HEBER CITY CORPORATION
75 North Main Street
Heber City, UT 84032
Planning Commission Meeting

September 26, 2023

6:00 p.m. – Regular Meeting

-Time and Order of Items are approximate and may be changed as Time Permits-

Public notice is hereby given that the monthly meeting of the Heber City Planning Commission will be in the Heber City Office Building, 75 North Main, South door, in the Council Chambers upstairs.

1. **Regular Meeting:**

   I. Call to Order

   II. Roll Call

   III. Pledge of Allegiance: By Invitation

   IV. Recuse for Conflict of Interest

2. **Consent Agenda:**

   I. August 22, 2023 Minutes for Approval

3. **Action Items:**

   I. Public Hearing for proposed Heber City Park Design Standards (Jamie Baron, Planner LDI)

4. **Work Meeting: N/A**

5. **Administrative Items:**

   I. Planning Commission Training

6. **Adjournment:**

Ordinance 2006-05 allows Commission Members to participate in meetings via telecommunications media.

In accordance with the Americans with Disabilities Act, those needing special accommodations during this meeting or who are non-English speaking should contact Trina Cooke at the Heber City Offices 435.657.7886 at least eight hours prior to the meeting.

Posted on September 23, 2023, in the Heber City Municipal Building located at 75 North Main, the Heber City Website at www.heberut.gov, and on the Utah Public Notice Website at http://pmn.utah.gov. Notice provided to the Wasatch Wave.

Planning Commission Staff Report

MEETING DATE: 9/26/2023
SUBJECT: August 22, 2023 Minutes for Approval
RESPONSIBLE:
DEPARTMENT: Planning
STRATEGIC RELEVANCE:

SUMMARY

RECOMMENDATION

BACKGROUND

DISCUSSION

FISCAL IMPACT

CONCLUSION

ALTERNATIVES

Staff Recommended Option - Approval

I move to **approve** the item as presented, with the findings and conditions as presented in the conclusion above.

Alterntive 2 - Continuance

I move to **continue** the item to another meeting on , with direction to the applicant and/or Staff on information and / or changes needed to render a decision, as follows:

Alternative 3 - DENIAL
I move to **deny** the item with the following findings.

POTENTIAL MOTIONS

ACCOUNTABILITY

Department: Planning
Staff member:

EXHIBITS

1. 08.22.2023 Minutes for Approval.

Heber City Corporation
75 North Main Street
Heber City, Utah

PLANNING COMMISSION MEETING

Tuesday, August 22, 2023
6:00 pm.
REGULAR MEETING

The Planning Commission of Heber City, Wasatch County, Utah, met in a Joint Meeting on August 22, 2023, in the City Council Chambers in Heber City, Utah.

1. Regular Meeting:

I. Call to Order – Chairman Gunn called the Work Meeting to order at 6:05 p.m. and welcomed everyone present

II. Roll Call

Present: **Planning Commission**
Chairman Dennis Gunn
Commissioner Phil Jordan
Commissioner Sid Ostergaard
Commissioner Josh Knight
Commissioner Darek Slagowski
Commissioner Robert Wilson

Staff: Community Development Director, Tony Kohler
Planning Manager, Jamie Baron
Assistant Planning Office Manager, Meshelle Kijanen
Consultant GCGarcia
City Engineer, Gordon Miner

Public: Shelton Taylor, Kendell Crittenden, Russell Watts, Rod Riddle, Piper Riddle, Weston Broadbent, Ralph Ogilvie

Online: N/A

III. Pledge of Allegiance: Commissioner Phil Jordan

IV. Recuse for Conflict of Interest N/A

2. Consent Agenda:

1. Minutes for Approval:
   a. June 13, 2023
   b. July 11, 2023

Commissioner Knight moved to approve the minutes as written for both June 13th and July 11th. Commissioner Jordan seconded and the motion passed unanimously.

3. <u>Action Items:</u>

I. Public Hearing to discuss a Master Development Agreement for Celebration Workforce Housing Community, located at 350 East 1200 South. (Planner Jamie Baron/Engineer Gordon Miner)

Planner Baron explained this was a public hearing in consideration of the Celebration Workforce Housing Community. He said the questions that evening were if the City should amend the General Plan to allow for this development, or if they should use a development instead, and also if the City should allow for development within the airport overlay zone. Planner Baron then provided some background for the development and indicated it was in the C-2 zone, although Envision Heber identified this area as being suited for light manufacturing and tech businesses as well as commercial uses. He noted some of the issues were that the plan involved a density of 26.29 units per acre, although the General Plan called for less than that, and also that there was not supposed to be development within the airport overlay zone due to noise and safety issues. Planner Baron noted the apartments would be deed-restricted as affordable units and shared photos of the proposed development. He highlighted there was a hotel as well which was a conditional use, and also noted the buildings would all be three stories tall.

Chairman Gunn asked about the airport overlay zone, and asked for clarification about the rule which prohibited residential housing. Planner Baron explained the airport overlay zone as well as the General Plan did not allow for residential development within the zone, so they would need to consider if they were willing to either amend the General Plan or enter into a MDA with the City to make an exception. Planner Baron elaborated the airport overlay zone was a City mandate, and not required by the FAA although it was recommended. He discussed there would need to be noticing that residents lived within the zone and the residents would need to acknowledge that they could not hold the City liable in any way. Chairman Gunn noted this was located near the Fire Station, and Planner Baron explained the Fire Station had been approved in the overlay zone since it was not considered to be residential even though some firefighters slept there.

Commissioner Knight asked if an MDA with the City opened them up to any issues, or if there were any other places a similar development could happen. Planner Baron replied the MDA would be specific to this property, so it would not give anyone else the right to develop a similar development. Planner Baron elaborated if they did a text amendment to the General Plan then that would open them up to other similar concepts, although if they just did an MDA it would not work that way. Planner Baron explained other developers could request to do similar developments, although it would have to go through the full application process and would not be streamlined in any way if they were to move forward with this MDA. Commissioner Knight also clarified the building heights would be in compliance with what was specified by the airport overlay zone.

Commissioner Jordan asked what the rationale was, if any, behind having the units be only for rent without an option for ownership. The applicant, Mr. Russ Watts, came forward to address this question, and stated first that he appreciated the opportunity for the development to be considered by the Planning Commission. He discussed how about 70% of the people he worked with had to commute into the City, and something needed to be done to help the community. He

explained he wanted to call it workforce housing rather than affordable housing, since affordable housing had connotations of being government subsidized and poorly managed. Mr. Watts expressed workforce housing helped unite a community and was important for the Valley. He clarified these units would be for lease to individuals, although major employers such as the School Board could purchase blocks of housing for their employees to rent. He emphasized it was important for people to be able to live and work in the same community and felt workforce housing was an effective way to do this. Mr. Watts expressed he was proud of the Valley and was interested to hear from a variety of entities that evening in the public hearing. He said they were trying to figure out how they could assist the City, and acknowledged that while his development would not solve everything, he felt it could help. He also cited the success of communities such as this one in other cities, including Tempe, Arizona, and he highlighted the advantage of having a walkable community.

Commissioner Jordan asked about the management plan for the rental properties. He added he was the president of his HOA which was why he was interested to know Mr. Watt's plan. Mr. Watts discussed the success of the development hinged on having master leases rather than selling the units, so his company could retain control of their ownership and management. Mr. Watts explained he wanted to have a system in place where the entities which signed master leases could have input as to the management, although at an upper level he wanted his company to retain control. He explained he did not want the uses to get away from his company, and he wanted to be able to determine who really needed the units. Mr. Watts said these were all things he was willing to have tied into the development agreement with the City. Commissioner Jordan thought this way they could have a clear hierarchy of who really needed this housing. Mr. Watts thought it was also helpful to have the master leasees have some say in the management, as this made them more involved in the project.

Planner Baron reiterated the density was higher than what was indicated in the General Plan, as it was in the range of 26 units per acre. Planner Baron advised the Planning Commission to open the Public Hearing before they began deliberations.

Assistant Planning Office Manager, Meshelle Kijanen read aloud the regulations for the Public Hearing.

Chairman Gunn opened the Public Hearing.

Kendall Crittenten spoke on behalf of the Housing Authority and the County. He thought having the County might buy into this type of housing in the future and it could be a good thing, although he did think having an option for home ownership would be beneficial. He discussed the challenges of affording to live in the Valley and he agreed the master leases would be helpful for people finding employment within the City. Mr. Crittenten noted in regards to the airport overlay zone that the high school in the area was higher than the proposed buildings in the development, so he did not think there would be a significant issue. He hoped this could get worked out and the development could move forward.

Weston Broadbent spoke on behalf of the School District. He said the School District was the largest employer in the Valley and had a huge housing problem as far as their staffing was

concerned. Mr. Broadbent discussed a program run by the high school in which students took a construction class and built a home over the course of the semester, and then sold the house at-cost to a teacher who needed it. However, he explained that last year their costs were not in-line with what teachers could afford. He said this year they were renting out a house to a teacher, and they were unsure what to do with the house long term. Mr. Broadbent expressed he was strongly in favor of the Celebration Workforce Development and said something like this would be a godsend to his teachers.

Commissioner Jordan asked if they had considered using the land that the School District owned to develop workforce housing, and Mr. Broadbent said they had had a couple conversations about this possibility, although they had not taken it further than some discussions. Commissioner Jordan noted this was something being done in other Counties, notably in South Summit. Commissioner Jordan thought it was a good case study and said there were developers out there who could get funding to do a project like that.

Piper Riddle spoke next. She said she was involved with IHC, and said she had not heard from any of the involved entities about a desire to be in the development business. She pointed out they had a valuable piece of donated land, and said IHC also had a parcel of land which needed to be developed. She expressed she wanted the Planning Commission to not miss any opportunities.

Ralph Ogilvie discussed how he had to block the point of egress from his property on school mornings due to how congested the traffic was during pick up and drop off. He worried that given the planned density for the new development that traffic would continue to be an issue, and he noted this was a significant safety concern. He discussed he had witnessed many accidents and near-accidents due to the inundation of traffic during peak hours. Mr. Ogilvie clarified he was in support of the project overall; however, he thought the developer needed to take the flow of traffic into consideration as they moved forward. He also expressed concerns about the proposed density.

Chairman Gunn expressed how important it was to have their essential workers within Heber City. He discussed how he worked for the Fire District and it was a huge concern for them to have employees within the Valley. Chairman Gunn felt the way they were approaching affordable housing was a temporary solution to a permanent issue, and he asked all of the entities present that evening how they could fund things so people could afford to live in the Valley. He asked the audience if their teachers and Public Works employees should be paid more, and wondered if they could start some kind of fund to increase their wages so they would be able to afford to live in the area. Chairman Gunn opined this development was something they desperately needed right now, although they needed to consider more long term solutions as well. Planner Kohler replied to these points and said they needed to do developments such as this one as well as try to find ways to increase wages.

Commissioner Ostergaard acknowledged Mr. Ogilvie's earlier comment about traffic and agreed it was very congested during the start and end of the school day. He asked if they could include a traffic study as part of the MDA, and determine if they needed to add lights or signs. Planner Baron noted it was within their purview to require a traffic study and this was something they

could certainly include if they wanted to. Planner Baron acknowledged how much the traffic would increase on 1200 once the rental units and hotels went in as well. Commissioner Ostergaard commented it was important to be sensitive to the needs of Mr. Ogilvie and his neighbors who would be impacted by this development, and asked if they had final numbers yet for parking in the development. Planner Baron replied they did not have firm numbers yet, although he did not think they were overparked. Planner Baron added the concern was usually under parking if anything, and said they usually aimed to have two stalls per unit and one stall per hotel room. Commissioner Jordan also advocated they add a bus stop by the development as that would also substantially alleviate traffic concerns.

Ms. Riddle echoed the traffic concerns voiced by Mr. Ogilvie. She reminded the Commission that the School District had recently broken down on a new school site which would increase traffic as well. Ms. Riddle agreed that they needed to increase the pay for essential workers, but urged the Commission not to put the burden of this increase on taxpayers. She recalled there had been a lot of opposition to the tax increase at the recent Truth in Taxation meeting, and pointed out many wage increases were at the cost of the taxpayer, many of whom also struggled to afford the cost of living in the Valley. Chairman Gunn agreed with these points although noted Heber City was already one of the highest paying districts in the State.

Commissioner Wilson asked for clarification as to why there was a hotel as part of the workforce housing development, and inquired as to what its purpose was. He also reiterated the sentiments about increased traffic and concerns about congestion. Mr. Watts addressed these questions, and explained the hotel was intended for people who would be working in the area for an extended period of time. Mr. Wilson clarified people staying in the hotel would have to prove in some way that they were working for a long period of time and Mr. Watts confirmed that was correct.

Chairman Gunn noted while they required each development to consider traffic, he wondered if they needed to do more as a City to manage traffic. He noted even if each development only increased traffic a little bit, all of the developments as a whole had a more substantial impact on the flow of traffic. Chairman Gunn asked what they could do as a City to study traffic increases, and Planner Baron explained traffic studies were holistic in that they considered both the development in question as well as current and planned developments in the vicinity.

Commissioner Knight asked about the master lease agreements, and he expressed curiosity about the breakdown of how the company would determine rates. He wondered what these rates would be based on, and if it would be a flat rate for all or determined by income. Mr. Watts explained he had worked with the state of Utah to come up with rates, and explained it would be based on 60% of the median income. Mr. Watts said they were still working on developing rates and he did not have any firm numbers at this time. Commissioner Knight circled back to Commissioner Ostergaard's comments about home ownership, and acknowledged it was much more difficult to buy a home now compared to several years ago. Commissioner Knight expressed he thought 60% of median income was acceptable, and voiced agreement that they needed to pay teachers much more. Commissioner Knight confirmed this was strictly for middle working class and Mr. Watts clarified that it was. Mr. Watts agreed this would be a process and noted the interest rate was currently at 8%.

Commissioner Knight also expressed that he was happy to see Mr. Watt's company was behind the development and felt assured his team would do a good job designing the buildings. Commissioner Knight spoke about how no one could have predicted what Covid-19 would have done to the community, and thought a development such as this put them in the right direction.

Chairman expressed that he felt a lot of people had stepped up to the plate with this project and now it was the Planning Commission's time.

Commissioner Jordan made a motion to forward a positive recommendation of the Celebration Workforce development to City Council with the findings and conditions as outlined in the report, namely that the apartment rental units be deed-restricted as affordable, the streetlights be amended in order to be in compliance with their Lighting Code, and that a traffic study be required and an in-depth review of the study be considered with the understanding of the safety issues given the current population. Commissioner Jordan added that there be new options for the master leases to be monitored and reviewed as well as that they understand there is only one property management for this development. He lastly noted that they also reach out to High Valley for opportunities as far as transit and traffic circulation was concerned. Commissioner Knight seconded and the motion carried.

The Commissioner thanked Mr. Watts for his work and wished him good luck with the continuation of the development.

II. Request for a Site Plan approval for New London South Pad-Site Plan, located at 900 North Hwy 40. (Planner Mark Vlasic/Engineer, Horrocks Engineering)

Planner Aubrey Larsen explained this item was the site plan approval for a proposed development located at 900 North Highway 40. She explained the site plan, and noted this would be a multi-tenant development and oriented the Planning Commission to the location of the site on 900 North Highway 40. She noted the nearby buildings and businesses as well.

Planner Larsen recalled the site plan had first been presented at the July 12th Planning Commission meeting, and said at that time the Planning Commission and Staff had requested some revisions and clarifications, and she reported the applicant and since come back and addressed all of those things. Specifically, she indicated the applicant had clarified the use would be retail and possibly a restaurant, and had also provided justification about how many parking stalls were included, although she specified they did need additional clarification about the actual number of stalls. She also expressed the applicant had clarified some design details and had given details of the trash enclosure.

Planner Larsen summarized that Staff recommended approval as the application was consistent with the General Plan, and outlined four new findings and conditions as follows: that an updated site plan be submitted with the current number of parking stalls, all requirements of City Engineer be met, all Code requirements be met, and all stipulations put forth by the Planning Commission be met as well.

Planner Larsen shared drawings of the overall site plan and highlighted some key features, namely where parking would be located. She also shared the table from their ordinance which explained how many parking stalls were required for developments. She also indicated the landscaping plan and and some drawings of the trash enclosure and indicated the elevations. She reiterated this was all in accordance with their Code.

Chairman Gunn invited the applicant to speak, and the applicant introduce himself although his name was inaudible. The applicant expressed confusion as to where 33 parking stalls had come from, and clarified they intended to have 19 parking stalls with the site. The applicant added they had an underlying declaration with Smith's and planned on sharing some of the parking with them.

Commissioner Wilson asked for clarification about the back entrance, and if it would be used exclusively for deliveries, to which the applicant explained it was intended to be an end-cap drive through. Commissioner Wilson mentioned that in general, the City had not been allowing new developments to have drive-ups since they constricted traffic and he wondered if the U-shaped drive through would work since the development was located off of 40, which was a busy road. Commissioner Knight pointed out that the closest entrance and exit were farther down and did not empty out onto 40, although he agreed with Commissioner Wilson's concerns about traffic piling up due to the U drive through. The applicant clarified the U shaped drive through would only be for one business, which should prevent queuing issues.

Commissioner Jordan spoke about the architecture for the proposed development and asked if it matched the aesthetic of the surrounding area. He pointed out it was the beginning of their City and it was important to keep a cohesive design. Commissioner Knight noted that it had a similar design to the nearby Smith's market. The applicant confirmed they had pulled inspiration from Smith's in their design, and said it had been coordinated with Smith's at the time the deal had been made. The applicant continued that the concept of the architecture was to attempt to blend traditional retail frontage for signage purposes while keeping a more modern feel. The applicant added that any architecture in the future would match this design concept as well.

Commissioner Jordan then addressed drive throughs, although Planner Baron explained the C-3 zone, which was their primary downtown zone, did not allow for drive throughs. Commissioner Jordan also inquired about the front elevation, and Planner Larsen noted she could get more information for him in that regard since the presentation that evening only had a screenshot from the site plan discussing the elevations of the buildings.

The applicant also commented on the materials they were planning to use as well, and specifically noted there would be a corrugated metal panel canopy extending from the front of the buildings. Commissioner Slagowski opined he did not like how plain the back of the buildings were, though acknowledged this was standard for retail buildings and it was not a huge issue. However, Commissioner Ostergaard felt that since it was a standalone building, all four sides should be considered. Commissioner Ostergaard proposed some metal panels be added in order to break up the building and add visual interest. The Commissioners briefly discussed other buildings in Heber which were boring to look at from the back. Commissioner Wilson asked about signage, and the applicant replied they were being cognizant to keep all the signs

uniform throughout the building as far as size was concerned. The applicant added they required all their tenants to submit signage plans for approval before they put anything up. Planner Baron also commented the City had a detailed sign ordinance which had standards the tenants would all have to adhere to. The applicant added that signage would only be allowed on the west side, and said there could be a separate monument sign which listed all of the tenants, if that was something the Commission wanted to include. Planner Baron noted per their ordinance, only the corner tenant would be allowed to have signage on two sides of the building.

Commissioner Knight moved to approve the request for the site plan approval as presented, with the findings and conditions as presented by Staff. Chairman Gunn clarified that the parking stall requirement was in the condition. Commissioner Ostergaard suggested that a shared parking agreement be added to the site plan for clarity for the tenants, and Commissioner Knight added this to the motion. Commissioner Wilson seconded the motion, and Chairman Gunn asked if there was any discussion about the motion as it stood.

Commissioner Jordan asked how outdoor seating would be addressed, and specifically asked if there was sufficient outdoor seating as they wanted to encourage people to be outside. The applicant replied they did provide some outdoor seating, particularly for the tenants on the end caps. The applicant also mentioned the U-shaped drive through included an outdoor patio.

Commissioner Knight stated his motion still stood, and the motion passed.

4. <u>Work Meeting:</u>

I. Discuss a Master Development Agreement proposal for Wasatch County Event Center grounds. (Planner Tony Kohler)

Planner Kohler explained they would be discussing a new cowboy camp at the Wasatch County Event Grounds and shared the vicinity map to orient the Commission. He explained there were some noncompliance issues with various aspects of the Event Center, and so the City had decided to form an MDA with them which recognized the nonconformity to the City Code. Planner Kohler listed the issues as follows: the street cross section did not include an eight-foot planter, the fence along 650 South did not include a transparent section for visibility, the masonry fence in the right of way was only six feet rather than the required eight, the internal roads were not hard surfaced, and it was unclear if it was Dark Sky compliant.

Commissioner Knight asked if there had been communication between the City and County about this, and Planner Kohler summarized that there had not been much communication due to the County having to meet a tight deadline to get the Event Center completed in time for a rodeo. Planner Kohler added that while he imagined the County had good reasons for rushing construction as they had, the City had adopted the Public Facility Zone with certain standards and assumed the County would eventually comply, though they had not. Planner Kohler hoped the County would better comply with their standards in the future. Chairman Gunn opined he was not upset about the fencing since it was temporary, although he thought the County should do a better job in complying with landscaping standards. Planner Baron agreed, and expressed he was hoping for an eight-foot planter and a five-foot sidewalk with some trees. Planner Baron

specified the City had been intending for the County to match how they had landscaped the surrounding roads.

Planner Kohler summarized that he thought retroactively asking for compliance would not be successful, but thought they could at least do some mitigation now. Chairman Gunn requested they show a plan view and Planner Baron pulled up a visual. Chairman Gunn thought the project looked incomplete. Planner Baron expressed the Planning Commission should come up with a list of questions for the County for when County representatives came to the Commission meeting, and he added his main concerns were about safety issues in regards to the train tracks. Planner Baron clarified the train was actually managed by UDOT. Commissioner Wilson added the visibility concerns at the Event Center were not just for traffic, but pedestrian visibility as well as people walked back to their cars after large events.

