

The prescriptions are presented to reflect the sequence of the desired visitor experience with the wayside signage or a visit to the Thunder Tree, Sand Creek Lateral Cultural Heritage Site. That experience is broken down into the following segments:





- Awareness and Pre-Trip (trip planning) experience: How that audience is informed to come and experience the Thunder Tree, Sand Creek Lateral Cultural Heritage site, including maps, brochures, social media etc.
- Navigation experience: Wayfinding, travel to the site.
- Arrival experience: Visitor options and landscape senses.
- Primary experience: The primary story points (take home messages).
- Departure experience: Reflection and action (encouraging further inquiry, participation in other City of Aurora offerings) and/or feedback.
- Return visit: Schedule other events to commemorate the site with speakers or other celebrations.
- Post-trip experience: Link to historic landmarks, other sites to visit along the High Line Canal Trail (partner link) and City of Aurora Parks and Open Space, Aurora History Museum.
- Potential extended experience: Information on other Historic Preservation events, educational programs for schools and educators volunteer information, etc.

The targeted audiences for the visitor experience of the Thunder Tree, Sand Creek Lateral Cultural Heritage Site have been selected as Park Visitors, Seniors, families with children and Nature and Historic Preservation advocates.



### Targeted Audiences (all Groups)

Trip Stage	Information	Delivery Strategy/Comments
<b>Awareness and Pre-trip (trip planning)</b>	Marketing and trip planning	The site is listed in the activities to do for the Aurora Reservoir, historic sites brochure, other media (social, print – maps, website, Aurora





		Access TV etc.). Local neighborhood HOA/special district information outlets, etc.
<b>Navigation</b>	Orientation and wayfinding	Wayfinding signs on the High Line Canal Trail and in Del Mar Park (see Wayfinding section above).
<b>Arrival Experience</b>	Landscape today, interpretive signs, Tree, Park bench	Point of interest, at the wayside sign. They may experience more by visiting the QR code link They may also hear or see others experiencing the site.
<b>Primary Experience</b>	<p>Take home messages:</p> <p>This “Thunder Tree” saved two boys lives and inspired advocacy for the natural world.</p> <p>The Sand Creek Lateral was an important extension of the High Line Canal.</p>	Wayside signs on the following will be augmented by links to the Robert Pyle’s biography and other works, more information on the Sand Creek Lateral and the High Line Canal sites and opportunities. (Hosted link to be determined).
<b>Departure Experience</b>	Reflection at the bench, encourage further exploration. QR interaction.	Encourage participation in the City’s historic preservation program, Parks and Open Space and Museum programs
<b>Return Visit</b>	Encourage other Park Visitors to visit again	Promote the site within bike enthusiast groups via social media, maps etc.





<b>Post-trip</b>	Visit other historic sites and the City's nature centers encouraged	Signs should encourage more to explore on agencies websites, etc.
<b>Potential Extended Experiences</b>	In-person visit to the museum or historic nature center site/events	Mention opportunities in the wayside signs, brochures etc.

### Accessibility Considerations



*Web Content Accessibility Guidelines*

By order of State law HB21-1110 the interpretive panels and materials as a product of local government must comply with accessibility standards or risk lawsuits. All wayside exhibits, smart phone apps, web links, etc. should all be in compliance with these accessibility standards and requirements for both print and web-based resources. The signage should also consider the principals of Universal Design (UD) and Universal Design Learning (UDL) to reach various age and ability audiences.



### Media Descriptions

The wayside panel proposed is to follow the design concepts discussed previously Most exhibit bases are installed by directly burying their legs into tamped dirt; however for added stability cementing the bases in place may be preferred. The base's simple, unadorned form helps to reduce its visual intrusion on the landscape. They are often made of anodized aluminum, weatherproof steel or durable painted aluminum designed to provide years of service, even in harsh environments.

