

Park Master Plan For West Winds Planned Community



West Winds

FINAL PLAN

Prepared By:
HKM Engineering Inc.
920 Technology Blvd. Suite A
Bozeman, MT 59718

Parks & Recreation
REVIEWED & APPROVED
DEPT. OF PLANNING
AND COMMUNITY DEVELOPMENT
[Signature]
DIRECTOR
DATE 8/20/08



NO MODIFICATION
of these plans and elevations
without prior approval
from the Office

Parks & Recreation

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Parks & Recreation

August 12, 2008
H:\04\SO67125\Parks Master Plan



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Ms. Susan Stodola, P.E.
City of Bozeman Engineering Dept.
P.O. Box 1230
Bozeman, MT 59771

RE: West Winds Subdivision Park Master Plan Comments

Dear Sue:

Please find enclosed with this letter HKM's submittal of West Winds Parks Master Plan with your 8-5-08 comments incorporated as indicated below (in italics following your original comment):

1. Figure 2 – Show the detention pond and easement at Hunters Way and Oak Street. Figure 2 and Sheet P-1 – Is the storm pond at Baxter Lane and Buckrake Avenue larger than the easement, as depicted?

The detention pond at the intersection of Hunters Way and Oak Street has been shown on Figure 2. There is currently no easement for this storm water retention pond, however a storm water easement will be filed for this pond. The storm pond at the intersection of Baxter Lane and Buckrake Avenue has been modified. The incorrect pond diagram was inserted into Figure 2 and Sheet P-1 on the previous parks plan. The revised pond configuration is shown.

2. Remove Sheets LS1 through LS6 since these are PUD landscaping sheets and not park plans.

Sheets LS1 through LS6 have been removed from the park master plan.

3. Sheet P-2 – The soccer practice field overlaps the sanitary sewer manhole and all-weather access road on Sheet P-2, but is shown west of them on Figure 2. Revise as necessary. The landscaping may also need to be revised.

The soccer field on sheet P-2 has been moved to demonstrate its correct location. This location is shown correctly in Figure 2.

4. Sheet P-3 – Street tree(s) are missing at the mid-block park connection on Hunter's Way between Oak and Breeze.

Two trees have been placed at the mid block park connection on Hunter's Way.

Included with this submittal are five copies of the Parks Master Plan.

If you have any questions, please feel free to contact our office.

Sincerely,

HKM Engineering

Clint Little, P.E.

**Park Master Plan
For
West Winds Planned Community**

Prepared For:
Cascade Development Inc.
1627 W. Main, Suite 223
Bozeman, MT 59718

Prepared By:
HKM Engineering Inc.
920 Technology Blvd. Suite A
Bozeman, MT 59715

Original Commission
Approval: May 16, 2005

Revised
August 12, 2008
04S067.125

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Introduction

The West Winds Park is a component of the West Winds Planned Community located within the Northwest ¼ of Section 2, Township 2 South, Range 5 East, PMM, Bozeman, MT. The park is proposed to be a neighborhood park providing both passive and active recreational activities. The intent of this plan is to provide a detailed design of the West Winds Subdivision Park Master Plan.

The Park design has emphasized preservation of an intermittent watercourse that bisects the property from south to north. The watercourse has fostered the growth of wetland species creating a jurisdictional wetland corridor through the property. This wetland corridor has intrinsic aesthetic and passive recreational value. The watercourse runs down the center of West Winds Park and is buffered by a 50 ft. watercourse set back. An extensive trail system will parallel the wetland system allowing residents to view the flora and fauna associated with the wetlands. The trail system will connect the West Winds Park and the remainder of the West Winds Community to adjacent neighborhoods, commercial areas (Baxter Meadows), and regional parks (Rose Park and the 100-acre Regional Park).

West Winds Park is intended to serve/benefit a wide range of people (young families through seniors) within the West Winds and surrounding neighborhoods by offering both active and passive recreational areas. This will be achieved by the preservation of a wetland corridor, trail installation and tot playground area. Additionally, a portion of the active recreational area will be graded and seeded such that the area can also serve as youth practice soccer fields.

Park Elements

Mary Keck of Garden Creations designed the landscaping in West Winds Park and the surrounding boulevard areas, in compliance with all applicable design standards.

The top 10-inches of existing soil, over the entire West Winds Park area, must be amended, as specified by the City Parks Foreman and described in the Appendices.

Active Areas

The West Winds Park will include active areas designed to provide a wide assortment of recreational opportunities to the neighborhood residents. These areas will include general purpose playfields.

Passive Areas

Passive Areas, as shown in Figure 1, are areas where residents can relax and enjoy West Winds Park's natural offerings. Benches and other amenities will be placed at locations throughout the Park.

Sensitive Areas

The West Winds Park will also include sensitive areas in the form of jurisdictional wetlands and the associated watercourse setbacks. These areas will be maintained in their natural state with additional landscaping as outlined in the Watercourse Setback Planting Plan.

Active Areas

General Purpose Playfields

Approximately 53% of the parkland will be dedicated to general-purpose playfields, or active use areas. These playfields would support a wide array of activities. These areas would also be graded and seeded such that the areas can be used as youth soccer practice fields. The playfield areas would be irrigated via a well system and will be mowed.

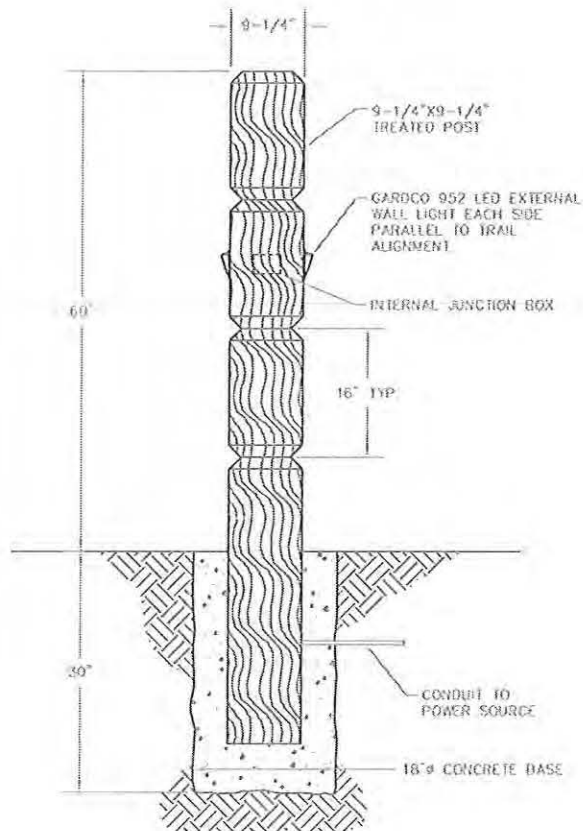
Lawn areas within West Winds Park shall consist primarily of regularly maintained, manicured lawns, meeting the City of Bozeman Parks Division specifications and requirements.

A complete specification for the installation and maintenance of the turf at West Winds Park is located at the end of this document, in Appendix A.

Trails

Trail installation will be in conformance with the City of Bozeman's 2020 Master Plan and will meet Americans with Disabilities Act (ADA) specifications for recreational facilities. The trail system will achieve the desired north/south and east/west connectivity by linking Rose Park, located to the east of the West Winds Community to the 100-acre Regional Park to the West. It will also connect Harvest Creek Subdivision, located to the south, with the Baxter Creek Subdivision to the north via a trail system constructed adjacent to the wetlands streambed and through the park. The North/South trail system will be classified as a Class I trail system, and will be installed within Zone 2 of the Watercourse Setback, which is described below in greater detail. The East/West trail system will be classified as a Class II trail system, and will be installed in a 60-ft. wide trail corridor, as shown in Figure 2. Trail bollard lights will also be installed per UDO Section 18.42.150.C.6 at all intersections of trails and streets, located within the West Winds Subdivision and along existing streets abutting the development. It is proposed that the City's standard trail marker be modified such that low energy consumptive LED lights could be attached to illuminate the trailhead. A schematic drawing of the proposed bollard light is shown in Figure 3.

An 8-foot wide bike path (shared-use path) will be constructed to provide an extension of the existing Harvest Creek trail to the south. The bike path will be constructed with an approved natural fines design mix to be consistent with the natural surroundings. This path will provide a vital connection to the City of Bozeman 2020 Master Plan trail system.



TRAIL BOLLARD DETAIL

SCALE : NONE



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WEST WINDS COMMUNITY
NW 1/4 SECTION 2, T.2.S., R.5.E., P.M.M.
GALLATIN COUNTY, MONTANA

TRAIL BOLLARD DETAIL

FIGURE 3

DATE: AUGUST 12, 2008

PROJECT NO. 045067.125

Passive & Sensitive Areas

Wetlands

The jurisdictional wetland areas will be maintained in their natural state, with limited improvements as specified within the Watercourse Setback Planting Plan, which has been provided with this Final P.U.D. submittal. Bridges will be constructed to allow continuity of the trail system that runs east-west across the West Winds Subdivision.

Watercourse

The watercourse areas of West Winds Park will remain in their natural state with the exception of minor streambed improvements and additional tree and shrub planting, as detailed in the Watercourse Setback Planting Plan.

Watercourse Setback

The passive and sensitive areas within West Winds Park will be set up with the intent of preserving the existing wetland areas, along with the associated flora and fauna. The watercourse setback has been broken down into two zones. Zone 1 reaches 30 feet from the edge of the wetlands, or flowline of the watercourse. Zone 2 extends an additional 20 feet outward. The lineal trail system portion that bisects the subdivision from south to north will lie within the Zone 2 setback.

The landscaping will provide for the planting of native, drought tolerant tree and shrub species. Additionally, the passive areas delineated outside of the watercourse setback will be landscaped such that the character of the wetlands are will be maintained. The passive areas will be seeded with a drought-tolerant seed mixture that will not require additional irrigation or mowing. Landscaping within the watercourse setback will satisfy the UDO point system and is described in greater detail in the Watercourse Setback Planting Plan.

Irrigation

As designed, the active areas within West Winds Park are intended to be fully irrigated. The source of this irrigation water will be a series of dedicated wells, located in the park site at areas approved by the City of Bozeman Parks Division.

All indicated areas shall be watered with permanent, underground irrigation systems, operated by means of an automatic time controller. This controller, along with all pump relays, breakers and meters, shall be located in a single, vandal-resistant, lockable steel pedestal enclosure, having separate compartments appropriate to this equipment. All irrigation equipment shall be supplied, installed, and operated in full compliance with City of Bozeman Parks Division's requirements and specifications.

A complete specification for the installation of the irrigation system at West Winds Park is located at the end of this document, in Appendix A.

The subdivider shall be responsible for irrigating the park area until development of the subdivision reaches 50%, after which time the Homeowner's Association shall maintain and

irrigate the publicly dedicated portions of the park. Wells will be used to irrigate the park area. A well system will be developed in which none of the proposed wells- which would not be manifolded together – would pump at a rate greater than 35 gallons per minute. By staying below the aforementioned pumping rate, it is not necessary to acquire water rights.

Ownership & Maintenance

Initial Construction & Maintenance

The subdivider of any specific phase of the West Winds Planned Community shall be responsible for improving his or her specific park area. The improvements shall include leveling any park areas, amending the soil, seeding disturbed areas to allow mowing with turf type mowers, installing trail systems, installing any ancillary items (benches, play equipment, etc.) and installing an underground irrigation system in compliance with the City of Bozeman's standards and specifications. The park shall be seeded with a drought tolerant grass seed.

Prior to beginning any construction activities in the Park areas, a pre-construction meeting will be held with all concerned parties in attendance. The purpose of this meeting will be to review and approve all proposed construction materials and methods.

The Developer will initially be responsible for ownership and maintenance of West Winds Park until such time when the subdivision has reached 50% of development. At this time, the West Winds Homeowner's Association (HOA) will be responsible for ownership and maintenance of the West Winds Park. The HOA shall retain ownership until a Park Maintenance District or similar funding source is established. West Winds Park will be dedicated to the City of Bozeman for ownership and maintenance in accordance of Section 18.50.070 of the BMC, which stated parks that provide recreation pathways should be dedicated to the City.

The developer will initially be responsible for the maintenance of the proposed park lands until such a point that fifty percent of the subdivisions lots have been sold, as required by the City of Bozeman's Unified Development Ordinances. The landscaping will be maintained in a healthy, growing state during this period. Trash removal will be carried out on a weekly basis and be performed by park maintenance personnel. The West Winds HOA will be responsible for snow removal from sidewalks that are adjacent to the park and open-space areas. The HOA, or their representative will be responsible for snow removal from these areas within 24 hours of snowfall.

The parkland will be turned over to the Homeowner's Association, who will then become responsible to carry out the maintenance duties until such a time when the parkland will be turned over to the City's Parks and Recreation Department.

Weed Management

A weed management plan will be set in place to discourage the establishment of noxious weeds in the West Winds Park areas. The noxious weeds, which are easily spread by traffic within park areas and trail corridors, could have negative effects on the park areas including increased soil erosion, diminished water quality, and unpleasant aesthetic impacts.

Funding

The developer of any portion of the West Winds Planned Community would be initially responsible for developing their required share of the parkland areas. Upon build-out of the specific phase, the Homeowner's Association would be responsible for park irrigation and maintenance.

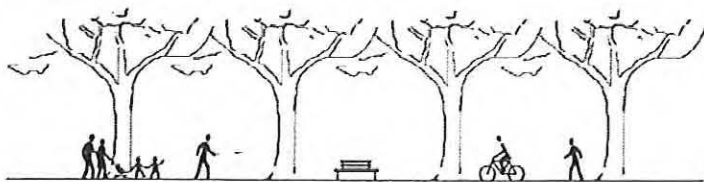
**CITY OF BOZEMAN – PARKS
DESIGN GUIDELINES
&
SUPPLEMENTAL DESIGN
GUIDELINES**

**A
P
P
E
N
D
I
X

A**



BOZEMAN PARKS,
RECREATION,
OPEN SPACE
AND TRAILS
(PROST) PLAN



ADOPTED DECEMBER 17, 2007



APPENDIX C

Design Guidelines for City of Bozeman Parks

NEW PARK CONSTRUCTION

New park construction must be approved by the City of Bozeman's Parks Division and the Recreation and Parks Advisory Board, and must comply with the adopted PROST Plan and individual park master plan, if applicable. Any changes must be approved and/or amended in the individual park master plan.

SOIL PREPARATION

All soils to be used on public parkland shall be inspected by and meet the approval of City of Bozeman Parks Division staff prior to installation, and shall meet the minimum depth requirement of 10 inches. All rock in excess of 1 inch in diameter shall be removed. Soil tests (a sieve analysis and soil analysis) shall be performed prior to planting to determine the classification and texture of the soils, along with any nutrient deficiencies. The classification and texture will determine what amendments, if any, are needed, while the soil analysis will help correct any nutrient problems with a pre-plant fertilization.

Guidelines for Soils. The soil will be deemed acceptable if it is less than 35 percent clay, less than 70 percent sand, and 70 percent silt. Ph must not exceed 8.4. The soil will be screened at 1 inch minus for rocks and debris, and topsoil depth will be at least ten inches. The sub-base, after grading, will be scarified to a depth of twelve inches to insure drainage throughout the profile.