Planner Kohler discussed the meetings he had held with the County, and recalled that at their last meeting he and the City Manager had walked the County representatives through their standards and explained how the center did not comply with them. Planner Kohler reported that at the time of that meeting, which he thought was around May of that year, the County representatives had expressed concerns about not being done with construction in time for the rodeo, and so that had been when they had come up with the idea for an MDA which acknowledged the nonconformity to Heber's Code. Planner Kohler added both the City and the County had expressed their intention to work on having better communication in the future, and he briefly discussed the challenges of having so many different entities having the jurisdiction to do construction. Chairman Gunn commented that life safety issues were important, and he felt since the County had violated their Code, this was a matter for the City Attorney. Planner Kohler replied that the City Attorney had actually been present at the May meeting, and he reported the stance of the City Attorney had been to sign an MDA as well. Chairman Gunn acknowledged this point, but still thought they should work with the City Attorney as far as their risk was concerned.

Planner Kohler agreed life safety issues were paramount and said they could push for compliance on those points. Chairman Gunn pointed out Heber City had protected itself from litigation in the future in case someone did get hurt at the Event Center, and said since the MDA acknowledged the issues and noncompliance it would keep the City from being sued. Chairman Gunn continued to discuss that no entities, however large, were entitled to break the law when it came to public safety, and voiced the opinion public safety was always paramount. Planner Kohler noted since Heber had extended the County a lot of grace in their violations of their Code, the City could push this point to their advantage when it came to getting other things that they needed cooperation from the County in order to get accomplished.

II. Discuss Colorado Tour (Planner Jamie Baron)

Planner Baron presented a slideshow with information summarizing their findings from a recent tour of several Colorado cities that he, as well as some other members of City Staff and Planning Commission had participated in. Planner Baron explained the tour had focused on the design of downtown centers, and particularly their main plazas. He said they had visited Glenwood Springs, Boulder, Fort Collins, and Steamboat Springs over the course of three days.

Planner Baron said they had first gone to Glenwood Springs, and reported their main takeaways had been the architecture as well as limited parking requirements. He explained how I-70 ran through the town, and noted some of the ways Glenwood Springs handled this to make that thoroughfare more appealing. Planner Baron spoke about how the City had revitalized their downtown area, and indicated a curbless main street, which they referred to as a Festival Street. He commented they had removed any restrictions on usage in the main downtown area, and had a height restriction in place for the buildings of 40 feet. Commissioner Jordan asked about setbacks, and Planner Baron replied there was not a requirement for setbacks for the buildings on their main street.

Planner Baron shared photographs of Glenwood Springs' Grand Avenue, and noted the mix of materials used. He commented the materials were primarily masonry and brick, and he thought the most important part was the finish, as they had found that some of the brick buildings had looked bland and unappealing, although other brick buildings featured more detail and were very aesthetic. Planner Baron also highlighted the awnings on the buildings, which he explained added an outdoor roof of sorts and made the City more walkable. Planner Baron specifically noted they had been very impressed with the architecture of a large parking garage, and expressed that they had been impressed with the amount of murals throughout the City as well.

Planner Baron reported that next, they had visited Boulder and specifically their famous Pearl Street, which had been a popular pedestrian area for decades. He explained how Pearl Street was partitioned off from the drivable roads, and said Heber wanted to do something similar to this. Beyond Pearl Street, he said their main findings there were the architecture, pedestrian streets, and prioritizing pedestrian traffic. Planner Baron clarified they had visited early in the morning, which was why there were not a lot of people walking around in their photographs. Planner Baron presented some photographs and indicated some key architectural features which they had liked.

Planner Baron said Fort Collins had yielded significant finds for them, and noted particularly their downtown center, which featured a splash pad and string lighting. He discussed how downtown development planning took a lot of time, and said this would be important to keep in mind as Heber developed their downtown. Planner Baron elaborated they had really enjoyed Fort Collins and spent most of their day exploring the City. He highlighted the ways in which Fort Collins blended their old buildings with newer developments, and noted that they also had a main street which was curbless and used for festivals and events. Planner Baron thought Fort Collins had good examples of pedestrian walkways as well, and commented how Heber could integrate some of these concepts into their own City.

Planner Baron moved on to Steamboat Springs and discussed traffic. He said Highway 40 was the only route into the City, and although there was only one way in and out, they had not noticed much truck traffic on their way in. He reported Steamboat Springs had been vibrant and busy, with a bustling downtown. He shared photographs of their famer's market, and felt this had been very well done and a high point of their visit to Steamboat Springs. He also noted there was a lot of rooftop dining, which he thought was great as everyone wanted to be outside and this was a cheap way to have downtown outdoor dining options. Planner Baron opined that they should push for more rooftop dining in Heber's downtown area. Again, Planner Baron reported

they had found the finish of the buildings more significant than materials used when it came to architecture, and shared some photographs which illustrated this point. Planner Baron also commented on their art and shared that utility boxes had been painted and there were many murals throughout the City. He added this had the added benefit of cutting their graffiti down as well.

Planner Baron reiterated time was of the essence for Heber, and said building up their downtown in the way they wanted it to look would take a lot of time. He summarized some key points and said that they needed to reduce parking restrictions, integrate a seamless transition from festival streets to regular streets, and prioritize pedestrian traffic. Chairman Gunn added that the idea of an outside community was important, and pointed out having things like shaded areas and benches was significant. Planner Baron thought parking limitations and parking garages were going to be their biggest hurdle, and he also thought they needed to address architecture in Heber sooner rather than later, so that as they found people to invest in Heber it already had the architectural standards that the Planning Commission wanted to see. Planner Baron added that Roger Brooks had also recently visited and given some recommendations for developing Heber.

Commissioner Jordan wondered how to increase public involvement in these efforts, and specifically asked how they could increase engagement with high school students. Commissioner Jordan thought Heber City needed to cultivate their identity; decide who they were and who they wanted to be. Chairman Gunn also extended thanks to City Staff for coordinating this trip and expressed he had gotten a lot out of it. Chairman Gunn specifically expressed how much he liked Fort Collins and hoped Heber could draw inspiration from them. He emphasized how important it was for them to get a parking garage downtown. Planner Baron recalled Roger Brooks had told him "parking doesn't have to be free, it just has to be worth it," and explained this meant they did not have to provide free parking, but they did have to have a structure which was nice enough that people were willing to pay for them. Commissioner Jordan pointed out the Planning Commission needed to be the entity to "bang the drum," so to speak, and entice developers and investors to come into their downtown area.

The Commissioners agreed they needed to extend a lot of focus to downtown development, and proposed a joint session be held with City Council to establish a framework moving forward. Planner Baron agreed they needed to act as soon as possible.

5. <u>Administrative Item: N/A</u>

6. <u>Adjournment:</u>

Commissioner Knight motioned to adjourn and the motion passed.

_____Meshelle Kijanen_____
Planning Department Administrator

Planning Commission Staff Report

MEETING DATE:	9/26/2023
SUBJECT:	Public Hearing for proposed Heber City Park Design Standards (Jamie Baron, Planner LDI)
RESPONSIBLE:	Aubrey Larsen
DEPARTMENT:	Planning
STRATEGIC RELEVANCE:	Evolvling Heber's Park System

SUMMARY

The City has gone into a contract with Landmark Design Inc. (LDI) to establish park standards to provide the minimum requirements for public parks, whether publicly funded or built and dedicated with developments. A draft of the Park Standards Manual as well as the accompanying standard landscape drawings and standard landscape specifications have been provided for review by the Planning Commission.

RECOMMENDATION

Staff recommends the Planning Commission hold a public hearing, take public comment, and forward a recommendation to the City Council.

BACKGROUND

Heber City is set on establishing a world-class parks, trails, and open space system. As an emerging recreational destination and a rapidly growing community, ensuring that all parks in the city reflect an acceptable standard is a critical step for achieving this goal. The Heber City Park Standards establish a coordinated and comprehensive park design and development framework for existing and future parks in order to meet the needs and expectations of the city and its current and future residents.

The project kickoff was held on March 16, 2023 with LDI planning consultants Mark Vlasic, Hugh Holt, and Aubrey Larsen and Heber City staff Mark Rounds and Jamie Baron. Main discussion items included:

- The desire for the guide to be easy to understand with clear distinctions between "rules" and "guidelines" e.g. fixed vs. flexible.
- Needs and requirements for park irritation, planting, amenities, signage, and fencing standards
- Since the project kickoff, regular coordination and project check-in meetings have been held.

On April 18, 2023, Heber City Planning Manager Jamie Baron provided the City Council with a project update during their working meeting. Key takeaways are summarized as follows:

Fixed Standards

- Comfortable moving forward with the fixed standards.

Flexible Standards

1-Areas of Agreement

- Aesthetics and brand are important. Want something that says, “this is the Heber Valley”.
- Comfortable with North Village themes but want a lot of flexibility.
- There should be some sort of “fingerprint” on the flexible standards.
- Don’t think we need to re-invent the wheel; take a look at some of the parks and park systems that are interesting. St. George, such as tree-house park, ninja parkour park is one example.
- Lighting must be dark sky and possibly solar-powered.
- Want open green spaces, and keeping green lawns will be important, especially considering the increased density that is approaching.
- Waterwise considerations are important.

2-Areas of Difference

- Aesthetics is really wishy-washy; would be against a city-wide standard as all parks are different. Don’t want to over-regulate them. Against standardizing design themes, but would be in favor of standardized signs, for example.
- Wondering do we want to have more of a fixed look for signs, for example (maybe have a tweak depending on the location or area in the city a ’la SLC wayfinding signage). Important to have variety and create places with different feelings and functions. But do want a unified sign system.
- Have all parks include ADA/all-ability accessible play; however, might have one all-abilities park or one all-abilities playground as well.

3-Neutral Areas

- Brown Canyon sandstone is Heber iconic, and should be in all signs (in addition to other materials) and in the parks.
- Olympic theme in Main Street Park (a nod to the Olympics).
- Would like to see an agriculture -themed park, an airport park, other themes specific to Heber (Provo River, Olympics, railroads, Fizgerald Park with a historic theme and an interpretive center, etc.). NOTE: may want to develop some potential themes for all of the park sites in the city as a sort of starting/programming point of departure.
- Like the Blueways sign for the river as a starting point.

A draft of the Park Standards Manual and accompanying standard drawings and specifications were presented to the POST committee on August 14, 2023. The committee was generally happy with the guide and most comments pertained to the minimum standards/ point system. Since meeting with the committee, staff have continued to refine the guidebook's language and layout and integrate feedback from the POST committee.

On September 12, 2023 a draft of the Heber City Park Design Standards was presented to the Planning Commission.

DISCUSSION

Any conditions, changes, or recommendations as articulated by the Planning Commission.

FISCAL IMPACT

The contract is $28,250 and has been executed. Some additional cost for remaining work may be negotiated.

CONCLUSION

Staff is seeking a positive recommendation of the Heber City Park Design Standards to the City Council.

ALTERNATIVES

Staff Recommended Option - Positive Recommendation

"I move to forward a **positive recommendation** of the Heber City Park Design Standards to the City Council with the findings and conditions":

Findings:

1. The Planning Commission held a public hearing on September 26, 2023.
2. The Planning Commission forwarded a positive recommendation on September 26, 2023.
3. The proposed Heber City Park Design Standards are consistent with the General Plan.

Conditions:

1. Any other conditions or changes as articulated by the Planning Commission.

Alternative 2 - Continuation

"I move to continue this item with the following direction to the staff and the applicant:"

Alternative 3 - Negative Recommendation

"I move to forward a **negative recommendation** of the Heber City Park Design Standards to the City Council with the following findings:"

Findings:

1. The Planning Commission held a public hearing on September 26, 2023.
2. The Planning Commission forwarded a negative recommendation on September 26, 2023.
3. The proposed Heber City Park Design Standards are not consistent with the General Plan.

POTENTIAL MOTIONS

ACCOUNTABILITY

Department: Planning
Staff member: Aubrey Larsen , Planning Consultant

EXHIBITS

1. Heber Standard Land Specs 2023 06 20
2. Heber City Park Standards - web friendly DRAFT 09-20-2023

STANDARD LANDSCAPE SPECIFICATIONS
TABLE OF CONTENTS

Specification Section No.	Last Rev.	Specification Name
01 5639	06/2023	Temporary Tree Protection
11 6813	06/2023	Playground Equipment
32 8400	06/2023	Irrigation Systems
32 9030	06/2023	Plants
32 9113	06/2023	Soil and Subgrade Preparation

SECTION 01 5639

TEMPORARY TREE PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Section 32 8400 - Irrigation Systems

B. Section 32 9030 - Plants

1.2 SUMMARY

A. This Section includes trimming, protection, and irrigation of trees that are to remain. Trees which are to remain and must be protected are indicated on the drawings.

1.3 SUBMITTALS

A. Tree Protection Plan: Contractor to submit a 'Tree Protection Plan' for approval by the Owner's Authorized Representative prior to beginning construction. The tree protection plan shall information including fencing, barricades, temporary irrigation, employee education, public education, etc.

1.4 QUALITY ASSURANCE

A. Coordinate with the Heber City Authorized Representative to perform the following work:

1. Remove branches from trees that are to remain, if required.

2. Recommend procedures to compensate for loss of roots and perform initial pruning of branches and stimulation of root growth to accommodate new construction.

3. Recommend procedures for excavation and grading work juxtaposed to established plants.

4. Perform tree repair work for damage incurred by new construction.

5. Determine the location of the tree protection fencing.

1.5 PROJECT CONDITIONS

A. Temporary Protections: Provide fencing located outside the drip-line (outer perimeter of branches plus two feet) to protect trees and other plants that are to remain from damage for any tree within fifty feet of construction activity.

1. Tree protection fence that is protecting trees on adjoining properties needs only be on this project site and not on the adjoining property unless otherwise noted.

B. Protect Root Systems: Do not store construction materials, debris, or excavated material within the drip-line of trees to remain. Do not permit vehicles within drip-line. Restrict foot traffic within fenced area to prevent excessive compaction of soil over root systems.

C. Watering: Provide irrigation to the landscape and trees to remain.

1.6 CERTIFIED ARBORIST OBSERVATIONS:

A. A contracted certified Arborist or Heber City Arborist shall visit the site a minimum of once each month throughout the growing season to advise the Contractor and Owner's Authorized Representative of changes or modifications to the protection and maintenance procedures.

1. The Arborist may provide a Tree Monitoring Report for each site visit indicating tree damage, soil moisture/irrigation, color of foliage, canopy density, trunk and limb discoloration, and pest presence.

2. The Arborist may provide a Post-Construction Management Plan for the trees indicating tree assessments, fertilizing recommendations, and other long term maintenance recommendations.

PART 2 - MATERIALS

2.1 FENCING:

A. Tree protection fence shall be sturdy and highly visible to discourage entrance and disturbance.

1. Fence to be 4 ft high minimum high visibility nylon or chain link.

2. Fence to be constructed using free standing posts, not post driven into the tree root systems.

3. Signage – fencing shall be signed indicating the fence as a tree protection fence with the Owner's Authorized Representative and Contractor contact information. Arborist information may be included.

2.2 TREE WATERING

A. Provide water to trees as required and as directed by the Heber City Arborist. Watering to be applied by hand or by a temporary irrigation system.

1. Hand watering to be by hose or pipe and water applied on a regular as needed basis.

2. Temporary irrigation system to include pipe, fittings, risers, nozzles, and valve(s) as needed to ensure proper application of water. Temporary irrigation system shall be connected to an automatic controller or timer.

2.3 ROOT PROTECTION MULCH

A. Temporary construction within the tree protection fence requires additional root protection to minimize soil compaction and mechanical root damage. The methods of root protection are to be determined by the arborist, and may include the following;

1. Apply 4 inches of woodchip mulch to the area.

2. Use ¾ inch plywood sheets

3. Use large wood beams

4. Use 4 inches of gravel mulch over a landscape fabric

5. Use commercial road mats

B. Temporary applications of root protection to be removed and the tree protection fence re-installed as soon as construction activity near the tree is completed.

PART 3 - EXECUTION

3.1 GENERAL

A. Install fencing at the Tree Protection Zone (TPZ) which is defined as at the drip line of the canopy plus 2 feet. Install fence at the TPZ of the trees to remain prior to construction in the area. Install two notification signs (minimum) at each tree or every 100 feet if a group of trees are fenced together.

B. Protect tree root systems from damage due to noxious materials caused by run-off or spillage during mixing, placement, or storage of construction materials. Protect root systems from flooding, eroding, or excessive wetting resulting from dewatering operations.

C. Do NOT allow fires under or adjacent to trees or other plants that are to remain.

D. Remove branches from trees that are to remain, if required, in order to accommodate new construction.

1. Where directed by Owner's Authorized Representative and arborist, extend pruning operation to restore natural shape of entire tree.

2. Cut branches and roots, if required, with sharp pruning instruments; do not break or chop.

E. Watering: Water trees with temporary irrigation system at a rate that allows each tree to receive adequate water as directed by the arborist.

1. Irrigation system to the trees and landscaping shall be operated by an automatic controller.

2. Provide temporary irrigation to landscape and trees to remain if irrigation systems are not in operation.

3. Irrigation water should penetrate the soil to a depth of 18 inches with a minimum of 1 inch of irrigation water weekly in the absence of rainfall.

3.2 EXCAVATION AROUND TREES

A. Excavate within proximity of trees only where indicated. Do not machine excavate within drip line.

B. Where excavating for new construction is required within drip line of trees, hand excavate to minimize damage to root systems. Provide protective plywood sheeting at excavations if required. Use narrow-tine spading forks and comb soil to expose roots.

1. Relocate roots in backfill areas wherever possible. If large, main lateral roots are encountered, expose beyond excavation limits as required to bend and relocate without breaking. If encountered immediately adjacent to location of new construction and relocation is not practical, cut roots approximately 3 inches back from new construction.

C. Do not allow exposed roots to dry out before permanent backfill is placed; provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in moist condition and temporarily support and protect from damage until permanently relocated and covered with earth.

D. Where trenching for utilities is required within drip line, tunnel under or around roots by hand digging. Do not cut main lateral roots or tap roots; cut only smaller roots that interfere with installation of new work. Cut roots with sharp pruning instruments; do not break or chop.

E. Prune branches to balance loss to root system caused by damage or cutting of roots.

3.3 GRADING AND FILLING AROUND TREES

A. Maintain existing grade within drip line of trees.

B. Lowering Grades: Where existing grade is above new finish grade shown around trees, gradually slope grade away from trees as recommended by Arborist. Do not reduce grade within drip line.

1. Prune the branches to stimulate root growth and to compensate for loss of roots. Provide subsequent maintenance during the contract period as recommended by arborist. Provide Owner with typed instructions for recommended long-range maintenance procedures to be followed after completion of construction operations.

3.4 RAISING GRADES:

A. Minor Fills: Where existing grade is 6 inches or less below elevation of indicated finish grade, use topsoil fill material specified. Place in single layer and do not compact; hand grade to require finish elevations. Do not place soil material against trunk of tree.

B. Raising Grades: Where existing grade is greater than 6” below elevation of indicated finish grade, provide stone retaining walls or adjust grading to maintain existing grading within drip lines.

Coordinate work with owner's authorized representative and arborist.

3.5 REPAIR AND REPLACEMENT OF TREES

A. Repair trees damaged by construction operations. Make repairs promptly after damage occurs to prevent progressive deterioration of damaged trees.

B. If a tree is damaged, the Arborist and Owner's Authorized Representative shall determine if the tree can be restored to normal growth pattern. When it is determined that a tree cannot be restored, the following shall occur:

1. Provide a new tree of the same species as those being replaced. Plant and maintain in accordance with current horticultural requirements.

2. If trees over 6 inches in caliper measurement (taken 12 inches above grade) are required to be replaced, provide new trees with 2-inch caliper size and of species selected by the Owner.

3. A tree appraisal shall be conducted by a third-party certified arborist using the latest guide for tree appraisal and the contractor will compensate the owner the agreed amount as a settlement.

3.6 DISPOSAL

A. Burning removed trees and branches is not permitted on the site.

B. Removal from Owner's Property: Remove excess excavation, displaced trees, and trimmings in a legal manner. These actions are to be provided at no additional expense to the Owner.

END OF SECTION

SECTION 11 6813

PLAYGROUND EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Furnish and deliver from a qualified manufacturer(s), all materials required to install playground equipment, subsurface drainage, base materials, and resilient surfacing.

B. Layout and install playground equipment meeting current safety standards.

C. Any minor items of labor or materials not specifically noted on the drawings or specifications, but necessary for the proper completion of the work, shall be considered incidental to and are to be included in the work.

1.2 COORDINATION

A. Coordinate and cooperate with other contractors as necessary to enable the work to proceed as rapidly and efficiently as possible.

B. Inspection of Site: The Contractor shall be acquainted with all site conditions. Should utilities not shown on the plans be found during excavations immediately notify the Owner's Authorized Representative. Failure to do so will make the Contractor liable for any and all damage thereto arising from his/her operations subsequent to discovery of such utilities not shown on plans.

C. Existing Utilities: Before any trenching, excavation or digging below the surface for any reason is begun, the Contractor shall have the area "Blue Staked" in order to determine as close as possible the location of all underground utilities. The Contractor will conduct the work in such a manner to protect all utilities from damage. It is the responsibility of the Contractor to repair or replace any damage incurred by the Contractor or the Contractor's employees at no expense to the Owner.

1.3 SUBMITTALS

A. Playground Equipment

1. The Contractor/Manufacturer's Representative shall submit the following; play capacity of each component prior to installation, scaled drawings of each specified component including dimensioned plans, color charts, erection drawings, installation details, parts list, and technical data for correct assembly of all components, clamp details, and anchoring details.

B. Resilient Safety Surfacing

1. Data and test information meeting playground safety and accessibility guidelines.

C. Shade Structures

1. Shop Drawings including:
   a. Column layout for applicable anchor bolts or buried columns.
   b. Foundation design.
   c. Three dimensional views of frame.
   d. Member sizes and locations.
   e. Structural connection details, including bolt sizes and plate thicknesses
   f. Fabric roof and connection details for installation clarity.

D. Warranty / Guarantee

1. The Contractor/Manufacturer’s Representative shall provide information on the equipment manufacturer's warranty/guarantee with bid.

