Nibley City
Planning Commission Meeting
Thursday, June 27, 2024
Nibley City Hall
455 W. 3200 S.
Nibley, UT

6:30 p.m. Call to Order and Roll Call
Approval of Agenda
Approval of Minutes

In accordance with Utah Code Annotated 52-4-207 and Nibley City Resolution 12-04, this meeting may be conducted electronically. The anchor location for the meeting will be Nibley City Hall, 455 West 3200 South, Nibley, Utah. The public may participate in the meeting either in person or electronically via the meeting link provided at www.nibleycity.com .

1. **Discussion and Consideration**: Site Plan Review for Stokes Nature Center- Nibley Outdoor Classroom & Nature Park, located at 99 W 2600 S
2. **Discussion and Consideration**: Recommendation for Nibley City Parks, Recreation and Open Space Master Plan
3. **Workshop:** Parking Requirements
4. Staff Report and Action Items

Planning Commission agenda items may be tabled or continued if 1) Additional information is needed in order to take action on the item, OR 2) The Planning Commission feels there are unresolved issues that may need further attention before the Commission is ready to make a motion. ***No agenda item will begin after 10:00 p.m. without a unanimous vote of the Commission****. The Commission may carry over agenda items, scheduled late in the evening and not heard, to the next regularly scheduled meeting.*

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, REASONABLE ACCOMMODATIONS FOR INDIVIDUALS WITH DISABILITIES WILL BE PROVIDED UPON REQUEST. FOR ASSISTANCE, PLEASE CALL 752-0431 A MINIMUM OF 24 HOURS BEFORE THE MEETING.

Nibley City Planning Commission Agenda Item Report

June 27, 2024

Agenda Item #1: Stokes Nature Center Site Plan Review

Description

Discussion and Consideration: Site Plan Review for Stokes Nature Center- Nibley Outdoor Classroom & Nature Park, located at 99 W 2600 S

Department

City Planning

Action Type

Administrative

Recommendation

Approval of Site Plan for Stokes Nature Center- Nibley Outdoor Classroom & Nature Park, located at 99 W 2600 S, adopting the recommended findings and conditions below.

Reviewed By

City Planner, City Engineer, Public Works

Background

Chris Sands, authorized representative of Stokes Nature Center, has submitted a site plan review application for Stokes Nature Center- Nibley Outdoor Classroom & Nature Park, located at 99 W 2600 S. The proposed project will develop the 9.77 acre site to be used as an outdoor classroom

for up to eight (8) pre-school students at one time, with one class in the morning and one in the afternoon. The site will also be used for a field trip destination for elementary school students of 20-30 children approximately 1-2 times/month. Frequent events may occur in a pavilion and amphitheater on the site. On Fridays, Saturdays and Sundays, the property would be open during the hours of 10 am – 4 pm for the general public to visit the site as a nature park. The applicant has provided a more detailed description of the intended use in a letter that is included in the meeting packet.

The property is zoned Park/School (P/S). The proposed uses of 'School,' 'Private Park' and 'Daycare/Preschool, Commercial' are permitted uses within the P/S zone. The site will include development of two yurts, a restroom and pavilion, an amphitheater, 3 play areas, a fishing pond, trails and boardwalks to access various areas and a 30-stall parking lot and drop-off zone. Total square footage of all buildings on the site is 2,295 sq. ft.

NCC 19.14.050(A)(1)(c) provides the following guidance regarding the review of proposed site plans as part of the required process for the review of commercial, institutional and industrial development:

Site Plan Review: For all commercial, institutional and industrial development, including new buildings, expansion of or addition to existing buildings, or change in the type of use of existing buildings, developer is required to receive approval from the following bodies, as set forth:

1) *For development, redevelopment, or additions to buildings which are below 500 sq ft, the City Planner shall be the site plan approval authority.*
2) *For development, redevelopment, or additions to buildings which are greater than 500 sq ft and less than 10,000 sq ft, the Planning Commission shall be the site plan approval authority.*
3) *For development, redevelopment, or additions to buildings which are greater than 10,000 sq ft, the City Council shall be the site plan approval authority. Such site plans shall only be presented to the City Council after a recommendation of the Planning Commission.*

Due to the square footage of the proposed buildings, the Planning Commission is the approval authority for this application.

NCC 19.14.050(A)(2) provides the following specifications for the application:

Site Plan Specifications: The site plan shall be prepared, submitted and reviewed in accordance with the Nibley City Code and Standards, as applicable, including Design Standards for Commercial and Institutional Development.

a. *At the time of site plan application, developer shall be required to submit the following plans, drawn to a scale not to exceed one inch equals three hundred feet (1" = 300'):*
    1) *Overall site plan, including location of buildings, open space, parking, landscaping and pedestrian and traffic circulation, all existing residences, buildings, existing streets and proposed streets within three hundred feet (300') of the site in all directions.*

    a) *Architectural renderings and elevations, demonstrating building materials and colors.*
    b) *General drainage and utility layout with topography, showing all topographic features.*
2) *As part of the site plan application, or subdivision plat application if a plat is required, the developer shall be required to submit construction drawings that are compliant with the Nibley City Design Standards and Specifications.*
3) *As part of the site plan application, or subdivision plat application if a plat is required, the developer shall describe the source, layout, and availability of utilities and utility connections. In particular, the developer shall describe the anticipated water requirements of the proposed development and the developer's plan for supplying water to the site.*
4) *As part of the site plan application, or subdivision plat application if a plat is required, the developer shall describe the road, sidewalk, stormwater, and other public improvements to be provided by the developer in accordance with NCC 21.12.*

The applicant has provided these materials and detail for review.

Staff held a pre-application conference with the applicant prior to this application, at which time initial feedback was provided. At that time, it was determined that a concept presentation was not required due to the limited square footage of the buildings on site, in accordance with NCC 19.14.050(A)(1)(b)

Development Description

Uses Classification: 'School,' 'Private Park' and 'Daycare/Preschool, Commercial'
Total square footage: 2,295 sq. ft.
Access: drop-off driveway and parking lot

Space Requirements

NCC 19.22.010 provides minimum setbacks and height requirements by zone. However, there are no specific requirements enumerated for the Park/School Zone.

Parking Requirements

NCC 19.24.160(B) provides that 'Churches, theaters, meeting rooms, places of public assembly' provide 1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement. The applicant has indicated 80 seats in the amphitheater, 28 seats in the pavilion and 10 seats in the yurt/pre-school for a total of 118 seats, which requires 24 stalls. The applicant proposes 30 stalls, which exceeds this requirement.

The applicant has indicated that there will be times, during special events, that parking capacity may be exceeded. They have indicated that the LDS Church near the site has agreed to allow for

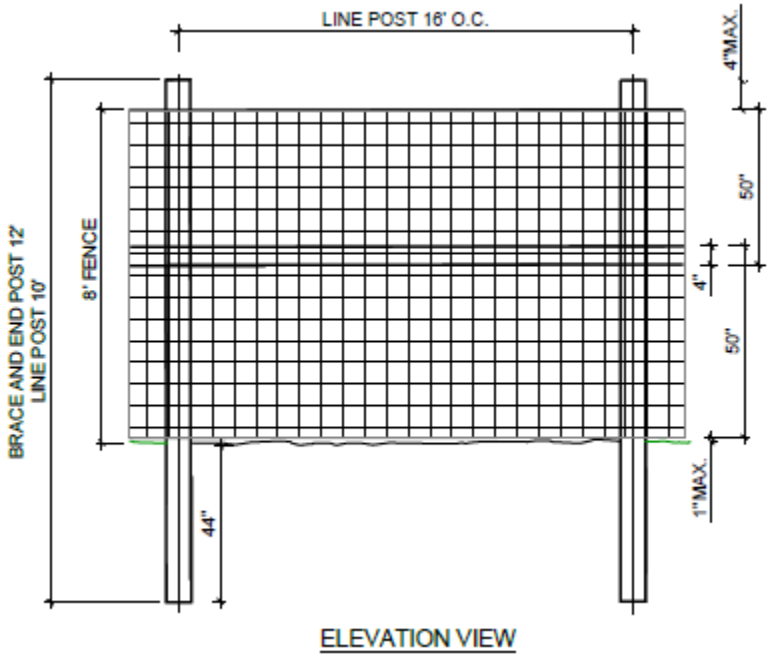
overflow parking. During Special Events that exceed 100 people, a Special Event Permit will be required in accordance with NCC 7.12.

Landscaping Requirements

NCC 19.24.170 includes landscaping requirements. There are no specific site landscaping requirements provided for developments within the Park/School zone, although standards for landscaping in public street rights of way of NCC 19.24.170(B) and street tree requirements of 21.12.170 apply. The applicant has proposed street trees to be placed every 30’ along the property line, which exceeds the requirement of plantings every 50’. Although there are no specific requirements for onsite landscaping, the applicant is providing extensive landscaping on 293 native trees, 157 shrubs, native grasses and wetland sod for on the property.

Fencing

The applicant is proposing to build an 8’ tall wood post and wire mesh fence. During the initial review, Staff made the comment that the fence height did not meet NCC 19.24.090(B)(1) which restricts fences to 4’ within front yard areas. However, front yard areas are defined by the minimum setback for the zone in which they are located. As noted above, there is no setback requirement for developments within a Park/School zone. Therefore this restriction does not apply. Instead, the standard for back and side yards of no taller than 8’ for a transparent fence applies. The proposed fence does not exceed this height restriction.



Transportation, Access and Trails

The applicant is proposing to dedicate the required right-of-way for 2600 S and provide a 10’ wide trail. To comply with the Transportation Master Plan, the applicant will be required to

stripe a bike lane, as well. Cache County is planning to complete the remaining striping along 2600 S as part of the Cache Bikeway project. The applicant is proposing one driveway which will accommodate vehicular and pedestrian access to the site. The City Engineer has determined that due to the limited anticipated traffic demand at the site, a Traffic Impact Study is not warranted.

The adopted Trails Master Plan includes 10' wide major trails through the site. The applicant has expressed that due to the conservation easement restrictions on the property, which is held by Utah Department of Wildlife Resources (UDWR), public trails are not allowed on the property. The applicant would like to petition the City to consider a development agreement that would except them from this requirement, due to this restriction.



Utilities

The applicant has provided designs for utilities, including streets, water, sewer, stormwater fire suppression and street lights. The City Engineer has reviewed these designs for conformance to Nibley City Engineering Design Standards. In addition, the Fire Marshall has reviewed the plans for conformance to the fire code. In particular, the following items need additional attention:

- A thicker pavement section is required for the public roadway.
- Water meter barrel needs to be shown on plans in appropriate location
- Stormwater calculations need to be provided.
- Additional private sewer line clean-outs are needed.

While there are some additional comments to address, Staff is comfortable recommending approval at this time, conditional upon addressing such comments.

Water Dedication

NCC 19.24.220(E) provides that water rights or shares must be provided with new development at a rate of 1 share of water stock per acre to be developed. In addition, developers are required in all zones, to provide Nibley City with water shares or rights sufficient to serve the culinary needs of the development in accordance with Utah R201-510. The applicant has proposed to retain existing shares to use for irrigation purposes across the site. Similar to the trail exception noted above, this would require an exception within a development agreement. Staff recommends that, at a minimum, the applicant be required to provide water shares or rights sufficient to service to projected indoor culinary use.

Recommended Conditions

1. The applicant will be required to resolve all plan review comments of City Staff.
2. The applicant must complete and record a Post Construction Stormwater Agreement
3. A Development Agreement must be reviewed by Planning Commission and approved by City Council which provides an exception to Nibley City Code requirements for the provision of public trails and dedication of water rights or shares to support projected outdoor water use.

Recommended Findings

1. The proposed uses are permitted uses in the approved Park/School zone
2. The application complies with space requirements of NCC 19.22.010.
3. The application complies with parking requirements of NCC 19.24.160.
4. There is insufficient detail in the concept plan to determine compliance with landscaping requirements of NCC 19.24.170 and NCC 21.12.170.
5. Proposed fencing complies with NCC 19.24.090.
6. Further modifications are needed to comply with Nibley City Engineering Design Standards for the provision of public utilities.
7. The Nibley City Trails Master Plan indicates public trails across the site. The applicant does not propose the construction of such trails. The absence of such trails requires approval of a development agreement, excepting the applicant from requirements of NCC 21.12.060(F).
8. NCC 19.24.220 requires dedication of water rights or shares for both projected indoor and outdoor culinary water use. The applicant proposes to retain water shares to be used for outdoor use. Approval of a development agreement is required, excepting the applicant of the requirement for water rights or shares sufficient to support outdoor use.

Agenda Item #2: Parks, Recreation and Open Space Master Plan

Description

Discussion and Consideration: Recommendation for Nibley City Parks, Recreation and Open Space Master Plan

Department

City Planning

Action Type

Legislative

Recommendation

Recommend approval of Nibley City Parks, Recreation and Open Space Master Plan

Reviewed By

City Planner, City Manager, Parks Supervisor, Recreation Director, Parks, Recreation and Open Space Master Plan Steering Committee, Parks & Recreation Committee

Background

In May 2023, Nibley City contracted with MGB&A to develop an update to the City's Parks, Recreation and Open Space Master Plan. The currently adopted plan was completed in 2016. The Trails portion of the Plan is currently being updated as part of the Active Transportation Plan. City Staff, a project steering committee and the Parks and Recreation Committee has guided the process of the Plan's development. Extensive public engagement, national best practices applied to local needs, and detailed analysis of existing needs informed the plan's development.

The Plan includes the following elements:

- A statement of a Vision and Goals
- Existing Conditions Analysis
- Summary of Public Engagement Findings
- A Maintenance Strategy and Facilities Management Plan
- A Plan for Recreation Programs
- A presentation of 2 considered scenarios and a preferred scenario for park development.
- Four conceptual designs to develop new parks or improve existing parks
- An Open Space Strategy
- A Funding Analysis and Strategy
- An Action Plan to guide the City's implementation of the Plan

The Plan is intended to provide a guide post for developing and maintaining Nibley City Parks with supportive Recreational programming that supports the community. The Plan will provide guidance for future opportunities to develop parks in conjunction with future development to serve the growing community. However, the Plan emphasizes maintaining our existing park resources as a primary focus, while understanding ongoing maintenance costs of additional developed park spaces. In addition, opportunities for new parks that are outside of the scope of the Plan should be evaluated in conjunction with those recommended within the Plan. The Preferred Master Plan Scenario emphasizes concentrating active recreational opportunities, which supports the findings that the public expressed.

Concept Plans in four park areas are provided as guidance for the development of such spaces. Several new amenities in these park spaces are designed to fill existing and projected gaps in recreational offerings. Additional field space for organized sports, sports courts, an indoor recreation center, a splash pad, dog park, skate park, a community pond, archery range, an expanded amphitheater and additional play areas are some of the recommended amenities.

The Open Space Strategic Plan provides an analysis of open spaces that should be pursued for preservation. In general, areas near existing development, adjacent to existing open spaces, but spaced apart for new open space areas, and sensitive land areas are prioritized. Use of Subdivision incentives, transfer of development rights (TDR) and land acquisition are recommended for open space preservation.

In order to realize the improvements recommended in the plan, additional funding will need to be pursued beyond the City's existing and projecting funding streams. These may include additional grants, tax increases, user fees, and regional partnerships.

The Action Plan provides specific strategies to help realize the Plan's vision, while continuing to evaluate, adjust and improve the plan in the future.

Agenda Item #3: Parking Requirements

Description

Workshop: Parking Requirements

Department

City Planning

Action Type

No Action

Recommendation

Discuss potential modifications to City Code

Reviewed By

City Planner

Background

NCC 19.24.160 provides Parking Requirements, including standards for the minimum number of parking stalls, dependent upon use. These minimum requirements are applied anytime a building is erected, altered, or converted to another use. The adopted minimum parking requirements are based upon square footage, number of dwelling units, number of beds, seats, or employees depending upon use. Additional parking standards for residential dwelling units within R-PUD overlay zones are provided in NCC 19.28. Additional parking standards for residential dwelling units within R-M zones are provided in NCC 19.20.040.

It has been discussed that the current standards may be overly restrictive, which may require more parking than is necessary. This may impact the affordability, feasibility and design of various developments. Parking provisions also have a profound impact on walkability, with excessive parking discouraging travel that is not in an automobile. The existing standards, generally, have not been updated in several years and there is no record as to what they are based upon. Staff has started researching potential methods for updating the existing standards, including reviewing nearby peer cities' parking requirements and referencing the Institute of Traffic Engineers (ITE) Parking Generation Manual. Based upon a discussion with Planning Commission, it is necessary to consider the following changes to the Parking Requirements:

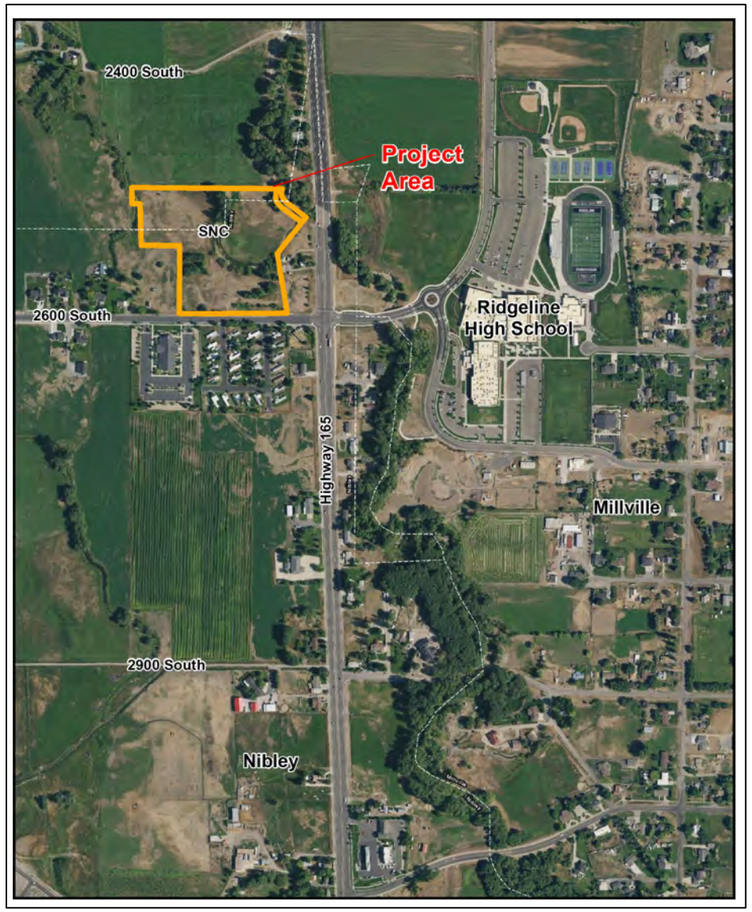
1. Update existing minimum parking requirements based upon the most current, best data available.
2. Allow for an alternative provision of parking, based upon a credible parking study.
3. Only require the provision of parking with new construction, removing the requirement for meeting the minimum requirements with a change of use.

Staff has compiled two sets of data that are provided in two separate spreadsheets in the meeting packet. One includes a comparison of Nibley City's Ordinance to a number of other cities in Utah. In general, there is a lot of variation when comparing our existing ordinance to other cities. In general, there is no clear standard for establishing parking standards, although there are some points of comparable standards.

Another spreadsheet compares our existing standards to data outputs of the ITE Parking Generation Manual. Based upon these outputs, Staff provides a draft updated chart for minimum parking.

Stokes Nature Center
Nibley Nature Park
Landscape Site Plan

Nibley, Utah



PROJECT AREA MAP
N.T.S.

All improvements not specifically covered herein by the contract documents (standards and specifications) must meet or exceed the current "AWPA Standards For Public Works Construction". Where improvements are not covered by the contract documents, Nibley City will be the sole judge in establishing appropriate standards.

Note: Plans are intended to be printed in color.

SHEET INDEX

SHEET IDENTIFIER	SHEET TITLE
G-001	COVER SHEET
G-002	GENERAL NOTES
LS-000	EXISTING CONDITIONS & DEMO PLAN
LS-100	OVERALL SITE PLAN / SHEET INDEX
LS-101-104	LANDSCAPE SITE PLAN
LI-101-104	LANDSCAPE IRRIGATION PLAN
LP-101-104	LANDSCAPE PLANTING PLAN
LS-401 - 402	LANDSCAPE PLAN AND SECTIONS
DT-501-520	LANDSCAPE DETAILS
GN-01	GENERAL NOTES AND SPECIFICATIONS (CIVIL)
C-1	GENERAL UTILITY PLAN (CIVIL)
D-1	GENERAL DETAILS (CIVIL)
S 000 - 003	STRUCTURAL NOTES FOR YURT FOUNDATION
S 100	YURT FOUNDATION PLAN
E 001	ABBREVIATIONS G.P. N. LEGEND
E 002	GENERAL PROJECT NOTES
E 003	ELECTRICAL SPECIFICATIONS
E 004	ELECTRICAL LEGEND
ES 101	ELECTRICAL SITE PLAN LIGHTING
ES 102	ELECTRICAL SITE PLAN POWER
ES 103	PHOTOMETRIC SITE PLAN
ES 104	PHOTOMETRIC DETAILS
ES 400	30' YURT ELECTRICAL PLAN
ES 401	33' YURT ELECTRICAL PLAN
ES 402	RESTROOM & PAVILION ELECTRICAL
ES 403	GATE HOUSE ELECTRICAL
E 501 - 502	LIGHTING DETAILS
E 503 - 504	ELECTRICAL DETAILS
E 601	ELECTRICAL ONE-LINE DIAGRAM
E 602	FIXTURE SCHEDULE
E 603	LIGHTING SCHEDULE
E 604 - 607	ELECTRICAL SCHEDULES

LANDSCAPE ARCHITECT:

BIO-WEST

1063 WEST 1400 NORTH, LOGAN, UT 84321
PH: 435.752.4202

SENIOR LANDSCAPE ARCHITECT: CHRIS SANDS

LANDSCAPE ARCHITECT: SANDY DAVENPORT

LANDSCAPE ARCHITECT LICENSE No. 6677105 SANDRA DAVENPORT 6/17/2024 ELECTRONIC SEAL STATE OF UTAH

CIVIL ENGINEER:

FORSGREN Associates Inc.
95 WEST 100 SOUTH, STE. 115, LOGAN, UT 84321
PH: 435.227.0333 FAX: 435.227.0334

PROJECT MANAGER: KYLE DANA, P.E.

ELECTRICAL ENGINEER:

Sine Source Engineering
95 West Golf Course Road
Suite 102
Logan, Ut 84321
office: (435) 787-1445
fax: 1-877-207-3199
www.sinesource.net

PROJECT MANAGER: SHANE SWENSON

EDA AWARD NUMBER: 05-79-06146

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
COVER SHEET

SHEET IDENTIFIER:
G 001

BINDING ORDER

GENERAL INFORMATION NOTES

Project Limits
All construction activity shall be confined to the project limit of disturbance including any staging/stockpile areas. Do not disturb, excavate or work beyond project limits of disturbance without written permission from the Owners Representative.

Project Specifications
APWA 2017 Standard Specifications and Drawings are the established standard for this work. Contractor is required to procure a copy of APWA 2017 Standard Specifications and Drawings for use in the project. Available at Utah LTAP Center, Utah State University, phone 435-797-2931.

Site Mapping
Basis of bearing is Utah State Plane; NAD83 datum, North Zone, US Foot. The base survey was provided by Foresight Surveying, Inc., Phone (435) 753-1910. Verification of survey mapping is the responsibility of the Contractor.

Survey Staking
Survey staking is the responsibility of the Contractor. The Contractor may obtain CAD files from the Preparer for staking and layout purposes. The Contractor is responsible to set the baseline survey control grade and confirm it with the Owner's Representative.

Permits
The Contractor shall comply with all construction related requirements in each permit issued for the project.

Utilities
Utility locations have not been surveyed. It is the responsibility of the Contractor to perform all utility locations at least 48 hours prior to excavation, call 1(800) 662-4111. It is the responsibility of the Contractor to protect all existing sewer, water, gas and electric utilities encountered in the work. Any relocation or improvements of utilities shall be accurately noted on as-built drawings and issued to the Owners Representative at the completion of the project.

Temporary Construction Facilities
All temporary utilities and facilities will be the responsibility of the Contractor. A construction trailer is not required. Potable water is not available on site and shall be provided by the Contractor. A chemical toilet of suitable type shall be provided and maintained by the Contractor at all times. The Contractor is responsible for job site conditions and the safety for human life during the course of construction. This requirement shall apply continuously during the period of construction and is not limited to normal working hours.

Construction Spoils and Waste Handling
Items encountered below grade and not shown on the drawings shall be brought to the attention of the Owners Representative. All construction spoils and waste are the responsibility of the Contractor and shall be disposed of at an approved landfill facility.

Clearing and Grubbing
Existing on-site materials shall be carefully removed and stored for re-use, or disposed of at an approved landfill facility. All existing vegetation not in designated excavation areas and not designated for removal is to be protected in place. Completely remove stumps, roots, shrubs, weeds, and other debris protruding from the ground in areas to be excavated. Vegetation damaged outside of the limits of disturbance will be replaced by the Contractor at their own expense.

Demolition
Locate and verify all utility line locations prior to demolition and report any conflicts to the Owners Representative.

Construction sites must be in compliance with the Utah Pollution Discharge Elimination System (UPDES) Storm Water General Permit for Construction Activities (UTR300000). A copy of the permit's Storm Water Pollution Prevention Plan must be submitted to the local storm water jurisdiction for review and approval. Additional water quality and erosion control measures may be required.

Site Earthwork and Grading
The Contractor is responsible for all site earthwork and grading activities to meet designs identified in plans and details, which are intended to show final result of design. Modifications may be required to suit job site conditions encountered during construction and shall be included in as-built drawings provided to the Owners Representative at completion of the project.

Backfill and embankment material shall be composed of suitable excavated and/or imported soils.

Existing topsoil shall be excavated and salvaged by Contractor for use in landscaping and grading activities. Contractor furnished topsoils used in landscaping shall have acidity range (pH) from 5.0 to 8.2 and a minimum organic content of greater than 1%. Provide suitable soil test analysis and source information of Contractor furnished topsoil to Owner 's Representative for approval prior to importing.

Topsoil shall be placed at 80% to 90% maximum dry density and subsoil at 85% minimum compaction as determined by the Standard Proctor Method (ASTM D0698-66T or AASHTO T99). All existing topsoils shall be salvaged and utilized for revegetation activities to the extent possible.

Site Construction Notes
All tree removal activities and site disturbance activities scheduled between April 1 and August 30 shall occur only after a Nesting Bird Survey has been conducted within the construction site footprint and all protocols and protective measures are followed.

All planting and seeding activities shall occur during the designated seeding and planting window from September 15 to December 1, unless in areas with irrigation or as otherwise authorized by the Owners Representative.

Where ground conditions are damp and equipment traffic would result in excessive ground compaction and rutting, use construction mats to access active work areas.

Use a water truck or other suitable watering device as needed to control dust.

Inspect paved roads adjacent to the project site regularly for mud tracking; sweep roadways as needed and ensure roads are left clean at the end of each shift.

The Contractor shall keep job site area clean, hazard free and dispose of all debris, rubbish and construction waste, and remove all abandoned materials from the site. All disturbed staging and access areas are to be restored to pre-construction condition. The Contractor is responsible to clean up and reclaim (regrade, seed and mulch) construction areas at the completion of the project.

All work shall conform to and be in accordance with the latest edition of Nibley City standard specifications and drawings, and the latest Utah edition of APWA Standards and Specifications at the time work is performed.

Temporary Environmental/Safety Fence
Install fencing to demarcate active work areas as appropriate based on construction phasing. Post signs or install barriers as required for public safety, Including material staging areas.The Contractor is responsible to keep access to Public and Private Property open at all times during construction. The Contractor is responsible to keep access to, and use of, adjacent private property open at all times during construction.

Storm Water Pollution Prevention Plan Notes
No earth shall be disturbed until erosion control measures are in place. Erosion control measures will be maintained and remain in place until re-vegetation success measures as identified by the Owner's Representative have been achieved.

Monitor, inspect, and maintain all erosion control measures as needed to prevent erosion and sediment discharge from the site. Adjust locations of measures and install additional measures as construction phasing requires. Disturbed areas where construction activity has ceased will be stabilized in accordance with State UPDES requirements. Submittal of NOI and acquisition of UPDES Storm Water General Permit for Construction Activities (UTR300000) is the responsibility of the Contractor.

The Contractor is responsible for implementing and utilizing Best Management Practices (BMPs) to prevent storm water runoff and water pollution during construction activities. The Contractor is responsible for supplying equipment and plans that provide both dust and fire control during project construction. Use caution when working in and around wet areas. If potential hazardous materials are encountered, contact the Owners Representative immediately.

ABBREVIATIONS

APPROX	APPROXIMATE
AVG	AVERAGE
BC	BOTTOM OF CURB
BM	BENCHMARK
BW	BOTTOM OF WALL
CAL	CALIPER
CL	CENTERLINE
CY	CUBIC YARD
DIA	DIAMETER
EG	EXISTING GRADE
EL	ELEVATION
EXIST	EXISTING
FG	FINISH GRADE
FL	FLOW LINE
GB	GRADE BREAK
HORIZ	HORIZONTAL
HP	HIGH POINT
IN	INCHES
LF	LINEAR FEET
LP	LOW POINT
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
REQ'D	REQUIRED
ROW	RIGHT OF WAY
SF	SQUARE FOOT
SHT	SHEET
STA	STATION
TBC	TOP BACK OF CURB
TOC	TOP OF CONCRETE
TW	TOP OF WALL
TYP	TYPICAL
VERT	VERTICAL

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

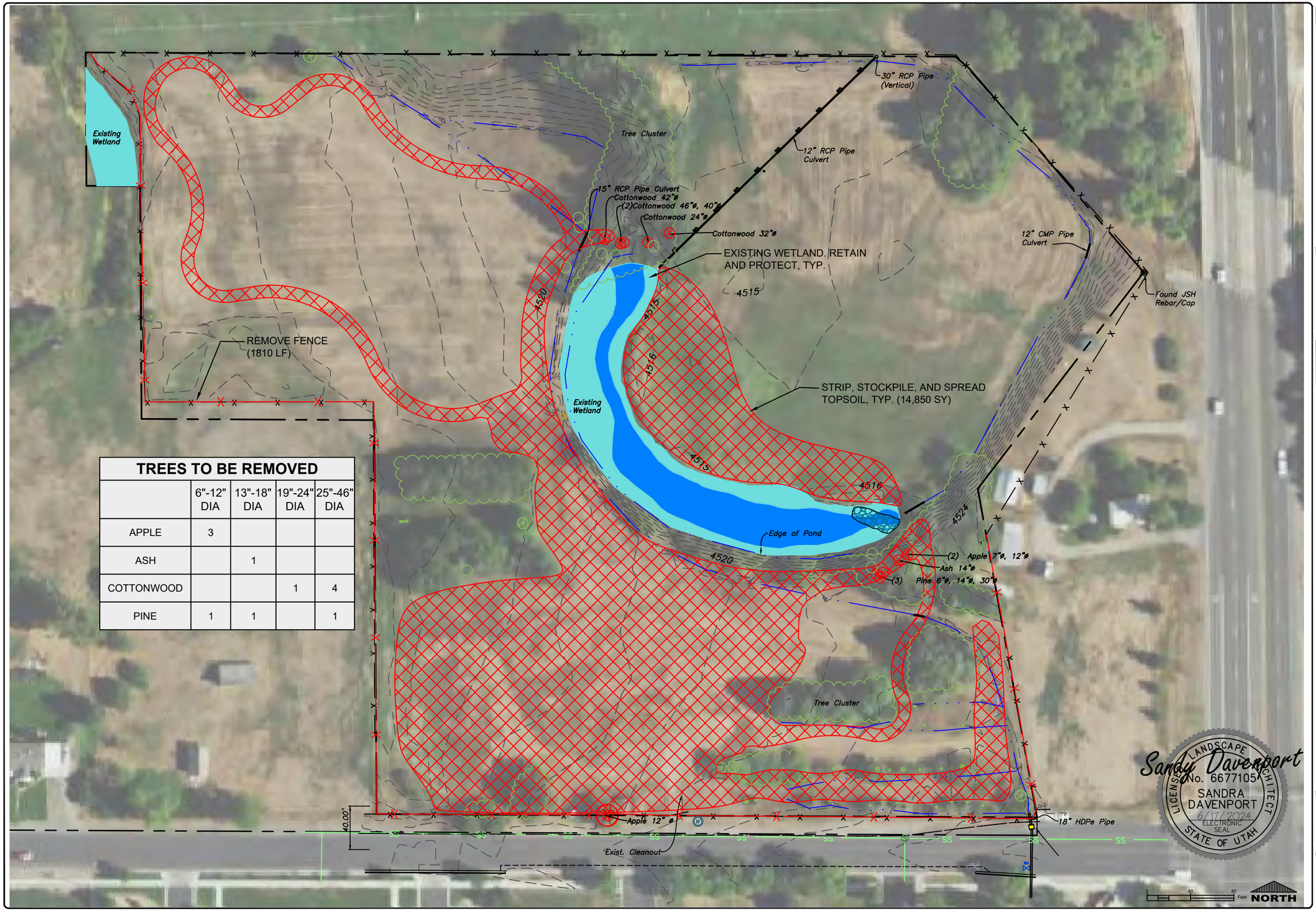
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
GENERAL NOTES

SHEET IDENTIFIER:
G-002

BINDING ORDER



TREES TO BE REMOVED

	6"-12" DIA	13"-18" DIA	19"-24" DIA	25"-46" DIA
APPLE	3			
ASH		1		
COTTONWOOD			1	4
PINE	1	1		1

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
EXISTING CONDITIONS & DEMO PLAN

SHEET IDENTIFIER:
LS 000

BINDING ORDER

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH
Sandy Davenport

SHEET 3

SHEET 4

SHEET 1

SHEET 2

4515
4516
4518
4519
4520
4524
4525
Tree Cluster
30" RCP Pipe (Vertical)
12" RCP Pipe Culvert
12" CMP Pipe Culvert
Found JSH Rebar/Cap
MEADOW
6' WIDE TRAIL
WILDLIFE VIEWING TOWER (BY OTHERS)
BOARDWALK ELEVATION 4517 - 4518
EXISTING WETLAND
FISHING POND -9'
30' YURT
WV
SS
FUTURE PLAY AREA 2
Edge of Pond
(4) WILDLIFE VIEWING BLIND (BY OTHERS)
8' WIDE TRAIL
RESTROOM AND PAVILION
FUTURE AMPHITHEATER
ADD ALT. #1 PLAY AREA 1
FUTURE PLAY AREA 3
REVERSE PAN CURB AND GUTTER
BIO-RETENTION
BIKE RACK
PARKING LOT (30 STALLS)
FUTURE ENTRY FEATURE
FUTURE ENTRY STATION
FOOD FOREST AND ORCHARD
40' R.O.W.
18" HDPe Pipe
EDGE OF ROAD
CENTER LINE
40.00'
NEW ASPHALT, CURB & GUTTER, INFILTRATION SWALE, AND 10' CONCRETE SIDEWALK
FLARE DRIVEWAY APPROACH
2600 South
Exist. Cleanout
0 40 80 Feet
NORTH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
OVERALL SITE PLAN

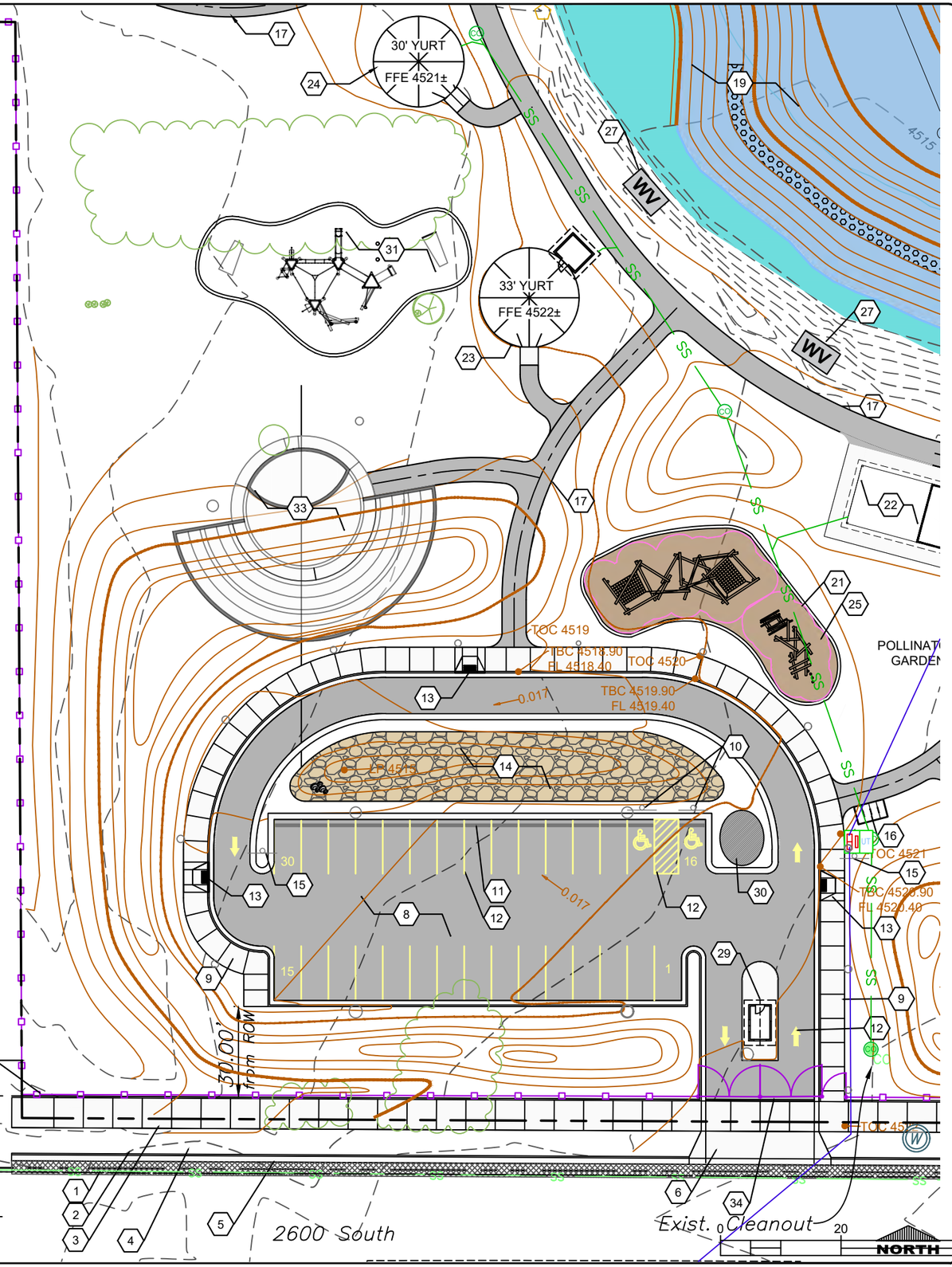
SHEET IDENTIFIER:
LS 100

BINDING ORDER

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH
Sandy Davenport

SITE PLAN SHEET KEY NOTES:

1. WIDEN 2600 SOUTH STREET TO ADD BIKE LANE, CURB AND GUTTER, INFILTRATION SWALE AND 10' WIDE CONCRETE SIDEWALK PER NIBLEY CITY DETAILS . SEE A / DT-501.
2. CURB AND GUTTER TYPE A. SEE A / DT 502
3. CONCRETE SIDEWALK, 10-FT WIDE. SEE B / DT 502.
4. PARK STRIP INFILTRATION SWALE. SEE DETAIL B / DT 504.
5. CURB CUT INLET AT INFILTRATION SWALE. SEE A / DT 504.
6. FLARE DRIVEWAY APPROACH. SEE A / DT 503.
7. WOOD POST AND WIRE MESH FENCE. SEE A / DT 509.
8. PARKING LOT PAVEMENT. SEE A / DT 505.
9. CONCRETE SIDEWALK, 8-FT WIDE. SEE A / DT 505.
10. DISABLED PARKING SIGN. SEE A / DT 506.
11. WHEEL STOP. SEE B / DT 506.
12. PARKING LOT PAVEMENT MARKINGS PER APWA SECTION 32 17 23 AND NIBLEY CITY STANDARDS.
13. MIDBLOCK PEDESTRIAN ACCESS PER APWA STANDARD PLAN NO. 236.1.
14. BIO-RETENTION BASIN. SEE A / DT 507.
15. "ONE-WAY" TRAFFIC SIGNS. SEE A / DT 506.
16. BIKE RACK. SEE B / DT 508.
17. 6-FT TO 8-FT WIDE WALKING PATH. SEE A / DT 508.
18. **ADD ALTERNATE #4:** ELEVATED BOARDWALK TRAIL. SEE A / DT 515.
19. FISHING POND. SEE SHEETS LS 401, 402, DT 511 - DT 514.
20. SOLAR AERATION SYSTEM. SEE A / DT 514.
21. **ADD ALTERNATE #1:** NATURE PLAY AREA CURB AND SURFACE. SEE C / DT 506.
22. PARK RESTROOM BUILDING AND PAVILION. SEE ENGINEER'S PLANS.
23. 33-FT YURT AND RESTROOM. SEE SHEETS S000 - S-100.
24. 30-FT YURT. SEE SHEETS S000 - S-100.
25. **ADD ALTERNATE #1:** NATURE PLAY AREA #1. SEE A / DT 510.
26. **ADD ALTERNATE #2**: IRRIGATION PUMP LOCATION. SEE IRRIGATION PLANS
27. FUTURE WILDLIFE BLIND (BY OTHERS).
28. FUTURE WILDLIFE VIEWING TOWER (BY OTHERS).
29. FUTURE GATE HOUSE (BY OTHERS).
30. FUTURE ICONIC FEATURE (BY OTHERS).
31. FUTURE NATURE PLAY AREA #2 (BY OTHERS)
32. FUTURE NATURE PLAY AREA #3 (BY OTHERS)
33. FUTURE AMPHITHEATER (BY OTHERS)
34. VEHICLE ACCESS AND PEDESTRIAN ACCESS GATES. SEE B / DT 509.



Sandy Davenport
LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

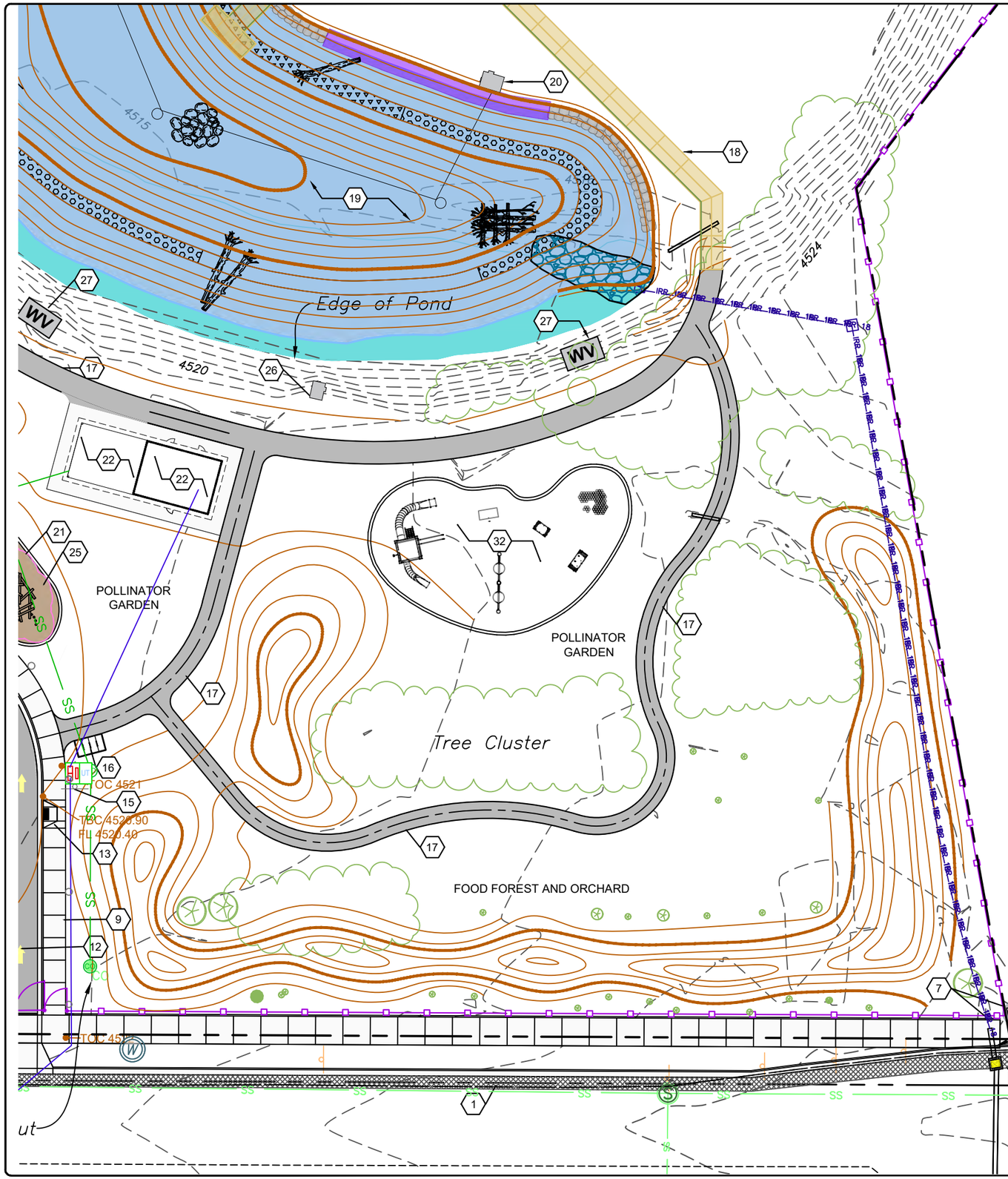
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE PLAN

SHEET IDENTIFIER:
LS 101

BIDDING ORDER


Edge of Pond
Tree Cluster
POLLINATOR GARDEN
POLLINATOR GARDEN
FOOD FOREST AND ORCHARD
4515
4520
4524
WV
WV
SS
SS
SS

EXISTING WETLAND

MEADOW

Tree Cluster

17

18

19

27

WV

30' YURT

EXISTING WETLAND

SITE PLAN SHEET KEY NOTES:

17 6-FT TO 8-FT WIDE WALKING PATH. SEE A / DT 508.

18 **ADD ALTERNATE #4:** ELEVATED BOARDWALK TRAIL. SEE A / DT 515.

19 FISHING POND. SEE SHEETS LS 401, 402, DT 511 - DT 514.

27 FUTURE WILDLIFE BLIND (BY OTHERS).

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/7/2024
ELECTRONIC SEAL
STATE OF UTAH

Sandy Davenport

0 20 40 Feet

NORTH

PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

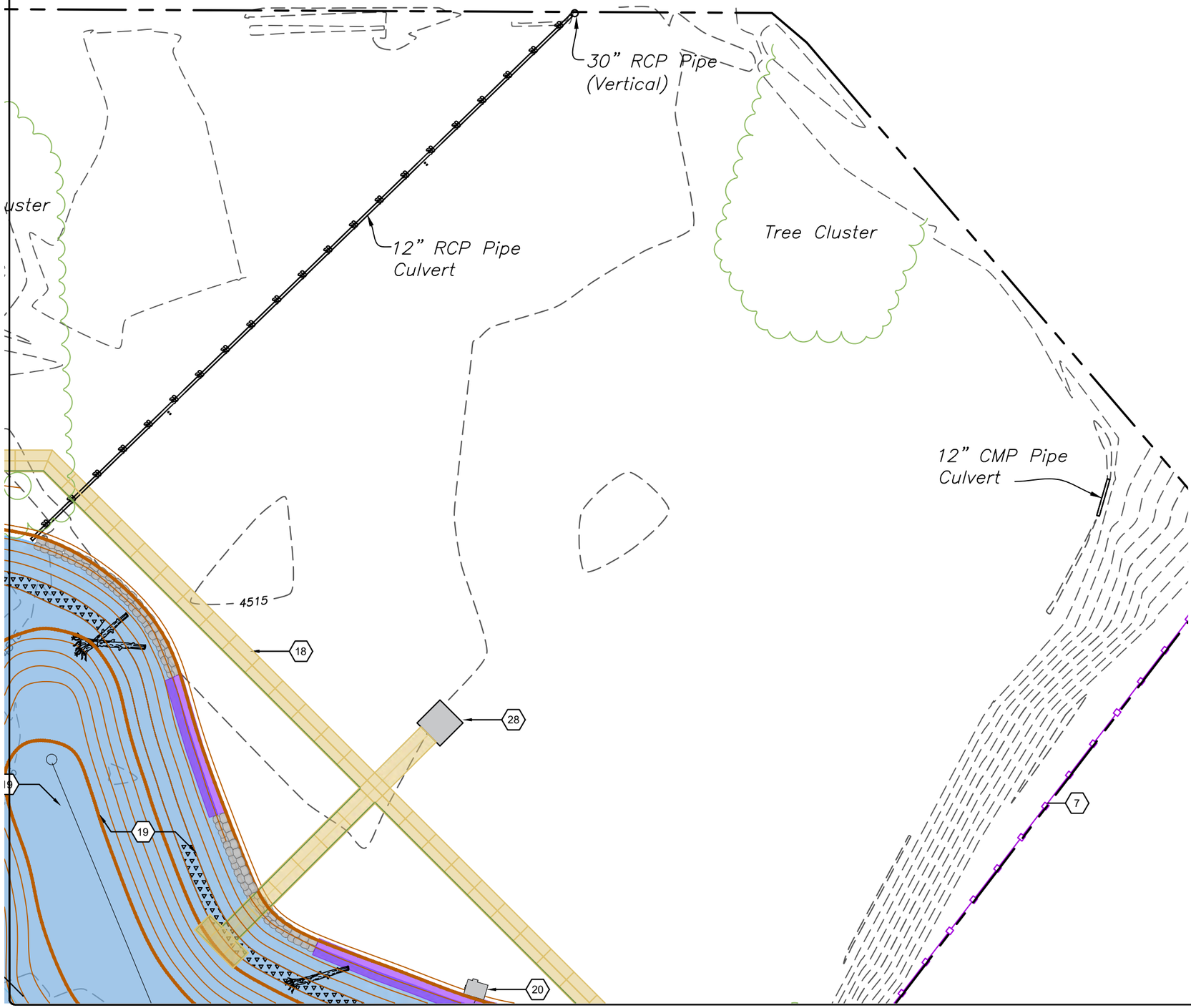
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE PLAN

SHEET IDENTIFIER:
LS 103

BINDING ORDER



SITE PLAN SHEET KEY NOTES:

1. WIDEN 2600 SOUTH STREET TO ADD BIKE LANE, CURB AND GUTTER, INFILTRATION SWALE AND 10' WIDE CONCRETE SIDEWALK PER NIBLEY CITY DETAILS . SEE A / DT-501.
2. CURB AND GUTTER TYPE A. SEE A / DT 502
3. CONCRETE SIDEWALK, 10-FT WIDE. SEE B / DT 502.
4. PARK STRIP INFILTRATION SWALE. SEE DETAIL B / DT 504.
5. CURB CUT INLET AT INFILTRATION SWALE. SEE A / DT 504.
6. FLARE DRIVEWAY APPROACH. SEE A / DT 503.
7. WOOD POST AND WIRE MESH FENCE. SEE A / DT 509.
8. PARKING LOT PAVEMENT. SEE A / DT 505.
9. CONCRETE SIDEWALK, 8-FT WIDE. SEE A / DT 505.
10. DISABLED PARKING SIGN. SEE A / DT 506.
11. WHEEL STOP. SEE B / DT 506.
12. PARKING LOT PAVEMENT MARKINGS PER APWA SECTION 32 17 23 AND NIBLEY CITY STANDARDS.
13. MIDBLOCK PEDESTRIAN ACCESS PER APWA STANDARD PLAN NO. 236.1.
14. BIO-RETENTION BASIN. SEE A / DT 507.
15. "ONE-WAY" TRAFFIC SIGNS. SEE A / DT 506.
16. BIKE RACK. SEE B / DT 508.
17. 6-FT TO 8-FT WIDE WALKING PATH. SEE A / DT 508.
18. **ADD ALTERNATE #4:** ELEVATED BOARDWALK TRAIL. SEE A / DT 515.
19. FISHING POND. SEE SHEETS LS 401, 402, DT 511 - DT 514.
20. SOLAR AERATION SYSTEM. SEE A / DT 514.
21. **ADD ALTERNATE #1:** NATURE PLAY AREA CURB AND SURFACE. SEE C / DT 506.
22. PARK RESTROOM BUILDING AND PAVILION. SEE ENGINEER'S PLANS.
23. 33-FT YURT AND RESTROOM. SEE SHEETS S000 - S-100.
24. 30-FT YURT. SEE SHEETS S000 - S-100.
25. **ADD ALTERNATE #1:** NATURE PLAY AREA #1. SEE A / DT 510.
26. **ADD ALTERNATE #2**: IRRIGATION PUMP LOCATION. SEE IRRIGATION PLANS
27. FUTURE WILDLIFE BLIND (BY OTHERS).
28. FUTURE WILDLIFE VIEWING TOWER (BY OTHERS).
29. FUTURE GATE HOUSE (BY OTHERS).
30. FUTURE ICONIC FEATURE (BY OTHERS).
31. FUTURE NATURE PLAY AREA #2 (BY OTHERS)
32. FUTURE NATURE PLAY AREA #3 (BY OTHERS)
33. FUTURE AMPHITHEATER (BY OTHERS)

34. V

LICENSED LANDSCAPE ARCHITECT
Sandy Davenport
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

0 20 40 Feet

NORTH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE PLAN

SHEET IDENTIFIER:
LS 104

BINDING ORDER

ADD ALTERNATE #2

IRRIGATION MATERIALS SCHEDULE

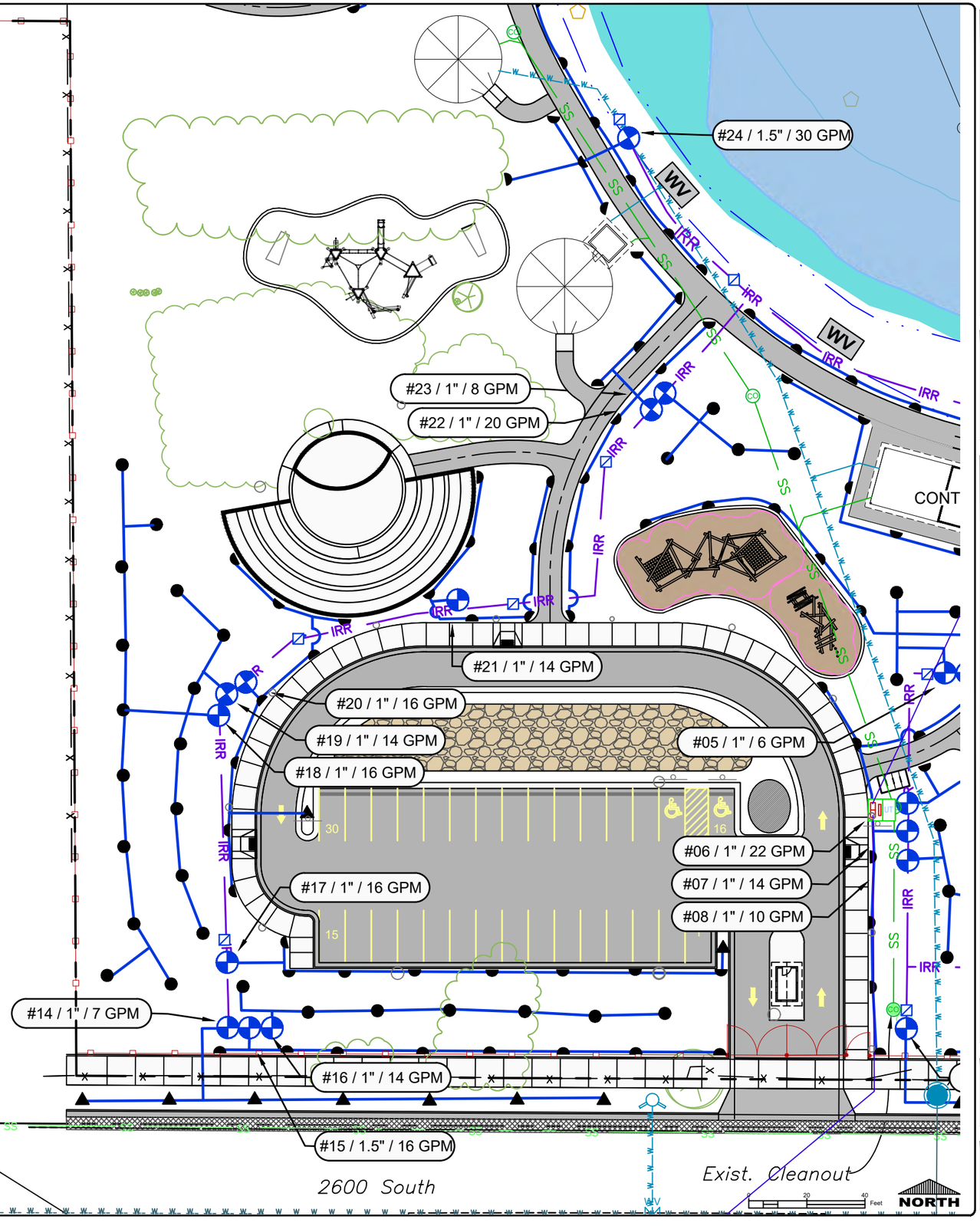
KEY	ITEM	DESCRIPTION
	PUMP STATION	WATERTRONICS WMLS-5000-7A-7.5-240-3-50-60, 7.5 HP, 240V, 60 HZ, DISCHARGE MANIFOLD AND ISOLATION VALVE: 3", 50 GPM @60 PSI,
	ISOLATION VALVE	LEEMCO LMV SERIES, 3". INSIDE A PURPLE CARSON VALVE BOX WITH LOCKING LID.
C	IRRIGATION CONTROLLER	RAINBIRD ESP-LXIVM, 2-WIRE. LOCATE INSIDE RESTROOM EQUIPMENT ROOM.
	QUICK COUPLER	RAIN BIRD 44LRC INSIDE A CARSON 910P VALVE BOX WITH LOCKING LID.
	REMOTE CONTROL VALVE	RAIN BIRD PEB, INSIDE A CARSON 1730P JUMBO VALVE BOX WITH LOCKING LID.
	PRESSURE COMPENSATING ADJUSTABLE FULL-CIRCLE BUBBLER	RAIN BIRD 1401 ON 1804 POP-UP. FULL CIRCLE UMBRELLA PATTERN. (1.0 GPM)
	IMPACT SPRINKLER	RAINBIRD ADJUSTABLE ARC MAXI-PAW 2045A-NP-07LA. (@ 35 PSI: 23' RADIUS: 2.0 GPM)
IRR	MAIN LINE	HDPE PIPE W/ TRACER WIRE. HEAT WELD. SIZE AS NOTED.
	LATERAL LINE	SCH. 40 PVC PIPE. SIZE PER SIZING CHART.
	SLEEVE	SCH. 40 PVC PIPE. 2X SIZE OF PIPE TO BE SLEEVED.
#03 / 1" / 13 GPM		STATION # / VALVE SIZE / GPM

Irrigation Plan Notes

1. This irrigation system is designed for a maximum of 35 gallons per minute at 50 psi minimum out of pump.
2. It is the contractors responsibility to be knowledgeable of all utilities, structures and grade differences on the site and to repair or replace all items damaged by his work at no additional cost to the owner.
4. Do not deliberately install the irrigation system as shown on these plans if there are any obvious obstructions or inconsistencies in the field that might not have been anticipated in the irrigation design. Notify the landscape architect of any such differences.
5. Adjust all sprinkler heads, valves and equipment for optimum coverage, and adjust arc radius and nozzle of each sprinkler to avoid spraying onto walks, streets, building, etc.
6. This irrigation design is diagrammatic. Where valves, piping and etc. are shown outside of planting areas, the intent is for this equipment to be installed within the planting areas. Coordinate irrigation head locations with plant material placement.
7. Install all irrigation equipment not detailed or specified but required for a fully operating system per manufacturers specifications.