### Additional Enhancements

The City of Aurora is a multi-cultural population that is one of the most diverse cities in the United States. A sizable number of the residents are not native English speakers. As such it is recommended that the wayside sign have both English and Spanish translations. If the sign can not accommodate both language translations then a Spanish, (perhaps other languages, Korean, Vietnamese etc.) should be made available via the on-line QR link.





## Tactile Learning Elements

One of the targeted audiences are Families with young children since Del Mar Park has many play opportunities for kids (playground, pool etc.). It is suggested then that the City consider adding a touch element (such a brass cast of the Cottonwood tree bark or leaf) to the sign to add a tactile element to the wayside visitor experience.

## Wayside Signage Text Details

<b>Title:</b>	<b>Thunder Tree &amp; Sand Creel Lateral Cultural Heritage Site</b>
<b>Headline Catch Title:</b>	<b><i>"When people connect with nature, it happens somewhere."</i> - Robert M. Pyle</b> <b>This "Thunder Tree" saved two boys lives and inspired advocacy for the natural world...</b>
<b>Focus body text</b>	You are standing near the site of the hollowed-out Plains Cottonwood tree that gave shelter to Robert (Bob) Michael Pyle and his brother Tom during a freak, intense thunderstorm on July 27, 1954. Their experience that day and at other times during their childhood gave rise to Bob's book, <i>The Thunder Tree: Lessons From An Urban Wildland</i> , published in 1993. In this part-childhood memoir, part description of the natural and cultural history of the landscape along the High Line Canal, Bob reflects:
<b>Quote:</b>	<i>"Growing up on the wrong side of Denver to reach the mountains easily or often, I resorted to the tattered edges of the Great Plains on the back side of town. There I encountered a century-old irrigation channel known as the High Line Canal. Without a doubt, most of the elements of my life flowed from that."</i>
<b>Photo or drawing caption:</b>	<i>Thunder Tree drawing by Douglas Smith for Houghton-Mifflin book cover.</i>
<b>Provocation Statement:</b>	<i>As you walk along the High Line Canal—savoring its sounds, smells and the ever-changing play of light across</i>





	<i>water and vegetation—we invite you to reflect on your own relationship with the natural world. And to consider how mighty trees like cottonwoods spring forth from barely visible seeds, their many gifts filling us with joy, wonder and curiosity.</i>
<b>Photo or drawing caption:</b>	<i>Woodcut of Black-billed Magpie by Thea Linnaea Pyle</i>
<b>Headline Catch Title:</b>	<b>Do you wonder what the ditch is before you? It's the Sand Creek Lateral, an important High Line Canal extension.</b>
<b>Focus body text</b>	<i>The Sand Creek Lateral, connected to the nearby High Line Canal, was the original water conveyor to Fitzsimons Army Post and passes through the center of what is now Del Mar Park. The Northern Colorado Irrigation Company constructed the waterway from 1882 to 1883. The creation of the Rocky Mountain Arsenal brought the northern 5.8 miles of the Sand Creek Lateral under the military facility's operation. The 15-mile lateral, an integral component of the largest canal system completed in Colorado, stimulated settlement and agricultural development of the area. It was an unlined, earthen ditch considerably smaller in dimensions than the main canal. Structures on the lateral included devices to control, carry, divert and measure the flow of water such as head works, drop checks and culverts.</i>
<b>Provocation Statement:</b>	One can still see drop structures along the lateral near the Thunder Tree, here in Del Mar Park. You are encouraged to carefully explore and see these historic features.
<b>Credit and logo (small):</b>	Signage plan by: <i>Interpret Site LLC</i>



### QR Program Proposed Content and Signage

The QR link offers the opportunity to hear Robert Pyle today recount his experience that day when he first encountered the Thunder Tree. The Aurora History Museum should







conduct an oral interview and include his re-telling of this story as part of the visitor experience.