Amendments may vary depending on existing soils, but will generally consist of 60 percent coarse sand (generally concrete sand), 20 percent organics (C : N ratio below 30) and 20 percent approved native soil. Soils will be mixed prior to installation with a screener / mixer machine, or applied in layers on site and mixed thoroughly with a deep rototiller. Depth of amended soil will be a minimum of 10 inches. There will be no compaction following the grading process. Fertilizer, and the rate at which it will be applied, should be dictated by the soil test report.

SEEDING

Seeding ratios and mixes will be approved by the City of Bozeman Parks Division. Seeding will be applied with a slit-type or drill-type seeder to insure good soil to seed contact. Before seeding the soil shall be loosened to a minimum depth of 6 inches in order to improve initial root development. The soil *will not* be compacted in any manner. Sufficient compaction is readily achieved through the grading process and normal rainfall. Fertilizer should be applied prior to planting to insure healthy plant development. Generally, a seed mix combination of Bluegrasses and Rye are used in formally maintained parks. Some low maintenance Kentucky bluegrasses that perform well are Kenblue, Park, Plush, Vantage, Victa, Vanessa, Barblue, Parade and S-21. Perennial ryegrass will be used instead of annual ryegrass. Athletic fields will be planted with new and improved Kentucky bluegrass (KBG) types and new cultivars of perennial rye. Examples of some of the new, aggressive types of KBG's are Award, Total Eclipse, Midnight, Nustar, Ram I, Limousine and Touchdown. Lower maintenance parkland may require different seed mixes, and will be specified by the Parks Division.

IRRIGATION

Irrigation systems will be compatible with Maxicom systems. All water lines shall be schedule 40 PVC. Black poly pipe is unacceptable for any mainline and may only be used for lateral lines when approved by the Parks Division. Pipe shall be installed at a minimum depth of 12 inches, with main lines at 18 inch minimum depth. If this depth is unachievable the Parks Division must be consulted. No stacking of irrigation lines shall be permitted. Four (4) inches of sand shall be placed beneath pipe, and 4 inches of sand above the pipe, to prevent compaction and settling. Sprinkler heads will be installed on manufactured swing joints (schedule 80 w/ o-rings). Heads to be installed must be approved by the Parks Division and shall be gear driven, with interchangeable nozzle sizes, unless noted otherwise. The heads shall be capable of producing the specified gpm and coverage area and shall be set to manufacturers' specifications. Electrical locate tape shall be installed along all main lines. Upon completion of installation all warranty and maintenance information, as well as well logs and pump warranties and information, if applicable, shall be supplied to the City of Bozeman Parks Division along with and an "as-built" map.

Irrigation clocks shall be Rain Bird ESP_MC with metal casing (for the purpose of consistency, being Maxicom compatible, training of employees, and to reduce vandalism).

WELLS

Wells installed on City of Bozeman property must be registered in the City's name. All wells must have a stainless steel screen at the intake. Any well installed in a public dedicated park that is larger than two acres must have a minimum potential of 100 gpm.

PLAYGROUNDS

Playgrounds must be installed on parkland managed by the City of Bozeman. All playgrounds must be approved by a Certified Playground Safety Inspector (CPSI) and meet ASTM F1487-01, CPSC and ADA guidelines and specifications. Playgrounds shall be age appropriate, for area served, and be signed accordingly. There must be an adequate use zone area around equipment, approved material in the use zone, which meets impact attenuation criteria as specified in ASTM 1292, and accessibility guidelines ASTM F 1951-99, and have adequate drainage. All installation plans, surfacing Certificate of Liability, materials list, construction guidelines, maintenance information and manufacturer's name must be supplied to the City of Bozeman's Parks Division, upon completion of playground installation. All work will be overseen and approved by a CPSI. Playgrounds must be inspected by a CPSI before opening playground to the public. No wooden structures will be approved.

FENCING

Fencing shall be constructed with 9-gauge, commercial grade chain link fabric. All posts and top rails shall be schedule 80 galvanized pipe. Corner post will be 2 and 3/8 inch, line post will be 1 7/8 inch, top and bottom rails will be 1 1/4 inch. All post are to be set in concrete, spaced at 10 foot intervals, and a concrete pad, 12 inches in width and 4 inches in depth, shall be installed beneath the fence line along the entire length. A bottom rail will be installed between all sections of fence for the purpose of tying the fabric down as well as maintaining the strength and integrity of the fabric. Appropriate heights of fences shall be determined by the City of Bozeman Parks Division.

LAKES AND PONDS

If the development includes a lake or pond that is dedicated to the public, the water shall be tested twice a year, once in the spring and once in the fall, by the developer until the Homeowner's Association forms at which time the HOA assumes the responsibility for testing. Testing shall include Fecal Coliform, Fecal Enterococci, Staphylococcus, and Pseudomonas, and copies of reports shall be submitted to the City of Bozeman Parks Division for their records.

PUBLIC RESTROOMS

New park restroom plans and construction must be approved by Parks Division and must comply with the individual park master plan, if applicable. Any changes must be approved and/or amended in the individual park master plan.

Rest room buildings, plumbing, electrical, and general construction must meet or exceed all City, County, State, and Federal building codes. Restrooms must meet or exceed all ADA and ADAAG guidelines.

Unless otherwise approved, restrooms (building) exterior and interior walls must be of CMU construction. All exterior walls must be insulated. The building will have a metal roof and rain gutters with down spouts. Security lights will be installed on two sides of the building. The building will consist of a Women's and a Men's restroom with each rest room having fluorescent lighting and ventilation fan activated by a motion sensor switch. Each restroom will consist of 3 stalls. The Women's will have three 3 toilets and the Men's will have two 1 toilets and one 1 urinal. Each restroom will have 1 sink, 1 soap dispenser, and 1 hand drier and/or 1 towel dispenser. Any and all windows will be of glass blocks. The building will have a utility room between the Men's and Women's restrooms measuring no less than 4 feet wide and run the length of the restrooms. All plumbing and water lines will be within the utility room and easily accessible. The water meter will be located in the utility room. The building's water lines will be copper. The size of the main feed line to the building will be determined by the City of Bozeman. The floors in each restroom will have either a single 4 inch floor drain or a trench drain. The utility room will also have a floor drain. The floor will slope to the drain with no low or flat areas that hold water. All the restrooms toilets, sinks, and urinals must be stainless steel. Each toilet and urinals will have a motion sensor flush valve. The building will have a heating system large enough to keep each restroom and utility room from freezing during winter months. The heating unit is to be located with in the utility room. Drinking fountains, showers and other amenities will be at the discretion of the City of Bozeman.

TRAIL CONSTRUCTION

1. Trail Classifications

Class IA. These trails are heavily used with full access, and are designed for recreational and commuter use along major transportation corridors. These trails are designed to permit two-way traffic using an impervious surface material such as asphalt or concrete. These trails are 12 feet wide with full ADA accessibility.

Class IB. These trails are the same as Class IA trails with the exception of being 10 feet wide. These trails are typically used in interior subdivision settings where Class I trails are appropriate, but a full 12 feet width is not necessary.

Class IIA. These trails receive heavy to moderate use with a very high degree of ADA accessibility. They are intended for multiple non-motorized, recreational and commuter use. Class II trails are constructed of natural fines and are 6 feet in width.

Class IIB. These trails receive moderate use and provide moderate ADA accessibility depending on grades and/or obstacles. Construction standard is the same as Class IIA.

Class III. These trails receive moderate to low use and are typically 3 feet in width. They are either natural trails developed by use, or constructed with natural fines. ADA accessibility is extremely limited.

Class IVA. These trails are generally mowed corridors used for ski trails in winter, or occasional special activities such as cross-country running meets, and are 16 feet in width.

Class IVB. These trails are the same as Class IVA trails with the exception that they are 10 feet in width.

Class V. These trails are used for equestrian traffic, and when constructed parallel to pedestrian trails are built with a sufficient buffer and physical barrier between them to prevent horse/pedestrian conflicts.

2. **Class I Trail Construction**

Class I trails must be constructed to support a minimum of 12,500 pounds.

- Asphalt – Width of trails shall be a minimum of 10 feet, with a minimum cross slope of 2 percent or maximum of 5 percent and a 1 foot wide gravel border along each edge. Trail bed shall be excavated to a minimum depth of 11.5 inches. A soil sterilant, approved by the City of Bozeman Parks Division, shall be applied to trail bed prior to construction. The trail bed shall consist of a minimum of 9 inches of crushed gravel compacted to 95 percent of maximum density as determined by AASHTO T99, unless otherwise dictated by sub-soil type materials being compacted to road standard. The overlay shall consist of 2.5 inches of asphalt compacted to 93 percent of maximum density, as determined by ASTM D 2041. Construction seal shall be applied at 0.08 gallon/square yard after installation.
- Concrete – Width of trails shall be a minimum of 10 feet with a minimum cross slope of 2% percent or maximum of 5 percent. The trail base shall consist of a minimum of 3 inches of crushed gravel compacted to 95 percent of maximum density as determined by AASHTO T99. Concrete shall be a minimum of 6 inches of M4000 reinforced with 1.5 lbs. per cubic yard of Fiber mesh. Where terrain allows, slope of trail should not exceed 12:1.

3. **Class II Trail Construction**

Class II trails shall be a minimum of 72 inches in width. The trail bed must be excavated 6 inches deep, prior to installation of tread mix. Tread mix shall be installed in two parts. The first 3 inch lift shall be of ¾ inch Road mix, compacted, and then 3/8th inch minus gravel (natural fines). Natural fines used for these trails shall consist of 80 percent sand, 10 percent silt and 10 percent clay. If the material falls outside of these parameters, the City Of Bozeman Parks Divisions must be consulted for approval or modification. If the natural fines tread mix does not contain enough clay or silt binder, additional binder must be mixed in. Alternative soil stabilizer products are acceptable, but

must be approved by the City of Bozeman Parks Division. The trail bed must be filled up to original surface along both edges with a cross slope of no less than 2 percent and no more than 5 percent to provide for water drainage. Tread mix must be rolled flat and compacted after installation, maintaining a 2 to 5 percent cross slope. (If moisture content is not adequate for compaction, water should be added prior to rolling and compacting). Where terrain allows, slope of trail should not exceed 12:1 with a cross slope no greater than 20:1 (5 percent) to provide for ADA accessibility. All damage to surrounding features and/or vegetation shall be reclaimed immediately. Encroaching weeds, due to trail construction, shall be treated and controlled for a minimum of 2 years after trail section is completed. Minimum overhead clearance shall be 96 inches for pedestrian and bike traffic, and 120 inches for equestrian traffic.

4. Street/Trail Connections

Mid block trail crossings shall have a painted pedestrian crossing, with crossing and advanced crossing signs at either end. Curb cuts shall be provided at all street / trail connections.

5. ADA Accessibility

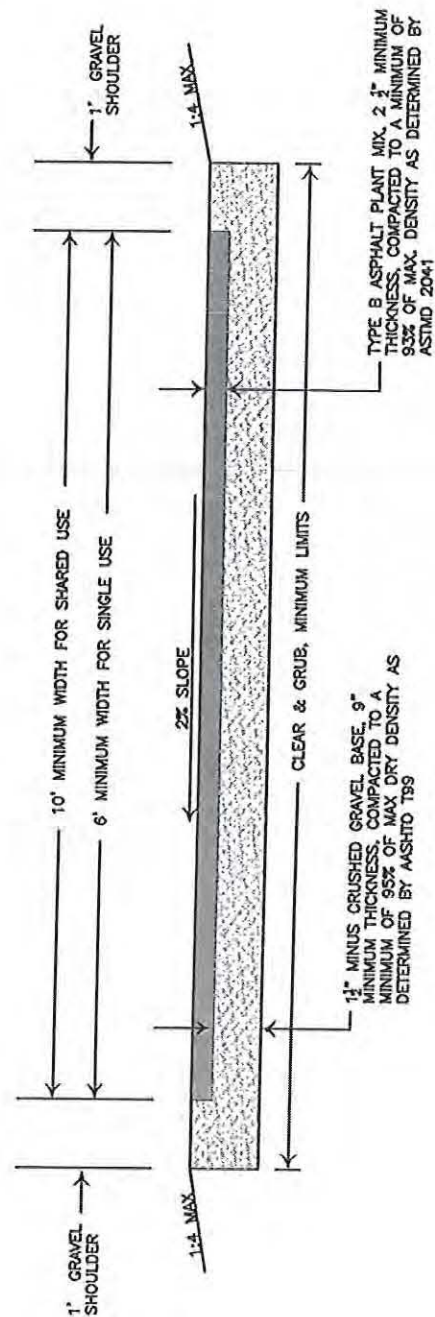
Full ADA trail accessibility is defined as a slope not exceeding a 12:1 angle and a cross slope of no more than 2 percent. There can be no abrupt change in surface level greater than ½ inch.

BRIDGES

Bridges shall have a minimum width of 96 inches, to allow wheelchair turn around and passing. The height of the bridge is measured from the bridge deck to the bottom of the stream or river. If the deck is more than 30 inches high a protective rail is required. Rails are to be 42 inches high, with at least one midrail at 34 inches, to be used as a handrail. A protective barrier must be installed along the length of the rail system with either solid paneling or vertical bars. Spacing between bars shall be no greater than 3.5 inches or less than 9 inches. All bridges to be installed on public lands must be certified by a civil or structural engineer. If the bridge does not require a rail it must have a 3 inch high curb on both sides along the entire length of the bridge. The deck should be constructed of slip-resistant material. The deck of the bridge shall not exceed a 12:1 slope along any part of its length. The deck and ends of the bridge must have no abrupt change in surface level greater than ½ inch. Cross slope shall not exceed 2 percent. Bridges must be rated for weight load distribution in accordance with ASTM standards and display a permanent label indicating the load limit, year it was built and manufacturer.

HILLSIDE GRADES

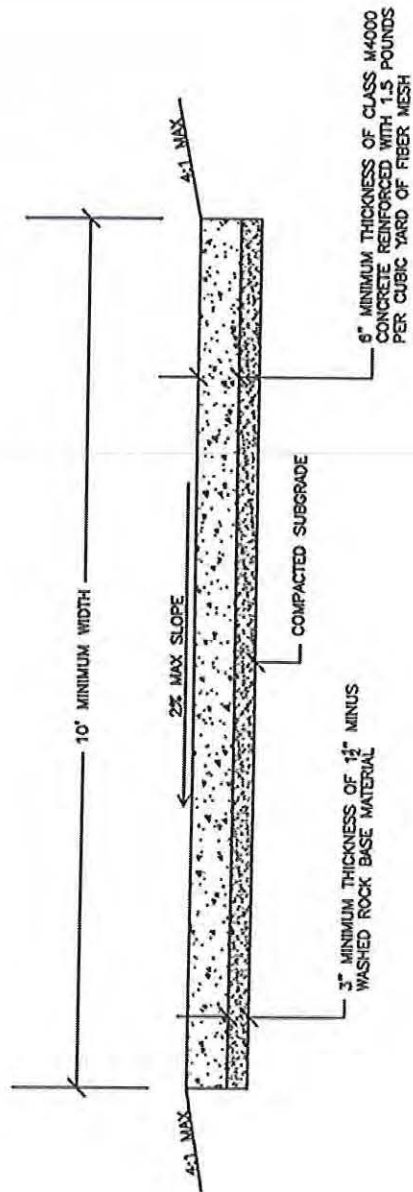
Hillside grades within park landscapes shall be 7:1 when achievable, and no steeper than 5:1, to allow for maintenance equipment access and to minimize water runoff. Appropriate measures such as hydroseeding, erosion control matting, or other approved measures shall be taken to stabilize and allow for the specified re-vegetation of all disturbed parkland areas, regardless of slope.