LANDSCAPE ARCHITECT LICENSE No. 6677105 SANDRA DAVENPORT 6/17/2024 ELECTRONIC SEAL STATE OF UTAH

Sandy Davenport



PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

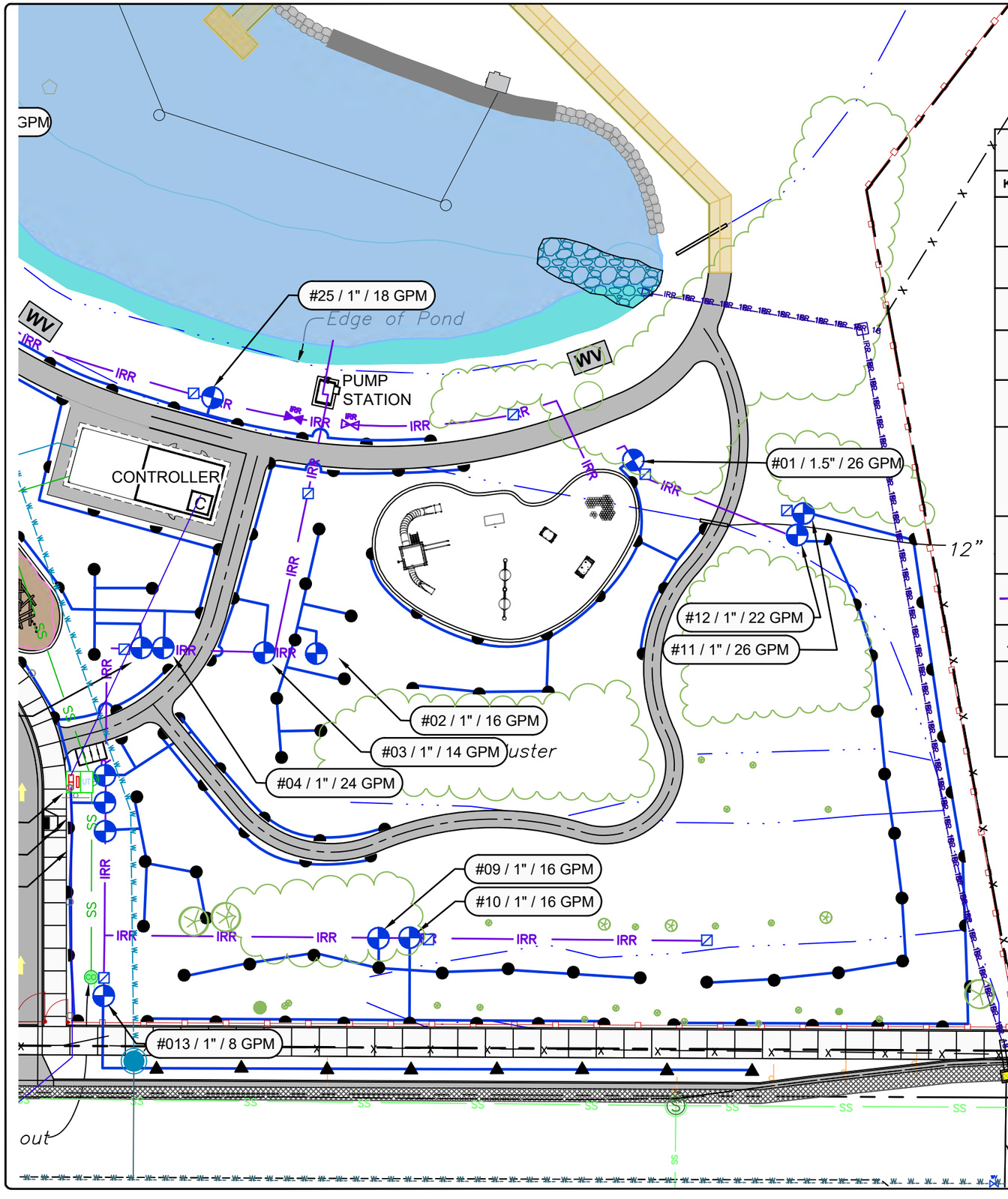
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
IRRIGATION PLAN

SHEET IDENTIFIER:
LI 101

BINDING ORDER



IRRIGATION MATERIALS SCHEDULE

KEY	ITEM	DESCRIPTION
	PUMP STATION	WATERTRONICS WMLS-5000-7A-7.5-240-3-50-60, 7.5 HP, 240V, 60 HZ, DISCHARGE MANIFOLD AND ISOLATION VALVE: 3", 50 GPM @60 PSI,
IRR	ISOLATION VALVE	LEEMCO LMV SERIES, 3". INSIDE A PURPLE CARSON VALVE BOX WITH LOCKING LID.
C	IRRIGATION CONTROLLER	RAINBIRD ESP-LXIVM, 2-WIRE. LOCATE INSIDE RESTROOM EQUIPMENT ROOM.
	QUICK COUPLER	RAIN BIRD 44LRC INSIDE A CARSON 910P VALVE BOX WITH LOCKING LID.
	REMOTE CONTROL VALVE	RAIN BIRD PEB, INSIDE A CARSON 1730P JUMBO VALVE BOX WITH LOCKING LID.
	PRESSURE COMPENSATING ADJUSTABLE FULL-CIRCLE BUBBLER	RAIN BIRD 1401 ON 1804 POP-UP. FULL CIRCLE UMBRELLA PATTERN. (1.0 GPM)
	IMPACT SPRINKLER	RAINBIRD ADJUSTABLE ARC MAXI-PAW 2045A-NP-07LA. (@ 35 PSI: 23' RADIUS: 2.0 GPM)
IRR	MAIN LINE	HDPE PIPE W/ TRACER WIRE. HEAT WELD. SIZE AS NOTED.
	LATERAL LINE	SCH. 40 PVC PIPE. SIZE PER SIZING CHART.
	SLEEVE	SCH. 40 PVC PIPE. 2X SIZE OF PIPE TO BE SLEEVED.
#03 / 1" / 13 GPM		STATION # / VALVE SIZE / GPM

ADD ALTERNATE #2

0 20 40 Feet

NORTH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH
Sandy Davenport

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
IRRIGATION PLAN

SHEET IDENTIFIER:
LI 102

BINDING ORDER

Tree Cluster

15" RCP Pipe Culvert

WV

ADD ALTERNATE #2

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

Sandy Davenport

NORTH

PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
IRRIGATION PLAN

SHEET IDENTIFIER:
LI 103

BINDING ORDER

uster

30" RCP Pipe
(Vertical)

12" RCP Pipe
Culvert

Tree Cluster

12" CMP Pipe
Culvert

Found JSH
Rebar/Cap

NO IRRIGATION THIS SHEET

ADD ALTERNATE #2

0 20 40 Feet

NORTH

PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
IRRIGATION PLAN

SHEET IDENTIFIER:
LI 104

BINDING ORDER

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

Sandy Davenport

PLANT LIST

KEY	BOTANICAL / COMMON NAME / HYDROZONE	QTY.
TREES: 2" CALIPER SIZE		
BO	BETULA OCCIDENTALIS / WATER BIRCH	5
AG	ACER GRANDIDENTATUM / BIGTOOTH MAPLE	12
AC	ACER GLABRUM / ROCKY MOUNTAIN MAPLE	14
CE	CELTIS OCCICENTALIS / COMMON HACKBERRY	15
CO	CERCIS OCCIDENTALIS / WESTERN REDBUD	10
CD	CRATAEGUS DOUGLASII / BLACK HAWTHORN	6
PV	PRUNUS VIRGINIANA / CHOKECHERRY	10
PT	POPULUS TREMULOIDES / QUAKING ASPEN	26
PA	POPULUS ANGUSTIFOLIA / NARROWLEAF COTTONWOOD	27
PP	PINUS PONDEROSA / PONDEROSA PINE	10
JO	JUNIPERUS OSTEOSPERMA / UTAH JUNIPER	22
		TOTAL 157
SHRUBS: 1 GALLON SIZE		
CS	CORNUS SERICEA / RED-OSIER DOGWOOD	43
PF	POTENTILLA FRUTICOSA / CINQUEFOIL	19
SA	SYMPHORICARPOS ALBUS / SNOWBERRY	39
MR	MAHONIA REPENS / CREEPING OREGON GRAPE	67
RT	RHUS TRILOBATA / SKUNKBRUSH	41
RA	RIBES AUREUM / GOLDEN CURRANT	18
AT	ARTEMISIA TRIDENTATA / BIG SAGE BRUSH	33
RW	ROSA WOODSII / WOODS ROSE	33
		TOTAL 293

NATIVE UPLAND SEED MIX

WETLAND SOD: PRE-VEGETATED (NATIVE) COIR EROSION CONTROL MAT. EACH MAT = 3.3 FEET WIDE X 16.4 FEET LONG X 4 INCHES THICK.

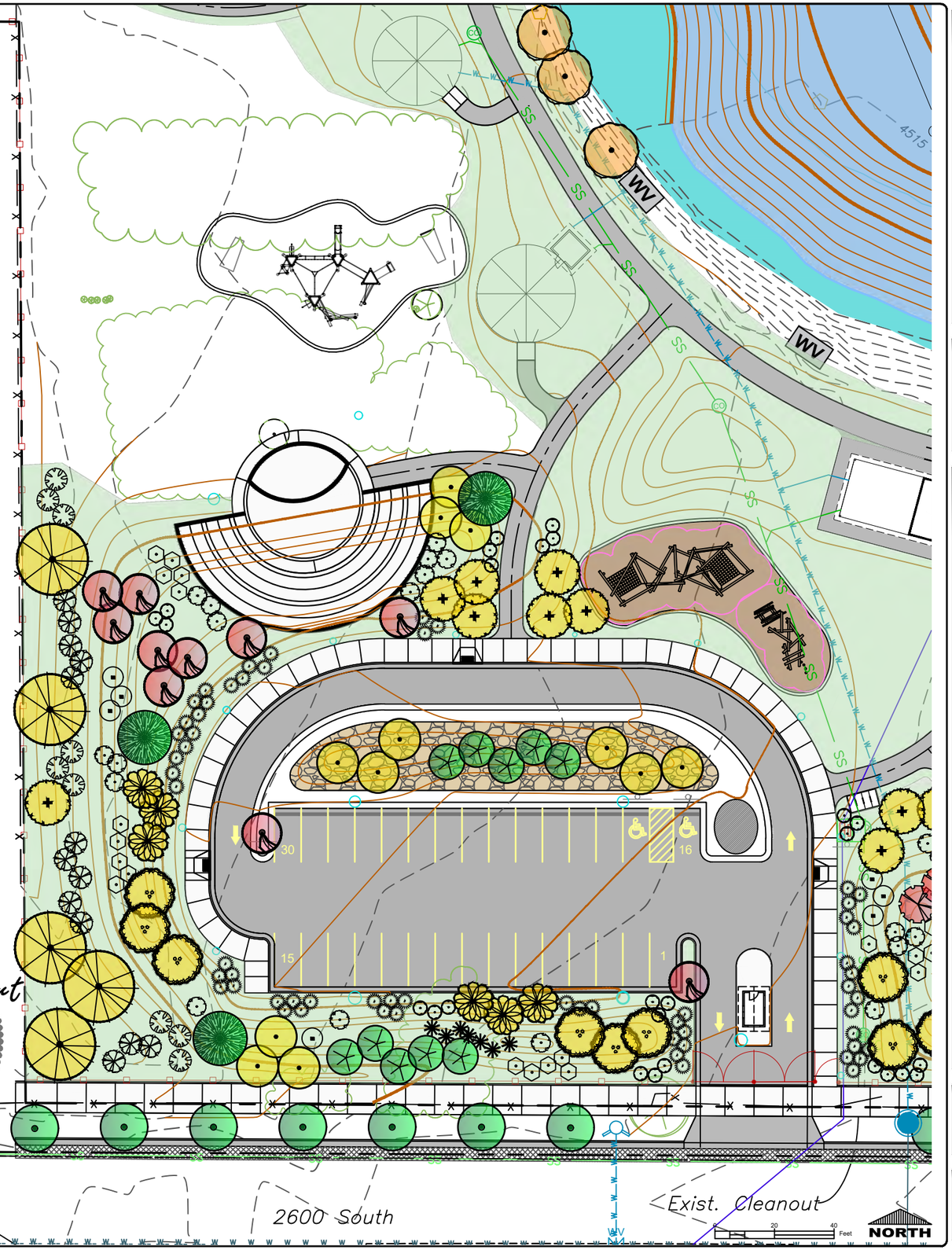
Planting Plan Notes

1. The planting plan is diagrammatic. Plant locations are approximate. Exact locations of plant materials to be approved by the Owners Representative in the field prior to installation.
2. All plant material shall conform to the guidelines established by "the American Standard for Nursery Stock", published by the American Association of Nurserymen, Inc.
3. No substitution of plant species will be allowed without the written approval of the Owners Representative.
4. Locate and verify all utility line locations prior to staking and report any conflicts to the Owners Representative.
5. Provide a minimum topsoil depth of six (6) inches on areas of cut and fill disturbances as per section 32 92 00.
6. Do not install plant material until the rough grading of topsoil is approved by the Owners Representative.
7. All plant species are native to Utah and adapted to conditions found on site. riparian species are located along streams and pond.

LANDSCAPE ARCHITECT — LICENSE No. 6677105 — SANDRA DAVENPORT — 6/17/2024 — ELECTRONIC SEAL — STATE OF UTAH

Sandy Davenport

ADD ALTERNATE #3



PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

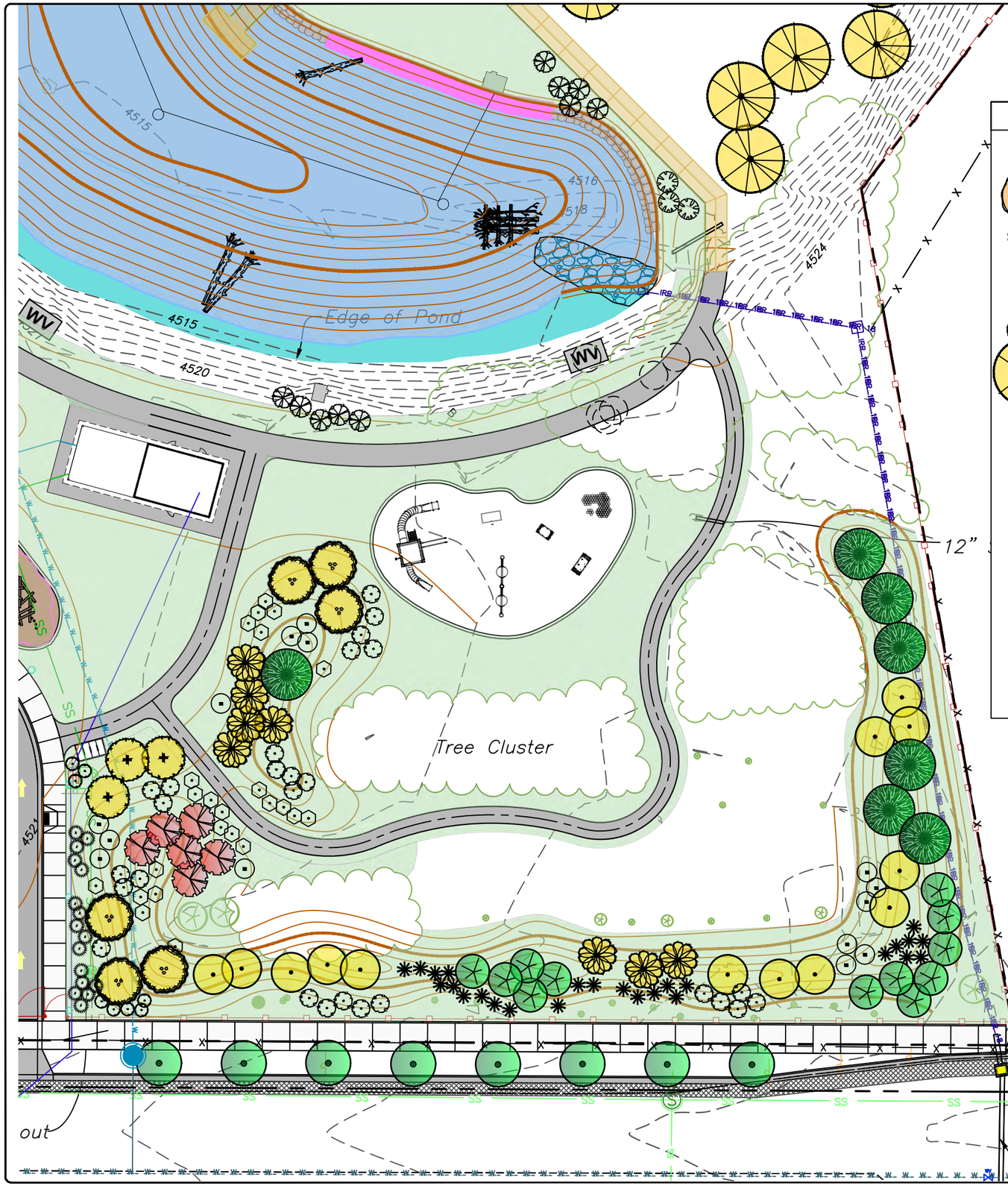
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
PLANTING PLAN

SHEET IDENTIFIER:
LP 101

BINDING ORDER



PLANT LIST

KEY	BOTANICAL / COMMON NAME / HYDROZONE	QTY.
	TREES: 2" CALIPER SIZE	
BO	BETULA OCCIDENTALIS / WATER BIRCH	5
AG	ACER GRANDIDENTATUM / BIGTOOTH MAPLE	12
AC	ACER GLABRUM / ROCKY MOUNTAIN MAPLE	14
CE	CELTIS OCCICENTALIS / COMMON HACKBERRY	15
CO	CERCIS OCCIDENTALIS / WESTERN REDBUD	10
CD	CRATAEGUS DOUGLASII / BLACK HAWTHORN	6
PV	PRUNUS VIRGINIANA / CHOKECHERRY	10
PT	POPULUS TREMULOIDES / QUAKING ASPEN	26
PA	POPULUS ANGUSTIFOLIA / NARROWLEAF COTTONWOOD	27
PP	PINUS PONDEROSA / PONDEROSA PINE	10
JO	JUNIPERUS OSTEOSPERMA / UTAH JUNIPER	22
		TOTAL 157
	SHRUBS: 1 GALLON SIZE	
CS	CORNUS SERICEA / RED-OSIER DOGWOOD	43
PF	POTENTILLA FRUTICOSA / CINQUEFOIL	19
SA	SYMPHORICARPOS ALBUS / SNOWBERRY	39
MR	MAHONIA REPENS / CREEPING OREGON GRAPE	67
RT	RHUS TRILOBATA / SKUNKBRUSH	41
RA	RIBES AUREUM / GOLDEN CURRANT	18
AT	ARTEMISIA TRIDENTATA / BIG SAGE BRUSH	33
RW	ROSA WOODSII / WOODS ROSE	33
		TOTAL 293

NATIVE UPLAND SEED MIX

WETLAND SOD: PRE-VEGETATED (NATIVE) COIR EROSION CONTROL MAT. EACH MAT = 3.3 FEET WIDE X 16.4 FEET LONG X 4 INCHES THICK.

LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

Sandy Davenport

0 20 40 Feet

NORTH

ADD ALTERNATE #3

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
PLANTING PLAN

SHEET IDENTIFIER:
LP 102

BINDING ORDER

4515
4516
4518
4519
4515
4518
Tree Cluster
15" RCP Pipe Culvert
WV
SS
0 20 40 Feet
NORTH

ADD ALTERNATE #3

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH
Sandy Davenport

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
PLANTING PLAN

SHEET IDENTIFIER:
LP 103

BINDING ORDER

30" RCP Pipe
(Vertical)

12" RCP Pipe
Culvert

Tree Cluster

4515

4515

4515

4520

4525

12" CMP Pipe
Culvert

Found JSH
Rebar/Cap

ADD ALTERNATE #3

0 20 40 Feet

NORTH

PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

Sandy Davenport

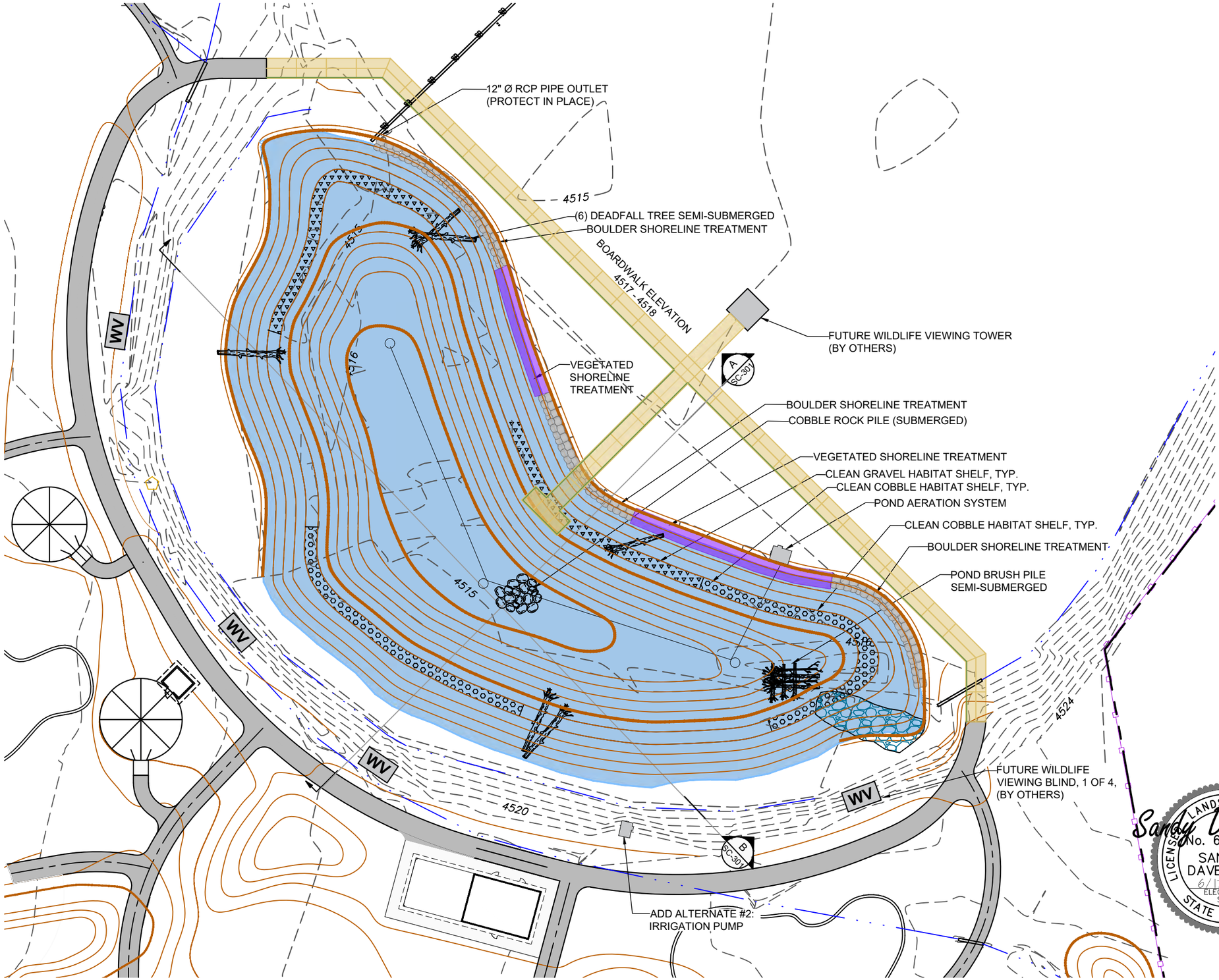
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
PLANTING PLAN

SHEET IDENTIFIER:
LP 104

BINDING ORDER



PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

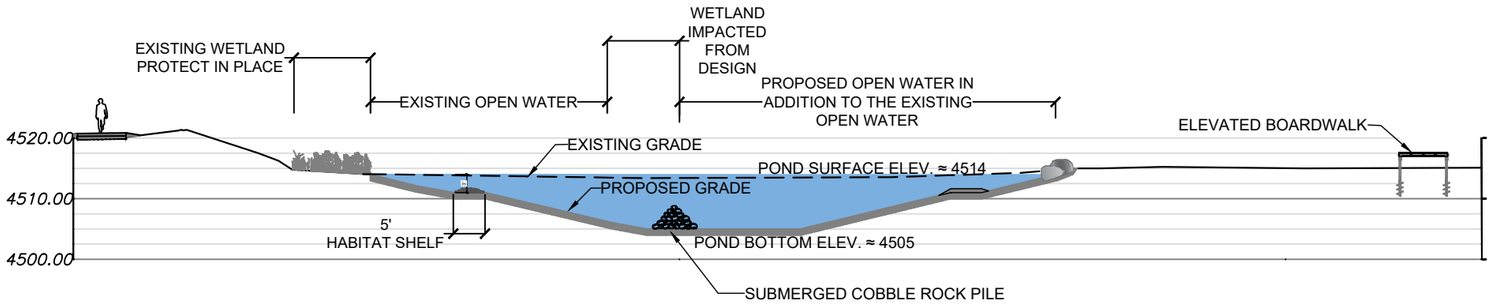
SHEET TITLE:
POND
PLAN

SHEET IDENTIFIER:
LS 401

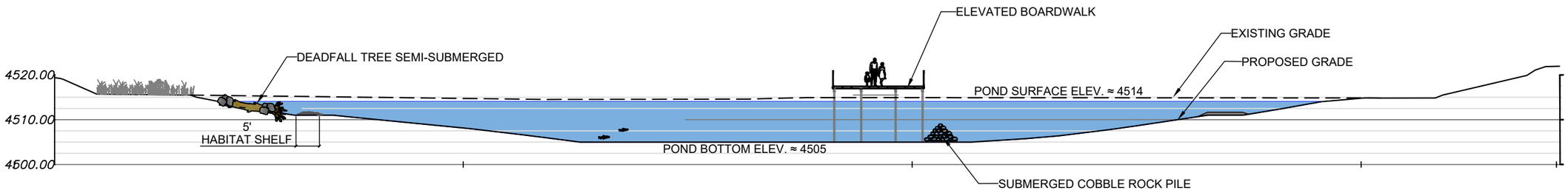
BINDING
ORDER

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA
DAVENPORT
6/17/2024
ELECTRONIC
SEAL
STATE OF UTAH

Sandy Davenport



A A-A POND CROSS SECTION
1"=25'



B B-B POND CROSS SECTION / ELEVATION
1"=25'

Sandy Davenport

LANDSCAPE ARCHITECT
LICENSE No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

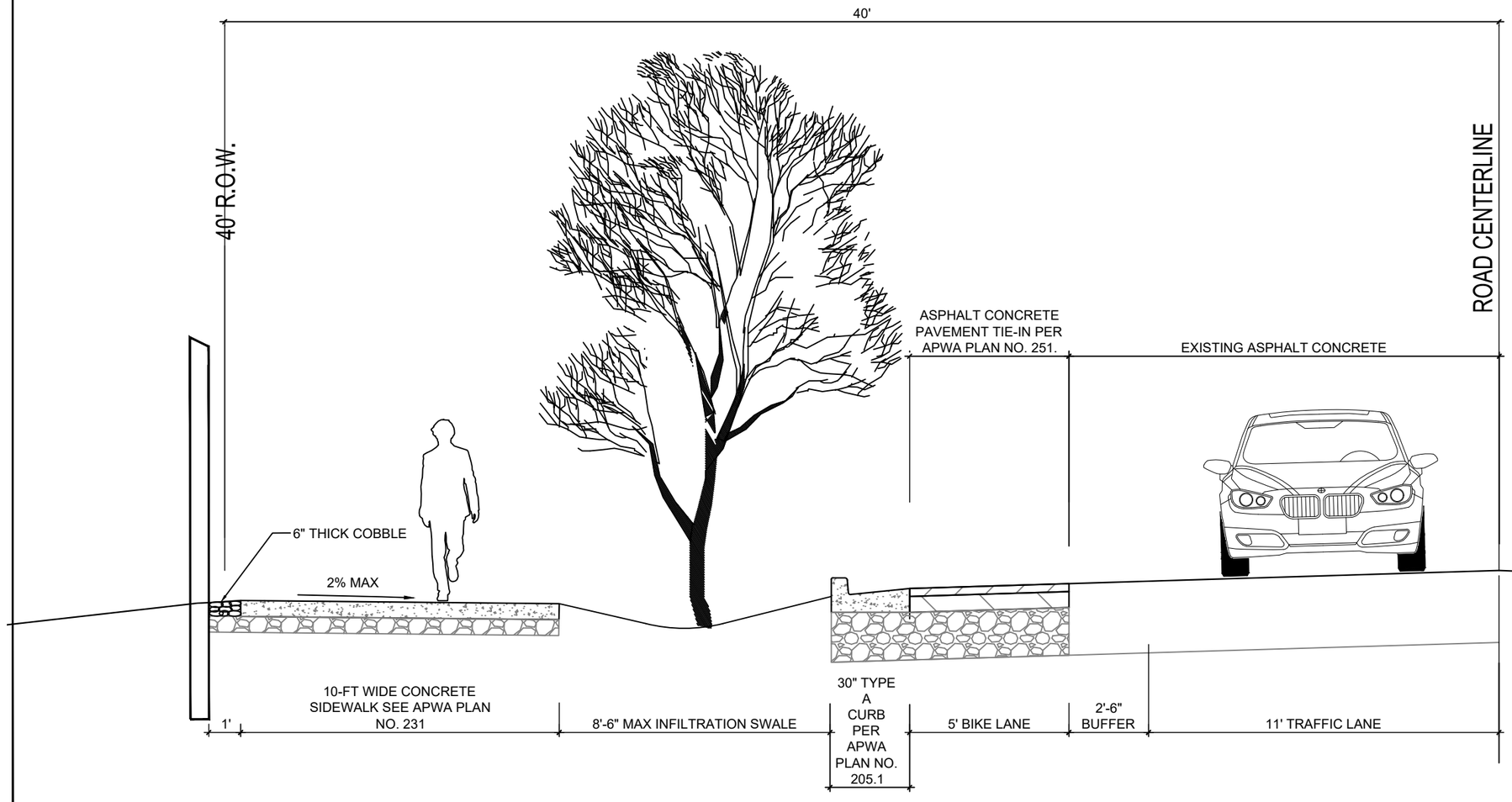
SHEET TITLE:
POND PLAN SECTIONS

SHEET IDENTIFIER:
LS 402

BINDING ORDER

ASPHALT CONCRETE PAVEMENT TIE IN:

1. UNTREATED BASE COURSE: PROVIDE MATERIAL SPECIFIED IN APWA SECTION 32 11 23.
   A. DO NOT USE GRAVEL AS A SUBSTITUTE FOR UNTREATED BASE COURSE WITHOUT ENGINEER'S PERMISSION.
   B. PLACE MATERIAL PER APWA SECTION 32 05 10.
   C. COMPACT PER APWA SECTION 31 23 26 TO A MODIFIED PROCTOR DENSITY OF 95 PERCENT OR GREATER. MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8 INCHES WHEN USING
   D. RIDING COMPACTION EQUIPMENT OR 6 INCHES WHEN USING HAND HELD COMPACTION EQUIPMENT.
2. DIMENSION:
   A. AGGREGATE BASE: MATCH EXISTING THICKNESS OR 8 INCHES MINIMUM.
   B. ASPHALT PAVEMENT: MATCH THICKNESS PLUS 1 INCH, OR 8 INCHES MAXIMUM.
3. ASPHALT CONCRETE PAVEMENT JOINTS: PROVIDE A NEAT STRAIGHT JOINT BETWEEN EXISTING AND NEW ASPHALT CONCRETE. SAW-CUT JOINT IF EXISTING PAVEMENT EXCEEDS 2 INCHES IN THICKNESS OR IF PORTLAND CEMENT CONCRETE UNDERLIES ASPHALT CONCRETE PAVEMENT.
4. TACK COAT: APWA SECTION 32 12 14. CLEAN ALL VERTICAL SURFACES ADJACENT TO THE PATCH. APPLY FULL COVERAGE TACK COAT.
5. ASPHALT PAVEMENT: USE HOT WEATHER OR COLD WEATHER ASPHALT CONCRETE PATCH MATERIAL SPECIFIED IN APWA SECTION 33 05 25.
   A. INSTALL IN LIFTS NO GREATER THAN 3 INCHES AFTER COMPACTION. COMPACT EACH LIFT TO 94 PERCENT OF ASTM D 2041 (RICE METHOD) PLUS OR MINUS 2 PERCENT.



A 2600 SOUTH STREET SECTION
1" = 4'-0"

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

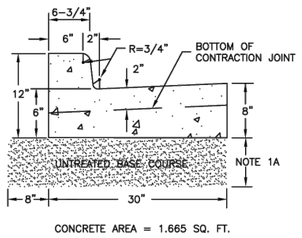
DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 501

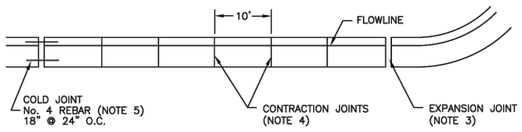
BINDING ORDER

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/7/2024
ELECTRONIC SEAL
STATE OF UTAH
Sandy Davenport



CONCRETE AREA = 1.665 SQ. FT.

TYPE A



CURB AND GUTTER JOINT DETAIL

Curb and gutter

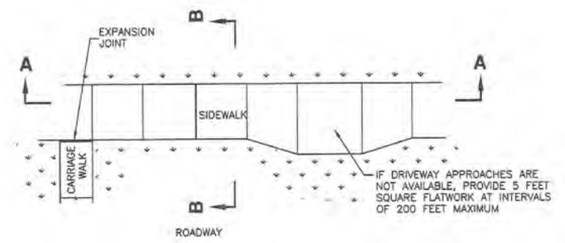
1. **GENERAL**
   A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
   B. Additional requirements are specified in APWA Section 32 16 13.

2. **PRODUCTS**
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
   C. Concrete: Class 4000, APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   D. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.

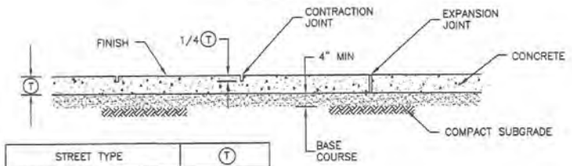
3. **EXECUTION**
   A. Base Course Placement: APWA Section 32 05 10. Thickness is 6-inches if flow-line grade is 0.5 percent (s=0.005) or greater. If slope is less, provide 8-inches. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
   B. Concrete Placement: APWA Section 03 30 10.
      1) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Install at the start or end of a street intersection curb return. Expansion joints are not required in concrete placement using slip-form construction.
      2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Match joint location in adjacent Portland-cement concrete roadway pavement.
      3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
   C. Protection and Repair: Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.

A CURB AND GUTTER TYPE A - SEE APWA PLAN NO. 205.1 AND NIBLEY CITY ENGINEERING DESIGN STANDARDS

NA



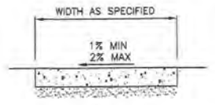
PLAN



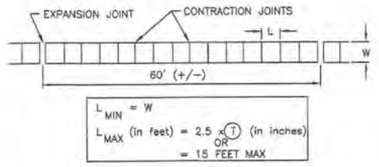
STREET TYPE	T
RESIDENTIAL (WITH PARK STRIP)	4"
RESIDENTIAL (NO PARK STRIP)	6"
OTHER	
REPLACING EXISTING SIDEWALK	MATCH EXISTING (4" MIN.)

SEE DRIVEWAY APPROACH PLANS FOR SIDEWALK THICKNESS AT DRIVEWAYS

SECTION A-A



SECTION B-B



SIDEWALK JOINT DETAIL

Sidewalk

1. **GENERAL**
   A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
   B. Additional requirements are specified in APWA Section 32 16 13.

2. **PRODUCTS**
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
   C. Concrete: Class 4000, APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   D. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.

3. **EXECUTION**
   A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
   B. Concrete Placement: APWA Section 03 30 10.
      1) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface.
      2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Maximum length to width ratio for non-square panels is 1.5 to 1. Maximum panel length (in feet) is 1.5 times the slab thickness (in inches).
      3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.

B CONCRETE SIDEWALK - SEE APWA PLAN NO. 231 AND NIBLEY CITY ENGINEERING DESIGN STANDARDS

1"=4'-0"

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH
Sandy Davenport

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

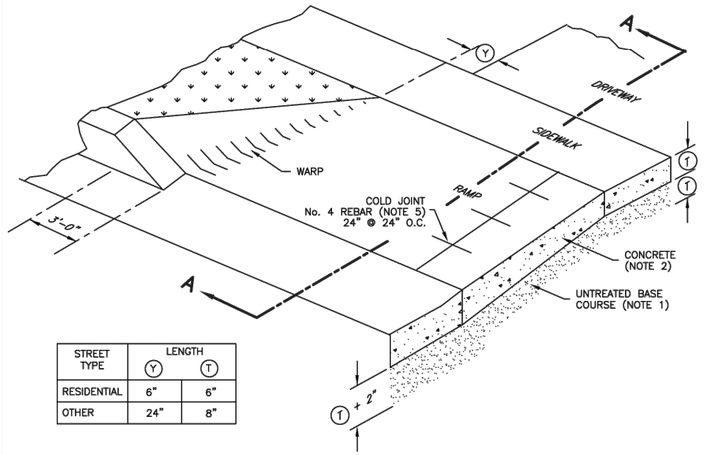
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

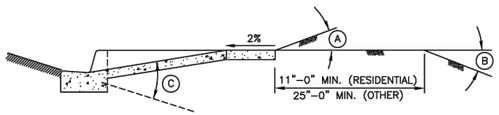
SHEET IDENTIFIER:
DT 502

BINDING ORDER



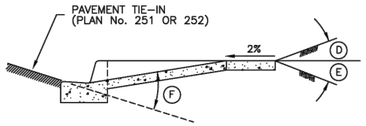
STREET TYPE	LENGTH (Y)	LENGTH (T)
RESIDENTIAL	6"	6"
OTHER	24"	8"

OBLIQUE



STREET TYPE	BREAKOVER ANGLE (MAXIMUM) (A)	(B)	(C)
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

SECTION A–A – APPROACH REQUIRING SERVICE TRUCK ACCESS



STREET TYPE	BREAKOVER ANGLE (MAXIMUM) (D)	(E)	(F)
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

SECTION A–A – TYPICAL DRIVEWAY APPROACH

Flare driveway approach – type A

1. UNTREATED BASE COURSE: Provide material specified in APWA Section 32 11 23.
   A. Do not use gravel as a substitute for untreated base course without ENGINEER's permission.
   B. Place material per APWA Section 32 05 10.
   C. Compact per APWA Section 31 23 26 to a modified proctor density of 95 percent or greater. Maximum lift thickness before compaction is 8 inches when using riding compaction equipment or 6 inches when using hand held compaction equipment.

2. CONCRETE: Class 4000 per APWA Section 03 30 04.
   A. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   B. Place concrete per APWA Section 03 30 10.
   C. Provide 1/2 inch radius on concrete edges exposed to public view.
   D. Cure concrete per APWA Section 03 39 00 with type ID Class A or B (clear with fugitive dye) membrane forming compound unless specified otherwise.

3. EXPANSION JOINT: Make expansion joints vertical, full depth, 1/2 inch wide with type F1 joint filler material per APWA Section 32 13 73. Set top of filler flush with surface of concrete.

4. CONTRACTION JOINT: Make contraction joints vertical.
   A. 1/8 inch wide and 1 inch deep or 1/4 slab thickness if slab is greater than 4 inches thick.
   B. Maximum length to width ratio for non-square panels is 1.5 to 1.
   C. Maximum panel length (in feet) is 2.5 times the slab thickness (in inches) to a maximum of 15 feet.

5. REINFORCEMENT: ASTM A 615, grade 60, galvanized or epoxy coated deformed steel. See APWA Section 03 20 00 requirements . Not required if driveway ramp is constructed without a cold joint.

6. FIELD CHANGES TO SLOPE REQUIREMENTS: The following design parameters are to be used as a guide. Specific uses or site conditions may require profile design submittal for review and acceptance.
   A. As a rule, driveway grades may have a 6 percent change in slope over a 11 feet wheel base run for both crest or sag vertical curves.
   B. Where heavy truck use and fire truck access applies, or to improve design speed, design grades should be cut in half.

7. FINISH: Broomed.

8. PROTECTION AND REPAIR:
   A. Fill flow-line with water. Repair construction that doesn't drain.
   B. Protect concrete from deicing chemicals during cure period.

Sandy Davenport
LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

A FLARE DRIVEWAY APPROACH DETAIL - SEE APWA PLAN 221.1 AND NIBLEY CITY ENGINEERING DESIGN STANDARDS
1"=4'-0"

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

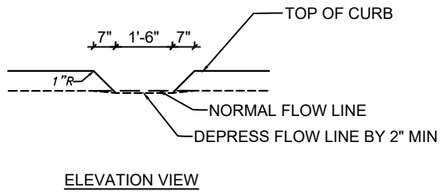
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

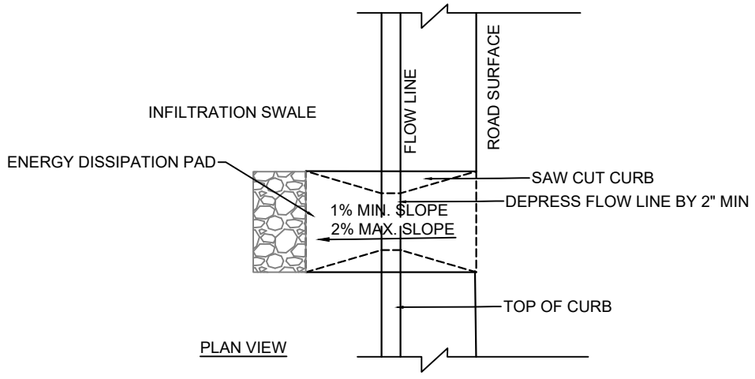
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SITE DETAILS

SHEET IDENTIFIER:
DT 503

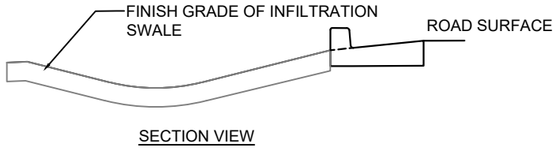
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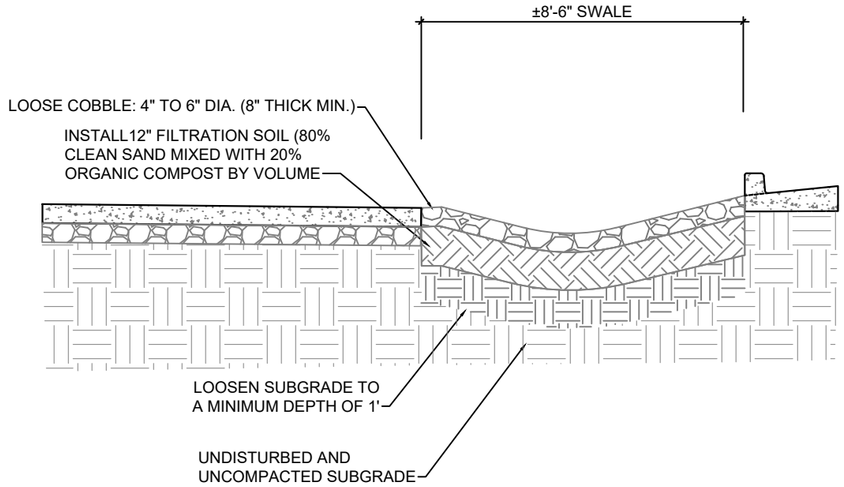
ELEVATION VIEW



PLAN VIEW



SECTION VIEW



INFILTRATION SWALE NOTES:

1. EXCAVATE CHANNEL TO SUBGRADE ELEVATIONS PER THE PLAN.
2. LOOSEN SOIL IN A MANNER THAT AVOIDS RECOMPACTION OF THE SOIL BY CONSTRUCTION TRAFFIC.
3. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE SWALE DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL WILL NEED TO BE REMOVED FROM THE SWALE PRIOR TO INITIATING THE NEXT STEP IN THE CONSTRUCTION PROCESS. SEDIMENT THAT HAS BEEN WASHED INTO THE SWALE DURING THE EXCAVATION PROCESS CAN SEAL THE PERMEABLE MATERIAL, SIGNIFICANTLY REDUCING THE INFILTRATION CAPACITY OF THE SOILS.
4. FINISH GRADE THE SWALE USING METHODS THAT AVOID RECOMPACTION OF LOOSENED SOIL. ACCEPTABLE METHODS INCLUDE HAND RAKING, SMOOTHING WITH A BACKHOE BUCKET FROM OUTSIDE THE LIMITS OF THE SWALE, AND/OR PULLING A DRAG BEHIND LOW GROUND PRESSURE EQUIPMENT LIKE AN ATV.

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

Sandy Davenport

A CURB CUT INLET AT INFILTRATION SWALE
NA

B PARK STRIP INFILTRATION SWALE
NA

PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

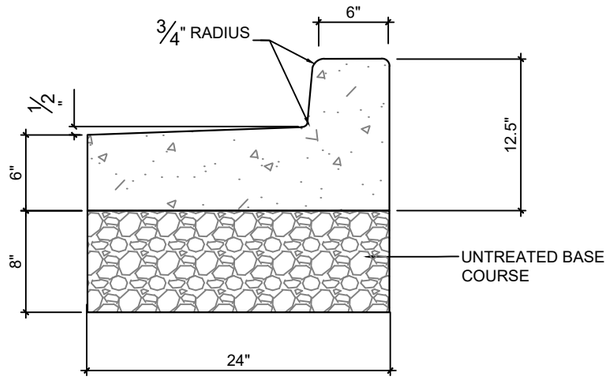
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

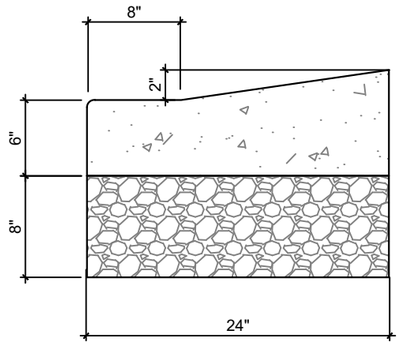
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SITE DETAILS

SHEET IDENTIFIER:
DT 504

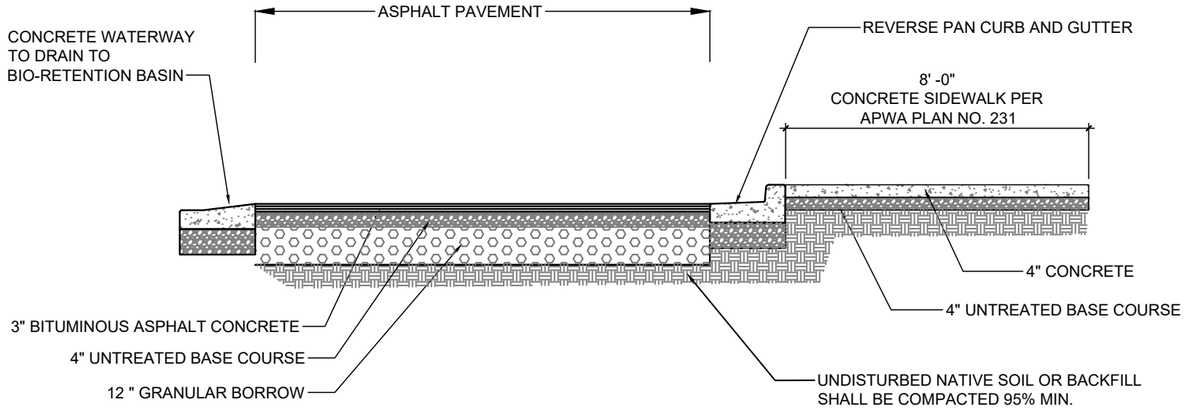
BINDING ORDER



REVERSE PAN CURB AND GUTTER SECTION VIEW



WATERWAY SECTION VIEW



A ASPHALT PAVEMENT SECTION
1"=4'-0"

BITUMINOUS ASPHALT CONCRETE PAVEMENT NOTES:

1. CONTRACTOR SHALL PLACE AND COMPACT A HOT-MIX ASPHALT SURFACE COURSE OVER THE FINISHED BASE COURSE MATERIAL. THE BITUMINOUS BINDER TYPE MATERIAL FOR THE SURFACE COURSE SHALL BE "PG58-28" ASPHALT CEMENT CONFORMING TO THE REQUIREMENTS OF ASTM AND THE AASHTO FOR THE SAME IN ACCORDANCE WITH UTAH APWA STANDARDS AND SPECIFICATIONS. THE BITUMINOUS SURFACE COURSE SHALL BE PLACED AND COMPACTED ON THE PREPARED BASE IN CONFORMANCE WITH THE LINES AND DIMENSIONS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THESE SPECIFICATIONS.
2. UNTREATED BASE COURSE: SHALL BE GRADE 1 AS APWA SECTION 02060 (SELECT FILL). PLACE FILL IN NO GREATER THAN 6 INCH LIFTS AFTER COMPACTION. COMPACT TO NO LESS THAN 95% RELATIVE DENSITY.
3. CONSTRUCT ROAD MIX BITUMINOUS SURFACE COURSE ONLY WHEN AIR TEMPERATURE IN THE SHADE AND ROAD BED TEMPERATURE ARE GREATER THAN 50 DEGREES.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL TRAFFIC. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED SURFACE FOR A MIN. PERIOD OF 24 HOURS.

CONCRETE SIDEWALK NOTES:

1. PROVIDE ½ INCH THICK PREFORMED EXPANSION JOINT FILLER F1 - BITUMINOUS MASTIC AT A MINIMUM OF 40 FEET INTERVALS.
2. PLACE SCORE LINES IN SIDEWALK TO CREATE SQUARE PANELS. WHEN CONTIGUOUS SIDEWALK IS CONSTRUCTED, ALIGN SCORE LINES WITH CURB SCORE LINES, OTHERWISE PLACE SCORE LINES AT A MAXIMUM OF 6 FEET SPACING.

LANDSCAPE ARCHITECT
LICENSED
No. 6677105
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ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 505

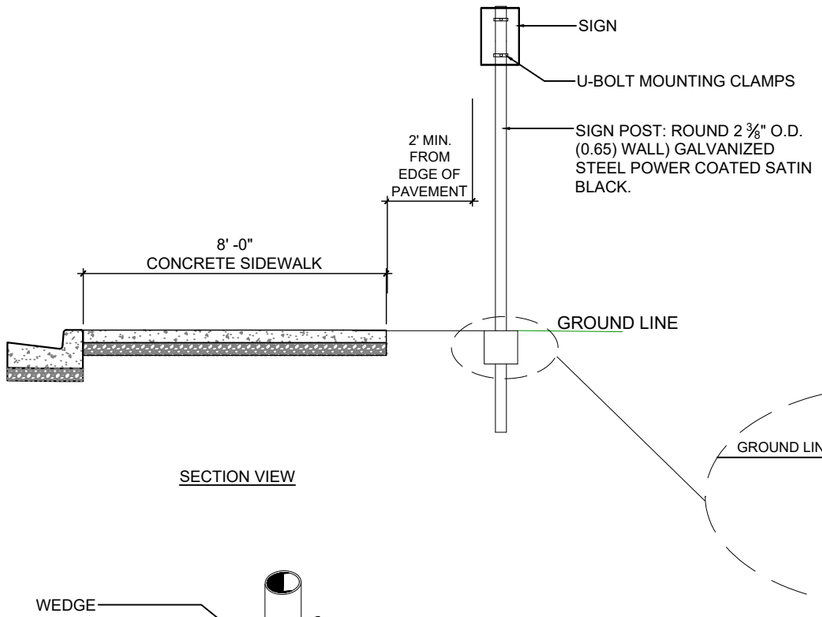
BINDING ORDER

12" X 18"
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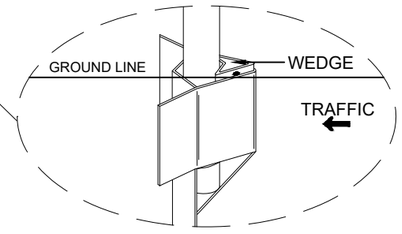


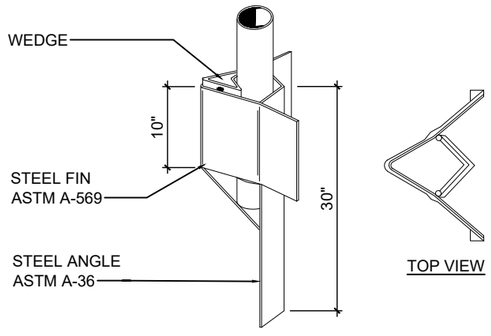






SECTION VIEW



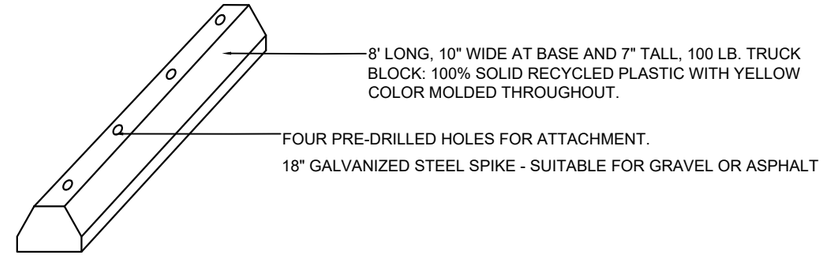


TOP VIEW

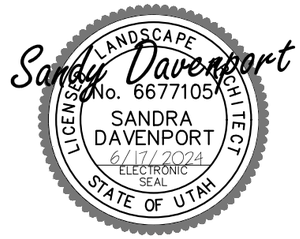
DISABLED PARKING SIGNAGE NOTES:

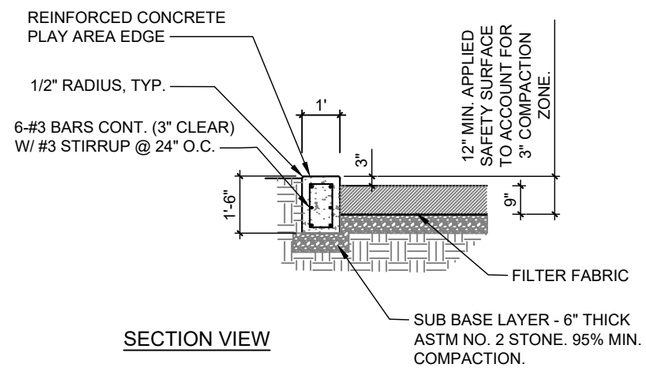
1. CONSTRUCT SIGNS IN ACCORDANCE WITH STANDARD DRAWING ST-9 AND MUTCO STANDARDS.
2. USE POSTS THAT MEET ASTM A-513 STEEL - 55,000 P.S.I. MINIMUM YIELD AND 70,000 P.S.I. MINIMUM TENSILE STRENGTH.
3. DRIVE POST ANCHOR FLUSH WITH GROUND LINE. ORIENT ANCHOR SO WEDGE INSTALLATION IS TOWARDS OPPOSING TRAFFIC.
4. INSTALL WEDGE WITH 1" MAX EXPOSURE TO TOP OF ANCHOR.

A DISABLED PARKING SIGNAGE
N.T.S.



B WHEEL STOP DETAIL
N.T.S.





SECTION VIEW

NATURE PLAY CURB AND SURFACE NOTES:

1. SURFACE TO BE APPROVED ENGINEERED HARDWOOD FIBER PER ASTM F2027 STANDARD FOR PLAYGROUND STRUCTURES.
2. EXCAVATE ENTIRE PLAY AREA TO FULL DEPTH OF PLAY AREA BORDER.

C NATURE PLAY AREA CURB AND SURFACE
1"=2'-0"

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

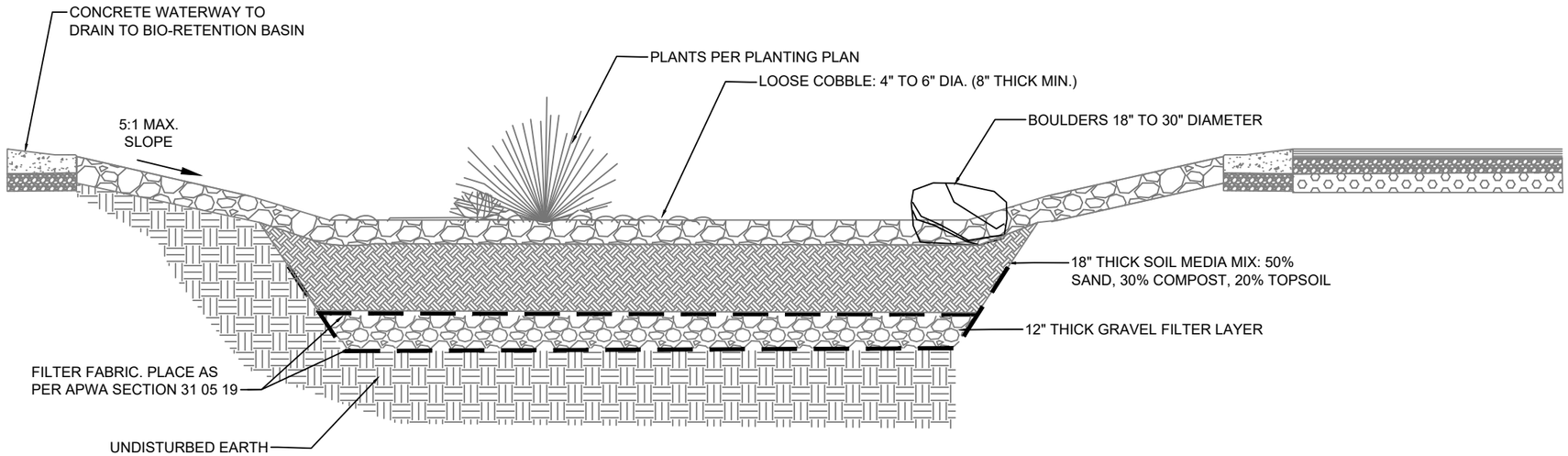
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 506

BINDING ORDER



SECTION VIEW

GRAVEL FILTER LAYER NOTES:

1. GRAVEL FILTER MATERIAL SHALL CONSIST OF CLEAN, DURABLE ROCK .
2. PLACE GRAVEL FILTER OVER PREPARED SUBGRADE TO 12 INCH THICKNESS.

% FINER THAN GIVEN SIZE	SIZE (INCHES)
0-3	0.003
0-15	0.05
0-30	0.2
35-90	0.75
90-100	3.0

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

Sandy Davenport

A BIO-RETENTION BASIN DETAIL
N.T.S.

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

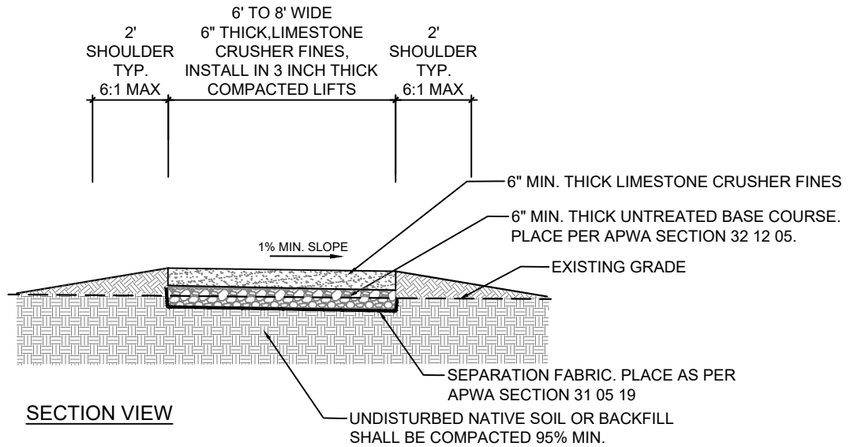
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 507

BINDING ORDER



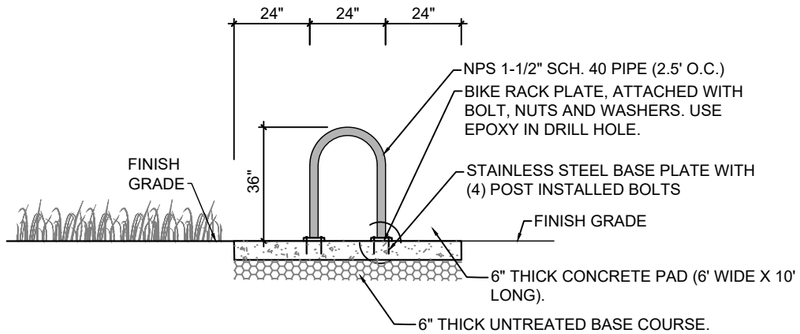
SECTION VIEW

LIMESTONE CRUSHER FINES NOTES:

1. THE CONTRACTOR SHALL FURNISH AND DELIVER LIMESTONE CRUSHER FINES CONSISTING OF IRREGULAR AND ANGULAR PARTICLES. NO ROUNDED MATERIAL IS ACCEPTABLE. THE LIMESTONE CRUSHER FINES SHALL MEET THE FOLLOWING GRADATION SPECIFICATION:

SIEVE SIZE	PERCENT PASSING
3/8 INCH (9.52 MM)	100%
NO. 4 (4.76 MM)	75 TO 92%
NO. 8 (2.38 MM)	50 TO 72%
NO. 16 (1.20 MM)	38 TO 55%
NO. 40 (0.42 MM)	20 TO 40%
NO. 100 (0.149 MM)	10 TO 22%
NO. 200 (0.074 MM)	8 TO 15%

A 6' TO 8' WIDE WALKING PATH
1"=4'-0"



BIKE RACK NOTES:

1. BIKE RACK TO BE PER SLCTRANS.COM STANDARD BICYCLE PARKING SECTION F1.f2 AND F1.g1 OF THE DIVISION OF TRANSPORTATION SALT LAKE CITY COMMUNITY & ECONOMIC DEVELOPMENT.
2. COLOR TO BE BLACK TEXTURED PAINT OVER GALVANIZATION.
3. PROVIDE SHOP DRAWINGS FOR OWNER REVIEW PRIOR TO FABRICATION.

B BIKE RACK: INVERTED "U" ON CONCRETE PAD
N.T.S.

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

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No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

Sandy Davenport

Stokes Nature Center
Nibley Nature Park

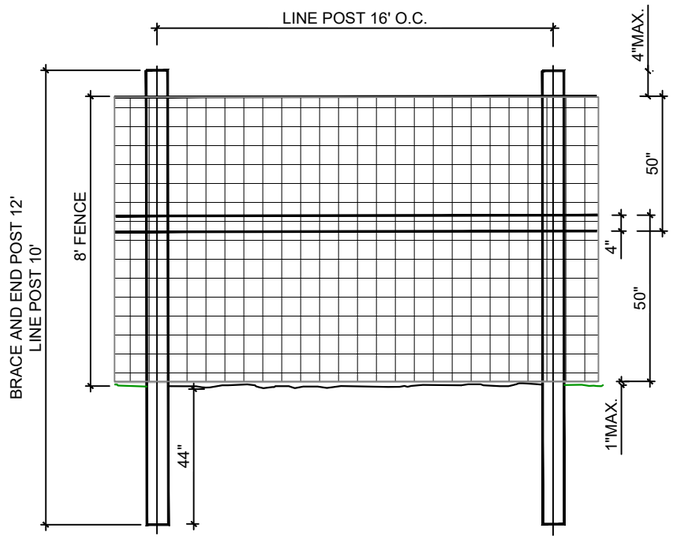
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

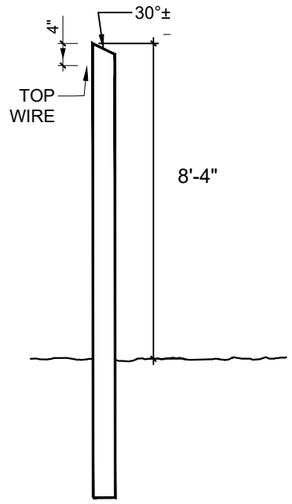
SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 508

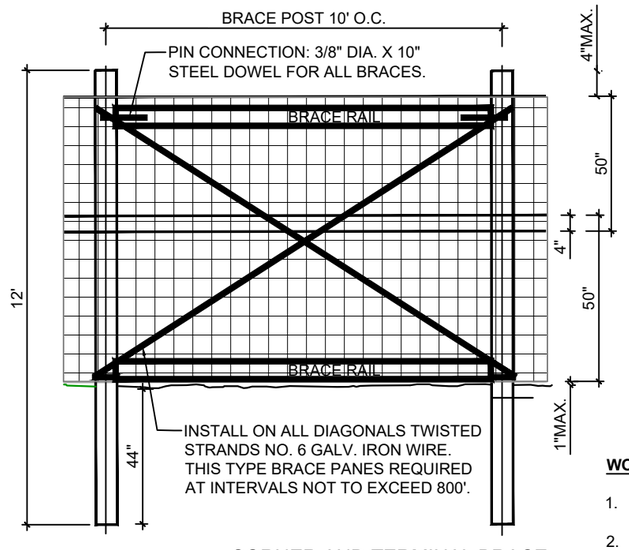
BINDING ORDER



ELEVATION VIEW



POST SIDE VIEW



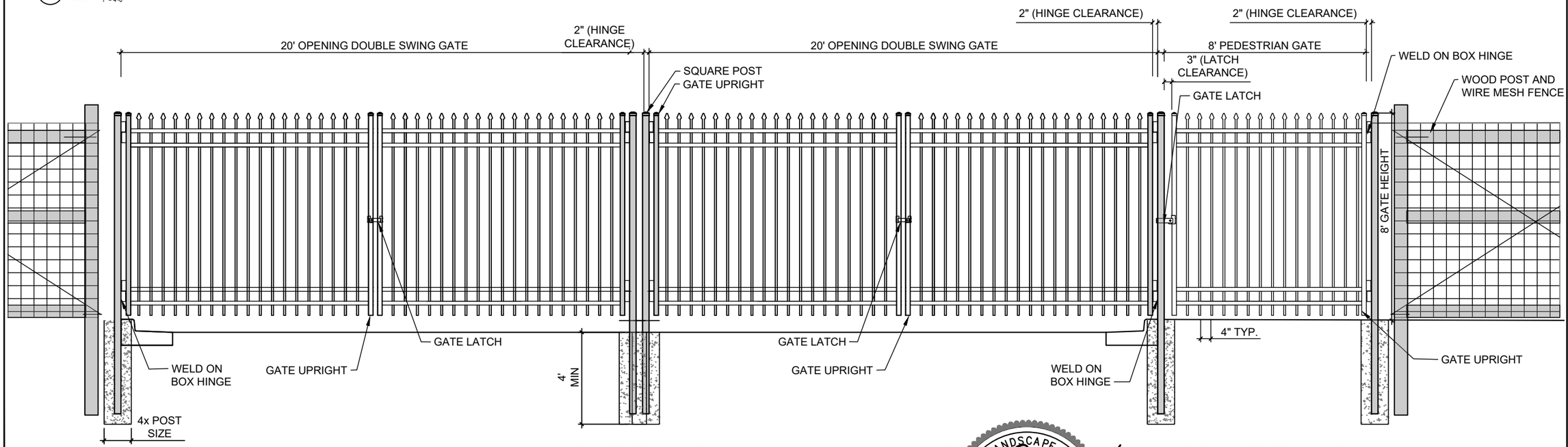
CORNER AND TERMINAL BRACE

WOOD POST AND WIRE MESH FENCE NOTES:

1. CONSTRUCT AND INSTALL FENCE PER UDOT STANDARD DETAIL FG 1A RIGHT OF WAY FENCE AND GATES (WOOD POST).
2. WOOD POSTS AND BRACES TO BE 5" DIAMETER ROUND WOOD.
3. TIE OR CLAMP THE 50 INCHES OF WELDED WIRE MESH TOGETHER EVERY 12 INCHES USING HOG RINGS OR OTHER TYPES OF TIES OR CLAMPS.
4. PLACE BOTTOM WIRE NO MORE THAN 1 INCH ABOVE THE GROUND.