1.4 QUALITY ASSURANCE

A. The Manufacturer and supplier furnishing the play equipment and structures must have a minimum of 10 years of experience in the manufacturing and supply of play equipment with the personnel, facilities, and equipment adequate for the products specified, and shall produce written proof of such with bid.

B. The Contractor installing the play equipment and structures must have a minimum of 5 years of experience in the installing of play equipment with the personnel, facilities, and equipment adequate for the products specified, and shall produce written proof of such with bid.

C. The Contractor installing the play equipment must be certified as a Certified Playground Safety Inspector in good standing with the National Playground Safety Institute

1.5 SAFETY GUIDELINES AND STANDARDS

A. All materials and equipment shall conform to the current issue of the "Public Playground Safety Handbook" published by the U.S. Consumer Product Safety Commission (C.P.S.C. Publication No. 325), and ASTM F1487-11. The manufacturer shall be responsible for correcting any product violations of the C.P.S.C. Guidelines and ASTM F1487-11, to the satisfaction of the Owner, should they be found after installation.

1. Related Information:
   a. ASTM F1487 – Standard Consumer Safety Performance Specification for Playground Equipment for Public Use
   b. ASTM F1292 – Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment
   c. ASTM F1951 – Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment
   d. ASTM F2075 – Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment
   e. ADA Accessibility Guidelines (ADAAG)

B. Playground shall be accessible in accordance with the latest ADA Accessibility Guidelines (ADAAG) Section 15.6 Play Areas.

C. Playground Equipment must hold the International Play Equipment Manufacturers Association (IPEMA) certification.

PART 2 - MATERIAL

2.1 PLAYGROUND EQUIPMENT – OWNER PROVIDED, CONTRACTOR INSTALLED

A. Material: All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all steel parts by the use of time-tested coatings such as zinc plating, galvanizing, finish coatings, etc. All metal components to be coated and/or powder coated.

B. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879. Manufacturer to provide special tools for pinned tamperproof fasteners.

C. Footings: Bury depth on all footings shall be 34” minimum below Finished Grade (FG) on all in-ground play events/posts. As per Manufacture’s requirements.

D. Submit layout shop drawings and equipment list for review

2.2 COLORS

A. Colors:

1. Colors of play equipment and surfacing may be suggested but will be selected by the Owner.

2.3 CONCRETE FOR FOOTINGS

A. Concrete Post Mix: 3000 PSI mix

B. Water: Potable

2.4 PLAYGROUND RESILIENT SAFETY SURFACING

A. Grass Resilient Surfacing

1. Owner Preferred

2. Playground Grass Ultra by ForeverLawn
   a. Synthetic Grass than meets fall height safety requirements
   b. IPEMA certified to ASTM F1292
   c. Local Sales Representative, Paul Daniels, ForeverLawn Mountain West, C: (208)283-8638, UT: (801)503-0949

B. Rubber Resilient Surfacing

1. To be used with Owner Permission Only

2. Solid Bonded Rubber Resilient Surfacing will be installed as a poured in place rubberized material base and ½" minimum resilient top surface.

3. Aliphatic Binder Required

4. Surface material to be in compliance with ADA requirements and meet ASTM standards F1292 for field and laboratory tests specified for designated fall height and impact.

5. Solid surfacing to be installed over compacted drainage and base materials.
   a. Full color surfacing required.
   b. Multiple colors required.
   c. Colors, design and patterns as detailed

C. Engineered Wood Fiber Material

1. To be used with Owner Permission Only

2. Engineered wood fiber comprised of softwoods and/or hardwoods, consisting of randomly sized wood fibers the majority of which do not exceed 1.5" in length and containing 10% to 20% fines to aid in compaction. (It is generally understood that the manufacturing process allows a few oversized pieces.

3. Product depth, after installation, must be in accordance with the procedure described in ASTM F-1292-04 and meet guidelines for critical height as set forth by the CPSC for use of wood products for protective surfacing.

4. Product testing and data sheet submittal required.

2.5 SUBSURFACE DRAINAGE

A. Perforated pipe – 3 inch minimum diameter and/or panel pipe 12 inches wide.

B. Drain pipes to be covered on all sides with a non-woven filter fabric.

C. Connectors and fittings as required.

D. Sand backfill material: course washed sand less than 5% retained on #10 and less than 5% passing #30 U.S. standard sieves.

2.6 SHADE STRUCTURE

A. General: The pre-engineered package shall be pre-cut and pre-fabricated to include all parts necessary for field construction. The shelter shall be shipped knocked-down with complete assembly instructions, and ready for field installation.

B. Engineering Data:

1. Structures are engineered to meet or exceed the requirements of International Building Code (IBC), and the following *standard* specifications:
   - **Wind Speed (Frame only):** 150 m.p.h.
   - **Wind Speed (Frame w/canopy):** 90 m.p.h.

- **Live Load:** None
- **Snow Load:** None

C. Reinforced Concrete Footings:

1. Footings shall be designed per stringent International Building Code (IBC) for the specific structure.

2. Concrete shall have minimum 28-day compressive strength of 3,000 psi and slump of 4" (+/- 1"), unless otherwise noted on the drawings or calculations.

3. Reinforcing shall be ASTM A615, grade 60.

D. Material:

1. All materials shall be structurally sound and appropriate for safe use.

2. Product durability shall be ensured by the use of corrosion-resistant metals such as stainless steel, and coatings such as zinc-plating, galvanizing, and powder-coating on steel parts, subject to the Project-Specific requirements below.

3. Fabrics used shall include UV-stabilizers and fire retardants for longevity and safety.

E. Posts, Structural Framing, And Hardware:

1. All tubing used shall be cold-formed and milled per ASTM A-135 and ASTM A-500. Material testing is in accordance with ASTM E-8. Minimum yield is 40,000 psi with a minimum tensile strength of 45,000 psi on all posts.

2. All tubing shall be pre-cut to appropriate lengths, and where applicable all outside surfaces shall be galvanized, with an interior corrosion-resistant zinc-rich coating. Where required, support pipes shall be schedule 40 hot-dip galvanized or powder-coated black steel.

3. All tubing members are factory-welded by Certified Welders to American Welding Society (AWS) specifications and to the highest standards of quality workmanship.

4. Weldments are finished with a zinc-rich galvanized coating. No field welding is required in the assembly of Shade Systems products.

5. All fastening hardware shall be stainless steel.

F. Fastening System Requirements:

1. Shade fabric shall be delivered complete with independent cables pre-inserted in fabric hems.

2. Each cable shall be looped and clamped at each end.

3. Product must be delivered complete with an instructional video on DVD media. Video must show the viewer the exact procedure for removing and re-attaching canopy using an actual shade structure in the field.

G. Roofing Materials:

1. SHADE FABRIC: Knitted of monofilament and tape construction high density polyethylene with Ultra Violet (U.V.) stabilizers and flame retardant.
   a. UV-Block Factor varies by standard color offered from 91% to 99%.
   b. Properties:
      - Nominal Thickness: 0.057 inches
      - Light Fastness: Min. 337 g/m2
      - Weather Fastness: 7-8 (Blue Wool Scale)
      - Tear Resistance: 4-5 (Grey Scale Test)
      - Breaking Force: Warp 210N, Weft 276N
      - Bursting Pressure: Mean 3125kPa
      - Bursting Force: Mean 1775N
   c. All hems and seams are double row lock stitched using exterior grade UV-stabilized polyethylene GORE™ TENARA™ sewing thread (GORE and TENARA are trademarks of W. L. Gore & Associates).

2. Shade Fabric is treated with fire retardants, and passes the requirements established under the NFPA 701 Test Method 2 test standards for flammability, including the accelerated water leaching protocol.
   a. Written evidence of compliance with this standard, including the accelerated water leaching protocol, must be furnished with bid proposal.

3. Fabric is attached to frame using a vinyl covered minimum 1/4″ diameter stainless steel and clear vinyl coated cable.
   a. Cable fasteners are zinc-plated copper for maximum corrosion resistance.

H. Polyester Powder-Coating Process:

1. All powder-coated parts are completely cleaned and a hot zinc phosphate pretreatment with non-chromic sealer is applied.

2. Powder-coating is then electrostatically applied and oven-cured at 375 to 425 degrees Fahrenheit.

3. Polyester powders shall meet or exceed ASTM standards for Adhesion, Hardness, Impact, Flexibility, Overbake Resistance, and Salt Spray Resistance.

4. Colors shall be specified by Owner.

PART 3 - EXECUTION

3.1 COORDINATION

A. The contractor shall coordinate his work with that of the Owner, other contractors on site, and shall cooperate to the fullest extent to see that the work is completed in a timely and workmanship like manner.

B. The Contractor shall be responsible for assuring that the installed playground equipment meets all safety requirements and shall have the structure inspected and certified by a Certified

Playground Inspector. The playground equipment shall be installed using the Manufacturers Installation Instructions.

C. Install approved play equipment and footings per manufacture's specifications. Backfill, compact, and clean area as necessary to restore sub-base.

D. Repair any and all damage to playground components and/or site improvements that was caused during playground installation.

3.2 DOCUMENTATION

A. Contractor to inventory and document equipment.

3.3 INSTALLATION

A. Contractor shall at all times be responsible for providing and maintaining a clean, safe, and secure working area. Contractor shall be responsible for providing barriers, signage, etc., in order to achieve this secure area. Contractor shall be responsible for the proper disposal of any and all earth, concrete, gravel, etc., removed in the process of installation.

B. Contractor shall provide the following for each installation upon completion: one owner's manual, one parts inventory, a collection of spare bolts/fasteners and tools needed to replace, and "clear/concise inspection, maintenance, and repair instructions including, but not limited to, what, when, and how to inspect, maintain, and repair" as stated in the ASTM standards.

C. Contractor shall submit in writing a schedule of the projected start and completion dates for all installations for approval. Contractor shall be responsible for completing installations in a timely and orderly fashion according to the approved schedule submitted.

D. Playground contractor to install drainage and play equipment and re-contour and re-compact base material as required.

E. Install subsurface drainage per reviewed shop drawings, submittals and details.

F. Install playground equipment as per manufacture's recommendations and requirements.

G. Install resilient surfacing as per manufacture's recommendations and requirements to comply with all applicable playground safety regulations and guidelines.

H. Contractor shall be responsible for coordinating with the City for a playground safety audit prior to opening playgrounds for use. Final payment will not be authorized until audit is complete and found to be/or is corrected to be in compliance with design standards, recommendations, and requirements.

I. Playground Safety Audit Certificates for each playground to be provided for Heber City, the contractor and the designer.

J. Contractor to layout the playground equipment with adequate safety and fall distances. The contractor shall be responsible for assuring that the installed playground equipment meets all safety requirements and shall have the structure inspected and certified by a Certified Playground Safety Inspector (CPSI).

3.4 SHADE SAIL ERECTION

A. Install all components according to manufacturer's installation instructions and these specifications.

3.5 CLEAN-UP

A. During work, store materials and equipment where directed. Keep pavements clean and work area in an orderly condition.

B. The Contractor shall keep the site free from accumulation of waste material. At the time of completion, all areas must be swept or washed clean and all rubbish removed to the satisfaction of the Owner's Authorized Representative.

C. The Contractor shall keep roads, shoulders, walks, clean.

D. Remove from the site all debris resulting from work of this section.

3.6 WARRANTY: PLAYGROUND EQUIPMENT

A. The Contractor shall warranty the installation for a period of one-year minimum following substantial completion and acceptance.

END OF SECTION

SECTION 328400

IRRIGATION SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. These specifications, together with the accompanying drawings and reference materials convey the design intent to accomplish the work of installing an irrigation system that will operate in an efficient and satisfactory manner according to the workmanlike standards established for the irrigation industry.
   a. As-built Irrigation Drawings: The contractor shall prepare as-built drawings which shall show deviations from the contract documents made during construction affecting the main line pipe, controller locations, remote control valves, manual drain valves, and all irrigation heads. The drawings shall also indicate and show approved substitutions of size, materials and manufacturer's name and catalog number. The Contractor will keep a record of all departures from the contract drawings that occur during construction. These shall be kept on a clean set of prints of the contract drawings.
   b. As-built Drawings shall be furnished to the Owner’s Authorized Representative at the time of the Inspection before any Substantial Completion Date will be issued.

2. The work consists of furnishing and installing an underground irrigation system as shown on the drawings and specifications. Include all labor, equipment and materials and perform all operations in connection with the construction of the irrigation system.

3. It will be the Contractor's responsibility to report to the Owner’s Authorized Representative any deviations between the drawings, specifications and the site. Failure to do so prior to the installing of equipment, and resulting in replacing, and/or relocating, will be done at the Contractor's expense.

4. Permits and Fees: Obtain all permits and pay required fees to any governmental agency having jurisdiction over the work. Inspections required by local ordinances during the course of construction shall be arranged as required. On completion of the work, satisfactory evidence shall be furnished to the Owner's representative to show that all work has been installed in accordance with the ordinances and code requirements. See existing utilities paragraph below.

5. Coordination: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.

6. Inspection of Site: Installer shall acquaint himself with all site conditions. Should utilities not shown on the plans be found during excavations notify the Owner’s Authorized Representative. Failure to do so will make installer liable for any and

all damage thereto arising from his operations subsequent to discovery of such utilities not shown on plans.

7. Existing Utilities: Before any trenching, excavation or digging below the surface for any reason is begun, the Contractor shall have the area "Blue Staked" and coordinate with the Owner in order to determine as close as possible the location of all underground utilities. The Contractor will conduct his work in such a manner to protect all utilities from damage. It is the responsibility of the Contractor to repair or replace any damage incurred by the Contractor's work or workers at no expense to the owner.

8. Protection of Existing Site Conditions: The Contractor shall take necessary precautions to protect site conditions to remain. Should damage be incurred, the Contractor shall repair the damage to its original condition at his own expense.

9. Irrigation Point of Connection: Irrigation sources include pressurized irrigation; where the pressurized irrigation connections are not available, culinary water may be required. All culinary water connections must include a backflow preventer meeting state and local codes.

10. Guarantee: All work shall be guaranteed for compliance with the drawings and specifications for a period of one year after the date of substantial completion. The Contractor shall make good any deficiencies at the time he is notified of any faults, and place in satisfactory condition any damage to the buildings or grounds without cost to the Owner. All guarantees shall be in writing and approved by the Owner's Authorized Representative before submitting to the Owner.

11. The work covered by this section of the specifications consists of furnishing all labor, material, equipment and supplies in performing all operations in connection with irrigation system and all site work in strict accordance with this section of specifications and applicable drawings.

12. Any minor items of labor or materials not specifically noted on the drawings or specifications; but obviously necessary for the proper completion of the work, are to be considered as incidental to and are to be included in the contract.

13. Specification and installation details may be modified at the direction of the Heber City Parks Director on a specific project basis.

1.2 DEFINITIONS

A. Circuit Piping (Lateral Lines): Downstream from control valves to sprinklers, specialties, and drain valves. Piping is under pressure during flow.

B. Main Piping: Downstream from point of connection to water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.

C. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control, signaling power-limited circuits.

1.3 PERFORMANCE REQUIREMENTS

A. Irrigation zone control shall be automatic operation with controller and automatic control valves.

B. Location of Sprinklers and Specialties: Design location is approximate. Make minor adjustments necessary to avoid plantings and obstructions such as signs and light standards. Maintain 100 percent irrigation coverage of areas indicated.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.

B. Qualification Data: For qualified Installer.

C. Controller Timing Schedule: Indicate timing settings for each automatic controller zone.

D. Maintenance Data: Submit maintenance data and parts lists for irrigation system materials and products.

E. Supplier: Submit names, addresses, and phone numbers of the distributors of the materials and products used.

F. Site Map showing all final control systems, valves, heads, and irrigation zones.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Project site Foreman or Supervisor has at least five consecutive years of commercial irrigation installation experience. This person shall be a current Certified Irrigation Contractor in good standing as set forth by the Irrigation Association. This person shall be on project site at least 75% of each working day.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store piping to prevent pipe-end damage and to prevent entrance of dirt, debris, and moisture.

B. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.

1.7 PROJECT CONDITIONS

A. Interruption of Existing Water Service: Do not interrupt water service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary water service according to requirements indicated:

1. Notify Owner no fewer than two days in advance of proposed interruption of water service.

2. Do not proceed with interruption of water service without Owner's written permission.

PART 2 - PRODUCTS

2.1 PIPES, TUBES, AND FITTINGS

A. Comply with requirements in the piping schedule for applications of pipe, tube, and fitting materials, and for joining methods for specific services, service locations, and pipe sizes.

B. PVC Pipe:

1. Main Line and Lateral pipes 3 inches and smaller in size to be PVC SCH 40, Main line pipes 4 inches and larger to be C900 DR 18 (225 psi) compression gasket ring joints. Ratings to be printed on pipe.

2. All fittings for Mainline PVC SCH 40 pipe shall be PVC SCH 80

3. All fittings for Mainline C900 pipe shall be ductile iron gasketed fittings.

4. All joints of change of direction of pipe larger than 2” shall have thrust blocks or joint restrints.

5. All fittings for lateral PVC pipe shall be PVC SCH 40 and PVC SCH 80 as detailed.

6. All sprinkler heads (1/2” or 3/4” FIPT inlets) to be installed on swing pipe with two ½” spiral barbed ells and one street ell.

7. All rotor heads with 1” FIPT or larger to be installed on pre-manufactured PVC swing joints.

8. All quick couplers shall be installed on pre-assembled swing joints with brass threaded inserts. Lasco SnapLok Swing Joint (1”x12” minimum)

C. See Heber City Engineering Standard Specifications and Details for thrust blocking.

2.2 PIPING JOINING MATERIALS

A. Solvent Cements for Joining PVC Piping shall be IPS Weld-On-Line - No. P-70 Primer and No. 711 Cement, for PVC socket fittings for use on all pipe fittings.

2.3 ENCASEMENT FOR PIPING (SLEEVES)

A. Standard: PVC Schedule 40

2.4 MANUAL VALVES

A. Stop and Waste Valve: (2” and smaller) Mueler Orseal, Valve box and sleeve as required.

B. Gate Valves (Isolation Valves): Matco-Norca 200RTD Ductile Iron Epoxy Coated Resilient wedge type with 2” operating nut.

C. Manual Drain Valves: 3/4” Apollo CII Bronze Ball Valve, Valve box and sleeve as required.

D. Quick Coupler Assembly

1. Quick Coupler Valves: Rain Bird 44-LRC

2. Lasco SnapLok Swing Joint

3. Quick Coupler Key: Rain Bird 44K

4. Quick Coupler Hose Swivel: Rain Bird SH1

2.5 POINT OF CONNECTION

A. Pressurized Irrigation Connection

1. Amiad Mini-Sigma Automatic Flush Filter
   a. Stainless Steel Smooth Touch Enclosure by Strong Box
      1) Lockable
      2) Contractor to verify size
   b. Sump or drain as required.
   c. Approved by Heber City Parks Director

B. Culinary Water Connection

1. Zurn Wilkins 375XLB Reduced Pressure Principle Backflow Preventer (3/4”-2”)
   a. Stainless Steel Smooth Touch Enclosure by Strong Box
      1) Lockable
      2) Contractor to verify size
   b. Approved by Heber City Parks Director

C. Master Valve / Flow Sensor – Netafim Hydrometer Globe Valve NC W/ Reed Switch (TL-LHM2TG1-MEL, TL-LHM4FG1-MEL), decoder as compatible with controller.

2.6 AUTOMATIC CONTROL VALVES

A. Automatic Control Valves: Rain Bird PESB, Electric scrubber valve size as noted on

plans

1. Solenoids compatible with controller and valves.

2. Valve manifold assembly: Action Machining buttress and transition fittings

2.7 SPRINKLERS

A. General Requirements: Designed for uniform coverage over entire spray area indicated at available water pressure. Nozzle patterns are to provide complete coverage and be compatible with the adjacent heads and nozzles. Contractor shall adjust patterns to provide adequate coverage.

B. Spray Bodies and Nozzles -

1. Rain Bird 1804 PRS - 4" pressure regulating bodies
   a. Rain Bird Spray Nozzles - Type as noted on drawing.
   b. Rain Bird Rotory Nozzles – Type as noted on drawings
   c. Rain Bird Bubblers – Type as noted on drawings

C. Rotor Heads

1. Heads as manufactured by Rain Bird Corp.

2. Use rotor heads of largest radius minimizing overspray to have fewest number of heads in the irrigated area.
   a. 3500 Series – 15 to 35 feet radius
   b. 5000 Series – MPR, PRS – 25 to 50 feet radius with matched precipitation nozzles and 45 psi pressure regulator
   c. Falcon 6504 Series - Rotors

2.8 DRIP EQUIPMENT

A. Drip Valve – Pre-assembled Control Zone Kit with control valve, pressure regulator and filter.

1. Rain Bird XCZ-100-PRB-COM Wide Flow Drip Assembly – Flows 0.3-20 gpm
   a. Rain Bird 1" PESB Valve
   b. Filter, 200 mesh
   c. Pressure regulator, 40-PSI
   d. Ball Valve required
   e. Action Buttress Unions required
   f. Valve box(s) as required

2. Rain Bird XCZ-150-PRB-COM
   a. Rain Bird 1-1/2" PESB Valve - Flows 15-40 gpm
   b. Filters, 200 mesh
   c. Pressure regulator, 40-PSI
   d. Ball Valve required

e. Action Buttress Unions required
f. Valve box(s) as required

3. Rain Bird XCZ-150-LCS
   a. Rain Bird 1-1/2” PESB Valve - Flows 15-62 gpm
   b. Filters, 120 mesh
   c. Pressure regulator, 40-PSI
   d. Ball Valve required
   e. Action Buttress Unions required
   f. Valve box(s) as required

B. Inline Drip Emitters - Rain Bird XFS-CV, dripline with check valve

C. Drip Emitter Systems – As manufactured by Rain Bird Corp

D. Root Watering System (RWS) - As manufactured by Rain Bird Corp

E. Poly pipe (lateral piping), fittings, tubing, flush valves, valve boxes, and stakes as detailed– compatible with equipment

F. Drip System Indicator – Hunter ECO-ID-6, 6” tall indicator with 1/2" FPT connection with 15-100 psi operating pressure.