NOTES:

1. PATHWAYS SHALL BE DESIGNED TO SUPPORT A MINIMUM DESIGN LOAD OF 25,000 ESAL.
2. A SOIL STABILANT SHALL BE APPLIED TO THE SUBGRADE PRIOR TO PLACEMENT OF THE GRAVEL BASE.
3. A CONSTRUCTION SEAL SHALL BE APPLIED TO THE PAVED SURFACE IMMEDIATELY FOLLOWING FINAL ROLLING AT THE RATE OF 0.08 GALLON/SQUARE YARD.

CITY OF BOZEMAN STANDARD DRAWING	SCALE: NONE	ASPHALT PATHWAY TYPICAL SECTION	NO. 02529-16 April 2006
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NOTES:

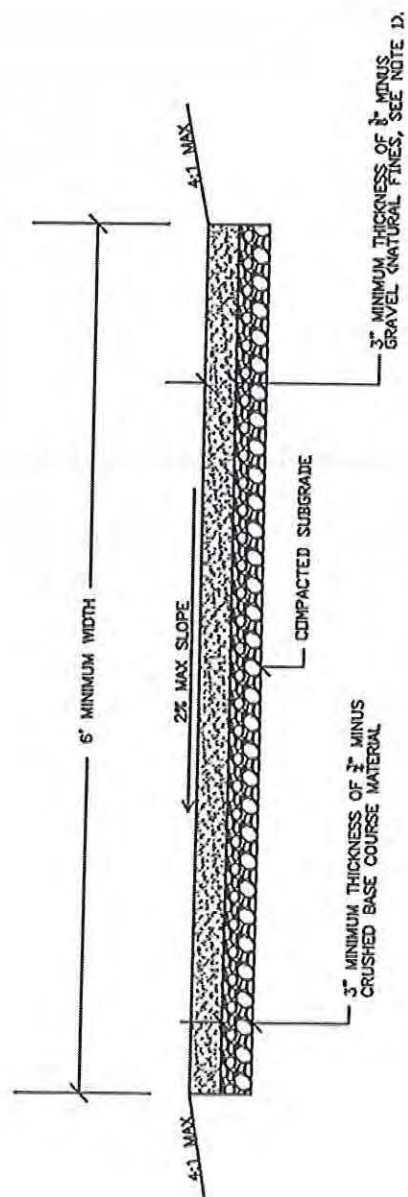
1. SPACE CONTRACTION JOINTS TO MATCH THE WIDTH OF TRAIL.
2. INSTALL EXPANSION JOINT MATERIAL AT EVERY FIFTH JOINT FOR THE FULL DEPTH OF CONCRETE.
3. FINISH CONCRETE WITH LIGHT BROOM FINISH.

CITY OF BOZEMAN
STANDARD DRAWING

SCALE:
NONE

CONCRETE CLASS I TRAIL
TYPICAL SECTION

NO. 02529-17
April 2006



NOTES:

1. NATURAL FINES SHALL CONSIST OF 80% SAND, 10% SILT, AND 10% CLAY.
2. A SOIL STABILANT SHALL BE APPLIED TO THE SUBGRADE PRIOR TO PLACEMENT OF THE GRAVEL BASE.

CITY OF BOZEMAN STANDARD DRAWING	SCALE: NONE	CLASS II TRAIL TYPICAL SECTION	NO. 02529-18 April 2006
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WEST WINDS PUD – MASTER PARK PLAN
SUPPLEMENTAL PARK DESIGN GUIDELINES

The following park design requirements are supplemental and additive to the City of Bozeman Park Design Guidelines.

- The width of the all-weather access road is to be kept to a minimum and a 12' wide driving surface is to be provided.
- All-weather access roads within park land may be required to be paved. Therefore, the gravel base will be constructed to facilitate the installation of a paved surface. The Parks and Recreation Superintendent will make the determination as/when the park is landscaped. See COB Standard Drawing No. 02529-16 and information for Class I Trails from the current Design Guidelines for City Parks and include the following adjustments: 1) if paved, provide 12' width with 1' shoulders and 2) road must support a minimum of 80,000 pounds.
- At each all-weather access road location, provide all-weather access in the boulevard and a curb cut at the street.
- Orient all-weather access roads to be as near to perpendicular to the adjoining roadway as practical.

**PARK MASTER
PLAN**

**A
P
P
E
N
D
I
X
B**

PLANS FOR
WEST WINDS PLANNED COMMUNITY
BOZEMAN, MONTANA
WEST WINDS COMMUNITY
PARK PLAN



West Winds

PREPARED FOR:
CASCADE DEVELOPMENT, INC.
1627 WEST MAIN STREET
SUITE #223
BOZEMAN, MONTANA 59715
(406) 585-9230

PREPARED BY:
HKM
ENGINEERING
HKM ENGINEERING, Inc.
920 Technology Blvd. Suite A
Bozeman, MT. 597158
(406) 586-8834
FAX (406) 586-1730

PROJECT NO. 04S067.125
AUGUST 2003

DESIGN BY:
MARY KECK
GARDEN CREATIONS
411 N. 3RD AVE
BOZEMAN, MT 59715
(406)600-0409

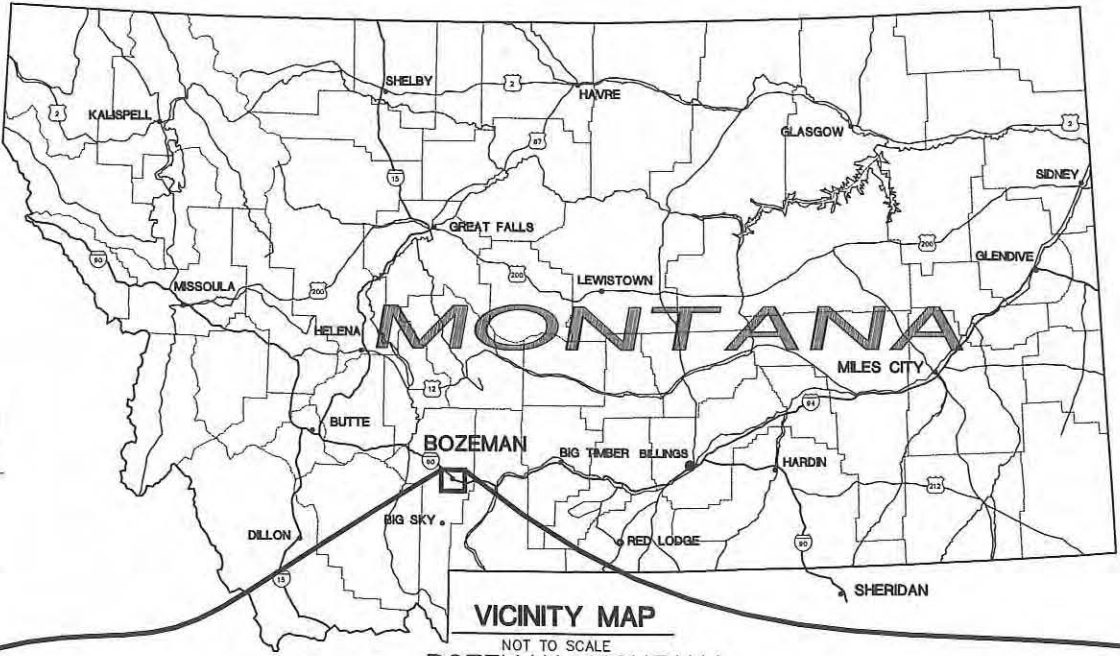
PROJECT MANAGER/ENGINEER



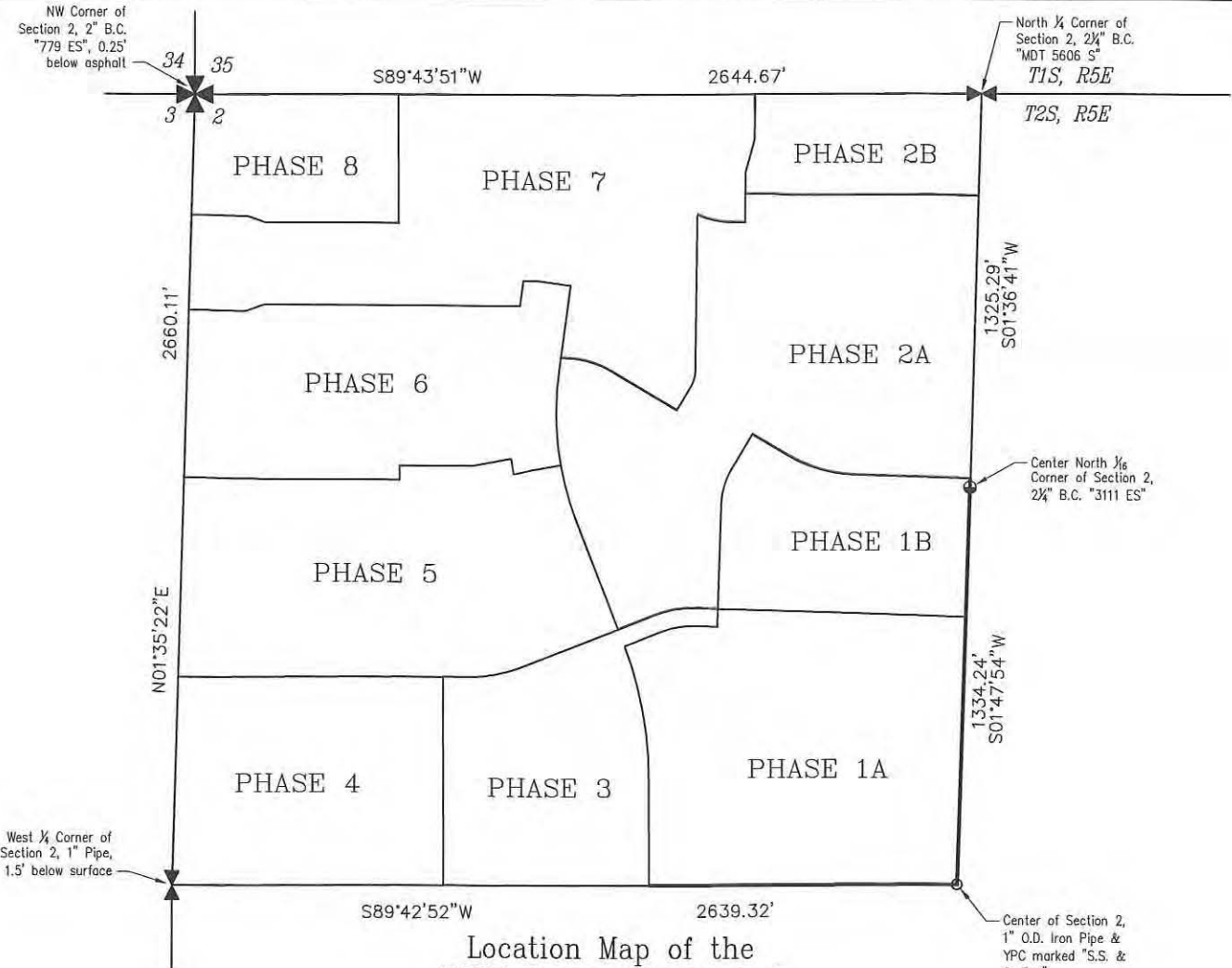
CLINTON O. LITTLE 10766 PE
Project Engineer
HKM ENGINEERING Inc.
clittle@hkminc.com

Sheet No. 1
G-1
of 6

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VICINITY MAP
NOT TO SCALE
BOZEMAN, MONTANA



Location Map of the
WEST WINDS SUBDIVISION
in the NW 1/4 of Section 2, T2S, R5E, P.M.M.

LANDSCAPING GENERAL LEGEND

PLANT SYMBOL LIST

PLANT SPECIES LIST

TREES

- (CBS) COLORADO BLUE SPRUCE
- (PSP) PRARIE SKY POPLAR
- (GWL) GOLDEN WILLOW
- (PGA) PRAIRIE SPIRE GREEN ASH
- (ELM) BRANDON AMERICAN ELM
- (HAK) NORTHERN HACKBERRY
- (OMA) OAKLEAF MOUNTAIN ASH
- (SHL) SKYLINE HONEY LOCUST
- (NWM) NORTHWOODS MAPLE
- (ASH) PATMORE ASH
- (EQM) EMERALD QUEEN MAPLE
- (OAK) BUR OAK
- (TCA) THUNDERCHILD CRABAPPLE
- (CRC) CANADA RED CHERRY - CLUMPS
- (JTL) JAPANESE TREE LILAC
- (ACC) AMUR CHOKECHERRY
- (PSC) PINK SPIRES CRABAPPLE
- (PGP) PRAIRIE GEM PEAR

SHRUBS

- (SBB) SILVER BUFFALO BERRY
- (RTD) REDTWIG DOGWOOD
- (YTD) YELLOW TWIG DOGWOOD
- (CCH) COMMON CHOKECHERRY CLUMP
- (IDW) ISANTI DOGWOOD
- (SBS) SKUNKBRUSH SUMAC
- (RMM) ROCKY MOUNTAIN MAPLE
- (FHL) FRENCH HYBRID LILAC

TREES

- | | | |
|-------------------------|------------------------------------|--------|
| Colorado Blue Spruce | Picea pungens | 60-80' |
| Prairie Sky Poplar | Populus x Canadensis 'Prairie Sky' | 55' |
| Golden Willow | Salix alba 'Vitellina' | 65' |
| Prairie Spire Green Ash | Fraxinus pennsylvanica 'Rugby' | 50-60' |
| Brandon American Elm | Ulmus 'Brandon' | 50' |
| Common Hackberry | Celtis occidentalis | 50-75' |
| Oakleaf Mountain Ash | Sorbus hybrida | 30' |
| Skyline Honeylocust | Gleditsia triacanthos inermis | 35-45' |
| Northwood Maple | Acer rubrum 'Northwood' | 50' |
| Patmore Green Ash | Fraxinus pennsylvanica 'Patmore' | 50-60' |
| Emerald Queen Maple | Acer platanoides 'Emerald Queen' | 50-60' |
| Bur Oak | Quercus macrocarpa | 60-80' |
| Thunderchild Crabapple | Malus 'Thunderchild' | 20' |
| Canada Red Cherry | Prunus virginiana 'Shubert' | 20-25' |
| Japanese Tree Lilac | Syringa reticulata | 25' |
| Amur Chokecherry | Prunus maackii | 35' |
| Pink Spires Crabapple | Malus 'Pink Spires' | 20' |
| Prairie Gem Pear | Pyrus ussuriensis 'Mordak' | 18-25' |

TREE NOTES:

- ALL TREES BALLED AND BURLAPPED 1.5"-2" CALIPER. PLANTED TO THE LEVEL OF THE ROOT FLARE, STAKED AND MULCHED WITH A 3" CIRCLE OF SHREDDED CEDAR, (SOD REMOVED AND NO EDGING OR WEEDMAT).
- TREES PLANTED AT 35'-50' SPACING.
- EVERGREENS SHALL BE 8' TALL MINIMUM.