A WOOD POST AND WIRE MESH FENCE

1" = 4'-0"



VEHICLE ACCESS ELEVATION VIEW

PEDESTRIAN ACCESS ELEVATION VIEW

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

VEHICLE ACCESS AND PEDESTRIAN ACCESS GATES NOTES:

1. DECORATIVE METAL GATES TO BE AMERISTAR MONTAGE COMMERCIAL CLASSIC 4-RAIL OR EQUAL.
2. ALL FENCING MATERIAL TO BE HOT DIPPED GALVANIZED WITH NO-MAR BLACK POWDER FINISH COAT.

B VEHICLE ACCESS AND PEDESTRIAN ACCESS GATES

1" = 4'-0"

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

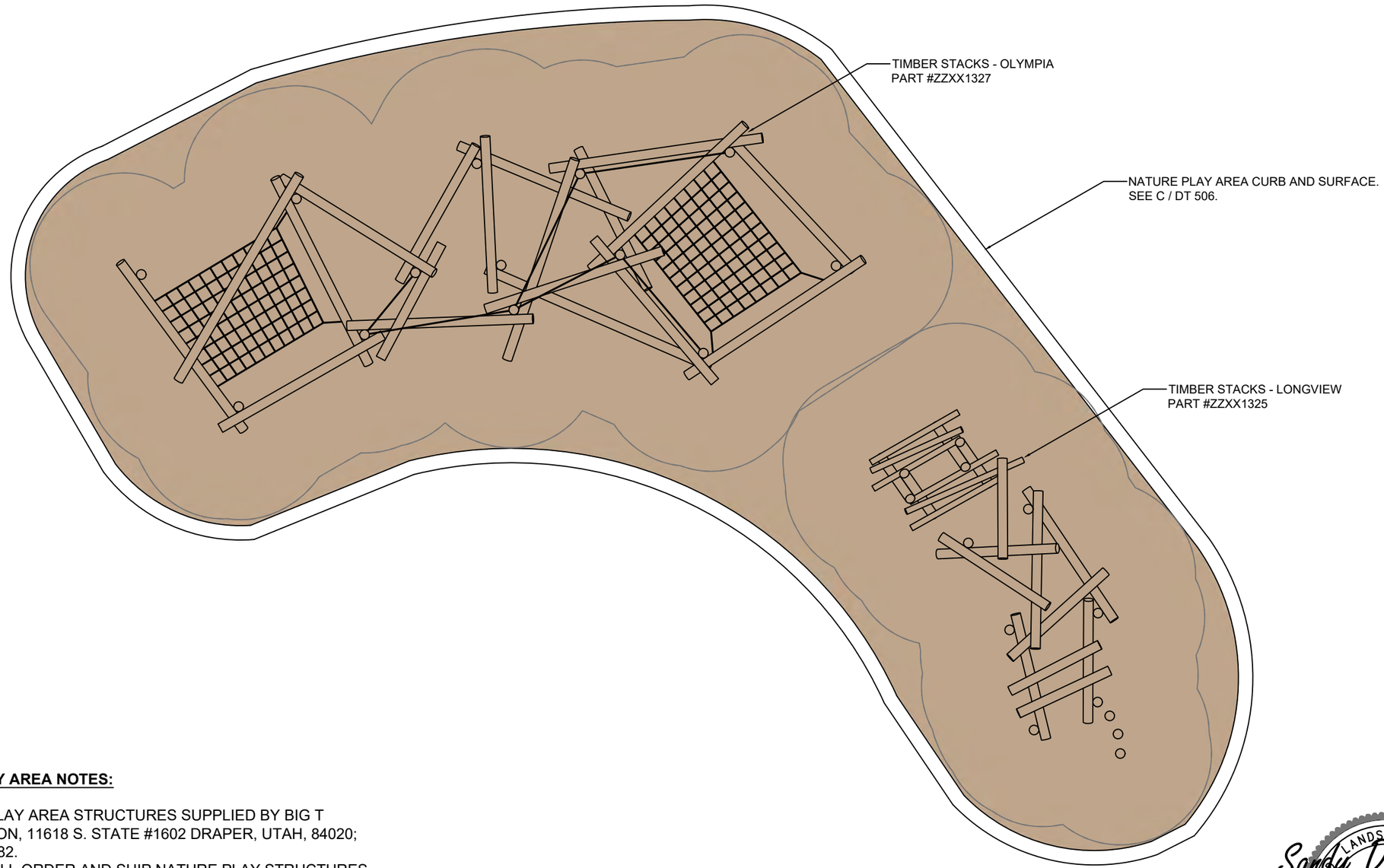
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 509

BINDING ORDER



NATURE PLAY AREA NOTES:

1. NATURE PLAY AREA STRUCTURES SUPPLIED BY BIG T RECREATION, 11618 S. STATE #1602 DRAPER, UTAH, 84020; 801-572-0782.
2. OWNER WILL ORDER AND SHIP NATURE PLAY STRUCTURES TO SITE. CONTRACTOR TO INSTALL AS PER MANUFACTURER'S SPECIFICATIONS.

A ADD ALTERNATE #1: NATURE PLAY AREA #1

1" = 4'-0"

Sandy Davenport

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6/17/2024
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STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:

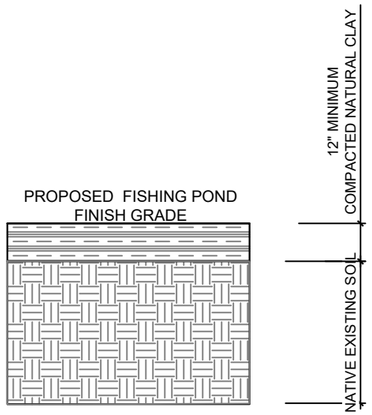
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 510

BINDING ORDER

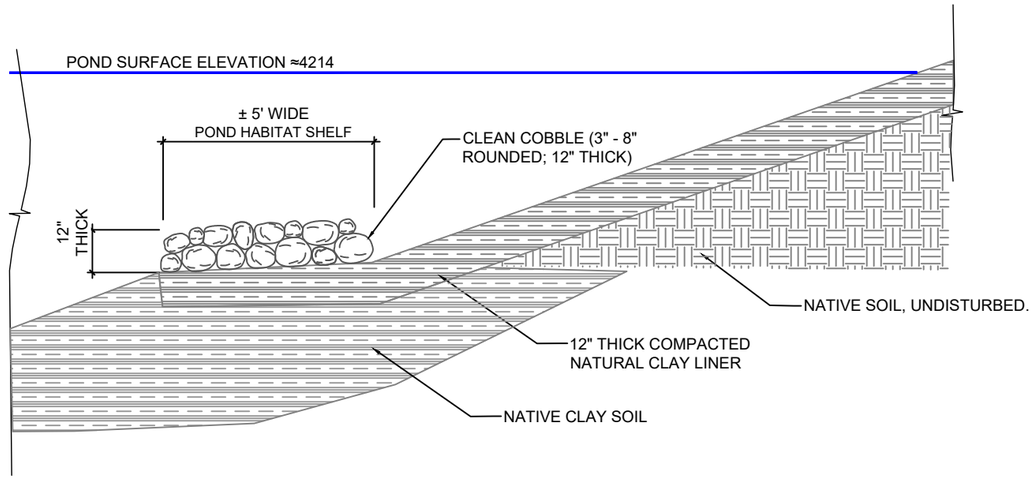


COMPACTED NATURAL CLAY LINER NOTES:

1. APPLY EXCAVATED STOCKPILED NATIVE CLAY SOIL AS NECESSARY TO ENSURE A 12" MIN. THICK FISHING POND LINER.
2. APPLY CLAY IN TWO 6 INCH LAYERS, COMPACTING THE FIRST BEFORE APPLYING THE SECOND.

A COMPACTED NATURAL CLAY LINER

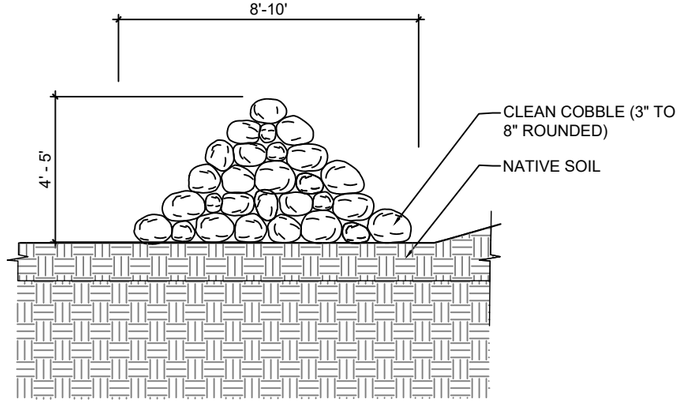
1"=4'-0"



C CLEAN COBBLE TREATMENT AT HABITAT SHELF

1"=4'-0"

POND SURFACE ELEVATION ≈4214

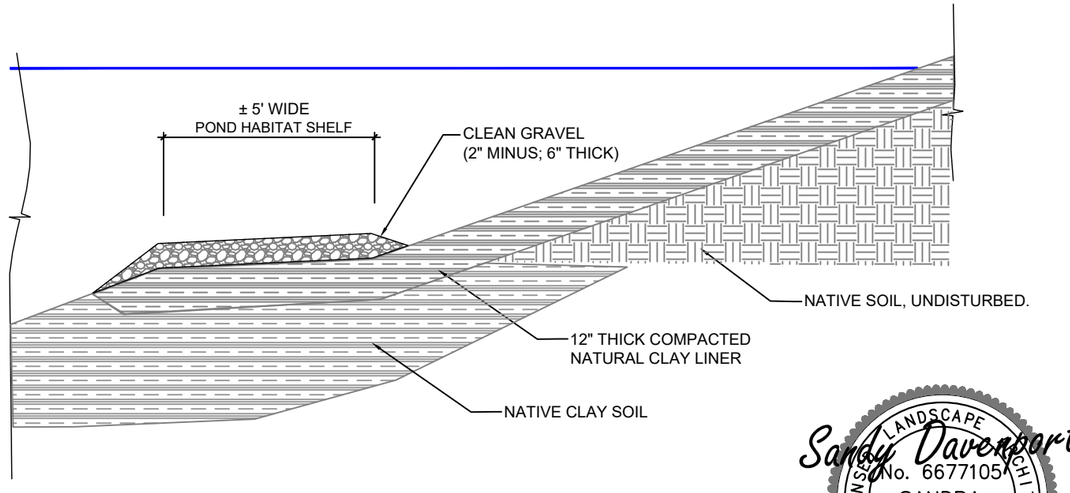


COBBLE ROCK PILE NOTES:

1. PLACE ROCKS SO THEY ARE LOOSELY FITTED TOGETHER BUT STABLE TO PROVIDE FISH HABITAT.
2. COORDINATE PILE PLACEMENT WITH OWNER'S REPRESENTATIVE.

B COBBLE ROCK PILE (SUBMERGED)

1"=4'-0"



D CLEAN GRAVELTREATMENT AT HABITAT SHELF

1"=4'-0"

Sandy Davenport
LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

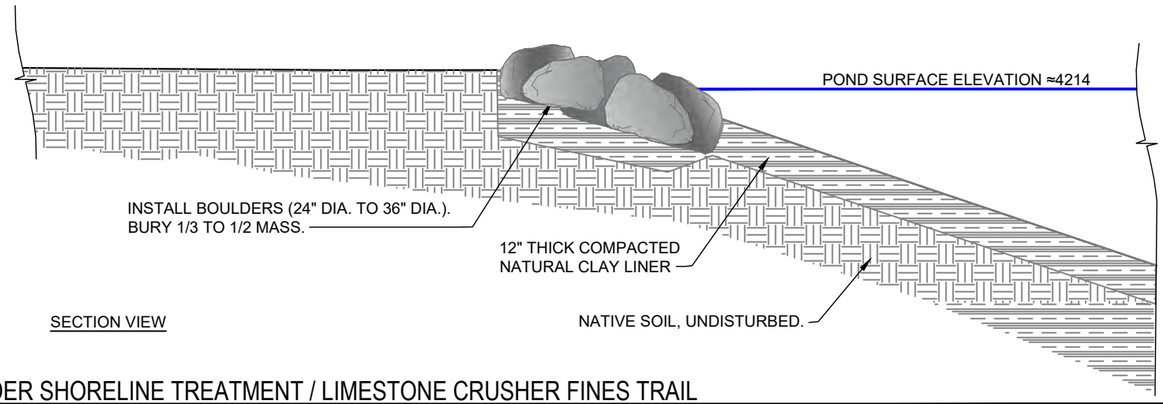
SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 511

BINDING ORDER

BOULDER SHORELINE TREATMENT NOTES:

1. USE GRANITE BOULDERS OR AS APPROVED BY OWNER'S REPRESENTATIVE.
2. SET ROCKS SO THEY SIT SECURELY AND ARE FITTED TOGETHER.
3. COORDINATE BOULDER PLACEMENT WITH OWNER'S REPRESENTATIVE.
4. EXTEND BOULDER SHORELINE TREATMENT A MINIMUM 12" ABOVE AND 12" BELOW POND SURFACE ELEVATION.



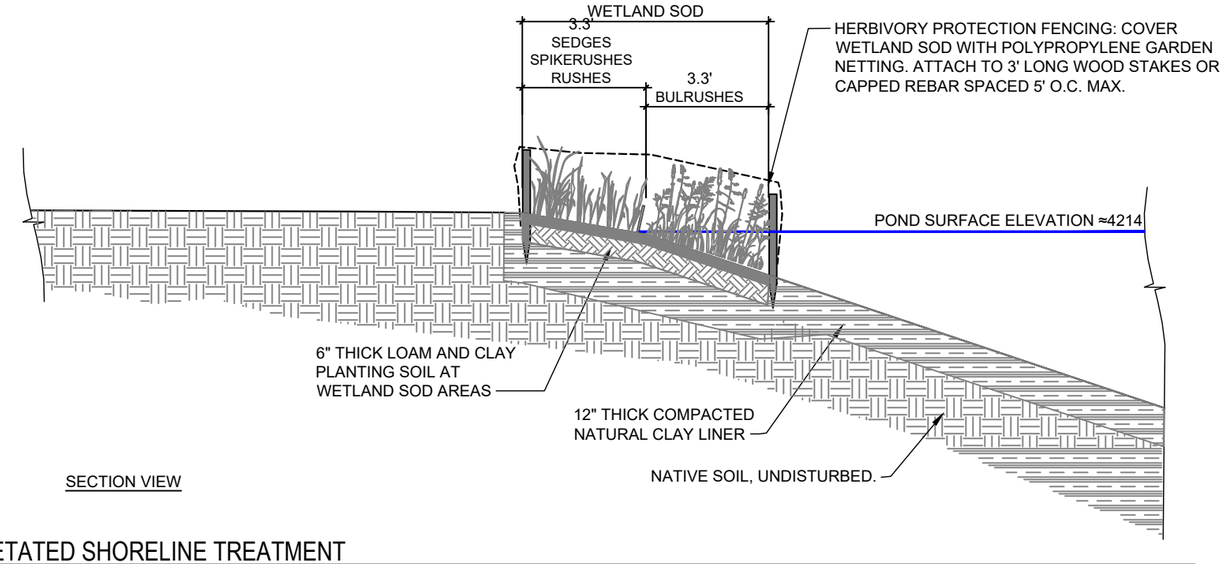
SECTION VIEW

A BOULDER SHORELINE TREATMENT / LIMESTONE CRUSHER FINES TRAIL

1"=4'-0"

VEGETATED SHORELINE TREATMENT NOTES:

1. WETLAND SOD: PRE-VEGETATED (NATIVE) COIR EROSION CONTROL MAT. EACH MAT = 3.3' (1M) WIDE BY 16.4' (5M) LONG. COIR MAT THICKNESS: 3-4 INCHES. AVAILABLE FROM NORTH FORK NATIVE PLANTS (PHONE# 1-877-444-6996)



SECTION VIEW

B VEGETATED SHORELINE TREATMENT

1"=4'-0"

PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

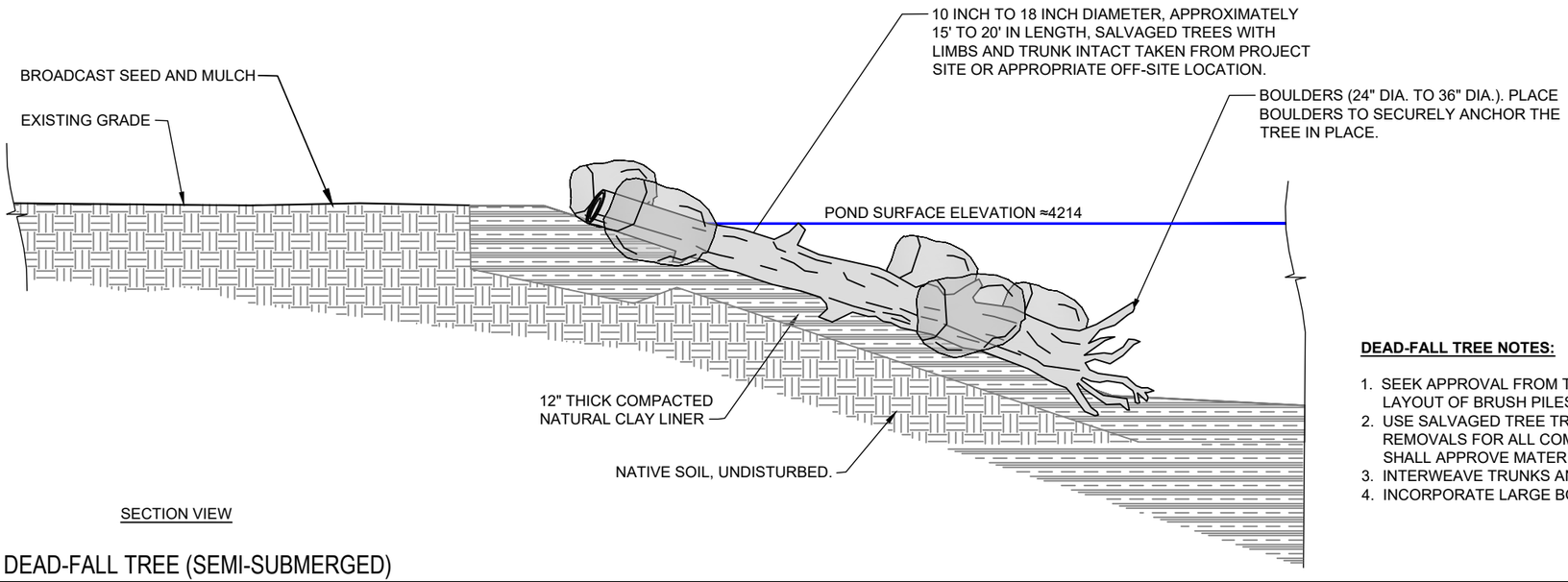
SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 512

BINDING ORDER

Sandy Davenport

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH



SECTION VIEW

A DEAD-FALL TREE (SEMI-SUBMERGED)

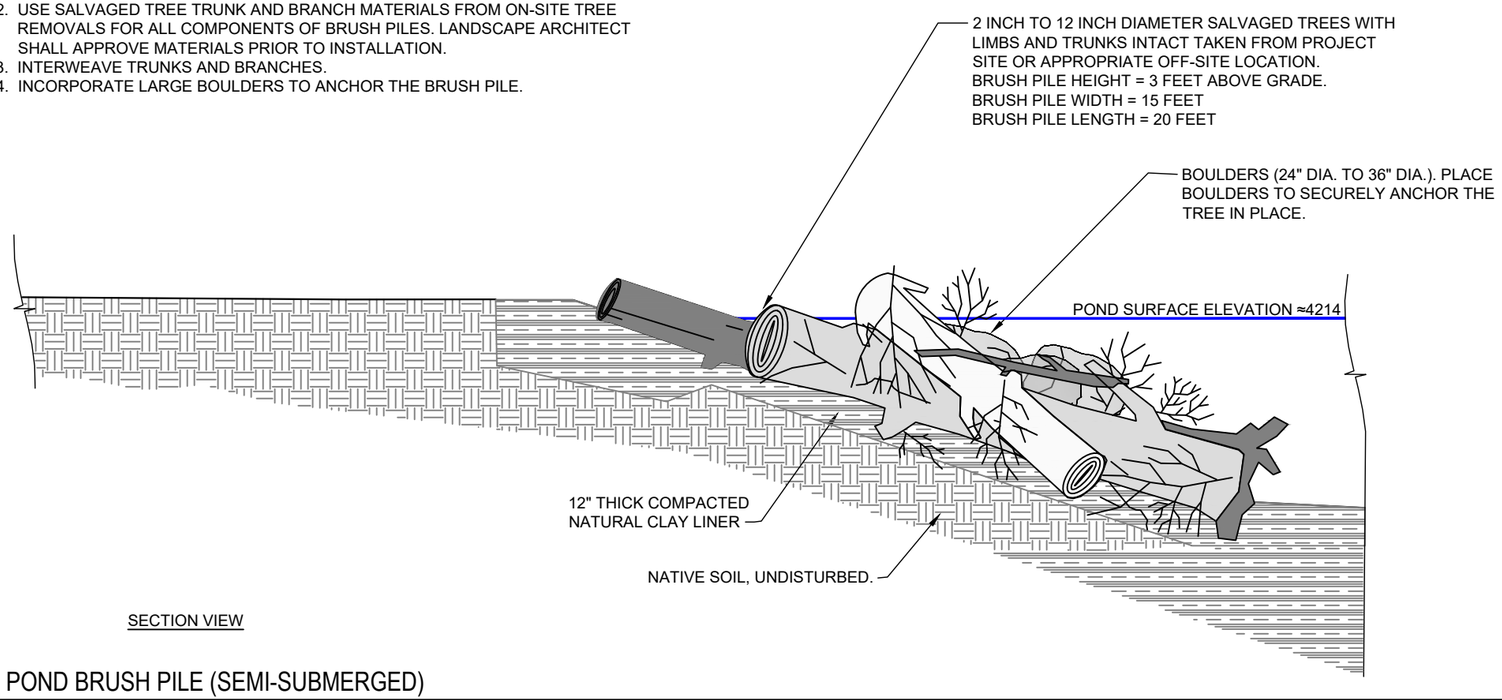
1"=4'-0"

DEAD-FALL TREE NOTES:

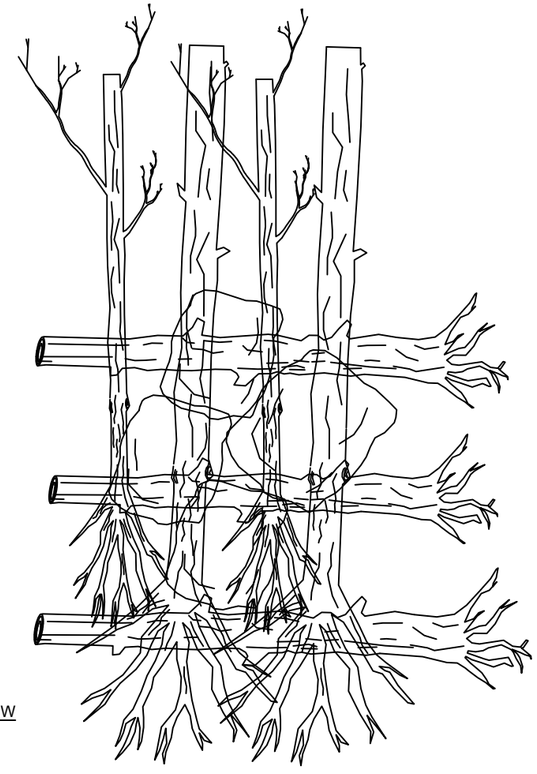
1. SEEK APPROVAL FROM THE PROJECT LANDSCAPE ARCHITECT FOR PROPOSED LAYOUT OF BRUSH PILES PRIOR TO PLACEMENT.
2. USE SALVAGED TREE TRUNK AND BRANCH MATERIALS FROM ON-SITE TREE REMOVALS FOR ALL COMPONENTS OF BRUSH PILES. LANDSCAPE ARCHITECT SHALL APPROVE MATERIALS PRIOR TO INSTALLATION.
3. INTERWEAVE TRUNKS AND BRANCHES.
4. INCORPORATE LARGE BOULDERS TO ANCHOR THE BRUSH PILE.

POND BRUSH PILE NOTES:

1. SEEK APPROVAL FROM THE PROJECT LANDSCAPE ARCHITECT FOR PROPOSED LAYOUT OF BRUSH PILES PRIOR TO PLACEMENT.
2. USE SALVAGED TREE TRUNK AND BRANCH MATERIALS FROM ON-SITE TREE REMOVALS FOR ALL COMPONENTS OF BRUSH PILES. LANDSCAPE ARCHITECT SHALL APPROVE MATERIALS PRIOR TO INSTALLATION.
3. INTERWEAVE TRUNKS AND BRANCHES.
4. INCORPORATE LARGE BOULDERS TO ANCHOR THE BRUSH PILE.



SECTION VIEW



PLAN VIEW

B POND BRUSH PILE (SEMI-SUBMERGED)

1"=4'-0"

Sandy Davenport

LICENSED LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

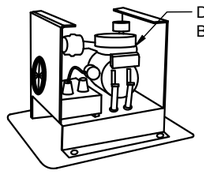
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

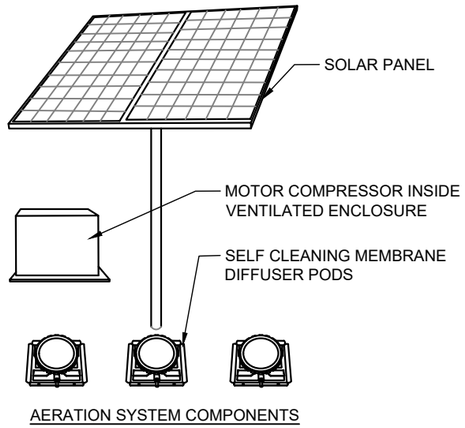
SHEET IDENTIFIER:
DT 513

BINDING ORDER



DC COMPRESSOR WITH BATTERY BACKUP

MOTOR INTERIOR

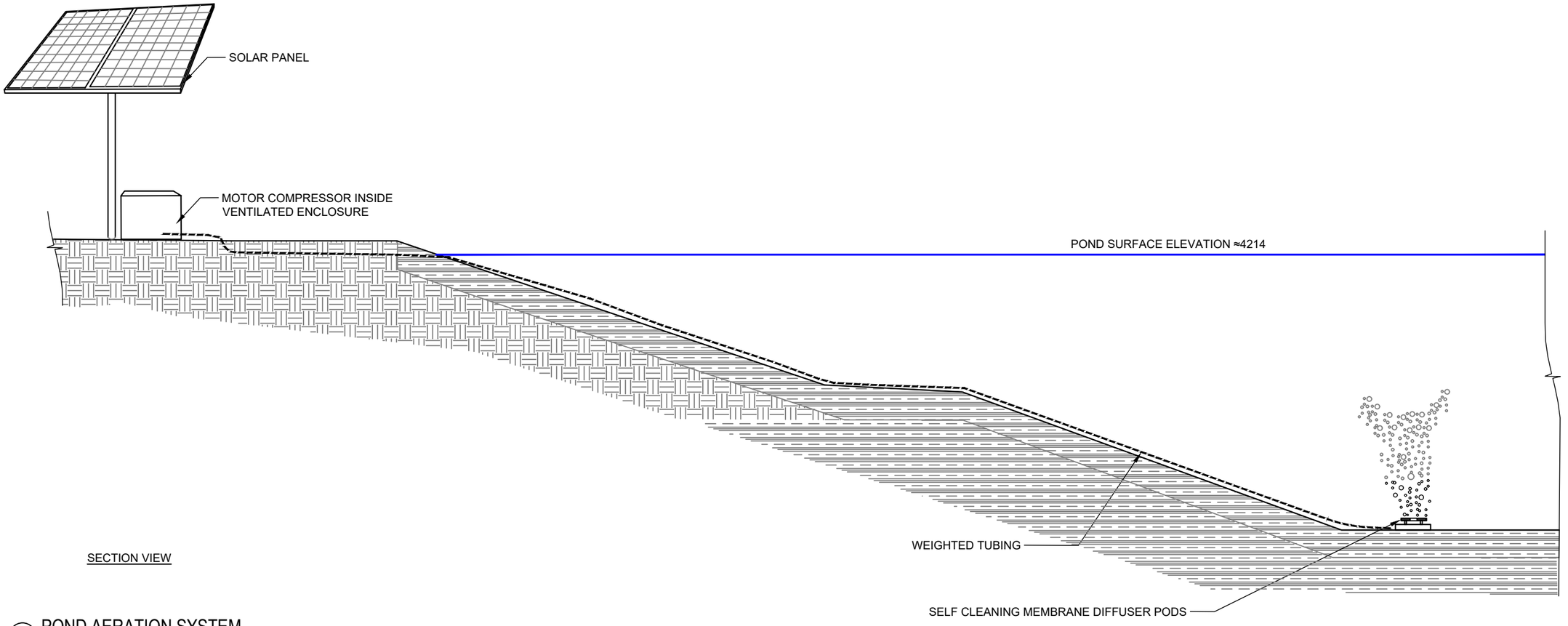


AERATION SYSTEM COMPONENTS

AERATION SYSTEM SPECIFICATIONS	
MODEL	BRITESTAR 3
SOLAR PANEL WITH RACKING	TWO 250W PANELS
MINIMUM SUNLIGHT REQUIRED	20%
DIGITAL 24V BLDC MOTOR	168W
MAX/ RUNNING AMPS	7.0
AIR OUTPUT (CFM)	2.5
MAXIMUM DEPTH	15'-0"
RESTARTS UNDER PRESSURE	✓
POWDER COATED ALUMINUM CABINET	✓
SUPER QUIET OPERATION	✓
AIRSTATION MODEL (QUANTITY)	THREE XL1
INDEPENDENTLY TESTED AIRSTATION	✓
SELF CLEANING MEMBRANE DIFFUSERS	✓

SOLAR AERATION SYSTEM

NTS



SECTION VIEW

A POND AERATION SYSTEM

1"=4'-0"

Sandy Davenport

LANDSCAPE ARCHITECT
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

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Stokes Nature Center

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SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 514

BINDING ORDER

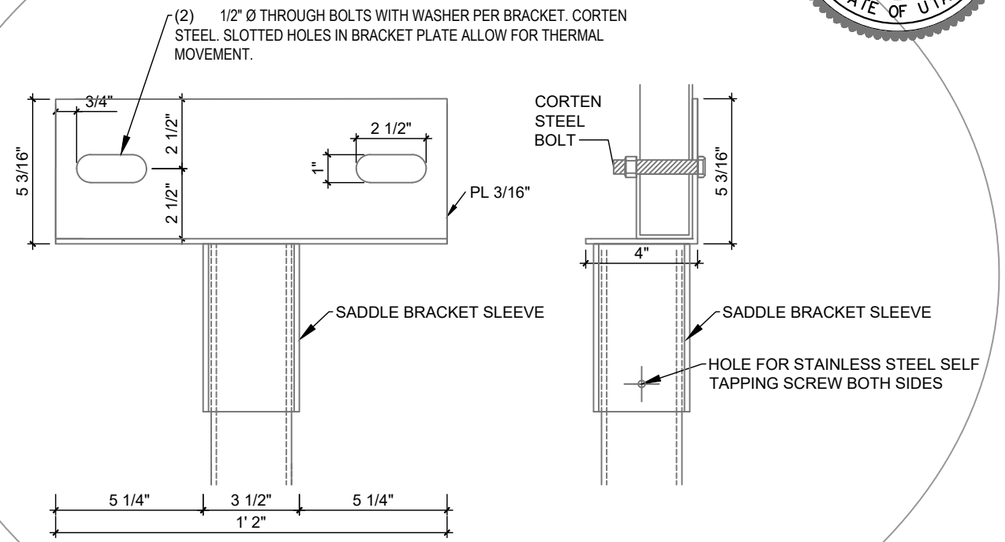
ELEVATED BOARDWALK NOTES:

1. THE MODULAR PREFABRICATED STEEL FRAME BOARDWALK SYSTEM SHALL BE BY WICKCRAFT BOARDWALKS OR APPROVED EQUAL. CONTACT PATRICK WALTERS, PH# 608-244-9177, Patrick@wickcraft.com.
2. ALL MODULAR PREFABRICATED STEEL FRAME STRUCTURE MATERIAL SHALL BE CORTEN STEEL.
3. FRAMES SHALL BE ENGINEERED IN ACCORDANCE TO THE INTERNATIONAL BUILDING CODE STANDARD OF 100 LBS. PER SQUARE FOOT.
4. THE HELICAL PIER NUMBER AND SIZE OF BLADES SHALL BE SO AS TO ACHIEVE APPROPRIATE INSTALLATION TORQUE AND CAPACITY. ALL PIER COMPONENTS SHALL BE HOT DIP ZINC GALVANIZED PER ASTM 123 OR 153. HELICAL PIER INSTALLATION SHOULD BE OBSERVED BY A GEOTECHNICAL ENGINEER TO VERIFY INSTALLATION TORQUE AND MINIMUM DEPTHS. PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO INSTALLATION WORK. THE LOADS SHOWN ON THE PLAN ARE MINIMUM DESIGN LOADS.THE MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED REGARDING THE TORQUE AND BEARING CAPACITY RELATIONSHIP FOR THE PARTICULAR HELICAL PIER SELECTED.
5. COORDINATE BRACKET SLEEVE WITH ELEVATED BOARDWALK MANUFACTURER.

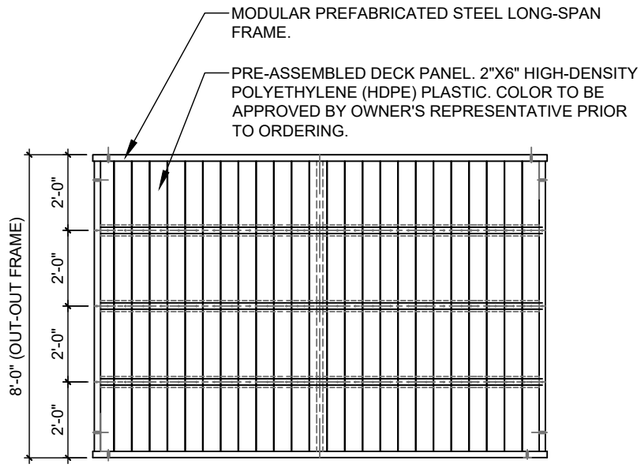
Reaction Table for Helical Pier Design Long Span Frame Width = 8'	
Leg Spacing (ft)	12
Leg Tributary Area (sq ft)	48
Loading per Leg	**(lb)**
Live Load	4800
Dead Load	720
Snow Load	2400
Wind Lateral Pressure	330
Wind Uplift	-960
Max Load Combination Gravity Load per / pile	5520

HELICAL PIER SADDLE CAP NOTES:

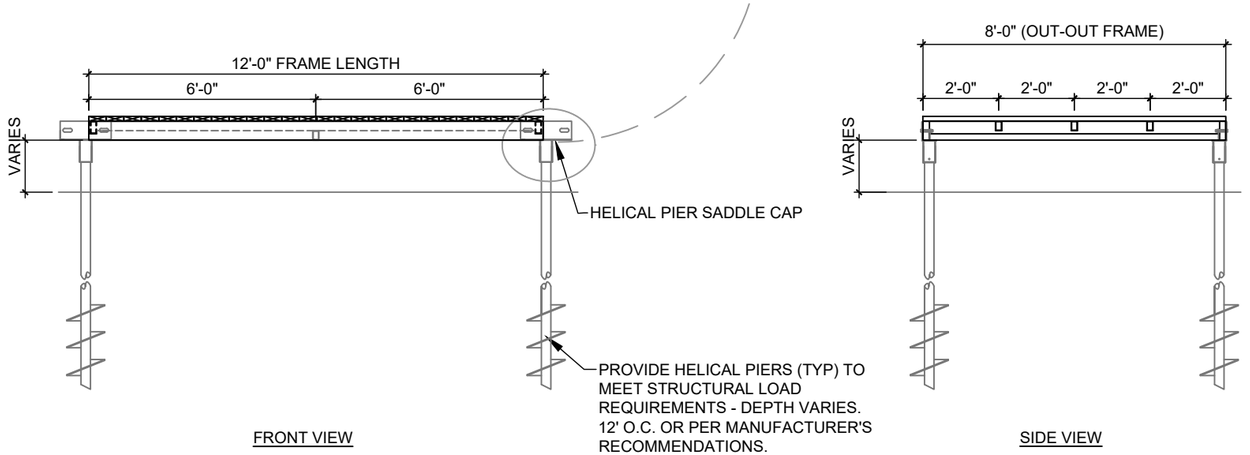
1. ALL PILE CAP MATERIAL TO BE CORTEN STEEL.



FRONT VIEW SIDE VIEW



TOP VIEW



FRONT VIEW SIDE VIEW

A ADD ALTERNATE #4: ELEVATED BOARDWALK TRAIL: 8' WIDE MODULAR PREFABRICATED STEEL FRAME SYSTEM

1"=4'-0"

Sandy Davenport
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LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

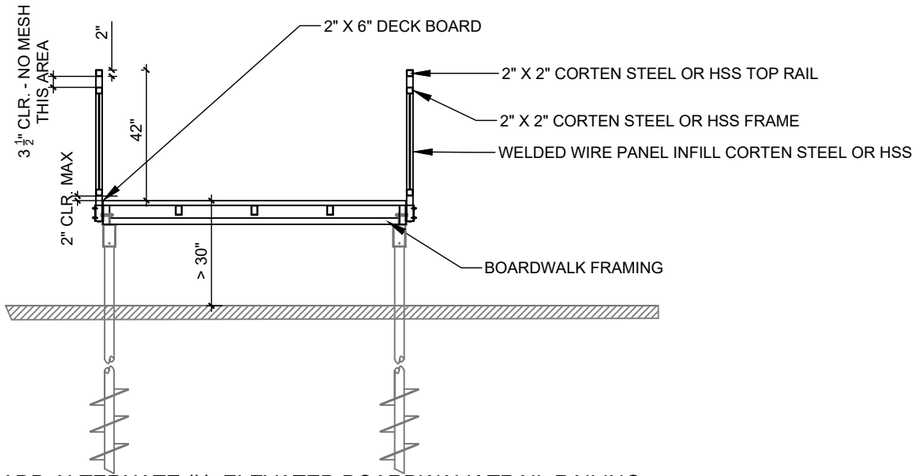
SHEET TITLE:
SITE DETAILS

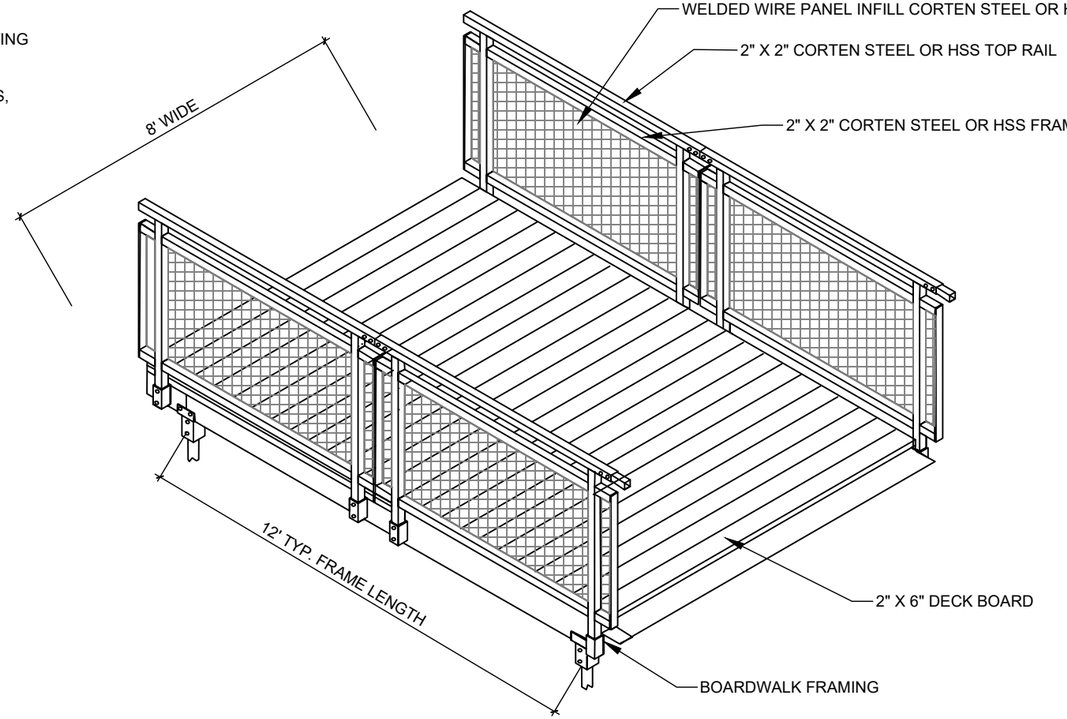
SHEET IDENTIFIER:
DT 515

BINDING ORDER

ELEVATED BOARDWALK RAILING NOTES:

1. RAILING SHALL BE REQUIRED AT ALL LOCATIONS WHERE BOARDWALK DECKING HEIGHT EXCEEDS 30 INCHES ABOVE THE EXISTING GRADES.
2. THE METAL STEEL FRAME RAILING SHALL BE BY WICKCRAFT BOARDWALKS OR APPROVED EQUAL. CONTACT PATRICK WALTERS, PH# 608-244-9177, Patrick@wickcraft.com.
3. ALL RAILING STRUCTURE MATERIAL SHALL BE CORTEN STEEL.
4. RAILINGS SHALL BE ENGINEERED IN ACCORDANCE TO THE INTERNATIONAL BUILDING CODE STANDARD..



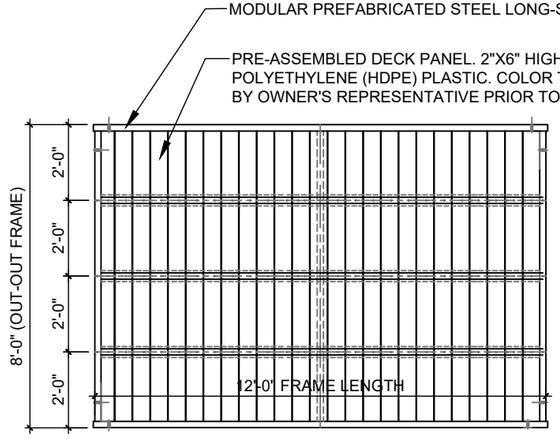


A ADD ALTERNATE #4: ELEVATED BOARDWALK TRAIL RAILING

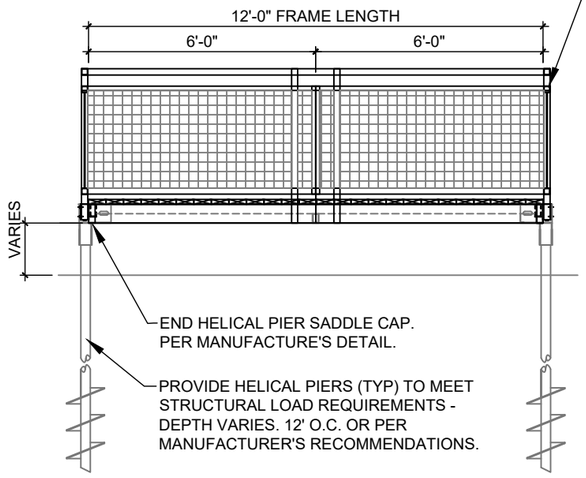
1"=4'-0"

VIEWING PLATFORM NOTES:

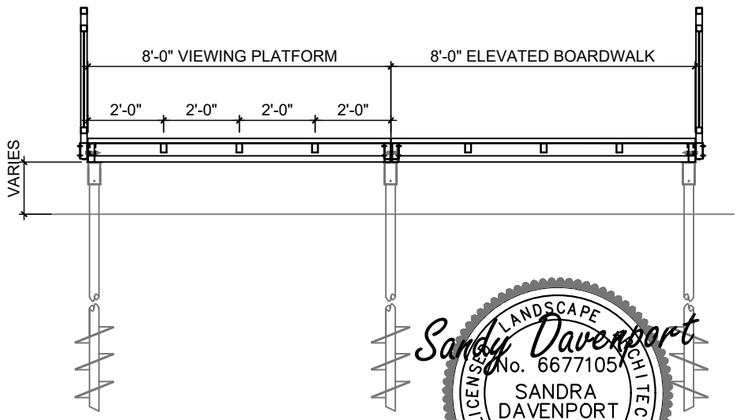
1. THE MODULAR PREFABRICATED STEEL FRAME VIEWING PLATFORM AND RAILINGS SHALL BE BY WICKCRAFT BOARDWALKS OR APPROVED EQUAL. CONTACT PATRICK WALTERS, PH# 608-244-9177, Patrick@wickcraft.com.
2. ALL MODULAR PREFABRICATED STEEL FRAME VIEWING PLATFORM AND RAILING STRUCTURE MATERIAL SHALL BE CORTEN STEEL.
3. VIEWING PLATFORMS AND RAILINGS SHALL BE ENGINEERED IN ACCORDANCE TO THE INTERNATIONAL BUILDING CODE STANDARD OF 100 LBS. PER SQUARE FOOT.



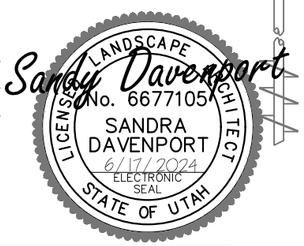
TOP VIEW



FRONT VIEW



SIDE VIEW



B ADD ALTERNATE #4: ELEVATED BOARDWALK TRAIL VIEWING PLATFORM

1"=4'-0"

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

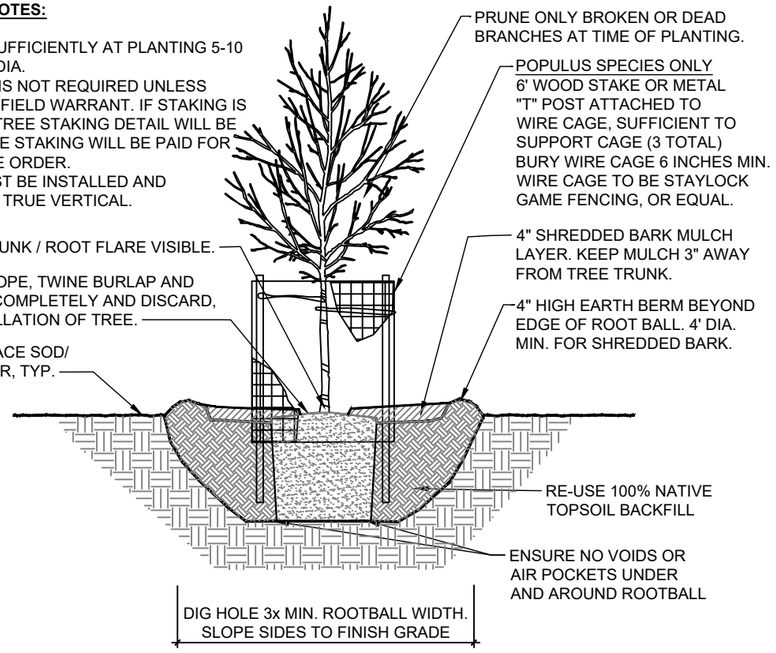
SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 516

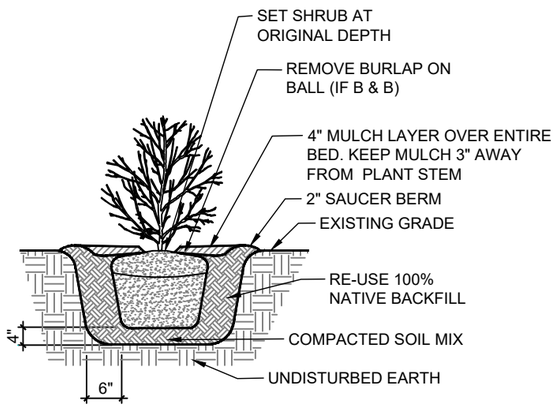
BINDING ORDER

TREE PLANTING NOTES:

1. WATER TREE SUFFICIENTLY AT PLANTING 5-10 GAL./1" TRUNK DIA.
2. TREE STAKING IS NOT REQUIRED UNLESS CONDITIONS IN FIELD WARRANT. IF STAKING IS NECESSARY A TREE STAKING DETAIL WILL BE PROVIDED. TREE STAKING WILL BE PAID FOR WITH A CHANGE ORDER.
3. ALL TREES MUST BE INSTALLED AND MAINTAINED AT TRUE VERTICAL.



A TREE PLANTING DETAIL (ADD ALTERNATE #3)
N.T.S.



B SHRUB PLANTING DETAIL (ADD ALTERNATE #3)
N.T.S.

SNC NATIVE SEED MIX

SEED NO.	SPECIES NAME		Number of seeds per pound	BROADCAST SEED		
	BOTANICAL NAME	COMMON NAME		Pounds of pure live seed per acre	Percent of mix	Seeds per square foot
Grasses						
1	*Aristida purpurea*	Purple three-awn	250,000	2	5.75%	11
2	*Elymus elymoides*	Bottlebrush squirreltail	192,000	2	4.42%	9
3	*Distichlis spicata stricta*	Inland saltgrass	518,000	0.50	2.98%	6
4	*Sporobolus cryptandrus*	Sand dropseed	5,300,000	0.10	6.10%	12
5	*Sporobolus airoides*	Alkali sacaton	1,750,000	0.10	2.01%	4
6	*Hesperostipa comata*	Needle and thread grass	115,000	3	3.97%	8
7	*Elymus trachycaulum*	Slender wheatgrass	135,000	3.5	5.43%	11
8	*Poa secunda (sandbergii)*	Sandberg bluegrass	1,046,960	0.5	6.02%	12
9	*Pseudoroegneria spicata*	Bluebunch wheatgrass	125,680	4	5.78%	12
Forbs and Shrubs						
10	*Aquilegia coerulea*	Rocky Mountain Columbine	365,000	1	4.20%	8
11	*Cleome serrulata*	Rocky Mountain Beeplant	65,900	3	2.27%	5
12	*Linum lewisii* 'Appar'	Appar blue flax	294,848	2	6.78%	14
13	*Erigeron speciosus*	Aspen daisy	1,600,000	0.5	9.20%	18
14	*Gaillardia aristata*	Blanket flower	132,000	0.5	0.76%	2
15	*Hedysarum boreale*	Utah Sweetvetch	46,000	3	1.59%	3
16	*Heliomeris multiflora*	Showy goldeneye	1,055,000	0.5	6.07%	12
17	*Lupinus argenteus*	Silvery lupine	126,000	1	1.45%	3
18	*Penstemon strictus*	Rocky Mountain Penstemon	285,000	1	3.28%	7
19	*Penstemon eatonii*	Firecracker Penstemon	325,000	1	3.74%	7
20	*Sphaeralcea coccinea*	Scarlet Globemallow	500,000	1	5.75%	11
21	*Sphaeralcea grossulariifolia*	Gooseberry Globemallow	500,000	1	5.75%	11
22	*Artemisia ludoviciana*	Prairie sage	32,767	2	0.75%	2
23	*Ericameria nauseosus*	Rubber rabbitbrush	400,000	1	4.60%	9
24	*Shepherdia canadensis*	Buffaloberry	59,215	2	1.36%	3
	TOTAL			**36.2**	**100.00%**	**200**

C NATIVE SEED MIX
N.T.S.

Sandy Davenport
LICENSED LANDSCAPE ARCHITECT
License No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

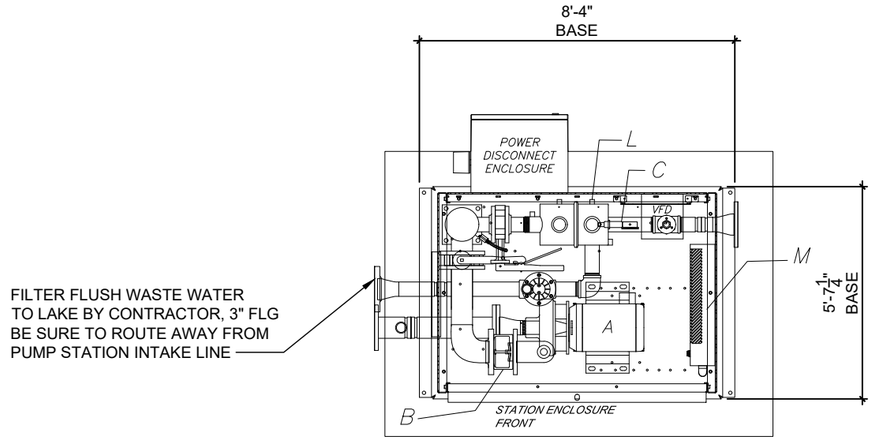
SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 517

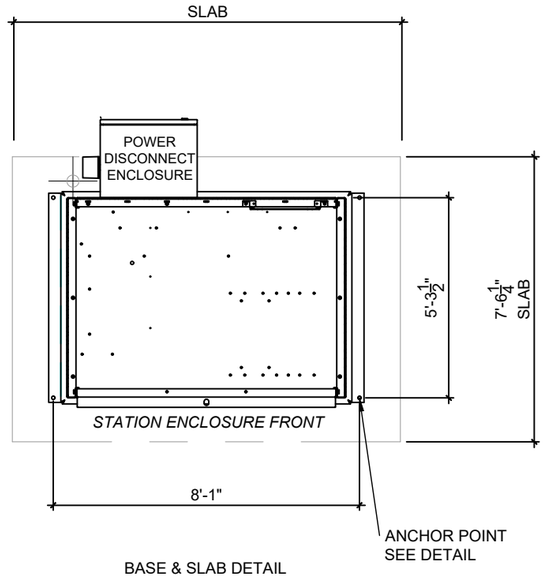
BINDING ORDER

PUMP STATION SPECIFICATIONS:
NAME: STOKES NATURE PRESERVE
STATION MODEL:
WMLV-5000-7A-5-240-1-35-50
STATION TOTAL PERFORMANCE: 35 GPM
@ 50 PSI
MAXIMUM LIFT: 5 FT
PUMP HORSEPOWER:
PUMP: NO.1 5HP (3600 RPM)
CHECK VALVE SIZES:
PUMP: NO.1 3"
ISOLATION VALVE SIZES:
DISCHARGE ISOLATION VALVE SIZE: 3"
DISCHARGE MANIFOLD SIZE: 2"
POWER REQUIREMENTS: 240VOLTS,
60HERTZ, 1PHASE, 40FLA (EST.)
EXHAUST FAN REQUIREMENTS:
STANDARD FAN

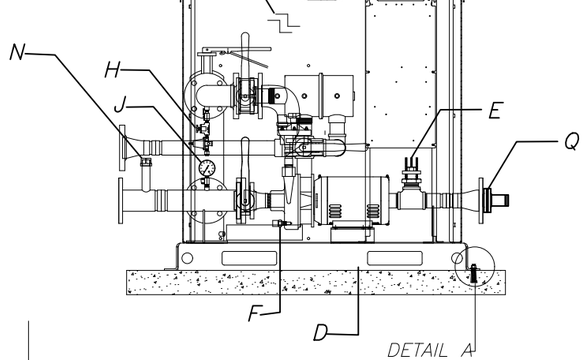
STATION COMPONENTS:
A PUMP AND MOTOR
B CHECK VALVE
C PRESSURE TRANSDUCER WITH GAUGE
D MARINE GRADE ALUMINUM BASE (UNPAINTED)
E FLOW SENSOR
F TEMP SENSOR
G STATION FAN HOOD MOUNTED
H POSITIVE PRIME ASSEMBLY
I MARINE GRADE ALUMINUM ENCLOSURE (UNPAINTED)
J PSI / VAC GAUGE LIQUID FILLED
K N/A
L MTF-2 AUTOMATIC FILTER W/ 200 MICRON SCREEN
M 500 WATT THERMOSTATICALLY CONTROLLED HEATER
N FILL PORT
O INTERNAL SOUND DAMPENING MATERIAL
P HDPE INTAKE PIPE STAND W/ CHECK VALVE
Q 3" MAXIMUM H2O MAGNET UNIT



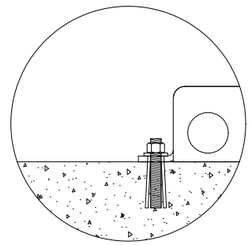
PLAN VIEW



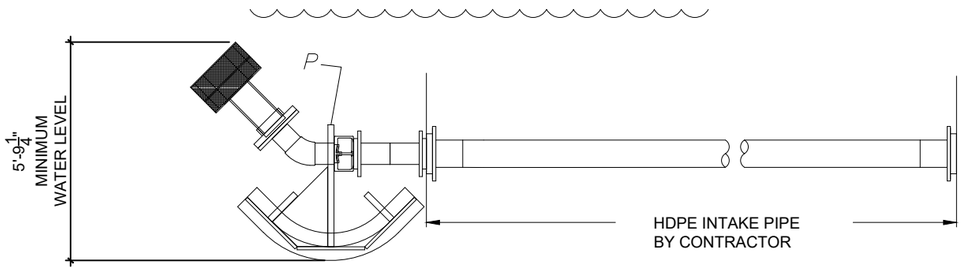
BASE & SLAB DETAIL



ELEVATION VIEW



DETAIL A
CONCRETE ANCHOR
BOLTS (x4) LOCATIONS



A PUMP STATION (ADD ALTERNATE #2)
N.T.S.



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WATERTRONICS

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

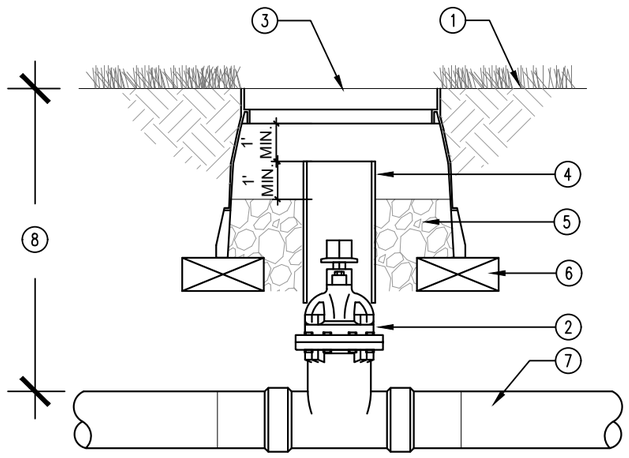
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 518

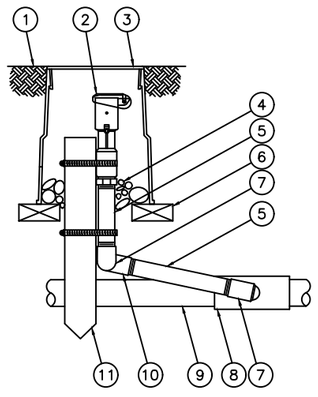
BINDING ORDER



1. SET FLUSH TO FINISH GRADE/TOP OF MULCH
2. ISOLATION VALVE (SEE IRRIGATION SCHEDULE) BUTT-FUSED TO HDPE MAINLINE
3. 10" ROUND HEAVY-DUTY VALVE BOX
4. SCH 40 PVC SLEEVE (DIA. & LENGTH AS REQUIRED). NOTCH OVER VALVE FOR STABILITY.
5. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED AGGREGATE
6. BRICK FOUNDATION
7. HDPE MAINLINE PIPING (SIZE AS PER PLAN)
8. SEE TRENCHING AND SLEEVING DETAIL FOR TRENCH DEPTHS

A ISOLATION VALVE (ADD ALTERNATE #2)

N.T.S.



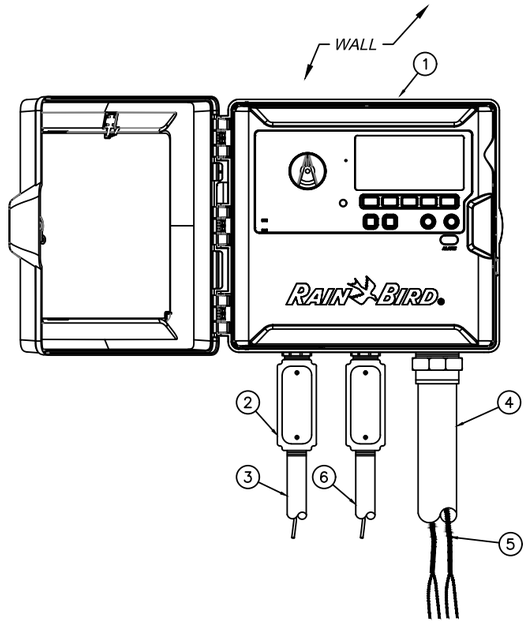
1. FINISH GRADE/TOP OF MULCH
2. QUICK-COUPLING VALVE: RAIN BIRD MODEL 44LRC
3. VALVE BOX WITH COVER: PURPLE
4. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
5. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
6. BRICK (1 OF 2)
7. PVC SCH 40 STREET ELL
8. PVC SCH 40 TEE OR ELL
9. HDPE MAINLINE PIPING (SIZE AS PER PLAN)
10. PVC SCH 40 ELL
11. 2" x 2" REDWOOD STAKE WITH STAINLESS STEEL GEAR CLAMPS OR EQUIVALENT SUPPORT SYSTEM

NOTE:

FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.

B QUICK COUPLER (ADD ALTERNATE #2)

N.T.S.

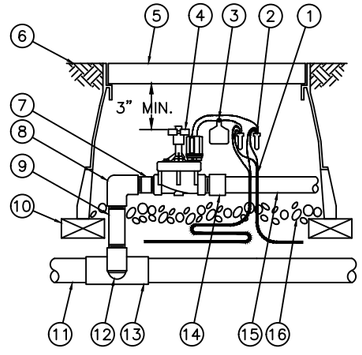


1. TWO-WIRE CONTROLLER: RAIN BIRD ESP-LXIVM IN PLASTIC CABINET WITH WALL MOUNT. INSTALL CONTROLLER AND CABINET ON WALL PER MANUFACTURER'S RECOMMENDATIONS.
2. JUNCTION BOX
3. 1-INCH CONDUIT AND FITTINGS FOR POWER SUPPLY WIRE
4. 2-INCH CONDUIT AND FITTINGS FOR TWO-WIRE CABLE
5. MAXICABLE TWO-WIRE PATH TO FIELD DEVICES USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH.
6. 1-INCH CONDUIT AND FITTINGS FOR GROUND WIRE. ONLY FOR OUTDOOR INSTALLATIONS.

NOTES:
1. ESP-LXIVM CONTROLLER HAS 60 AVAILABLE STATIONS.
2. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 4O PVC CONDUIT FOR BELOW GRADE CONDITIONS.
3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS. IF CONTROLLER IS MOUNTED INDOORS, USE POWER SUPPLY GROUND.

C ESP-LXIVM/PRO TWO-WIRE CONTROLLER WALL MOUNTED (ADD ALTERNATE #2)

N.T.S.



NOTE:
1. COIL AN ADDITIONAL 3–FEET OF TWO–WIRE CABLE IN VALVE BOX FOR EASY SERVICING.

1. TWO-WIRE CABLE
2. WATERPROOF SPLICE CONNECTION RAIN BIRD WC20 (TWO REQUIRED)
3. ID TAG
4. REMOTE CONTROL VALVE: RAIN BIRD PEB/PESB/PESB-R WITH IVM-SOL
5. VALVE BOX WITH COVER, PRRPLE
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 CLOSE NIPPLE
8. PVC SCH 80 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. BRICK (1 OF 4)
11. HDPE MAINLINE PIPE
12. SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 80 ELL
13. PVC SCH 80 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

D IRRIGATION CONTROL VALVE (ADD ALTERNATE #2)

N.T.S.