2.9 CONTROLLER

A. Controller – HydroPoint WeatherTRAK 2-wire controller compatible with Heber City systems. Verify model and connectivity with Heber City PRIOR to irrigation design.

B. WeatherTRAK Controller WT-WTPRO3-C-#-CWM conventional wire for retrofit), (WT-WTPRO3-C-H2O48-CWM for new 2-wire control), Site Consultation Required.

C. Grounding

1. #6 AWG solid bare copper wire.

2. Copper ground plate 4 inches wide, 96 inches long, 0.0625 inches thick with 25 feet continuous length of 6 AWG solid bare copper wire attached by the manufacturer.

3. Copper clad steel ground rod 5/8 inch diameter, 10 feet long, UL listed.

4. Cadweld GR1161G ‘One-Shot’ welding kit.

5. Power Set earth contact material by Paige Electric, 1-800-327-2443.

6. Ground network shall be 10 ohms or less when tested.

7. Grounding Rod – 5/8” diameter minimum bare copper 8’ long minimum
   a. CADWELD connection exothermic weld kit.
   b. Ten inch round valve box

8. 10” round valve box

D. Control Wire Two-wire – Paige P7072D

1. Dedicated master valve two-wire to controller.

2. Secondary or redundant two-wire, different colors from primary two-wires

3. All wire to be continuous. For all wire connections to remote control valves and all splices of wire in the field, use 3M DBY connectors. If splices are necessary, they are to be installed in a standard size valve box.

4. All irrigation wiring under asphalt, concrete, or any other hard surface needs to be in its own conduit.

5. Provide secondary or redundant two-wire spare pair from to each valve from controller and label as such.

6. Three foot (3’) expansion loop required at all corners.

7. All wires labeled in the controller and at the valve boxes.

8. Solenoids / Surge Protection – compatible with control systems

2.10 BOXES FOR AUTOMATIC CONTROL VALVES

A. Control Valve Boxes shall be ‘T’ Type bolt down lid, as manufactured by Carson-Brooks, Ametek, Rain Bird or approved equal.

B. Size:

1. Rectangular size as required.

2. Round 10” diameter minimum

C. Color of valve box lid shall be:

1. Green in turf areas.

2. Brown or tan in shrub areas with bark mulch.

3. Gray in rock or stone mulch areas.

D. Drain Material: ¾” clean washed gravel

E. Geotectile Fabric: DeWitt Pro 5 or equal

PART 3 - EXECUTION

3.1 PIPE LOCATION: The contractor, prior to installing the system, must verify existing system pipe, valves, and wire location.

3.2 EARTHWORK

A. Trenches shall be dug as deep and wide as necessary to properly place the irrigation piping. All trenches shall be backfilled and tamped sufficiently to insure no settling of the surface.

B. The contractor, in placing the irrigation lines, etc. may uncover material not suitable for finish grading. This material shall be removed from the site. After the installation of the lines, the finished grading shall be smoothed over and restored to its original condition, using additional topsoil where necessary.

C. Where existing pavements must be cut to install irrigation system, cut smoothly to straight lines 6" wider than trench. Repair or replace pavement cuts with equivalent materials and finishes.

3.3 PIPING INSTALLATION

A. Install pipes as detailed in drawings.

B. Location and Arrangement: The plans show the general areas for irrigation only. Contractor to repair irrigation in all areas disturbed or affected by this construction.

C. Bedding Material: A bedding material shall be placed a minimum of 3" in all directions around all pipes prior to backfilling.

D. Install piping at minimum uniform slope of 0.5 percent down toward drain valves.

E. Install piping free of sags and bends.

F. Main line pipe and lateral pipes shall not be in the same trench. Multiple lateral pipes in the same trench shall be separated by 6” out-to-out minimum.

G. Install fittings for changes in direction and branch connections.

H. Lay piping on solid subbase, uniformly sloped without humps or depressions.

I. Install PVC piping in dry weather when temperature is above 40 deg F. Allow joints to cure at least 24 hours at temperatures above 40 deg F before testing.

J. Install piping in sleeves under parking lots, roadways, sidewalks, dry stream bed, and other hardscape materials.

K. Install sleeves as detailed.

3.4 JOINT CONSTRUCTION

A. Ream ends of pipes and tubes and remove burrs.

B. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.

C. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:

1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.

2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.

D. Flanged Joints: Select rubber gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.

E. Ductile-Iron Piping Gasketed Joints: Comply with AWWA C600 and AWWA M41.

F. PVC Piping Solvent-Cemented Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:

1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.

2. PVC Pressure Piping: Join schedule number, ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.

3. PVC Nonpressure Piping: Join according to ASTM D 2855.

3.5 VALVE INSTALLATION

A. Underground Curb Valves: Install in curb-valve casings with tops flush with grade.

B. Aboveground Valves: Install as components of connected piping system.

C. Manual Drain Valves: Install manual drain valves at all low points and at each valve cluster on irrigation pressure line. Handle keys shall operate all manual drain valves. Drain valves shall be provided with a gravel sump not less than 12" X 12" X 18” in size and with gravel ¾” to 1” in size to insure continued dependable drainage. Cover drain material with landscape filter fabric and backfill remainder with excavated material. Install manual drain valve at all low points along mainline.

D. Quick Coupler Valve: Install as per details with brass riser and pre-manufactured swing joint. Place one quick coupler where noted on the plans.

3.6 SPRINKLER SYSTEM HEADS

A. Install sprinkler system as detailed and as per manufacturer’s recommendations to provide complete coverage in landscape areas.

3.7 DRIP IRRIGATION

A. Drip emitter shall be installed as detailed and as per manufacture’s recommendations.

3.8 AUTOMATIC IRRIGATION-CONTROL SYSTEM INSTALLATION

A. Controller, Grounding, and Wires: Installation as per details.

3.9 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.

2. Operational Test: After electrical circuitry has been energized, operate controllers and automatic control valves to confirm proper system operation.

3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

B. Any irrigation product will be considered defective if it does not pass tests and inspections.

C. Prepare test and inspection reports.

3.10 STARTUP SERVICE

A. Perform startup service.

1. Complete installation and startup checks according to manufacturer's written instructions.

2. Verify that controllers are installed and connected according to the Contract Documents.

3. Verify that electrical wiring installation complies with manufacturer's submittal.

3.11 ADJUSTING

A. Adjust settings of controllers.

B. Adjust automatic control valves to provide flow rate at rated operating pressure required for each sprinkler circuit.

C. Adjust sprinklers and devices, except those intended to be mounted aboveground, so they will be flush with finish grade.

3.12 CLEANING

A. Flush dirt and debris from piping before installing sprinklers and other devices.

3.13 DEMONSTRATION, TRAINING, AND DOCUMENTATION

A. At the time of final inspection the entire system must be tested in the presence of the Owner's Authorized Representative.

B. Before the final inspection is complete the contractor must furnish as-built drawings. These should be updated on a daily basis to assure accuracy. The drawings must show the location of all control systems, valves, pipe, heads, and drain valves used on the job. These drawings and maintenance manuals must be submitted at the time of final inspection or in accordance to the general conditions.

C. Provide a Site Map with Irrigation Control Systems, Valves, Heads, and Irrigation Zones of the entire site including new and existing systems.

3.14 GUARANTEE

A. 1 year warranty required.

END OF SECTION

SECTION 32 9030

PLANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Plants.

2. Tree stabilization.

B. Related Sections:

1. Section 01 5639 - "Temporary Tree Protection" for protecting, trimming, pruning, repairing, and replacing existing trees to remain that interfere with, or are affected by, execution of the Work.

2. Section 32 9113 - “Soil and Subgrade Preparation” for planting soils.

3. Section 32 8400 - “Irrigation Systems” for irrigation systems.

1.2 DEFINITIONS

A. Backfill: The earth used to replace or the act of replacing earth in an excavation.

B. Balled and Burlapped Stock: Plants dug with firm, natural balls of earth in which they were grown, with ball size not less than sizes indicated; wrapped with burlap, tied, rigidly supported, and drum laced with twine with the root flare visible at the surface of the ball as recommended by ANSI Z60.1.

C. Balled and Potted Stock: Plants dug with firm, natural balls of earth in which they are grown and placed, unbroken, in a container. Ball size is not less than sizes indicated.

D. Bare-Root Stock: Plants with a well-branched, fibrous-root system developed by transplanting or root pruning, with soil or growing medium removed, and with not less than minimum root spread according to ANSI Z60.1 for type and size of plant required.

E. Container-Grown Stock: Healthy, vigorous, well-rooted plants grown in a container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for type and size of plant required.

F. Duff Layer: The surface layer of native topsoil that is composed of mostly decayed leaves, twigs, and detritus.

G. Finish Grade: Elevation of final finished surface.

H. Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.

I. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.

J. Pests: Living organisms that occur where they are not desired, or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

K. Planting Area: Areas to be planted.

L. Planting Soil: Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.

M. Plant; Plants; Plant Material: These terms refer to vegetation in general, including trees, shrubs, vines, ground covers, ornamental grasses, bulbs, corms, tubers, or herbaceous vegetation.

N. Root Flare: Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.

O. Stem Girdling Roots: Roots that encircle the stems (trunks) of trees below the soil surface.

P. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

Q. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

R. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

1. Plant Materials: Include quantities, sizes, quality, and sources for plant materials.

2. Pesticides and Herbicides: Include product label and manufacturer's application instructions specific to the Project.

B. Samples for Verification: For each of the following:

1. Mulch: 1-gallon volume of each mulch required; in sealed plastic bags labeled with composition of materials by percentage of weight and source of mulch. Each Sample

shall be typical of the lot of material to be furnished; provide an accurate representation of color, texture, and organic makeup if applicable.

C. Product Certificates: For each type of manufactured product, from manufacturer, and complying with the following:

1. Manufacturer's certified analysis of standard products.

2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.

D. Material Test Reports: For native topsoil and imported topsoil.

E. Warranty: Sample of special warranty.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: A qualified landscape Installer whose work has resulted in the successful establishment of plants.

1. Professional Licensure: Contractor to be licensed in the State of Utah to do the work.

2. Membership: Installer shall be a member in good standing of either the Professional Landcare Network or the American Nursery and Landscape Association.

3. Experience: Five years of experience in landscape installation.

4. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.

5. Pesticide Applicator: State licensed, commercial.

B. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1.

C. Measurements: Measure according to ANSI Z60.1. Do not prune to obtain required sizes.

1. Trees and Shrubs: Measure with branches and trunks or canes in their normal position. Take height measurements from or near the top of the root flare for field-grown stock and container grown stock. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip to tip. Take caliper measurements 6 inches above the root flare for trees up to 4-inch caliper size, and 12 inches above the root flare for larger sizes.

2. Other Plants: Measure with stems, petioles, and foliage in their normal position.

D. Plant Material Observation: Owner’s authorized representative may observe plant material either at place of growth or at site before planting for compliance with requirements for genus, species, variety, cultivar, size, and quality. Owner’s authorized representative retains the right to observe trees and shrubs further for size and condition of balls and root systems, pests, disease symptoms, injuries, and latent defects and to reject unsatisfactory or defective material

at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.

1. Notify Owner's authorized representative of sources of planting materials seven days in advance of delivery to site.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws if applicable.

B. Bulk Materials:

1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.

2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.

3. Accompany each delivery of bulk fertilizers and soil amendments with appropriate certificates.

C. Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.

D. Handle planting stock by root ball.

E. Deliver plants after preparations for planting have been completed, and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.

1. Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Water as often as necessary to maintain root systems in a moist, but not overly-wet condition.

1.6 PROJECT CONDITIONS

A. Field Measurements: Verify actual grade elevations, service and utility locations, irrigation system components, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.

1. Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required, to minimize possibility of damage to

underground utilities. The Contractor shall have the area "Blue Staked" prior to digging. It is the responsibility of the Contractor to repair or replace any damage incurred by the Contractor or the Contractor's employees at no expense to the Owner. In the event of a conflict between utility lines and plant locations, promptly notify the Owner's Authorized Representative. Failure to follow this procedure places the responsibility and expense upon the Contractor for making any and all repairs.

B. Planting Restrictions: Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion. Contractor is responsible to ensure plants are watered adequately.

C. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.

D. Coordination with Turf Areas (Lawns): Plant trees, shrubs, and other plants after finish grades are established and before planting turf areas unless otherwise indicated.

1. When planting trees, shrubs, and other plants after planting turf areas, protect turf areas, and promptly repair damage caused by planting operations.

1.7 WARRANTY

A. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.

1. Failures include, but are not limited to, the following:
   a. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner, or incidents that are beyond Contractor's control.
   b. Structural failures including plantings falling, bending, or blowing over.
   c. Faulty performance of any plant or material.
   d. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

2. Warranty Periods from Date of Landscape Substantial Completion
   a. Trees, Shrubs, Vines, and Ornamental Grasses: 12 months.
   b. Ground Covers, Biennials, Perennials, and Other Plants: 12 months.

3. Include the following remedial actions as a minimum:
   a. Immediately remove dead plants and replace unless required to plant in the succeeding planting season.
   b. Replace plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
   c. A limit of one replacement of each plant will be required except for losses or replacements due to failure to comply with requirements.
   d. Provide extended warranty for period equal to original warranty period, for replaced plant material.

1.8 MAINTENANCE SERVICE

A. Initial Maintenance Service for Trees, Shrubs, Ground Covers, and other plants: Provide maintenance by skilled employees of landscape Installer. Maintain as required in Part 3. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established but for not less than maintenance period below.

1. Maintenance Period: 30 days from date of Landscape Substantial Completion. Landscape Substantial Completion is defined as time of acceptance by owner.

PART 2 - PRODUCTS

2.1 PLANT MATERIAL

A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant Schedule or Plant Legend shown on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

1. Trees with damaged, crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs more than 3/4 inch in diameter; or with stem girdling roots will be rejected.

2. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless otherwise indicated.

B. Provide plants of sizes, grades, and ball or container sizes complying with ANSI Z60.1 for types and form of plants required. Plants of a larger size may be used if acceptable to Owner’s authorized representative, with a proportionate increase in size of roots or balls.

C. Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which shall begin at root flare according to ANSI Z60.1. Root flare shall be visible before planting.

D. Labeling: Label at least one plant of each variety, size, and caliper with a securely attached, waterproof tag bearing legible designation of common name and full scientific name, including genus and species. Include nomenclature for hybrid, variety, or cultivar, if applicable for the plant as shown on Drawings.

E. If formal arrangements or consecutive order of plants is shown on Drawings, select stock for uniform height and spread.

2.2 SOD

A. Sod: Furnish viable sod of uniform density, color, and texture, strongly rooted, and capable of

vigorous growth and development when planted. Sod to be free of weeds and other foreign plants and materials.

1. Turf Grass Sod: Bluegrass and Rye Grass Mix

2.3 SEED

A. The seed mixture shall meet the minimum tested requirements of any Utah State Seed Law. The seed shall be the current year's crop, guaranteed by the supplier. The seed mix is based on a Pure Live Seed (PLS) basis with no noxious weeds and no more than 1/10% weed seed.

B. Seed Mix – Supply seed as specified on the Drawings.

1. Seed shall be fresh, clean, new crop seed complying with tolerance for purity and germination established by Official Seed Analysts of North America. Provide an analysis of the seed mix as specified.

C. Hydroseeding Mulch: Mulch material shall be 'Silva-fiber' as manufactured by Weyerhauser Company, Silva Products Department, Tacoma, Washington, and applied at a rate of 2000 pounds per acre or approved equal.

2.4 MULCHES

A. Bark Mulch:

1. Type: This material shall be a clean medium coarseness shredded pine, fir, or cedar bark free of sticks, stones, clay or foreign materials.

2. Size Range: Maximum thickness 5/8 inch, maximum length 4 inches.

3. Color: Natural.

2.5 EDGING

A. Steel Edging:

1. 3/16" x 6" steel bar

2. #3 Rebar (3/8") stakes – 12" long

B. Concrete Edging

1. Concrete: 4000 psi compressive strength mix.

2. #4 Rebar (1/2")

2.6 WEED-CONTROL BARRIERS

A. Woven Geotextile Filter Fabric: Polypropylene fabric, 5 oz./sq. yd. minimum. DeWitt Pro 5 or equivalent.

2.7 FERTILIZERS

A. Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.

B. Sustaine Bolster Granular 4-4-4 + 3Fe with Mycorrhizae or equal.

C. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

D. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory

2.8 PESTICIDES / HERBICIDES

A. General: Pesticide registered and approved by EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

B. Pre-Emergent Herbicide (Selective and Non-Selective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.

C. Post-Emergent Herbicide (Selective and Non-Selective): Effective for controlling weed growth that has already germinated.

2.9 TREE STABILIZATION MATERIALS

A. Tree Anchoring and Protection

1. Peeled wood pole – 2” diameter

2. Tree tie – ¾” polypropylene lock stitch 900 lb. minimum tensile strength

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive plants for compliance with requirements and conditions affecting installation and performance.

1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Owner's authorized representative and replace with new planting soil.

D. Modifications to the specifications and drawings including fertilizer application products and rates may be adjusted based on soil testing and approved by the Heber City Parks Director.

3.2 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities and turf areas and existing plants from damage caused by planting operations.

B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

C. Submit a Storm Water Pollution Prevention Plan in accordance with state and local requirements.

3.3 PLANTING AREA ESTABLISHMENT

A. Before planting, obtain Owner's authorized representative 's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.4 EXCAVATION FOR TREES AND SHRUBS

A. Planting Pits: As detailed

B. Drainage: Notify Owner's authorized representative if subsoil conditions evidence unexpected water seepage or retention in tree or shrub planting pits.

C. Fill excavations with water and allow to percolate away before positioning trees and shrubs.

3.5 TREE, SHRUB, AND VINE PLANTING

A. Before planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.

B. Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.

C. Set balled and burlapped stock plumb and in center of planting pit or trench with root flare 2 inches above adjacent finish grades.

1. Use planting soil for backfill.

2. After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root ball. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.

3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.

4. Incorporate ¼ pound of Sustaine 4-4-4+Fe Bolster Granular into top half of backfill soil.

5. Continue backfilling process. Water again after placing and tamping final layer of soil.

D. Set container-grown stock plumb and in center of planting pit or trench with root flare 1 inch above adjacent finish grades.

1. Use planting soil for backfill.

2. Carefully remove root ball from container without damaging root ball or plant.

3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.

4. Incorporate ¼ pound of Sustaine 4-4-4+Fe Bolster Granular into top half of backfill soil.

5. Continue backfilling process. Water again after placing and tamping final layer of soil.

3.6 TREE, SHRUB, AND VINE PRUNING

A. Prune, thin, and shape trees, shrubs, and vines as directed by Owner's authorized representative.

B. Prune, thin, and shape trees, shrubs, and vines according to standard professional horticultural and arboricultural practices. Unless otherwise indicated by Owner's authorized representative , do not cut tree leaders; remove only injured, dying, or dead branches from trees and shrubs; and

prune to retain natural character.

C. Do not apply pruning paint to wounds.

3.7 TREE STABILIZATION

A. Install rootball stabilization as detailed

3.8 WEED-CONTROL BARRIERS

A. Install weed-control barrier before installing stone mulch according to manufacturer's written instructions. Completely cover area to be mulched. Overlapping edges a minimum of 6 inches and secure seams with galvanized pins.

3.9 GROUND COVER AND PLANT PLANTING

A. Set out and space ground cover and plants other than trees, shrubs, and vines according to drawings.

B. Use planting soil for backfill.

C. Dig holes large enough to allow spreading of roots and as detailed in drawings.

D. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.

E. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.

F. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

3.10 SODDING AND SEEDING PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.

B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

C. Limit sod and seed subgrade preparation to areas to be planted.

D. Newly Graded Subgrades: Loosen subgrade to a minimum depth of 4 inches. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.

1. Spread amended soil to a depth of 8 inches but not less than required to meet finish grades after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.

a. Spread approximately 1/2 the thickness of amended soil over loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of amended soil.
b. Apply Sustaine Bolster Granular at a rate of 25 lbs. per 1000 square feet and till in to a depth of 4 inches.
c. Compact placed amended soil to 85% to 90%.
d. Reduce elevation of planting soil to allow for soil thickness of sod.

2. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit finish grading to areas that can be planted in the immediate future.

3. After finish grading and immediately before placing sod apply Sustaine Bolster Granular at a rate of 25 lbs. per 1000 square feet on top of bare soil.

4. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

5. Before planting, obtain Owner's authorized representative's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.11 SODDING

A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.

B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to subgrade or sod during installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass. Sod to be ½" below top of adjacent concrete.

C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

3.12 SEEDING

A. Grade seeded areas and remove debris. Uniform and smooth grades are required.

B. Apply Sustane 4-4-4+Fe Bolster Granular at a rate of 25 lbs per 1000 square feet on top of bare soil immediately prior to seed application.

C. If a crust has formed on the soil, loosen the ground surface to a depth of one inch. The soil shall be moist enough to permit it to be worked properly. It shall not be so dry it is powdery nor so wet that it will puddle or become hard when it dries.

D. Remove all weeds from areas to be seeded. All areas to be seeded shall be weed free at the time

of seeding.

E. The Contractor shall prepare only enough ground that can be seeded within 24 hours thereafter.

F. No seeding shall be done immediately after a rain or if the prepared surface has been compacted without first loosening the surface.

G. Broadcast Seed and Mulch

1. Use the two step hydro-seeding method of seeding.
   a. Prepare the seed bed as specified
   b. Combine the seed mixture as specified with Silva Fiber Mulch at a rate of 300 pounds per acre and seed mix of the rate noted on the seed mix.
   c. Fill the tank(s) with water, agitating of these materials into a well-mixed slurry suspension, and spraying the mixture under pressure onto the prepared seedbed of all disturbed areas.
   d. Apply mulch within 24 hours after seeding or before precipitation falls.
   e. Apply wood fiber mulch at a rate of 2000 lbs with 5000 gallons per acre. Apply mulch to form an even cover over the seeded area.
   f. No seeding shall be done when the wind velocities exceed 5 miles per hour.
   g. The area to be seeded shall be staked in segments to control application rates and verify coverage.