SHRUBS

- | | | |
|----------------------|-----------------------------|-------|
| Silver Buffaloberry | Shepherdia argentea | 8-12' |
| Red Twig Dogwood | Cornus sericea | 8' |
| Yellow Twig Dogwood | Cornus alba 'Bud's Yellow' | 6-8' |
| Common Chokecherry | Prunus virginiana | 18' |
| Isanti Dogwood | Cornus sericea 'Isanti' | 5' |
| Skunkbrush Sumac | Rhus trilobata | 3-6' |
| Rocky Mountain Maple | Acer glabrum | 15' |
| French Hybrid Lilac | Syringa 'various cultivars' | 8-10' |

SHRUB NOTES:

- ALL SHRUBS SHALL BE 5 GALLON SIZE OR LARGER.
- SHRUB BEDS WILL BE EDGED WITH BLACK ALUMINUM EDGING, COVERED WITH TYPAR PROFESSIONAL GRADE WEED MAT AND MULCHED WITH SHREDDED CEDAR TO A DEPTH OF 3"-4".
- SHRUBS PLANTED AT 6' SPACING.

GENERAL NOTES:

- NO PLANT SUBSTITUTIONS WILL BE MADE WITHOUT APPROVAL FROM THE LANDSCAPE DESIGNER OR CITY FORESTER.
- IRRIGATION SUBMITTAL WILL BE PREPARED. SPECIFICS DETERMINED BY IRRIGATION CONTRACTOR.
- GENERAL OPEN SPACE LANDSCAPE NOTES:
DESIGN CONCEPTS INCLUDE:
A. BORROWING FROM THE HISTORIC LANDSCAPE WITH THE USE OF 'WINDBREAK' ROWS OF POPLAR AND ASH.
B. OCCASIONAL GOLDEN WILLOWS WHERE SPACE PERMITS, REPEAT OF NEIGHBORING PROPERTY.
C. USE OF NATIVE/RIPARIAN SPECIES (DOGWOOD, CHOKECHERRY, SUMAC, BUFFALOBERRY AND ROCKY MOUNTAIN MAPLE) TO TIE IN WITH THE SMALL WATERCOURSES IN THE AREA.
D. SPECIES WERE CHOSEN FOR SPRING BLOOMING, FALL COLOR AND WINTER INTEREST.
E. NOISE AND VISUAL BUFFERING FROM BAXTER LANE WITH EVERGREENS AND LARGER BUSHY SHRUBS.
- NO TREES SHALL BE LOCATED WITHIN 10 FEET OF SEWER, WATER OR STORM DRAINAGE MAINS, ANY FIRE HYDRANTS AND SEWER AND WATER SERVICES
- A PERMANENT AUTOMATIC IRRIGATION SYSTEM SHALL BE PROVIDED FOR THE PARK AND LANDSCAPE AREA, WITH THE EXCEPTION OF THE WATERCOURSE SETBACK WHICH SHALL BE IRRIGATED IN COMPLIANCE WITH THE WATERCOURSE SETBACK PLANTING PLAN.
- WATERCOURSE SETBACK PLANTING PLAN IS FOUND IN APPENDIX 1-4 OF PUD.

DESIGN BY:

MARY KECK
GARDEN CREATIONS
411 N. 3RD AVE
BOZEMAN, MT 59715
(406)600-0409

KEY MAP



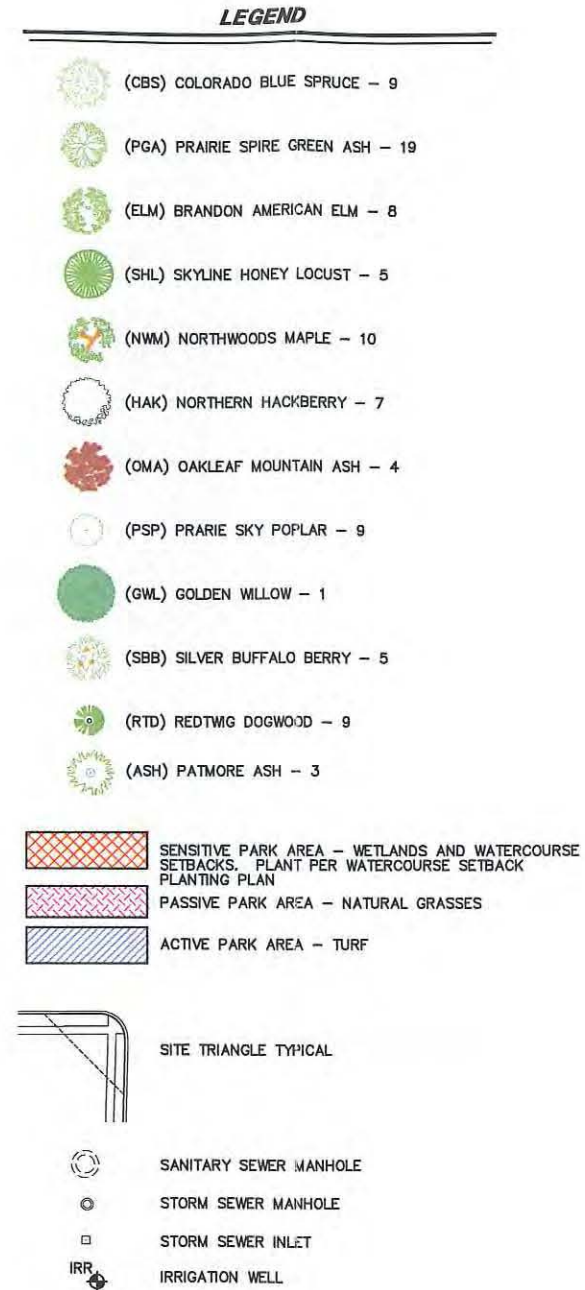
SHEET INDEX

SHT. NO.	TITLE
G-1	COVER SHEET
G-2	KEY MAP, PROJECT LEGEND & SHEET INDEX
P-1	NORTH PARK AREA (PHASE 7)
P-2	CENTRAL PARK AREA (PHASE 2)
P-3	SOUTH PARK AREA (PHASE 1)
P-4	EAST & WEST TRAIL - PARK AREA EXTENSIONS

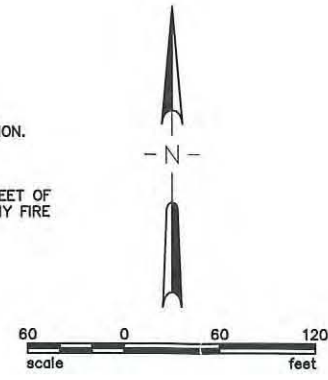
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No.			Revision									
By												
Date												

WEST WINDS PLANNED COMMUNITY
BOZEMAN, MT
KEY MAP, PROJECT LEGEND &
SHEET INDEX





NOTES:
1. CITY OF BOZEMAN PARKS DEPARTMENT TO APPROVE TRAIL MATERIAL PRIOR TO INSTALLATION.
2. SOCCER PRACTICE FIELD FOR GRAPHICS PURPOSES ONLY. NO SOCCER SPECIFIC IMPROVEMENTS PROPOSED.
3. NO TREES SHALL BE LOCATED WITHIN 10 FEET OF SEWER, WATER OR STORM DRAINAGE MAINS, ANY FIRE HYDRANTS AND SEWER AND WATER SERVICES.



DESIGN BY:
MARY KECK
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411 N. 3RD AVE
BOZEMAN, MT 59715
(406)586-0409

Project: 045057125 • WW-Community Park.dwg • Date: AUG. 2008 • Designed: MK • Drawn: BRF • Checked: COL • Approved: COL

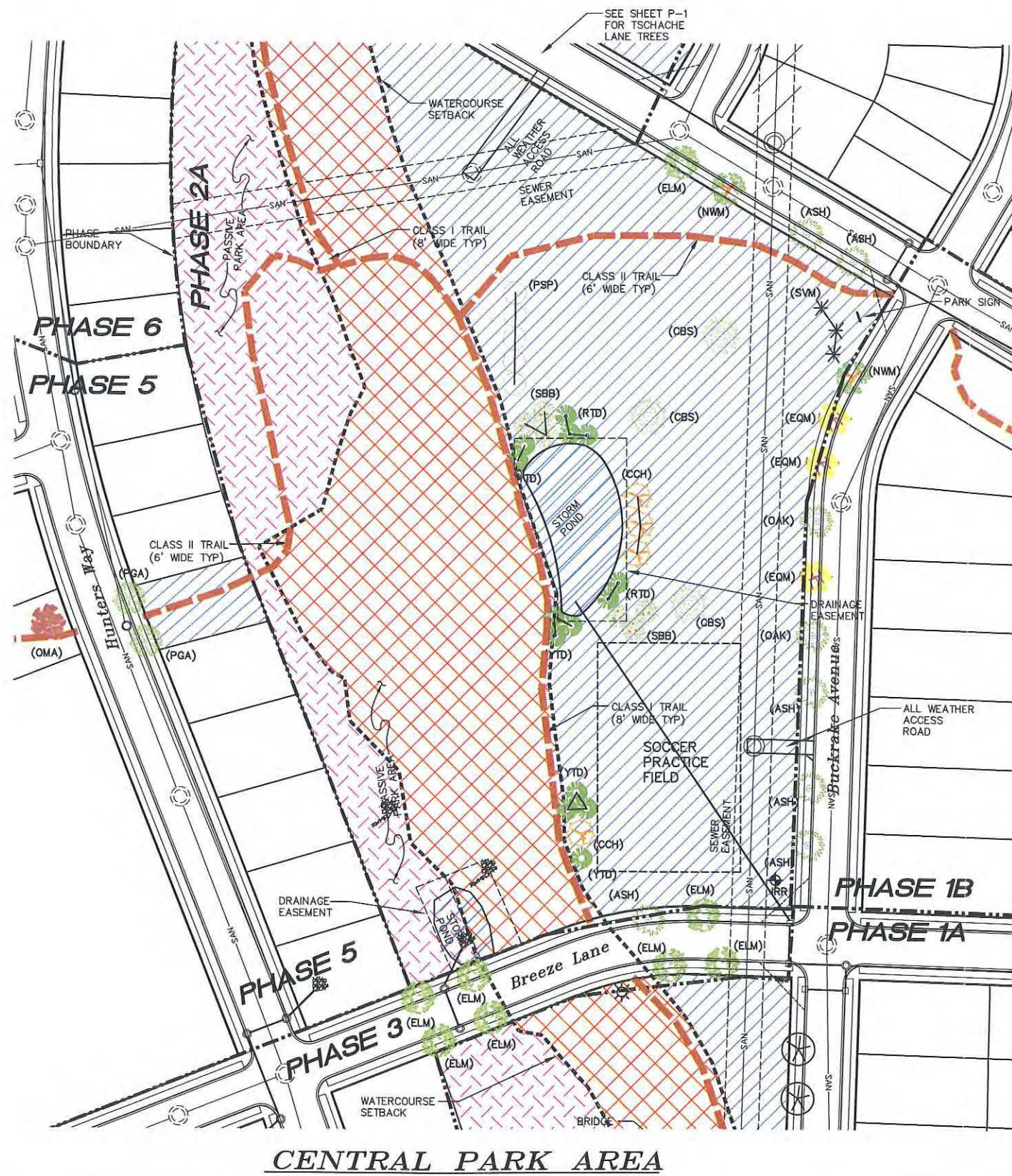
No.	Revision	By	Date

WEST WINDS PLANNED COMMUNITY
BOZEMAN, MT

WEST WINDS COMMUNITY PARK
NORTH PARK AREA (PHASE 7)

HKM
ENGINEERING
920 Technology Blvd., Suite A
Bozeman, MT 59718
Phone: (406) 586-6834
Fax: (406) 586-1730

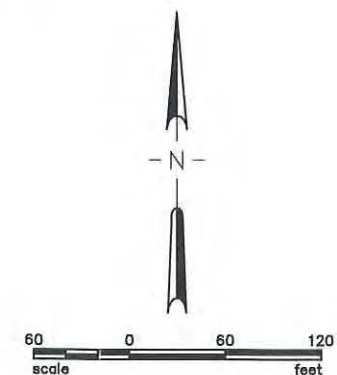
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P-1



- LEGEND**
- (CBS) COLORADO BLUE SPRUCE - 3
 - (PSP) PRARIE SKY POPLAR - 5
 - (SBB) SILVER BUFFALO BERRY - 6
 - (RTD) REDTWIG DOGWOOD - 5
 - (PGA) PRAIRIE SPIRE GREEN ASH - 2
 - (ELM) BRANDON AMERICAN ELM - 7
 - (NWM) NORTHWOODS MAPLE - 3
 - (YTD) YELLOW TWIG DOGWOOD - 9
 - (CCH) COMMON CHOKECHERRY CLUMP - 4
 - (ASH) PATMORE ASH - 5
 - (EQM) EMERALD QUEEN MAPLE - 3
 - (OAK) BUR OAK - 2
 - (TCA) THUNDERCHILD CRABAPPLE - 3
 - (SVM) SILVER MAPLE - ACTUALLY PLANTED - 3
- SENSITIVE PARK AREA - WETLANDS AND WATERCOURSE SETBACKS. PLANT PER WATERCOURSE SETBACK PLANTING PLAN
 - PASSIVE PARK AREA - NATURAL GRASSES
 - ACTIVE PARK AREA - TURF
- SITE TRIANGLE TYPICAL
 - SANITARY SEWER MANHOLE
 - STORM SEWER MANHOLE
 - STORM SEWER INLET
 - IRRIGATION WELL

NOTES:

1. CITY OF BOZEMAN PARKS DEPARTMENT TO APPROVE TRAIL MATERIAL PRIOR TO INSTALLATION.
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DESIGN BY:
 MARY KECK
 GARDEN CREATIONS
 411 N. 3RD AVE
 BOZEMAN, MT 59715
 (406)600-0409

Project: 04S067125 • WINDS COMMUNITY PARK.dwg				Date: AUG. 2008			
Designed: MK				Drawn: BRF			
Checked: COL				Approved: COL			
No.	Revision	By	Date				

WEST WINDS PLANNED COMMUNITY
 BOZEMAN, MT

WEST WINDS COMMUNITY PARK
 CENTRAL PARK AREA (PHASE 2)

HKM
 ENGINEERING
 920 Technology Blvd., Suite A
 Bozeman, MT 59718
 Phone: (406) 586-8834
 Fax: (406) 586-1730

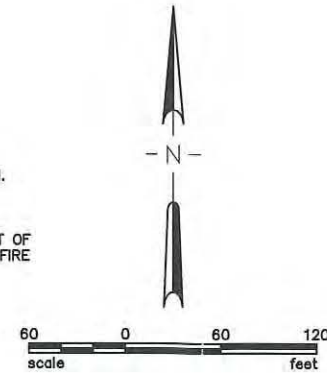
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P-2