LICENSED LANDSCAPE ARCHITECT
Sandy Davenport
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

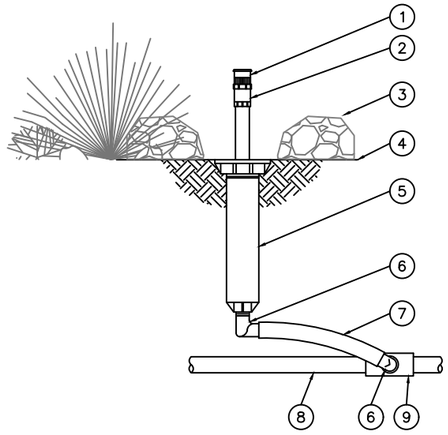
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 519

BINDING ORDER

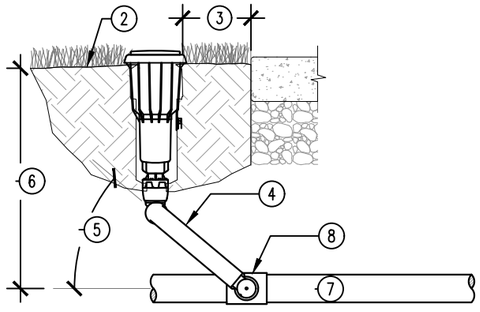


1. PRESSURE COMPENSATING FULL-CIRCLE BUBBLER: RAIN BIRD 1408
2. PLASTIC ADAPTER: RAIN BIRD MODEL PA-80
3. PLANT MATERIAL / ROCK MULCH
4. FINISH GRADE/TOP OF MULCH
5. POP-UP SPRAY SPRINKLER: RAIN BIRD 1804
6. 1/2-INCH MALE NPT x .490-INCH BARB ELBOW: RAIN BIRD MODEL SBE-050
7. SWING PIPE, 12-INCH LENGTH: RAIN BIRD MODEL SP-100
8. PVC LATERAL PIPE
9. PVC SCH 40 TEE OR ELL

A PRESSURE COMPENSATING FULL CIRCLE BUBBLER (ADD ALTERNATE #2)

N.T.S.

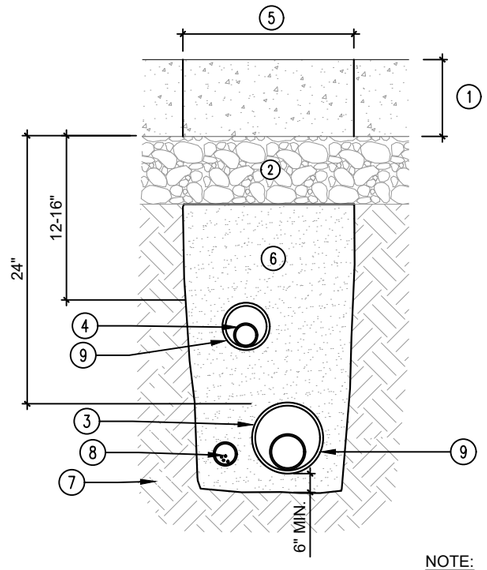
NOTE:
1. SWING PIPE SHALL SLOPE TOWARDS LATERAL PIPE FOR COMPLETE DRAINAGE.



1. POP-UP IMPACT ROTOR SPRINKLER - SEE IRRIGATION SCHEDULE
2. SET HEAD FLUSH WITH FINISH GRADE/TOP OF MULCH
3. ALL ROTOR HEADS TO BE PLACED 2" CLEAR OF ALL HARDSCAPE SURFACES AND 2'-0" FROM BUILDINGS
4. SCH. 80 THREADED NIPPLE W/ MARLEX STREET ELBOWS
5. SWING JOINT ARM INSTALLED AT ANGLE BETWEEN 30 AND 45 DRG. OF LATERAL PIPE. USE MALE THREAD MODEL
6. SEE TRENCHING DETAIL FOR DEPTH
7. LATERAL LINE, SIZE AS NOTED ON PLAN. 2" AND LARGER PIPE TO BE HDPE, 1.5" AND SMALLER TO BE PVC
8. PVC SCH. 40 SxSxT TEE/ELL OR BUTT-FUSED HDPE TEE

B IMPACT ROTOR POP-UP SPRINKLER (ADD ALTERNATE #2)

N.T.S.

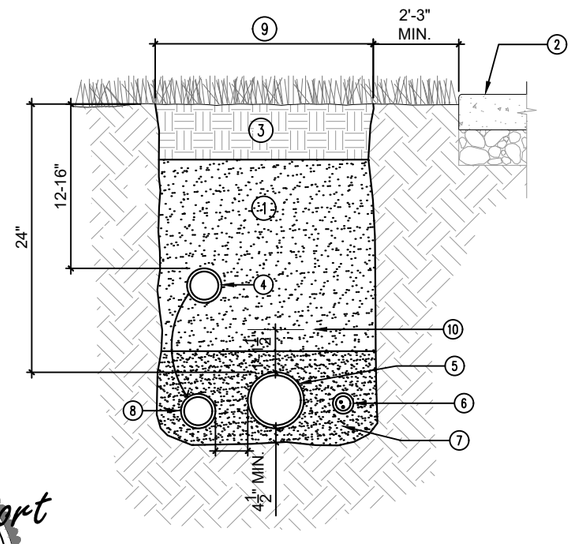


1. HARDSCAPE PAVING
2. COMPACTED AGGREGATE SUB-BASE
3. MAIN LINE PIPE
4. LATERAL LINE PIPE
5. SAWCUT & PATCH HARDSCAPE PAVING WIDTH AS REQUIRED
6. COMPACTED BACKFILL FREE FROM ROCKS GREATER THAN 1" IN DIA.
7. SUB-GRADE COMPACTED TO 95% (TYP.)
8. CONTROL WIRES 6" TO EITHER SIDE OR 6" UNDER MAINLINE.
9. SLEEVING:
   - SLEEVES SHALL BE 2" LARGER THAN PIPE
   - SLEEVES SHALL BE PVC SCH. 40

NOTE:
1. SETTLE ALL TRENCHES WITH WATER PRIOR TO INSTALLATION OF TOPSOIL.
2. WHEN MULTIPLE PIPES OCCUR IN ONE TRENCH, MAINTAIN 6" SEPARATION BETWEEN PIPES AND PLACE IN SEPARATE SLEEVES FOR EACH.
3. EXTEND ALL SLEEVING 12" MIN. BEYOND EDGE OF PAVING.

C IRRIGATION PIPE SLEEVING (ADD ALTERNATE #2)

N.T.S.



1. CLEAN BACKFILL- SEE SPECS.
2. ADJACENT HARD SURFACE OR STRUCTURE
3. TOPSOIL FREE FROM ROCKS GREATER THAN 1" DIAMETER
4. NON-PRESSURE LATERAL LINE
5. PRESSURE MAIN LINE
6. INSTALL ELECTRICAL WIRING IN 1" HDPE CONDUIT.
7. MORTAR SAND BEDDING 2" BELOW AND TO EITHER SIDE OF PIPE AND ELECTRICAL WIRING.
8. WHERE LATERAL AND MAIN LINES ARE PLACED IN THE SAME TRENCH, MAKE TRENCH WIDE ENOUGH TO MIN. 12" HORIZONTAL SEPARATION BETWEEN MAIN LINE AND LATERAL LINE PIPING AS WELL AS CONTROL WIRING (NO VERTICAL SPACING ALLOWED).
9. IF TRENCHING THROUGH EXISTING TURF, REPLACE SOD PER SPECIFICATIONS
10. TRACER WIRE.

NOTE:
1. SETTLE ALL TRENCHES WITH WATER PRIOR TO INSTALLATION OF TOPSOIL.
2. SEE SLEEVING DETAIL FOR TRENCHING IN PAVED AREAS.

D IRRIGATION PIPE TRENCHING (ADD ALTERNATE #2)

N.T.S.

LICENSED LANDSCAPE ARCHITECT
Sandy Davenport
No. 6677105
SANDRA DAVENPORT
6/17/2024
ELECTRONIC SEAL
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE DETAILS

SHEET IDENTIFIER:
DT 520

BINDING ORDER

GENERAL NOTES

1. EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS BY CONTACTING BLUE STAKES AT 1-800-662-4111 OR 811 AND OTHER APPLICABLE UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL POT-HOLE AND LOCATE UTILITIES AT THE CONTRACTOR'S EXPENSE WHEN REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR COSTS AND REPAIRS DUE TO DAMAGE OF EXISTING UTILITIES. ALL UTILITIES MAY NOT BE SHOWN ON PLANS.

2. CONTRACTOR SHALL POTHOLE ALL GAS SERVICES, WATER LINES, COMMUNICATIONS LINES, SEWER LINES, AND POSSIBLE INTERFERING WATER SERVICES IN ORDER TO VERIFY ADEQUATE CLEARANCE TO THE NEW CONSTRUCTION. THIS SHALL BE DONE AT THE BEGINNING OF THE PROJECT IN ORDER TO PROVIDE UTILITY OWNERS ADEQUATE TIME TO RELOCATE SERVICES IF REQUIRED.

3. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN, ADEQUATE TRAFFIC CONTROL, SIGNING, BARRICADING, AND PEDESTRIAN DIRECTION THROUGH AND AROUND THE CONSTRUCTION WORK ZONE IN COMPLIANCE WITH THE LATEST EDITION OF THE MUTCD AND UDOT REQUIREMENT.

4. CONTRACTOR SHALL REPAIR DISTURBED SURFACES TO EXISTING CONDITIONS, INCLUDING, BUT NOT LIMITED TO, UTILITY LINES AND SERVICES, ASPHALT REPAIR, DRIVEWAYS, PLANTER STRIPS, SPRINKLER AND IRRIGATION SYSTEMS, IRRIGATION DITCHES, AND GENERAL CLEANUP EXCEPT WHERE INSTRUCTED IN WRITING OTHERWISE.

5. ALL UTILITIES SHALL BE KEPT IN WORKING ORDER EXCEPT FOR THE MINIMUM TIME NEEDED FOR EXCAVATION, TRENCHING, CONNECTIONS, ETC.

6. APPROVAL FROM THE PUBLIC WORKS DIRECTOR IS REQUIRED PRIOR TO WATER SHUT-DOWNS IF REQUIRED TO COMPLETE THE WORK. ALL AFFECTED ENTITIES AND PROPERTY OWNERS SHALL BE NOTIFIED 24 HOURS PRIOR TO APPROVED SHUTDOWNS.

7. APWA 2017 STANDARD SPECIFICATIONS AND DRAWINGS ARE THE ESTABLISHED STANDARD FOR THIS WORK. CONTRACTOR IS REQUIRED TO PROCURE A COPY OF APWA 2017 STANDARD SPECIFICATIONS AND DRAWINGS FOR USE IN THE PROJECT. AVAILABLE AT UTAH LTAP CENTER, UTAH STATE UNIVERSITY, PHONE 435-797-2931.

CONSTRUCTION NOTES

SURVEY AND CONSTRUCTION STAKING

1. OWNER WILL PROVIDE BENCHMARK LOCATIONS FOR THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONSTRUCTION STAKING FOR THE PROJECT. CAD FILE AVAILABLE AFTER RECEIPT OF A SIGNED CAD RELEASE FORM.

2. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS PRIOR TO COMMENCING THE WORK AND SHALL FIELD-VERIFY ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION.

PIPE AND FITTING MATERIALS

1. ALL PVC/PE/HDPE PIPE, INCLUDING WATER SERVICE CONNECTIONS SHALL INCLUDE A #12 TRACER WIRE ATTACHED TO THE TOP OF THE PIPE.

2. ALL POLYETHYLENE TUBING (3/4" THROUGH 3") SHALL BE PE 4710 DR9, MANUFACTURED ACCORDING TO ASTM D3350 AND AWWA C901.

3. DISINFECTION OF WATER LINE SHALL BE ACCOMPLISHED BY CHLORINE SOLUTION PLACED INTO THE SERVICE LINE OR OTHER APPROVED METHOD.

4. PVC SEWER PIPE TO BE SDR 35 MANUFACTURED ACCORDING TO ASTM D3034.

5. CAUTION SHALL BE USED WHEN INSTALLING PVC PIPELINE SUCH THAT EACH PIPE SEGMENT IS NOT INSERTED FURTHER INTO THE RECEIVING BELL THAN THE MARK SHOWN THEREON. CONTRACTOR SHALL REMOVE AND REWORK PIPE SEGMENTS THAT ARE SEATED BEYOND THE SAID MARK. PIPE SHALL BE ASSEMBLED PER MANUFACTURER'S RECOMMENDATIONS.

6. ALL FITTING HARDWARE SHALL BE COATED WITH NSF61 APPROVED GREASE AND ENTIRE FITTING SHALL BE COVERED WITH POLYETHYLENE PLASTIC.

GENERAL CONSTRUCTION REQUIREMENTS

1. CONTRACTOR SHALL FIELD VERIFY ALL PIPE LENGTHS AND CONNECTION ANGLES PRIOR TO CONSTRUCTION OF JOINTS.

2. ALL MATERIALS WHICH MAY COME IN CONTACT WITH DRINKING WATER SHALL BE ANSI-CERTIFIED TO MEET OR EXCEED NSF STANDARD 61, AND SHALL BE STAMPED THEREON TO INDICATE SUCH CERTIFICATION.

3. CONTRACTOR SHALL COVER AND EFFECTIVELY SEAL ALL OPEN ENDS OF PIPELINES AT THE END OF EACH DAY'S WORK.

4. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST INTERNATIONAL BUILDING CODE AND LOCAL BUILDING CODES, AND SHALL BE CONSISTENT WITH COMMON CONSTRUCTION PRACTICES OF THE TRADES.

5. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTING PROJECT. ALL UTILITY LOCATIONS SHOWN ARE APPROXIMATE, EXCEPT AS NOTED.

6. ANY CONTRACTOR-CAUSED DAMAGE TO UTILITY AND/OR SERVICE LINES, SHOWN OR NOT SHOWN ON THE PLANS, SHALL BE REPAIRED OR REPLACED AT NO COST TO THE OWNER.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK IN THE PROJECT AREA.

RESTORATION OF SURFACE IMPROVEMENTS

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND THE RESTORATION OR REPLACEMENT OF ANY IMPROVEMENTS EXISTING ON PUBLIC OR PRIVATE PROPERTY AT THE START OF WORK OR PLACED THERE DURING THE PROGRESS OF THE WORK.

2. EXISTING IMPROVEMENTS SHALL INCLUDE BUT NOT TO BE LIMITED TO PERMANENT SURFACING, CURBS, GUTTERS, SIDEWALKS, PLANTED AREAS, DITCHES, DRIVEWAYS, CULVERTS, FENCES, AND WALLS. ALL IMPROVEMENTS SHALL BE RECONSTRUCTED TO EQUAL OR BETTER, IN ALL RESPECTS, THAN THE EXISTING IMPROVEMENTS REMOVED.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RESTORE TO THEIR ORIGINAL CONDITION ALL IRRIGATION CANALS, LEVEES, CULVERTS, GATES, FENCES, DRAINAGE DITCHES, AND ALL SUCH IMPROVEMENTS WHICH ARE CUT OR DISTURBED DURING CONSTRUCTION. TOPSOIL IN FARMING AREAS OR ALONG ROAD EDGES SHALL BE STORED SEPARATE FROM SUBSOIL DURING PIPE TRENCH EXCAVATION. TOPSOIL SHALL BE REPLACED DURING BACKFILL OPERATIONS AS NEARLY AS POSSIBLE TO ITS ORIGINAL CONDITION, THEREBY ASSURING SUITABLE SOIL FOR RESEEDING.

4. UNLESS OTHERWISE DIRECTED, ALL STREET SURFACING, CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS, OR OTHER HARD SURFACE THAT MUST BE REMOVED IN THE PERFORMANCE OF THE WORK SHALL BE RESTORED IN KIND BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED HEREIN. DEVIATION OF MORE THAN ONE-FOURTH INCH (1/4") BETWEEN OLD AND NEW WORK OR WITHIN NEW CONSTRUCTION SHALL BE CORRECTED. SUCH MEASUREMENT SHALL BE MADE FROM A TEN-FOOT (10') MINIMUM LENGTH STRAIGHT EDGE. ADJOINING SURFACES BETWEEN OLD AND NEW MUST BE FLUSH

5. AT THE COMPLETION OF EACH AREA OF WORK ALL EQUIPMENT, BARRICADES, AND SIMILAR ITEMS SHALL BE REMOVED FROM THE AREA. ALL EXCESS MATERIAL WILL BE REMOVED. ALL ROCKS LARGER THAN TWO INCHES (2") SHALL BE REMOVED FROM THE SURFACE. ADJACENT BORROW PITS AND ROAD SHOULDERS USED FOR STORAGE OF EXCAVATING MATERIALS SHALL BE SMOOTHED AND RETURNED TO ITS ORIGINAL CONTOUR/GRADE.

6. ALL DISTURBED/IMPACTED AREAS RESULTING FROM THE DEMOLITION, REMOVAL, AND/OR RECONSTRUCTION EFFORTS SHALL BE RE-SEEDED; SEED MIX TO MATCH NATIVE GRASSES SURROUNDING SITE.

ACCESS AND IRRIGATION IMPACTS

1. ALL PROPERTY OWNERS AND RESIDENTS ADJACENT TO THE STREETS OR EASEMENTS AFFECTED BY THE CONSTRUCTION SHALL BE NOTIFIED BY THE DEVELOPER/CONTRACTOR AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF THE TIME CONSTRUCTION BEGINS. THE CONTRACTOR CAN SATISFY THIS REQUIREMENT BY PLACING A WRITTEN NOTICE ON THE DOOR OF EACH RESIDENCE OR BUSINESS READING "NOTICE OF CONSTRUCTION OPERATION" INDICATING THE WORK TO BE PERFORMED. THE CONTRACTOR SHALL PROVIDED A COPY OF THE NOTIFICATION FORM AT THE PRE-CONSTRUCTION MEETING AND THE METHOD TO BE USED (HANG ON DOOR, ETC.).

2. DAMAGE TO EXISTING IRRIGATION DITCHES, ROADWAY SWALES, OR OTHER CONVEYANCE SYSTEMS (INCLUDING CONTROL VALVES) SHALL BE REPAIRED BY CONTRACTOR AT NO COST TO THE CITY OF RIVER HEIGHTS OR THE UTILITY OWNER.

3. CONTRACTOR SHALL OBTAIN ALL NECESSARY INFORMATION CONCERNING PROPERTY LINES AND EASEMENTS.

PUBLIC SAFETY AND CONVENIENCE

THE CONVENIENCE OF THE GENERAL PUBLIC AND THE PROTECTION OF PERSONS AND PROPERTY IS OF PRIME IMPORTANCE AND SHALL BE PROVIDED FOR BY THE CONTRACTOR DURING THIS PROJECT. THE CONTRACTOR SHALL USE EVERY REASONABLE PRECAUTION TO SAFEGUARD PERSONS AND PROPERTY. FAILURE OF THE OWNER OR THE PUBLIC WORKS REPRESENTATIVE/ENGINEER TO NOTIFY THE CONTRACTOR OF ANY DEFICIENCEIS IN PROVIDING FOR PUBLIC SAFETY AND CONVENIENCE SHALL NOT RELIEVE THE CONTRACTOR FROM ITS REPONSIBILITY. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH THE REQUIRMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE REQUIREMENTS OF OSHA.

PROFESSIONAL STRUCTURAL ENGINEER
5/24/24
No. 295553
CRAIG L. RASMUSSEN
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST
FORSGREN Associates Inc

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

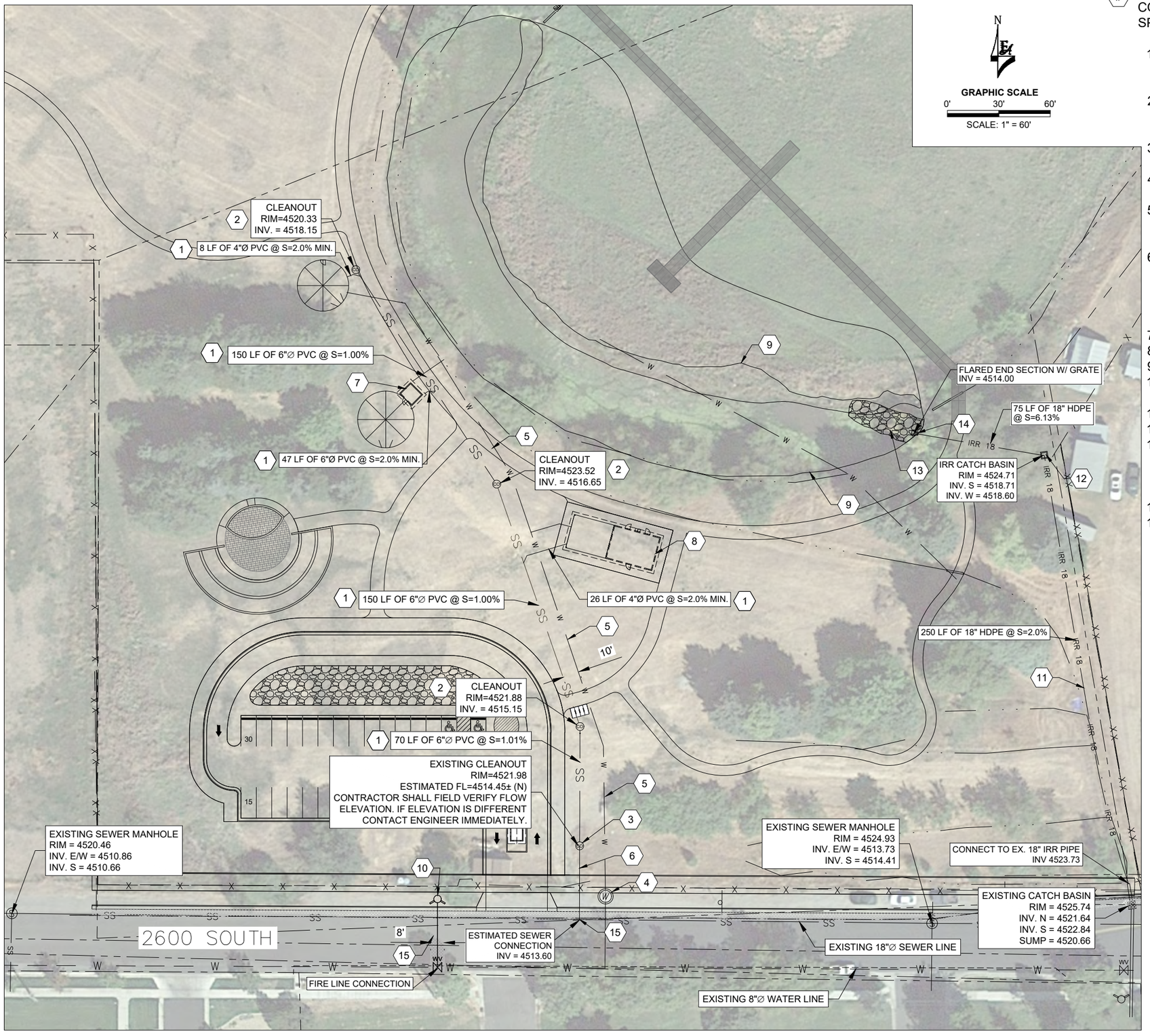
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
GENERAL NOTES & SPECIFICATIONS

SHEET IDENTIFIER:
GN-1

BINDING ORDER



SCOPE OF WORK:

CONSTRUCT PER REFERENCED STANDARDS AND SPECIFICATIONS:

1. 6" PVC SDR-35 SANITARY SEWER LINE; LENGTH AND SLOPE PER PLAN. CONSTRUCT PER NIBLEY CITY STANDARDS AND SPECIFICATIONS.
2. 6" SANITARY SEWER CLEANOUT; RIM AND INVERT ELEVATION PER PLAN. CONSTRUCT PER APWA DETAIL 431 SHEET D-1.
3. 6"Ø PVC SDR-35 SEWER LINE TO BE CONNECTED TO EXISTING SEWER OR REPLACED SEWER SERVICE.
4. 2" POLYWATER LINE TO BE CONNECTED AT EXISTING WATER METER WITH COMPRESSION FITTINGS.
5. 2" POLYETHYLENE SDR 9 250 PSI POTABLE WATER SERVICE WITH 4' MINIMUM COVER. CONSTRUCT PER APWA SPECIFICATIONS.
6. EXISTING SEWER SERVICE VERIFY SIZE. IF LESS THAN 6" REPLACE WITH 6" SDR-35 SEWER LINE AND NEW SADDLE AT MAIN LINE. RESEARCH REQ'D OR FIELD INVESTIGATE RECOMMENDED. STREET REPAIR REQUIRED FOR SERVICE REPLACEMENT.
7. YURT RESTROOM
8. PAVILION/RESTROOM
9. WETLANDS
10. CONSTRUCT FIRE HYDRANT ASSEMBLY PER APWA DETAIL 511 SHEET D-1.
11. CONSTRUCT 18"Ø HDPE IRRIGATION PIPE.
12. CONSTRUCT 3'X3' IRRIGATION BOX.
13. 4" TO 12" COBBLE ROCK 12" THICK WITH GEOTECHNICAL FABRIC BELOW ROCK. PLACE RIP RAP TIGHT AROUND END SECTION AND PROVIDE 14' WIDE BY 2' DEEP SWALE TO POND LOW WATER ELEVATION.
14. CONSTRUCT FLARED END SECTION WITH TRASH GRATE.
15. 8' WIDE ASPHALT PATCH FOR UTILITY CONNECTION PER CITY STANDARDS.

LEGEND:

SS	EXISTING SEWER LINE
W	EXISTING WATER LINE
X	EXISTING FENCE LINE
	EXISTING PROPERTY LINES
	EXISTING DITCH
SS	PROPOSED SEWER LINE
W	PROPOSED WATER LINE
IRR 18	PROPOSED IRRIGATION LINE
	PROPOSED FIRE HYDRANT
WV	PROPOSED WATER VALVE
	EXISTING FIRE HYDRANT
WV	EXISTING WATER VALVE

PROFESSIONAL STRUCTURAL ENGINEER
5/24/24
No. 295553
CRAIG L. RASMUSSEN
STATE OF UTAH

Craig L. Rasmussen

PREPARERS:
LANDSCAPE ARCHITECT:

BIO-WEST
FORSGREN Associates Inc

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
SITE UTILITY PLAN

SHEET IDENTIFIER:
C-1

BINDING ORDER

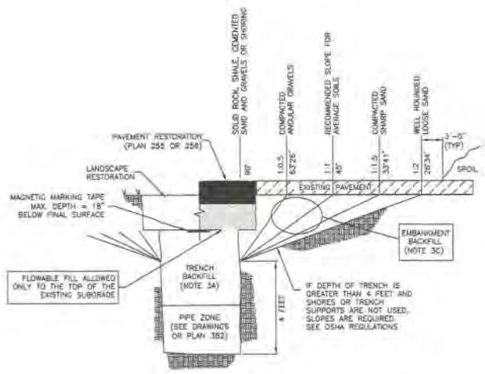
Trench backfill

1. **GENERAL**
   A. The drawing applies to backfilling a trench (and embankment) above the pipe zone.

2. **PRODUCTS**
   A. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 3-inches.
   B. Flowable Fill: APWA Section 31 05 15. Target is 60 psi in 28 days with 90 psi maximum in 28 days. It must flow easily requiring no vibration for consolidation.

3. **EXECUTION**
   A. Trench Backfill Above the Pipe Zone: Follow requirement indicated in APWA Section 33 05 20 and the following provisions. See Standard Plan 382 for backfilling the pipe zone.
      1) DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench backfill.
      2) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.
      3) Water jetting is NOT allowed.
   B. Flowable Fill: If controlled low strength material is placed in the trench. Cure the material before placing surface restorations.
   C. Embankment Backfill: When trench sides are sloped proceed as follows.
      1) Maximum lift thickness is 8-inches before compaction.
      2) Compact per APWA Section 31 23 26 to 95 percent or greater relative to a standard proctor density.
      3) Submission of quality control compaction test result data may be requested by ENGINEER at any time. Provide results of tests immediately upon request.
   D. Surface Restoration:
      1) Landscaped Surface: Follow APWA Section 32 92 00 (turf or grass) or APWA Section 32 93 13 (ground cover) requirements. Rake to match existing grade. Replace vegetation to match pre-construction conditions.
      2) Paved Surface: Follow APWA Section 33 05 25 (bituminous pavement surfacing), or APWA Section 33 05 25 (concrete pavement surfacing). Do not install surfacing until compaction density is acceptable to ENGINEER.

NARRATIVE: THIS PLAN SHOWS VARIOUS SLOPES RECOMMENDED FOR VARIOUS TYPES OF SLOPE STABILITY PROBLEMS. THE VERTICAL TEXT INDICATES VARIOUS MATERIALS THAT MAY BE ENCOUNTERED. THE SERVICES OF A PROFESSIONAL SOILS ENGINEER SHOULD BE USED TO VERIFY SLOPE STABILITY.



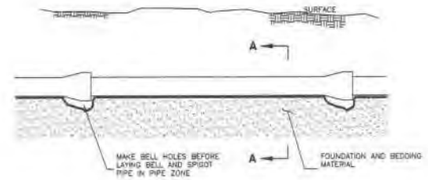
APWA Utah Chapter — *Trench backfill* — Plan 381 July 2016

Pipe zone backfill

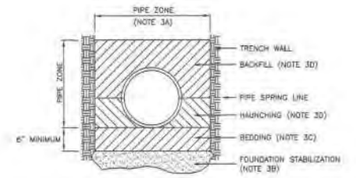
1. **GENERAL**
   A. Install the pipe in the center of the trench or no closer than 6-inches from the wall of the trench.

2. **PRODUCTS**
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
   C. Concrete: APWA Section 03 30 04.
   D. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
   E. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.

3. **EXECUTION**
   A. Excavate the Pipe Zone: Width is measured at the pipe spring line and includes any necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturer's recommendations when using trench boxes.
   B. Foundation Stabilization: Get ENGINEER's permission before installing common fill. Vibrate to stabilize. Installation of stabilization-separation geotextile will be required to separate backfill material and native subgrade materials if common fill cannot provide a working surface or prevent soils migration.
   C. Bedding: Follow APWA Section 33 05 20 requirements and the following provisions.
      1) Furnish untreated base course material unless specified otherwise by pipe manufacturer.
      2) Maximum lift thickness is 8-inches.
      3) Bedding immediately under the pipe should not be compacted, but loosely placed.
      4) Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
      5) When using concrete, provide at least Class 2,000, APWA Section 03 30 04.
   D. Pipe Zone: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate in the pipe zone. Water jetting is NOT allowed.
      1) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26 unless pipe manufacturer requires more stringent installation.
      2) Submission of quality control compaction test result data developed for the haunch zone may be requested by ENGINEER at any time. CONTRACTOR is to provide results of tests immediately upon request.
   E. Flowable Fill (when required and if allowed by pipe manufacturer):
      1) Place the controlled low strength material, APWA Section 31 05 15.
      2) Prevent pipe flotation by installing in lifts and providing pipe restraints as required by pipe manufacturer.
      3) Reset pipe to line and grade if pipe "floats" out of position.



ELEVATION VIEW



SECTION A-A

INSTALLATION

CONCRETE PIPE: FOLLOW ASTM C 1479
"STANDARD PRACTICE FOR INSTALLATION OF PRECAST CONCRETE SEWER, STORM DRAIN, AND CULVERT PIPE USING STANDARD INSTALLATIONS."

PLASTIC PIPE: FOLLOW ASTM D 2321
"STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS"

CORRUGATED METAL PIPE: FOLLOW ASTM A 798
"STANDARD PRACTICE FOR INSTALLING FACTORY-MADE CORRUGATED STEEL PIPE FOR SEWERS AND OTHER APPLICATIONS."

VITRIFIED CLAY PIPE: FOLLOW ASTM C 12.
"STANDARD RECOMMENDED PRACTICE FOR INSTALLING VITRIFIED CLAY PIPE LINES."

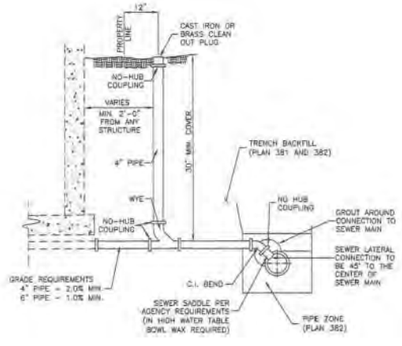
APWA Utah Chapter — *Pipe zone backfill* — Plan 382 January 2011

Sewer lateral connection

1. **GENERAL**
   A. Before installation, secure acceptance by ENGINEER for all pipe, fittings, and couplings to be used.
   B. Before backfilling, secure inspection of installation by ENGINEER. Give at least 24 hours notice.
   C. Verify if CONTRACTOR or agency is to install the wye.

2. **PRODUCTS**
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
   C. Provide agency approved wye or tee with appropriate donut.
   D. Stainless steel straps required.

3. **EXECUTION**
   A. Tape wrap pipe as required by soil conditions.
   B. Remove core plug from sewer main. Do not break into sewer main to make connection.
   C. Base Course and Backfill Placement: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.



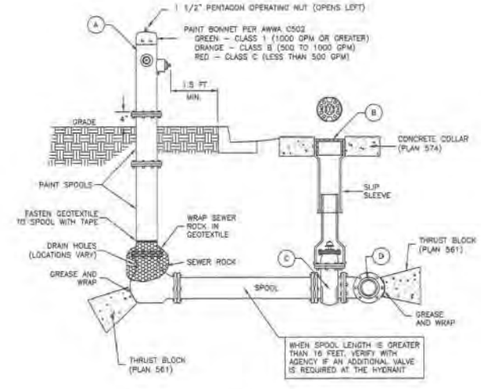
APWA Utah Chapter — *Sewer lateral connection* — Plan 431 January 2011

Fire hydrant with valve

1. **GENERAL**
   A. Before backfilling, secure inspection of installation by ENGINEER.
   B. Additional requirements are specified in APWA Section 33 11 00.

2. **PRODUCTS**
   A. Hydrant: Dry barrel, AWWA C502.
   B. Thrust Bocks: Concrete Class 4000, APWA Section 03 30 04.
   C. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.
   D. Backfill: APWA Section 31 05 13. Maximum particle size 2-inches.
      1) Sewer Rock: ASTM Size No. 3 (2" to 1") or larger.
      2) Other Type of Common Fill: CONTRACTOR's choice,
   E. Geotextile: Stabilization-separation fabric, APWA Section 31 05 19.

3. **EXECUTION**
   A. Installation:
      1) Provide at least 1 cubic yard of sewer rock around drain hole at base of hydrant spool. Wrap geotextile around sewer rock and tape geotextile to hydrant spool to prevent silting of sewer rock.
      2) Paint fire hydrant to agency's fire hydrant paint code.
      3) Apply non-oxide grease to all buried metal surfaces. Wrap with polyethylene sheet and tape wrap.
      4) Notify fire department as soon as hydrant is placed in service.
   B. Thrust Blocks:
      1) Before pouring concrete, wrap pipe system with polyethylene sheet to prevent bonding of concrete to pipe system.
      2) Not required for flange or welded pipe systems.
   C. Backfill: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.



LEGEND			
No.	*	ITEM	DESCRIPTION
(A)		FIRE HYDRANT	AWWA C502
(B)		VALVE BOX WITH LID	2-PIECE CAST IRON
(C)		GATE VALVE WITH 2" X 2" NUT	AWWA C509
(D)		TEE WITH 125 # FLANGE	AWWA C110

* FURNISHED BY UTILITY AGENCY

SECTION

PROFESSIONAL STRUCTURAL ENGINEER
5/24/24
No. 295553
CRAIG L. RASMUSSEN
STATE OF UTAH

Craig L. Rasmussen

APWA Utah Chapter — *Fire hydrant with valve* — Plan 511 February 2011

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST
FORSGREN Associates Inc

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
GENERAL DETAILS

SHEET IDENTIFIER:
D-1

BINDING ORDER

GENERAL

1. ALL DESIGN, CONSTRUCTION, AND INSPECTION SHALL BE IN CONFORMANCE WITH THE 2021 INTERNATIONAL BUILDING CODE (IBC) AND REFERENCED STANDARDS.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE.

3. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED.

4. DRAWINGS INDICATE THE FINISHED PRODUCT. THEY DO NOT INDICATE A METHOD OF CONSTRUCTION. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH PRECAUTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, ETC..

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPENSATING THE OWNER FOR ANY CHANGES MADE AS A RESULT OF A DEVIATION FROM THE CONTRACT DOCUMENTS, DEVIATION FROM THE SPECIFICATIONS, FAULTY MATERIALS, OR FAULTY WORKMANSHIP.

6. OPTIONS ARE FOR THE CONTRACTOR'S CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED DESIGN CHANGES. COST ASSOCIATED WITH ANY DESIGN WORK INITIATED BY THE OPTION SHALL BE BORN BY THE CONTRACTOR.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION WITHIN AND ADJACENT TO THE JOB SITE.

8. TEMPORARY SHORING AND BRACING SHALL BE PROVIDED WHEREVER NECESSARY TO TAKE CARE OF ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED INCLUDING WIND. SUCH BRACING SHALL BE LEFT IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY OR UNTIL ALL THE STRUCTURAL ELEMENTS ARE COMPLETE.

9. DURING AND AFTER CONSTRUCTION THE CONTRACTOR AND/OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOADS.

10. THE GENERAL CONTRACTOR SHALL HAVE SHOP DRAWINGS REVIEWED BY THE ENGINEER PRIOR TO FABRICATION OR ERECTION.

11. ALL DETAILS, SECTIONS, AND NOTES ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS UNLESS NOTED OR SHOWN OTHERWISE.

12. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION NOT COVERED ON THE DRAWINGS.

13. OBSERVATION VISITS TO THE JOB SITE BY THE OWNER, ENGINEER OR FIELD REPRESENTATIVES OF THE ENGINEER SHALL NEITHER BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.

14. SIZES, LOCATIONS, AND ANCHORAGE'S OF EQUIPMENT SHALL BE VERIFIED IN THE FIELD WITH EQUIPMENT MANUFACTURERS (SUPPLIERS) PRIOR TO PLACING CONCRETE OR FABRICATING STEEL.

DESIGN CRITERIA

THE FOLLOWING STRUCTURAL DESIGN LOADS APPLY U.N.O.:

ROOF LIVE LOAD . . . . . L_r = 20 PSF
FLOOR LIVE LOAD . . . . . L = 40 PSF (YURTS)

STRUCTURE RISK CATEGORY II

SNOW LOAD:
- GROUND SNOW LOAD. . . . . P_g = 43 PSF
- SNOW IMPORTANCE FACTOR. . . . . I_s = 1.00
- SNOW EXPOSURE FACTOR. . . . . C_e = 1.00
- SNOW THERMAL FACTOR . . . . . C_t = 1.2 (PAVILION)
- SNOW THERMAL FACTOR . . . . . C_t = 1.1 (ALL OTHERS)
- SNOW SLOPE FACTOR . . . . . C_s = 1.0
- FLAT ROOF SNOW LOAD. . . . . P_f = 36 PSF
- SLOPED ROOF SNOW LOAD . . . . . P_s = 36 PSF (PAVILION)
- SLOPED ROOF SNOW LOAD . . . . . P_s = 35 PSF (ALL OTHERS)

WIND:
- BASIC WIND SPEED . . . . . V = 105 MPH (3-SEC. GUST)
- ASD WIND SPEED . . . . . V = 81 MPH
- WIND EXPOSURE. C
- ANALYSIS PROCEDURE: ASCE 7-16 CH 28, ENVELOPE PROCEDURE)

SEISMIC:
- SEISMIC IMPORTANCE FACTOR. . . . . I_E = 1.00
- SPECTRAL RESPONSE ACCELERATION. . . . . S_S = 1.14
- SPECTRAL RESPONSE ACCELERATION. . . . . S_1 = 0.34
- SEISMIC SOIL SITE CLASS . . . . . D
- SPECTRAL RESPONSE COEFFICIENT . . . . . S_{DS} = .85
- SPECTRAL RESPONSE COEFFICIENT . . . . . S_{D1} = .56g
- SEISMIC DESIGN CATEGORY . . . . . D

ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE

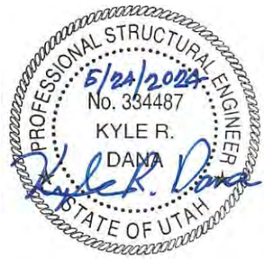
BASIC SEISMIC FORCE RESISTING SYSTEM:
SPECIAL REINFORCED MASONRY SHEAR WALLS - PROVIDED BY MANUFACTURER (PAVILION, GATEHOUSE, BATHROOMS)

SEISMIC RESPONSE COEF. . . . . Cs (PROVIDED BY MANUFACTURER)

SEISMIC BASE SHEAR
- TRANSVERSE . . . . . V_T (PROVIDED BY MANUFACTURER)
- LONGITUDINAL . . . . . V_L (PROVIDED BY MANUFACTURER)

RAIN:
- RAIN INTENSITY . . . . . .i = 1.5 IN/HR

SOILS:
- DESIGN BEARING CAPACITY = 1500 PSF (ASSUMED)



CONCRETE

1. ALL CONCRETE SHALL MEET THE REQUIREMENTS OF ACI-301, "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS." PROPORTIONING OF INGREDIENTS FOR EACH CONCRETE MIX SHALL BE BY METHOD 2 OR THE ALTERNATE PROCEDURE GIVEN IN ACI-301. PLACE CONCRETE PER ACI-304 AND CONFORM TO ACI-604 (306) FOR COLD WEATHER PLACEMENT AND ACI-605 (305) FOR HOT WEATHER PLACEMENT, USE INTERIOR MECHANICAL VIBRATORS WITH 7,000 RPM MINIMUM FREQUENCY. DO NOT OVER-VIBRATE. CONCRETE SHALL BE PLACED MONOLITHICALLY BETWEEN CONSTRUCTION AND CONTROL JOINTS. PROTECT ALL CONCRETE FROM PREMATURE DRYING, EXCESSIVE HOT OR COLD TEMPERATURE FOR SEVEN DAYS AFTER PLACING.

2. STRENGTH
   TWENTY-EIGHT DAY COMPRESSIVE STRENGTH SHALL BE f'c=4000 PSI
   SLUMP: 4" + 1 INCH.
   MAX. WATER/CEMENT RATIO: 0.45

3. STRUCTURAL CONCRETE EXPOSURE CLASS: F2

4. MATERIALS
   CEMENT: ASTM C150, TYPE I OR ASTM C595 TYPE IL.
   COARSE AND FINE AGGREGATE: ASTM C33.
   WATER SHALL BE CLEAN AND POTABLE.

5. ADMIXTURES

   WATER REDUCING ADMIXTURE: ASTM C494, ADMIXTURES SHALL BE USED IN EXACT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

   SYNERGIZED PERFORMANCE SYSTEMS: CONCRETE USING ADMIXTURES TO PRODUCE FLOWABLE CONCRETE MAY BE USED SUBJECT TO ENGINEER'S APPROVAL.

6. AIR ENTRAINMENT:ASTM C260 AND ASTM C494, ENTRAIN 6% PLUS/MINUS 1 1/2% BY VOLUME IN ALL EXPOSED CONCRETE.

7. NO OTHER ADMIXTURE PERMITTED UNLESS APPROVED BY THE ENGINEER OF RECORD.

8. THE FLATNESS AND LEVELNESS OF CONCRETE FLOORS SHALL BE MEASURED PER ASTM E 1155:STANDARD TEST METHOD FOR DETERMINING FLOOR FLATNESS AND LEVELNESS USING THE F-NUMBER SYSTEM.

   SPECIFIED OVERALL F-NUMBER FF 25/FL 20
   MINIMUM LOCAL F-NUMBER FF 15/FL 12

9. A STATEMENT OF MIX DESIGN FOR ALL CONCRETE SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER PRIOR TO COMMENCING WORK.

10. ALL CONCRETE WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS DIRECTED BY THE SPECIFICATIONS AND ACI STANDARDS AND PRACTICES.

11. DOWEL VERTICAL BARS THE DEVELOPMENT LENGTH INTO STRUCTURE ABOVE AND FOOTINGS BELOW. PROVIDE 90 DEGREE HOOK WHERE DEVELOPMENT LENGTH IS NOT POSSIBLE. LAP ALL REINF. IN CONCRETE THE LISTED LENGTH U.N.O.

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST
FORSGREN Associates Inc

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
STRUCTURAL NOTES

SHEET IDENTIFIER:
S 000

BINDING ORDER

CONCRETE

12. BEFORE CONCRETE IS POURED CHECK WITH ALL TRADES TO ENSURE PROPER PLACEMENT OF ALL OPENINGS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, ETC. RELATIVE TO WORK.

13. ADD (2)#5 BARS MINIMUM AROUND ALL OPENINGS (UNLESS OTHERWISE NOTED) AND EXTEND 24" BEYOND CORNER OF OPENING.

14. ALL SLABS ON GRADE SHALL BE PLACED IN ALTERNATE PANELS WITH A MAXIMUM WIDTH OF 10' BETWEEN CONTROL OR CONSTRUCTION JOINTS; REFER TO TYPICAL DETAILS ON DRAWINGS. UNLESS OTHERWISE NOTED, SLABS ON GRADE SHALL BE 4" THICK AND SHALL BE REINFORCED WITH #4 BARS @ 18" ON CENTER EACH WAY.

15. REFER TO DRAWINGS FOR TYPICAL CONSTRUCTION JOINT DETAILS. UNLESS NOTED IN DRAWINGS, ALL REINFORCEMENT SHALL BE CONTINUOUS THROUGH JOINTS.

16. WHERE EXTERIOR SLABS ON GRADE ABUT FOUNDATIONS OR COLUMNS PROVIDE 3/8" PREFORMED EXPANSION JOINT WITH SEALANT.

17. CONTRACTOR SHALL SUBMIT A PLACEMENT PLAN FOR REVIEW INCLUDING ALL ITEMS EMBEDDED IN CONCRETE AND ALL CONCRETE PENETRATIONS.

FOOTINGS

1. FOOTING ELEVATIONS SHOWN ON PLAN ARE TOP OF FOOTINGS AND ARE MINIMUM DEPTH. DIFFERENT OR UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ENGINEER.

2. EXTERIOR WALL FOOTINGS SHALL BEAR AT A MINIMUM DEPTH OF 30" BELOW FINISHED EXTERIOR GRADE.

3. NO FOOTINGS SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

4. ANY SOIL CONDITION ENCOUNTERED DURING EXCAVATION THAT IS CONTRARY TO THE CONDITIONS USED FOR DESIGN OF FOOTINGS, OR ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.

5. WHERE 6" DIAMETER OR LARGER PIPE PASSES THROUGH AN INTERIOR OR EXTERIOR FOUNDATION WALL, STEP THE FOOTING DOWN TO PASS BELOW PIPE AND THEN STEP BACK UP TO INDICATED ELEVATION. PROVIDE PIPE SLEEVE THROUGH FOUNDATION WALL. PLACE BOTTOM OF PIPE SLEEVE 12" ABOVE TOP OF FOOTING.

6. ALL FOOTING EXCAVATIONS SHALL BE EXAMINED BY THE ENGINEER FOR VERIFICATION OF ADEQUATE BEARING CONDITIONS BEFORE PLACING CONCRETE.

7. COMPACT SOIL UNDER FOOTINGS TO AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY (MODIFIED PROCTOR) ASTM D1557.

8. ALLOWABLE BEARING CAPACITY = 1500 PSF (ASSUMED)

REINFORCING STEEL

1. ALL REINFORCEMENT, INLCUDING WELDED WIRE FABRIC SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315 ,"DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) RECOMMENDATIONS.

2. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.

3. ALL REINFORCEMENT SHALL BE SECURELY TIED AND HELD IN PLACE.

4. REINFORCING BARS THAT ARE TO BE WELDED, INCLUDING DEFORMED BAR ANCHORS (D.B.A.) SHALL COMPLY WITH ASTM A706 OR ANOTHER APPROVED WELDABLE GRADE AND SHALL BE WELDED IN ACCORDANCE WITH THE A.W.S. RECOMMENDATIONS.

5. ALL CONTINUOUS REINFORCEMENT SHALL TERMINATE WITH A 90 DEG. TURN OR A SEPARATE CORNER BAR. ALL SPLICES IN CONCRETE SHALL LAP THE LISTED LAP LENGTH.

6. THE FOLLOWING CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
   A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
   B. ALL OTHER CONCRETE:2"

7. PRIOR TO FABRICATION AND PLACEMENT, SHOP DRAWINGS FOR ALL REINFORCING STEEL SHALL BE REVIEWED BY THE ENGINEER.

8. REFER TO WALL CORNER AND WALL INTERSECTION REINFORCING DETAIL. IN GENERAL, THE WALL CORNER REINFORCING SIZES AND SPACING SHALL BE CALLED OUT ON THE PLANS AND REFERENCED TO THESE DETAILS AND THE TYPICAL HORIZONTAL WALL REINFORCING SHALL LAP WITH THE HORIZONTAL REINFORCING.

9. ALL BENDS, UNLESS OTHERWISE SHOWN, SHALL BE A 90 DEGREE STANDARD HOOK. REFER TO STANDARD CONCRETE HOOK DETAILS.

10. ALL WALL CORNER AND WALL INTERSECTION REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH COLUMNS OR PILASTERS. REINFORCEMENT SHALL BE EXTENDED INTO CONNECTING WALLS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING WALLS.

11. UNLESS INDICATED OTHERWISE, CONTRACTOR MAY SPLICE CONTINUOUS SLAB OR LONGITUDINAL BEAM BARS AT LOCATION OF THEIR CHOOSING, EXCEPT THAT TOP BAR SPLICES SHALL BE LOCATED AT MIDSPAN AND BOTTOM BAR SPLICES SHALL BE LOCATED AT SUPPORTS. STAGGER SPLICES IN HORIZONTAL WALL BARS SO THAT NO TWO ADJACENT BARS IN THE SAME OR OPPOSITE CURTAIN ARE SPLICED AT THE SAME LOCATION. ALL REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE REQUIREMENTS OF THE STD. CONCRETE HOOK SCHEDULE AND THE CONCRETE REINFORCEMENT LAP AND DEVELOPMENT SCHEDULES.

FORM WORK

1. FOLLOW RECOMMENDED PRACTICE FOR CONCRETE FORMWORK (ACI-347-14).

2. ALL SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FORMWORK SUPPORTS AND SHORING SHALL BE DESIGNED TO PROVIDE FINISHED CONCRETE SURFACES OF ALL FACES LEVEL, PLUMB, AND TRUE TO THE DIMENSIONS AND ELEVATIONS SHOWN. TOLERANCES AND VARIATIONS SHALL BE AS SPECIFIED.

ANCHOR BOLTS

1. CONCRETE ANCHOR RODS SHALL MEET THE QUALITY OF ASTM F1554 GRADE 36 KSI, GALVANIZED (ASTM A153, CLASS C) RODS AND SHALL HAVE A STANDARD BOLT HEAD OR AN EQUAL DEFORMITY IN THE EMBEDDED PORTION.

2. MACHINE BOLTS SHALL BE ASTM A307 BOLTS, UNLESS NOTED ON THE DRAWINGS OR DETAILS.

3. WELDED-HEADED STUDS SHALL BE “NELSON” STUDS CONFORMING TO ASTM A108.

4. DEFORMED BAR ANCHORS SHALL BE ASTM A1064

PROFESSIONAL STRUCTURAL ENGINEER
5/24/2024
No. 334487
KYLE R. DANA
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST
FORSGREN Associates Inc

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
STRUCTURAL NOTES

SHEET IDENTIFIER:
S 001

BINDING ORDER

QUALITY ASSURANCE PLAN

1. SPECIAL INSPECTION SHALL BE PROVIDED ACCORDING TO IBC CHAPTER 17 FOR THE ITEMS IDENTIFIED IN THIS SECTION AND ON THE CONTRACT DOCUMENTS.

2. THE NAMES AND CREDENTIALS OF SPECIAL INSPECTORS TO BE USED SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT WHEN APPLYING FOR A BUILDING PERMIT.

3. SPECIAL INSPECTION REPORTS SHALL BE DELIVERED TO THE OWNER BI-WEEKLY OR MORE FREQUENTLY AS REQUIRED BY THE INSPECTOR OR BUILDING OFFICIAL.

4. OFF-SITE FABRICATION: WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATORS SHOP, SPECIAL INSPECTION OF THE FABRICATED ITEMS SHALL BE IN ACCORDANCE WITH IBC SECTION 1704.2.5 UNLESS THE FABRICATOR IS APPROVED ACCORDING TO IBC SECTION 1704.2.5.1.

5. CONCRETE CONSTRUCTION: SPECIAL INSPECTIONS AND VERIFICATIONS SHALL BE PROVIDED IN ACCORDANCE WITH TABLE 1705.3.

6. SOILS: SPECIAL INSPECTION SHALL BE PROVIDED FOR PLACEMENT OF FILL 12 INCHES OR MORE DEEP IN ACCORDANCE WITH SECTION 1705.6.

7. EPOXY ANCHORS: PRIOR TO AND DURING EPOXY INJECTION TO INSURE PROPER INSTALLATION AS PER MANUFACTURERS REQUIREMENTS. CONTRACTOR SHALL SUBMIT PROPOSED EPOXY MANUFACTURERS I.C.B.O. REPORT TO ENGINEER PRIOR TO INSTALLATION.

QUALITY ASSURANCE CONTRACTOR RESPONSIBILITY

EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM, OR COMPONENT LISTED IN THE QUALITY ASSURANCE PLAN SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND TO THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT IN ACCORDANCE WITH IBC SECTION 1704.4. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:

A. ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE QUALITY ASSURANCE PLAN.

B. ACKNOWLEDGMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL.

C. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING, AND THE DISTRIBUTION OF REPORTS.

D. IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THE POSITION(S) IN THE ORGANIZATION.

REINFORCEMENT LAP LENGTHS - CLASS A									
CONCRETE DESIGN STRENGTH - 4000 PSI									
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
TOP BAR (Lt)	1'-7"	2'-1"	2'-7"	3'-1"	4'-6"	5'-2"	5'-10"	6'-7"	7'-3"
OTHER BAR (Ld)	1'-3"	1'-7"	2'-0"	2'-5"	3'-6"	4'-0"	4'-6"	5'-1"	5'-7"

NOTES:

1. ALL REINFORCEMENT LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE "REINFORCEMENT LAP LENGTHS."

2. TOP BARS SHALL BE DEFINED AS ANY HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR, IN ANY SINGLE POUR. HORIZONTAL WALL BARS ARE CONSIDERED TOP BARS.

3. FOR CLASS B SPLICE, MULTIPLY THE ABOVE SPLICE LENGTHS BY 1.3.

CONCRETE REINFORCEMENT LAP & DEVELOPMENT SCHEDULES
NTS

PROFESSIONAL STRUCTURAL ENGINEER
5/24/2024
No. 334487
KYLE R. DANA
STATE OF UTAH

PREPARERS:
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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
STRUCTURAL NOTES

SHEET IDENTIFIER:
S 002

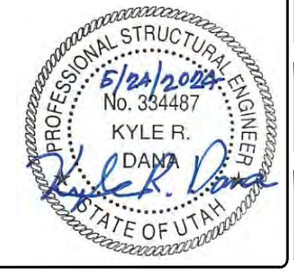
BINDING ORDER

TABLE 1705.3 REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	--	X	ACI 318 CH. 20, 25.2, 25.3, 26.6.1-26.6.3	--
2. INSPECT ANCHORS CAST IN CONCRETE.	--	X	ACI 318:17.8.2	--
3. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.				
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	--	ACI 318:17.8.2.4	--
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 3.a.	--	X	ACI 318: 17.8.2	--
4. VERIFYING USE OF REQUIRED DESIGN MIX.	--	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2
5. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	--	ASTM C172, ASTM C31, ACI 318: 26.4, 26.12	1908.10
6. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	--	ACI 318: 26.5	--
7. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	--	X	ACI 318: 26.5.3-26.5.5	--
8. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	--	X	ACI 318: 26.11.1.2(b)	--

TABLE 1705.6 REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS

VERIFICATION AND INSPECTION	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	--	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	--	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	--	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	--
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	--	X



PREPARERS:
LANDSCAPE ARCHITECT:
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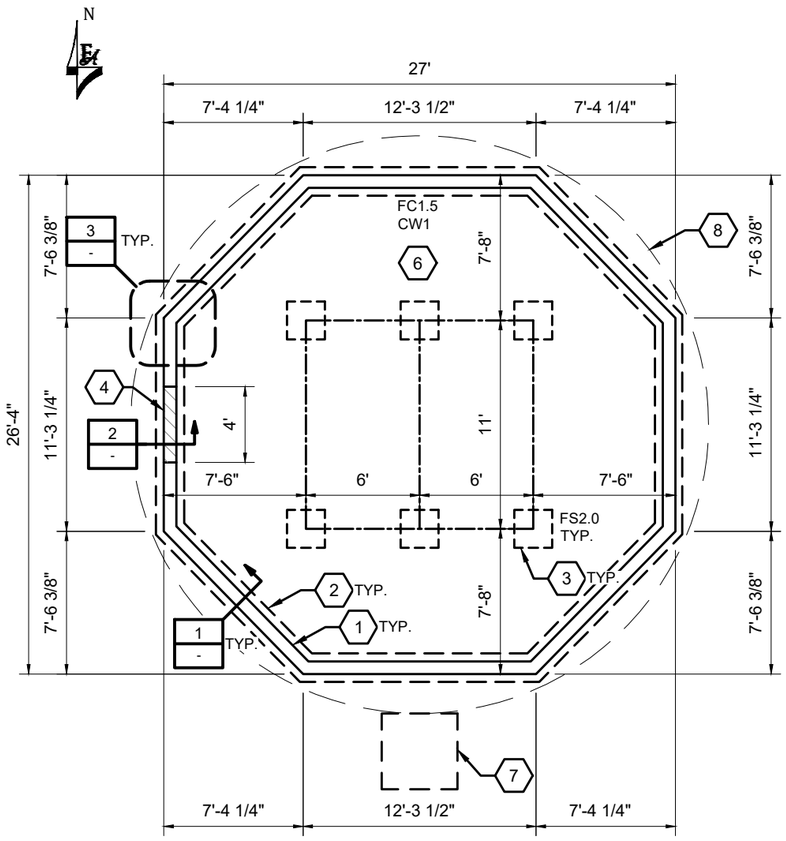
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
STRUCTURAL NOTES

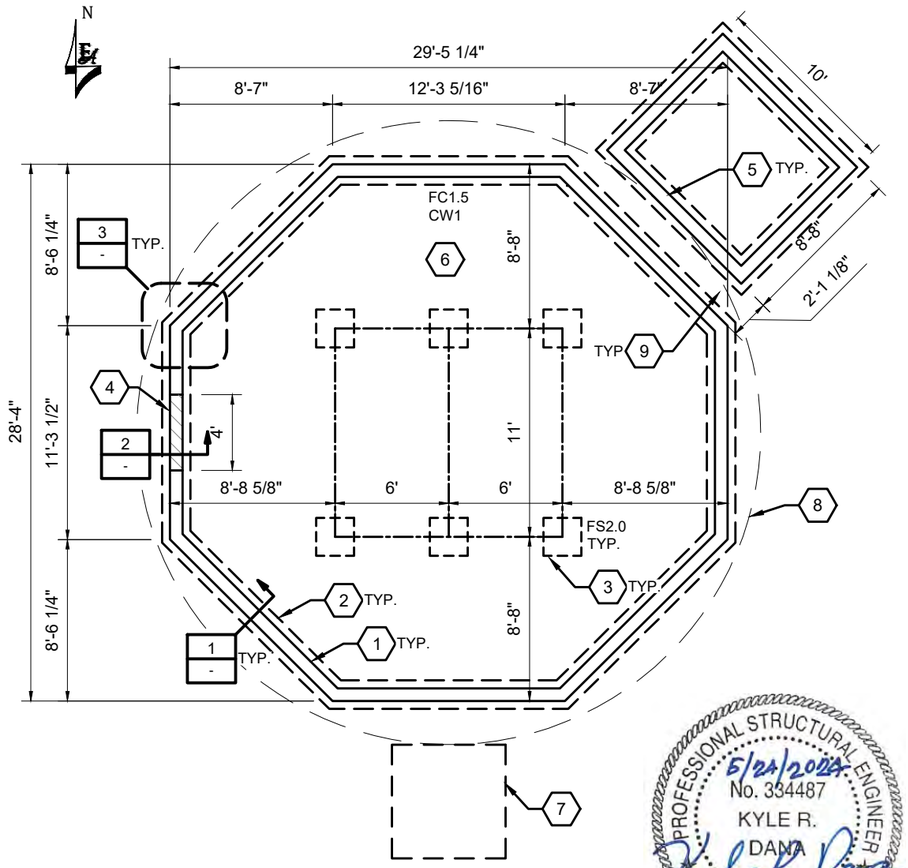
SHEET IDENTIFIER:
S 003

BINDING ORDER



FOUNDATION PLAN - 30' DIA YURT

SCALE: 1/8"=1'-0"



FOUNDATION PLAN - 33' DIA YURT

SCALE: 1/8"=1'-0"

FOUNDATION PLAN NOTES:

1. VERIFY ALL DIMENSIONS WITH YURT AND YURT RESTROOM SUPPLIERS.
2. FOR CONCRETE FOUNDATION WALL CORNERS SEE DETAIL 3/S100.
3. FOR REINFORCING SPLICES PROVIDE LAP LENGTHS AS FOUND IN THE REINFORCING LAP LENGTHS SCHEDULE ON SHEET S002 WALL HORIZONTAL BARS REQUIRE TOP BAR LAP LENGTHS, SEE SCHEDULE.
4. FINISH GRADE VARIES SEE SITE PLANS.
5. REFER TO DRAWINGS PROVIDED BY YURT SUPPLIER FOR FLOOR FRAMING AND CONNECTIONS TO FOUNDATION (INCLUDES WOOD BEAMS, SIPs PANELS, WOOD SUPPORT POSTS BELOW FLOOR, BEAM TO SILL PLATE CONNECTION, AND POST TO FOOTING CONNECTION).
6. REFER TO DRAWINGS PROVIDED BY RESTROOM SUPPLIER FOR FOOTING AND STEM WALL DETAILS UNDER RESTROOM.
7. SEE PSE DRAWINGS FOR FLOOR FRAMING.

STRUCTURAL KEY NOTES

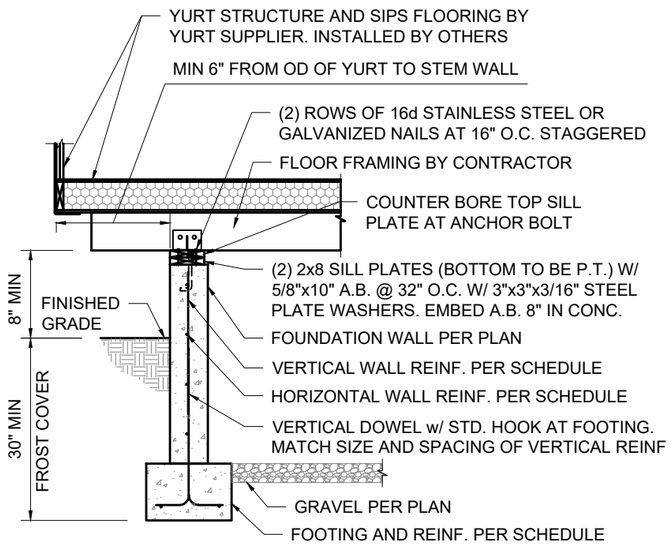
1. FOUNDATION WALL, TYP.
2. CONTINUOUS FOOTING, TYP.
3. CONCRETE SPOT FOOTING, TYP. REFERENCE YURT SUPPLIER PLANS FOR SPACING AND LOCATION OF SUPPORT POSTS.
4. OPENING IN STEM WALL FOR CRAWL SPACE ACCESS. SEE DETAIL 2/S100.
5. FOOTING, STEM WALL, AND SLAB ON GRADE FOR ATTACHED YURT RESTROOM IS SHOWN FOR REFERENCE. FOOTING AND REINFORCING UNDER YURT RESTROOM BY OTHERS.
6. 4" OF 3/4" MINUS WASHED ROCK IN CRAWL SPACE.
7. LANDING PAD AT YURT ENTRANCE. SEE SITE PLANS.
8. YURT PLATFORM OUTSIDE DIAMETER SHOWN FOR REFERENCE. SEE MANUFACTURES PLANS FOR ACTUAL DIMENSIONS.
9. PROVIDE WOOD FRAMING W/ REMOVABLE ACCESS PANEL ON EACH END OF SPACE BETWEEN YURT STEM WALL AND RESTROOM STEM WALL .