3.13 PLANTING AREA MULCHING

A. Mulch backfilled surfaces of planting areas and other areas indicated.

1. Mulch in Planting Areas: Apply 3-inch thickness of stone mulch over entire surface of planting area, and finish level with adjacent finish grades. Do not place mulch within 6 inches of trunks of trees or 2 inches of stems of shrubs and perennials.

3.14 PLANT MAINTENANCE

A. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, adjusting and repairing tree-stabilization devices, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings. Spray or treat as required to keep trees and shrubs free of insects and disease.

B. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.

C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.

3.15 PESTICIDE APPLICATION

A. Apply pesticides and other chemical products and biological control agents in accordance with authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.

B. Pre-Emergent Herbicides (Selective and Non-Selective): Apply to tree, shrub, and ground-cover areas in accordance with manufacturer's written recommendations. Do not apply to seeded or sod areas.

C. Post-Emergent Herbicides (Selective and Non-Selective): Apply only as necessary to treat already-germinated weeds and in accordance with manufacturer's written recommendations.

D. Herbicides not allowed in bioretention areas.

3.16 CLEANUP AND PROTECTION

A. During planting, keep adjacent paving and construction clean and work area in an orderly condition.

B. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.

C. After installation and before Substantial Completion, remove nursery tags, nursery stakes, tie tape, labels, wire, burlap, and other debris from plant material, planting areas, and Project site.

3.17 DISPOSAL

A. Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off Owner's property.

END OF SECTION

SECTION 32 9113

SOIL AND SUBGRADE PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes planting soils specified by composition of the mixes.

B. Related Requirements:

1. Section 329030 "Plants" for placing plants.

C. Soil Testing

1. Soil Sampling

2. Preconstruction soil testing

3. Amendment testing

1.2 DEFINITIONS

A. Backfill: The earth used to replace or the act of replacing earth in an excavation. This can be amended or unamended soil as indicated.

B. CEC: Cation exchange capacity.

C. Compost: The product resulting from the controlled biological decomposition of organic material that has been sanitized through the generation of heat and stabilized to the point that it is beneficial to plant growth.

D. Duff Layer: A surface layer of soil, typical of forested areas, that is composed of mostly decayed leaves, twigs, and detritus.

E. Imported Soil: Soil that is transported to Project site for use.

F. Layered Soil Assembly: A designed series of planting soils, layered on each other that together produce an environment for plant growth.

G. Manufactured Soil: Soil produced by blending soils, sand, stabilized organic soil amendments, and other materials to produce planting soil.

H. NAPT: North American Proficiency Testing Program. An SSSA program to assist soil-, plant-, and water-testing laboratories through interlaboratory sample exchanges and statistical evaluation of analytical data.

I. Organic Matter: The total of organic materials in soil exclusive of undecayed plant and animal

tissues, their partial decomposition products, and the soil biomass; also called "humus" or "soil organic matter."

J. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified as specified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.

K. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

L. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.

M. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil"; but in disturbed areas such as urban environments, the surface soil can be subsoil.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include recommendations for application and use.

2. Include test data substantiating that products comply with requirements.

3. Include sieve analyses for aggregate materials.

4. Material Certificates: For each type of imported soil and soil amendment and fertilizer before delivery to the site, according to the following:
   a. Manufacturer's qualified testing agency's certified analysis of standard products.
   b. Analysis of fertilizers, by a qualified testing agency, made according to AAPFCO methods for testing and labeling and according to AAPFCO's SUIP #25.
   c. Analysis of nonstandard materials, by a qualified testing agency, made according to SSSA methods, where applicable.

B. Samples: For each bulk-supplied material, 1-gal. volume of each in sealed containers labeled with content, source, and date obtained. Each Sample shall be typical of the lot of material to be furnished; provide an accurate representation of composition, color, and texture.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For each testing agency.

B. Preconstruction Test Reports: For preconstruction soil analyses specified in "Preconstruction Testing" Article.

C. Field quality-control reports.

1.5 QUALITY ASSURANCE

A. Testing Agency Qualifications: An independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in types of tests to be performed.

B. Pre-installation Conference: Conduct conference at Project site. Prior to commencement of the work by the Landscape Subcontractor, the Owner's Representative, General Contractor, Landscape Architect, and Civil Engineer shall meet on-site to discuss at a minimum:

1. Existing condition of sub-grade to receive topsoil: General Contractor to certify that excavated sub-grade meets the depth and conditions required for planting, irrigation and topsoil placement.

C. Compost Testing Laboratory Qualifications: An independent Seal of Testing Assurance (STA} Program certified laboratory with the experience and capability to conduct the testing indicated.

1.6 PRECONSTRUCTION TESTING

A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction soil analyses on imported soil.

B. Preconstruction Soil Analyses: For each unamended soil type, perform testing on soil samples and furnish soil analysis and a written report containing soil-amendment and fertilizer recommendations by a qualified testing agency performing the testing according to "Soil-Sampling Requirements" and "Testing Requirements" articles.

1. Have testing agency identify and label samples and test reports according to sample collection and labeling requirements.

2. Testing methods and written recommendations shall comply with USDA's Handbook No. 60.

3. The soil-testing laboratory shall oversee soil sampling; with depth, location, and number of samples to be taken per instructions from Architect. A minimum of three representative samples shall be taken from varied locations for each soil to be used or amended for planting purposes.

4. Report suitability of tested soil for plant growth.
   a. Based upon the test results, state recommendations for soil treatments and soil amendments to be incorporated. State recommendations in weight per 1000 sq. ft. or volume per cu. yd. for nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants.
   b. Report presence of problem salts, minerals, or heavy metals. If such problem materials are present, provide additional recommendations for corrective action.

1.7 SOIL-SAMPLING REQUIREMENTS

A. General: Extract soil samples according to requirements in this article.

B. Sample Collection and Labeling: Have samples taken and labeled by state-certified or registered soil scientist under the direction of the testing agency.

1. Number and Location of Samples: Minimum of three representative soil samples from varied locations for each soil to be used or amended for landscaping purposes.

2. Procedures and Depth of Samples: As directed by Soil Scientist.

3. Labeling: Label each sample with the date, location keyed to a site plan or other location system, visible soil condition, and sampling depth.

1.8 TESTING REQUIREMENTS

A. General: Perform tests on soil samples according to requirements in this article.

B. Testing shall be performed on the planting soil mixes and components not more than 3 months prior to installation.

C. Physical Testing:

1. Soil Texture: Soil-particle, size-distribution analysis by the following methods according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods":
   a. Hydrometer Method: Report percentages of sand, silt, and clay.

D. Chemical Testing:

1. CEC: Analysis by sodium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."

2. Clay Mineralogy: Analysis and estimated percentage of expandable clay minerals using CEC by ammonium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 1- Physical and Mineralogical Methods."

E. Fertility Testing: Soil-fertility analysis according to standard laboratory protocol.

1. Testing to include the following:
   a. Percentage of organic matter
   b. CEC, calcium percent of CEC, and magnesium percent of CEC.
   c. Soil reaction (acidity/alkalinity pH value).
   d. Buffered acidity or alkalinity.
   e. Nitrogen ppm.
   f. Phosphorous ppm.
   g. Potassium ppm.
   h. Sodium ppm and sodium absorption ratio.
   i. Soluble-salts ppm.
   j. Presence and quantities of problem materials including salts and metals cited in the Standard protocol. If such problem materials are present, provide additional

recommendations for corrective action.

k. Other deleterious materials, including their characteristics and content of each.

F. Organic-Matter Content: Analysis using loss-by-ignition method according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."

G. Soil Nutrient Analysis: Report suitability of tested soil for plant growth of each planting soil mix.

1. Soil Nutrient Analysis to include levels of the following nutrients at a minimum: Nitrogen, Phosphorus, Potassium, and Iron.

2. Based upon the test results, state recommendations for soil treatments and soil amendments to be incorporated. State recommendations in weight per 1000 sq. ft., or volume per cu. yd. for nitrogen, phosphorus, and potash nutrients, and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants.

3. Report presence of problem salts, minerals, or heavy metals. If such problem materials are present, provide additional recommendations for corrective actions.

4. Analysis of heavy metals and other toxics per EPA Test Method and Practical Quantitation Level.

H. Infiltration Test/Hydraulic Conductivity: Provide test results for bioretention soil mix per ASTM D2434 at 85% compaction per ASTM D1557.

I. Compost Analysis: tests to be performed not more than 3 months before planting.

1. Provide test results for the following:
   a. Organic content by percent of dry weight LOI (loss on ignition), ASTM D 2974 Method D
   b. Moisture content
   c. C:N Ratio
   d. pH
   e. Soluble Salt Concentration
   f. Ammonium nitrogen
   g. Nitrate nitrogen
   h. Particle size Sieve analysis per USDA soil texture classification
   i. Stability - Carbon Dioxide Evolution Rate
   j. Maturity
   k. Seed Emergence and Seedling Vigor
   l. Bulk density
   m. Nutrient content of N-P-K
   n. Provide verification of manufactured compost meeting the US Composting Council's "Seal of Testing Assurance"(STA) program.

J. Recommendations: Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated to produce satisfactory planting soil suitable for healthy, viable plants indicated. Include, at a minimum, recommendations for nitrogen, phosphorous, and potassium fertilization, and for micronutrients.

1. Fertilizers and Soil Amendment Rates: State recommendations in weight per 1000 sq. ft. for 6-inch depth of soil.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and compliance with state and Federal laws if applicable.

B. Bulk Materials:

1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.

2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.

3. Do not move or handle materials when they are wet or frozen.

4. Accompany each delivery of bulk fertilizers and soil amendments with appropriate certificates.

1.10 PROJECT CONDITIONS

A. Field Measurements: Verify actual grade elevations, service and utility locations, irrigation system components, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting soil and subgrade work.

B. Interruption of Existing Services or Utilities: Do not interrupt services or utilities to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary services or utilities according to requirements indicated:

1. Notify Owner's Representative no fewer than four days in advance of proposed interruption of each service or utility.

2. Do not proceed with interruption of services or utilities without Owner's Representative written permission.

C. Weather Limitations: Proceed with soil excavation, amending or placement only when existing and forecasted weather conditions permit activities to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.

1. When in the opinion of the Owner's Representative the weather is such that satisfactory results cannot be obtained, the contractor shall suspend operations until the weather is favorable.

2. No materials shall be placed or worked in snow or when subgrade is soft, muddy, frozen, or saturated.

D. Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Owner's Representative before planting. Do not proceed with planting activities until drainage conditions have been fixed such that plants will thrive. Installation of soil or plants in such adverse conditions is at contractor's risk. Owner reserves the right to require immediate removal of all materials and reinstallation of all materials.

PART 2 - PRODUCTS

2.1 PLANTING SOILS

A. Planting Soil: Imported topsoil or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from, bogs, or marshes.

1. All planting soils to be screened to remove 3/4” and greater sized materials.

2. Additional Properties of Imported Topsoil or Manufactured Topsoil: Screened and free of stones 3/4 inch or larger in any dimension; free of roots, plants, sod, clods, clay lumps, pockets of coarse sand, paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials harmful to plant growth; free of obnoxious weeds and invasive plants including quackgrass, Johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and bromegrass; not infested with nematodes; grubs; or other pests, pest eggs, or other undesirable organisms and disease-causing plant pathogens; friable and with sufficient structure to give good tilth and aeration. Continuous, air-filled pore space content on a volume/volume basis shall be at least 15 percent when moisture is present at field capacity. Soil shall have a field capacity of at least 15 percent on a dry weight basis.

3. Mix imported topsoil or manufactured topsoil, soil amendments, and fertilizers as recommended by soil laboratory to produce planting soil.

4. Soil to be amended to meet the following minimum requirements:

PH	6.0 – 8.2
C:N Ratio	< 20:1
Soluble Salts	<4 ds/m or mmho/cm
Sodium Absorption Ratio (SAR)	3 – 7
Organic Matter	>3%
Sand	<80%
Silt	<50%
Clay	<20%

2.2 ORGANIC SOIL AMENDMENTS

A. Organic compost shall be used for:

1. Subgrade preparation - medium or coarse compost

2. A component of planting soil mix - fine compost

B. Compost: Well-composted, stable, and weed-free organic matter produced by composting feedstock, and bearing USCC's "Seal of Testing Assurance," and as follows:

1. Reaction: pH of 5.5 to 8.

2. Soluble-Salt Concentration: Less than 4 dS/m.

3. Moisture Content: 35 to 55 percent by weight.

4. Organic-Matter Content: 30 to 50 percent of dry weight.

5. Particle Size: Minimum of 98 percent passing through a 1-inch sieve.

C. Wood Derivatives: Shredded and composted, nitrogen-treated sawdust, ground bark, or wood waste; of uniform texture and free of chips, stones, sticks, soil, or toxic materials.

D. Manure: Well-rotted, unleached, stable or cattle or poultry manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, debris, and material harmful to plant growth.

2.3 FERTILIZERS

A. Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.

B. Sustaine Bolster Granular 4-4-4 + Fe with Mycorrhizae

C. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified testing agency.
   a. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
   b. Aluminum Sulfate: Commercial grade, unadulterated

D. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified testing agency.

E. Do NOT use fertilizers in bioretention areas.

PART 3 - EXECUTION

3.1 GENERAL

A. Place planting soil and fertilizers according to requirements in other Specification Sections.

1. Sod and seeded areas to have 8” minimum depth of planting soil.

2. Shrub, perennial, and ground cover areas to have 12” minimum depth of planting soil.

B. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil area.

C. Proceed with placement only after unsatisfactory conditions have been corrected.

D. Do not mix or place soils and soil amendments in frozen, wet, or muddy conditions.

1. Suspend soil spreading, grading, and tilling operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.

2. Uniformly moisten excessively dry soil that is not workable or too dusty.

E. Proceed with installation only after unsatisfactory conditions have been corrected.

F. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Landscape Architect and replace with new planting soil.

3.2 PROTECTION

A. Protection Zone: Identify protection zones according to Section 015639 "Temporary Tree Protection."

B. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:

1. Storage of construction materials, debris, or excavated material.

2. Parking vehicles or equipment.

3. Vehicle traffic.

4. Foot traffic.

5. Erection of sheds or structures.

6. Impoundment of water.

7. Excavation or other digging unless otherwise indicated.

C. If planting soil or subgrade is overcompacted, disturbed, or contaminated by foreign or deleterious materials or liquids, remove the planting soil and contamination; restore the subgrade as directed by Architect and replace contaminated planting soil with new planting soil.

3.3 PREPARATION

A. Unacceptable Materials: Clean soil of concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.

B. Protect structures, utilities, sidewalks, pavements, and other facilities and turf areas and existing plants from damage caused by planting operations.

C. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil bearing water runoff or airborne dust to adjacent properties. walkways and stormwater utilities.

3.4 SUB-GRADE PREPARATION FOR PLANTING AREAS

A. Planting Beds:

1. Establish sub-grade elevations that will accommodate final planting soil depths per Planting Soil Depth Schedule (shown below}, compost. and top mulch depth where applicable.

2. Entire surface is to be disturbed and loosened to a depth of 8 inches by scarification, discing or ripping to enable a rototiller to fully incorporate required compost.

3. Do not scarify within drip line of existing trees.

4. Remove cobbles, rocks, concrete, asphalt and other debris over 1 inch in any dimension and legally dispose of them off Owner's property.

5. Apply two and a half (2.5) inches of medium compost onto ripped subgrade.

6. Tilling:
   a. Till in medium compost into sub-grade to a depth of 8 inches.
   b. Tilling the compost into the soil shall be accomplished by tilling it twice, the second time perpendicular to the first.
   c. When preparing subgrade near existing vegetation protect existing vegetation by limiting tilling/discing to no closer than 10 feet from existing trees and 6 feet from existing shrubs.

7. Proceed with planting and installation only after approval of subgrade preparation has been provided by Owner.

3.5 PLANTING SOIL PLACEMENT

A. Owner reserves the right to reject material that does not satisfy requirement at any time. Contractor shall remove material immediately with no cost to Owner.

B. Before mixing, clean planting soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.

C. Remove all temporary erosion control seeding prior to installation of planting soil and planting.

D. Mix soil amendments and fertilizers with planting soil at rates per test results. Delay mixing fertilizer if planting does not follow placing of planting soil within a few days.

E. Planting Beds for Shrub and Groundcover Areas:

1. Mix planting soil either prior to placement or apply on surface of planting beds and mix thoroughly before planting.

2. Place approximately 1/2 the minimum depth of planting soil mixture required but not more than 6 inches. Rototill thoroughly into top 2 to 3 inches of loosened, prepared subgrade to create a transition layer.

3. Spread remaining planting soil mixture to depth required to meet thickness, grades, and elevations shown, after natural settlement

F. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture, roll and rake, remove ridges, and fill depressions to meet finish grades.

G. Before planting, obtain Landscape Architect's acceptance of sub-grade preparation and finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.6 SUBGRADE PREPARATION FOR AREAS IMPACTED BY CONSTRUCTION ACTIVITY

A. Subgrade preparation as described above, including the addition of compost, is required for any area impacted by construction activity, including lay down areas, areas used by equipment at any time, and any visible impact to the surface such as tire tracks or compacted areas.

3.7 CLEANUP AND PROTECTION

A. During sub-grade preparation and soil placement, keep adjacent paving and construction area clean and work area in an orderly condition.

3.8 DISPOSAL

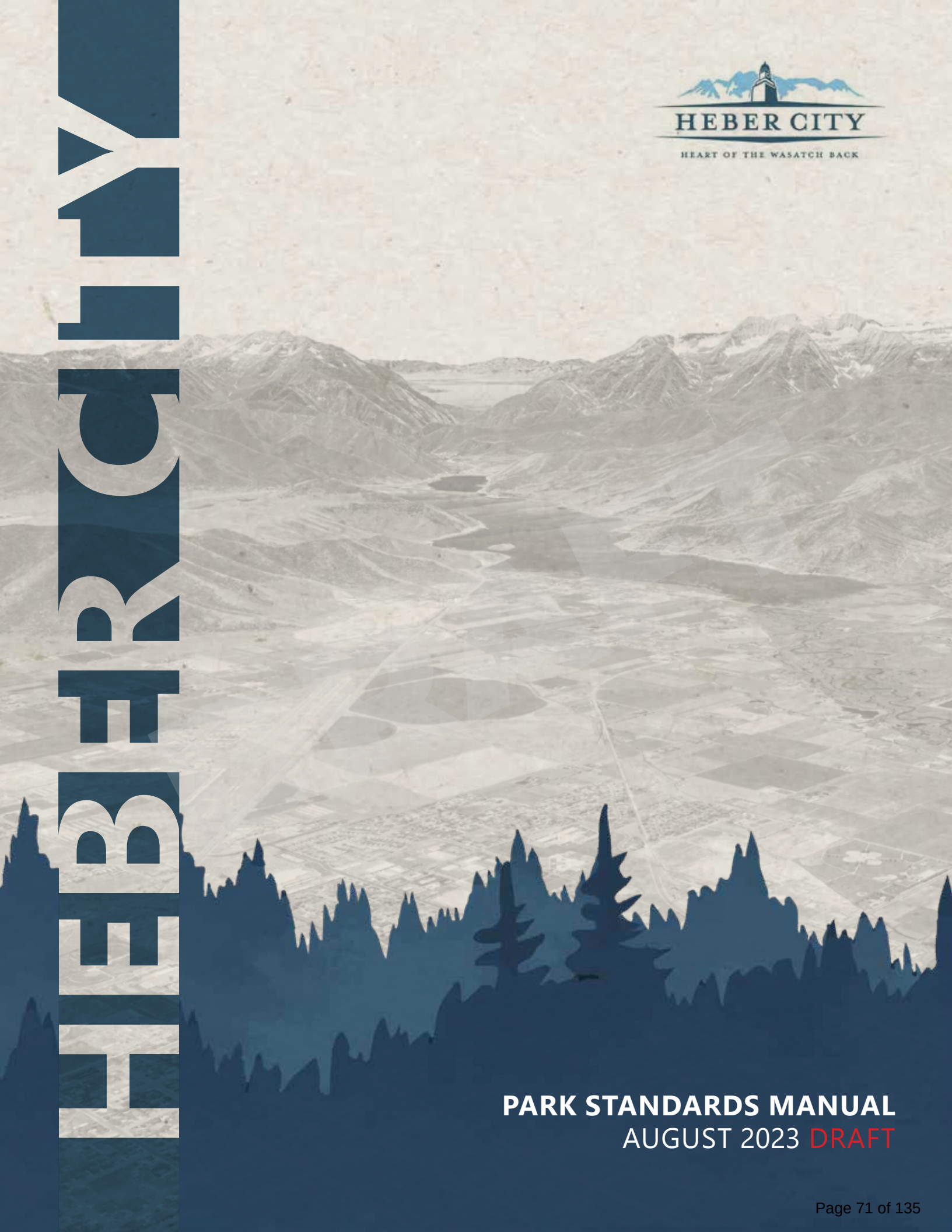
A. Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off Owner's property.

END OF SECTION

HEBER CITY

HEBER CITY

HEART OF THE WASATCH BACK



PARK STANDARDS MANUAL

AUGUST 2023 DRAFT

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HEBER CITY

HEART OF THE WASATCH BACK

75 North Main Street
Heber City, Utah 84032
Phone: 435.654.0757
heberut.gov

ACKNOWLEDGMENTS

HEBER CITY COUNCIL

Heidi Franco, Mayor

Yvonne Barney

Mike Johnston

Rachel Kahler

Scott Phillips

Ryan Stack

PLANNING COMMISSION

Dennis Gunn, Chair-Person

Dave Richards, Vice-Chair

Darek Slagowski

Oscar Covarrubias

Sid Ostergaard

Phil Jordan

Josha Knight

Robert Wilson

CITY STAFF

Jamie Baron, Planning Manager

Mark Rounds, Parks & Cemetery Director

Matt Brower, City Manager

PARKS, OPEN SPACE, TRAILS, AND TREES COMMITTEE

Ashley Farrell, Co-Chair

Scott House, Co-Chair

Yvonne Barney, Council Rep

John Crook

Sarah Simons

Nathanael Adams

Don Taylor

Mia Yue

Christen Thompson

PLANNING CONSULTANTS

LANDMARK DESIGN

Mark Vlasic, AICP, PLA, Principal-in-Charge

Hugh Holt, PLA, ISA, CPSI, Senior Landscape Architect

Aubrey Larsen, Project Planner and Landscape Designer

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1 INTRODUCTION

THE NEED FOR CONSISTENT STANDARDS

Heber City is set on establishing a world-class parks, trails, and open space system. As an emerging recreational destination and a rapidly growing community, ensuring that all parks in the city reflect an acceptable standard is a critical step for achieving this goal. The Heber City Park Standards establish a coordinated and comprehensive park design and development framework for existing and future parks in order to meet the needs and expectations of the city and its current and future residents.