SOUTH PARK AREA

- LEGEND**
- (PSP) PRARIE SKY POPLAR - 3
 - (CCH) COMMON CHOKECHERRY CLUMP - 4
 - (IDW) ISANTI DOGWOOD - 3
 - (SBS) SKUNKBRUSH SUMAC - 6
 - (RMM) ROCKY MOUNTAIN MAPLE - 2
 - (GWL) GOLDEN WILLOW - 1
 - (PGA) PRAIRIE SPIRE GREEN ASH - 2
 - DENOTES TREE ACTUALLY PLANTED
 - SENSITIVE PARK AREA - WETLANDS AND WATERCOURSE SETBACKS. PLANT PER WATERCOURSE SETBACK PLANTING PLAN
 - PASSIVE PARK AREA - NATURAL GRASSES
 - ACTIVE PARK AREA - TURF
 - SITE TRIANGLE TYPICAL
 - SANITARY SEWER MANHOLE
 - STORM SEWER MANHOLE
 - STORM SEWER INLET
 - IRRIGATION WELL

NOTES:
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DESIGN BY:
MARY KECK
GARDEN CREATIONS
411 N. 3RD AVE
BOZEMAN, MT 59715
(406) 600-0409

Project: 04S067.125 • WINDS COMMUNITY PARK.dwg • Date: AUG. 2008 • Drawn: BRF • Checked: COL • Approved: COL

No.	Revision	By	Date

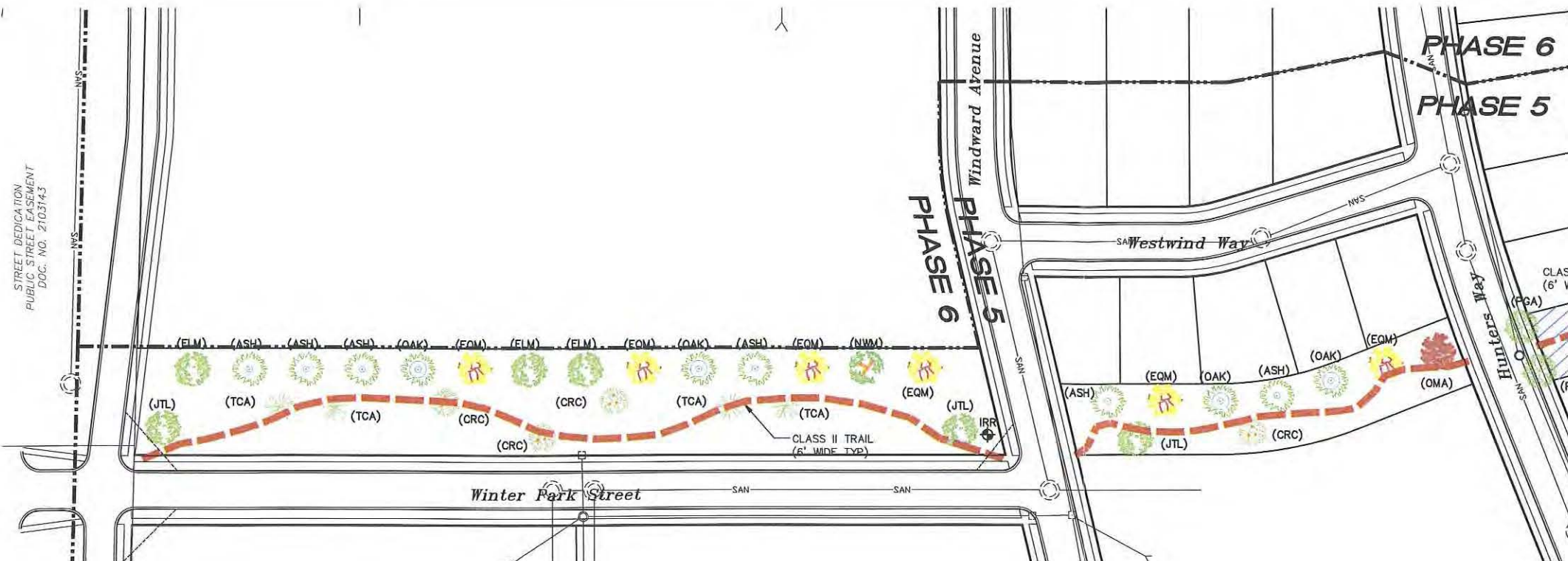
WEST WINDS PLANNED COMMUNITY
BOZEMAN, MT

WEST WINDS COMMUNITY PARK
SOUTH PARK AREA (PHASE 1)

WARNING
IF THIS BAR DOES NOT MATCH THE DRAWING, THEN THE DRAWING IS NOT TO SCALE

HKM ENGINEERING
920 Technology Blvd., Suite A
Bozeman, MT 59718
Phone: (406) 586-8834
Fax: (406) 586-1730

Sheet No. 5
P-3



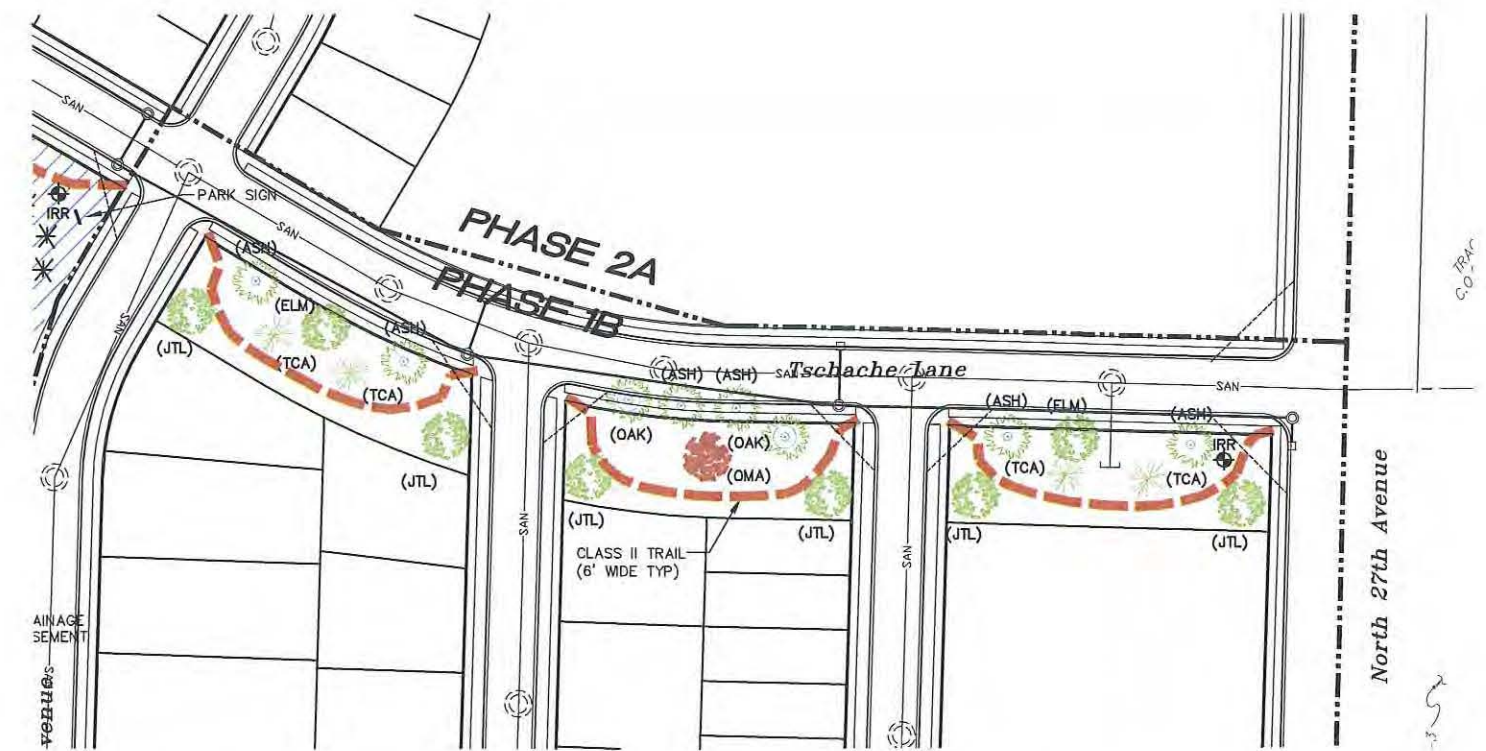
WEST TRAIL PARK AREA EXTENSION (PHASE 5)

LEGEND

- (ELM) BRANDON AMERICAN ELM - 3
- (OMA) OAKLEAF MOUNTAIN ASH - 1
- (NWM) NORTHWOODS MAPLE - 1
- (ASH) NORTHERN TREASURE ASH - 8
- (EQM) EMERALD QUEEN MAPLE - 6
- (OAK) BUR OAK - 4
- (TCA) THUNDERCHILD CRABAPPLE - 4
- (CRC) CANADA RED CHERRY - CLUMPS - 4
- (JTL) JAPANESE TREE LILAC - 3

SITE TRIANGLE TYPICAL

SANITARY SEWER MANHOLE
 STORM SEWER MANHOLE
 STORM SEWER INLET
 IRRIGATION WELL



EAST TRAIL PARK AREA EXTENSION (PHASE 1)

LEGEND

- (ELM) BRANDON AMERICAN ELM - 2
- (OMA) OAKLEAF MOUNTAIN ASH - 1
- (ASH) NORTHERN TREASURE ASH - 6
- (OAK) BUR OAK - 2
- (TCA) THUNDERCHILD CRABAPPLE - 4
- (JTL) JAPANESE TREE LILAC - 6

SITE TRIANGLE TYPICAL

SANITARY SEWER MANHOLE
 STORM SEWER MANHOLE
 STORM SEWER INLET
 IRRIGATION WELL

NOTES:
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DESIGN BY:
 MARY KECK
 GARDEN CREATIONS
 411 N. 3RD AVE
 BOZEMAN, MT 59715
 (406)600-0409

Scale: 0 60 120 feet

North Arrow

Project: 045067.125 • WW-Community Park.dwg • Date: AUG. 2008 • Designed: MK • Drawn: BRF • Checked: COL • Approved: COL

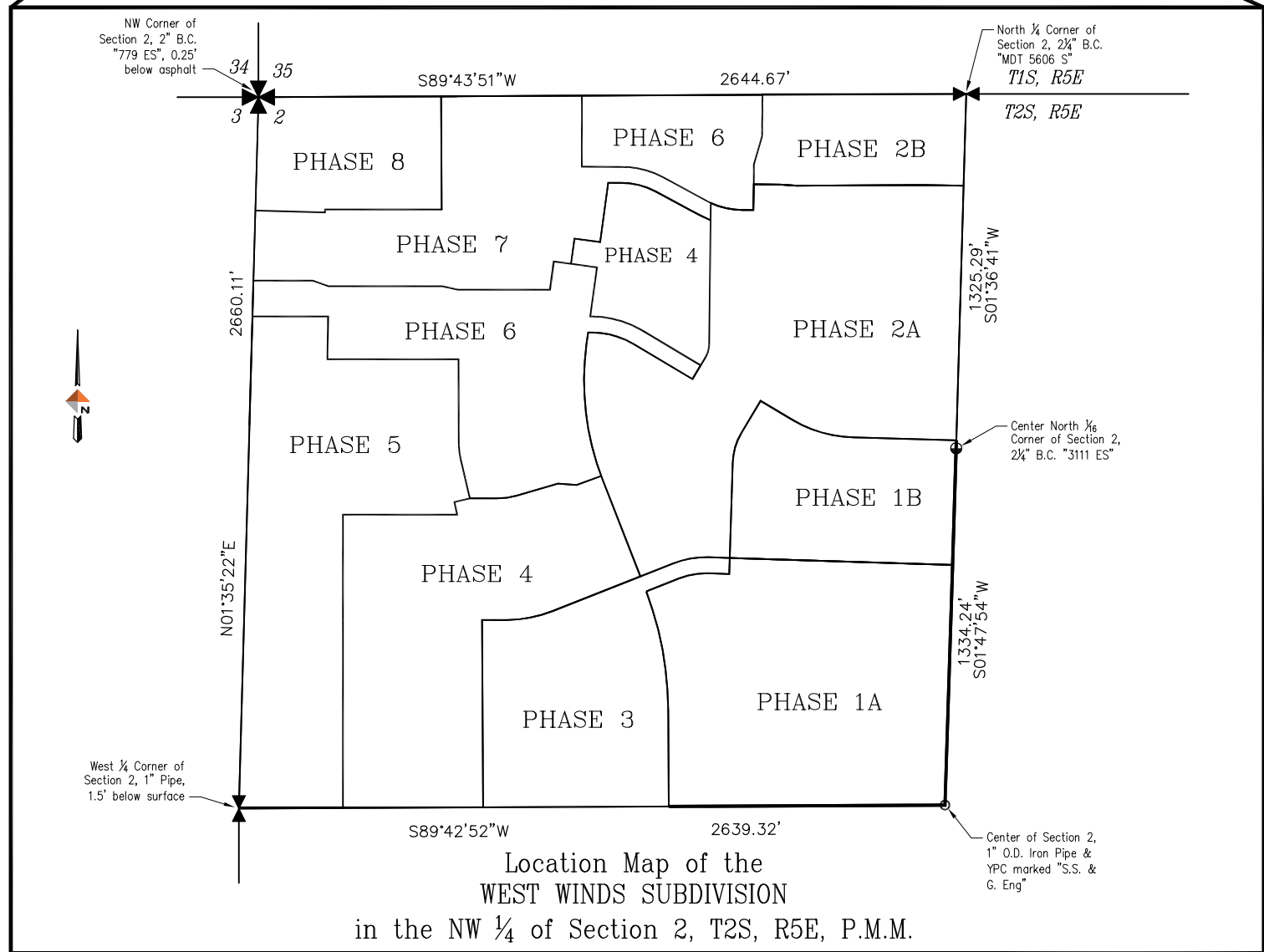
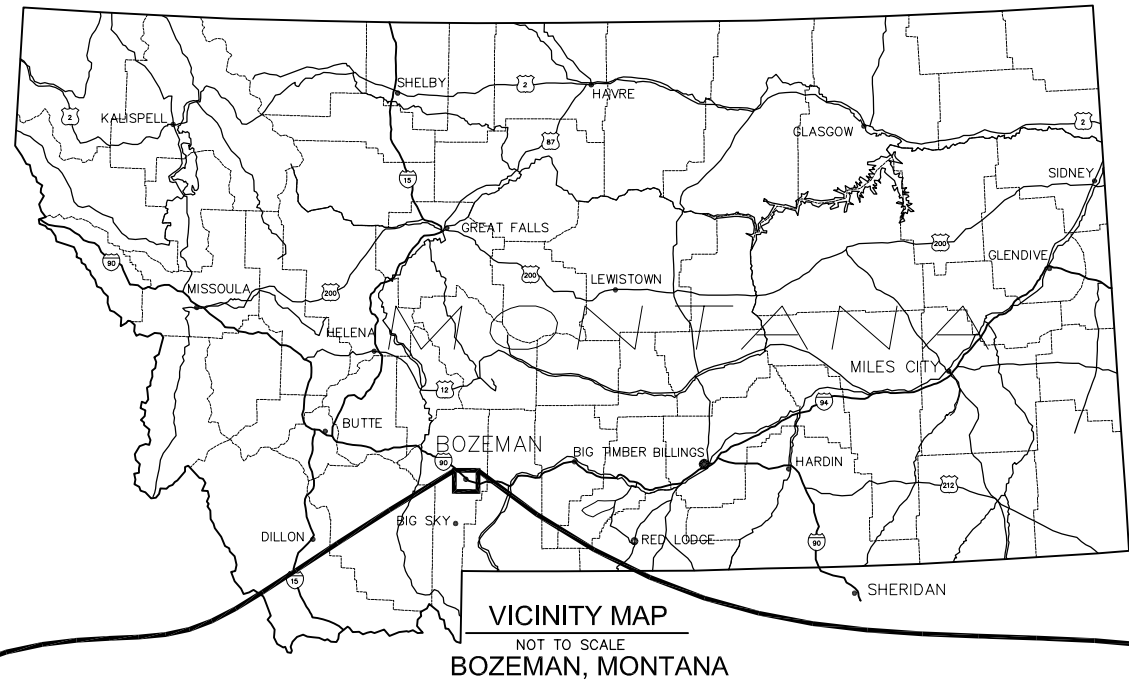
No.	Revision	By	Date