ELEVATIONS

FINISHED FLOOR ELEVATION (YURTS AND RESTROOM)= 100'-0"

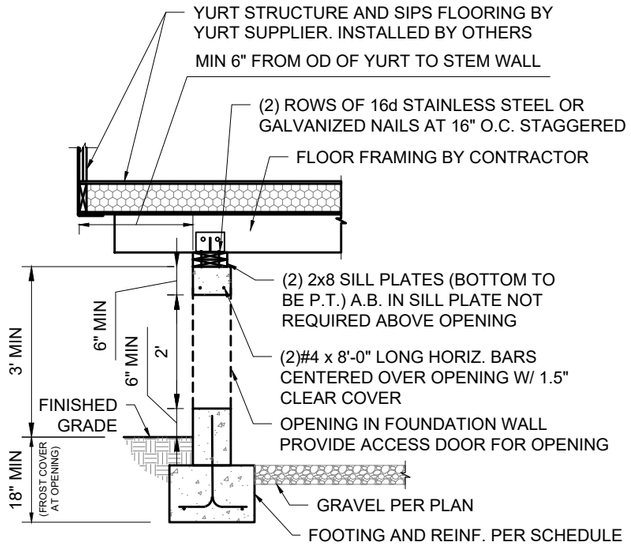
TOP OF STEM WALL ELEVATION = 98'-6"

TOP OF FOOTING ELEVATION = 95'-0"



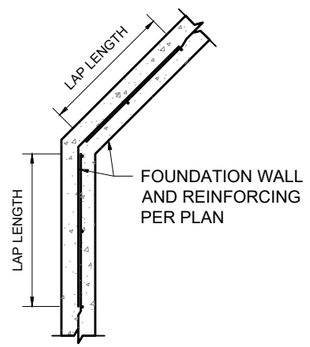
TYP. CONCRETE FOUNDATION WALL 1

SCALE: 3/8"=1'-0"



ACCESS OPENING IN STEM WALL 2

SCALE: 3/8"=1'-0"

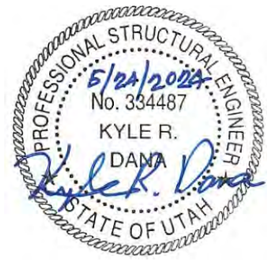


CORNER REINFORCING NOTE:

TYPICAL HORIZONTAL REINF. AT WALL CORNER. ALL HORIZONTAL WALL REINF. REQUIRES TOP BAR LAP SPLICES. FOR SIZE AND SPACING OF REINF. SEE PLANS.

TYP WALL REINF. AT CORNER 3

SCALE: 3/8"=1'-0"



MEMBER SCHEDULES

MARK	DIMENSIONS	REINFORCEMENT & OTHER INFORMATION
FOOTING SCHEDULE		
FC1.5	1'-6"x12" CONT.	(2) #4 BARS CONT., BOTTOM
FS2.0	2'-0"x2'-0" SPOT FTG.	(3) #4 BARS EA. WAY, BOTTOM
STEM WALL SCHEDULE		
CW1	8" STEM WALL	#4 AT 18" O.C. VERT. & #4 AT 12" O.C. HORIZ. CENTERED IN WALL

LEGEND

FOUNDATION WALL

FOOTING

OPENING IN STEM WALL

YURT PLATFORM OD

PREPARERS:
LANDSCAPE ARCHITECT:
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FORSGREN Associates Inc

REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
YURT FOUNDATION PLAN

SHEET IDENTIFIER:
S 100

BINDING ORDER

SHEET INDEX

#	Sheet Title	#	Sheet Title
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E002	GENERAL PROJECT NOTES	E502	LIGHTING DETAILS
E003	ELECTRICAL SPECIFICATIONS	E503	ELECTRICAL DETAILS
E004	ELECTRICAL LEGEND	E504	ELECTRICAL DETAILS
ES101	ELECTRICAL SITE PLAN - LIGHTING	E601	ELECTRICAL ONE-LINE DIAGRAM
ES102	ELECTRICAL SITE PLAN - POWER	E602	FIXTURE SCHEDULE
ES103	PHOTOMETRIC SITE PLAN	E603	LIGHTING SCHEDULES
ES104	PHOTOMETRIC DETAILS	E604	ELECTRICAL SCHEDULES
ES400	30' YURT ELECTRICAL PLAN	E605	ELECTRICAL SCHEDULES
ES401	33' YURT & RESTROOM ELECTRICAL PLAN	E606	ELECTRICAL SCHEDULES
ES402	RESTROOM & PAVILION ELECTRICAL PLAN	E607	ELECTRICAL SCHEDULES
ES403	GATEHOUSE ELECTRICAL PLAN		

ELECTRICAL ABBREVIATIONS

A	AMPERE	ELEC	ELECTRICAL	MECH	MECHANICAL	SPEC	SPECIFICATION
AFF	ABOVE FINISHED FLOOR	EMT	ELECTRICAL METALLIC TUBING	MIN	MINIMUM	TEMP	TEMPORARY
AFG	ABOVE FINISHED GRADE	EQUIP	EQUIPMENT	MLO	MAIN LUGS ONLY	TYP	TYPICAL
AIC	AMPERE INTERRUPTING CAPACITY	EX, EXIST	EXISTING	NEC	NATIONAL ELECTRICAL CODE	UL	UNDERWRITERS LABORATORY
AL	ALUMINUM	FLEX	FLEXIBLE METALLIC CONDUIT (STEEL)	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	V	VOLT OR VOLTAGE
AWG	AMERICAN WIRE GAUGE	GFI	GROUND FAULT INTERRUPTER	N, NEUT	NEUTRAL	VA	VOLT AMPERE
BLDG	BUILDING	G, GND	GROUND	NC	NORMALLY CLOSED	W	WATT
C	CONDUIT	HP	HORSEPOWER	NO	NORMALLY OPEN	WP	UL LISTED WEATHERPROOF, NEMA 3R or 4
CAT	CATALOG/CATEGORY	IMC	INTERMEDIATE METAL CONDUIT	NTS	NOT TO SCALE		
C/B	CIRCUIT BREAKER	IN	INCH(ES)	OCP	OVERCURRENT PROTECTION		
CKT	CIRCUIT	JB, J-BOX	JUNCTION BOX	PH	PHASE		
COMM	COMMUNICATION	KCMIL	THOUSAND CIRCULAR MILS	PNL	PANEL		
CU	COPPER	KVA	KILOVOLT AMPERE	PWR	POWER		
DEMO	DEMOLITION/DEMOLISH	KW	KILOWATT	QTY	QUANTITY		
DISC	DISCONNECT	LTG	LIGHTING	RECEP	RECEPTACLE		
DWG	DRAWING	MAX	MAXIMUM	RGSC	RIGID GALVANIZED STEEL CONDUIT		
EA	EACH	MCB	MAIN CIRCUIT BREAKER	RM	ROOM		

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
ABBREVIATIONS G.P.N. LEGEND & SHEET INDEX

SHEET IDENTIFIER:
E001

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GENERAL PROJECT NOTES

1. ALL ELECTRICAL INSTALLATIONS TO CONFORM TO THE LATEST NEC AND LOCAL CODES.

2. THE ELECTRICAL CONTRACTOR SHALL HAVE A COORDINATION MEETING WITH THE MECHANICAL CONTRACTOR, CONSTRUCTION SUPERINTENDANT AND ANY OTHER TRADES AS REQUIRED WITHIN SEVEN DAYS OF THE START OF THE JOB TO REVIEW CODE CLEARANCE REQUIREMENTS FOR PANELS, SWITCHES, AND OTHER ELECTRICAL GEAR SPECIFICALLY FOR THIS JOB. RECORD THE MEETING IN THE SUPERINDENT'S LOG. REPORT UNRESOLVED CONFLICTS TO THE ARCHITECT IMMEDIATELY.

3. ELECTRICAL CONTRACTOR'S PROJECT MANAGER AND ON-SITE PROJECT FOREMAN SHALL REVIEW VENDOR SUBMITTALS FOR ACCURACY PRIOR TO SUBMITTING TO ENGINEER. INACCURACIES SHALL BE CORRECTED PRIOR TO ENGINEER SUBMITTAL.

4. SUBMITTALS FOR EACH SYSTEM WILL BE REVIEWED BY ENGINEER UP TO TWO TIMES--ONE FULL SUBMITTAL FOR OVERALL COMPLIANCE AND ONE RESUBMITTAL. ADDITIONAL REVIEWS WILL BE CHARGED TO CONTRACTOR AT ENGINEER'S STANDARD BILLING RATE.

5. SUBMITTALS TO ENGINEER SHALL INCLUDE ALL SPECIFIED SYSTEMS IN FIRST SUBMITTAL. PARTIAL SUBMITTALS WILL BE RETURNED TO CONTRACTOR AS INCOMPLETE AND WILL BE CONSIDERED ONE OF TWO INCLUDED SUBMITTAL REVIEWS.

6. THE CLARITY OF RECORD DRAWING CHANGES MADE BY THE CONTRACTOR SHALL BE EQUAL TO THE ORIGINAL DRAWINGS AS JUDGED BY THE ARCHITECT OR THE RECORD SET WILL BE RETURNED TO THE CONTRACTOR FOR CLARIFICATION.

7. WHEN THE GENERAL CONTRACT CALLS FOR “RECORD” OR “AS-BUILT” DRAWINGS TO BE FURNISHED BY THE CONTRACTOR AT JOB COMPLETION, THE ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO FURNISH A COMPLETE SET OF “BLUE-PRINT READY” AUTOCAD ELECTRICAL DRAWINGS FOR ALL CONTRACTOR GENERATED CHANGES FROM THE DRAWINGS OF A CLARITY EQUAL TO THE ORIGINAL DRAWINGS AS JUDGED BY THE ENGINEER. CONTACT ARCHITECT FOR DISKS OR REPRODUCIBLE ORIGINAL MEDIA. PROVIDE DRAWINGS ON CD IN AUTOCAD FORMAT.

8. DO NOT SCALE ELECTRICAL PLANS. SEE CIVIL DRAWINGS FOR ACCURATE DIMENSIONS AND FLOOR PLANS.

9. ELECTRICAL DEVICES CANNOT BE SHOWN TO SCALE AND SOMETIMES OVERLAP BUILDING ELEMENTS. REFER TO ARCHITECTURAL ELEVATIONS FOR ACCURATE MOUNTING LOCATIONS

10. ELECTRICAL CONTRACTOR SHALL CONTACT POWER COMPANY, TELEPHONE COMPANY, AND TV COMPANY WITHIN THE FIRST WEEK OF THE START OF CONSTRUCTION AND NOTIFY THEM OF THE PROBABLE DATE WHEN THE NEW ELECTRICAL, TELEPHONE, AND/OR TV SERVICE CONNECTION WILL BE NEEDED.

11. CONTRACTOR SHALL LOCATE AND INSTALL TRANSFORMER PAD PER POWER COMPANY SPECIFICATIONS. VERIFY PROPER CLEARANCES FROM BUILDING AND OTHER EQUIPMENT BEFORE INSTALLATION. THE LOCATION OF THE TRANSFORMER SHOWN ON THE PLANS IS AN APPROXIMATE LOCATION.

12. THE MAIN TELEPHONE AND TV SERVICES AS SHOWN ON THE DRAWINGS HAVE NOT BEEN COORDINATED WITH THE RESPECTIVE UTILITY COMPANIES DURING DESIGN. THE CONTRACTOR SHALL VERIFY THE TELEPHONE AND TV SERVICE AS SHOWN OR ANY CHANGES REQUIRED BY THE TELEPHONE COMPANY BEFORE INSTALLATION BEGINS. NOTIFY THE ARCHITECT IF CHANGES FROM THE DRAWING ARE REQUIRED.

13. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL PANEL CLEARANCES PER NEC 110.26 AND NOTIFY ALL OTHER TRADES ON THE JOB OF THESE CODE REQUIREMENTS.

14. PANEL INDEXES SHALL INCLUDE ALL PERTINENT INFORMATION ON THE PANEL SCHEDULES INCLUDING INFORMATION ON LIGHTS AND OUTLETS. DO NOT SIMPLY COPY THE CIRCUIT DESCRIPTION COLUMN. INDEXES TO BE TYPEWRITTEN.

15. CONDUITS ENTERING MAIN PANEL FROM THE BOTTOM SHALL BE ARRANGED IN STRAIGHT ROWS FASTENED TO UNISTRUT. HOLES SHALL BE PUNCHED IN PANEL BOTTOM AND CONDUITS FASTENED BY TWO LOCKNUTS AND A CONDUIT BUSHING. CUTTING OUT THE BOTTOM OF THE PANEL IS NOT PERMITTED.

16. DO NOT INSTALL PANELS IN FIRE WALLS.

17. ALL PARALLEL CONDUCTORS TO BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 310.4. WIRE IS TO BE LAID ON A FLAT SURFACE FOR MEASUREMENT. USE TORQUE WRENCH ON TERMINATIONS.

18. COORDINATE MOUNTING HEIGHT AND LOCATION OF ALL OUTLETS, SWITCHES, AUXILIARY EQUIPMENT, AND OTHER DEVICES WITH THE ARCHITECTURAL DRAWINGS. PRIOR TO INSTALLATION, REVIEW WITH THE GENERAL CONTRACTOR THE LOCATION OF MILLWORK AS A FINAL CHECK TO PREVENT COVERING OF ELECTRICAL ITEMS.

19. MOUNTING HEIGHT OF GENERAL PURPOSE OUTLETS AND SWITCHES SHALL BE 16” TO BOTTOM AND 48” TO TOP RESPECTIVELY UNLESS OTHERWISE NOTED.

20. EMT IS NOT ALLOWED OUT OF DOORS.

21. DO NOT INSTALL IN-GRADE JUCTION BOXES UNLESS SPECIFICALLY SHOWN ON DRAWINGS. CONDUCTORS SHALL BE RUN CONTINOUS WITHOUT SPLICING FROM SOURCE OR DEVICE TO NEXT DEVICE.

22. CIRCUIT WIRE SIZES MUST, AT MINIMUM, MATCH NEC REQUIRED CONDUUCTOR SIZES FOR CORRESPONDING OVERCURRENT PROCTECTIVE DEVICES. VERIFY WITH PANEL SCHEDULES BEFORE PULLING WIRE.

23. HOME RUNS MUST BE RUN EXACTLY AS SHOWN ON PLANS UNLESS OTHERWISE NOTED. DO NOT COMBINE HOME RUNS INTO ONE CONDUIT THAT ARE NOT SHOWN COMBINED ON THE DRAWINGS.

24. CIRCUIT WIRING SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS. ANY DEVIATIONS SHALL BE INITIATED BY A CHANGE ORDER FROM THE ARCHITECT. OTHERWISE THE RECORD SET SHALL MATCH THE CONSTRUCTION SET.

25. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR, PULLED INTO THE CONDUIT WITH THE PHASE CONDUCTOR, IN ALL SERVICE, FEEDER, AND BRANCH CIRCUITS.

26. PROVIDE A NEUTRAL CONDUCTOR FOR EACH BREAKER TRIP HANDLE. NEUTRALS SHALL NOT BE SHARED BETWEEN BRANCH CIRCUITS.

27. ALL CIRCUITS TO BE MINIMUM #12 CU IN MINIMUM 3/4” CONDUIT UNLESS OTHERWISE NOTED.

28. MC CABLE IS NOT AN APPROVED ALTERNATE TO CONDUCTORS IN CONDUIT.

29. INCLUDE AS PART OF THE JOB THE INSTALLATION OF AN EXTRA 200 FT OF 3/4” EMT WITH 4 #10 WIRES INSTALLED AND TWO J-BOX TERMINATIONS.

30. IDENTIFY ALL OUTLET COVER PLATES WITH THE PANEL AND CIRCUIT NUMBER.

31. A GFI OUTLET SHALL BE INSTALLED AT EACH LOCATION DESIGNATED BY “GFI” ON THE DRAWINGS. DOWNSTREAM PROTECTION BY A GFI OUTLET UPSTREAM IS NOT ALLOWED.

32. ALL CONVENIENCE OUTLETS MUST BE MOUNTED FLUSH WITH THE COVER PLATE AND SECURED FIRMLY TO THE OUTLET BOX.

33. ALL CONVENIENCE OUTLETS MUST BE RATED TAMPER RESISTANT

34. ALL PATCH, REPAIR, REPAINT AND COVER UP REQUIRED AS A RESULT OF ELECTRICAL REMODEL IS TO BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, BUT ACTUAL WORK IS TO BE PERFORMED BY QUALIFIED PERSONNEL.

35. FIXTURE COUNTS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE TO VERIFY FIXTURE COUNTS AS PART OF BIDDING PROCESS.

36. WHERE LIGHT FIXTURES AS SPECIFIED AS COLOR PER ARCHITECT, THIS SHALL BE INTERPRETED AS A NON-STANDARD COLOR

37. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW ALL SWITCH LOCATIONS WITH THE GENERAL CONTRACTOR PRIOR TO ROUGH-IN TO PREVENT ANY SWITCHES FROM BEING LOCATED ON THE WRONG SIDE OF THE DOOR.

38. ELECTRICAL CONTRACTOR SHALL FURNISH ALL MOTOR DISCONNECTS, STARTERS, AND CONTROL STATIONS FOR MECHANICAL EQUIPMENT UNLESS THE SAME IS FURNISHED AS AN INTEGRAL PART OF THE EQUIPMENT. VERIFY WITH MECHANICAL CONTRACTOR PRIOR TO BID.

39. PROVIDE SAFETY DISCONNECTS AS REQUIRED AT ALL CONNECTIONS TO MECHANICAL EQUIPMENT. PROVIDE FUSING AND RATINGS PER NAMEPLATE INFORMATION OF EQUIPMENT SERVED.

40. WHERE AUTOMATIC SPRINKLER CONTROLS ARE SHOWN ON THE LANDSCAPE OR ARCHITECTURAL DRAWINGS, PROVIDE A FLUSH SINGLE-GANG J-BOX BEHIND THE CONTROL AND CONNECT TO THE NEAREST OUTLET CIRCUIT WITH AVAILABLE CAPACITY.

41. DISCONNECT SWITCHES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL ELECTRICAL SWITCHES AND MOTOR CONTROL FOR PROPER CODE CLEARANCES. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS WITH OTHER TRADES REGARDING PROPER EQUIPMENT CLEARANCES.

42. ALL DISCONNECT SWITCHES FOR MOTORS SHALL BE RATED A MINIMUM OF 22000 AIC UNLESS OTHERWISE SHOWN.

43. BEFORE RUNNING CONDUITS, PLACING OUTLETS OR ORDERING EQUIPMENT, THE CONTRACTOR SHALL REVIEW THE SPECIFICATIONS AND DESIGN AND SHOP DRAWINGS OF THE OTHER TRADES SERVED BY THE CONDUIT, OUTLETS, AND/OR EQUIPMENT.

44. PROVIDE NEUTRAL CONNECTION TO 208/240/480V, SINGLE-PHASE EQUIPMENT. RUN SEPARATE GROUND WIRE TO ALL OUTDOOR UNITS AND BOND TO THE EQUIPMENT GROUND LUG.

45. ELECTRICAL CONTRACTOR SHALL INSTALL A PULL STRING IN ALL COMMUNICATIONS, SECURITY, AND OTHER LOW VOLTAGE CONDUITS FOR USE BY LOW VOLTAGE SYSTEM CONTRACTOR.

46. ELECTRICAL CONTRACTOR SHALL INSTALL A PULL STRING IN ALL UNUSED POWER AND LIGHTING CONDUITS.

47. WHERE THERE ARE CONFLICTS IN THE DRAWINGS AND/OR SPECIFICATIONS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO BID. WHERE NO NOTIFICATION IS GIVEN THE MORE STRINGENT INTERPRETATION (GENERALLY INTERPRETED TO BE THE MORE COSTLY) WILL BE ENFORCED.

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
GENERAL PROJECT NOTES

SHEET IDENTIFIER:
E002

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ELECTRICAL SPECIFICATIONS

SECTION 260500 - COMMON WORK RESULTS FOR ELECTRICAL

1.1 GENERAL
- A. Specifications included here are a supplement to the American Public Works Association (APWA) Manual of Standard Specifications (2017) hereby incorporated by reference.

1.2 PERFORMANCE REQUIREMENTS
- A. Seismic Performance: Equipment controllers shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
  1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."

1.3 ENCLOSURES
- A. Comply with environmental conditions at installed location.
  1. Indoor, Dry and Clean Locations: NEMA 250, Type 1.
  2. Outdoor Locations: NEMA 250, Type 3R.
  3. Other Wet or Damp, Indoor Locations: NEMA 250, Type 4.

1.4 GROUT
- A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107, factory-packaged, nonmetallic aggregate grout, noncorrosive, nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.

1.5 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION
- A. Comply with NECA 1.
- B. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.
- C. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.
- D. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.
- E. Right of Way: Give to piping systems installed at a required slope.

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

1.1 GENERAL
- A. Specifications included here are a supplement to the American Public Works Association (APWA) Manual of Standard Specifications (2017) hereby incorporated by reference.

1.2 CONDUCTORS
- A. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
- B. Bare Copper Conductors:
  1. Solid Conductors: ASTM B 3.
  2. Stranded Conductors: ASTM B 8.
  3. Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch in diameter.
  4. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
  5. Bonding Jumper: Copper tape, braided conductors, terminated with copper ferrules; 1- 5/8 inches wide and 1/16 inch thick.

1.3 CONNECTORS
- A. Listed and labeled by a nationally recognized testing laboratory acceptable to authorities having jurisdiction for applications in which used, and for specific types, sizes, and combinations of conductors and other items connected.

1.4 GROUNDING ELECTRODES
- A. Ground Rods: Copper-clad steel, sectional type; 3/4 inch by10 feet in diameter.

1.5 APPLICATIONS
- A. Conductors: Install solid or stranded conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger, unless otherwise indicated.
- B. Conductor Terminations and Connections:
  1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
  2. Underground Connections: Welded connectors, except at ground rods and as otherwise indicated.
  3. Connections to Ground Rods: Bolted connectors.
  4. Connections to Structural Steel: Welded connectors.

1.6 EQUIPMENT GROUNDING
- A. Install insulated equipment grounding conductors all feeder and branch circuits , in addition to those required by NFPA 70:
- B. Metal Poles Supporting Outdoor Lighting Fixtures: Install grounding electrode and a separate insulated equipment grounding conductor in addition to grounding conductor installed with branch-circuit conductors.

1.7 INSTALLATION
- A. Grounding Conductors: Route along shortest and straightest paths possible, unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
- B. Ground Rods: Drive rods until tops are 2 inches below finished floor or final grade, unless otherwise indicated.

SECTION 260533 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

1.1GENERAL
- A. Specifications included here are a supplement to the American Public Works Association (APWA) Manual of Standard Specifications (2017) hereby incorporated by reference.

1.2 HANDHOLES AND BOXES FOR EXTERIOR UNDERGROUND WIRING
- A. Description: Comply with SCTE 77.
  1. Color of Frame and Cover: Gray.
  2. Configuration: Units shall be designed for flush burial and have open bottom, unless otherwise indicated.
  3. Cover: Weatherproof, secured by tamper-resistant locking devices and having structural load rating consistent with enclosure.
  4. Cover Finish: Nonskid finish shall have a minimum coefficient of friction of 0.50.
  5. Cover Legend: Molded lettering, "ELECTRIC."
  6. Handholes 12 inches wide by 24 inches long and larger shall have inserts for cable racks and pulling-in irons installed before concrete is poured.
- B. Polymer-Concrete Handholes and Boxes with Polymer-Concrete Cover: Molded of sand and aggregate, bound together with polymer resin, and reinforced with steel or fiberglass or a combination of the two.

1.3INSTALLATION
- A. Complete raceway installation before starting conductor installation.
- B. Support raceways as specified in Division 26 Section "Hangers and Supports for Electrical Systems."
- C. Arrange stub-ups so curved portions of bends are not visible above the finished slab.
- D. Install no more than the equivalent of three 90-degree bends in any conduit run except for communications conduits, for which fewer bends are allowed.
- E. Conceal conduit and EMT within finished walls, ceilings, and floors, unless otherwise indicated.
- F. Raceways Embedded in Slabs:
  1. Run conduit larger than 1-inch trade size, parallel or at right angles to main reinforcement. Where at right angles to reinforcement, place conduit close to slab support.
  2. Arrange raceways to cross building expansion joints at right angles with expansion fittings.
  3. Change from RNC, Type EPC-40-PVC to rigid steel conduit before rising above the floor.
- G. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 12 inches of slack at each end of pull wire.

1.4INSTALLATION OF UNDERGROUND CONDUIT
- A. Direct-Buried Conduit:
  1. Excavate trench bottom to provide firm and uniform support for conduit. Prepare trench bottom as specified..
  2. After installing conduit, backfill and compact. Start at tie-in point, and work toward end of conduit run, leaving conduit at end of run free to move with expansion and contraction as temperature changes during this process. Firmly hand tamp backfill around conduit to provide maximum supporting strength. After placing controlled backfill to within 12 inches of finished grade, make final conduit connection at end of run and complete backfilling with compaction.
  3. Install manufactured duct elbows for stub-ups at poles and equipment and at building entrances through the floor, unless otherwise indicated. Encase elbows for stub-up ducts throughout the length of the elbow.

1.5INSTALLATION OF UNDERGROUND HANDHOLES AND BOXES
- A. Install handholes and boxes level and plumb and with orientation and depth coordinated with connecting conduits to minimize bends and deflections required for proper entrances.
- B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2- inch sieve to No. 4 sieve and compacted to same density as adjacent undisturbed earth.
- C. Elevation: In paved areas, set so cover surface will be flush with finished grade. Set covers of other enclosures 1 inch above finished grade.
- D. Install removable hardware, including pulling eyes, cable stanchions, cable arms, and insulators, as required for installation and support of cables and conductors and as indicated. Select arm lengths to be long enough to provide spare space for future cables, but short enough to preserve adequate working clearances in the enclosure.
- E. Field-cut openings for conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

SECTION 260548 - VIBRATION AND SEISMIC CONTROLS FOR ELECTRICAL SYSTEMS

1.1 GENERAL
- A. Specifications included here are a supplement to the American Public Works Association (APWA) Manual of Standard Specifications (2017) hereby incorporated by reference.

1.2 PERFORMANCE REQUIREMENTS
- A. Seismic-Restraint Loading:
  1. Site Class as Defined in the IBC: D.
  2. Assigned Seismic Use Group or Building Category as Defined in the IBC: III.
     - a. Component Importance Factor: 1.0.
     - b. Component Response Modification Factor:
       1) Fixtures: 1.5
       2) Equipment: 2.5
       3) Conduit and Cables: 5.0.
     - c. Component Amplification Factor: 2.5.
  3. Design Spectral Response Acceleration at Short Periods (0.2 Second): as defined in structural documents1. Design Spectral Response Acceleration at 1.0-Second Period: as defined in structural documents.

1.3QUALITY ASSURANCE
- A. Comply with seismic-restraint requirements in the IBC unless requirements in this Section are more stringent.
- B. Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- C. Comply with NFPA 70.

1.4SEISMIC-RESTRAINT DEVICES
- A. General Requirements for Restraint Components: Rated strengths, features, and application requirements shall be as defined in reports by an agency acceptable to authorities having jurisdiction.
  1. Structural Safety Factor: Allowable strength in tension, shear, and pullout force of components shall be at least four times the maximum seismic forces to which they will be subjected.
- B. Channel Support System: MFMA-3, shop- or field-fabricated support assembly made of slotted steel channels with accessories for attachment to braced component at one end and to building structure at the other end and other matching components and with corrosion-resistant coating; and rated in tension, compression, and torsion forces.
- C. Mechanical Anchor: Drilled-in and stud-wedge or female-wedge type in zinc-coated steel for interior applications and stainless steel for exterior applications. Select anchors with strength required for anchor and as tested according to ASTM E 488. Minimum length of eight times diameter.
- D. Adhesive Anchor: Drilled-in and capsule anchor system containing polyvinyl or urethane methacrylate- based resin and accelerator, or injected polymer or hybrid mortar adhesive. Provide anchor bolts and hardware with zinc-coated steel for interior applications and stainless steel for exterior applications. Select anchor bolts with strength required for anchor and as tested according to ASTM E 488.

1.5SEISMIC-RESTRAINT DEVICE INSTALLATION
- A. Drilled-in Anchors:
  1. Identify position of reinforcing steel and other embedded items prior to drilling holes for anchors. Do not damage existing reinforcing or embedded items during coring or drilling. Notify the structural engineer if reinforcing steel or other embedded items are encountered during drilling. Locate and avoid prestressed tendons, electrical and telecommunications conduit, and gas lines.
  2. Do not drill holes in concrete or masonry until concrete, mortar, or grout has achieved full design strength.
  3. Wedge Anchors: Protect threads from damage during anchor installation. Heavy-duty sleeve anchors shall be installed with sleeve fully engaged in the structural element to which anchor is to be fastened.
  4. Adhesive Anchors: Clean holes to remove loose material and drilling dust prior to installation of adhesive. Place adhesive in holes proceeding from the bottom of the hole and progressing toward the surface in such a manner as to avoid introduction of air pockets in the adhesive.
  5. Set anchors to manufacturer's recommended torque, using a torque wrench.
  6. Install zinc-coated steel anchors for interior and stainless-steel anchors for exterior applications.

SECTION 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

1.1GENERAL
- A. Specifications included here are a supplement to the American Public Works Association (APWA) Manual of Standard Specifications (2017) hereby incorporated by reference.

1.2INSTALLATION
- A. Verify identity of each item before installing identification products.
- B. Underground-Line Warning Tape: During backfilling of trenches install continuous underground-line warning tape directly above line at 6 to 8 inches above lines. Use multiple tapes where width of multiple lines installed in a common trenchexceeds 16 inches overall.

1.3IDENTIFICATION SCHEDULE
- A. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and handholes, use color-coding conductor tape to identify the phase.
  1. Color-Coding for Phase Identification, 600 V or Less: Use colors listed below for ungrounded branch-circuit conductors.
     - a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG, if authorities having jurisdiction permit.
     - b. Colors for 120/240-V Circuits
       1) Phase A: Black.
       2) Phase B: Red.
       3) Neutral: White with colored stripe to match associated phase
       4) Ground: Green
     - c. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.
- B. Locations of Underground Lines: Identify with underground-line warning tape for power, lighting, communication, and control wiring and optical fiber cable.
  1. Install underground-line warning tape for both direct-buried cables and cables in raceway.

SECTION 265100 - EXTERIOR LIGHTING

1.1GENERAL
- A. Specifications included here are a supplement to the American Public Works Association (APWA) Manual of Standard Specifications (2017) hereby incorporated by reference.
  1. APWA installation standards for roadway lighting are applicable to non-roadway, area lighting

1.2STRUCTURAL ANALYSIS CRITERIA FOR POLE SELECTION
- A. Dead Load: Weight of luminaire and its horizontal and vertical supports, lowering devices, and supporting structure, applied as stated in AASHTO LTS-4.
- B. Wind Load: Pressure of wind on pole and luminaire, calculated and applied as stated in AASHTO LTS- 4.
  1. Wind speed for calculating wind load for poles exceeding 50 feet in height is 110 mph.

1.3SUBMITTALS
- A. Product Data: For each luminaire, pole, and support component, arranged in order of lighting unit designation.
- B. Operation and Maintenance Data: For luminaires and poles to include in emergency, operation, and maintenance manuals.

1.4QUALITY ASSURANCE
- A. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by manufacturers' laboratories that are accredited under the National Volunteer Laboratory Accreditation Program for Energy Efficient Lighting Products.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

1.5POLES AND SUPPORT COMPONENTS, GENERAL REQUIREMENTS
- A. Structural Characteristics: Comply with AASHTO LTS-4.
  1. Wind-Load Strength of Poles: Adequate at indicated heights above grade without failure, permanent deflection, or whipping in steady winds of speed indicated in Part 1 "Structural Analysis Criteria for Pole Selection" Article, with a gust factor of 1.3.
  2. Strength Analysis: For each pole, multiply the actual equivalent projected area of luminaires and brackets by a factor of 1.1 to obtain the equivalent projected area to be used in pole selection strength analysis.
- B. Luminaire Attachment Provisions: Comply with luminaire manufacturers' mounting requirements. Use stainless-steel fasteners and mounting bolts, unless otherwise indicated.
- C. Mountings, Fasteners, and Appurtenances: Corrosion-resistant items compatible with support components.
  1. Materials: Shall not cause galvanic action at contact points.
  2. Anchor Bolts, Leveling Nuts, Bolt Caps, and Washers: Hot-dip galvanized after fabrication, unless stainless-steel items are indicated.
  3. Anchor-Bolt Template: Plywood or steel.
- D. Concrete Pole Foundations: Cast in place, with anchor bolts to match pole-base flange.

1.6ALUMINUM POLES
- A. Poles: ASTM B 209, 5052-H34 marine sheet alloy with access handhole in pole wall.
- B. Grounding and Bonding Lugs: Welded 1/2-inch threaded lug, complying with requirements in Division 26 Section "Grounding and Bonding for Electrical Systems," listed for attaching grounding and bonding conductors of type and size listed in that Section, and accessible through handhole.
- C. Brackets for Luminaires: Detachable, with pole and adapter fittings of cast aluminum. Adapter fitting welded to pole and bracket, then bolted together with stainless-steel bolts.
  1. Finish: Same as pole.

1.7 POLE ACCESSORIES
- A. Base Covers: Manufacturers' standard metal units, arranged to cover pole's mounting bolts and nuts. Finish same as pole.

1.8 LED LUMINAIRES
- A. Solid State Drivers and LED: Comply with DOE LM 79
  1. Total Harmonic Distortion Rating: Less than 10 percent
  2. Transient Voltage protection
  3. Power factor: 0.90 or higher
  4. Temperatures: Minus 40 deg F (minus 40 deg C) and higher
  5. Heat sink to remove heat from circuits
  6. L70 compliant to 70,000 hours minimum
  7. Dimmable
     - a. Dimming Range: 100 to 1 percent of rated lamp lumens
     - b. Input watts: Can be reduced to 20 percent of normal

1.9LUMINAIRE INSTALLATION
- A. Fasten luminaire to indicated structural supports.
  1. Use fastening methods and materials selected to resist seismic forces defined for the application and approved by manufacturer.

1.10 POLE INSTALLATION
- A. Align pole foundations and poles for optimum directional alignment of luminaires and their mounting provisions on the pole.
- B. Clearances:Maintain the following minimum horizontal distances of poles from surface and underground features, unless otherwise indicated on Drawings:
  1. Fire Hydrants and Storm Drainage Piping: 60 inches.
  2. Water, Gas, Electric, Communication, and Sewer Lines: 10 feet.
- C. Concrete Pole Foundations: Set anchor bolts according to anchor-bolt templates furnished by pole manufacturer.
- D. Raise and set poles using web fabric slings (not chain or cable).

SECTION 270528 - PATHWAYS FOR COMMUNICATIONS SYSTEMS

1.1 GENERAL
- A. Specifications included here are a supplement to the American Public Works Association (APWA) Manual of Standard Specifications (2017) hereby incorporated by reference.

1.2 METAL CONDUITS AND FITTINGS
- A. See section 260533 "Raceways and boxes for Electrical Systems".

1.3 BOXES, ENCLOSURES, AND CABINETS
- A. See section 260533 "Raceways and boxes for Electrical Systems" unless otherwise indicated below.
- B. Device Box Dimensions: 4 inches square by 2-1/2 inches deep.

1.4 HANDHOLES AND BOXES FOR EXTERIOR UNDERGROUND CABLING
- A. See section 260533 "Raceways and boxes for Electrical Systems".

1.5 PATHWAY APPLICATION
- A. See section 260533 "Raceways and boxes for Electrical Systems" unless otherwise indicated below.
- B. Indoors: Apply pathway products as specified below unless otherwise indicated:
- C. Minimum Pathway Size: 1 inch.

1.6 INSTALLATION
- A. See section 260533 "Raceways and boxes for Electrical Systems" unless otherwise indicated below.
- B. Install no more than the equivalent of two 90-degree bends in any pathway run. Support within 12 inches of changes in direction. Utilize long radius ells for all optical-fiber cables.
- C. Coat field-cut threads on PVC-coated pathway with a corrosion-preventing conductive compound prior to assembly.
- D. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install insulated bushings on conduits terminated with locknuts.
- E. Do not rely on locknuts to penetrate nonconductive coatings on enclosures. Remove coatings in the locknut area prior to assembling conduit to enclosure to assure a continuous ground path.
- F. Spare Pathways: Install pull wires in empty pathways. Cap underground pathways designated as spare above grade alongside pathways in use.
- G. Pathways for Communications Cable: Install pathways as follows:
  1. 1-Inch Trade Size and Larger: Install pathways in maximum lengths of 75 feet.
  2. Install with a maximum of two 90-degree bends or equivalent for each length of pathway unless Drawings show stricter requirements.

1.7 INSTALLATION OF UNDERGROUND CONDUIT
- A. See section 260533 "Raceways and boxes for Electrical Systems" unless otherwise indicated below.

1.8 INSTALLATION OF UNDERGROUND HANDHOLES AND BOXES
- A. See section 260533 "Raceways and boxes for Electrical Systems" unless otherwise indicated below.

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
ELECTRICAL SPECIFICATIONS

SHEET IDENTIFIER:
E003

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ELECTRICAL LEGEND

ANNOTATIONS

X / XXX	DETAIL CALL-OUT; TOP "X" REFERS TO DETAIL NUMBER & BOTTOM "XXX" REFERS TO SHEET NUMBER
#	KEYED NOTE CALLOUT
#.#	EQUIPMENT CALLOUT

LIGHTING FIXTURES

FIXTURE LUMEN INDICATOR
FIXTURE SIZE INDICATOR
FIXTURE TYPE
XXX - XXx (X)
FIXTURE ACCESSORY APPEND

	STRIP LIGHT
	LINEAR FIXTURE
	EMERGENCY FIXTURE
	WALL MOUNT FIXTURE
	POLE LIGHT; ONE HEAD
	POLE LIGHT; TWO HEAD
	DECORATIVE POLE LIGHT

LIGHTING CONTROL

GENERAL CONTROLS

$_{DT}	OCCUPANCY SENSOR: DUAL TECHNOLOGY
$_{VS}	OCCUPANCY SENSOR: VACANCY SENSOR FUNCTION
$_{OS}	OCCUPANCY SENSOR: OCCUPANCY SENSOR FUNCTION
P	PHOTOCELL

LOCAL CONTROLS

$^{X}	SINGLE POLE SWITCH; "x" INDICATES SWITCH GROUP
$_{3}	THREE WAY SWITCH
$_{L}	DIMMER SWITCH: LED; 600 W MINIMUM
$_{VS}	WALL MOUNT OCCUPANCY SENSOR: VACANCY SENSOR FUNCTION
$_{OS}	WALL MOUNT OCCUPANCY SENSOR: OCCUPANCY SENSOR FUNCTION

CENTRAL SYSTEM CONTROLS
(SEE LIGHTING CONTROL SCHEDULES FOR COMPLETE INFORMATION)

$_{LO#}	OCCUPANCY SENSOR: LIGHTING CONTROL SYSTEM; O# = LIGHTING CONTROL TYPE
P_{DR}	PHOTOCELL: DAYLIGHT RESPONSIVE FOR CONTINUOUS DIMMING APPLICATIONS.
P_{LP#}	PHOTOCELL: INTEGRATED TO LIGHTING CONTROL SYSTEM; P# = LIGHTING CONTROL TYPE
$_{W*}	SWITCH; WIRELESS

POWER AND DISTRIBUTION

	DISTRIBUTION PANEL
	PANELBOARD
	METER / METER SOCKET

COMMUNICATIONS

	COMMUNICATIONS ENCLOSURE

BRANCH CIRCUITING

	DUPLEX OUTLET
	FACELESS GFCI PROTECTION DEVICE
	DUPLEX OUTLET: GROUND FAULT INTERRUPTER
WP	DUPLEX OUTLET: WEATHERPROOF
WPIU	DUPLEX OUTLET: WEATHERPROOF-IN-USE COVER
	DOUBLE DUPLEX OUTLET
	DOUBLE DUPLEX OUTLET: GROUND FAULT INTERRUPTER
	SPECIAL OUTLET: SEE PANEL SCHEDULE
J	JUNCTION BOX
	DISCONNECT; NO OVER-CURRENT PROTECTION
	DISCONNECT WITH OVER-CURRENT PROTECTION (CIRCUIT BREAKER STYLE OR AS SPECIFIED)
$_{m}	MOTOR PROTECTIVE THERMAL SWITCH
$_{SSU}	MOTOR PROTECTIVE FUSED THERMAL SWITCH
	QUANTITY OF CONDUCTORS: SHORT LINES = PHASE /SWITCH, LONG LINES = NEUTRAL
	HOME-RUN
	CIRCUITING: LINE VOLTAGE
	CIRCUITING: CONTROL

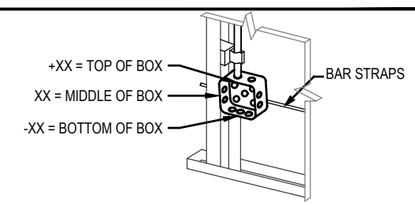
SITE ELECTRICAL

---1ØOP---	1-PHASE OVERHEAD PRIMARY POWER
---1ØOS---	1-PHASE OVERHEAD SECONDARY POWER
---1ØUF---	1-PHASE UNDERGROUND FEEDER
---1ØUP---	1-PHASE UNDERGROUND PRIMARY POWER
---1ØUS---	1-PHASE UNDERGROUND SECONDARY POWER
--(E)3ØOP--	3-PHASE OVERHEAD PRIMARY POWER : EXISTING
---3ØOP---	3-PHASE OVERHEAD PRIMARY POWER
---3ØOS---	3-PHASE OVERHEAD SECONDARY POWER
--(E)3ØUP--	3-PHASE UNDERGROUND PRIMARY POWER : EXISTING
--(E)3ØUS--	3-PHASE UNDERGROUND SECONDARY POWER : EXISTING
--(D)3ØUP--	3-PHASE UNDERGROUND PRIMARY POWER: DEMO
--(D)3ØUS--	3-PHASE UNDERGROUND SECONDARY POWER: DEMO
---3ØUP---	3-PHASE UNDERGROUND PRIMARY POWER
---3ØUS---	3-PHASE UNDERGROUND SECONDARY POWER
---OT---	OVERHEAD TELEPHONE
---OTV---	OVERHEAD TV
---(E)UT---	UNDERGROUND TELEPHONE : EXISTING
--(E)UTV--	UNDERGROUND TV : EXISTING
---(D)UT---	UNDERGROUND TELEPHONE : DEMO
--(D)UTV--	UNDERGROUND TV : DEMO
----UT----	UNDERGROUND TELEPHONE
---UTV---	UNDERGROUND TV
	POINT OF DISCONNECTION
	POINT OF CONNECTION
	UTILITY POLE

ONE-LINE

XA / YP	BREAKER : "x" = BREAKER AMPERAGE "y" = QUANTITY OF POLES
	BRANCH PANEL
	BRANCH PANEL WITH MAIN BREAKER
	BRANCH PANEL WITH SUB FEED BREAKER
x	FEEDER SIZE (REFER TO CONDUIT AND CONDUCTOR SCHEDULE UNLESS OTHERWISE NOTED)
	GROUND
SPD	SURGE PROTECTIVE DEVICE
hp	MOTOR : hp = MOTOR HORSEPOWER

GENERAL WALL-MOUNTED BOX HEIGHT DETAIL



REFER TO POWER, LIGHTING AND COMMUNICATIONS PLANS FOR SPECIFIC DIMENSIONS. SEE GENERAL NOTES AND SPECIFICATIONS WHERE NO HEIGHTS ARE INDICATED.

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

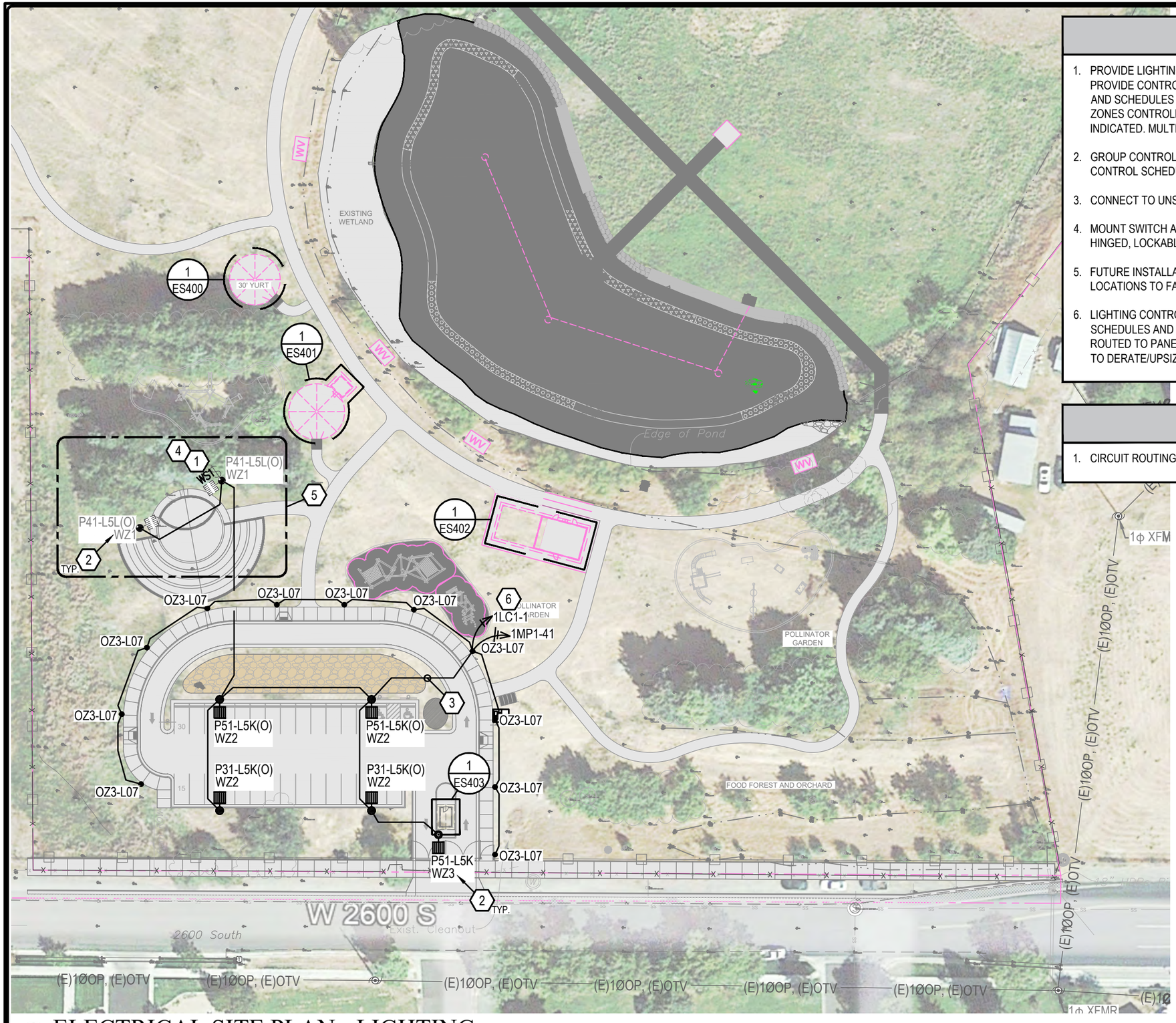
DATE: MAY 2024

SHEET TITLE:
ELECTRICAL LEGEND

SHEET IDENTIFIER:
E004

REGISTERED PROFESSIONAL ENGINEER
No. 294174
SHANE D. SWENSON
5/24/2024
STATE OF UTAH

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SHEET KEYED NOTES

1. PROVIDE LIGHTING CONTROL OVERRIDE SWITCHES AT LOCATIONS INDICATED. PROVIDE CONTROL WIRING PER MANUFACTURER'S REQUIREMENTS. SEE DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. ENGRAVE COVER PLATE WITH ZONES CONTROLLED. PROVIDE SEPARATE BUTTON/LABELING FOR EACH ZONE INDICATED. MULTIPLE BUTTONS SHALL BE MOUNTED IN A SINGLE-GANG COVER.
2. GROUP CONTROL OF WIRELESS LIGHTING ZONE INDICATED. REFER TO LIGHTING CONTROL SCHEDULES FOR ADDITIONAL INFORMATION.
3. CONNECT TO UNSWITCHED SOURCE CONDUCTOR.
4. MOUNT SWITCH AT STANDARD SWITCH HEIGHT IN EXTRA POLE HANDHOLE. PROVIDE HINGED, LOCKABLE COVER.
5. FUTURE INSTALLATIONS SHOWN FOR REFERENCE. PROVIDE CONDUITS TO DEVICE LOCATIONS TO FACILITATE FUTURE BUILD-OUT.
6. LIGHTING CONTROL PANEL SWITCH LEGS. REFER TO LIGHTING CONTROL PANEL SCHEDULES AND DETAILS FOR ADDITIONAL INFORMATION. SWITCH LEGS MAY BE ROUTED TO PANEL IN SAME CONDUITS AS CONSTANT POWER FEEDS. CONTRACTOR TO DERATE/UPSIZE CONDUCTORS & CONDUIT WHERE REQUIRED.

GENERAL SHEET NOTES

1. CIRCUIT ROUTING IS SCHEMATIC UNLESS OTHERWISE NOTED.

1 ELECTRICAL SITE PLAN - LIGHTING

Scale: 1"=60'-0"

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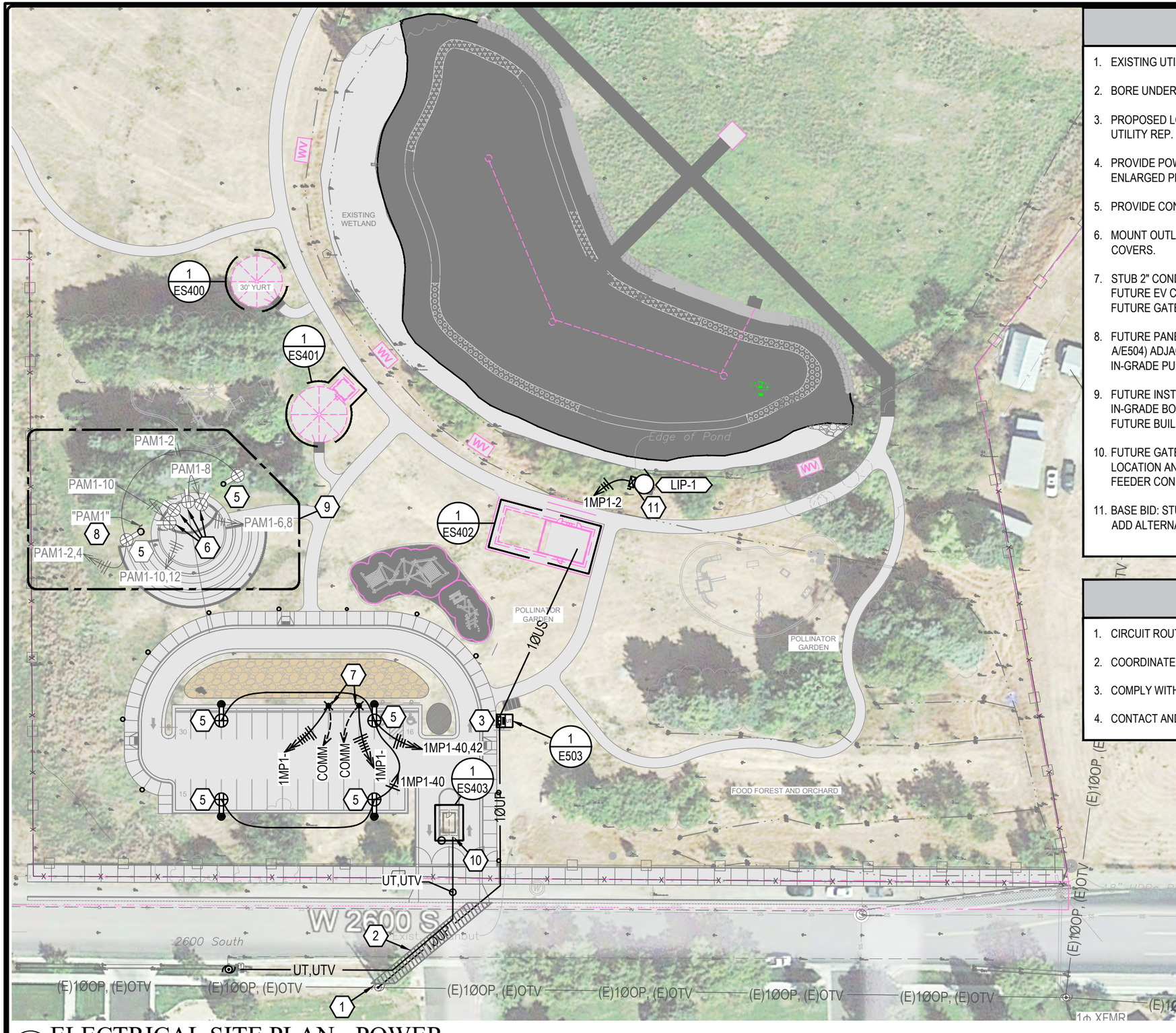
SHEET TITLE:
ELECTRICAL SITE PLAN - LIGHTING

SHEET IDENTIFIER:
ES101

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1 ELECTRICAL SITE PLAN - POWER

Scale: 1"=60'-0"

SHEET KEYED NOTES

1. EXISTING UTILITY POLE TO REMAIN.
2. BORE UNDER EXISTING ROAD FOR NEW INSTALLATIONS.
3. PROPOSED LOCATION FOR NEW UTILITY TRANSFORMER. COORDINATE WITH LOCAL UTILITY REP.
4. PROVIDE POWER TO STRUCTURE. SEE E601 - ELECTRICAL ONE-LINE DIAGRAM AND ENLARGED PLANS FOR ADDITIONAL INFORMATION.
5. PROVIDE CONNECTIONS TO POLE MOUNTED OUTLETS AS REQUIRED.
6. MOUNT OUTLETS IN BACK CONCRETE RISER OF AMPHITHEATER. PROVIDE WP-IN-USE COVERS.
7. STUB 2" CONDUIT FROM IN-GRADE PULL BOX TO PANEL INDICATED TO ALLOW FOR FUTURE EV CHARGING STATION. PROVIDE 1" CONDUIT FROM SAME PULL BOX TO FUTURE GATEHOUSE IN-GRADE BOX(SEE KEY NOTE #10 THIS SHEET.
8. FUTURE PANEL TO BE MOUNTED TO STRUCTURAL METAL SUPPORT (SEE DETAIL A/E504) ADJACENT TO POLE. STUB CONDUIT TO PANEL LOCATION AND TERMINATE IN IN-GRADE PULL BOX AS SPECIFIED.
9. FUTURE INSTALLATIONS SHOWN FOR REFERENCE. PROVIDE CONDUIT STUBS FROM IN-GRADE BOX (SEE KEY NOTE #8 ABOVE) TO DEVICE LOCATIONS TO FACILITATE FUTURE BUILD-OUT.
10. FUTURE GATEHOUSE. STUB COMMUNICATIONS UTILITY CONDUIT TO GATEHOUSE LOCATION AND TERMINATE IN FLUSH-IN-GRADE BOX AS SPECIFIED. STUB PANEL FEEDER CONDUIT TO LOCATION AND TERMINATE IN SEPARATE IN-GRADE BOX.
11. BASE BID: STUB CONDUIT TO PUMP LOCATION.
    ADD ALTERNATE #2 PRICING: COMPLETE INSTALLATION AS SHOWN.

GENERAL SHEET NOTES

1. CIRCUIT ROUTING IS SCHEMATIC UNLESS OTHERWISE NOTED.
2. COORDINATE ALL UTILITY INSTALLATIONS WITH LOCAL UTILITY REPS.
3. COMPLY WITH ALL UTILITY REQUIREMENTS FOR NEW UTILITY INSTALLATIONS.
4. CONTACT ANDY PHILIPS WITH RMP FOR PRE-INSTALLATION COORDINATION.

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Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
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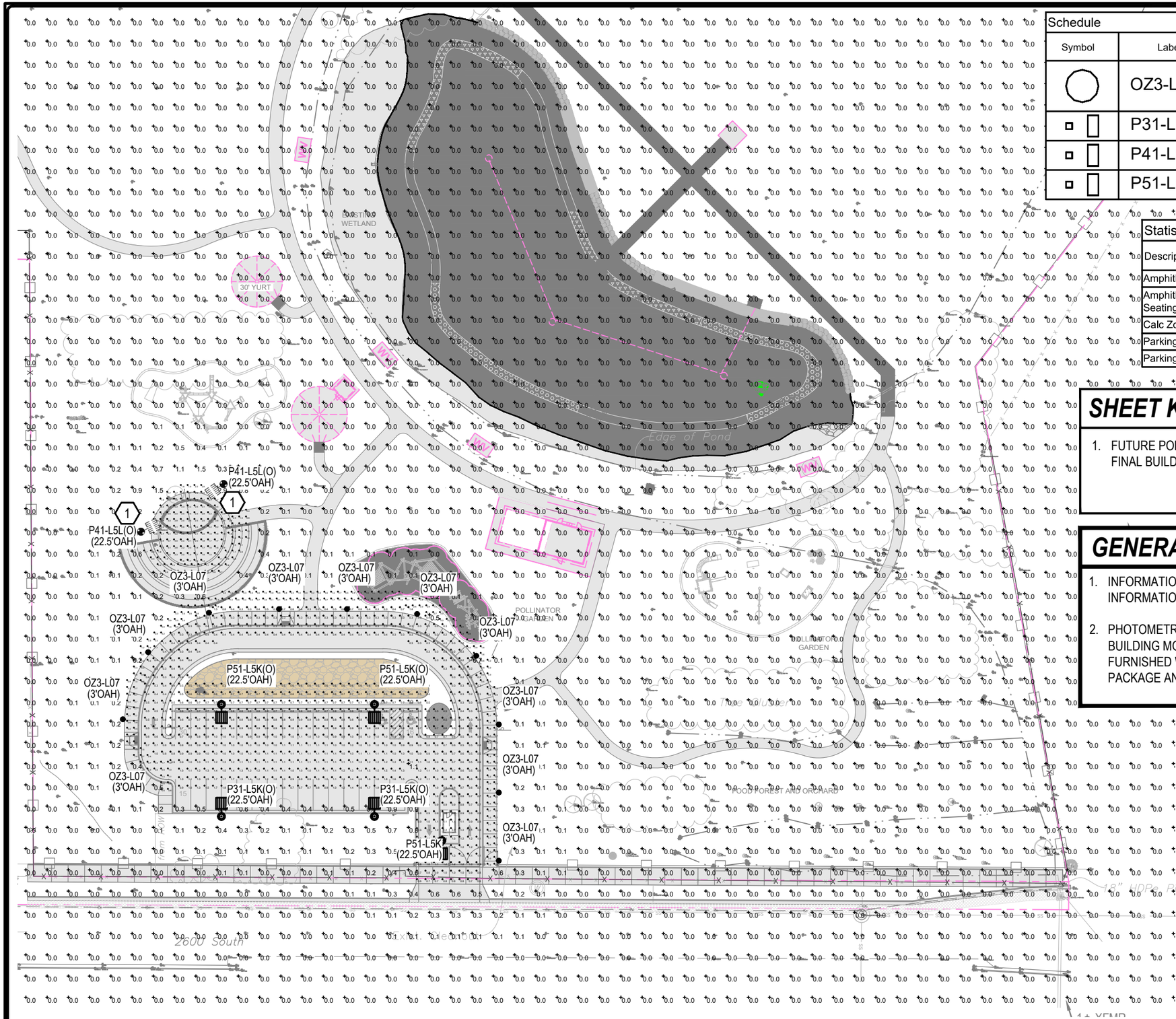
SHEET TITLE:
ELECTRICAL SITE PLAN - POWER

SHEET IDENTIFIER:
ES102

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Schedule

Symbol	Label	Lamp	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
○	OZ3-L07		1	705	0.9	9.48
▭	P31-L5K	LED	1	7096	0.6429	51.34
▭	P41-L5K	LED	1	7189	0.6429	51.34
▭	P51-L5K	LED	1	7285	0.6429	51.34

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Amphitheater	+	2.6 fc	4.7 fc	1.3 fc	3.6:1	2.0:1
Amphitheater Seating	+	1.1 fc	2.5 fc	0.4 fc	6.3:1	2.8:1
Calc Zone #1	+	0.0 fc	2.9 fc	0.0 fc	N/A	N/A
Parking	+	0.8 fc	1.9 fc	0.2 fc	9.5:1	4.0:1
Parking Sidewalk	+	1.9 fc	5.8 fc	0.2 fc	29.0:1	9.5:1

SHEET KEYED NOTES

1. FUTURE POLE LIGHTS -- PHOTOMETRIC INCLUDES CONTRIBUTION FOR FINAL BUILD-OUT REFERENCE.

GENERAL NOTES

1. INFORMATION ON ES101 AND FIXTURE SCHEDULE SUPERCEDES INFORMATION SHOWN ON THIS SHEET.
2. PHOTOMETRIC LAYOUT DOES NOT INCLUDE CONTRIBUTIONS FROM BUILDING MOUNTED FIXTURES. BUILDING MOUNTED FIXTURES ARE FURNISHED WITH PRE-FAB BUILDINGS AS PART OF THE MANUFACTURER'S PACKAGE AND TYPES/STYLES/LOCATIONS ARE NOT KNOWN.