Establishing minimum standards does not mean these spaces should be overly prescriptive or soley focused on meeting minimum requirements, looking identical, or containing the exact same features and equipment. Instead, it is anticipated that each park will be carefully designed to not only meet the minimum requirements, but also respond to the specific site, setting, and program, resulting in unique and engaging spaces.

PARKS STANDARDS GUIDING PRINCIPLES

COMPREHENSIVE RECREATION SYSTEM

Each park is part of a comprehensive recreation system that meets the needs and contributes to the high quality of life in Heber.

HIGH QUALITY DESIGN AND BRANDING

High-quality park design and activities promote the Heber City “brand”, improve livability, and attract tourism.

EQUITABLE ACCESS

Existing and future parks should be distributed in a manner that is equitable and ensures access within a maximum half-mile walking distance of every home in the community.

CONTEMPORARY STANDARDS

Existing parks should be upgraded and future parks designed to meet the established standards.

CONTEXT SENSITIVE

The site, setting and special needs of each park should be addressed through a professional design and development process.

ENVIRONMENTALLY RESPONSIBLE

The Heber City park system should be sustainable and easy to maintain with water-conserving landscapes and dark sky friendly lighting.

A LIVING DOCUMENT

The Heber City Park Standards is a living document that will change, be revised, updated and improved periodically as needed.

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RELATIONSHIP TO OTHER CITY STANDARDS, PLANS, & ORDINANCES

The Heber City Park standards support the overall Heber City Vision and complement other key plans, standards, codes, and ordinances as follows.

HEBER CITY ENVISION 2050

This is a critical policy document that establishes the vision for Heber's future growth and development for the next several decades. It was established as part of highly engaged and comprehensive public involvement process that clarified the future vision for the park, trail, and open space system as well as other key aspects of the city. The plan includes a future land use map and graphic descriptions and development principles intended to ensure existing and future parks, trails and open spaces are implemented in a manner that meets long-term growth and development needs.

HEBER CITY PARKS, TRAILS AND OPEN SPACE MASTER PLAN

The Heber City Parks, Trails and Open Space Master Plan builds upon Heber City Envision 2050, providing more detail regarding existing conditions and future needs, park service gaps, park priorities and levels of service. The plan acknowledges that Heber City is an active community with an identity intrinsically tied to its natural environment, which should be addressed in the design and development of its parks, trails and open space system.

ENVISION CENTRAL HEBER

This planning process takes a careful look at the heart of the city, with a focus on Main Street, surrounding neighborhoods, and a planned recreation and tourism district near the train station. The plan explores growth and traffic enhancements in these areas while maintaining and enhancing the history, recreation opportunities, community spaces, business development opportunities and beauty of the greater downtown area.

WASATCH COUNTY REGIONAL TRAILS MASTER PLAN

This plan was developed in close collaboration with Heber City as a framework for creating a connected system of trails throughout Wasatch County. It addresses regional facilities in Wasatch County, including trails, bike lanes, bike routes and trailheads. The plan also identifies specific standards for bikeways, suggests improved multi-use trails and urban soft surface trails, improved pedestrian trails, backcountry trails, and trail signage and wayfinding systems. The plan includes phasing recommendations for implementing the trail system countywide and within Heber City specifically.

HEBER CITY TRAIL & LIGHTING STANDARDS

Heber City has adopted specific standards for trails and trail lighting, which have been codified in the Municipal Code (*see Chapter 17.30 - Trail Design Guidelines* and *18.78 - Lighting*). These serve as the basis upon which lighting standards for city parks were developed, and should be referenced as appropriate.

C-2 AND C-4 ZONES DESIGN STANDARDS & GUIDELINES

Although these design guidelines were developed for specific commercial districts, they are an excellent reference for understanding the Heber City brand, themes, and aesthetic vision (*see C-2 and C-4 Zones Design Standards & Guidelines*). Preferred colors, building materials, and architectural styles in addition to design principles and styles are described in detail.

HEBER CITY MUNICIPAL CODE

A compendium of key statutes, ordinances, codes and standards that apply in Heber City, including those that address design and development of parks. The following chapters provide specific guidance to the design and development of city parks:

6 *Animals*

8 *Health and Sanitation*

10 *Vehicles and Traffic*

12 *Streets, Sidewalks and Public Places*

13 *Public Services*

15 *Buildings and Construction*

17 *Subdivisions*

18 *Zoning*

19 *Heber City Envision 2050*

HEBER CITY ENGINEERING STANDARDS

In addition to the engineering standards addressed in the Heber Municipal Code, standard Engineering Drawings and Specifications have been established that are aligned with the drawings and specifications for parks in this document. For current Heber City Engineering Standards see *heberut.gov/158/Engineering*.

Note: The municipal code is updated and modified on a regular basis. Visit *heber.municipalcodeonline.com* to ensure the latest version is used.

APPLYING THE STANDARDS

WHERE THE PARK STANDARDS APPLY AND WHERE THEY DO NOT

The Heber City Park Standards apply specifically to new park design as well as retrofit and rehabilitation of existing parks and recreational facilities. These standards apply to all public parks and private parks that are intended to become publicly owned and operated in the future. The standards are therefore encouraged to be used for the design of all private parks and recreation facilities as well.

FIXED VS. FLEXIBLE STANDARDS

A distinction is made throughout this document between fixed and flexible standards. Fixed standards are the same between all parks and are intended to be unchanging.

FIXED STANDARDS

As indicated by the name, fixed standards are predetermined and generally inflexible. They should be the same at all parks (*see Table 1.1*).

TABLE 1.1 - FIXED PARK STANDARDS

- Level of Service (LOS)*
- Softscape (plant materials)
- Hardscape (paved surfaces)
- Irrigation
- Fencing
- Signage (Park Name only)
- ADA/Accessibility
- Lighting/Electric/Utilities

**Note that the LOS will change based on park type and size, but will establish the minimums for developments .*

FLEXIBLE STANDARDS

In order to ensure each park is unique and an example of great park design, flexible standards provide more flexibility while ensuring the minimum requirements are met (*see Table 1.2*).

TABLE 1.2 - FLEXIBLE PARK STANDARDS

- Park Amenities
  - Furnishings, Structures and Architectural Features such as restrooms, shelters, trellises and gazebos
- Recreation and Play Amenities
- Special features and structures
  - Water features, splash pads, fountains and similar features
  - Special park features such skate parks and demonstration gardens
  - Themed elements and historic/cultural features
  - Environmental and interactive art features such as Low Impact Design (LID) systems stormwater conveyance system, labyrinths and interpretive walkways
  - Public art and sculpture

END USERS

PARK DESIGNERS

The Heber City Park Standards are not a substitute for professional expertise, experience, and aesthetic judgment. It is assumed that professional landscape architects (PLAs), licensed in the State of Utah, shall be responsible for the design of all parks in Heber City. They shall utilize these guidelines to help ensure public safety, health, regulatory, and permitting requirements associated with the design and implementation of parks are met, and shall ensure that all applicable local, state, and federal laws, codes, and regulations are addressed and incorporated as required. Generally, the design of parks and open space shall be undertaken by project owners and developers, and reviewed and revised by the city.

CITY STAFF

City staff will use these standards in conjunction with city policies and guidance documents, community desires and needs, and existing amenities in other parks when evaluating and managing park development projects. Their role is to help ensure that the design and specific elements for each park and open space meets the needs of the city and park system.

MEMBERS OF THE PUBLIC

These guidelines are available to the public to help clarify the processes and standards that are in effect.

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THE HEBER CITY IMAGE

Heber City is nestled in a green valley, brimming with historic agricultural uses, the beautiful Provo River, and unmatched views of the Wasatch Mountains. This image of Heber City creates a strong sense of place, and the consistent application of the City brand, themes, and aesthetic vision is essential for achieving a cohesive park system. Park designers should be familiar with the Heber City brand and central themes (*see Table 1.3*) as well as the characteristics of the unique City districts and future land use areas. For further clarification, a land use and district map are found on *pages 16 and 17* respectively, as well as in the *Heber City Envision 2050 General Plan (adopted 2020)* and *Central Heber Vision Scenario (proposed 2023)*.

TABLE 1.3 - HEBER CITY BRAND CENTRAL THEMES

Description: The central themes of the City address focal points and commonalities that residents and visitors universally cite when describing the Heber Valley.

- Sense of history and place in a beautiful mountain valley, and its welcoming and peaceful environment
- Open space & rural character
- Friendly neighborhoods and centers
- Diverse regional recreational opportunities

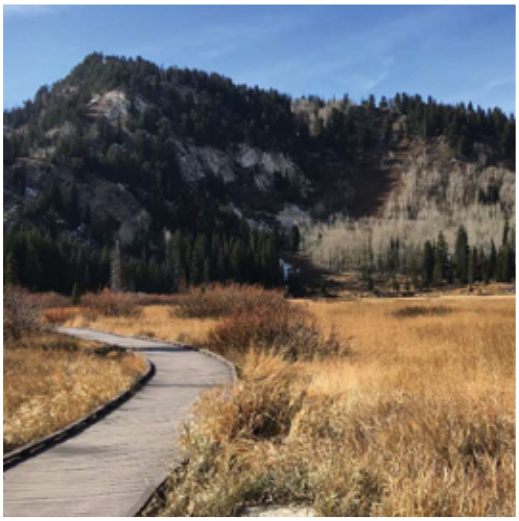
HEBER CITY DISTRICTS

In addition to the overall Heber City brand, specific design standards have been developed for specific areas of the city. For example, the Municipal Code includes a special section for the North Village to help ensure a unified design and quality development is achieved through the use of high-quality materials, architecture, landscaping, and open space, as defined in the General Plan (*see Table 1.4*). Note that the "Mountain Modern" style referenced throughout this section shares the characteristics of the North Village.

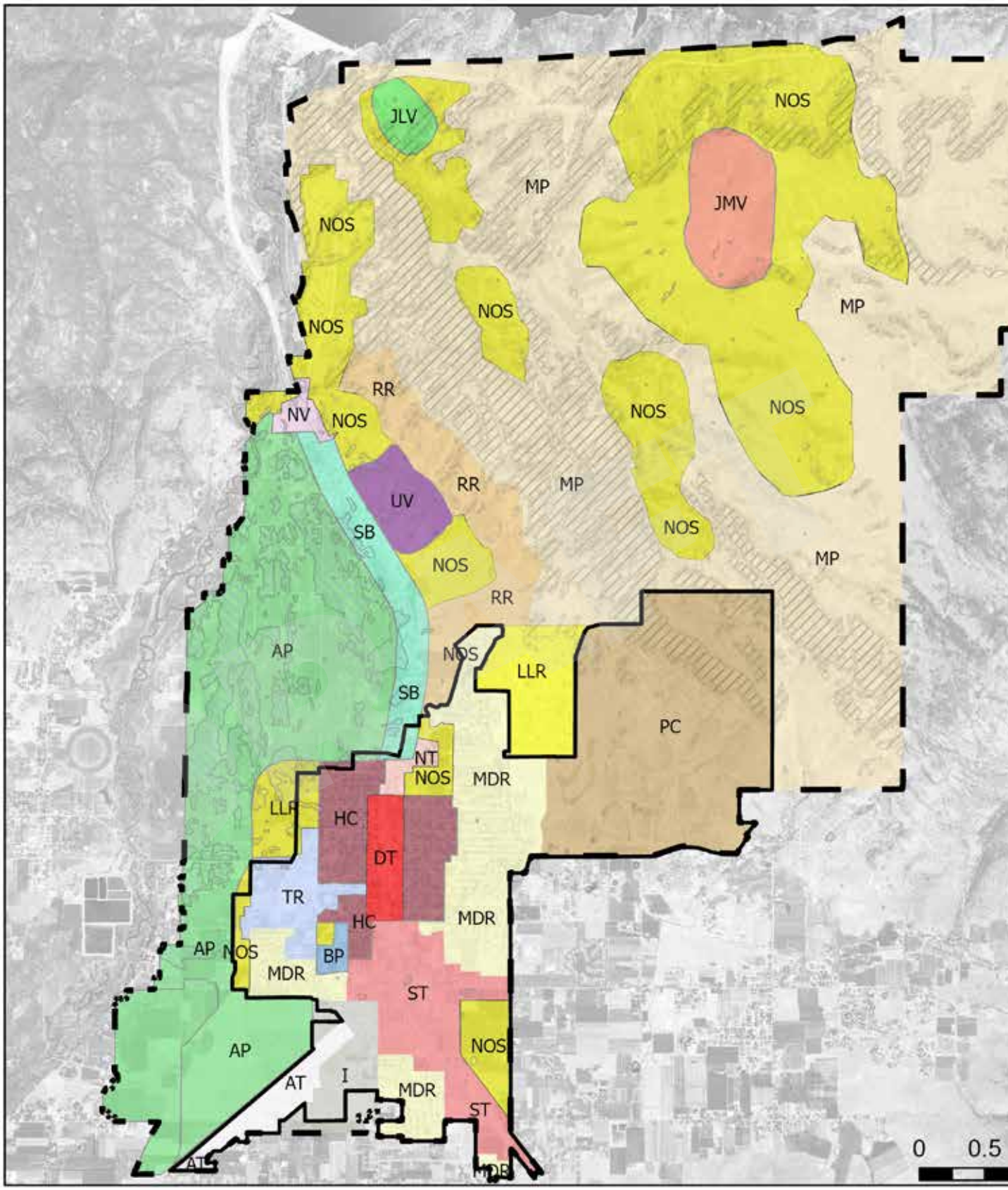
TABLE 1.4 - NORTH VILLAGE (NV) KEY CHARACTERISTICS

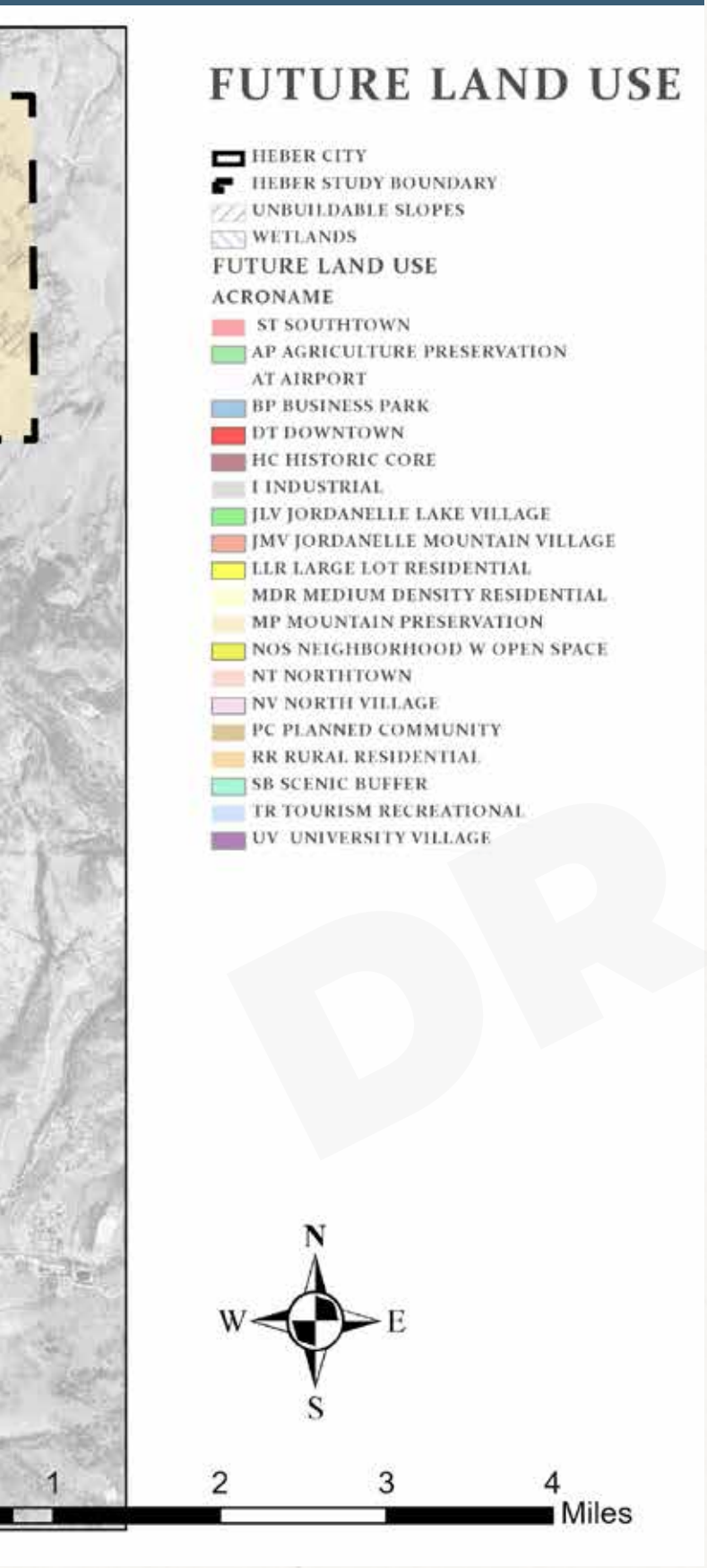
Description: A town center located at the major crossroads of Highway 40 and Highway 32, growth is anticipated to exceed many other areas of Heber due to the numerous developments occurring in both Summit and Wasatch Counties, including evolving ski resort destinations.

- Simple rustic detailing and ornamentation
- Stone/ brick or natural/ transparent stained wood
- Colors and materials blend with the natural setting
- Simple geometric forms
- Exposed structural elements