## Effectiveness Monitoring and Re-Tooling

Key indicators for success based on the proposed interpretive goals should be monitored and fine tuned over time. It is recommended that once the plan has been implemented and established, that all the agency partners create a uniform evaluation plan and that the agencies meet and share their evaluations indicating success or need for improvement to the plan, as well as any of the strategies or media products. This could be articulated in a separate plan, protocol or memorandum of understanding that identifies areas in need of improvement.

### Evaluation techniques and strategies

The following is a brief summary of selected approaches based on the National Park Service's *Interpretive Planning Tools for Heritage Areas, Historic Trails and Gateways*. Evaluation can be direct (audience interacts with evaluator) or indirect (visitors' actions and responses are tracked without their knowledge). Qualitative measures assess the depth and effectiveness of the experience (perhaps by interviewing respondents), while quantitative approaches produce measurable results (determining, for example, what percentage of visitors surveyed were able to describe the significance of the site or region).

Since it is impossible to evaluate each visitor's experience, evaluators must rely on well-designed sampling (surveying a specific number) of visitors to represent the whole. In order to be valid, sampling techniques must be random and representative of the whole spectrum of visitors. For example, every tenth person who visits the site while a recorder is at the site would be asked to respond to a survey – not just the visitors who look the friendliest. Informal evaluation can also be revealing. For example, interpreters conduct informal evaluation during every visitor contact to gain a general impression of program effectiveness. While the results of the conversations are not scientific, they still play a role in assessing interpretive services.

Planning for evaluation – A robust evaluation plan should be adopted. A regular schedule of evaluation should be an ongoing activity of each agency. The evaluation accomplishes the following:

- Provides a balanced view of program effectiveness
- Utilizes feedback that has been gathered systematically (not just anecdotally)
- Gathers empirical evidence of strong and weak areas of a program or service





- Fuels opportunities to improve effectiveness

### **Monitoring and Site Stewardship**

Currently members of the Historic Preservation Commission regularly visit landmark and cultural heritage sites to identify issues and problems and report on them at monthly meetings. Perhaps local community groups around Del Mar Park could also adopt and help to monitor the sign for damages, vandalism and repair/reporting needs.

### **Evaluating the Plan (Ename Charter)**

ICOMOS (International Council on Monuments and Sites) has created a “Charter for the Interpretation and Presentation of Cultural Heritage Sites,” also known as the Ename Charter. The Charter puts forth principles for effective interpretation, addressing the following:

- Access and understanding
- Information sources
- Context and setting
- Authenticity
- Sustainability
- Inclusiveness
- Research, training and evaluation
- The need for ongoing evaluation and adjustment

The implementation of the Thunder Tree, Sand Creek Lateral Cultural Heritage Site Interpretive Plan and all its elements should be evaluated using this internationally recognized standard rubric and evaluation tool.

### **Begin Implementation**

Once this Interpretive Plan is adopted it should be posted on a website as a way that encourages continued public feedback. Print copies should also be produced for those truly interested. Distributing a press release, hosting a press event and making presentations to organizations and governments are good ways to celebrate the completion of the plan and let partners and the public know that implementation has begun.





## **Moving the Interpretive Plan Forward**

Even small-scale, inexpensive implementation projects can attract media attention and demonstrate steady progress to constituents and financial supporters, so these should be celebrated and publicized with each milestone and victory, no matter how small. Publicly thank the appropriate partners and supporters and commemorate their efforts through special events, news releases, plaques and other means.

Showcasing ongoing programs will motivate managers, staff and partners and will maintain existing sources of public support and add new ones. Implementation may lead to increased visitation, strengthened engagement of residents through greater use of the site's or region's assets and enhanced stewardship through financial contributions or volunteer efforts. It is vital to continue to communicate the implementation plans and milestones to the public and all partners, using the strategies put in place during planning. Together we can all benefit from a carefully crafted and executed interpretive plan for the Thunder Tree, Sand Creek Lateral – a significant City Cultural Heritage Site with a large story to share!





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