1 PHOTOMETRIC SITE PLAN

Scale: 1"=60'-0"

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
PHOTOMETRIC SITE PLAN

SHEET IDENTIFIER:
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RSX1 LED
Area Luminaire

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

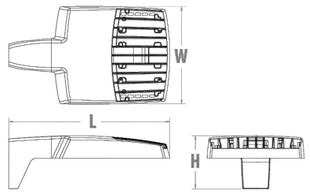
EPA (ft²@0°): 0.57 ft² (0.05 m²)

Length: 21.8" (55.4 cm) (SPA mount)

Width: 13.3" (33.8 cm)

Height: 3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm

Weight (SPA mount): 22.0 lbs (10.0 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

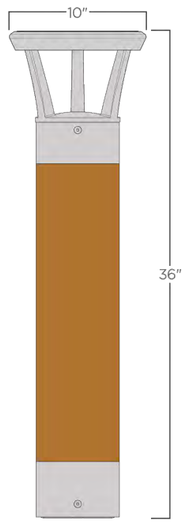
RSX1 LED

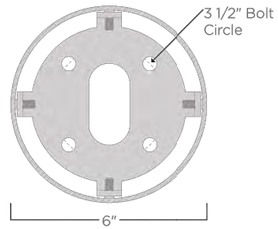
Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1	30K 3000K	R2 Type 2 Wide	MVOLT (120V-277V) [2]	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)
	P2	40K 4000K	R3 Type 3 Wide	HVOLT (347V-480V) [3]	RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°)
	P3	50K 5000K	R3S Type 3 Short	XVOLT (277V-480V) [4]	MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon)
	P4		R4 Type 4 Wide	(use specific voltage for options as noted)	IS Adjustable slipfitter (fits 2-3/8" OD tenon) [6]
			R4S Type 4 Short	120 [3] 277 [5]	WBA Wall bracket [1]
			R5 Type 5 Wide [1]	208 [3] 347 [5]	WBASC Wall bracket with surface conduit box
			R5S Type 5 Short [1]	240 [3] 480 [5]	AASP Adjustable tilt arm square pole mounting [6]
			AFR Automotive Front Row		AARP Adjustable tilt arm round pole mounting [6]
			AFRR90 Automotive Front Row Right Rotated		AAWB Adjustable tilt arm with wall bracket [6]
			AFRL90 Automotive Front Row Left Rotated		AAWSC Adjustable tilt arm wall bracket and surface conduit box [6]

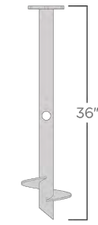
Options		Finish	
Shipped Installed		DDBXD	Dark Bronze
HS	House-side shield [7]	DBLXD	Black
PE	Photocontrol, button style [8,9]	DNAXD	Natural Aluminum
PEX	Photocontrol external threaded, adjustable [9,10]	DWHXD	White
PER7	Seven-wire twist-lock receptacle only (no controls) [9,11,12,13]	DDBTXD	Textured Dark Bronze
CE34	Conduit entry 3/4" NPT (Qty 2)	DBLBXD	Textured Black
SF	Single fuse (120, 277, 347) [5]	DNATXD	Textured Natural Aluminum
DF	Double fuse (208, 240, 480) [5]	DWHGXD	Textured White
SPD20KV	20KV Surge pack (10KV standard)		
FAO	Field adjustable output [9,13]		
DMG	0-10V dimming extend out back of housing for external control (control ordered separate) [9,13]		
Shipped Installed			
***Standalone and Networked Sensors/Controls (factory default settings, see table page 9)**			
NLTAIR2	nLight AIR generation 2 [13,14,15]		
PIRHN	Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) [13,15,16]		
BAA	Buy America(n) Act Compliant		
***Note: PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted.**			
Shipped Separately (requires some field assembly)			
EGS	External glare shield [7]		
EGFV	External glare full visor (360° around light aperture) [7]		
BS	Bird spikes [17]		

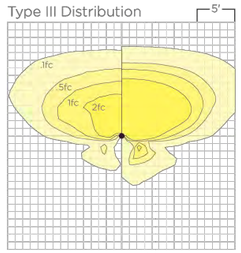
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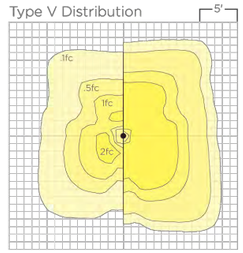
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ORDERING GUIDE: EXAMPLE: ZORA-SOL-36-L30-5-S2-C7-04-SCW-STD

FIRSTLIGHT TECHNOLOGIES

ZORA		36							
1	2	3	4	5	6	7	8	9	10

1 Series
- ZORA — Zora

2 Power
- AC — AC Powered
- SOL — Solar Powered

3 Overall Height
- 36 — 36"

4 Color Temperature
- L30 — 3000K
- L40 — 4000K
- AMB — Amber(1)

5 Distribution
- 3 — Type III
- 5 — Type V

6 Wood Finish
- S* — See color options on finishes technical sheet

7 Metal Finish
- C1 — Bone White
- C6 — Bronze
- C7 — Jet Black
- CSM — Custom

8 Lighting Profile(2)
- 00 — On at dusk, off at dawn
- 01 — On at dusk, off after 6 hours
- 02 — On at dusk, dim to 30% after 6 hours
- 03 — On at dusk, off after 5 hours, on 1 hour before dawn, off at dawn
- 04 — On at dusk, dim to 30% after 5 hours, on 1 hour before dawn, off at dawn (default)
- NA — AC Powered

9 Mounting
- CB — Concrete Anchor Bolts
- SCW — Screw-In Foundation

10 Special
- STD — Standard
- MOD — Modified

1. Amber option approved by the Florida Fish and Wildlife Conservation Commission for use in Sea Turtle Habitats
2. Lighting Profile applies only to solar powered option. Select NA for AC powered applications.

Product specification sheets subject to change.

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

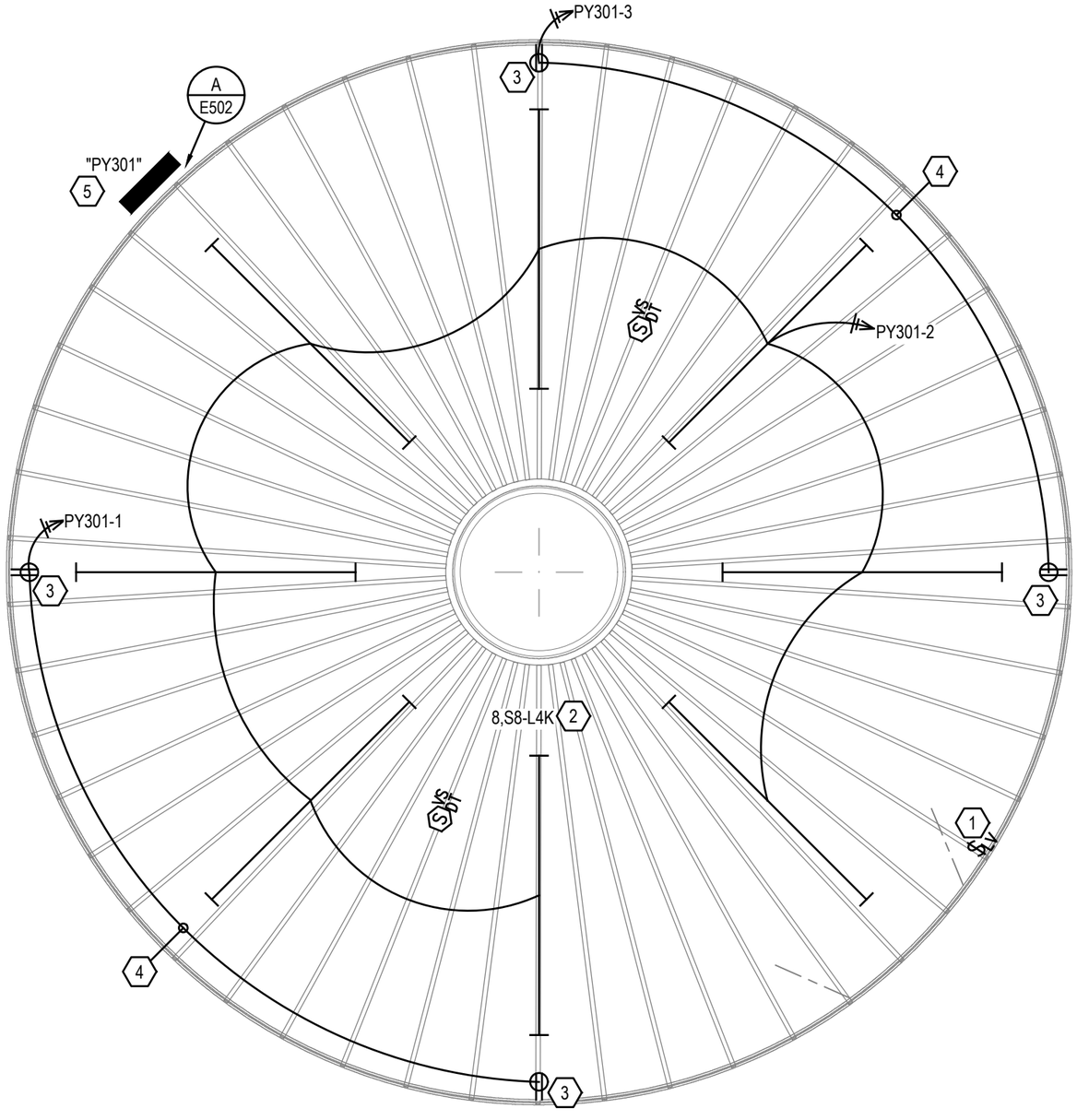
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
PHOTOMETRIC DETAILS

SHEET IDENTIFIER:
ES104

LAST SAVE 8/30/2023 T:\JOBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\ES104 PHOTOMETRIC DETAILS.DWG
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30' YURT ELECTRICAL PLAN

Scale: 1/4"=1'-0"

SHEET KEYED NOTES

1. MOUNT SWITCH AT NEAREST STRUCTURAL MEMBER TO ENTRY.
2. MOUNT FIXTURES TO STRUCTURAL CEILING ELEMENTS AT 45° INTERVALS. ROUTE POWER FEEDS CONCEALED ALONG STRUCTURAL ELEMENTS.
3. MOUNT OUTLETS TO STRUCTURAL ELEMENT AT STANDARD DEVICE HEIGHT. FEED WITH SINGLE CONDUIT SIZED PER CIRCUIT VOLTAGE AS SPECIFIED.
4. ROUTE CIRCUITING UNDERGROUND BETWEEN DEVICES.
5. MOUNT PANEL TO STRUCTURAL METAL SUPPORT (SEE DETAIL A/E503) ADJACENT TO YURT STRUCTURE AND 180° OPPOSITE ENTRY.

GENERAL SHEET NOTES

1. STRUCTURAL CEILINGS SHOWN FOR CONTRACTOR CONVENIENCE IN BIDDING INSTALLATION REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FURNISH OCCUPANCY SENSORS WITH COVERAGE PATTERNS APPROPRIATE FOR THEIR INSTALLED LOCATIONS. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO BID.
3. CONNECT OCCUPANCY SENSORS TO ENABLE ALL SWITCHES IN CONTROLLED SPACE.
4. CONNECT OCCUPANCY SENSORS, BATTERY BALLASTS, EXIT SIGNS, ETC. TO UNSWITCHED SOURCE CONDUCTOR.

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Stokes Nature Center
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PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

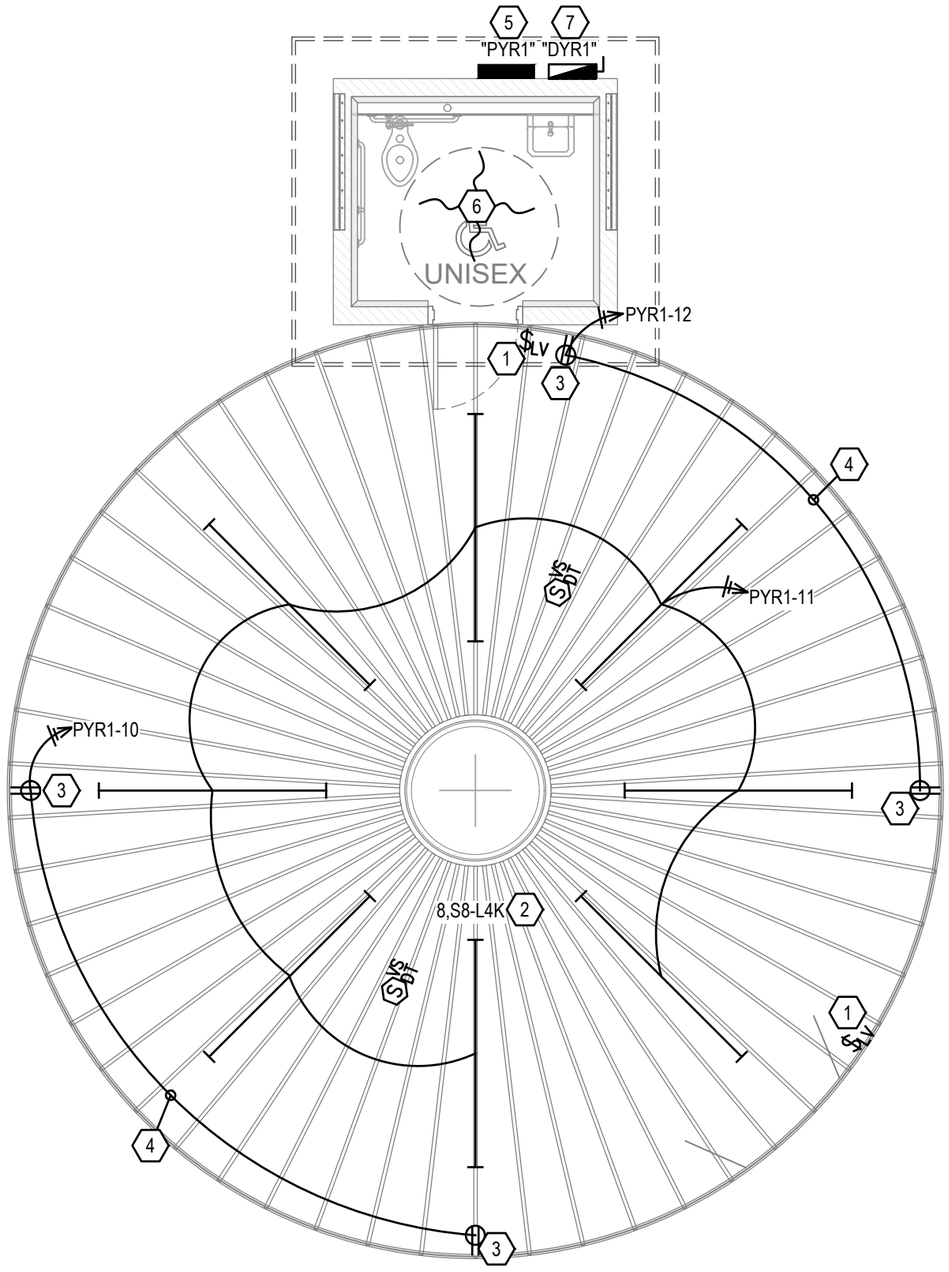
SHEET TITLE:
30' YURT ELECTRICAL PLAN

SHEET IDENTIFIER:
ES400

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NORTH

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LAST SAVED: 18 Jan 24



SHEET KEYED NOTES

1. MOUNT SWITCH AT NEAREST STRUCTURAL MEMBER TO ENTRY.
2. MOUNT FIXTURES TO STRUCTURAL CEILING ELEMENTS AT 45° INTERVALS. ROUTE POWER FEEDS CONCEALED ALONG STRUCTURAL ELEMENTS.
3. MOUNT OUTLETS TO STRUCTURAL ELEMENT AT STANDARD DEVICE HEIGHT. FEED WITH SINGLE CONDUIT SIZED PER CIRCUIT VOLTAGE AS SPECIFIED.
4. ROUTE CIRCUITING UNDERGROUND BETWEEN DEVICES.
5. INSTALL PANEL FURNISHED WITH ROMTEC PACKAGE.
6. INSTALL LIGHTING AND OUTLETS FURNISHED WITH ROMTEC PACKAGE. SEE VENDOR DRAWINGS FOR ADDITIONAL INFORMATION.
7. PROVIDE MAIN DISCONNECT TO FEED ROMTEC PANEL. SEE ELECTRICAL ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

GENERAL SHEET NOTES

1. STRUCTURAL CEILINGS SHOWN FOR CONTRACTOR CONVENIENCE IN BIDDING INSTALLATION REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FURNISH OCCUPANCY SENSORS WITH COVERAGE PATTERNS APPROPRIATE FOR THEIR INSTALLED LOCATIONS. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO BID.
3. CONNECT OCCUPANCY SENSORS TO ENABLE ALL SWITCHES IN CONTROLLED SPACE.
4. CONNECT OCCUPANCY SENSORS, BATTERY BALLASTS, EXIT SIGNS, ETC. TO UNSWITCHED SOURCE CONDUCTOR.

33' YURT & RESTROOM ELECTRICAL PLAN

Scale: 3/16"=1'-0"

NORTH

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Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

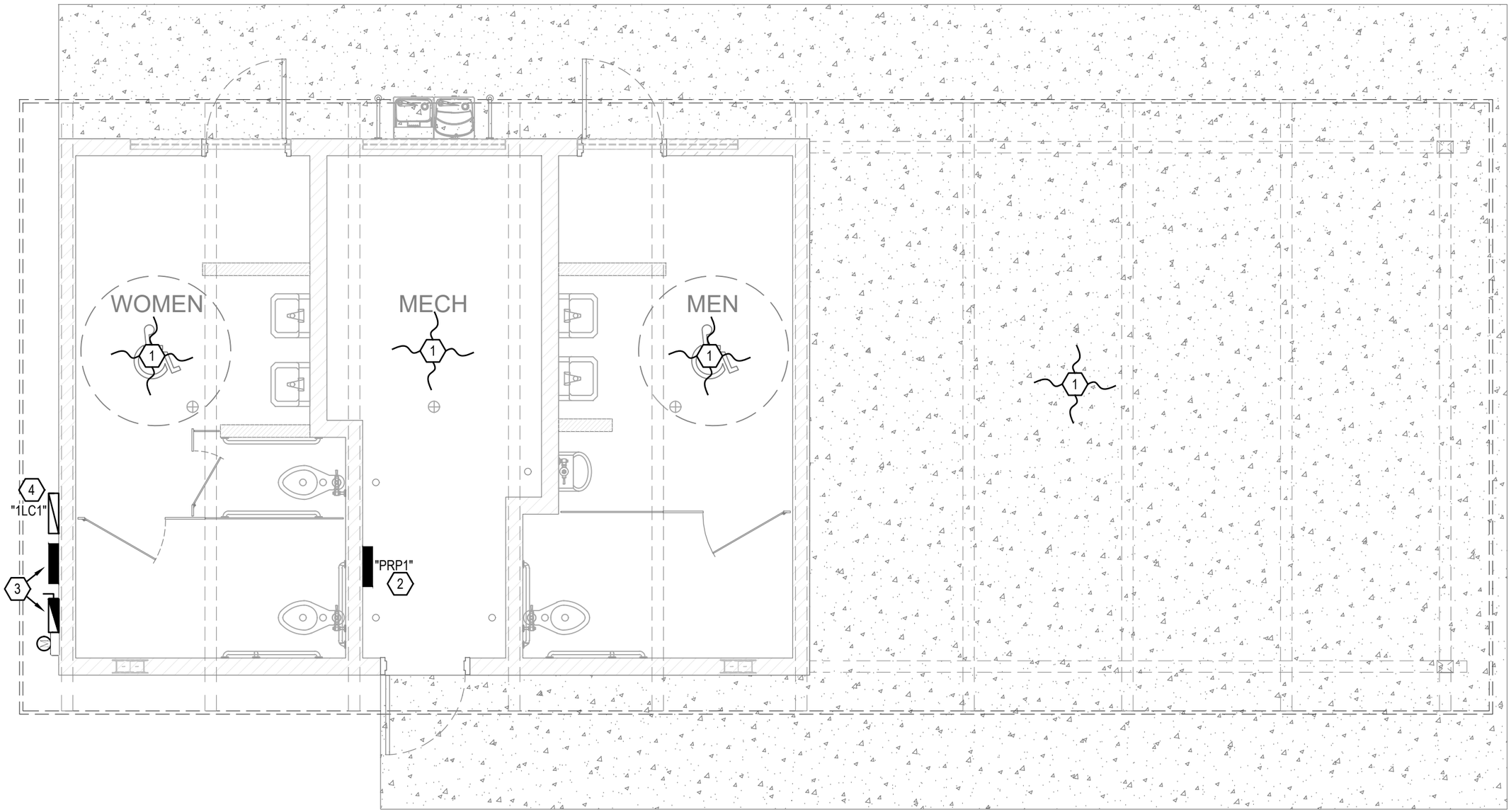
DATE: MAY 2024

SHEET TITLE:
33' YURT & RESTROOM ELECTRICAL PLAN

SHEET IDENTIFIER:
ES401

REGISTERED PROFESSIONAL ENGINEER
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LAST SAVED: 18 Jan 24



GENERAL SHEET NOTES

1. CIRCUIT ROUTING IS SCHEMATIC UNLESS OTHERWISE NOTED.
2. COORDINATE ALL UTILITY INSTALLATIONS WITH LOCAL UTILITY REPS.

SHEET KEYED NOTES

1. INSTALL LIGHTING AND OUTLETS FURNISHED WITH ROMTEC PACKAGE. SEE VENDOR DRAWINGS FOR ADDITIONAL INFORMATION.
2. INSTALL PANEL FURNISHED WITH ROMTEC PACKAGE.
3. PROVIDE FACILITY MAIN SERVICE EQUIPMENT. SEE ELECTRICAL ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
4. PROVIDE LIGHTING CONTROL PANEL AS SPECIFIED. SEE LIGHTING CONTROL RISER SHEET E502 FOR ADDITIONAL INFORMATION.

1 RESTROOM & PAVILION ELECTRICAL PLAN
Scale: 3/16"=1'-0"

NORTH

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Stokes Nature Center
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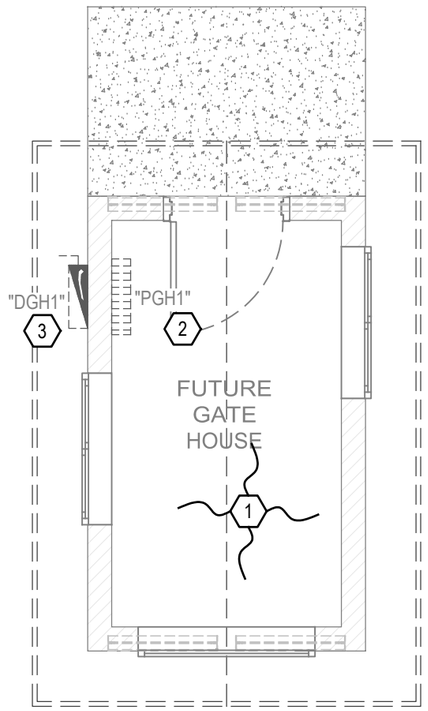
PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
RESTROOM & PAVILION ELECTRICAL PLAN

SHEET IDENTIFIER:
ES402

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LAST SAVED: 24 May 24



SHEET KEYED NOTES

1. FUTURE LIGHTING AND OUTLETS FURNISHED WITH ROMTEC PACKAGE.
2. FUTURE PANEL TO BE FURNISHED WITH ROMTEC PACKAGE.
3. PROVIDE MAIN DISCONNECT TO FEED ROMTEC FUTURE PANEL. STUB FEEDER CONDUIT TO DISCONNECT LOCATION AND TERMINATE IN IN-GRADE BOX AS SPECIFIED. SEE ES102 AND ELECTRICAL ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

GENERAL SHEET NOTES

1. FUTURE BUILDING SHOWN FOR REFERENCE TO IDENTIFY PREPARATION TO FACILITATE FUTURE INSTALLATIONS.

GATEHOUSE ELECTRICAL PLAN
Scale: 1/4"=1'-0"

NORTH

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REV.	DATE	DESCRIPT

Stokes Nature Center
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PROJECT OWNER:
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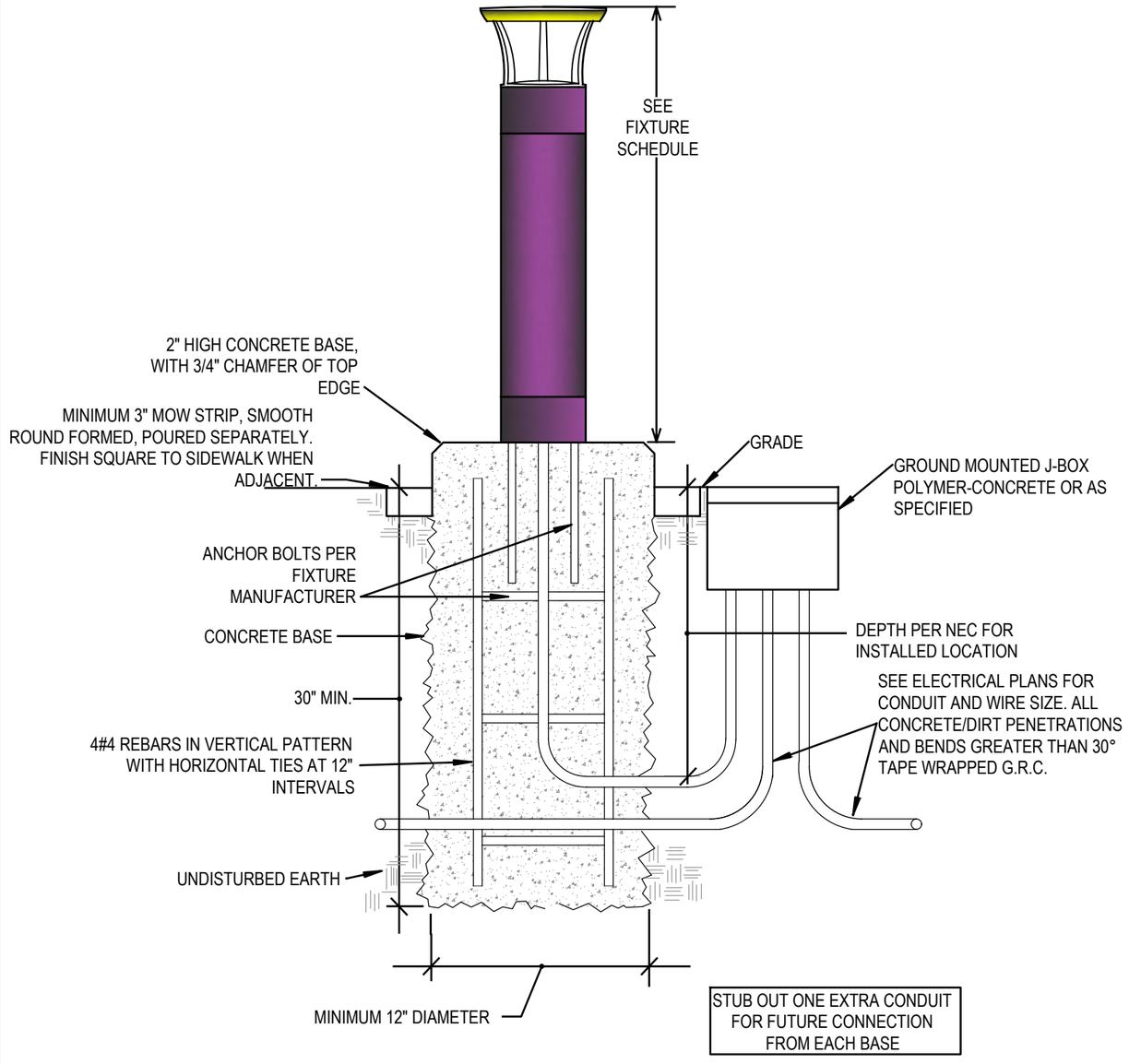
DATE: MAY 2024

SHEET TITLE:
GATEHOUSE ELECTRICAL PLAN

SHEET IDENTIFIER:
ES403

REGISTERED PROFESSIONAL ENGINEER
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5/24/2024
STATE OF UTAH

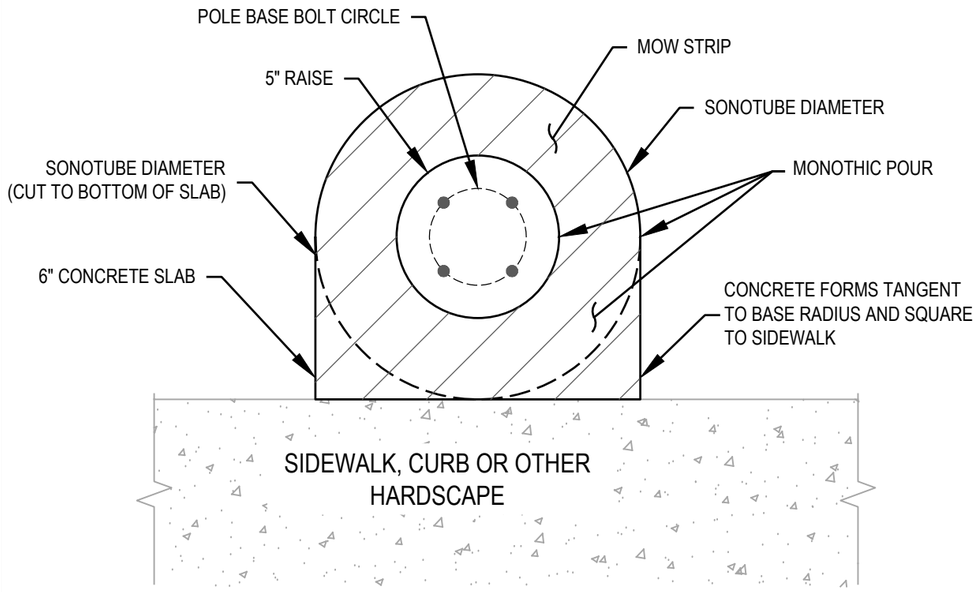
LAST SAVED: 18 Jan 24



OZX-LXX FIXTURE MOUNT DETAIL

C

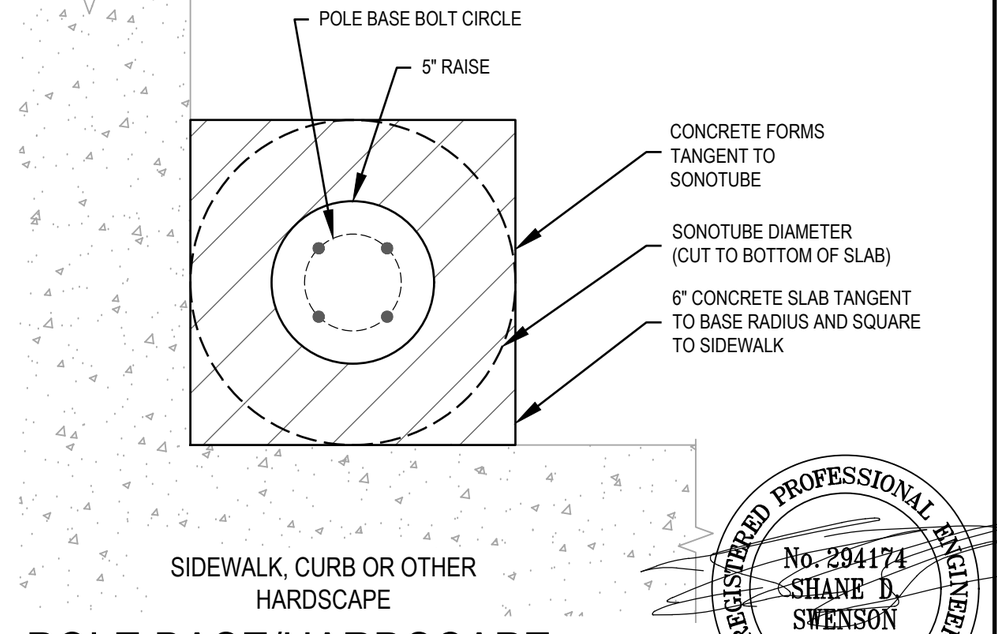
SCALE: NO SCALE



POLE BASE/HARDSCAPE FINISH DETAIL: INTERIOR SECTION

B

SCALE: NO SCALE



POLE BASE/HARDSCAPE FINISH DETAIL: CORNER POLE

A

SCALE: NO SCALE

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

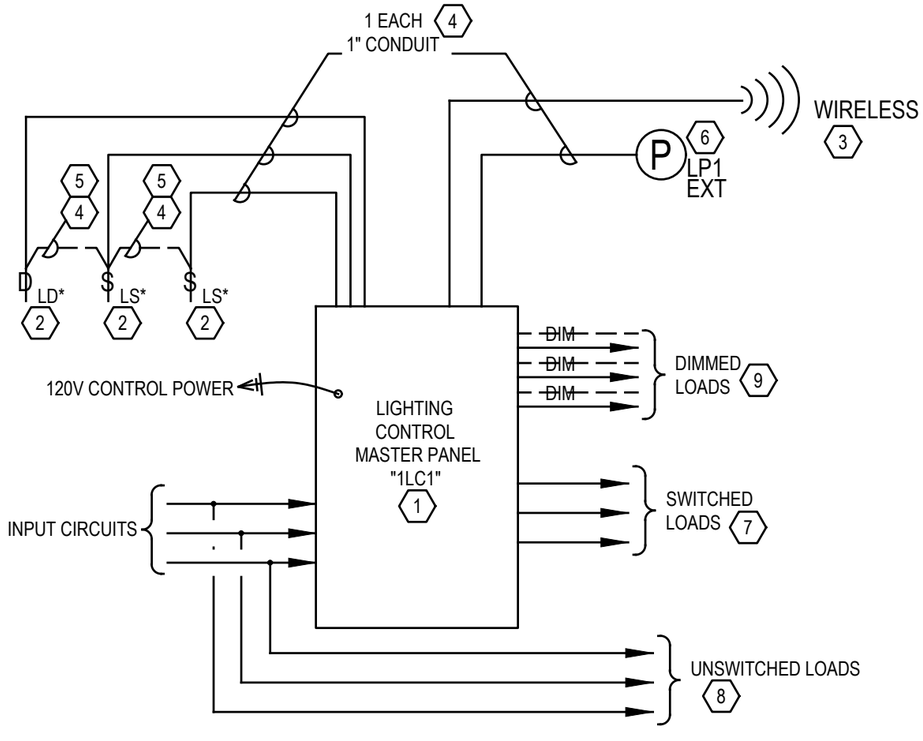
SHEET TITLE:
LIGHTING DETAILS

SHEET IDENTIFIER:
E501

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LAST SAVED: 27 Mar 24

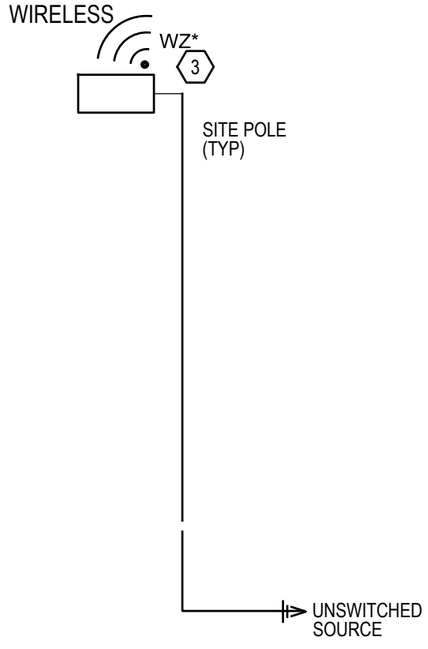
⬡ DETAIL KEYED NOTES

1. PROVIDE LIGHTING CONTROL PANEL WITH ALL OPTIONS NECESSARY TO PROVIDE CONTROLS AS SHOWN AND SPECIFIED.
2. SEE LIGHTING PLANS FOR DIGITAL, ADDRESSABLE SWITCH LOCATIONS. PROGRAM FOR CONTROL AS SCHEDULED. PROVIDE ENGRAVED COVER PLATES FOR SWITCHES. (*) INDICATES CONTROL TYPE.
3. PROVIDE WIRELESS ACCESSORIES AS REQUIRED TO CONTROL SITE LIGHTING FIXTURES.
4. PROVIDE CONTROL WIRING PER EQUIPMENT REQUIREMENTS.
5. PROVIDE HOME-RUN OR DAISY CHAIN WIRING PER EQUIPMENT REQUIREMENTS.
6. PROVIDE INTERIOR AND/OR EXTERIOR PHOTOCELLS. REFER TO LIGHTING PLAN FOR INTERIOR COUNTS AND LOCATIONS. PROVIDE (1)EXTERIOR SENSOR ROOF MOUNTED PER MANUFACTURER RECOMMENDATIONS. (*) INDICATES CONTROL TYPE.
7. REFER TO LIGHTING PLANS FOR SWITCHING GROUPS/HOME RUNS.
8. PROVIDE CONSTANT POWER TO EXIT SIGNS, EM BALLASTS, NIGHT-LIGHTS, OCCUPANCY SENSORS, ETC.
9. REFER TO LIGHTING PLANS FOR DIMMING GROUPS/HOME-RUNS. INCLUDE DIMMING CONTROL WIRE PER SYSTEM/FIXTURE REQUIREMENTS.



A LIGHTING CONTROL RISER DIAGRAM

SCALE: NO SCALE



LAST SAVED: 18 Jan 24

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REV.	DATE	DESCRIPT

Stokes Nature Center
Nibley Nature Park

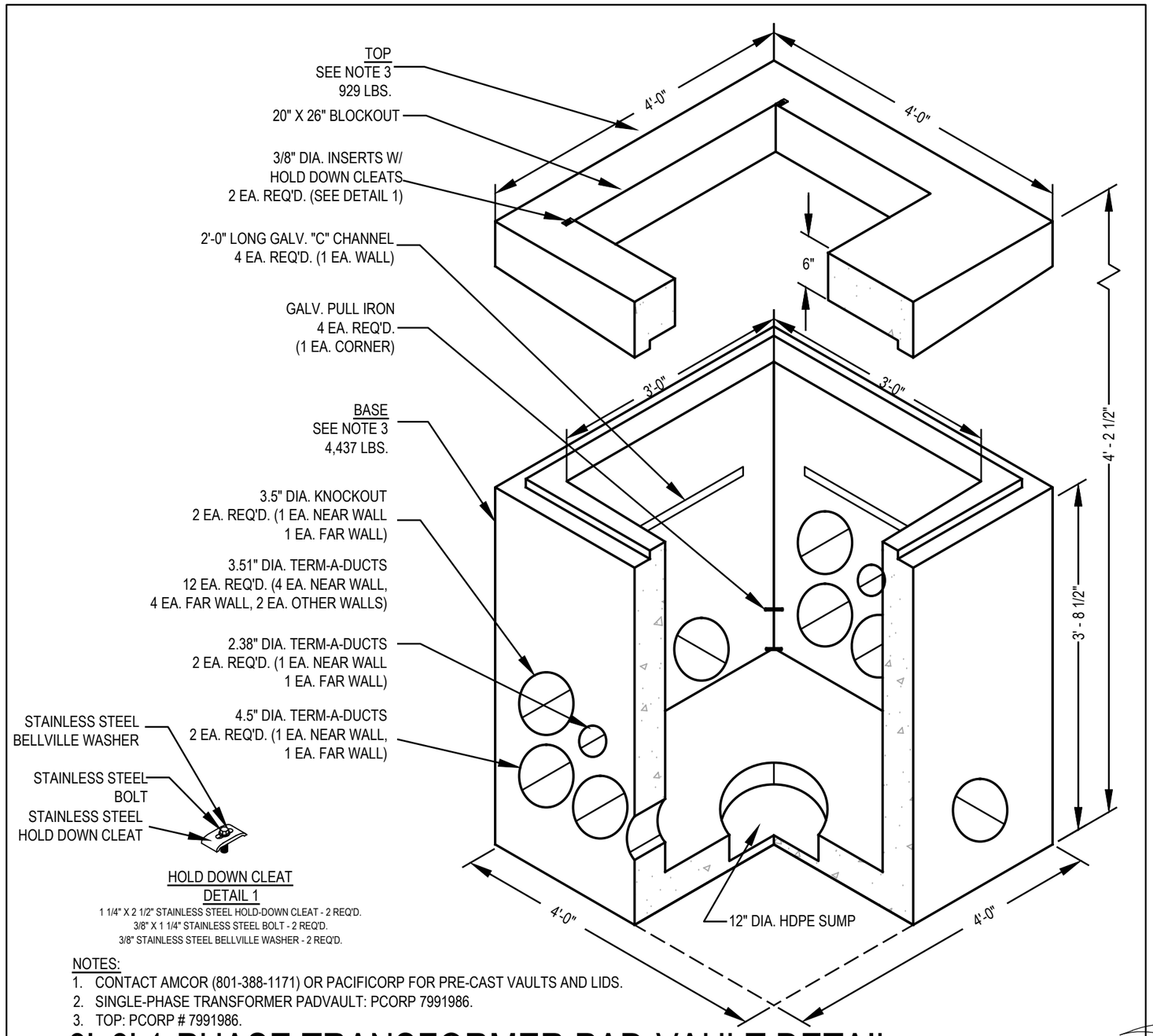
PROJECT OWNER:
Stokes Natur Center

DATE: MAY 2024

SHEET TITLE:
LIGHTING DETAILS

SHEET IDENTIFIER:
E502

REGISTERED PROFESSIONAL ENGINEER
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STATE OF UTAH



HOLD DOWN CLEAT
DETAIL 1

1 1/4" X 2 1/2" STAINLESS STEEL HOLD-DOWN CLEAT - 2 REQ'D.
3/8" X 1 1/4" STAINLESS STEEL BOLT - 2 REQ'D.
3/8" STAINLESS STEEL BELLVILLE WASHER - 2 REQ'D.

NOTES:
1. CONTACT AMCOR (801-388-1171) OR PACIFICORP FOR PRE-CAST VAULTS AND LIDS.
2. SINGLE-PHASE TRANSFORMER PADVAULT: PCORP 7991986.
3. TOP: PCORP # 7991986.

A 3'x3' 1-PHASE TRANSFORMER PAD-VAULT DETAIL

SCALE: NO SCALE

REGISTERED PROFESSIONAL ENGINEER
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STATE OF UTAH

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Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
ELECTRICAL DETAILS

SHEET IDENTIFIER:
E503

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CONDUCTOR AND CONDUIT SCHEDULE

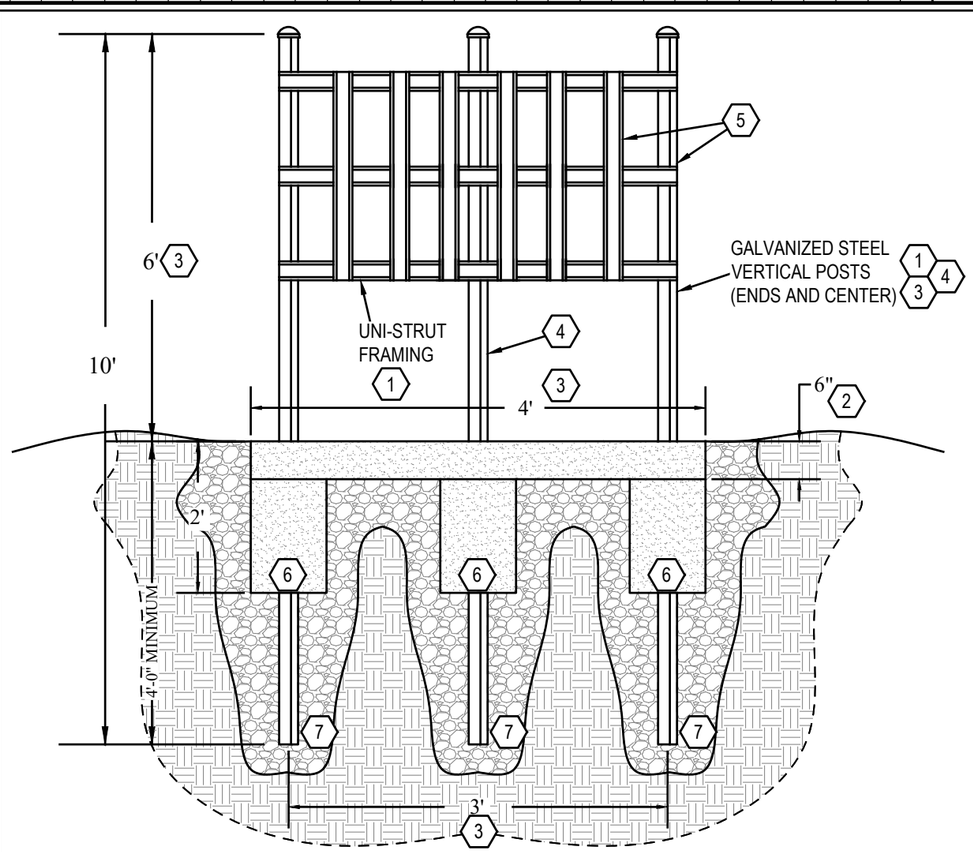
SIZE OF CONDUCTORS — SCHEDULE NUMBER
QUANTITY OF PHASE/NEUTRAL CONDUCTORS — XX — CONDUCTOR MATERIAL
QUANTITY OF PARALLEL RUNS — S1 S2 — SUBSCRIPTS (SEE NOTE 5)

SYM	AMP CU	AMP AL	CONDUIT QTY	CONDUIT SIZE	CONDUCTOR (NOTE 1,6,7) QTY	SIZE P/N	G CU	G AL	IG CU	IG AL	SE (NOTE 4) CU	SE (NOTE 4) AL	NOTES
1212	20	N/A	1	3/4"	2	12	12	N/A	12	N/A	8	N/A	2
1312					3								2,3
1412					4								2,3
120	30				2	10	10		10				2
130					3								2
140					4								2
128	40			1"	2	8			8				2
138					3								2
148					4								2
126	55				2	6			6				2
136					3								2
146				1.25"	4								2
124	70	55			2	4	8	6	4	4			2
134					3								2
144					4								2
123	85	65			2	3			3	3			2
133					3								2
143					4								2
132	95	75			3	2			2	2			6
142				1.5"	4								2
131	130	100			3	1	6				6		2
141					4								2,8
1310	150	120		2"	3	1/0		4		1			2
1410					4								2
1320	175	135			3	2/0					4	4	2
1420					4								2
1330	200	155			3	3/0							2
1430				2.5"	4								2
1340	230	180			3	4/0	4		1		2	2	2
1440					4								2
1325	255	205			3	250		2		2/0			2
1425				3"	4								2,8
133K	285	230			3	300						1/0	2,8
143K					4								2
1335	310	250			3	350	3		1/0				2
1435					4								2,8
134K	335	270		3.5"	3	400					1/0		2
144K					4								2
135K	380	310		4"	3	500		1		3/0			2,4
145K					4								2,4
1375	475	385			3	750	2		2/0		2/0	3/0	2,4
1475					4								2,4

CONDUIT AND CONDUCTOR SCHEDULE NOTES

1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE #5. ALL CONDUCTORS SHOWN ARE THWN FOR CU OR THWN OR XHHW FOR AL UNLESS OTHERWISE NOTED.
2. PROVIDE EQUIPMENT GROUNDING CONDUCTORS PER NEC TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
3. PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
4. GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
5. SYMBOL SUBSCRIPTS:
   - "IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.
   - "SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.
   - "2N": INCLUDE TWO NEUTRAL CONDUCTORS, SIZED AS SCHEDULED FOR PHASED AND NEUTRAL CONDUCTORS.
   - "R": RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.
   - "V(#)": PHASE AND NEUTRAL CONDUCTORS UPSIZED FOR VOLTAGE DROP. UPSIZE GROUNDING CONDUCTOR(G) TO SIZE INDICATED BY (#) PER NEC 250.122(B).
   - "A": ALUMINUM CONDUCTORS ALLOWED FOR FEEDER INDICATED. ALUMINUM CONDUCTORS ARE NOT TO BE USED FOR CONNECTIONS TO MOTORS OR MOTOR DRIVEN EQUIPMENT.
6. A FULL SIZE GROUNDING CONDUCTOR (SE OR G AND/OR IG) SHALL BE INSTALLED IN EACH RACEWAY OR CABLE FOR PARALLELED CIRCUITS.
7. GROUNDING CONDUCTORS (G, IG, AND SE) SHALL BE OF THE SAME CONDUCTOR MATERIAL AS THE CORRESPONDING PHASE CONDUCTORS TO KEEP TABLE CALCULATIONS IN ", ACCORDANCE WITH NEC REQUIREMENTS.
8. INCREASE CONDUIT TO NEXT LARGEST STANDARD CONDUIT SIZE WHEN IG IS USED.

*-CONDUIT SIZED FOR COMPACT ALUMINUM CONDUCTORS. USE COPPER CONDUIT SIZE FOR STANDARD SIZE CONDUCTORS



A FREE STANDING RACK DETAIL
SCALE: NO SCALE

DETAIL KEYED NOTES

1. PROVIDE FREE-STANDING METAL CHANNEL RACK. FIELD PAINT, COLOR AS DIRECTED BY ARCHITECT.
2. PROVIDE 6" DEEP CONCRETE BASE EXTENDING THE LENGTH OF THE RACK.
3. ANTICIPATED DIMENSIONS - VERIFY DIMENSIONS WITH ACTUAL EQUIPMENT PRIOR TO CONSTRUCTING RACK.
4. PROVIDE VERTICAL SUPPORT AT CENTER OF RACK FOR RACKS GREATER THAN 36" WIDE.
5. PROVIDE HORIZONTAL AND VERTICAL SUPPORTS AS REQUIRED BY EQUIPMENT, MINIMUM 3 EACH DIRECTION.
6. PROVIDE 12"Øx2' DEEP BASES AT EACH VERTICAL POST.
7. EXTEND VERTICAL POSTS DOWN INTO GROUND PAST BOTTOMS OF CONCRETE SUPPORTS.

GENERAL NOTES

1. BOND STEEL PER NEC REQUIREMENTS.
2. PROVIDE UFER GROUND IN CONCRETE BASE. BOND AS SHOWN ON ONE-LINE DIAGRAM.

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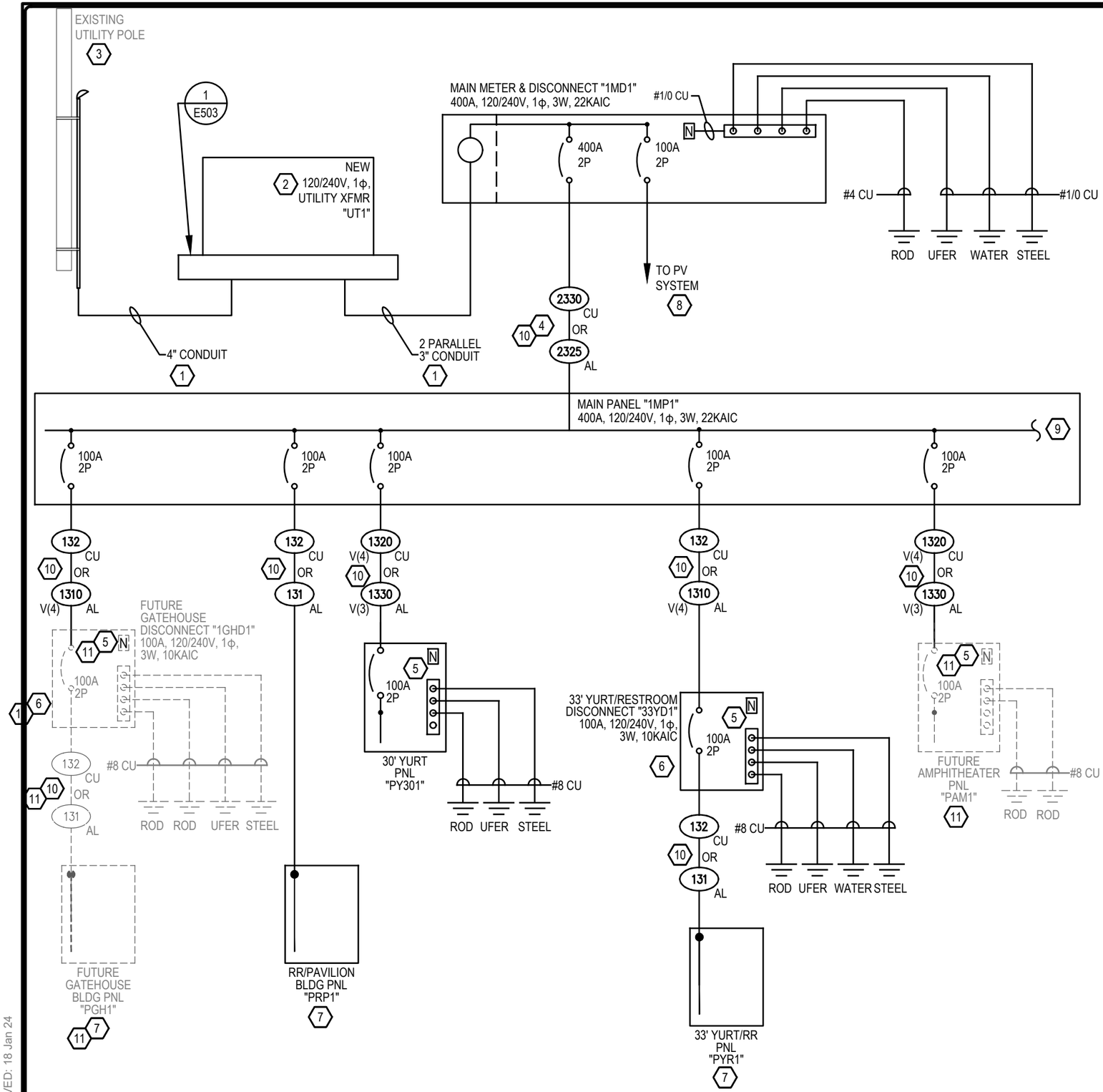
PROJECT OWNER: Stokes Nature Center

DATE: MAY 2024

SHEET TITLE: ELECTRICAL DETAILS

SHEET IDENTIFIER: E504

LAST SAVE 1/18/2024 T:\JOBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E504 ELECTRICAL DETAILS.DWG
LAST SAVED: 18 Jan 24



SHEET KEYED NOTES

1. PRIMARY AND SECONDARY CONDUIT, TRENCHING, AND BACKFILL AND SECONDARY CONDUCTORS BY CONTRACTOR. PRIMARY CONDUCTORS BY UTILITY.
2. EQUIPMENT PAD-VAULT BY CONTRACTOR. EQUIPMENT BY UTILITY.
3. COORDINATE CONNECTION POINT WITH LOCAL UTILITY REP. SEE ES102 - ELECTRICAL SITE PLAN - POWER FOR ADDITIONAL INFORMATION.
4. ALTERNATE CONFIGURATIONS OF PARALLEL FEEDERS CAN BE USED WITH ENGINEER'S, PRIOR WRITTEN APPROVAL.
5. PROVIDE GROUNDING/BONDING PER NEC 250.32(B) FOR SEPARATE STRUCTURE. DO NOT BOND TO NEUTRAL AT THIS LOCATION.
6. PROVIDE EXTERIOR DISCONNECT ON PRE-FAB BUILDING WITH CONNECTIONS TO BUILDING PANEL AS REQUIRED. SEE VENDER DRAWINGS FOR ADDITIONAL INFORMATION.
7. INSTALL PRE-FAB BUILDING PANEL FURNISHED BY OTHERS.
8. PROVIDE CONNECTIONS TO PV SYSTEM PER PV SYSTEM VENDOR REQUIREMENTS. SEE PV SYSTEM VENDOR DRAWINGS FOR ADDITIONAL INFORMATION.
9. SEE SCHEDULES FOR ADDITIONAL LOADS AND CIRCUIT INFORMATION.
10. SEE CONDUCTOR AND CONDUIT SCHEDULE ON SHEET E504.
11. FUTURE INSTALLATIONS SHOWN FOR REFERENCE TO ALLOW PREPARATIONS TO FACILITATE FUTURE INSTALLATIONS. SEE SITE PLAN ES102 FOR ADDITIONAL INFORMATION FOR INTERIM INSTALLATIONS.

GENERAL SHEET NOTES

1. COMPLY WITH POWER UTILITY'S REQUIREMENTS FOR ALL UTILITY RELATED INSTALLATIONS. REVIEW CURRENT UTILITY STANDARDS MANUAL PRIOR TO BID. NOTIFY ENGINEER OF CONFLICTS PRIOR TO BID.
2. AIC RATINGS SHOWN INDICATE MINIMUM REQUIRED VALUES. SCCR RATINGS ARE TO MATCH OR EXCEED AIC RATINGS.
3. A FULL SIZE EQUIPMENT GROUNDING CONDUCTOR SIZED FOR THE OVERCURRENT PROTECTIVE DEVICE PROTECTING THE CIRCUIT IS REQUIRED IN EACH RACEWAY OR CABLE FOR PARALLELED CIRCUITS.
4. CONTRACTOR SHALL DOCUMENT FEEDER CONDUCTOR LENGTH ON FIELD REDLINE SET. FEEDER LENGTHS ARE REQUIRED FOR ARC FAULT STUDIES AS SPECIFIED.
5. FIELD MARK SERVICE EQUIPMENT WITH AVAILABLE FAULT CURRENT AND CALCULATION DATE PER NEC 110.24(A).
6. REFER TO SPECIFICATIONS FOR SERIES VS. FULLY RATED REQUIREMENTS.
7. FIELD MARK ALL SERVICE EQUIPMENT WITH REQUIRED BREAKER CLEARING TIME. CONTRACTOR VERIFY WITH MANUFACTURER'S PUBLISHED DATA FOR MAIN BREAKER.
8. CONTACT ANDY PHILIPS WITH RMP FOR PRE-INSTALLATION COORDINATION.

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
ELECTRICAL ONE-LINE DIAGRAM

SHEET IDENTIFIER:
E601

REGISTERED PROFESSIONAL ENGINEER
No. 294174
SHANE D. SWENSON
5/24/2024
STATE OF UTAH

LAST SAVE 1/18/2024 T:\JOBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E601 ELECTRICAL ONE-LINE DIAGRAM.DWG
LAST SAVED: 18 Jan 24

LIGHT FIXTURE SCHEDULE

	TYPE	MANUFACTURER/CATALOG NO.	DESCRIPTION	MOUNTING	POWER	LAMPS
	OZ3- L07	STRUCTURA ZORA-AC-3-L30-3-S*-C*-CB EQUIVALENT ONLY WITH PRIOR ARCHITECTURAL APPROVAL	DECORATIVE LED BOLLARD; 6" NOMINAL DIAMETER; 36" NOMINAL HEIGHT; TYPE 3 OPTICAL PATTERN; HOUSING FINISHES PER OWNER ARCHITECT; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; SOLAR ONLY OPTION IN SAME FAMILY	BOLLARD BASE SEE DETAIL	10 W	700 LUMEN NOMINAL LED 3000K
	P31- L5K P31- L5K(O)	LITHONIA RSX1-P1-MOD(27K)-R3-MVOLT-SPA-(HS)-NLTAIR2/PIRHN-SCBA SSA-20-5G-DM19*-FBC-NEC-SCBA(-FDL1B)	EXTERIOR POLE LIGHT; MULTI-VOLT, ELECTRONIC, DRIVER; TYPE 3 OPTICAL DISTRIBUTION; WIRELESS CONTROL INTEGRATED WITH LIGHTING CONTROL SYSTEM; 30% NIGHT SETBACK WITH LOW LEVEL MOTION SENSOR OVERRIDE ON TO FULL OUTPUT; MOTION SENSOR INTEGRATED INTO HEAD; HOUSE SIDE SHIELD WHERE (H) APPEND SHOWN; STRAIGHT, SQUARE, 20' ALUMINUM POLE; FULL BASE COVER; 110 MPH EPA RATING UNLESS OTHERWISE INDICATED	POLE VEHICULAR POLE BASE SEE DETAIL	51 W	5000 LUMEN NOMINAL LED 2700K
	P41- L5L P41- L5L(O)	LITHONIA RSX1-P1-MOD(27K)-R4-MVOLT-SPA-(HS)-NLTAIR2/PIRHN-SCBA SSA-22-5G-DM19*-FBC-NEC-SCBA(-FDL1B)	EXTERIOR POLE LIGHT; MULTI-VOLT, ELECTRONIC, DRIVER; TYPE 4 OPTICAL DISTRIBUTION; WIRELESS CONTROL INTEGRATED WITH LIGHTING CONTROL SYSTEM; 30% NIGHT SETBACK WITH LOW LEVEL MOTION SENSOR OVERRIDE ON TO FULL OUTPUT; MOTION SENSOR INTEGRATED INTO HEAD; HOUSE SIDE SHIELD WHERE (H) APPEND SHOWN; STRAIGHT, SQUARE, 22' ALUMINUM POLE; FULL BASE COVER; 110 MPH EPA RATING UNLESS OTHERWISE INDICATED	POLE LANDSCAPE RISER SEE DETAIL	51 W	5000 LUMEN NOMINAL LED 2700K
	P51- L5K P51- L5K(O)	LITHONIA RSX1-P1-MOD(27K)-R5-MVOLT-SPA-(HS)-NLTAIR2/PIRHN-SCBA SSA-20-5G-DM19*-FBC-NEC-SCBA(-FDL1B)	EXTERIOR POLE LIGHT; MULTI-VOLT, ELECTRONIC, DRIVER; TYPE 5 OPTICAL DISTRIBUTION; WIRELESS CONTROL INTEGRATED WITH LIGHTING CONTROL SYSTEM; 30% NIGHT SETBACK WITH LOW LEVEL MOTION SENSOR OVERRIDE ON TO FULL OUTPUT; MOTION SENSOR INTEGRATED INTO HEAD; HOUSE SIDE SHIELD WHERE (H) APPEND SHOWN; STRAIGHT, SQUARE, 20' ALUMINUM POLE; FULL BASE COVER; 110 MPH EPA RATING UNLESS OTHERWISE INDICATED	POLE VEHICULAR POLE BASE SEE DETAIL	51 W	5000 LUMEN NOMINAL LED 2700K
	S8- L4K	KELVIX (2) QX-550-40K-4-010-120/277-SV OR EQUIVALENT WITH PRIOR APPROVAL	SURFACE MOUNT LED STRIP LIGHT; LOW PROFILE (1.5"WX1.6"H MAX DIMENSIONS); 8' OVERALL LENGTH; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER	SURFACE	36 W	4000 LUMEN NOMINAL LED 4000K

NOTES

LIGHT FIXTURE ACCESSORY SCHEDULE

	O	POLE OUTLET ACCESSORY	APPENDED TO FIXTURE TYPE	FACTORY MOUNT ON POLE	N/A	PER FIXTURE TYPE

NOTES

-FIXTURE APPENDS ARE ADDED TO STANDARD FIXTURE TYPES. APPENDS ARE INTENDED TO MODIFY FIXTURE CATALOG NUMBERS GIVEN ABOVE AS NOTED IN APPEND DESCRIPTION

REGISTERED PROFESSIONAL ENGINEER
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5/24/2024
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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
FIXTURE SCHEDULE

SHEET IDENTIFIER:
E602

LAST SAVE 5/24/2024 T:\OBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E602 FIXTURE SCHEDULE.DWG
LAST SAVED: 24 May 24

RELAY PANEL SCHEDULE

RELAY PANEL	FEEDS	REMARKS	LOCATION	MOUNTING
1LC1 X NEW EXISTING AS NEMA RATING	X INDIVIDUAL MAIN LUGS MAIN BKR MAX VOLTAGE 240 MAX PHASE 1	-*=PROVIDE DIMMING CONTROL WIRING PER LOAD TYPE THROUGHOUT CIRCUIT	MAIN RESTROOM BUILDING	FLUSH X SURFACE

No.	RELAY A	RELAY P	CONTROLLED CKT	CONTROL ZONE	CONTROL TYPE (SEE SCHEDULE)	DIMMING* (SEE SCHED)	No.	No.	CONTROL TYPE (SEE SCHEDULE)	DIMMING* (SEE SCHED)	CONTROL ZONE	CONTROLLED CKT	RELAY A	RELAY P	No.
1	20	1	1MP1- 41	BOLLARDS	T2,P1	FUTURE	1	2				SPA RE	20	1	2
3	20	1	SPA RE				3	4				SPA RE	20	1	4

CONTROL TYPES

CLK = TIMECLOCK
SW = SWITCH (1, 3, OR 4)
OVER = 2-HOUR TIMED OVERRIDE ON
PHOTO = PHOTOCELL

ABBREVIATION CODES

AS= AS SPECIFIED

LIGHTING CONTROL INPUT SCHEDULE

TYPE	DESCRIPTION	CONTROLLED RELAYS
T1	INTERIOR TIMECLOCK ON/OFF (SCHEDULE PER OWNER)	
T2	EXTERIOR TIMECLOCK ON/OFF (ON AT DUSK, OFF PER OWNER)	1LC1:1 WZ:1,2,3
B1	BLINK WARNING	1LC1:1 WZ:1,2,3
IO	OCC SENSOR: INTEGRAL TO FIXTURE	WZ:1,2,3
P1	PHOTOCELL: EXTERIOR	1LC1:1 WZ:1,2,3
P2	PHOTOCELL: SPARE INPUT	
P3	PHOTOCELL: SPARE INPUT	
WS1	WIRELESS SWITCH TOGGLE W/ TIME OUT: AMPHITHEATER	WZ:1
WS2	WIRELESS SWITCH TOGGLE W/ TIME OUT: SPARE INPUT	
WS3	WIRELESS SWITCH TOGGLE W/ TIME OUT: SPARE INPUT	
WS4	WIRELESS SWITCH TOGGLE W/ TIME OUT: SPARE INPUT	
WS5	WIRELESS SWITCH TOGGLE W/ TIME OUT: SPARE INPUT	
WS6	WIRELESS SWITCH TOGGLE W/ TIME OUT: SPARE INPUT	
WS7	WIRELESS SWITCH TOGGLE W/ TIME OUT: SPARE INPUT	
WS8	WIRELESS SWITCH TOGGLE W/ TIME OUT: SPARE INPUT	

NOTES

WIRELESS CONTROL SCHEDULE

NOTES
-INTEGRATE WIRELESS CONTROL ACCESSORIES INTO MAIN LIGHTING CONTROL SYSTEM
-*=PROVIDE DIMMING CONTROL WIRING AS REQUIRED

No.	CONTROL ZONE	SWITCHING (SEE SCHEDULE)	DIMMING* (SEE SCHED)
WZ1	AMPHITHEATER	T2,P1,WS1	NS,IO
WZ2	PARKING	T2,P1	NS,IO
WZ3	PARKING ENTRY	T2,P1	NS,IO
WZ4	SPARE		
WZ5	SPARE		
WZ6	SPARE		
WZ7	SPARE		
WZ8	SPARE		

IO =INTERNAL OCCUPANCY SENSOR

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER:
Stokes Nature Center

DATE: MAY 2024

SHEET TITLE:
LIGHTING SCHEDULES

SHEET IDENTIFIER:
E603

LAST SAVE 3/27/2024 T:\JOBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E603 LIGHTING SCHEDULES.DWG
LAST SAVED: 27 Mar 24

MECHANICAL EQUIPMENT SCHEDULE

SYM	DESCRIPTION	LOAD	VOLTS	PHASE	FIRE ALARM SHUTDOWN	CONTROL CIRCUITS BY	* STARTER BY	SAFETY DISCONNECT BY	REMARKS
LIP- 1	LANDSCAPE IRRIGATION PUMP	10 HP	240	1	NO	OTHER	ELEC	ELEC	SEE ES102 FOR BASE BID AND ADD ALTERNATE #2 PRICING INFORMATION

* ELECTRICAL CONTRACTOR VERIFY SINGLE SPEED OR TWO SPEED STARTERS WITH MECHANICAL DRAWINGS.