MAP 1.1 - HEBER CITY FUTURE LAND USE MAP




FUTURE LAND USE
HEBER CITY
HEBER STUDY BOUNDARY
UNBUILDABLE SLOPES
WETLANDS
FUTURE LAND USE
ACRONAME
ST SOUTHTOWN
AP AGRICULTURE PRESERVATION
AT AIRPORT
BP BUSINESS PARK
DT DOWNTOWN
HC HISTORIC CORE
I INDUSTRIAL
JLV JORDANELLE LAKE VILLAGE
JMV JORDANELLE MOUNTAIN VILLAGE
LLR LARGE LOT RESIDENTIAL
MDR MEDIUM DENSITY RESIDENTIAL
MP MOUNTAIN PRESERVATION
NOS NEIGHBORHOOD W OPEN SPACE
NT NORTHTOWN
NV NORTH VILLAGE
PC PLANNED COMMUNITY
RR RURAL RESIDENTIAL
SB SCENIC BUFFER
TR TOURISM RECREATIONAL
UV UNIVERSITY VILLAGE
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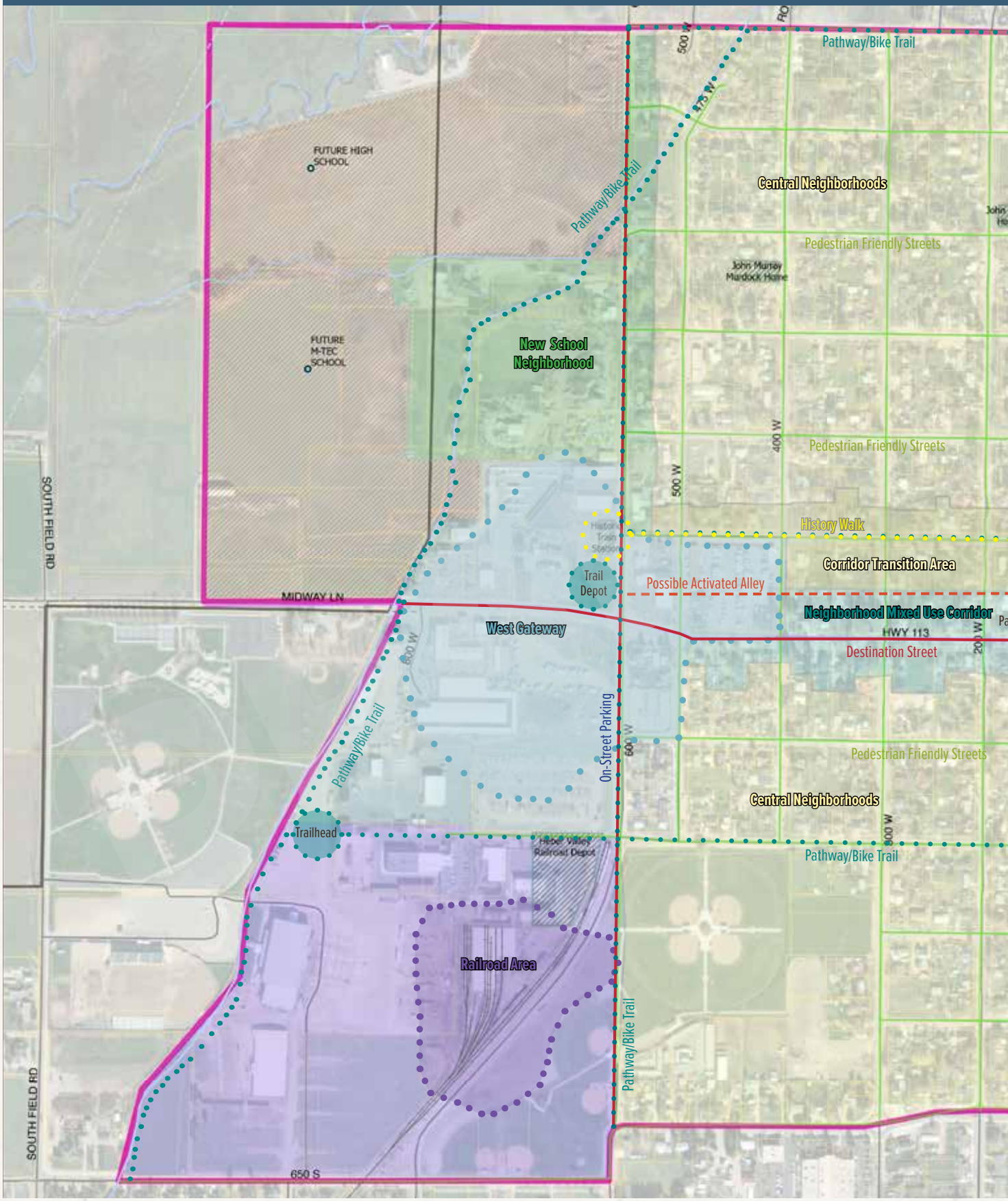
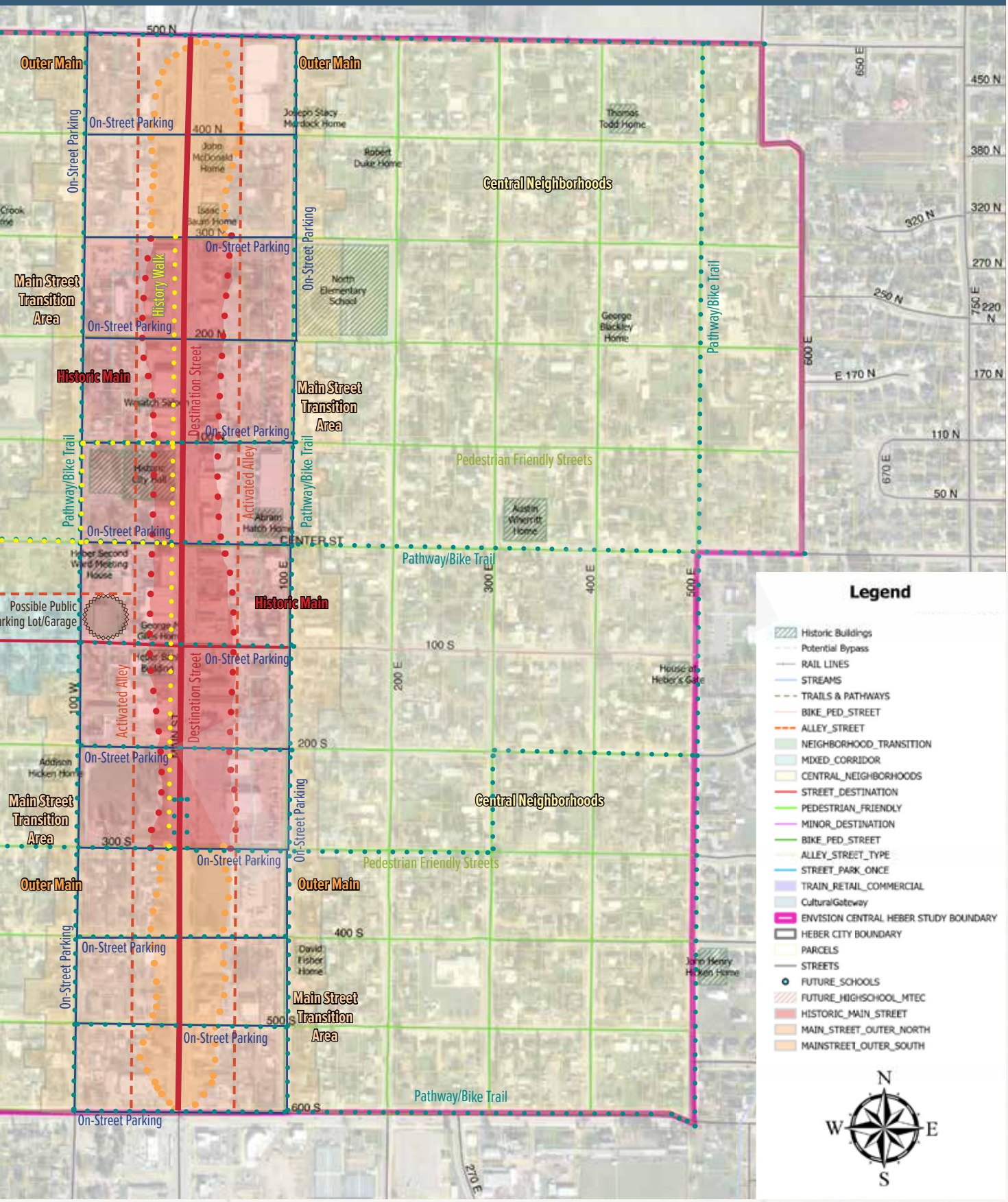
MAP 1.2 - ENVISION CENTRAL HEBER CITY DISTRICT MAP




Outer Main
Outer Main
On-Street Parking
On-Street Parking
On-Street Parking
Main Street Transition Area
History Walk
On-Street Parking
Historic Main
Destination Street
Main Street Transition Area
On-Street Parking
Pathway/Bike Trail
Activated Alley
Pathway/Bike Trail
On-Street Parking
CENTER ST
Pathway/Bike Trail
Possible Public Parking Lot/Garage
Historic Main
Activated Alley
Destination Street
On-Street Parking
On-Street Parking
Main Street Transition Area
On-Street Parking
Outer Main
Outer Main
On-Street Parking
On-Street Parking
Main Street Transition Area
On-Street Parking
Pathway/Bike Trail
Central Neighborhoods
Central Neighborhoods
Pedestrian Friendly Streets
Pedestrian Friendly Streets
Pathway/Bike Trail
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400 N
300 N
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750 E
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450 N
380 N
320 N
270 N
220 N
170 N
110 N
50 N
E 170 N
250 N
320 N
100 S
200 S
300 S
400 S
500 S
600 S
270 E
Legend
Historic Buildings
Potential Bypass
RAIL LINES
STREAMS
TRAILS & PATHWAYS
BIKE_PED_STREET
ALLEY_STREET
NEIGHBORHOOD_TRANSITION
MIXED_CORRIDOR
CENTRAL_NEIGHBORHOODS
STREET_DESTINATION
PEDESTRIAN_FRIENDLY
MINOR_DESTINATION
BIKE_PED_STREET
ALLEY_STREET_TYPE
STREET_PARK_ONCE
TRAIN_RETAIL_COMMERCIAL
Cultural/Gateway
ENVISION CENTRAL HEBER STUDY BOUNDARY
HEBER CITY BOUNDARY
PARCELS
STREETS
FUTURE_SCHOOLS
FUTURE_HIGHSCHOOL_MTEC
HISTORIC_MAIN_STREET
MAIN_STREET_OUTER_NORTH
MAINSTREET_OUTER_SOUTH
N
W
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S

EMERGING ENVISION CENTRAL HEBER DISTRICTS

The following districts were identified as part of the Envision Central Heber project with unique themes and characteristics for design professionals to consider (*see Table 1.5 - 1.7*):

TABLE 1.5 - RECREATION & TOURISM DISTRICT KEY CHARACTERISTICS

Description: An outdoor-oriented district that lets Main Street "shine" while supporting local recreational activities and regional recreational destination pursuits.

- Wide sidewalks
- Benches
- Outdoor dining areas
- Street trees
- Plaza space
- Fire pits/heaters
- Bike racks
- Activity structures
- Art/sculptures
- Planters
- Attractive streetlights
- Classic materials and features
- Modern/clean lines
- Preferred building materials: brick, wood/composite siding, sandstone, timbers
- Design standards requiring classic commercial features (e.g. storefront), but with flexibility for a variety of styles.

TABLE 1.6 - CENTRAL NEIGHBORHOODS DISTRICT KEY CHARACTERISTICS

Description: Pedestrian-friendly streets with an easy-to-access bike network, neighborhood parks, a potential alley pilot project between 100 South and Center Street, a history walk connecting the original train depot and the Civic Center Block, historic structures and homes enhanced.

TABLE 1.7 - MAIN STREET DISTRICT KEY CHARACTERISTICS

Description: Highly active destination Main Street featuring live/work/play/shop/dine/gather opportunities; historic/classic architecture in Historic Main District and historic themed but more flexible architecture in outer Main.

- Benches
- Outdoor dining areas
- Street trees
- Plaza space
- Fire pits/heaters,
- Bike racks
- Activity structures
- Art/sculptures
- Planters
- Attractive streetlights
- Mix of existing historic and new modern and traditional
- Preferred building materials: brick, sandstone, glass, timbers, rock
- Apply existing design standard for classic commercial requiring historic/classic commercial features (e.g. storefront), but with flexibility for a mix of styles
- Classical/historic building features encouraged.

FUTURE LAND USE DISTRICTS

In addition to the emerging Central Heber Districts,the following land uses described in the *Heber City Envision 2050 General Plan (adopted 2020)* provide general direction and guidance for future decisions to expand, modify, or rehabilitate City infrastructure.

In order to ensure the brand and aesthetic vision is current and up to date, it is the responsibility of each professional designer to verify that they have reviewed the current version of the General Plan and other adopted policies, plans, and documents.

DISTRICT TYPE	USES	KEY CHARACTERISTICS
Historic Core Neighborhood (HC)	Primary: single family dwellings on smaller lots, town homes, duplexes, triplexes, flexible infill, small multifamily buildings; consider bonus densities for higher quality architecture Secondary: connective and corner small scale retail/ restaurants, bed and breakfasts, community gardens, public facilities, churches	A mixed neighborhood emphasizing a variety of housing types. Strong street connections to the downtown and the tourist center; bicycle and pedestrian friendly.
Jordanelle Mountain Village (JMV)	Primary: commercial and service uses intended to reduce trip generation to other town centers Neighborhoods: low, medium and higher density residential areas on slopes less than 30%, clustering options, schools	A mixed use town center intended to serve the significant population on the upper mountain area, characterized by Mountain Modern architecture and mixed uses that include gathering spaces. Natural lands are preserved. Roads with swales and trails, clustering options, small lot and townhome options, significant open space, natural areas, schools.

DISTRICT TYPE	USES	KEY CHARACTERISTICS
Jordanelle Lake Village (JLV)	Primary: hospitality, mixed uses, service and commercial uses Secondary: medium to higher density residential, schools	A mixed use town center with adjacent neighborhoods to serve the region's growing recreation/tourism industry, characterized by Mountain Modern architecture and mixed uses that include gathering spaces. Development blends into the slopes, and natural lands are preserved. Roads with swales and trails, clustering options, small lot and townhome options, significant open space, natural areas.
Utah Valley University Village	Primary: an array of uses supportive to the University, including hospitality, training centers, small retail, gathering places, mixed use, and student housing. Secondary: tech uses, affordable housing	A mixed use village created to support the growth and desirability of the UVU campus, characterized by Mountain Modern architecture and vibrant pedestrian gathering places.
New Neighborhoods with Open Space (NOS)	Primary: SFDs Secondary: townhomes, small lot and attached housing	Small lot clusters, townhomes and open space achieved through clustering and generally located adjacent to centers.
Agricultural Preservation (AP)	Agricultural uses on large lot (20 acres), with minor residential use	Dairy, grazing and grazing supportive crops with a homestead. Agricultural areas provide separation between communities.
Mountain Preservation (MP)	Recreational uses using the preserved natural areas	Steep slopes over 30%, stream corridors, wetlands, areas providing separation between communities. Clustered housing with density transfers to the villages.

DISTRICT TYPE	USES	KEY CHARACTERISTICS
Scenic buffer (SB)	Scenic highway corridors with adjacent trail systems, storm water retention and significant use setbacks	Natural and enhanced landscapes with trail systems adjacent to existing and proposed highways.
Rural Residential (RR)	Residential and agricultural mix in clustered patterns of development	Rural streetscapes with clustered housing and large open spaces in a natural, grazing, or agricultural use.
Medium Density Residential (MDR)	Primary: single family residential uses	Existing single family neighborhoods with a mix of suburban and rural street standards.
Large Lot Residential (LLR)	Primary: single family residential uses	Mostly existing single family neighborhoods with expansive views due to large separations between homes.
Planned Community (PC)	Primary: large lot single family homes	Existing neighborhood with significant open space and recreation uses.
South Town Center (ST)	Primary: regional commercial/ office uses, health services, light manufacturing and tech businesses Secondary: medium to high density residential	A mix of businesses catering to the regional larger scale needs of Wasatch County. Includes big box retail opportunities.
North of Downtown Center (NT)	Primary: regional commercial/ office uses, health services, incubator business complexes Secondary: medium to high density residential	A secondary regional hub.
Business Park (BP)	Office and tech uses	High quality design and architecture.
Airport (AT)	Airport and air traffic related uses	Runways, hangars, service shops and supportive commercial uses.
Light Industrial (I)	Manufacturing uses located generally within enclosed buildings, plus office warehouse uses	Limited outdoor storage and activity; may allow for accessory apartments.

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PARK TYPE STANDARDS

LEVEL OF SERVICE (LOS) STANDARDS

As detailed in the *Heber City Parks, Trails and Open Space Master Plan (adopted 2021)*, establishing a clear Level of Service (LOS) for parks is essential for ensuring that existing and future park needs are met. The plan calls for a future LOS of 4.0 acres of park land to be provided for every 1,000 residents, equitably distributed throughout the city so that eventually a park or trail will be available to every household within a maximum half-mile walking distance. Generally, an emphasis should be placed on the quality of parks rather than the quantity (acreage).

Existing and future parks are expected to meet the high aspirational standards for quality amenities and design. In addition, extra vigilance is necessary to ensure existing and future parks are distributed in a manner that is equitable and achieves the ambitious goal of ensuring a maximum walking distance from home to the nearest park.

MINIMUM STANDARDS FIXED STANDARD

Establishing minimum standards is not meant to be prescriptive or to suggest that every park should look similar and contain the same or indistinguishable features and equipment. Rather, it is assumed that each park will be funded at a level to allow the park to meet the established standard, and carefully designed to ensure each site is unique and aligned to the specific location.

In order to meet the needs and expectations of the city and its residents, all parks are required to provide a minimum level of amenities based on the size of each park in acres. “Amenities” encompass a broad range of features that will be used by park users, such as playgrounds, sport fields, furnishings, and restrooms. Individual park amenities, paired with a park’s overall design and setting contribute to the character and function for each park. **At least 10 points per 0.1 acre or 100 points per acre are required in the design of Heber parks** (*see Table 2.2*).

SENSITIVE SITE ELEMENTS

Heber City recognizes that not all land is buildable or appropriate for development and that there are areas on which the intensity or type of development should be modified. Areas commonly referred to as “sensitive lands” provide beneficial uses, distinctive features, and natural settings that should be enhanced or preserved (see *Municipal Code Chapter 18.67 - Sensitive Lands*). At the discretion of the planning commission and city council, sensitive lands characteristics (*see Table 2.1*) may grant an applicant some leniency in determining amenity requirements. Points will be awarded based on the quality and usability of the land.

TABLE 2.1 - SENSITIVE LANDS CHARACTERISTICS

- Steep slopes
- Significant rock outcroppings
- Wetlands
- Avalanche zones
- Intermittent or constant flow stream corridors
- Ridgelines
- Springs
- Significant gullies
- Species protection
- Wildfire/urban interfaces
- Flood plains
- Animal migration routes
- Soils and geotechnical considerations, such as fault lines, soil types, and depth to bedrock, and shallow water table levels

PARK AMENITY REQUIREMENTS (POINTS WILL BE FINE-TUNED)

The following elements may be used to achieve the 10 points that are required per 0.1 acre (or 100 points per acre). Park features or elements that are not included in this table may be proposed by an applicant and are assigned points by the planning commission and city council. All parks are required to provide a mixture of amenities that are reflective of the park type (*see pages 30-34*).

TABLE 2.2 - AMENITIES/ PARK FEATURES	POINTS
Sports court (6,600 sq. ft. or 55' x 120')	100
Restroom (min. 190 sq. ft. and 2 stalls) (80 points per additional 2 stalls)	100
Multi-purpose sport fields (needs dimension)	50
Passive recreation area (needs dimension)	50
Trail, hard or soft surface (min. width to maximum 8ft.), excluding sidewalks along streets (per 100 linear feet). Trail and bike lane connections to other parks, open spaces, recreation amenities and community destinations should be included	6-8
Drinking Fountain (freeze resistant w/pet bowl & bottle filler)	5
Pavilion (per 100 sq. ft.)*	4
Shade structure (per 100 sq. ft.)	4
Public art or sculpture, artist commissioned	4
Picnic or dining table (6'-8'); bench or other seating (6'-8'), trash receptacle or similar furnishings. High-quality metal, powder-coat, selected from same series or model**	2
Bicycle rack (4+ bikes)	2
Trees (5)	2
Playground equipment, splash pad, skate, or other specialty play feature (per $1,000)	2
Sensitive lands characteristics as determined by Heber City (awarded based on the quality and usability of the land)	0-100
Other special amenities and features approved by Heber City	0-100

** 1 picnic table or equivalent is required for every 100 sq ft.*

*** A minimum of one trash can is required for every pavilion and/or picnic/dining table*

DIFFERENT PARK TYPES

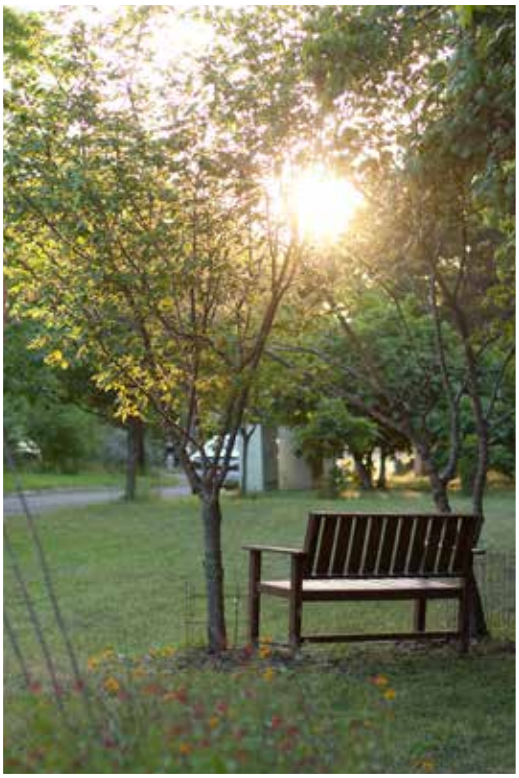
LOCAL PARKS

5 ACRES OR LESS

Local Parks are small (typically less than 5 acres) and provide limited amenities. They are also referred to as Common, Green, or Pocket Parks. While it should be noted that Local Parks are generally not supported in the *Heber City Parks, Trails and Open Space Master Plan (adopted 2021)*, they should include the following minimum amenities in order to match their size and function (*see Table 2.3*):

TABLE 2.3 - LOCAL PARK MINIMUM AMENITIES

- Trees
- Picnic tables, benches, or other site furnishings
- 1 drinking fountain for anything larger than 2 acres or as otherwise determined by City staff
- Passive multi-use area(s)
- A covered shelter, pavilion or shade structure or a small playground, sport court or activity area
- Restrooms are costly and are not typically included (if restrooms are desired in the future, additional funding will be required)
- Focus on natural park functions and trail access rather than developed park amenities such as courts and fields



NEIGHBORHOOD PARKS

3-10 ACRES

Neighborhood Parks are recommended as the primary park type for filling gaps in the park system. They generally provide the best value to the City and its residents by striking a balance between convenient access, and the level of amenities they provide. While the established size range for Neighborhood Parks is 3-10 acres, **a minimum of 5 acres should be the goal for future parks**, as this is considered the minimum threshold for ensuring efficient maintenance routines and for providing the highest level of play and recreation opportunity. Neighborhood Parks should include the following amenities (*see Table 2.4*):

TABLE 2.4 - NEIGHBORHOOD PARK MINIMUM AMENITIES

- Trees
- Picnic tables or benches
- 1 drinking fountain for every 5 acres
- Passive multi-use area(s)
- Small/Medium Pavilion(s)
- A restroom
- Sport court(s) (basketball, volleyball, pickleball and tennis)
- Playground(s)
- Sports field(s) (baseball, soccer, football and similar sports for casual play, pick-up games and training)
- Trail and bike lane connections to other parks, open spaces, recreation amenities and community destinations
- Perimeter walking trail(s) where appropriate

COMMUNITY PARKS

10 - 30 ACRES

Community Parks are larger parks that meet the needs of the entire community. They should be between 10-30 acres and include the following (*see Table 2.5*):

TABLE 2.5 - COMMUNITY PARK MINIMUM AMENITIES
▪ All the amenities and features in Neighborhood Parks ▪ At least one large pavilion ▪ At least one specialty regional recreation feature, such as a sports complex, an aquatics facility, splash pad or arboretum ▪ At least one restroom, depending on size and need ▪ Community event infrastructure

REGIONAL PARKS

30+ ACRES

Regional Parks are large, typically greater than 30 acres in size. They are the largest and most diverse park type, providing a wide range of amenities and features. Future city and county-owned Regional Parks should include the following (*see Table 2.6*):

TABLE 2.6 - REGIONAL PARK MINIMUM AMENITIES
▪ All the amenities and features in Community Parks ▪ Two or more specialty regional recreation features, such as a sports complex, an aquatics facility, splash pad or arboretum ▪ Two or more restrooms, depending on size and need ▪ Community event infrastructure

URBAN GATHERING PLACES

VARY IN SIZE

Urban Gathering Places are important for activating Heber's destinations and town centers. As such, they should provide the highest level of amenities. They are intended to provide high quality gathering places, incorporating amenities and features that engage local residents and encourage visitors to join in and return again and again. Urban gathering spaces vary in size, but should include many of the same minimum amenities and features found in Community and Regional Parks while also incorporating special amenities that provide a regional draw. They should include amenities that support 24/7 activity and contribute to a unified look and appeal as defined in the General Plan and Envision Central Heber. In summary, Urban Gathering Places should include the following (*see Table 2.7*):

TABLE 2.7 - URBAN GATHERING PLACES MINIMUM AMENITIES

- Amenities and features similar to those found in Community/Regional Parks as well as features such as plaza spaces, fire pits/ heaters, bike racks, activity structures, art/ sculptures, planters, fitness stations, and attractive streetlights
- Special destination amenities that provide a regional draw such as a performance and event venue, food and eating elements, destination play/water features, and special programming/ branding
- Amenities that support 24/7 activity and contribute to a unified look and appeal as defined in the general plan

CONSIDERATION OF SPECIAL PARK NEEDS & CHARACTERISTICS

These general park standards are primarily a function of the size and purpose of each park. In some cases, other characteristics may need to be considered when determining how to apply the standards.