WEST WINDS PLANNED COMMUNITY
BOZEMAN, MT

WEST WINDS COMMUNITY PARK
EAST & WEST TRAIL - PARK AREA EXTENSIONS

Sheet No. 6
P-4

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PLANS FOR WEST WINDS PLANNED COMMUNITY BOZEMAN, MONTANA

WEST WINDS COMMUNITY PARK PLAN



West Winds

PREPARED BY:



PREPARED FOR:
CASCADE DEVELOPMENT, INC.
1627 WEST MAIN STREET
SUITE #223
BOZEMAN, MONTANA 59715
(406) 585-9230

PROJECT NO. 4522.11200.01
MARCH 2008

DESIGN BY:

MARY KECK
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411 N. 3RD AVE
BOZEMAN, MT 59715
(406)600-0409



CLINTON O. LITTLE 10766 PE
Project Engineer
DOWL HKM ENGINEERING Inc.
CLittle@dowlhkm.com

NOTE:
THIS PLAN IN CONFORMANCE WITH APPROVED
"PARK MASTER PLAN FOR WEST WINDS
PLANNED COMMUNITY" 8/20/2008

PROJECT	4522.11200.01
DATE	7/24/2013
SHEET	G-1
OF	6



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LANDSCAPING GENERAL LEGEND









PLANT SYMBOL LIST

PLANT SPECIES LIST

TREES

-  (CBS) COLORADO BLUE SPRUCE
-  (PSP) PRARIE SKY POPLAR
-  (GWL) GOLDEN WILLOW
-  (PGA) PRAIRIE SPIRE GREEN ASH
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-  (HAK) NORTHERN HACKBERRY
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-  (JTL) JAPANESE TREE LILAC
-  (ACC) AMUR CHOKECHERRY
-  (PSC) PINK SPIRES CRABAPPLE
-  (PGP) PRAIRIE GEM PEAR

SHRUBS

-  (SBB) SILVER BUFFALO BERRY
-  (RTD) REDTWIG DOGWOOD
-  (YTD) YELLOW TWIG DOGWOOD
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-  (IDW) ISANTI DOGWOOD
-  (SBS) SKUNKBRUSH SUMAC
-  (RMM) ROCKY MOUNTAIN MAPLE
-  (FHL) FRENCH HYBRID LILAC

TREES

- Colorado Blue Spruce

Picea pungens

60–80'
- Prairie Sky Poplar

Populus x Canadensis 'Prairie Sky'

55'
- Golden Willow

Salix alba 'Vitilina'

65'
- Prairie Spire Green Ash

Fraxinus pennsylvanica 'Rugby'

50–60'
- Brandon American Elm

Ulmus 'Brandon'

50'
- Common Hackberry

Celtis occidentalis

50–75'
- Oakleaf Mountain Ash

Sorbus hybrida

30'
- Skyline Honeylocust

Gleditsia triacanthos inermis

35–45'
- Northwood Maple

Acer rubrum 'Northwood'

50'
- Patmore Green Ash

Fraxinus pennsylvanica 'Patmore'

50–60'
- Emerald Queen Maple

Acer platanoides 'Emerald Queen'

50–60'
- Bur Oak

Quercus macrocarpa

60–80'
- Thunderchild Crabapple

Malus 'Thunderchild'

20'
- Canada Red Cherry

Prunus virginiana 'Shubert'

20–25'
- Japanese Tree Lilac

Syringa reticulata

25'
- Amur Chokecherry

Prunus maackii

35'
- Pink Spires Crabapple

Malus 'Pink Spires'

20'
- Prairie Gem Pear

Pyrus ussuriensis 'Mordak'

18–25'

TREE NOTES:

1. ALL TREES BALLED AND BURLAPPED 1.5:–2" CALIPER. PLANTED TO THE LEVEL OF THE ROOT FLARE, STAKED AND MULCHED WITH A 3" CIRCLE OF SHREDDED CEDAR, (SOD REMOVED AND NO EDGING OR WEEDMAT).
2. TREES PLANTED AT 35'–50" SPACING.
3. EVERGREENS SHALL BE 8' TALL MINIMUM.

SHRUBS

- Silver Buffaloberry

Shepherdia argentea

8–12'
- Red Twig Dogwood

Cornus sericea

8'
- Yellow Twig Dogwood

Cornus alba 'Bud's Yellow'

6–8'
- Common Chokecherry

Prunus virginiana

18'
- Isanti Dogwood

Cornus sericea 'Isanti'

5'
- Skunkbrush Sumac

Rhus trilobata

3–6'
- Rocky Mountain Maple

Acer glabrum

15'
- French Hybrid Lilac

Syringa 'various cultivars'

8–10'

SHRUB NOTES:

1. ALL SHRUBS SHALL BE 5 GALLON SIZE OR LARGER.
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GENERAL NOTES:

1. NO PLANT SUBSTITUTIONS WILL BE MADE WITHOUT APPROVAL FROM THE LANDSCAPE DESIGNER OR CITY FORESTER.
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3. GENERAL OPEN SPACE LANDSCAPE NOTES: DESIGN CONCEPTS INCLUDE:

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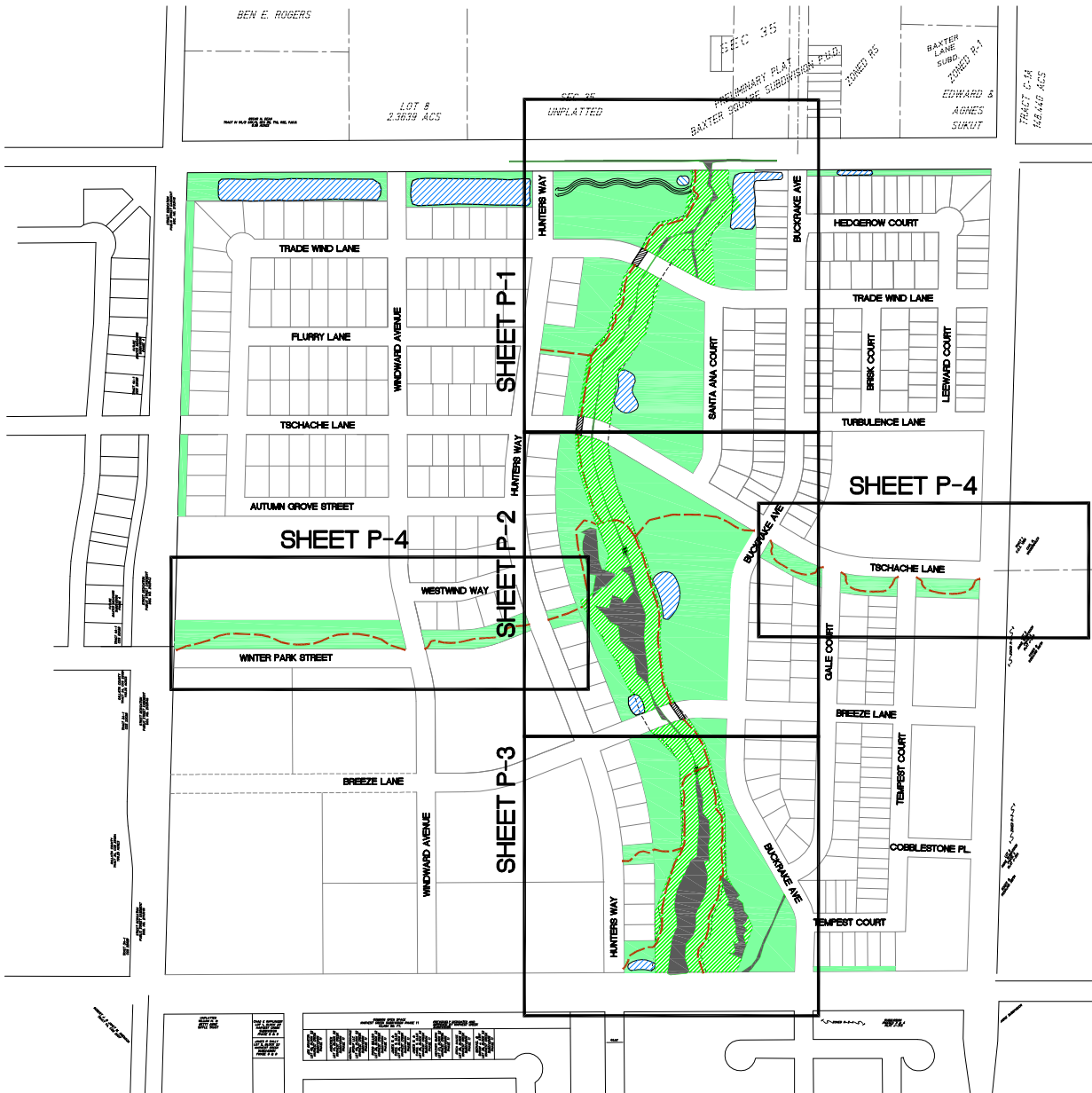
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6. WATERCOURSE SETBACK PLANTING PLAN IS FOUND IN APPENDIX 1–4 OF PUD.

DESIGN BY:

MARY KECK
GARDEN CREATIONS
411 N. 3RD AVE
BOZEMAN, MT 59715
(406)600–0409

KEY MAP



SHEET INDEX

SHT. NO.

TITLE

- G-1

COVER SHEET
- G-2

KEY MAP, PROJECT LEGEND & SHEET INDEX
- P-1


NORTH PARK AREA (PHASE 7)
- P-2

CENTRAL PARK AREA (PHASE 2)
- P-3

SOUTH PARK AREA (PHASE 1)
- P-4

EAST & WEST TRAIL - PARK AREA EXTENSIONS

REVISIONS		BY	DATE	DESCRIPTION
REV	DATE			

**DOWL HKM**

Bozeman, Montana 59715
www.dowlhkm.com

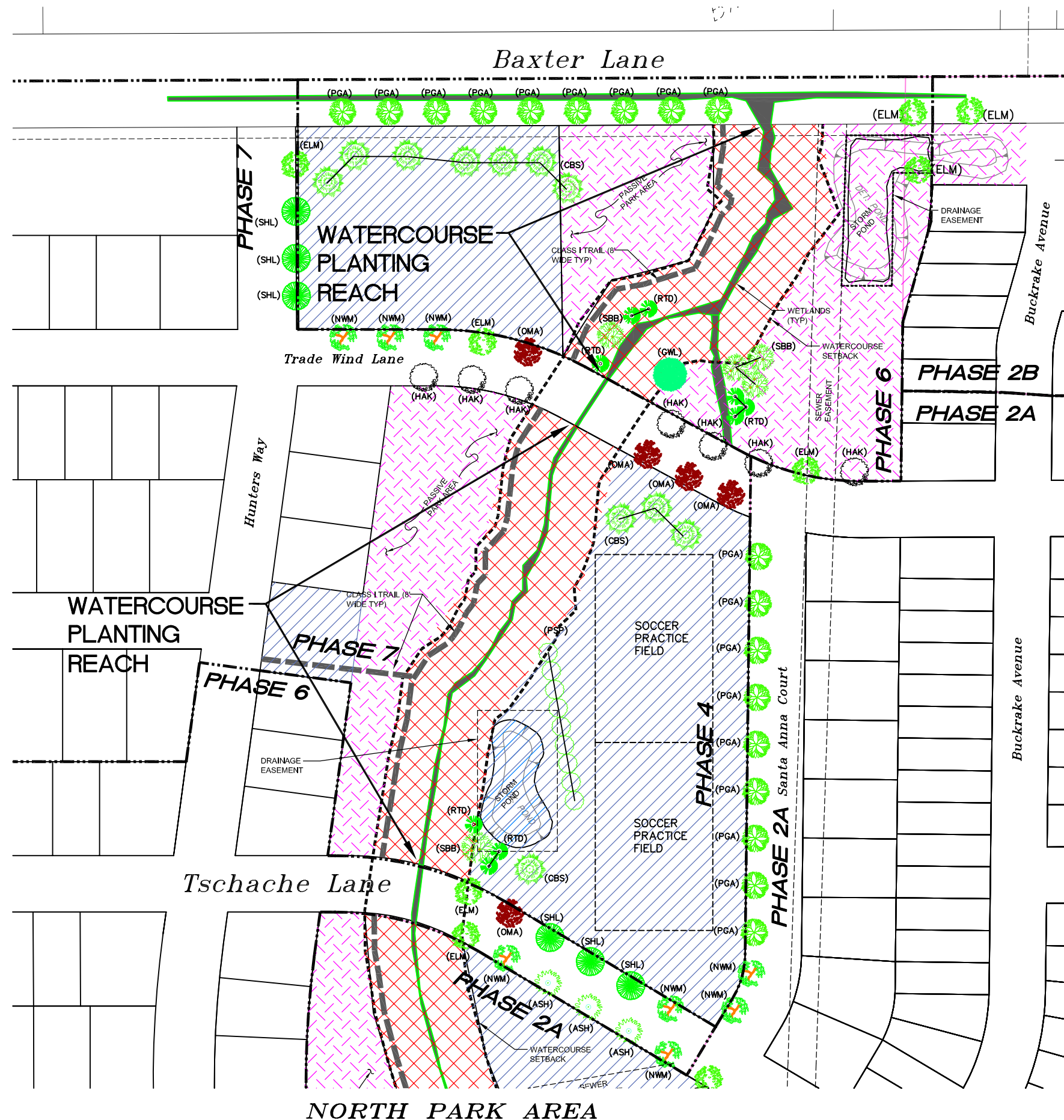
2090 Stadium Drive
406-566-6624






WEST WINDS PLANNED COMMUNITY
BOZEMAN, MT

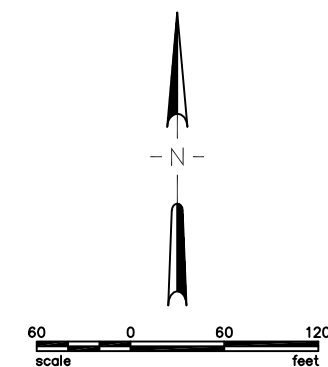
KEY MAP, PROJECT LEGEND & SHEET INDEX

PROJECT	4522.11200.01
DATE	7/12/2013
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SHEET	
G-2	
OF 6	



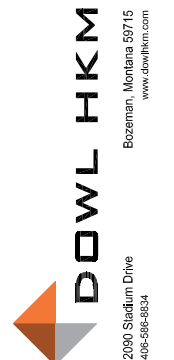
-  SENSITIVE PARK AREA – WETLANDS AND WATERCOURSE SETBACKS. PLANT PER WATERCOURSE SETBACK PLANTING PLAN
-  PASSIVE PARK AREA – NATURAL GRASSES
-  ACTIVE PARK AREA – TURF