PANEL 1MP1 TYPE NQ 1 Ø 3 WIRE 120/240 VOLTS

X	NEW
	EXISTING
AS	NEMA RATING
AS	BOLT ON BREAKERS
	ISOLATED GROUND BUS
120K	SURGE PROTECT (SPD)

REMARKS

-*=VERIFY WITH EQUIPMENT NAMEPLATE AND/OR SUBMITTAL PRIOR TO GEAR RELEASE

-**=BASE BID--BREAKER AND CONDUIT. SEE ES102 FOR ADDITIONAL INFORMATION

LOCATION: RR BUILDING EXTERIOR

MOUNTING: ( ) FLUSH (X) SURFACE

1LIN AMP MAIN
1LIN LUGS
1LIN BREAKER

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND PH	WIRE/CND N	WIRE/CND G	WIRE/CND C	CIRC. LOAD	A	B	CIRC. LOAD	WIRE/CND PH	WIRE/CND N	WIRE/CND G	WIRE/CND C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	1LIN	2	RR/PAVILION PANEL (PRP1)				1LIN	1LIN	1LIN	1LIN	3840	9840		6000	2	2	8	1.5			1	IRRIGATION PUMP**	100H*	2	2
3	-	-	-				1LIN				3840		9840	6000	2						1	-	-	-	4
5	1LIN	2	GATEHOUSE PANEL (PGH1)				1LIN	1LIN	1LIN	1LIN	1920	7680		5760	4	4	10	2			1	VEHICLE CHARGER (FUTURE)	60	2	6
7	-	-	-				1LIN				1920		7680	5760	4			|			1	-	-	-	8
9	1LIN	2	30' YURT PANEL (P301)				1LIN	1LIN	1LIN	1LIN	648	6408		5760	4	4	10	|			1	VEHICLE CHARGER (FUTURE)	60	2	10
11	-	-	-				1LIN				360		6120	5760	4			|			1	-	-	-	12
13	1LIN	2	33' YURT/RR PANEL (PYR1)				1LIN	1LIN	1LIN	1LIN	2280	8040		5760	4	4	10	2			1	VEHICLE CHARGER (FUTURE)	60	2	14
15	-	-	-				1LIN				2568		8328	5760	4			|			1	-	-	-	16
17	1LIN	2	AMPHITHEATER PANEL (PAM1)				1LIN	1LIN	1LIN	1LIN	540	6300		5760	4	4	10	|			1	VEHICLE CHARGER (FUTURE)	60	2	18
19	-	-	-				1LIN				540		6300	5760	4			|			1	-	-	-	20
21	20	1	SPARE									0										SPARE	20	1	22
23	20	1	SPARE										0									SPARE	20	1	24
25	20	1	SPARE									0										SPARE	20	1	26
27	20	1	SPARE										0									SPARE	20	1	28
29	20	1	SPARE									0										SPARE	20	1	30
31	20	1	SPARE										0									SPARE	20	1	32
33	20	1	SPARE									0										SPARE	20	1	34
35	20	1	SPARE										0									SPARE	20	1	36
37	20	1	SPARE									0										SPARE	20	1	38
39	20	1	SPARE										360	360	4	4	4	1.25		2		PLUGS: PARKING POLES S	20	1	40
41	20	1	LTG: SITE				8	8	8	1	467	827		360	4	4	4	1.25		2		PLUGS: PARKING POLES N	20	1	42
											TOTALS	39095	38628												

AIC SEE ONE-LINE
SCCR SEE ONE-LINE
PARALLEL RUNS SEE ONE-LINE

FEEDER SEE ONE-LINE

AMPS/PHASE 326 322

BREAKER CODES
A=ARC-FAULT; G=GROUND FAULT; H=HACR; L=LOCKING HANDLE; S=SHUNT TRIP; R=RED PAINTED HANDLE

WIRE CODES
I=ADD'L ISO GROUND TO MATCH SAFETY GROUND; S=UNLESS OTHERWISE SPECIFIED

GENERAL CODES
1LIN=SEE ONE-LINE DIAGRAM; AS=AS SPECIFIED

REGISTERED PROFESSIONAL ENGINEER
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SHANE D. SWENSON
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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER: Stokes Nature Center

DATE: MAY 2024

SHEET TITLE: ELECTRICAL SCHEDULES

SHEET IDENTIFIER: E604

LAST SAVE 5/24/2024 T:\JOBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E604 ELECTRICAL SCHEDULES.DWG
LAST SAVED: 24 May 24

PANEL PY301 | TYPE QO | 1 Ø 3 WIRE 120/240 VOLTS | LOCATION: 30' YURT | MOUNTING: FLUSH / X SURFACE

X	NEW
	EXISTING
AS	NEMA RATING
	BOLT ON BREAKERS
	ISOLATED GROUND BUS
	SURGE PROTECT (SPD)

REMARKS

125 AMP MAIN | X LUGS | BREAKER

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND PH	N	G	C	CIRC. LOAD	A	B	CIRC. LOAD	WIRE/CND PH	N	G	C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	20	1	YURT LIGHTING				12S	12S	12S	3/4S	288	648		360	12S	12S	12S	3/4S		2		PLUGS: CIRCUIT 1	20	1	2
3	20	1	SPARE										360	360	12S	12S	12S	3/4S		2		PLUGS: CIRCUIT 2	20	1	4
5	20	1	SPARE									0										SPARE	20	1	6
7	20	1	SPARE										0									SPARE	20	1	8
9	1LIN	2	BRANCH MOUNT MAIN				1LIN	1LIN	1LIN	1LIN		0										SPARE	20	1	10
11	-	-	-				1LIN						0									SPARE	20	1	12
											TOTALS	648	360												

AIC 10000
SCCR 10000
FEEDER SEE ONE-LINE | AMPS/PHASE 5 3 | PARALLEL RUNS SEE ONE-LINE

BREAKER CODES
A=ARC-FAULT; G=GROUND FAULT; H=HACR; L=LOCKING HANDLE; S=SHUNT TRIP; R=RED PAINTED HANDLE
WIRE CODES
I=ADD'L ISO GROUND TO MATCH SAFETY GROUND; S=UNLESS OTHERWISE SPECIFIED
GENERAL CODES
1LIN=SEE ONE-LINE DIAGRAM; AS=AS SPECIFIED

PANEL PYR1 | TYPE QO | 1 Ø 3 WIRE 120/240 VOLTS | LOCATION: 33' YURT RESTROOM | MOUNTING: FLUSH / X SURFACE

X	NEW
	EXISTING
AS	NEMA RATING
	BOLT ON BREAKERS
	ISOLATED GROUND BUS
	SURGE PROTECT (SPD)

REMARKS
-INSTALL PANEL FURNISHED BY OTHERS
-+=PROVIDE BREAKER IN PANEL FURNISHED BY OTHERS

TBD AMP MAIN | X LUGS | BREAKER

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND PH	N	G	C	CIRC. LOAD	A	B	CIRC. LOAD	WIRE/CND PH	N	G	C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	20	1	LTG LOAD (PER VENDOR)				12S	12S	12S	3/4S	1920	1920										SPARE	20	1	2
3	20	1	PLUG LOAD (PER VENDOR)				12S	12S	12S	3/4S	1920		1920									SPARE	20	1	4
5	20	1	SPARE									0										SPARE	20	1	6
7	20	1	SPARE										0									SPARE	20	1	8
9	20	1	SPARE									360		360	12S	12S	12S	3/4S		2		PLUGS: CIRCUIT 1	+20	1	10
11	+20	1	LTG: YURT				12S	12S	12S	3/4S	288		648	360	12S	12S	12S	3/4S		2		PLUGS: CIRCUIT 2	+20	1	12
											TOTALS	2280	2568												

AIC 10000
SCCR 10000
FEEDER SEE ONE-LINE | AMPS/PHASE 19 21 | PARALLEL RUNS SEE ONE-LINE

BREAKER CODES
A=ARC-FAULT; G=GROUND FAULT; H=HACR; L=LOCKING HANDLE; S=SHUNT TRIP; R=RED PAINTED HANDLE
WIRE CODES
I=ADD'L ISO GROUND TO MATCH SAFETY GROUND; S=UNLESS OTHERWISE SPECIFIED
GENERAL CODES
1LIN=SEE ONE-LINE DIAGRAM; AS=AS SPECIFIED

REGISTERED PROFESSIONAL ENGINEER
No. 294174
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5/24/2024
STATE OF UTAH

PREPARERS:
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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER: Stokes Nature Center

DATE: MAY 2024

SHEET TITLE: ELECTRICAL SCHEDULES

SHEET IDENTIFIER: E605

LAST SAVE 5/24/2024 T:\JOBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E605 ELECTRICAL SCHEDULES.DWG
LAST SAVED: 24 May 24

PANEL PGH1 | TYPE QO | 1 Ø 3 WIRE 120/240 VOLTS | LOCATION: GATE HOUSE | MOUNTING: [ ] FLUSH [X] SURFACE

[X] NEW
[ ] EXISTING
[AS] NEMA RATING
[ ] BOLT ON BREAKERS
[ ] ISOLATED GROUND BUS
[ ] SURGE PROTECT (SPD)

REMARKS: -INSTALL PANEL FURNISHED BY OTHERS

TBD AMP MAIN [X] LUGS [ ] BREAKER

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND PH	N	G	C	CIRC. LOAD	A	B	CIRC. LOAD	WIRE/CND PH	N	G	C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	20	1	LTG LOAD (PER VENDOR)				12S	12S	12S	3/4S	1920	1920										SPARE	20	1	2
3	20	1	PLUG LOAD (PER VENDOR)				12S	12S	12S	3/4S	1920		1920									SPARE	20	1	4
5	20	1	SPARE									0										SPARE	20	1	6
7	20	1	SPARE										0									SPARE	20	1	8
9	20	1	SPARE									0										SPARE	20	1	10
11	20	1	SPARE										0									SPARE	20	1	12
											TOTALS	1920	1920											

AIC 10000
SCCR 10000
PARALLEL RUNS SEE ONE-LINE

FEEDER SEE ONE-LINE
AMPS/PHASE 16 16

BREAKER CODES
A=ARC-FAULT; G=GROUND FAULT; H=HACR; L=LOCKING HANDLE; S=SHUNT TRIP; R=RED PAINTED HANDLE
WIRE CODES
I=ADD'L ISO GROUND TO MATCH SAFETY GROUND; S=UNLESS OTHERWISE SPECIFIED
GENERAL CODES
1LIN=SEE ONE-LINE DIAGRAM; AS=AS SPECIFIED

PANEL PRP1 | TYPE QO | 1 Ø 3 WIRE 120/240 VOLTS | LOCATION: RESTROOM/ PAVILION BUILDING | MOUNTING: [ ] FLUSH [X] SURFACE

[X] NEW
[ ] EXISTING
[AS] NEMA RATING
[ ] BOLT ON BREAKERS
[ ] ISOLATED GROUND BUS
[ ] SURGE PROTECT (SPD)

REMARKS: -INSTALL PANEL FURNISHED BY OTHERS

TBD AMP MAIN [X] LUGS [ ] BREAKER

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND PH	N	G	C	CIRC. LOAD	A	B	CIRC. LOAD	WIRE/CND PH	N	G	C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	20	1	LTG LOAD (PER VENDOR)				12S	12S	12S	3/4S	1920	1920										SPARE	20	1	2
3	20	1	SPARE										1920	1920	12S	12S	12S	3/4S				PLUG LOAD (PER VENDOR)	20	1	4
5	20	1	SPARE									0										SPARE	20	1	6
7	20	1	SPARE										0									SPARE	20	1	8
9	20	1	SPARE									0										SPARE	20	1	10
11	20	1	SPARE										0									SPARE	20	1	12
13	20	1	SPARE									0										SPARE	20	1	14
15	20	1	SPARE										0									SPARE	20	1	16
17	20	1	SPARE									0										SPARE	20	1	18
19	20	1	SPARE										0									SPARE	20	1	20
21	20	1	SPARE									0										SPARE	20	1	22
23	20	1	SPARE										0									SPARE	20	1	24
25	20	1	SPARE									0										SPARE	20	1	26
27	20	1	SPARE										1920	1920	12S	12S	12S	3/4S				EQUIPMENT LOAD (PER VENDOR)	20	1	28
29	20	1	SPARE									1920		1920	12S	12S	12S	3/4S				EQUIPMENT LOAD (PER VENDOR)	20	1	30
											TOTALS	3840	3840											

AIC 12000
SCCR 12000
PARALLEL RUNS SEE ONE-LINE

FEEDER SEE ONE-LINE
AMPS/PHASE 32 32

BREAKER CODES
A=ARC-FAULT; G=GROUND FAULT; H=HACR; L=LOCKING HANDLE; S=SHUNT TRIP; R=RED PAINTED HANDLE
WIRE CODES
I=ADD'L ISO GROUND TO MATCH SAFETY GROUND; S=UNLESS OTHERWISE SPECIFIED
GENERAL CODES
1LIN=SEE ONE-LINE DIAGRAM; AS=AS SPECIFIED

REGISTERED PROFESSIONAL ENGINEER
No. 294174
SHANE D. SWENSON
5/24/2024
STATE OF UTAH

PREPARERS:
LANDSCAPE ARCHITECT:
BIO-WEST

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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER: Stokes Nature Center

DATE: MAY 2024

SHEET TITLE: ELECTRICAL SCHEDULES

SHEET IDENTIFIER: E606

LAST SAVE 3/27/2024 T:\JOBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E606 ELECTRICAL SCHEDULES.DWG
LAST SAVED: 27 Mar 24

PANEL PAM1 | TYPE QO | 1 Ø 3 WIRE 120/240 VOLTS

X	NEW
	EXISTING
AS	NEMA RATING
	BOLT ON BREAKERS
	ISOLATED GROUND BUS
	SURGE PROTECT (SPD)

REMARKS: -FUTURE PANEL. SCHEDULE SHOWN FOR REFERENCE. SEE SITE AND BUILDING PLANS FOR ADDITIONAL INFORMATION

LOCATION: FUTURE AMPHTHTR

MOUNTING: | | FLUSH | X | SURFACE |

125 AMP MAIN | X | LUGS | | BREAKER |

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND PH	N	G	C	CIRC. LOAD	A	B	CIRC. LOAD	WIRE/CND PH	N	G	C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	1LIN	2	BRANCH MOUNT MAIN				1LIN	1LIN	1LIN	1LIN		180		180	12S	12S	12S	3/4S		1		PLUGS: AMPHI POLE 1	20	1	2
3	-	-	-				1LIN						180	180	12S	12S	12S	3/4S		1		PLUGS: AMPHI POLE 2	20	1	4
5	20	1	SPARE									180		180	12S	12S	12S	3/4S		1		PLUGS: AMPHI CKT 1	20	1	6
7	20	1	SPARE										180	180	12S	12S	12S	3/4S		1		PLUGS: AMPHI CKT 2	20	1	8
9	20	1	SPARE									180		180	12S	12S	12S	3/4S		1		PLUGS: AMPHI CKT 3	20	1	10
11	20	1	SPARE										180	180	12S	12S	12S	3/4S		1		PLUGS: AMPHI CKT 4	20	1	12
13	20	1	SPARE									0										SPARE	20	1	14
15	20	1	SPARE										0									SPARE	20	1	16
17	20	1	SPARE									0										SPARE	20	1	18
19	20	1	SPARE										0									SPARE	20	1	20
21	20	1	SPARE									0										SPARE	20	1	22
23	20	1	SPARE										0									SPARE	20	1	24
											TOTALS	540	540												

FEEDER SEE ONE-LINE

AMPS/PHASE 5 5

AIC 10000

SCCR 10000

PARALLEL RUNS SEE ONE-LINE

BREAKER CODES
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I=ADD'L ISO GROUND TO MATCH SAFETY GROUND; S=UNLESS OTHERWISE SPECIFIED

GENERAL CODES
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REV.	DATE	DESCRIPTION

Stokes Nature Center
Nibley Nature Park

PROJECT OWNER: Stokes Nature Center

DATE: MAY 2024

SHEET TITLE: ELECTRICAL SCHEDULES

SHEET IDENTIFIER: E607

LAST SAVE 1/18/2024 T:\JOBS\2023063 STOKES NATURE CENTER - NIBLEY\01 DRAWINGS\05 ELECTRICAL\SINE SOURCE PROJECT\SHEETS\E607 ELECTRICAL SCHEDULES.DWG
LAST SAVED: 18 Jan 24

GENERAL STRUCTURAL NOTES

(Unless Noted Otherwise)

CODES AND SPECIFICATIONS

1. 2021 International Building Code (IBC)
2. ASCE 7-16 Minimum Design Loads for Buildings and Other Structures
3. NDS-2018 National Design Specification for Wood Construction
4. ACI 318-19 Building Code Requirements For Structural Concrete
5. AISC 360-16 Specification for Structural Steel Buildings

DESIGN CRITERIA

1. Wind Load - per International Building Code, V=115 mph, Risk Category II, Exposure Category C
2. Seismic - per International Building Code, Ss=1.5 S1=.75, Site class=D, Seismic Use Group=II, Seismic Design Category=D,
3. Roof Load - DL = 2.5 psf
   SL = 50 psf (without center column)
4. Floor Load - DL = 15 psf
   LL = 40 psf
5. Soils - 1,500 psf (allowable bearing pressure on bearing soils, not fill)
   35 psf/ft (active lateral pressure of retained earth)
   250 psf/ft(passive earth pressure)
   0.35 (coefficient of friction between soil and concrete in contact area)
6. Concrete - 2500 psi at 28 days strength, Grade 60 reinforcement.

SOIL CONSTRUCTION

1. Extend footings to undisturbed soil or fill compacted to 95% Modified Proctor. All footings shall be below local frost depth.
   Contractor to check with local building department.

REINFORCED CONCRETE

1. f'c = 2500 psi for footings slabs and walls. Min 5 ½ sacks of cement per cubic yard of concrete and maximum of 6-3/4 gallons of water per 94 lb. sack of cement.
2. Maximum aggregate size is 1-1/2". Maximum slump = 4 inches.
3. Mixing and placement of all concrete shall be in accordance with the IBC and ACI 318-19. Proportions of aggregate to cement shall be such as to produce a dense, workable mix which can be placed without segregation or excess free surface water. Provide ¾ inch chamfer on all exposed concrete edges unless otherwise indicated on architectural drawings.
4. No special inspection is required.
5. Vibrate all concrete walls. Segregation of materials shall be prevented.

REINFORCING STEEL

1. Concrete reinforcement shall be detailed, fabricated and placed in accordance with ACI 318-19.
2. Reinforcing steel shall be deformed billet steel conforming to ASTM A-615.
3. Welded wire mesh shall conform to ASTM A-185.
4. Reinforcing steel shall be accurately placed and adequately secured in position. The following protection for reinforcement shall be provided:

	Min Cover(in.)
Cast against and permanently exposed to earth-	3
Exposed to earth or weather-	2
Slabs and walls at interior face	¾

5. Lap continuous reinforcing bars 32 bar diameters(1'-6" min) in concrete. Corner bars consisting of 32 bar diameter(1'-6" min) bend shall be provided for all horizontal reinforcement. Lap welded wire mesh edges 1.5 mesh minimum.This criteria applies unless noted otherwise.

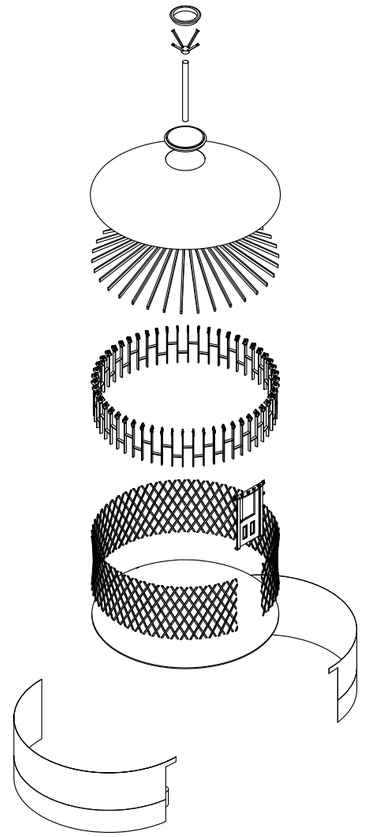
LUMBER & TIMBER

1. Unless noted otherwise, all sawn lumber shall be kiln dried and graded/marked in conformance with WCLIB standard grading for west coast lumber. Lumber shall meet the following minimum criteria:
   4x and larger DF #1 (Fb=1000 psi)
   3x and smaller DF #1 (Fb=1000 psi)
2. All wood in contact with ground or concrete to be pressure-treated with a wood preservative.
3. All interior non-load bearing walls shall be minimum 2x4 at 24" oc.
4. All perimeter studs at each rafter shall be 2x4 DF-L #1.
   4.1. Perimeter studs as required as per Yurt Upgrades on this page.
5. Provide (2) 2x6 header over openings not noted otherwise with steel saddle as per sheets A1-A4.
6. Provide solid blocking in floor space under all posts and wall members connected to holdowns.
7. Posts may be built from ganged 2x members. Connect each 2x to the adjoining 2x with 2 rows 16d at 8" oc in each row. All posts shall be built to match the supported member width and provide 1-1/2" minimum bearing length.
8. Provide double floor joists under all partition walls parallel to floor joists and along the perimeter of all diaphragm openings.
9. Provide double blocking between floor joists under all partition walls perpendicular to floor joists

STRUCTURAL INSULATED PANELS, SIPS NOTES:

1. Contractor shall follow the manufacturer recommendation.
2. Provide top and bottom plates. plates shall be dimensional lumber of minimum #2 Douglas fir - Larch, sized to match the core thickness and fastened to the panel facings with 8d common nails or staples spaced per shear wall schedule, maximum of 6" on center, panel edge fasteners.
3. Splines shall be:
   a. Nominal 2" thick solid-sawn DF #2 or equivalent lumber having a depth equal to the panel core thickness.
   b. Surface splines consisting of 3"wide, 7/16" thick osb (structural 1, exposure 1).
4. Staples:
   a. Staples, when used, shall be gauge 14 wire, two inches long, with a minimum of 7/16" on diameter crown width for roof and floors, staple spacing shall be per plan. for shear walls, staple spacing shall be per shear wall schedule.

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD



Yurt- Sample Exploded View (A)

NTS

REQUIRED YURT UPGRADES FOR LOAD:
2X6 RAFTERS W/ RAFTER TO RING BRACKET (ALL SIZES): 1) RAFTER/RING BRACKET + EAGLE BLOCKS + WALL POST

NOTES:

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NOMINAL DIA.	NO. OF RAFTERS	RAFTER: DOUG-FIR SS MSR 2400 OR BETTER Fb=2400 psi, Fcll=1975 psi, E=2E6 psi	LATTICE	COMPRESSION RING PIN DIAMETER	TENSION CABLE DIAMETER/SPECIFICATION
33'	54	1.5"x5.5"	PER C & D/P9	7/16-14 x 6" LONG, GRADE: A307, ZINC T-ROD	5/16" DIA. SS PRE-STRETCHED, LOAD TESTED

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PROJECT #:
Rainier Yurts 223-002

SHEET INDEX		
PAGE	SHEET DESCRIPTION	DEPARTMENT
P1	COVER SHEET	E
P2	CONSTRUCTION NOTES	E
P3	CONSTRUCTION NOTES	E
P4	PLATFORM FRAMING	E
P5	FOOTING AND SUBFRAME	E
P6	PLYWOOD AND JOISTS	E
P7	CONSTRUCTION DETAILS	E
P8	ROOF FRAMING	E
P9	WALL AND RAFTER 2X6	E
P10	EAGLE BLOCKS	E
P11	NOT USED	E
P12	RAFTER TO RING CLIPS	E

PART DESCRIPTION: Rainier Yurt- 33' Frame

.X = ± 1/4"
.XX = ± 1/16"
ANGLES = ± 1°

CUSTOMER: N/A
SHEET DESCRIPTION: COVER SHEET
RAINIER PART #: 33' YURT
CUSTOMER DRAWING #: N/A
PAGE: P1

RAINIER INDUSTRIES LTD

REVISION HISTORY				
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A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD

WOOD CONNECTORS, FASTENERS AND PRESSURE TREATED WOOD

1. All wood connectors shall be Simpson or approved equal.
2. All nails shall be common wire nails unless noted otherwise.
3. All nailing shall meet the minimum nailing requirements of Table 2304.9.1 of the International Building Code.
4. All wood connectors and associated steel fasteners in contact with any pressure treated wood shall conform to one of the following configuration options:
   a) All wood connectors and associated steel fasteners shall be stainless steel.
   b) All wood connectors and associated steel fasteners shall be G185 hot-dip galvanized per ASTM A653.
   c) All wood connectors and associated steel fasteners shall be batch/post hot-dip galvanized per ASTM A123 for connectors and ASTM A153 for fasteners.
   d) All wood connectors and associated steel fasteners shall be mechanically galvanized per ASTM B695, Class 55 or greater.
5. G60 galvanized products shall not be used with treated wood.
6. G90 galvanized connectors may be used with sodium borate(DOT - Disodium Octaborate Tetrahydrate) treated woods. Sodium borate treated wood is not suitable for applications where moisture exposure is likely. Sodium borate treated wood may be suitable for mudsill applications when transported, stored, and installed appropriately.
7. Uncoated or painted steel should be used with treated wood.
8. Wood connectors and fasteners shall be made of the same material. Do not mix stainless steel and hot-dip galvanized wood connectors and fasteners.
9. Where a connector strap connects two wood members, install one half of the total required nails or bolts in each member.
10. All bolts in wood members shall conform to ASTM A307.
11. Provide standard cut washers under the head of all bolts and lag screws bearing on wood.

FLOOR AND ROOF DIAPHRAGMS

1. Apply 3/4" APA rated Sturd-I-Floor(24" oc) nailed to floor framing members with 10d common wire nails at 6" OC at all supported edges and at 12" OC at interior supports unless noted otherwise on the plans.
2. Blocking of interior edges is not required unless noted otherwise on the plans.

GENERAL CONSTRUCTION

1. All materials, workmanship, design, and construction shall conform to the project drawings, specifications, and the International Building Code.
2. Structural drawings shall be used in conjunction with architectural drawings for bidding and construction. Contractor shall verify dimensions and conditions for compatibility and shall notify the architect of any discrepancies prior to construction.

2.1 Discrepancies: The contractor shall inform the engineer in writing, during the bidding period, of any and all discrepancies or omissions noted on the drawings and specifications or of any variations needed in order to conform to codes, rules and regulations. Upon receipt of such information, the engineer will send written instructions to all concerned. Any such discrepancy, omission, or variation not reported shall be the responsibility of the contractor.

3. The contractor shall provide temporary bracing as required until all permanent framing and connections have been completed.
4. The contractor shall coordinate with the building department for all permits and building department required inspections.
5. Do not scale drawings. Use only written dimensions.
6. Drawings indicate general and typical details of construction. Where conditions are not specifically indicated but are of similar character to details shown, similar details of construction shall be used, subject to review and approval by the architect and the structural engineer.
7. Contractor initiated changes shall be submitted in writing to the architect and structural engineer for approval prior to fabrication or construction.
8. All structural systems which are to be composed of field erected components shall be supervised by the supplier during manufacturing, delivery, handling, storage, and erection in accordance with instructions prepared by the supplier.
9. Contractor shall be responsible for all safety precautions and the methods, techniques, sequences, or procedures required to perform the work.
10. Shop drawing review: Dimensions and quantities are not reviewed by the engineer of record, therefore, must be reviewed by the contractor. Contractor shall review and stamp all shop drawings prior to submitting for review by the engineer of record. Submissions shall include a reproducible and one copy. Reproducible will be marked and returned. Re-submittals of previously submitted shop drawings shall have all changes clouded and dated with a sequential revision number. Contractor shall review and stamp all revised and resubmitted shop drawings prior to submittal and review by the engineer of record. In the event of conflict between the shop drawings and design drawings/specifications, the design drawings/specifications shall control and be followed.

CABLE AND FITTING NOTES:

DESIGN CRITERIA

1. Design, materials, fabrication, protective coatings and installation of all steel cables and fittings shall be according to ASCE standard: "structural applications of steel cables for buildings", latest edition.
2. All cables and fittings shall be galvanized, class A, according to ASTM A586 and A603.
3. $\frac{1}{4}$" Diameter cable shall have a minimum breaking strength of 7,000 lbs tension force.
4. $\frac{5}{16}$" Diameter cable shall have a minimum breaking strength of 9,800 lbs tension force.
5. All cable fittings shall have the capacity to resist the tension force shown on item c & d above. contractor to submit manufacturer data.

CABLE TYPE

1. ASTM A586, class A, pre-stressed, zinc-coated parallel and helical steel wire structural strand or
2. ASTM A603-88, zinc-coated steel structural wire rope.

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PROJECT #:
Rainier Yurts 223-002

	PART DESCRIPTION: Rainier Yurt- 30' Frame		
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: CONSTRUCTION NOTES	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT	PAGE: P2
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD

NOTES:

A. Foundation system is dependent upon site soil conditions. Confirm soil conditions/foundation system compatibility with local building department.

B. The following may be substituted for 4"x8" beams: (2) 2"x8" with a spacer of 1/2" cdx plywood. fasten with 16d galvanized nails (minimum 2 nails every 12")

C. Blocking over beams match joist depth

D. Qty and length based on level site with platform height as illustrated

E. Contractor to refer to page 6 and 7 for typical details.

F. Platform dimensions:

Diameter	32'-11 5/16"
Radius	16'-6 5/8"
Circumference	103'-6"

G. Locate this beam as far from the center as the joist hangers will allow

H. Follow instructions for use and installation of Simpson hardware. See: https://www.strongtie.com/ for additional information

I. Design allows for approximately 4" clear zone under sips for sidewall to purse

J. These dimensions are the widths of the pre-manufactured Structural Insulated Panel (SIP)

K. These dimensions are the length of the pre-manufactured sips floor panels

L. (3) layers of $\frac{1}{2}$" Plywood perimeter banding as per detail F on page 6

M. Items included with the SIP package are item #16 (mastic glue), item #17 (8" wood screws), SIP panels and the smaller SIP splines, but item 1 (the perimeter blocking) and the larger structural SIP splines item #23 are not included in the SIPs package. Cutting, gluing and nailing of the structural splines is the responsibility of the platform builder.

N. Pressure treated post by others, cbq44 post base pc44 post cap

O. Can reuse cut-offs of 2"x pieces that are 4'-0" or larger for structural splines. Stagger pieces at ends of structural splines by 0'-4" for improved strength.

P. Contractor shall provide, not included with Rainier package.

Q. Refer to detail E on page 9 for 16ga custom strap hold-down.

R. Includes spares depending on configuration

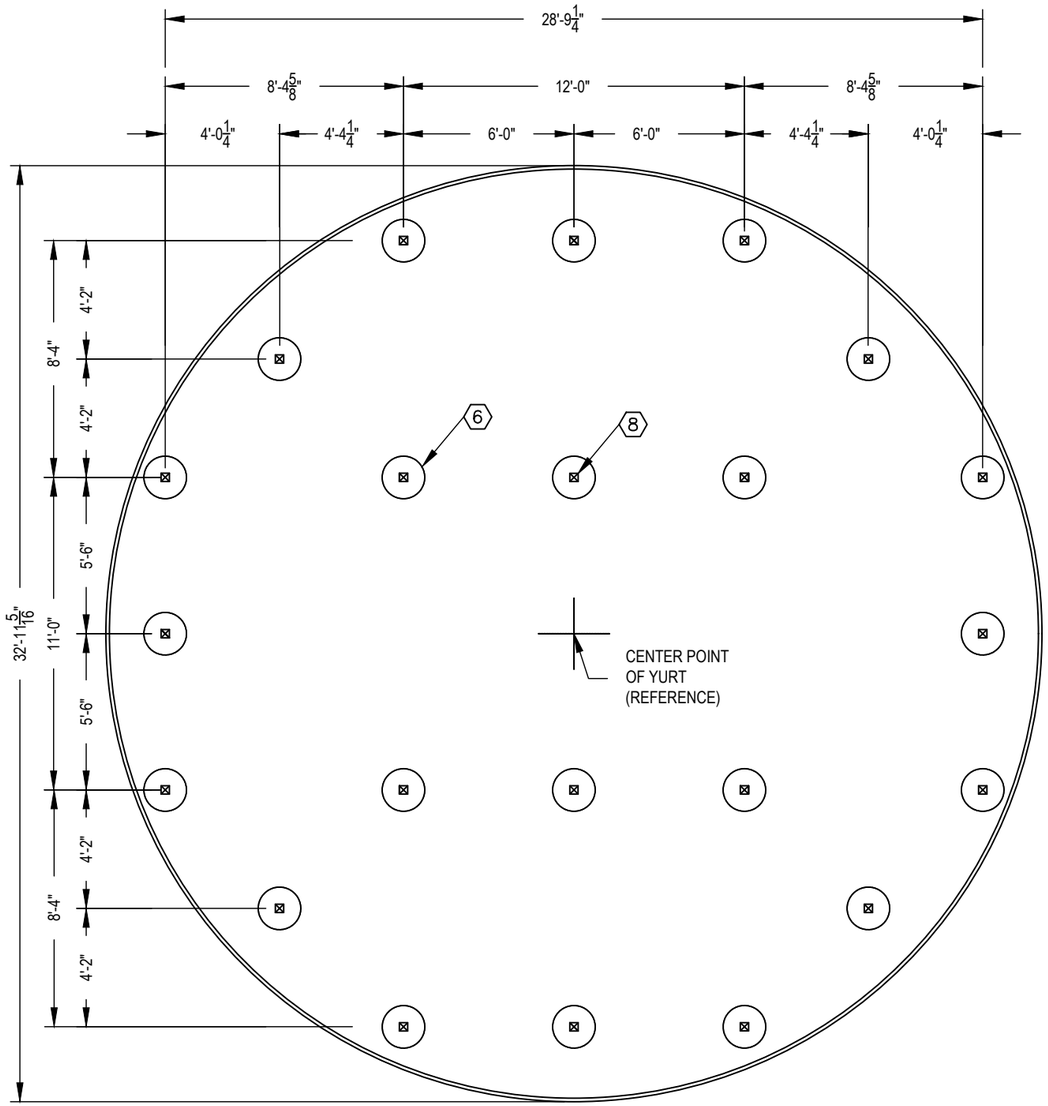
ITEM.	QTY	DESCRIPTION	NOTES
25	108	$\frac{1}{4}$"x2" A325 THROUGH BOLT WITH NUT AND WASHER FOR HOLD-DOWN BRACKET	Q R
24	108	9"x1 $\frac{1}{4}$"x16GA CUSTOM STRAP	Q R
23	4	SIMPSON END POST CAP EPC4Z	N
22	52	2x6x11'-0" - DF-L #2 SIPs SPLINE	A B C
21	10	4x8x12'-0" BEAMS PRESSURE TREATED HF2	A B C
			A B C
19	25	6 $\frac{1}{2}$" TYPE 'L' PREMIER SIP PANEL	
18	432	#10x4" SDS WOODEX DECK SCREWS FOR HOLD-DOWN BRACKET	Q R
17	n/a	8" SIP SCREW	M
16	n/a	PREMIER MASTIC GLUE	M
15	n/a	REBAR REINFORCEMENT: BY OTHERS	
14	850	16d GALVANIZED NAILS (SIMPSON BRACKETS)	
13	8	SIMPSON FACE MOUNT HANGER HUS48, OR EQUIV. (4"x8")	
12	4	SIMPSON 45° SKEWED HANGER HSUL/L46 (4"x8")	
11	4	SIMPSON 45° SKEWED HANGER HSUR/L46 (4"x8")	
10	4	SIMPSON STRAP TIES ST2215 (16 ga. x 2"x16")	
9	144	SIMPSON SDS 1/4"x2" SCREWS (FOR CBQ44)	
8	22	SIMPSON POST BASE #CBQ44 (OR EQUIVALENT)	N
7	36	SIMPSON POST CAP AC4	
6	n/a	POURED FOOTINGS: BY OTHERS	A
5	5	4x4x8'-POSTS HF2 (PRESSURE TREATED, RATED FOR GROUND CONTACT)	A D
4	8	4x8x8'-0" BEAMS PRESSURE TREATED HF2	A B C
3	8	2x4x12'-BRACING (TYPICAL 4-PLACES)(PRESURE TREATED, RATED FOR GROUND CONTACT)	
2	1000	#10x2" SDS WOODEX DECK SCREWS	
1	8	$\frac{1}{2}$" PLYWOOD PERIMETER BANDING	L

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PROJECT #:
Rainier Yurts 223-002

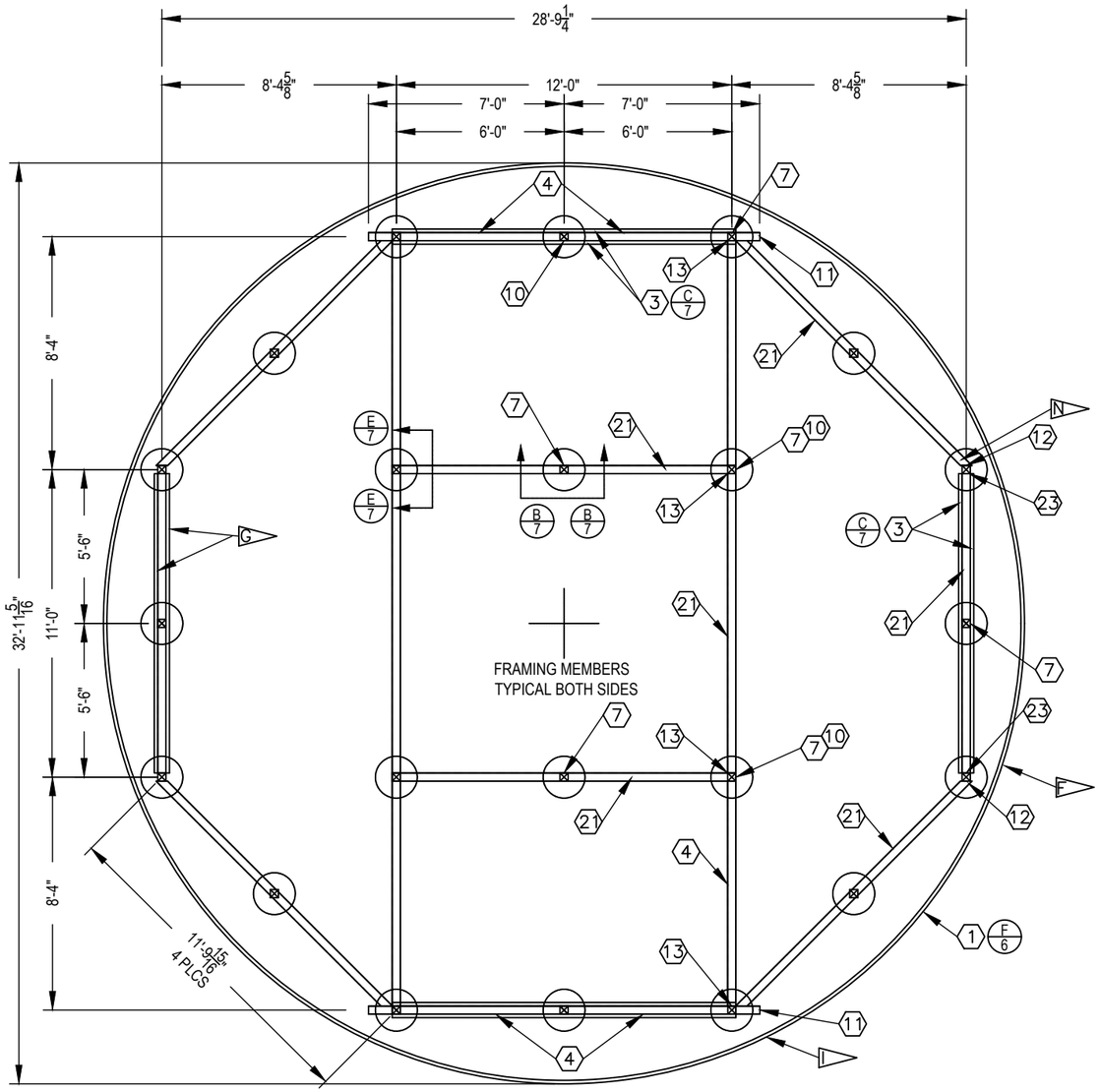
PART DESCRIPTION: Rainier Yurt- 33' Frame
CUSTOMER: N/A
SHEET DESCRIPTION: CONSTRUCTION NOTES
.X = ± 1/4"
.XX = ± 1/16"
ANGLES = ± 1°
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RAINIER PART #: 33' YURT
CUSTOMER DRAWING #: N/A
PAGE: P3

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REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
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Assumed Footing Layout (A)

Scale: $\frac{3}{16}$"=1'-0"



Subframe Layout (B)

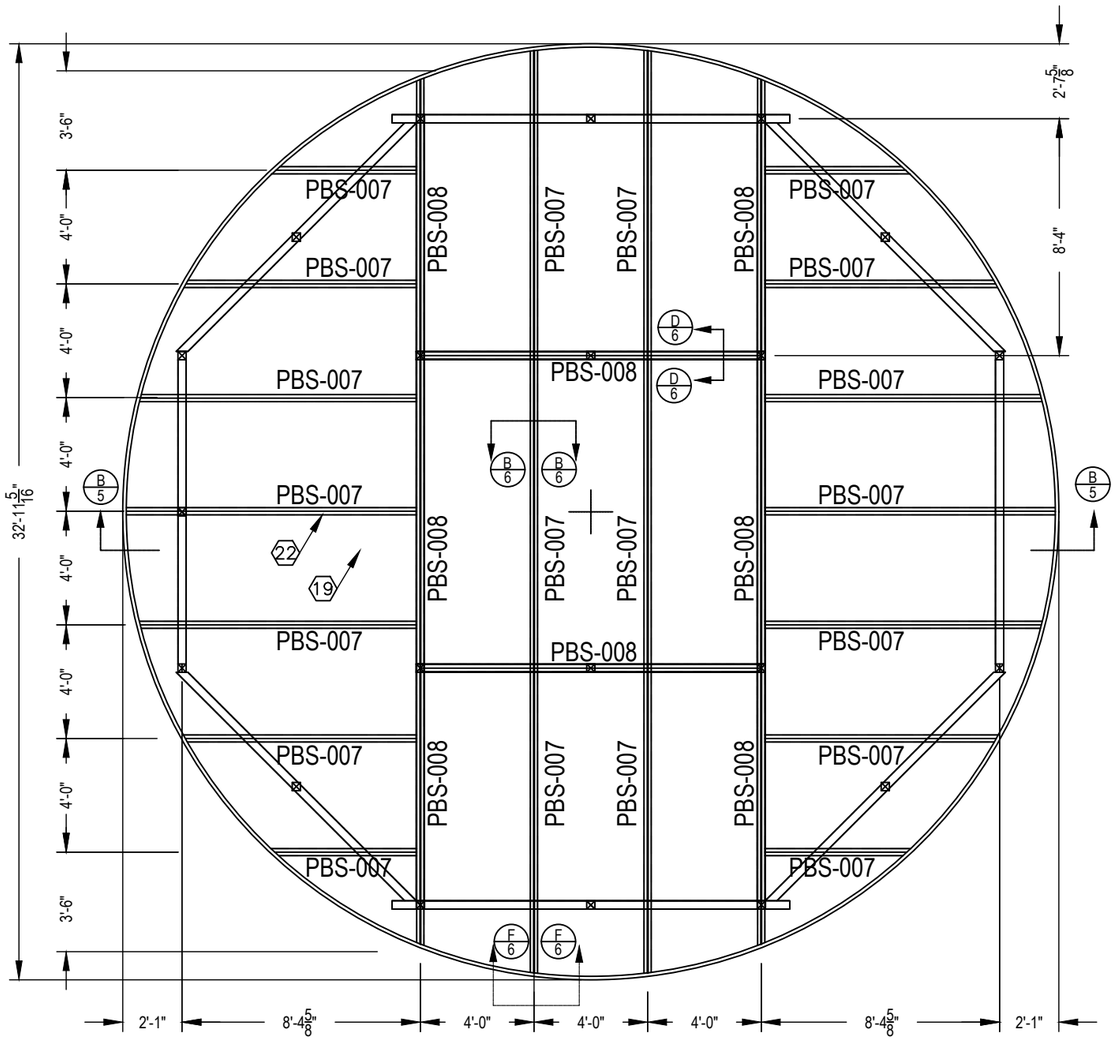
Scale: $\frac{3}{16}$"=1'-0"

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PROJECT #:
Rainier Yurts 223-002

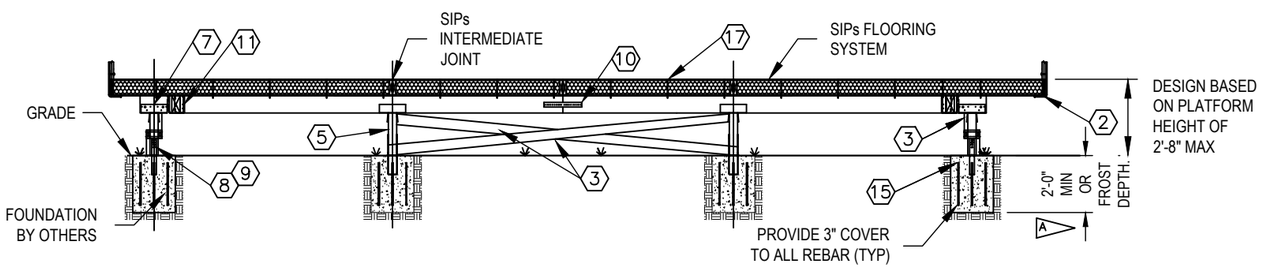
PART DESCRIPTION: Rainier Yurt- 33' Frame			
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: FOOTING AND SUBFRAME	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT	PAGE: P4
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

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REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD



SIPS Panel Layout (A)

Scale: 3/16" = 1'-0"



Platform Section View (B)

Scale: 3/16"=1'-0"

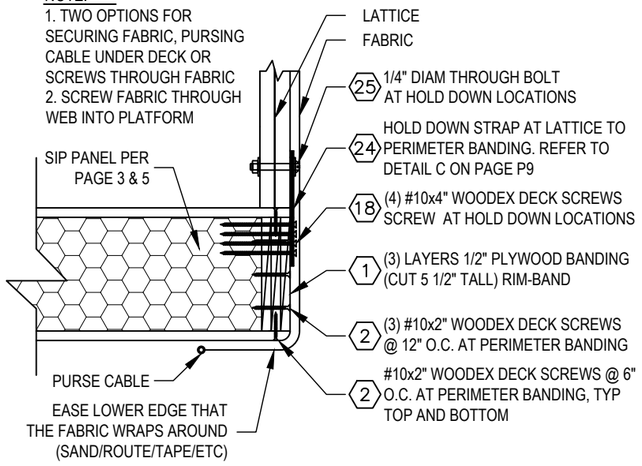
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PROJECT #:
Rainier Yurts 223-002

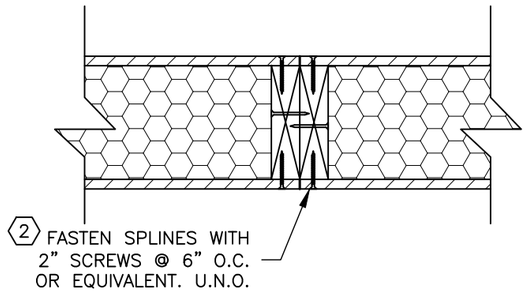
.X = ± 1/4"	PART DESCRIPTION: Rainier Yurt- 33' Frame		
.XX = ± 1/16"	CUSTOMER: N/A	SHEET DESCRIPTION: PLATFORM FRAMING	
ANGLES = ± 1°	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT	PAGE: P5
		CUSTOMER DRAWING #: N/A	

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD

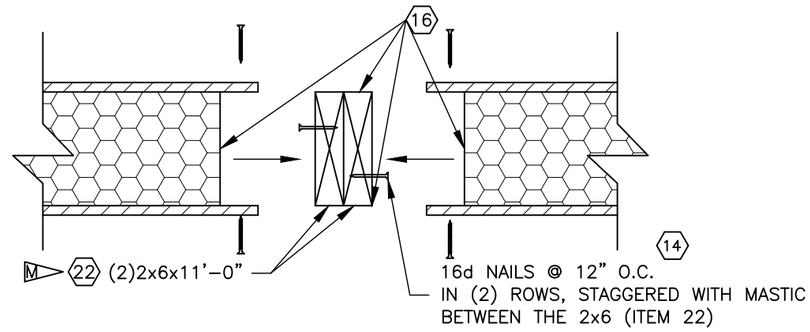
NOTE:
1. TWO OPTIONS FOR SECURING FABRIC, PURSING CABLE UNDER DECK OR SCREWS THROUGH FABRIC
2. SCREW FABRIC THROUGH WEB INTO PLATFORM



Section View & PBS-005 (A)
Scale: 1 1/2"=1'-0"



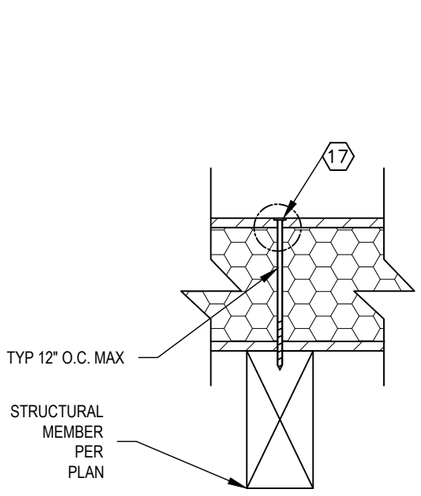
Section View & PBS-007 (B)
Scale: 1 1/2"=1'-0"



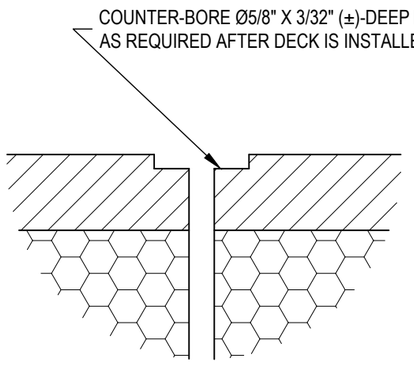
Exploded View (C)
Scale: 1 1/2"=1'-0"

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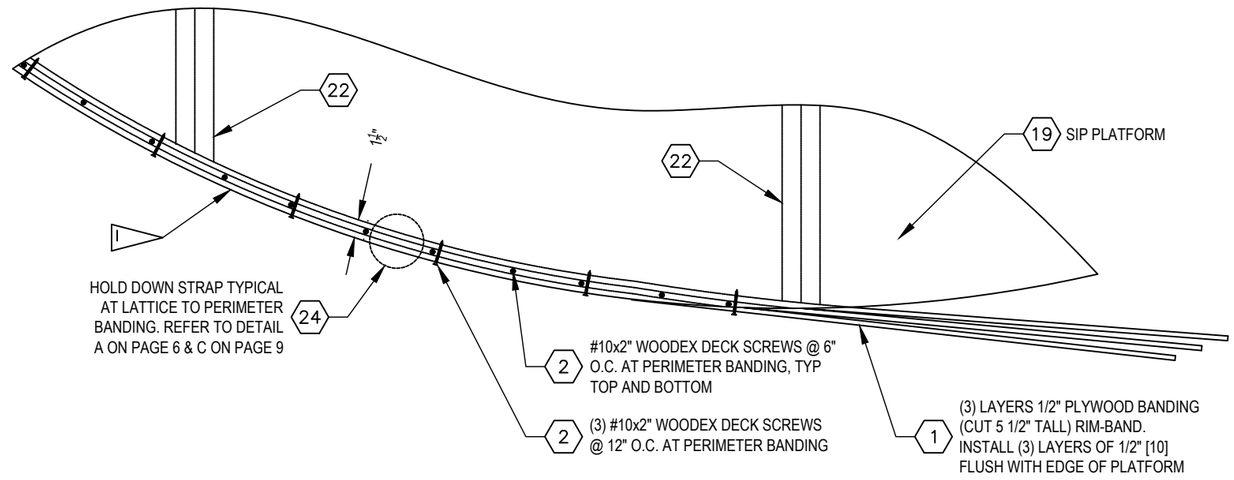
PROJECT #:
Rainier Yurts 223-002



Section View (D)
Scale: 1 1/2"=1'-0"



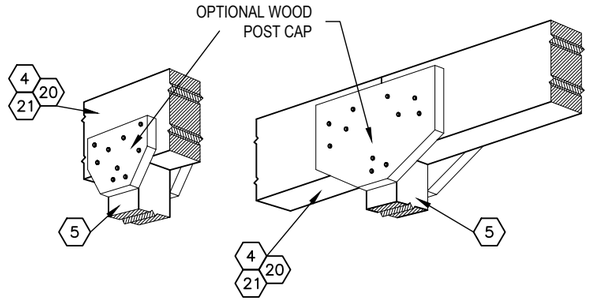
Partial View (E)
Scale: 1'-0"=1'-0"



Top View of Platform (F)
Scale: 1"=1'-0"

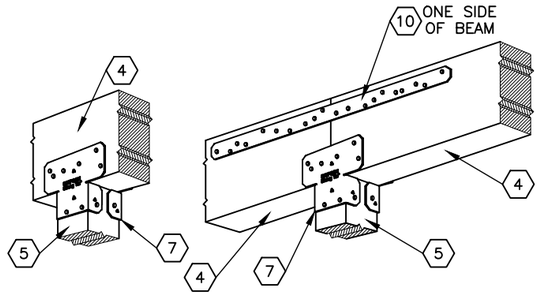
PART DESCRIPTION: Rainier Yurt- 33' Frame			
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: SIPS SUBFRAME DETAILS	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT	PAGE: P6
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD



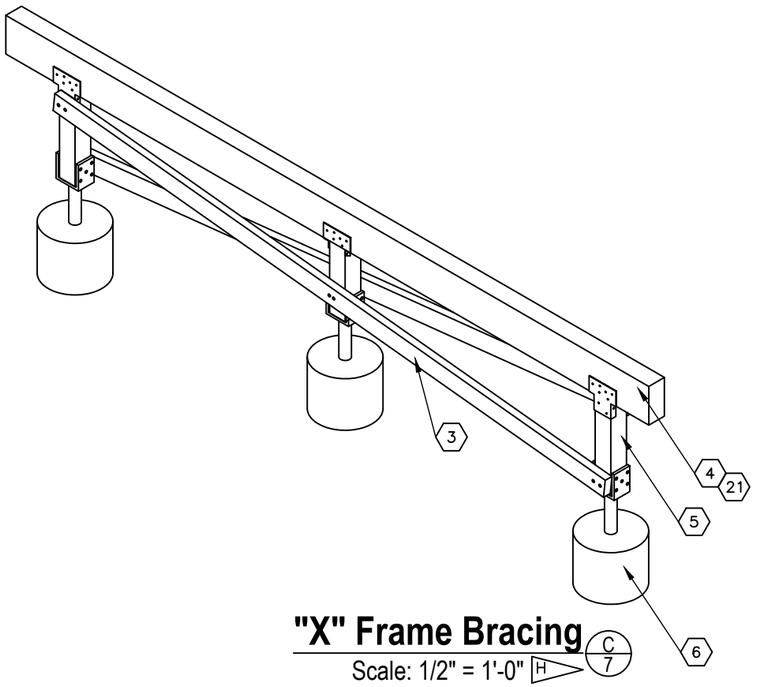
Post/Beam Wood Post Cap A/7

Scale: 3/4" = 1'-0"



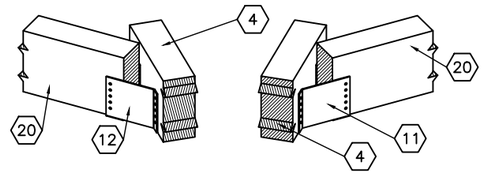
Post/Beam AC4 & ST2215 B/7

Scale: 3/4" = 1'-0" H



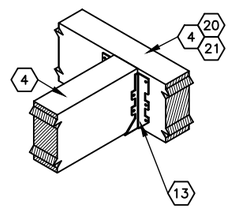
"X" Frame Bracing C/7

Scale: 1/2" = 1'-0" H



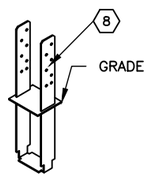
Simpson Brackets HSUL & HSUR D/7

Scale: 3/4" = 1'-0" H



Simpson Bracket HUS48 E/7

Scale: 3/4" = 1'-0" H



Simpson Post Base #CBQ44 F/7

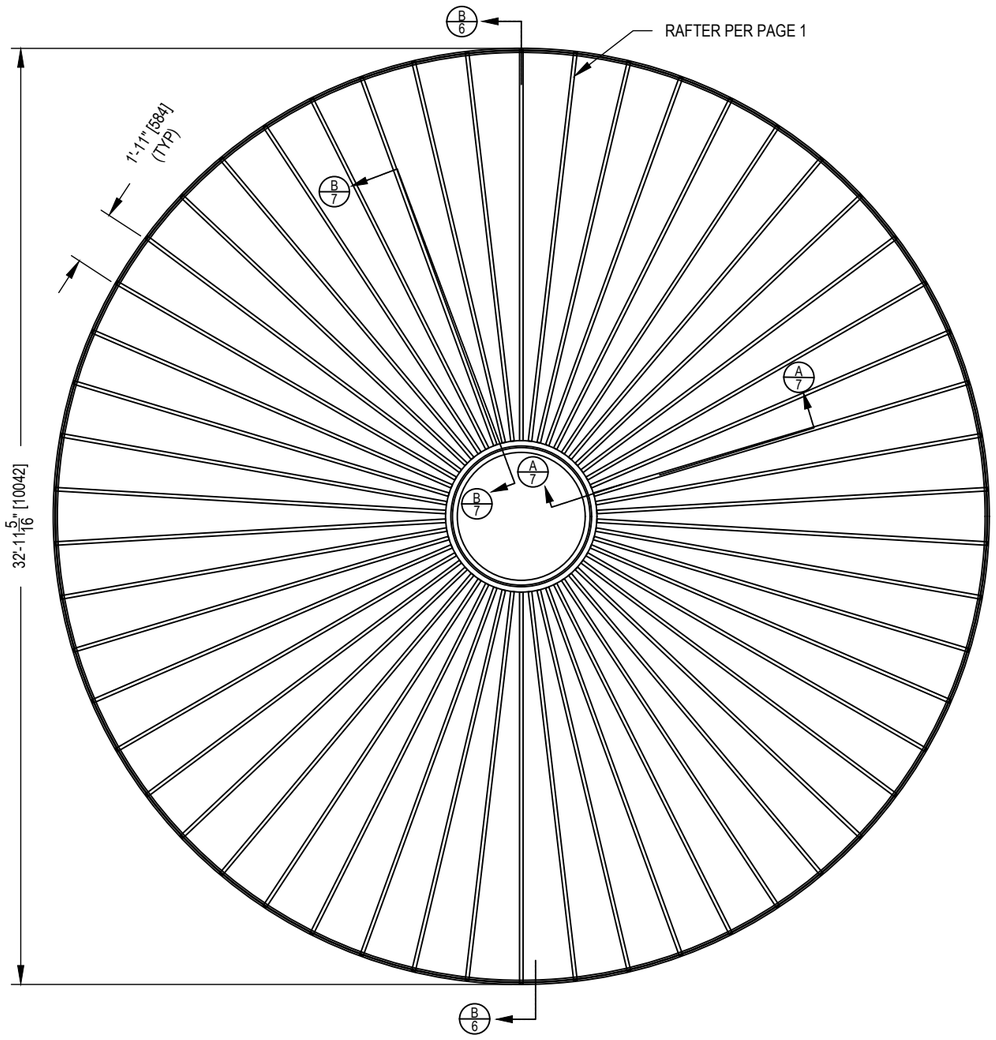
Scale: 3/4" = 1'-0" H

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PROJECT #:
Rainier Yurts 223-002

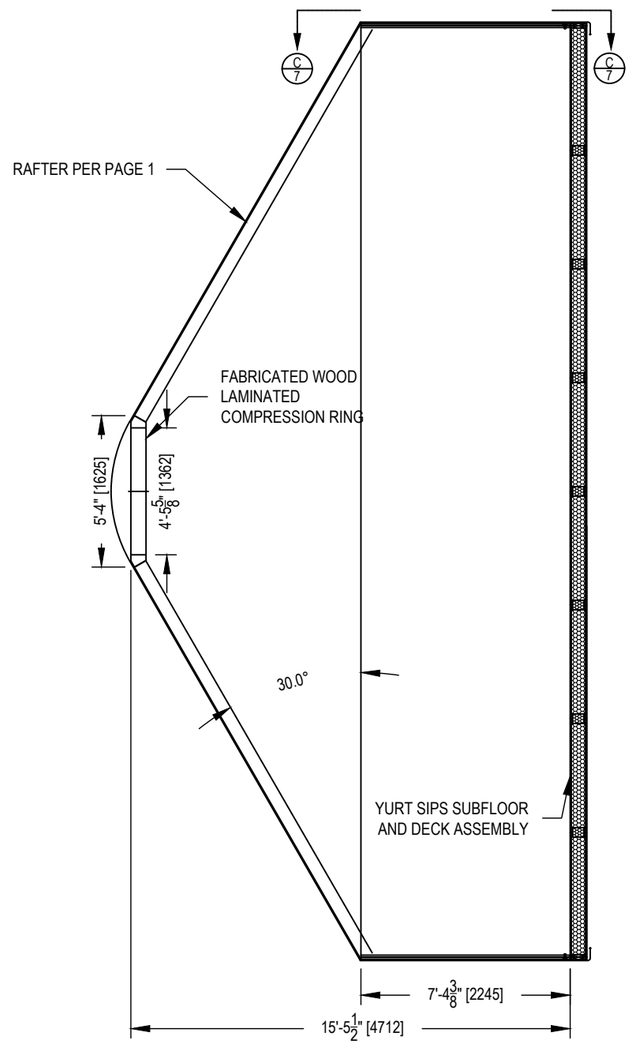
	PART DESCRIPTION: Rainier Yurt- 33' Frame		
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: CONSTRUCTION DETAILS	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT	PAGE: P7
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD



Roof Framing Plan A/8

Scale: 3/16"=1'-0"



Section View B/8

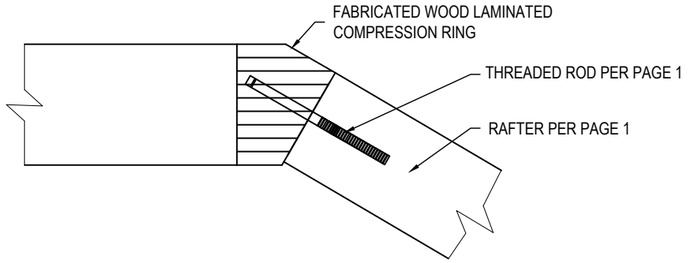
Scale: 3/16"=1'-0"

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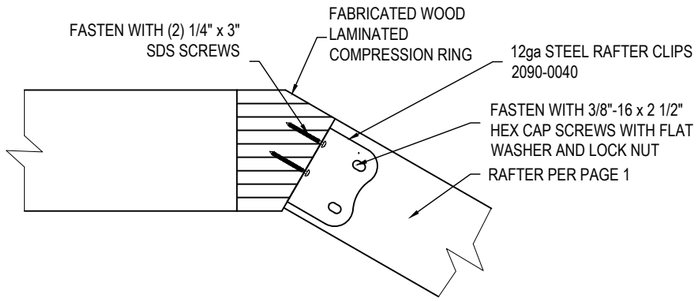
PROJECT #:
Rainier Yurts 223-002

	PART DESCRIPTION: Rainier Yurt- 33' Frame			
.X = ± 1/4"	CUSTOMER: N/A		SHEET DESCRIPTION: ROOF FRAMING	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT		PAGE: P8
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A		

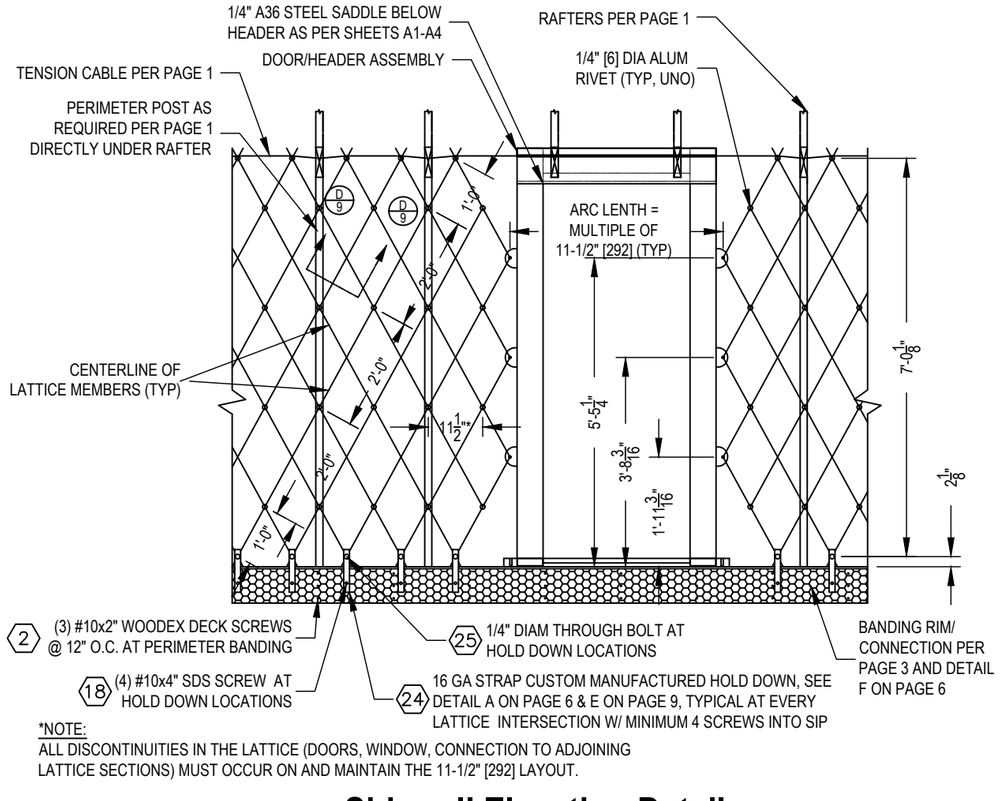
REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD



Section View (A/9)
Scale: 1-1/2" = 1'-0"

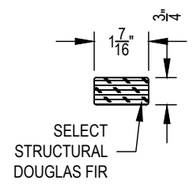


Section View (B/9)
Scale: 1-1/2"" = 1'-0"

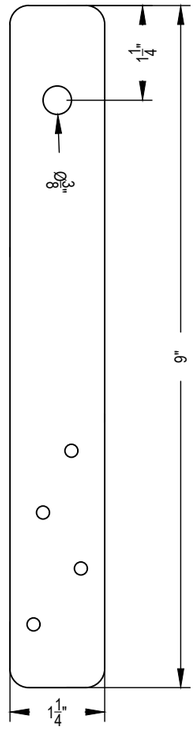


*NOTE:
ALL DISCONTINUITIES IN THE LATTICE (DOORS, WINDOW, CONNECTION TO ADJOINING LATTICE SECTIONS) MUST OCCUR ON AND MAINTAIN THE 11-1/2" [292] LAYOUT.