For example, a park that is located in a natural setting should build upon those conditions, resulting in a simpler and less developed park better matching the context and setting. Another example is a park that is located in a district or neighborhood with a special theme, brand, or look. In such cases, those special conditions should be considered and evaluated in addition to the general standards.

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PARK DESIGN

Great parks require great designs. They rarely, if ever, just “happen.” Nearly all communities have public spaces and features that evolved without any type of strategic plan or organized process, and while these places are appreciated, they are not the destinations they could have been with the application of solid design approaches.

This section outlines seven park design principles that, when applied strategically, will result in quality, well-thought-out park spaces.

PARK DESIGN PRINCIPLES

INCLUSIVE & WELCOMING

Great parks make you feel good as soon as you arrive. They are open in their design, welcoming, and park visitors sense that they are in a safe place where they can relax, exercise, play with their kids, or make new friends.

SUSTAINABLE & RESILIENT

Great parks embody environmentally responsible development strategies. Heber's parks are not only great places for people, but they incorporate natural systems and processes, conserve water and other natural resources, balance dark-sky lighting principles with public safety, and are designed with ecological processes in mind — incorporating them seamlessly.

BEAUTIFUL

Great parks are filled with beautiful elements that are organized in ways that create balance, unity, rhythm, proportion, and interest.

SENSITIVE TO CONTEXT

Great parks are a reflection of their context. For example, a park adjacent to a school will take into consideration the needs of the students next door and will be designed in such a way that their experience is maximized. A park located in a wooded or river setting will build upon those features, celebrating the unique features associated with those natural elements.

DESIGNED TO EVOLVE

Great parks have longevity while also being able to respond to changes over time. A great park can adapt to meet the needs of new generations and respond to evolving activities and uses.

TIMELESS

Great parks are timeless, reflecting the era in which they were designed. Some of the most innovative park designs retain their original look and feel even after being modified and changed to meet new needs.

MAINTAINABLE

Great parks always involve and consider the needs of maintenance staff in the planning and design process, ensuring efficient maintenance processes and budgetary limitations are integrated into the design.

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SOFTSCAPE & HARDSCAPE

The process of landscape design involves programming both the hard and soft areas of a site in order to achieve desired goal and needs. When planning Heber's parks, one should consider hardscape and softscape activity requirements, maintenance, aesthetics, and functionality.

SOFTSCAPE FIXED STANDARD

Softscape refers to the horticultural elements of a park that are composed of plant materials such as shrubs, trees, lawns and ground covers, and similar live and growing elements. Softscape also includes permeable surface treatments associated with the planted areas such as mulches (*see Table 4.1*).

Softscape requires regular maintenance such as weed and nuisance management, lawn management and watering, and similar activities that ensure the park is functional and usable. See the appendices for softscape standard specifications and details.

TABLE 4.1 - SOFTSCAPE

Description: Horticultural elements of a park composed of plant materials or other similar live, growing elements.

- Plant materials such as shrubs, trees, lawns, ground covers, and similar live and growing elements
- Surface treatments associated with planted and live materials such as mulches
- Requires regular weeding, nuisance management, lawn management, watering, and similar activities

HARDSCAPE FIXED STANDARD

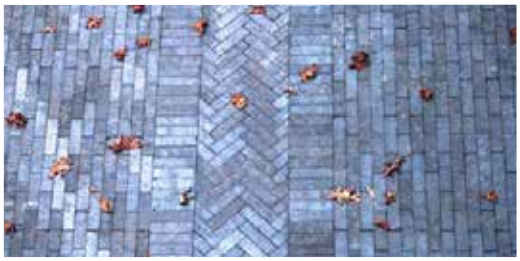
Hardscape refers to hard landscape materials in the built environment that are incorporated into a landscape. Hardscapes are typically impermeable, and include paved surfaces, driveways, retaining walls, stairs, walkways, and any other hard-wearing materials composed of wood, stone, metal and concrete (*see Table 4.2*).

Hardscape can also be defined spatially (e.g. plazas, gathering areas, sidewalks, paths and trails), by use (e.g. edging), and by material (e.g. concrete, asphalt, stone, decomposed and crushed stone, gravel, asphalt, metal and wood). See the appendices for hardscape standard specifications and details.

TABLE 4.2 - HARDSCAPE

Description: Hard landscape elements and materials in the built environment that are incorporated into a landscape.

- Includes paved surfaces, driveways, retaining walls, stairs, walkways, and other hard-wearing materials
- Hardscape can be defined spatially (plazas, gathering areas, sidewalks, paths, and trails)
- Hardscape can be defined by use (edging)
- Hardscape can be defined by material (concrete, asphalt, stone pavers, decomposed and crushed stone, gravel, asphalt, metal, and wood)



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PARK AMENITIES

Park amenities encompass man-made features and structures in a park. Examples include:

- Furnishings such as benches, picnic tables, and trash receptacles
- Architectural features and structures (large and small) such as arbors, shelters, shade structures, restrooms, and storage facilities
- Playgrounds and play features
- Smaller features such as fences, walls, and lighting
- Special features that complete the park and make it unique such as public art, monuments, fountains, water features, and statues

In short, park amenities encompass all of the features that enhance one's enjoyment and comfort at the park. Park design often begins by addressing the primary use areas and ends with the selection of amenities that make the park a place that people want to visit regularly.

The following are typical standards and qualities that should be considered when designing and selecting park amenities in Heber City. Standard details and specifications are contained in the appendices.

PARK FURNISHINGS FLEXIBLE STANDARD

Park furnishings should be limited to a select and unified range of features. Standards for park funishings are as follows:

SEATING AND BENCHES

When selecting seating and benches, the function of each park and the anticipated park users should be carefully considered. For example, if the park is located in a neighborhood with a greater concentration of elderly users, more benches and seating should be provided that include support for the arms and back. Materials should be selected that are comfortable, durable, and easy to clean such as powder-coated metal and recycled wood. The benches and seats should be selected from standard model lines, with flexibility provided for branding with the Heber City logo or the park name.

PICNIC AND DINING FURNITURE

Picnic and dining furniture should be selected in a similar manner to park seats and benches, with special attention to ensure the needs of elderly, disabled, and users with special needs are addressed. These furnishings should complement the design and style of the other park furnishings, also incorporating opportunities for branding with the Heber City logo or park name.

TRASH RECEPTACLES

To ensure the parks remain clean and attractive, an adequate number of trash receptacles should be located throughout the park with the greatest concentration in areas near picnic and dining areas, seating and assembly areas, and locations where people tend to gather such as entry plazas. The receptacles should complement the other park furnishings and be optimally located near seating and activity areas — close enough to be functional, yet far enough away to separate park users from any generated smells. Specific models should be selected that facilitate simple and routine maintenance.

BIKE RACKS

Heber is an active community that will soon be connected by a coordinated trail system. Since many people will be riding their bikes to the city's parks and open spaces, the provision of robust bike racks at park destinations is essential. Factors such as ease of locking, proximity to the destination point, and high visibility should be taken into consideration. Bike racks should be embedded or surface mounted with tamper-proof bolts and feature thick metal bars at an appropriate height for easy and effective locking (meaning the bike frame and at least one wheel can easily be secured). Bike racks should be unified with the design of the other park furnishings.

DRINKING FOUNTAINS

Drinking fountains should be located in high-activity areas of the park such as picnic areas and sports facilities. They should be carefully selected to match the health and utility standards in Heber City, and should generally match the look and appearance of the other park furnishing. Drinking fountains should be fabricated from materials that are weather proof, vandal resistant, and easy to maintain. Drinking fountains should be selected to meet special needs such as filling water bottles and providing drinking water for dogs.

BUILDINGS AND ARCHITECTURAL FEATURES

Building and architectural features will vary depending on the specific needs and requirements of each park, requiring a high level of flexibility when designing and selecting these features. Whether specially designed or pre-fabricated, buildings and architectural features should meet the functional and design needs of the city, the surrounding neighborhood or district, and the park itself. Examples of key park buildings and architectural features include park shelters, pavilions, arbors, shade structures, and restrooms.

RESTROOMS

Restrooms are critical for conveying a high-quality impression of Heber's parks. They should be specially-designed or customized to ensure they meet both the functional and aesthetic needs of the park. Restrooms preferably are custom designed, and if a pre-fabricated structure is used it should meet the same design, functional needs, and requirements.

SPECIAL AMENITIES AND FEATURES

Special amenities and features include water features, splash pads, monuments, sculpture and public art, to name a few. Such features will vary depending on the specific function and vision for each park, and can contribute to a more complete park experience. Due to the variability of such features, they should be implemented with a higher level of flexibility and review than more standard park features and elements.

LIGHTING FIXED STANDARD

Park lighting should build upon the established lighting standards (see *Municipal Code Chapter 18.78 - Lighting*) and the engineering standard drawings and specifications for trail lighting. Park and park pathway lighting styles should be coordinated with the other park furnishings to provide a unified appearance while allowing flexibility to meet the specific needs of each park.

Park lights should utilize a coordinated system of bollards and pedestrian-scale light poles in addition to the lighting of key buildings and structures. Specific light fixtures should be selected from a single model-line. Park lighting should meet established lighting requirements, be high quality, dark-sky compliant, and utilize powder-coated metal poles and rust-resistant lighting housings.

FENCING FIXED STANDARD

In order to ensure Heber City parks are safe and secure, a unified and consistent fencing treatment is required.

DIFFERENT FENCES FOR DIFFERENT PURPOSES

Fences are structures which serve as an enclosure, barrier, or boundary and a fence's design should reflect it's purpose. The outer edges of Heber City parks should be a split rail or open farm fence style, similar to those found throughout the Heber Valley. In areas of the park that abut residential and commercial properties, a solid privacy fence is required. A greater level of flexibility and latitude is provided to meet special or unanticipated fencing needs. See the Appendices for details and specifications.

FENCING PRINCIPLES

SAFE AND FUNCTIONAL

The type of fencing should reflect the type of park or playground and be sensitive to those who frequent it. Playgrounds for small children, dog parks, and areas that are secured at night should utilize fencing that prevents climbing or jumping over. Fence openings should be tight enough to prevent a child or pet from getting stuck. Areas of the park that need to be secured should include lockable gates. Sports fields usually require taller fences in locations closest to direct play areas and lower barriers further from active play. If a fence is required in a natural park or walking trail, a more organic design would be appropriate.

STRONG AND DURABLE

All fence types should be be high-quality, durable, and match the specific need, setting, and park design vision. Wood and timber fences will decompose over time and may require more maintenance while metal fences typically last longer and tend to be stronger.

ATTRACTIVE AND SUITABLE

An attractive fence that matches the aesthetics of the park and reinforces the Heber City "brand" will help ensure the look of each park is unified and attractive as well as safe and secure.

MEETS REGULATION AND CODE REQUIREMENTS

Heber City zoning regulations and codes control many of the aspects of fence selection. The height, type, distance from the road, and other physical details of a fence must match the legal requirements of the city.

SIGNAGE FIXED STANDARD

Park signage performs multiple functions. It provides information and directions to help people find their way around the park, enhances learning experiences, helps maintain the image of the park, and communicates park rules. The best park signage is usually minimized, providing the necessary information and message without demanding undue attention. Park signage can be specific for the park system or part of a unified wayfinding signage system, but in either case it should be clear and concise.

Since a city-wide park signage system has not yet been developed, Heber City's parks should be limited to Naming Signs (also known as Entry Signs). These signs alert pedestrians, cyclists, and motorists that they have arrived at a specific park. The size of the signs vary according to the intended group of users with vehicle-oriented signs generally being larger than pedestrian or cyclist-oriented signage.

Signage for the site must be developed and integrated into the overall site during site design stages rather than as an afterthought, giving consideration to placement of landscaping areas. CHOSEN SIGN TYPE must meet the standards of Chapter X of the code.

STONE MONUMENT/ LANDSCAPE ENTRY SIGNS

Large engraved rock and natural stone entry monument signs re-enforce the Heber City brand identity while offering a unique range of shapes and sizes.

MIXED MATERIAL ENTRY SIGNS

Description pending decision.

RECREATION AND PLAY AMENITIES

FLEXIBLE STANDARD

Playgrounds are essential, safe places where children can get out and be active while developing cognitive, physical, social, and emotional skills. They are important amenities where people of all ages, abilities, and backgrounds gather to play, exercise, and interact.

The best playgrounds are carefully designed to maximize “play value” and similar opportunities for children to explore, exercise, and build confidence. Each park playground must be designed in such a way to best serve children, families, and the community.

PLAYGROUND PRINCIPLES

ALIGNED WITH CITY VISION

Playgrounds should be aligned with the Heber City vision.

PERSONAL SAFETY

Playgrounds should be safe. Heber's parks should be designed according to Crime Policing Through Environmental Design (CPTED) principles, which alter the playground environment to prevent and reduce crime, and reduce criminal opportunities. Visit *cpted.net* to learn more.

PROVIDE HIGH PLAY VALUE

Playgrounds should provide high play value and include different types of play opportunities. While many playgrounds focus on active, physical types of play, the best playgrounds challenge children to explore and grow by providing opportunities to engage in different types of play (*see Table 5.1*):

TABLE 5.1 - HIGH VALUE PLAY

- **Active Play:** Running, jumping, climbing, twirling, swinging, spinning, and rolling around. Moving your body up, down, and around.
- **Sensory Play:** Touching different interesting textures, smelling flowers and plants, hearing music and sounds, seeing different perspectives and angles in addition to beautiful shapes and colors.
- **Creative Play:** Role playing, acting, singing, drumming, and dancing. Creative expression allows children to communicate and connect.
- **Reflective Play:** Watching, resting, reflecting, thinking, and daydreaming.
- **Imaginative Play:** Dressing up, make-believe, and pretend play. Play houses, pretend ships, vehicles, and props allow children to act out imaginary scenes and adopt roles.
- **Manipulative Play:** Handling, building, molding, manipulating, sifting, pouring, scooping, stacking, combining, and altering.
- **Social Play:** Talking, sharing, cooperating, taking turns, following rules, and playing sports.

DESIGN SAFETY

Playgrounds should provide safe play equipment and structures. This begins by investing in the most up-to-date equipment that adheres to strict safety guidelines and professional installation practices.

CONTEXT SENSITIVE

Playgrounds need to consider the surrounding environment and setting in order to ensure play value is maximized.

AGE APPROPRIATE

Playgrounds should be age appropriate, with separate play areas and amenities provided for children under 5 years old and those from 5 to 12 years and older.

INCLUDE VARIETY

Playgrounds should include a variety of equipment, and be supported by other amenities such as benches and seating areas, tables, shade structures, and trash receptacles. They should include comfortable places for caretakers to sit and observe, and for children to take breaks between play.

INCLUDE HIGH QUALITY FALL SURFACING

Playgrounds should include high-quality and safe "fall surfacing" that meets playground safety standards, is aesthetically appealing, and easy to maintain.

SENSE OF PLACE

Playgrounds should create a sense of place which fosters a sense of community pride and belonging.

ENCOURAGE CREATIVITY

Playgrounds should be designed with trust for children's creativity. Children are creative and will find ways to play that often aren't anticipated. A good playground should encourage children's creativity to take the lead.

ENCOURAGE EXPLORATION

Playgrounds should provide opportunities for exploring. The magic of a playground sometimes lies more in the little details than the structures and large features. A well-designed playground includes small wonders that can be discovered while playing.

PROVIDES WELL-CONNECTED ELEMENTS THAT "FLOW"

Playgrounds should "flow". Children at play do not move in straight lines. Good flow allow children to find different directions and explore each time they step into the play space. A playground that flows has well-connected play components.

ALL ABILITIES

Playgrounds should be designed for all abilities and beyond. Consider the needs of children of different mental and physical abilities, ages, and strengths, but avoid segregating children of different abilities. Focus instead on opportunities for children of all abilities to interact and play together.

DESIGN WITH NATURE

Playgrounds should work with, not against nature. Incorporate nature into your design as much as possible, and think about how to work with the natural features that already exist in your space.

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ACCESSIBILITY & ADA REQUIREMENTS

PARK ACCESSIBILITY STANDARDS

Parks and recreation facilities play a critical role in community wellness by providing a positive environment for physical activity and inclusion. When barriers prohibit use of the park by a child with special needs, the opportunity for play and physical activity is lost. The presence of physical barriers can prevent children with disabilities from accessing all play elements on the playground. Most significantly, inclusive play between children with disabilities and children without disabilities is diminished when the playground does not have accessible equipment and surfaces. Physical barriers also prohibit adult caregivers with disabilities from engaging with their children and responding when a child is in need of assistance.

The Department of Justice's Americans with Disabilities Act (ADA) of 1990 is a federal law prohibiting discrimination on the basis of disability, ensuring equal access and benefit to all people. Stemming from ADA, *the 2010 ADA Standards for Accessible Design* establishes accessibility standards for public facilities that can be enforced under a federal court of law.

Before proceeding with the design of Heber City parks, visit *ada.gov* for up-to-date information on ADA requirements and accessible play areas.

ADA STANDARDS FIXED STANDARD

APPLYING ADA STANDARDS TO PARK DESIGN

According to ADA, an accessible playground is one that offers a range of play experiences to children of varying abilities. Accessible playgrounds provide the following elements (*see Table 6.1*):

TABLE 6.1 - ACCESSIBLE PLAYGROUNDS

- An accessible path from the building or parking lot to the edge of the play area.
- An accessible path from the edge of the play area to the play equipment.
- Surfacing that complies with ASTM 1951 (Determination of Accessibility of Surface Systems Under and Around Playground Equipment).
- Accessible parking spaces nearby that meet ADA standards.
- Outdoor play areas for children ages 2 or older should be given equal opportunity to play. Playground equipment and facilities constructed or altered on or after March 15, 2012, must comply with the 2010 ADA Standards for Accessible Design.
- Once a child is in the play area, they must be able to access the play equipment by either moving out of their mobility device onto the playground structure (such as a transfer station) or by direct play structure access in their mobility device (such as a ramp).

ACCESSIBLE PLAYGROUND DISTINCTIONS

The very philosophy of public parks is that all people—regardless of race, ethnicity, age, income level, physical ability, sexual orientation, gender or religion – can take advantage of the park facilities, places, and spaces that make Heber a great community. There are many terms that define all abilities parks and play, which are for the most part interchangeable. However, there are some differences.

ADA COMPLIANT PARK OR PLAYGROUND

An ADA compliant park or playground meets all of the Americans with Disabilities Act regulations for playgrounds. It is the least you can do according to the law. In Heber City's parks and playgrounds, **meeting ADA requirements is the baseline, and accessible and inclusive park elements should always be considered**.

ACCESSIBLE PARK OR PLAYGROUND

Accessibility refers to the ease at which something can be used, reached, or entered. Accessible playgrounds are those that have gone beyond ADA to ensure that people using wheelchairs or other mobility devices can use the playground. **In Heber City, all parks and playgrounds should be accessible**.

INCLUSIVE PARK OR PLAYGROUND

Inclusion is ensuring that people feel that they belong, are engaged, and connected. Inclusive playgrounds are designed specifically to ensure that children of all abilities can play together — going beyond simply being wheelchair accessible. All inclusive playgrounds are accessible, but not all accessible playgrounds are necessarily inclusive. **In Heber City, all parks and playgrounds strive to be inclusive to the greatest degree possible**.

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7

PARK UTILITIES, INFRASTRUCTURE, & IRRIGATION

The electrical, sewer, water, and other utilities required in Heber's parks must meet established engineering and code requirements. Similarly, roadways, parking, stormwater, and similar infrastructure must meet current planning and engineering requirements. See Heber City Engineering and Planning codes for general details, and contact city staff to ensure these applicable city standards are understood and correctly addressed in the park design.

GREEN INFRASTRUCTURE FLEXIBLE STANDARD

Green infrastructure (also know as Low Impact Development of LID) offers a way to strategically create or enhance park amenities through more natural systems. Green infrastructure practices help infiltrate stormwater and enhance park topography, reduce maintenance, improve drainage, reduce erosion, improve vegetation health, and eliminate standing water. Substituting high maintenance vegetation (such as turf) to lower maintenance native vegetation can reduce the need for supplemental water and other inputs such as fertilizers and pesticides. Mowing and weeding frequency may also be reduced through the proper implementation of low impact development principles.

IRRIGATION FIXED STANDARD

It is well documented that Utah is one of the driest states in the nation, second only to Nevada. This fact, along with a traditionally high level of water consumption and rapid population growth, has brought water conservation to the forefront of the natural resource issues we face.

Parks are often seen as a sort of “welcome mat” for the community. The promise of soft, green grass, robust sports fields, and well-tended trails often conflicts with the need to conserve water. Taking proactive steps in water use and turf-management strategies will only become more important over time and Heber City should ensure that the park irrigation standards address the changes ahead.

The Municipal Code and appendices provide up-to-date, water-conserving design and irrigation ordinances, standards, details, and specifications. When designing a water-conserving irrigation system, key elements to be considered include the following (*see Table 7.1*):

TABLE 7.1 - WATER CONSERVING IRRIGATION SYSTEM KEY ELEMENTS

- Backflow Preventers
- Booster Pump Assembly
- Controller
- Flow Meter
- Meter
- Piping
- Quick Couplers and Valves
- Sprinkler Heads
- Baseball/Softball infield Irrigation