NOTE: NO PLANTING WITHIN 10' OF UTILITIES



IN ASSOCIATION WITH:

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[illegible]

WEST WINDS PLANNED COMMUNITY
BOZEMAN, MT
PHASE 2 WATERCOURSE SETBACK PLAN

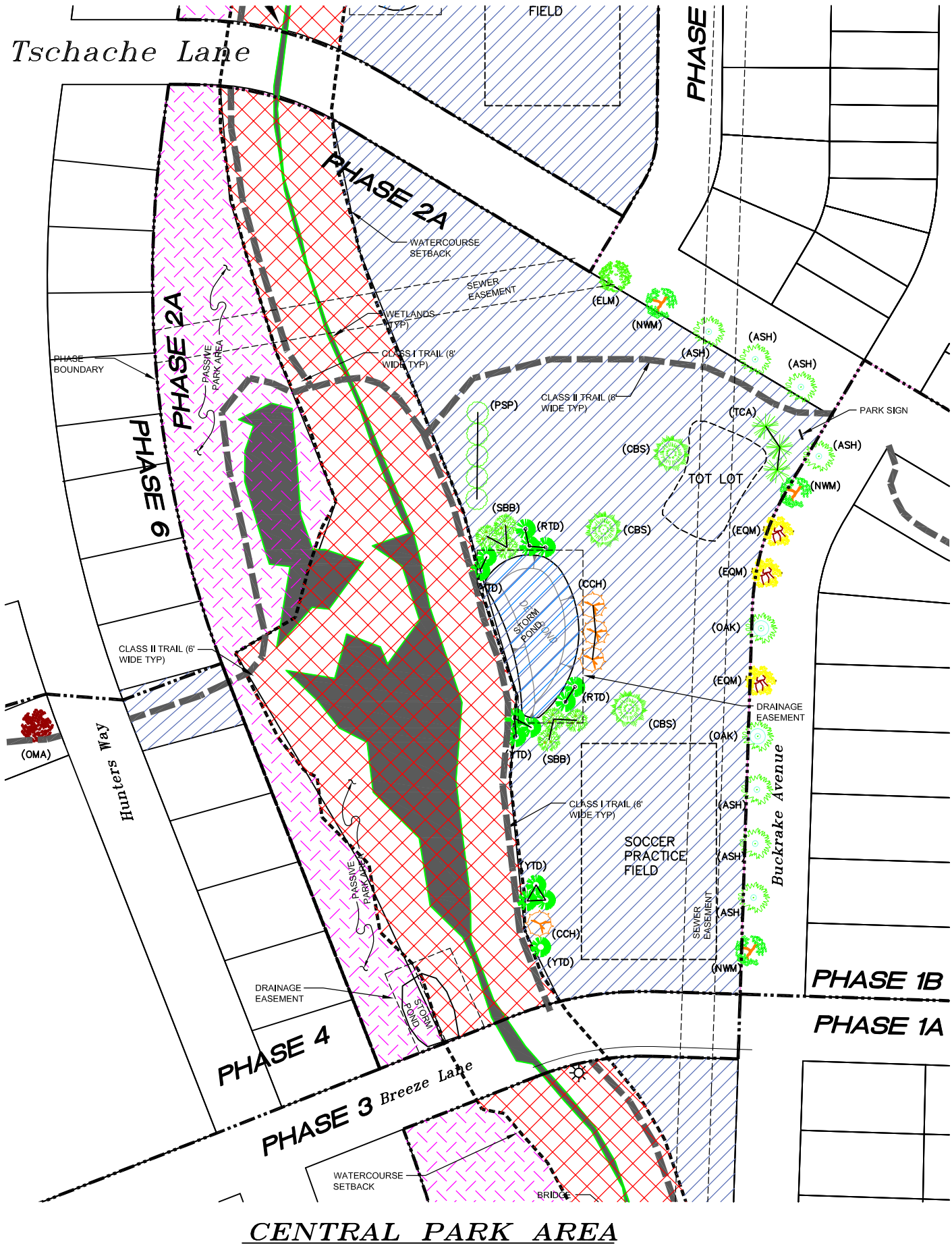
PROJECT	4522.11200.01
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P-1

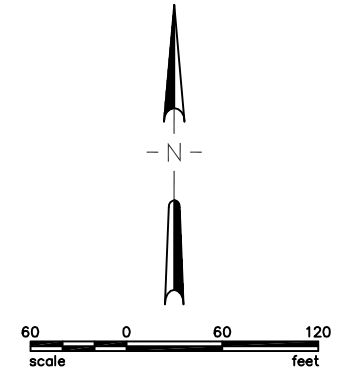
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- LEGEND**
- (CBS) COLORADO BLUE SPRUCE - 3
 - (PSP) PRARIE SKY POPLAR - 5
 - (SBB) SILVER BUFFALO BERRY - 6
 - (RTD) REDTWIG DOGWOOD - 5
 - (ELM) BRANDON AMERICAN ELM - 1
 - (NWM) NORTHWOODS MAPLE - 3
 - (YTD) YELLOW TWIG DOGWOOD - 9
 - (CCH) COMMON CHOKECHERRY CLUMP - 4
 - (ASH) NORTHERN TREASURE ASH - 7
 - (EQM) EMERALD QUEEN MAPLE - 3
 - (OAK) BUR OAK - 2
 - (TCA) THUNDERCHILD CRABAPPLE - 3

- NOTES:
1. CITY OF BOZEMAN PARKS DEPARTMENT TO APPROVE TRAIL MATERIAL PRIOR TO INSTALLATION.
2. SOCCER PRACTICE FIELD FOR GRAPHICS PURPOSES ONLY. NO SOCCER SPECIFIC IMPROVEMENTS PROPOSED.
- SENSITIVE PARK AREA - WETLANDS AND WATERCOURSE SETBACKS. PLANT PER WATERCOURSE SETBACK PLANTING PLAN
 - PASSIVE PARK AREA - NATURAL GRASSES
 - ACTIVE PARK AREA - TURF



DESIGN BY:
MARY KECK
GARDEN CREATIONS
FEB. 2005

REVISIONS		DESCRIPTION	BY
REV	DATE		

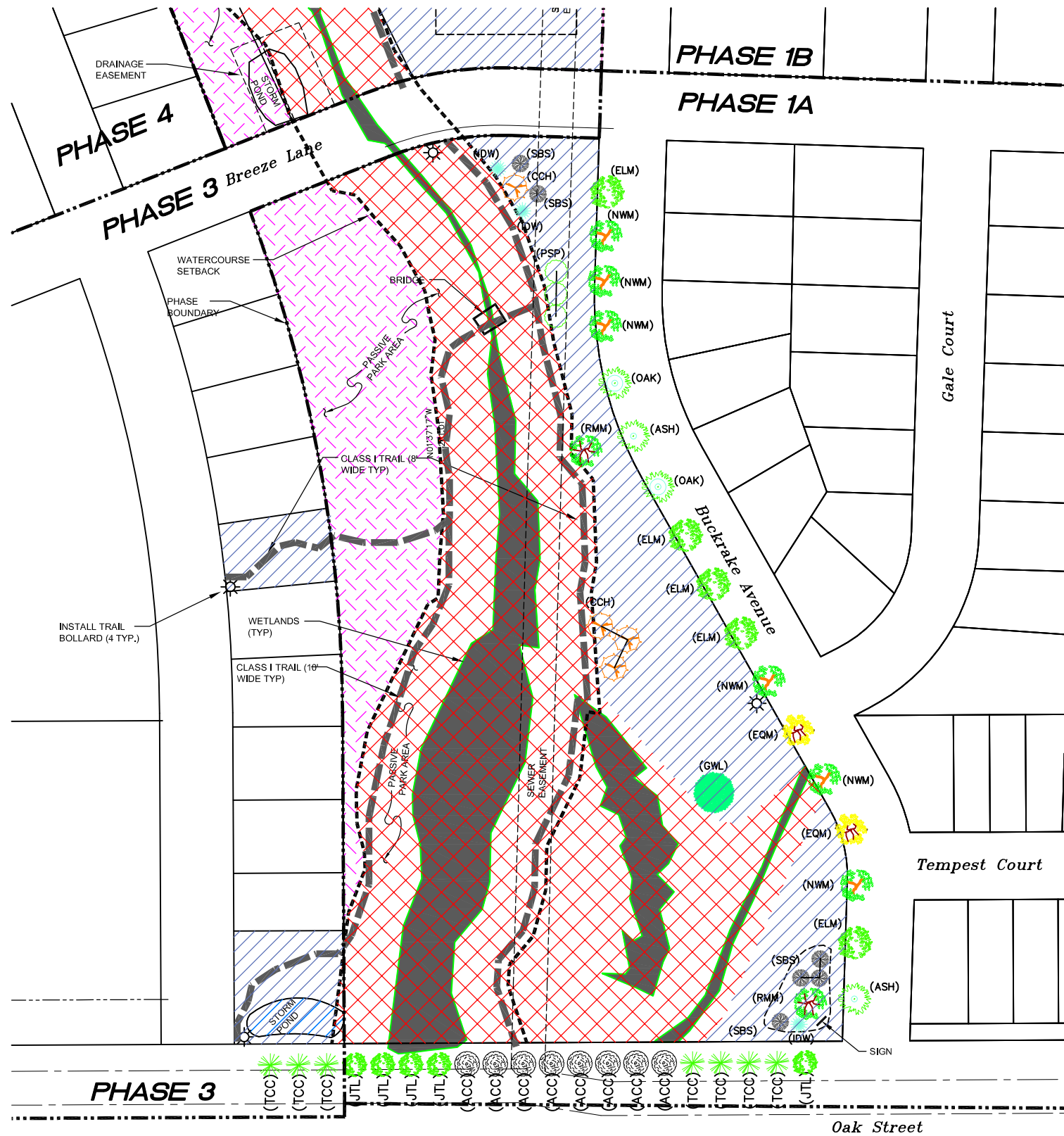
**DOWL HKM**
Bozeman, Montana 59715
www.dowlhkm.com
2000 Stadium Drive
406-586-8834

WEST WINDS PLANNED COMMUNITY
BOZEMAN, MT

WEST WINDS COMMUNITY PARK
CENTRAL PARK AREA (PHASE 2)

PROJECT	4522.11200.01
DATE	7/12/2013
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SHEET	
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OF 8	

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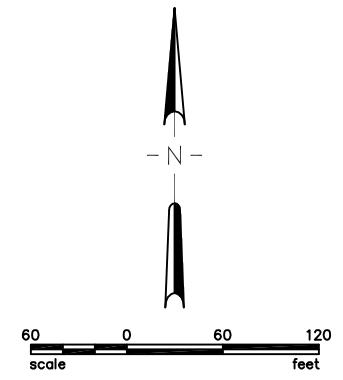
LEGEND

- (PSP) PRARIE SKY POPLAR - 3
- (ELM) BRANDON AMERICAN ELM - 5
- (NWM) NORTHWOODS MAPLE - 6
- (CCH) COMMON CHOKECHERRY CLUMP - 4
- (ASH) FALL GOLD ASH - 2
- (EQM) EMERALD QUEEN MAPLE - 2
- (OAK) BUR OAK - 2
- (IDW) ISANTI DOGWOOD - 3
- (SBS) SKUNKBRUSH SUMAC - 6
- (RMM) ROCKY MOUNTAIN MAPLE - 2
- (JTL) JAPANESE TREE LILAC - 5
- (TCC) THUNDERCHILD CRABAPPLE - 7
- (ACC) AMUR CHOKE CHERRY - 8
- (GWL) GOLDEN WILLOW - 1

SENSITIVE PARK AREA - WETLANDS AND WATERCOURSE SETBACKS. PLANT PER WATERCOURSE SETBACK PLANTING PLAN

PASSIVE PARK AREA - NATURAL GRASSES

ACTIVE PARK AREA - TURF



DESIGN BY:
MARY KECK
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FEB. 2005

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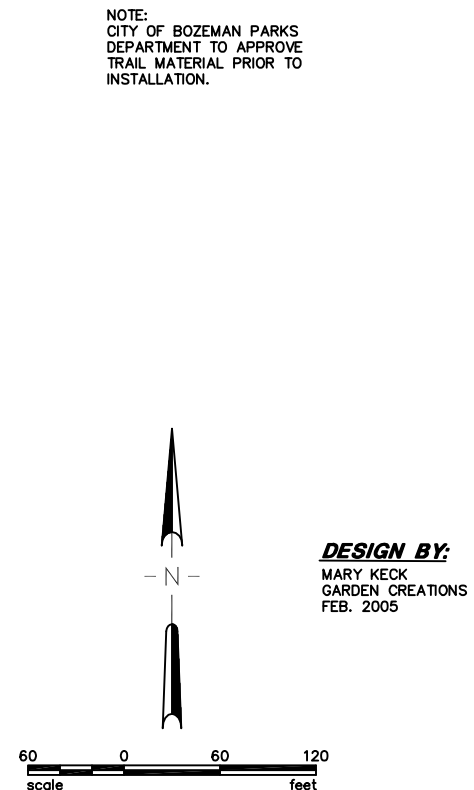
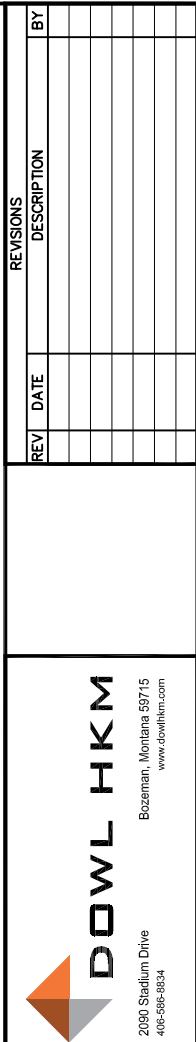
WEST WINDS PLANNED COMMUNITY
BOZEMAN, MT

WEST WINDS COMMUNITY PARK
SOUTH PARK AREA (PHASE 1)

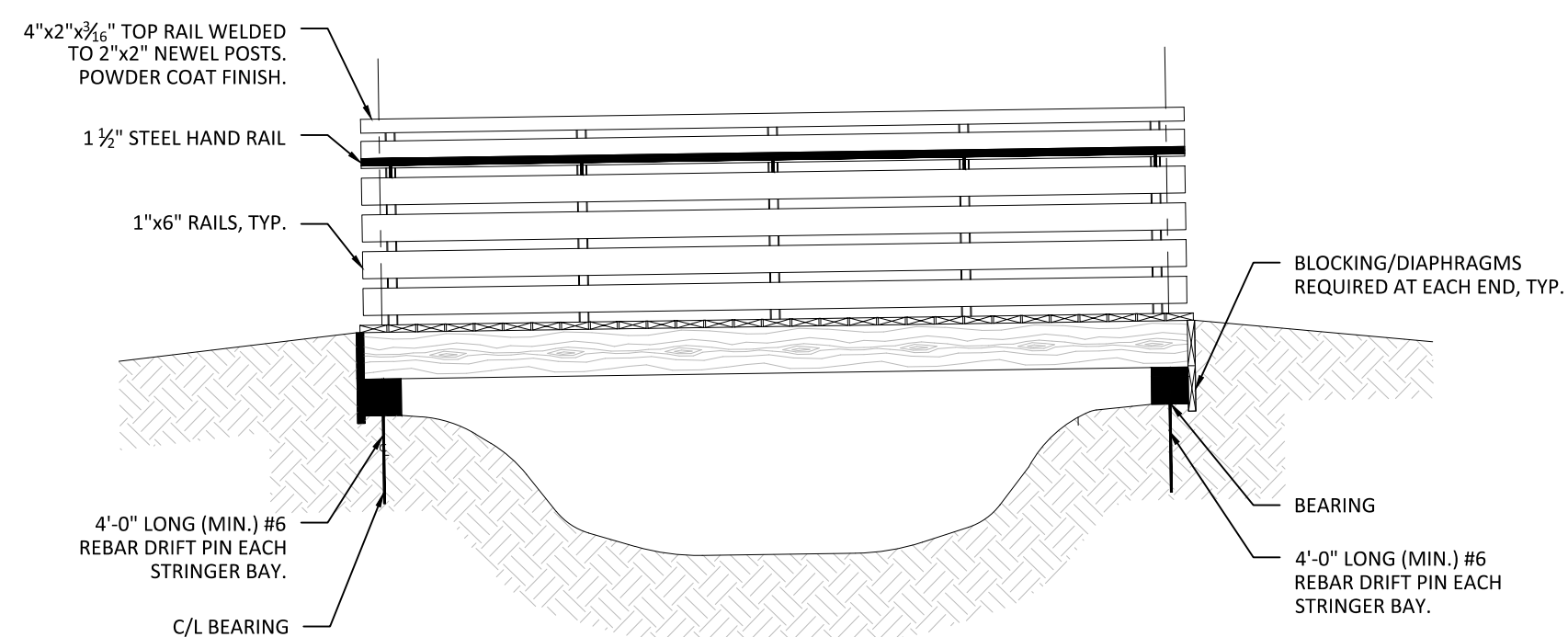
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DATE 7/12/2013

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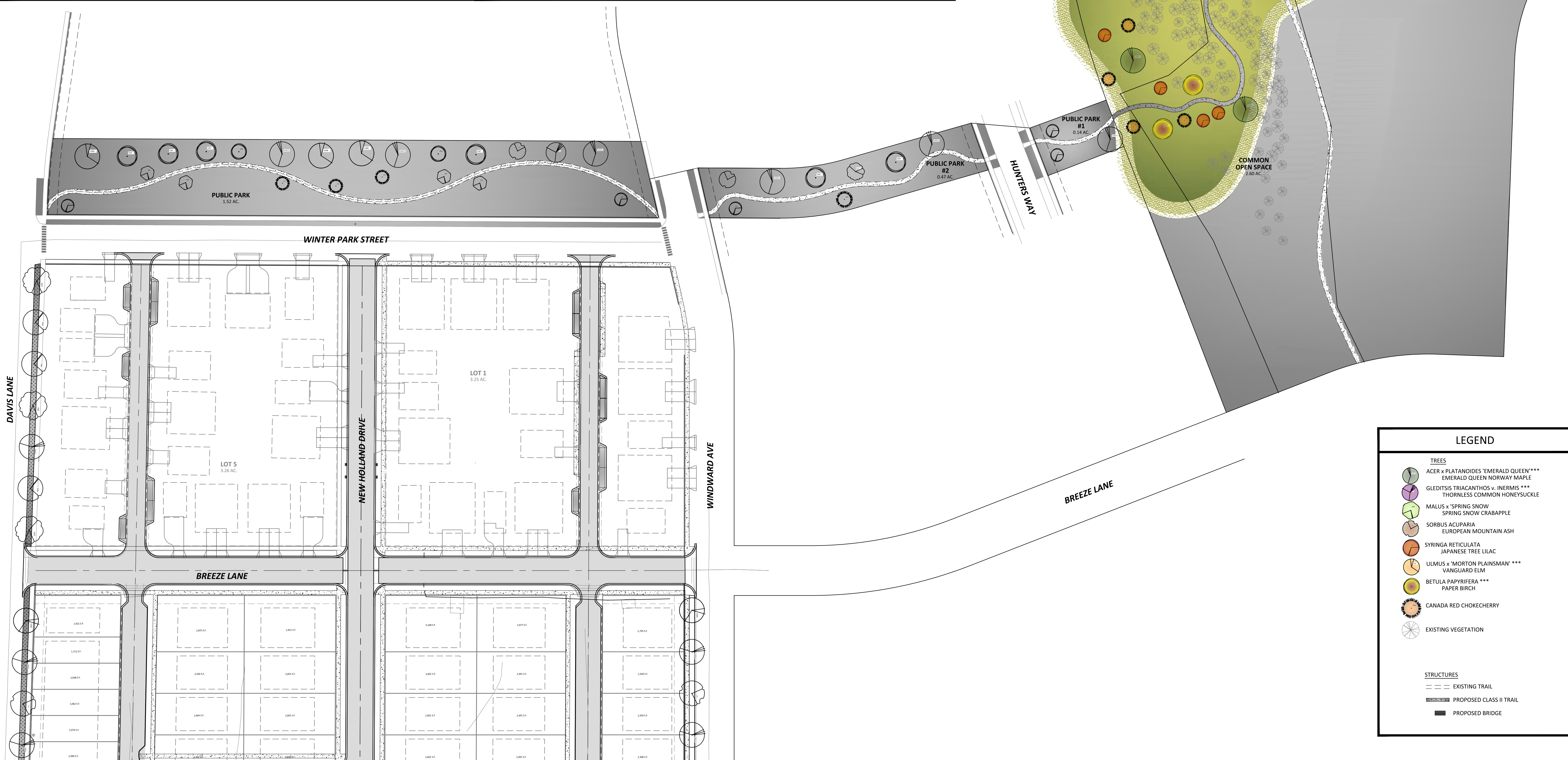
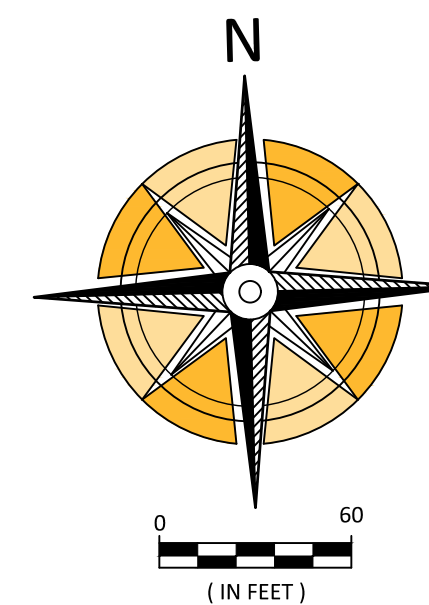
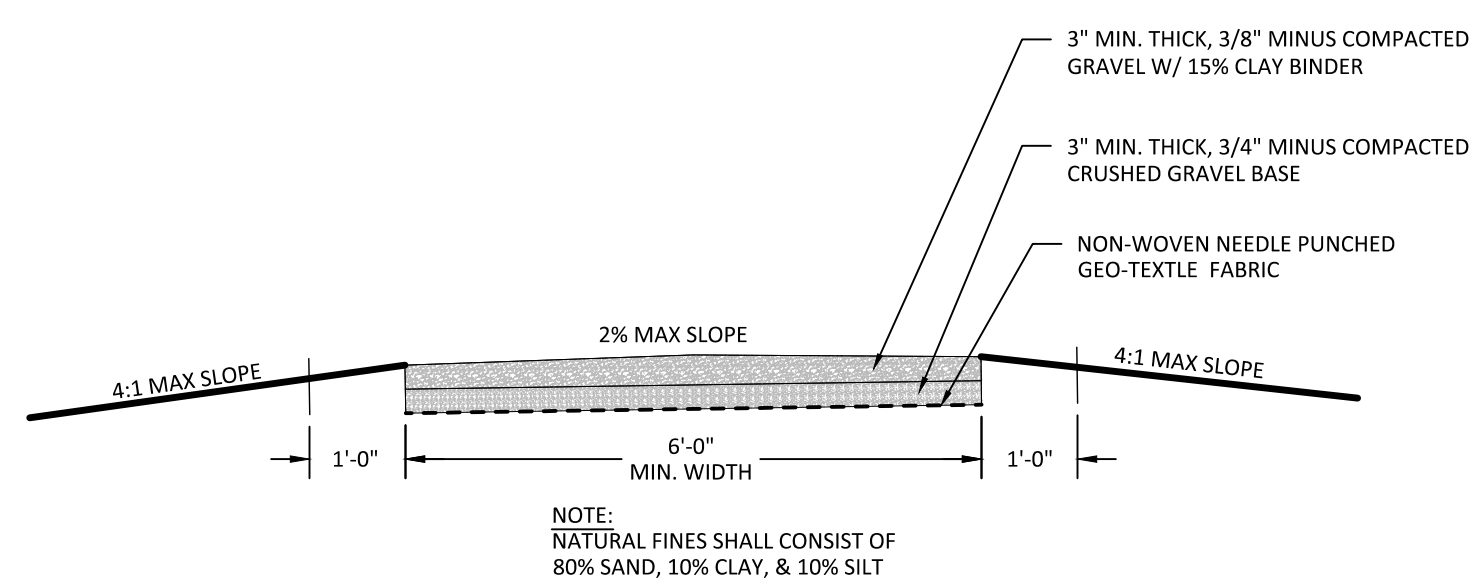
SHEET
P-3
OF 8



BRIDGE SECTION



CLASS II TRAIL SECTION



VERIFY SCALE!
THESE PRINTS MAY BE
REDUCED. LINE BELOW
MEASURES ONE INCH ON
ORIGINAL DRAWING.



HAYSTACK
DEVELOPMENT

104 E. MAIN ST. SUITE 206 | BOZEMAN, MT 59711 | 406.570.3830

DRAWN BY: JCH
CHK'D. BY: TWMM
APPR. BY: TWMM
DATE: 12/2017

WEST WINDS SW SUBDIVISION

PARK PLAN

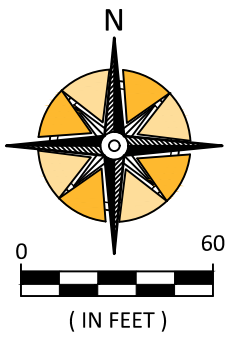
MONTANA

BOZEMAN

PROJECT NO.
102.09

FIGURE No.

1






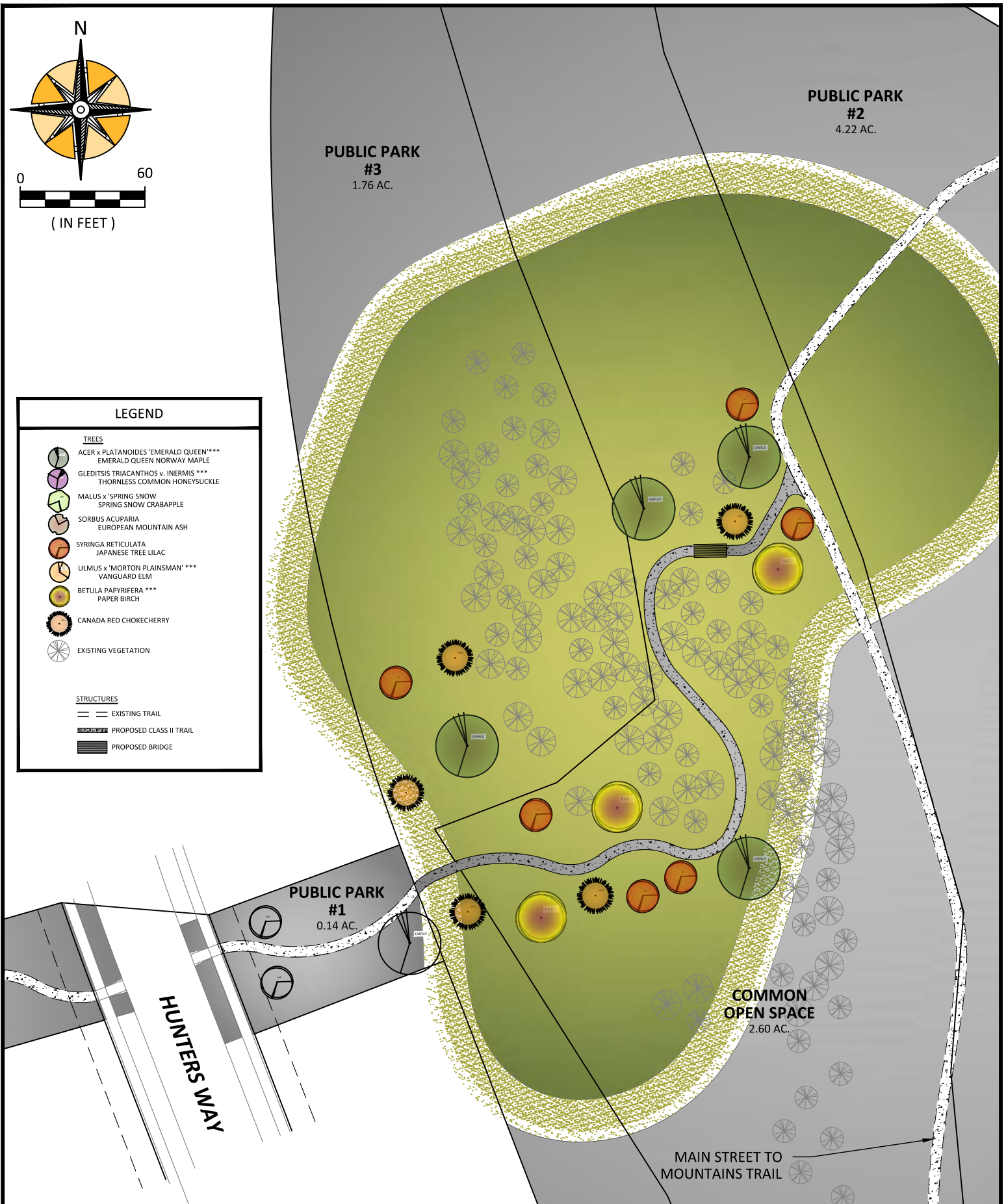
LEGEND

TREES

-  ACER x PLATANOIDES 'EMERALD QUEEN'***
-  EMERALD QUEEN NORWAY MAPLE
-  GLEDITSIS TRIACANTHOS v. INERMIS ***
-  THORNLESS COMMON HONEYSUCKLE
-  MALUS x 'SPRING SNOW
-  SPRING SNOW CRABAPPLE
-  SORBUS ACUPARIA
-  EUROPEAN MOUNTAIN ASH
-  SYRINGA RETICULATA
-  JAPANESE TREE LILAC
-  ULMUS x 'MORTON PLAINSMAN' ***
-  VANGUARD ELM
-  BETULA PAPIRIFERA ***
-  PAPER BIRCH
-  CANADA RED CHOKECHERRY
-  EXISTING VEGETATION

STRUCTURES

-  EXISTING TRAIL
-  PROPOSED CLASS II TRAIL
-  PROPOSED BRIDGE



HAYSTACK
DEVELOPMENT

104 E. MAIN ST. SUITE 206 | BOZEMAN, MT 59771 | 406.570.3830

DRAWN BY: JCH
CHK'D BY: TWM
APPR. BY: TWM
DATE: 12/2017

464

WEST WINDS SW SUBDIVISION
BOZEMAN MONTANA

PARK PLAN

PROJECT NO.
102.09

FIGURE NUMBER

2