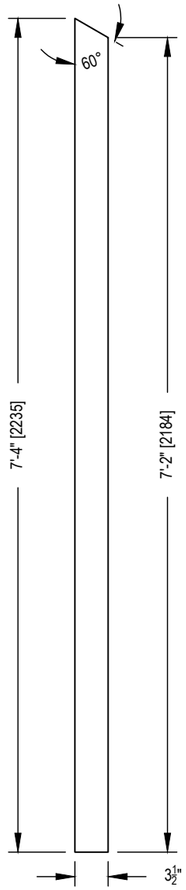
Sidewall Elevation Detail (C/9)
Scale: 3/8"=1'-0"



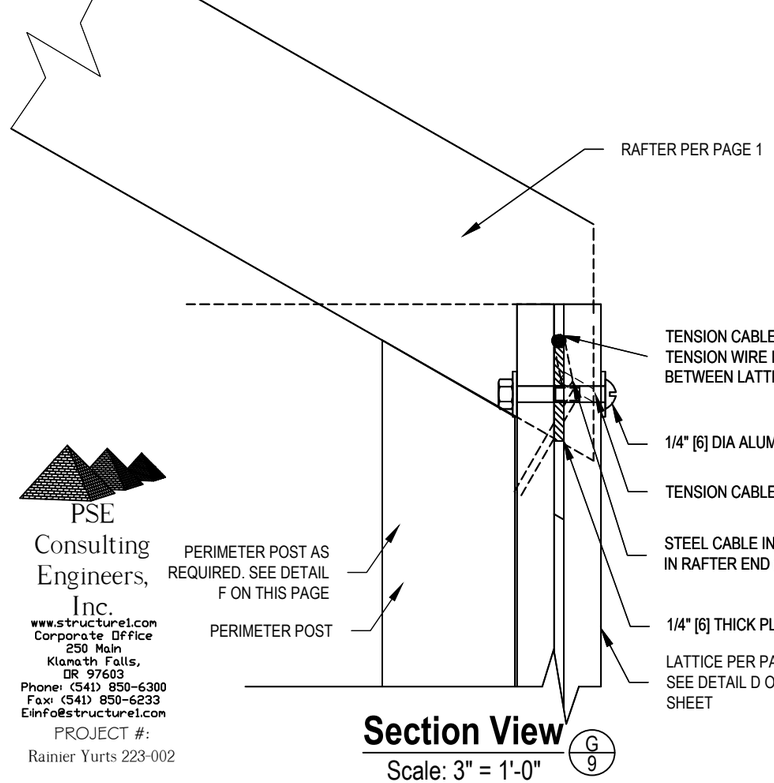
Section View (D/9)
Scale: 3" = 1'-0"



Custom Strap Tie (E/9)
Scale: 6"=1'-0"
16 Gauge Galvanized Steel



Perimeter Post (F/9)
Scale: 3" = 1'-0"
ATTACHMENT TO RAFTER:
Bracket, Simpson Strong-Tie, 20 GA Rigid Tie Connector
ATTACHMENT TO FLOOR:
Bracket, Simpson-Strong-Tie, Bottom, 20GA Z-Max, 2 x 4



Section View (G/9)
Scale: 3" = 1'-0"

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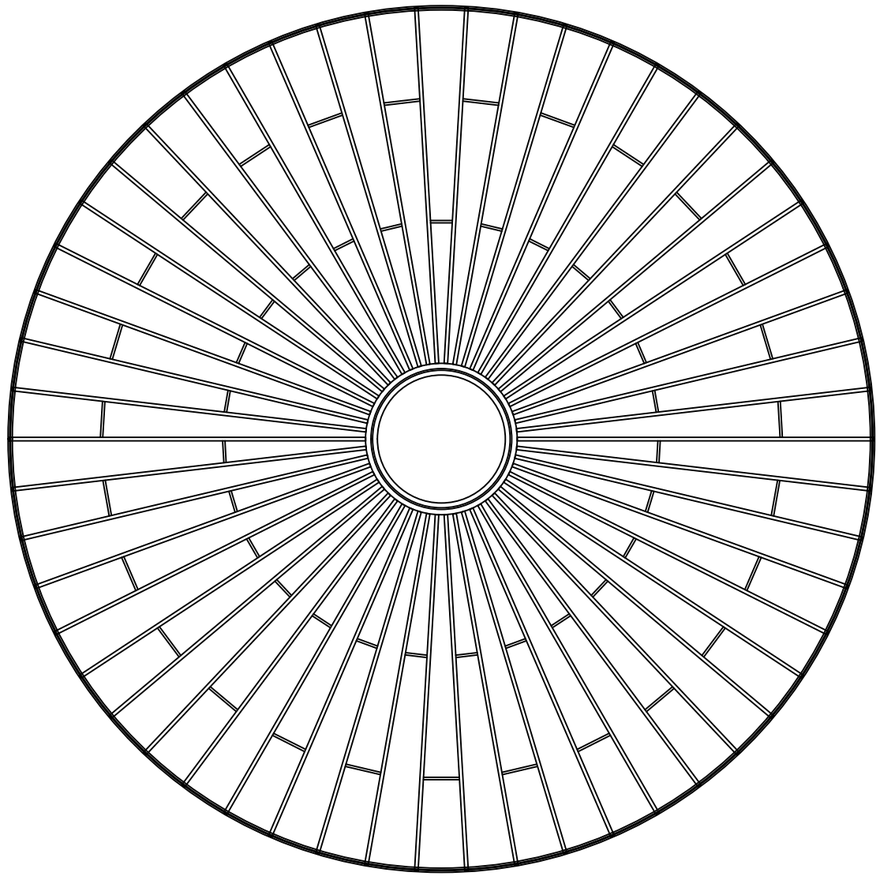
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PROJECT #:
Rainier Yurts 223-002

PART DESCRIPTION: Rainier Yurt- 30' Frame			
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: WALL AND RAFTER 2X6	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT	PAGE: P9
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD

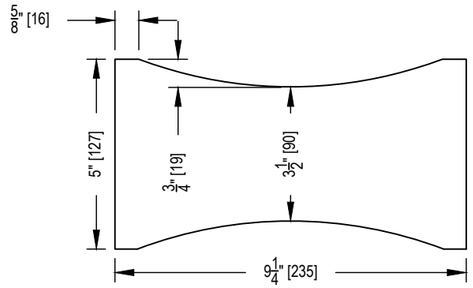
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Rainier Yurts 223-002



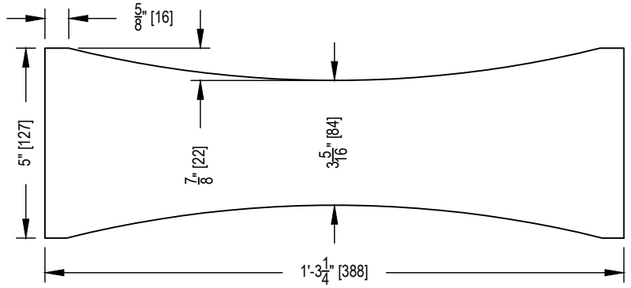
Roof Framing Plan w/ Eagle Blocks (A/10)

Scale: 3/16" = 1'-0"



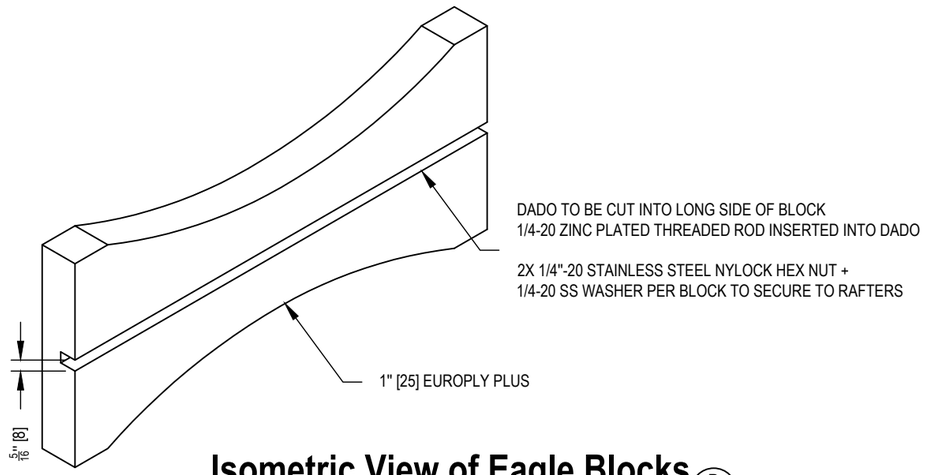
Upper Eagle Blocks for 2x6 Rafters (C/10)

Scale: 3" = 1'-0"



Upper Eagle Blocks for 2x6 Rafters (D/10)

Scale: 3" = 1'-0"

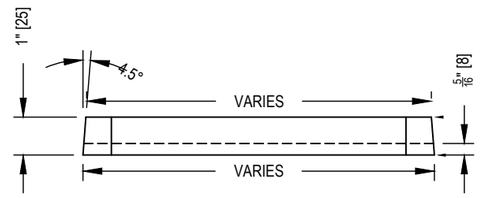


Isometric View of Eagle Blocks (B/10)

Scale: 3" = 1'-0"

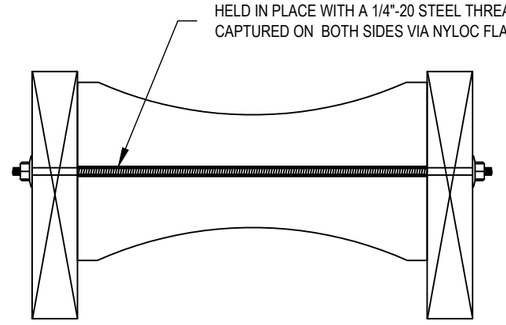
NOTES:

-EAGLE BLOCKS CUT ON CNC FROM P/N: 1020-0018-Sheet, Plywood, 4' x 8' x 1", Europly Plus



Cross Section of Eagle Blocks (E/10)

Scale: 3" = 1'-0"



Eagle Block Attachment (F/10)

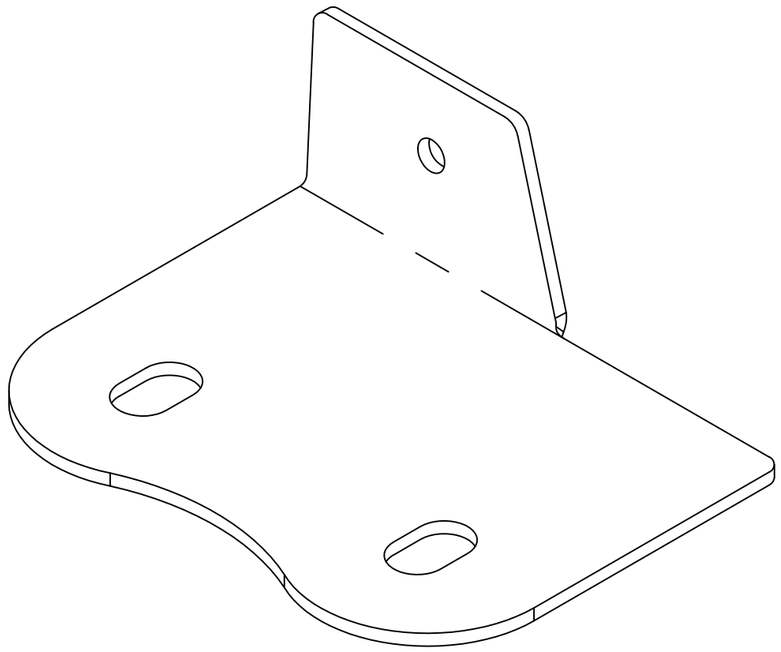
Scale: 3" = 1'-0"

PART DESCRIPTION: Rainier Yurt- 33' Frame			
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: EAGLE BLOCKS	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT	PAGE: P10
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
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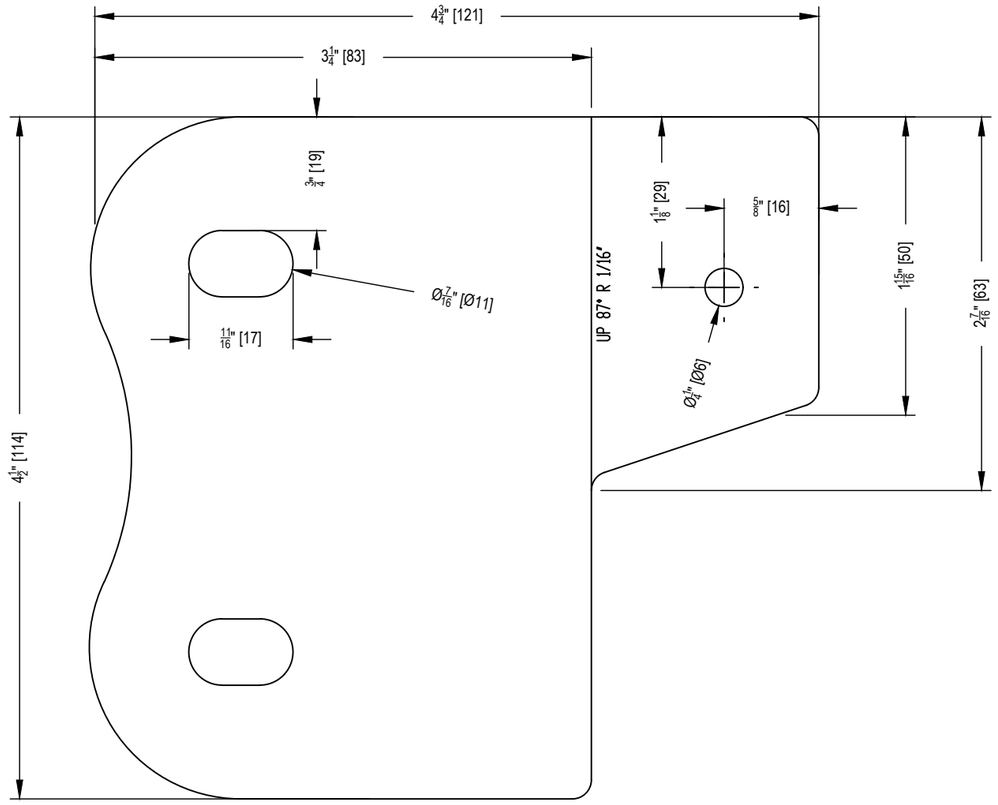
PROJECT #:
Rainier Yurts 223-002



Rafter to Ring Clip Isometric View (A/12)

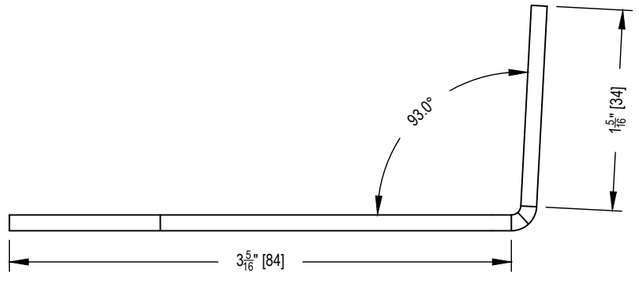
Scale: 1'-0" = 1'-0"

P/N 1110-0008- Sheet, Steel, 4x10x12GA Hot Rolled



Rafter to Ring Clip Flat Pattern (B/12)

Scale: 1'-0" = 1'-0"



Rafter to Ring Clip Side View (C/12)

Scale: 1'-0" = 1'-0"

.X = ± 1/4"	PART DESCRIPTION: Rainier Yurt- 33' Frame		
.XX = ± 1/16"	CUSTOMER: N/A	SHEET DESCRIPTION: RAFTER TO RING CLIPS	
ANGLES = ± 1°	RAINIER INDUSTRIES LTD	RAINIER PART #: 33' YURT	PAGE: P12
		CUSTOMER DRAWING #: N/A	

GENERAL STRUCTURAL NOTES

(Unless Noted Otherwise)

CODES AND SPECIFICATIONS

1. 2021 International Building Code (IBC)
2. ASCE 7-16 Minimum Design Loads for Buildings and Other Structures
3. NDS-2018 National Design Specification for Wood Construction
4. ACI 318-19 Building Code Requirements For Structural Concrete
5. AISC 360-16 Specification for Structural Steel Buildings

DESIGN CRITERIA

1. Wind Load - per International Building Code, V=115 mph, Risk Category II, Exposure Category C
2. Seismic - per International Building Code, Ss=1.5 S1=.75, Site class=D, Seismic Use Group=II, Seismic Design Category=D,
3. Roof Load - DL = 2.5 psf
   SL = 60 psf (without center column)
4. Floor Load - DL = 15 psf
   LL = 40 psf
5. Soils - 1,500 psf (allowable bearing pressure on bearing soils, not fill)
   35 psf/ft (active lateral pressure of retained earth)
   250 psf/ft(passive earth pressure)
   0.35 (coefficient of friction between soil and concrete in contact area)
6. Concrete - 2500 psi at 28 days strength, Grade 60 reinforcement.

SOIL CONSTRUCTION

1. Extend footings to undisturbed soil or fill compacted to 95% Modified Proctor. All footings shall be below local frost depth.
   Contractor to check with local building department.

REINFORCED CONCRETE

1. f'c = 2500 psi for footings slabs and walls. Min 5 ½ sacks of cement per cubic yard of concrete and maximum of 6-3/4 gallons of water per 94 lb. sack of cement.
2. Maximum aggregate size is 1-1/2". Maximum slump = 4 inches.
3. Mixing and placement of all concrete shall be in accordance with the IBC and ACI 318-19. Proportions of aggregate to cement shall be such as to produce a dense, workable mix which can be placed without segregation or excess free surface water. Provide ¾ inch chamfer on all exposed concrete edges unless otherwise indicated on architectural drawings.
4. No special inspection is required.
5. Vibrate all concrete walls. Segregation of materials shall be prevented.

REINFORCING STEEL

1. Concrete reinforcement shall be detailed, fabricated and placed in accordance with ACI 318-19.
2. Reinforcing steel shall be deformed billet steel conforming to ASTM A-615.
3. Welded wire mesh shall conform to ASTM A-185.
4. Reinforcing steel shall be accurately placed and adequately secured in position. The following protection for reinforcement shall be provided:

	Min Cover(in.)
Cast against and permanently exposed to earth-	3
Exposed to earth or weather-	2
Slabs and walls at interior face	¾

5. Lap continuous reinforcing bars 32 bar diameters(1'-6" min) in concrete. Corner bars consisting of 32 bar diameter(1'-6" min) bend shall be provided for all horizontal reinforcement. Lap welded wire mesh edges 1.5 mesh minimum.This criteria applies unless noted otherwise.

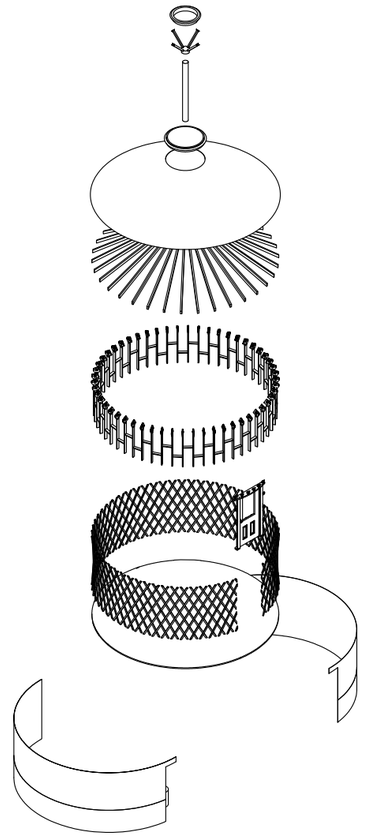
LUMBER & TIMBER

1. Unless noted otherwise, all sawn lumber shall be kiln dried and graded/marked in conformance with WCLIB standard grading for west coast lumber. Lumber shall meet the following minimum criteria:
   4x and larger DF #1 (Fb=1000 psi)
   3x and smaller DF #1 (Fb=1000 psi)
2. All wood in contact with ground or concrete to be pressure-treated with a wood preservative.
3. All interior non-load bearing walls shall be minimum 2x4 at 24" oc.
4. All perimeter studs at each rafter shall be 2x4 DF-L #1.
   4.1. Perimeter studs as required as per Yurt Upgrades on this page.
5. Provide (2) 2x6 header over openings not noted otherwise with steel saddle as per sheets A1-A4.
6. Provide solid blocking in floor space under all posts and wall members connected to holdowns.
7. Posts may be built from ganged 2x members. Connect each 2x to the adjoining 2x with 2 rows 16d at 8" oc in each row. All posts shall be built to match the supported member width and provide 1-1/2" minimum bearing length.
8. Provide double floor joists under all partition walls parallel to floor joists and along the perimeter of all diaphragm openings.
9. Provide double blocking between floor joists under all partition walls perpendicular to floor joists

STRUCTURAL INSULATED PANELS, SIPS NOTES:

1. Contractor shall follow the manufacturer recommendation.
2. Provide top and bottom plates. plates shall be dimensional lumber of minimum #2 Douglas fir - Larch, sized to match the core thickness and fastened to the panel facings with 8d common nails or staples spaced per shear wall schedule, maximum of 6" on center, panel edge fasteners.
3. Splines shall be:
   a. Nominal 2" thick solid-sawn DF #2 or equivalent lumber having a depth equal to the panel core thickness.
   b. Surface splines consisting of 3"wide, 7/16" thick osb (structural 1, exposure 1).
4. Staples:
   a. Staples, when used, shall be gauge 14 wire, two inches long, with a minimum of 7/16" on diameter crown width for roof and floors, staple spacing shall be per plan. for shear walls, staple spacing shall be per shear wall schedule.

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
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Yurt- Sample Exploded View A

NTS

REQUIRED YURT UPGRADES FOR LOAD:
2X6 RAFTERS W/ RAFTER TO RING BRACKET (ALL SIZES): 1) RAFTER/RING BRACKET + EAGLE BLOCKS + WALL POST

NOTES:

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NOMINAL DIA.	NO. OF RAFTERS	RAFTER: DOUG-FIR SS MSR 2400 OR BETTER Fb=2400 psi, Fcll=1975 psi, E=2E6 psi	LATTICE	COMPRESSION RING PIN DIAMETER	TENSION CABLE DIAMETER/SPECIFICATION
30'	50	1.5"x5.5"	PER C & D/P9	7/16-14 x 6" LONG, GRADE: A307, ZINC T-ROD	1/4" DIA. SS PRE-STRETCHED, LOAD TESTED

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PROJECT #:
Rainier Yurts 223-002

SHEET INDEX		
PAGE	SHEET DESCRIPTION	DEPARTMENT
P1	COVER SHEET	E
P2	CONSTRUCTION NOTES	E
P3	CONSTRUCTION NOTES	E
P4	PLATFORM FRAMING	E
P5	FOOTING AND SUBFRAME	E
P6	PLYWOOD AND JOISTS	E
P7	CONSTRUCTION DETAILS	E
P8	ROOF FRAMING	E
P9	WALL AND RAFTER 2X6	E
P10	EAGLE BLOCKS	E
P11	NOT USED	E
P12	RAFTER TO RING CLIPS	E

PART DESCRIPTION: Rainier Yurt- 30' Frame

.X = ± 1/4"
.XX = ± 1/16"
ANGLES = ± 1°

CUSTOMER: N/A

SHEET DESCRIPTION: COVER SHEET

RAINIER INDUSTRIES LTD

RAINIER PART #: 30' YURT

CUSTOMER DRAWING #: N/A

PAGE: P1

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
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WOOD CONNECTORS, FASTENERS AND PRESSURE TREATED WOOD

1. All wood connectors shall be Simpson or approved equal.
2. All nails shall be common wire nails unless noted otherwise.
3. All nailing shall meet the minimum nailing requirements of Table 2304.9.1 of the International Building Code.
4. All wood connectors and associated steel fasteners in contact with any pressure treated wood shall conform to one of the following configuration options:
   a) All wood connectors and associated steel fasteners shall be stainless steel.
   b) All wood connectors and associated steel fasteners shall be G185 hot-dip galvanized per ASTM A653.
   c) All wood connectors and associated steel fasteners shall be batch/post hot-dip galvanized per ASTM A123 for connectors and ASTM A153 for fasteners.
   d) All wood connectors and associated steel fasteners shall be mechanically galvanized per ASTM B695, Class 55 or greater.
5. G60 galvanized products shall not be used with treated wood.
6. G90 galvanized connectors may be used with sodium borate(DOT - Disodium Octaborate Tetrahydrate) treated woods. Sodium borate treated wood is not suitable for applications where moisture exposure is likely. Sodium borate treated wood may be suitable for mudsill applications when transported, stored, and installed appropriately.
7. Uncoated or painted steel should be used with treated wood.
8. Wood connectors and fasteners shall be made of the same material. Do not mix stainless steel and hot-dip galvanized wood connectors and fasteners.
9. Where a connector strap connects two wood members, install one half of the total required nails or bolts in each member.
10. All bolts in wood members shall conform to ASTM A307.
11. Provide standard cut washers under the head of all bolts and lag screws bearing on wood.

FLOOR AND ROOF DIAPHRAGMS

1. Apply 3/4" APA rated Sturd-I-Floor(24" oc) nailed to floor framing members with 10d common wire nails at 6" OC at all supported edges and at 12" OC at interior supports unless noted otherwise on the plans.
2. Blocking of interior edges is not required unless noted otherwise on the plans.

GENERAL CONSTRUCTION

1. All materials, workmanship, design, and construction shall conform to the project drawings, specifications, and the International Building Code.
2. Structural drawings shall be used in conjunction with architectural drawings for bidding and construction. Contractor shall verify dimensions and conditions for compatibility and shall notify the architect of any discrepancies prior to construction.

2.1 Discrepancies: The contractor shall inform the engineer in writing, during the bidding period, of any and all discrepancies or omissions noted on the drawings and specifications or of any variations needed in order to conform to codes, rules and regulations. Upon receipt of such information, the engineer will send written instructions to all concerned. Any such discrepancy, omission, or variation not reported shall be the responsibility of the contractor.

3. The contractor shall provide temporary bracing as required until all permanent framing and connections have been completed.
4. The contractor shall coordinate with the building department for all permits and building department required inspections.
5. Do not scale drawings. Use only written dimensions.
6. Drawings indicate general and typical details of construction. Where conditions are not specifically indicated but are of similar character to details shown, similar details of construction shall be used, subject to review and approval by the architect and the structural engineer.
7. Contractor initiated changes shall be submitted in writing to the architect and structural engineer for approval prior to fabrication or construction.
8. All structural systems which are to be composed of field erected components shall be supervised by the supplier during manufacturing, delivery, handling, storage, and erection in accordance with instructions prepared by the supplier.
9. Contractor shall be responsible for all safety precautions and the methods, techniques, sequences, or procedures required to perform the work.
10. Shop drawing review: Dimensions and quantities are not reviewed by the engineer of record, therefore, must be reviewed by the contractor. Contractor shall review and stamp all shop drawings prior to submitting for review by the engineer of record. Submissions shall include a reproducible and one copy. Reproducible will be marked and returned. Re-submittals of previously submitted shop drawings shall have all changes clouded and dated with a sequential revision number. Contractor shall review and stamp all revised and resubmitted shop drawings prior to submittal and review by the engineer of record. In the event of conflict between the shop drawings and design drawings/specifications, the design drawings/specifications shall control and be followed.

CABLE AND FITTING NOTES:

DESIGN CRITERIA

1. Design, materials, fabrication, protective coatings and installation of all steel cables and fittings shall be according to ASCE standard: "structural applications of steel cables for buildings", latest edition.
2. All cables and fittings shall be galvanized, class A, according to ASTM A586 and A603.
3. $\frac{1}{4}$" Diameter cable shall have a minimum breaking strength of 7,000 lbs tension force.
4. $\frac{5}{16}$" Diameter cable shall have a minimum breaking strength of 9,800 lbs tension force.
5. All cable fittings shall have the capacity to resist the tension force shown on item c & d above. contractor to submit manufacturer data.

CABLE TYPE

1. ASTM A586, class A, pre-stressed, zinc-coated parallel and helical steel wire structural strand or
2. ASTM A603-88, zinc-coated steel structural wire rope.

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PROJECT #:
Rainier Yurts 223-002

.X = ± 1/4"	PART DESCRIPTION: Rainier Yurt- 30' Frame		
.XX = ± 1/16"	CUSTOMER: N/A	SHEET DESCRIPTION: CONSTRUCTION NOTES	
ANGLES = ± 1°	RAINIER INDUSTRIES LTD	RAINIER PART #: 30' YURT	PAGE: P2
		CUSTOMER DRAWING #: N/A	

NOTES:

A. Foundation system is dependent upon site soil conditions. Confirm soil conditions/foundation system compatibility with local building department.

B. The following may be substituted for 4"x8" beams: (2) 2"x8" with a spacer of 1/2" cdx plywood. fasten with 16d galvanized nails (minimum 2 nails every 12")

C. Blocking over beams match joist depth

D. Qty and length based on level site with platform height as illustrated

E. Contractor to refer to page 6 and 7 for typical details.

F. Platform dimensions:

Diameter	30'-6"
Radius	15'-3"
Circumference	95'-9 13/16"

G. Locate this beam as far from the center as the joist hangers will allow

H. Follow instructions for use and installation of Simpson hardware. See: https://www.strongtie.com/ for additional information

I. Design allows for approximately 4" clear zone under sips for sidewall to purse

J. These dimensions are the widths of the pre-manufactured Structural Insulated Panel (SIP)

K. These dimensions are the length of the pre-manufactured sips floor panels

L. (3) layers of $\frac{1}{2}$" Plywood perimeter banding as per detail F on page 6

M. Items included with the SIP package are item #16 (mastic glue), item #17 (8" wood screws), SIP panels and the smaller SIP splines, but item 1 (the perimeter blocking) and the larger structural SIP splines item #23 are not included in the SIPs package. Cutting, gluing and nailing of the structural splines is the responsibility of the platform builder.

N. Pressure treated post by others, cbq44 post base pc44 post cap

O. Can reuse cut-offs of 2"x pieces that are 4'-0" or larger for structural splines. Stagger pieces at ends of structural splines by 0'-4" for improved strength.

P. Contractor shall provide, not included with Rainier package.

Q. Refer to detail E on page 9 for 16ga custom strap hold-down.

R. Includes spares depending on configuration

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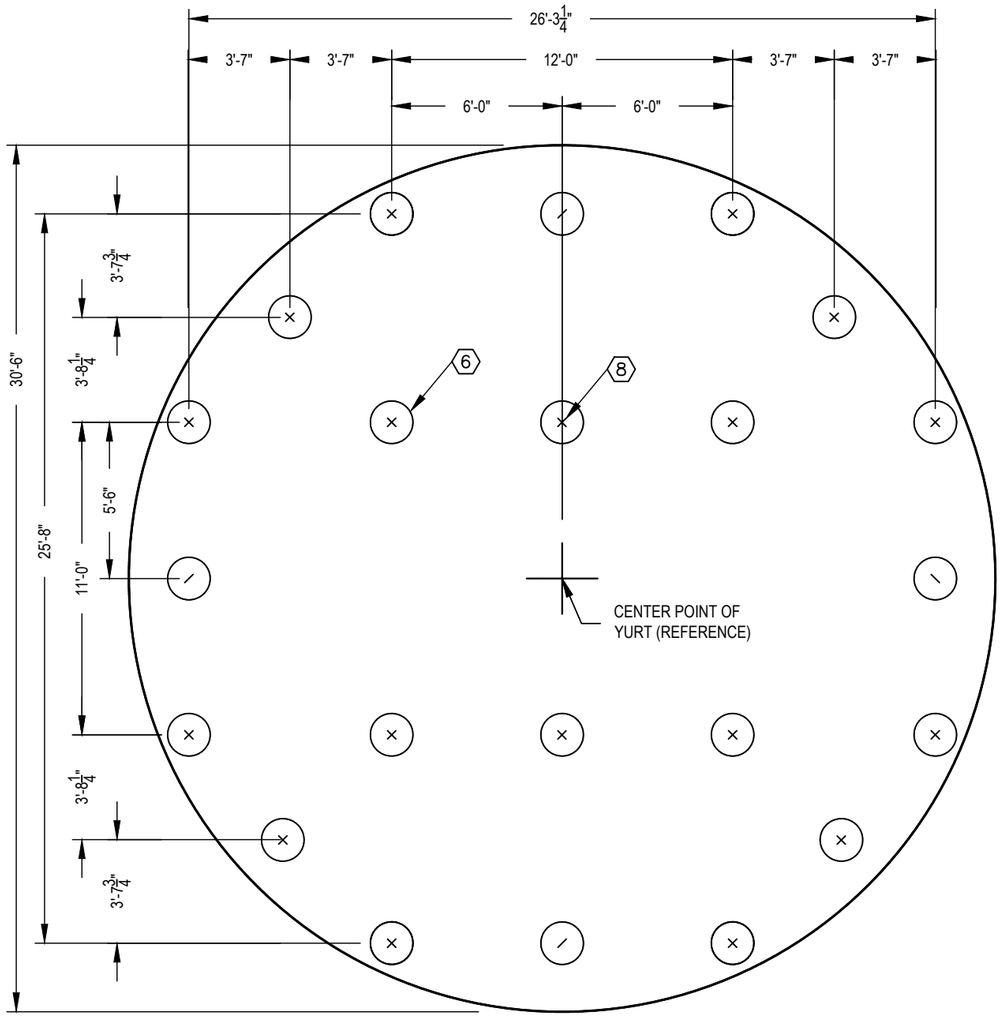
ITEM.	QTY	DESCRIPTION	NOTES
25	100	$\frac{1}{4}$"x2" A325 THROUGH BOLT WITH NUT AND WASHER FOR HOLD-DOWN BRACKET	Q R
24	100	9"x1 $\frac{1}{4}$"x16GA CUSTOM STRAP	Q R
23	4	SIMPSON END POST CAP EPC4Z	N
22	52	2x6x11'-0" - DF-L #2 SIPs SPLINE	A B C
21	4	4x8x12'-0" BEAMS PRESSURE TREATED HF2	A B C
20	4	4x8x10'-0" BEAMS PRESSURE TREATED HF2	A B C
19	20	6 $\frac{1}{2}$" TYPE 'L' PREMIER SIP PANEL	
18	400	#10x4" SDS WOODEX DECK SCREWS FOR HOLD-DOWN BRACKET	Q R
17	n/a	8" SIP SCREW	M
16	n/a	PREMIER MASTIC GLUE	M
15	n/a	REBAR REINFORCEMENT: BY OTHERS	
14	850	16d GALVANIZED NAILS (SIMPSON BRACKETS)	
13	8	SIMPSON FACE MOUNT HANGER HUS48, OR EQUIV. (4"x8")	
12	4	SIMPSON 45° SKEWED HANGER HSUL/L46 (4"x8")	
11	4	SIMPSON 45° SKEWED HANGER HSUR/L46 (4"x8")	
10	6	SIMPSON STRAP TIES ST2215 (16 ga. x 2"x16")	
9	144	SIMPSON SDS 1/4"x2" SCREWS (FOR CBQ44)	
8	22	SIMPSON POST BASE #CBQ44 (OR EQUIVALENT)	N
7	36	SIMPSON POST CAP AC4	
6	n/a	POURED FOOTINGS: BY OTHERS	A
5	5	4x4x8'-POSTS HF2 (PRESSURE TREATED, RATED FOR GROUND CONTACT)	A D
4	12	4x8x8'-0" BEAMS PRESSURE TREATED HF2	A B C
3	8	2x4x12'-BRACING (TYPICAL 4-PLACES)(PRESURE TREATED, RATED FOR GROUND CONTACT)	
2	1000	#10x2" SDS WOODEX DECK SCREWS	
1	8	$\frac{1}{2}$" PLYWOOD PERIMETER BANDING	L

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PROJECT #:
Rainier Yurts 223-002

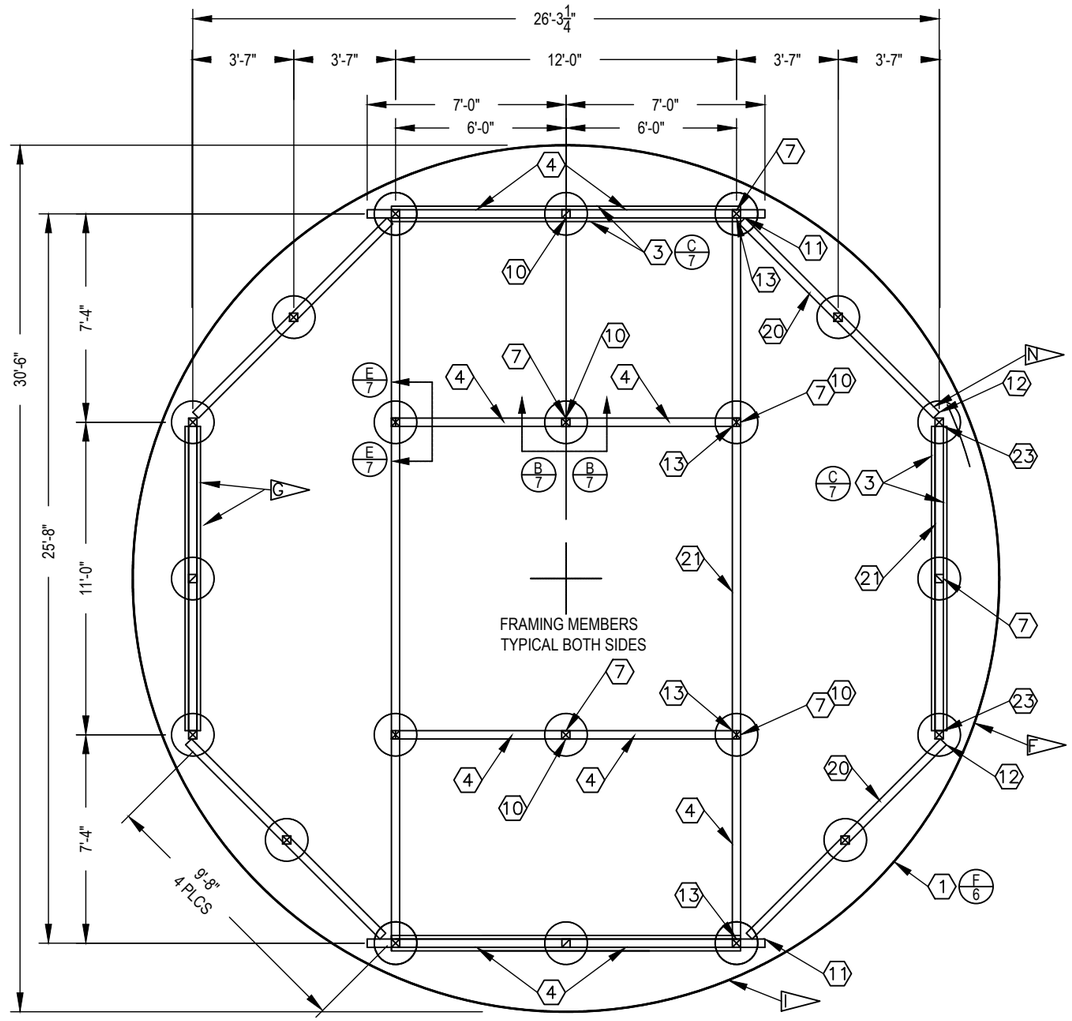
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CUSTOMER: N/A
SHEET DESCRIPTION: CONSTRUCTION NOTES
RAINIER PART #: 30' YURT
CUSTOMER DRAWING #: N/A
PAGE: P3
RAINIER INDUSTRIES LTD
.X = ± 1/4"
.XX = ± 1/16"
ANGLES = ± 1°

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Assumed Footing Layout (A)

Scale: 3/16"=1'-0"



Subframe Layout (B)

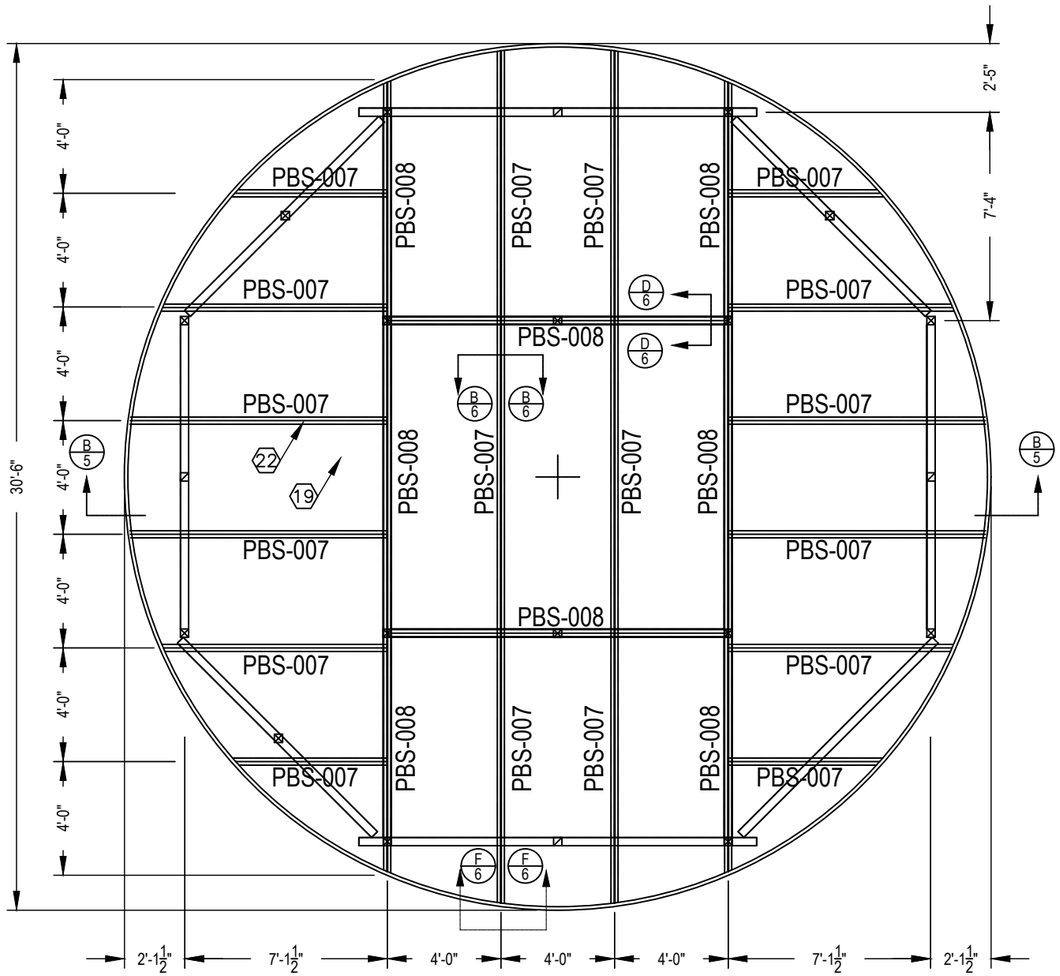
Scale: 3/16"=1'-0"

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PROJECT #:
Rainier Yurts 223-002

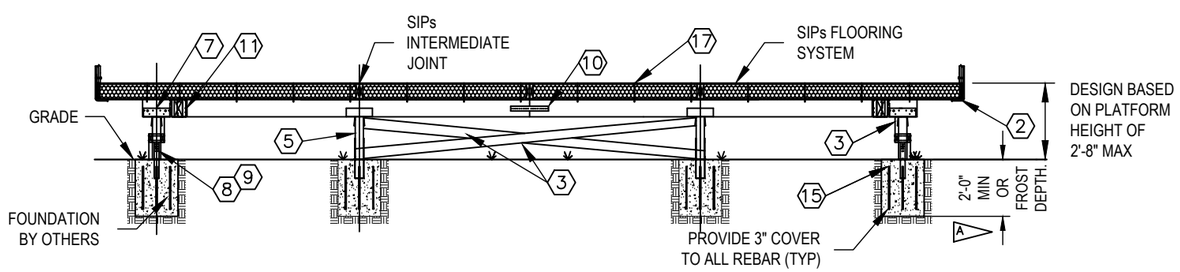
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ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

REVISION HISTORY				
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SIPS Panel Layout (A)

Scale: $\frac{3}{16}$" = 1'-0"



Platform Section View (B)

Scale: $\frac{3}{16}$"=1'-0"

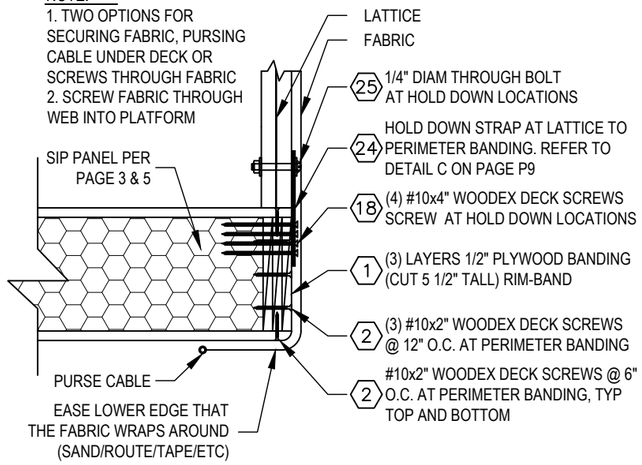
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PROJECT #:
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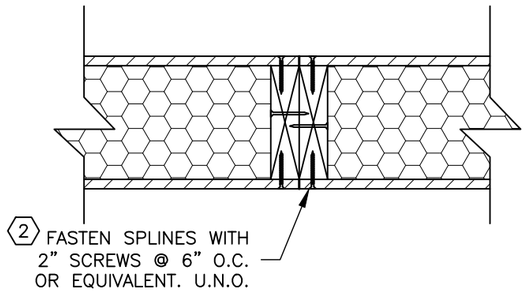
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.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 30' YURT	PAGE: P5
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
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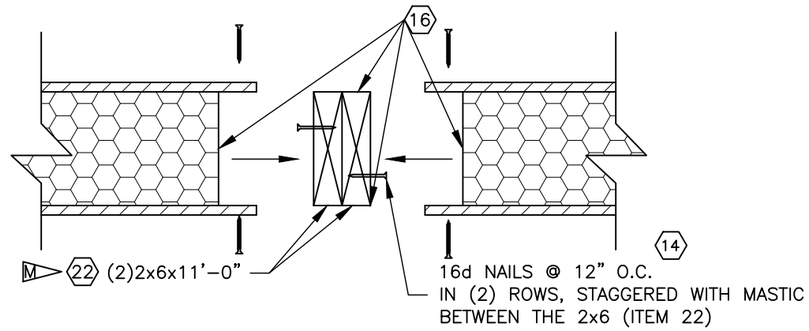
NOTE:
1. TWO OPTIONS FOR SECURING FABRIC, PURSING CABLE UNDER DECK OR SCREWS THROUGH FABRIC
2. SCREW FABRIC THROUGH WEB INTO PLATFORM



Section View & PBS-005 (A)
Scale: 1 1/2"=1'-0"



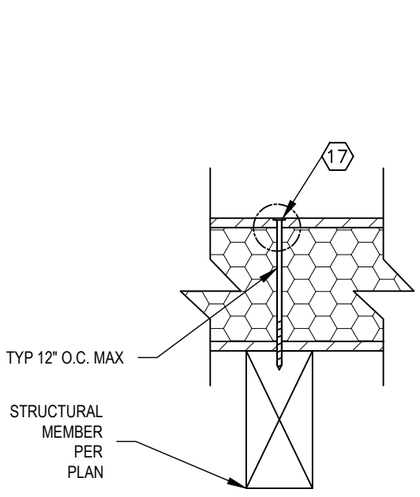
Section View & PBS-007 (B)
Scale: 1 1/2"=1'-0"



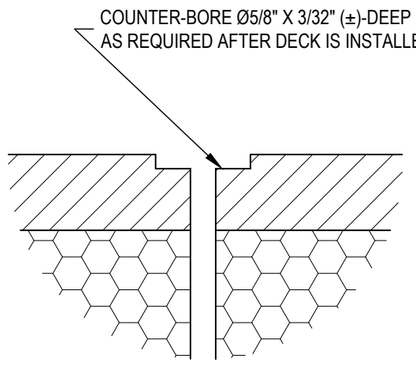
Exploded View (C)
Scale: 1 1/2"=1'-0"

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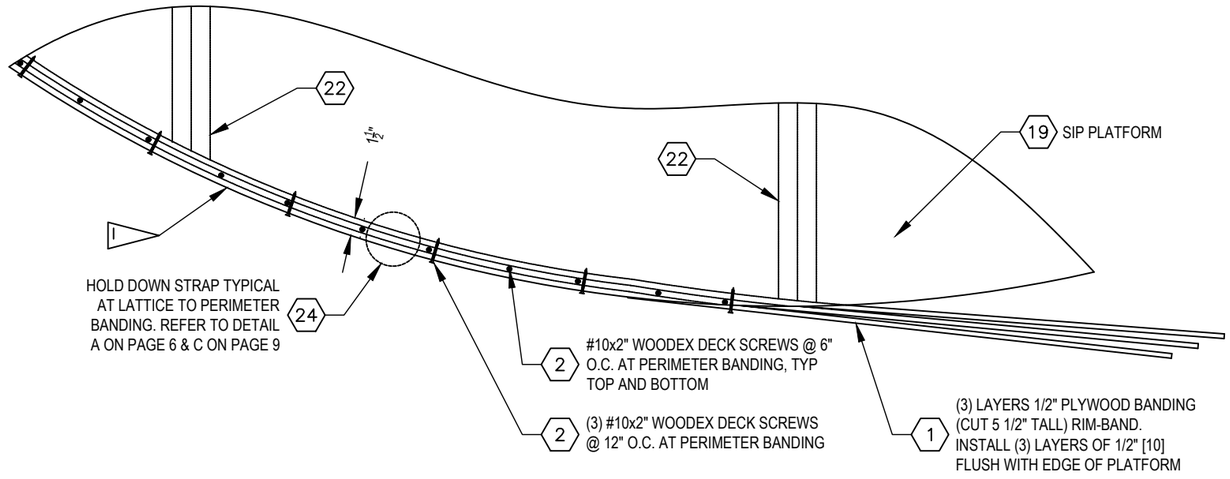
PROJECT #:
Rainier Yurts 223-002



Section View (D)
Scale: 1 1/2"=1'-0"



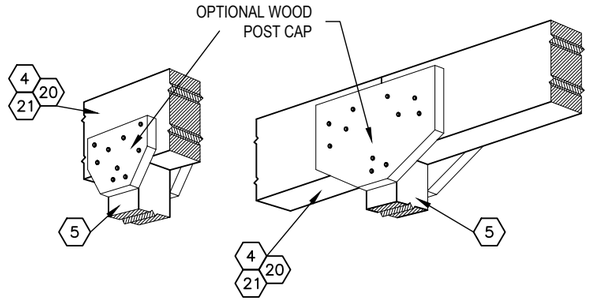
Partial View (E)
Scale: 1'-0"=1'-0"



Top View of Platform (F)
Scale: 1"=1'-0"

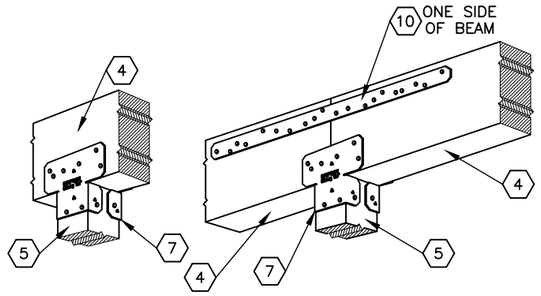
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.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 30' YURT	PAGE: P6
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

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REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
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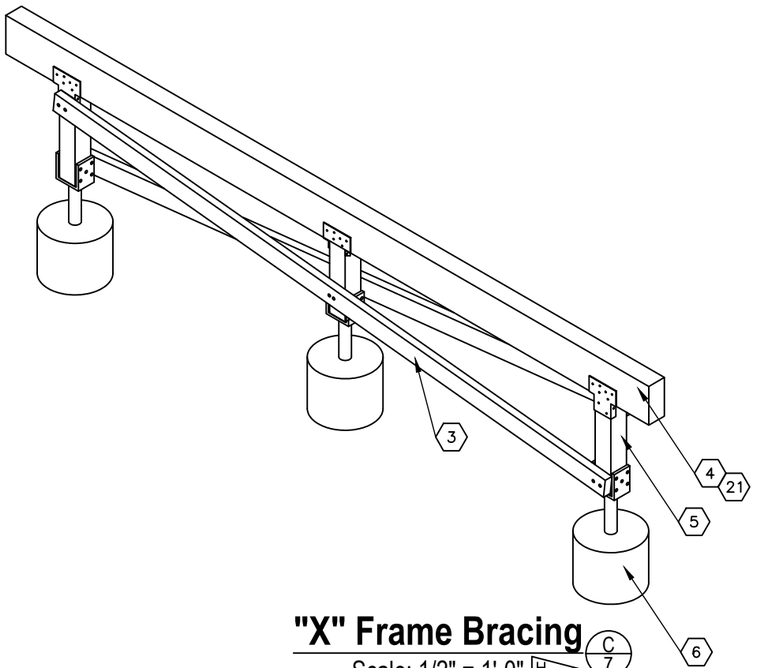
Post/Beam Wood Post Cap A/7

Scale: 3/4" = 1'-0"



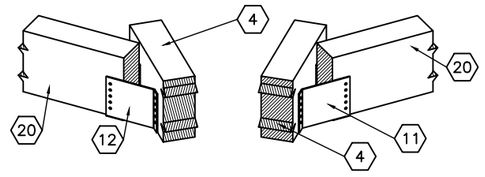
Post/Beam AC4 & ST2215 B/7

Scale: 3/4" = 1'-0" H



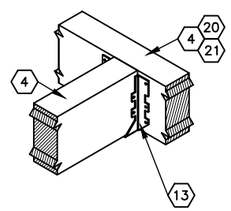
"X" Frame Bracing C/7

Scale: 1/2" = 1'-0" H



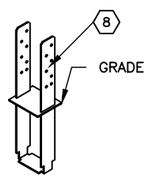
Simpson Brackets HSUL & HSUR D/7

Scale: 3/4" = 1'-0" H



Simpson Bracket HUS48 E/7

Scale: 3/4" = 1'-0" H



Simpson Post Base #CBQ44 F/7

Scale: 3/4" = 1'-0" H

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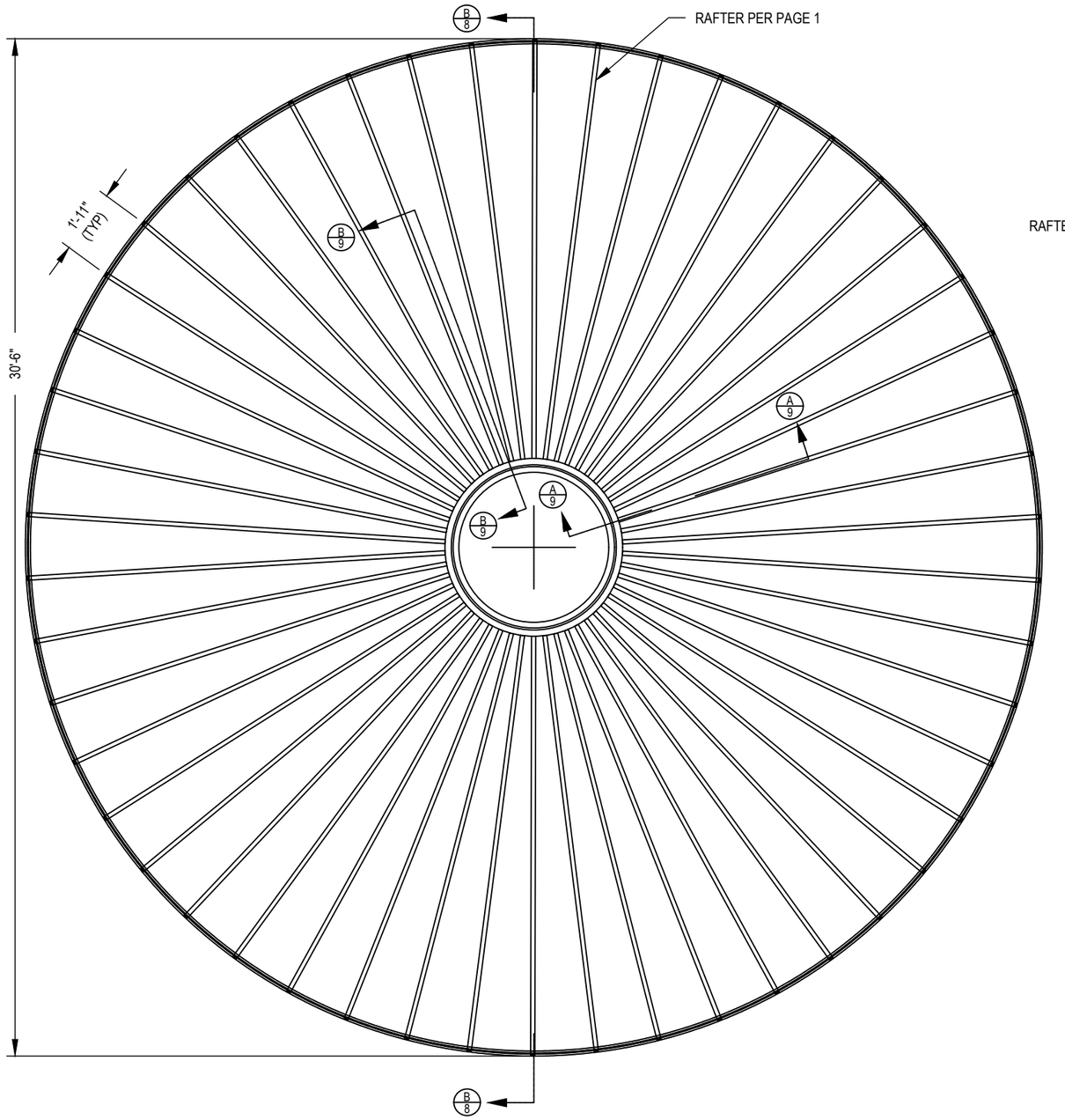
PROJECT #:
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.X = ± 1/4"
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ANGLES = ± 1°

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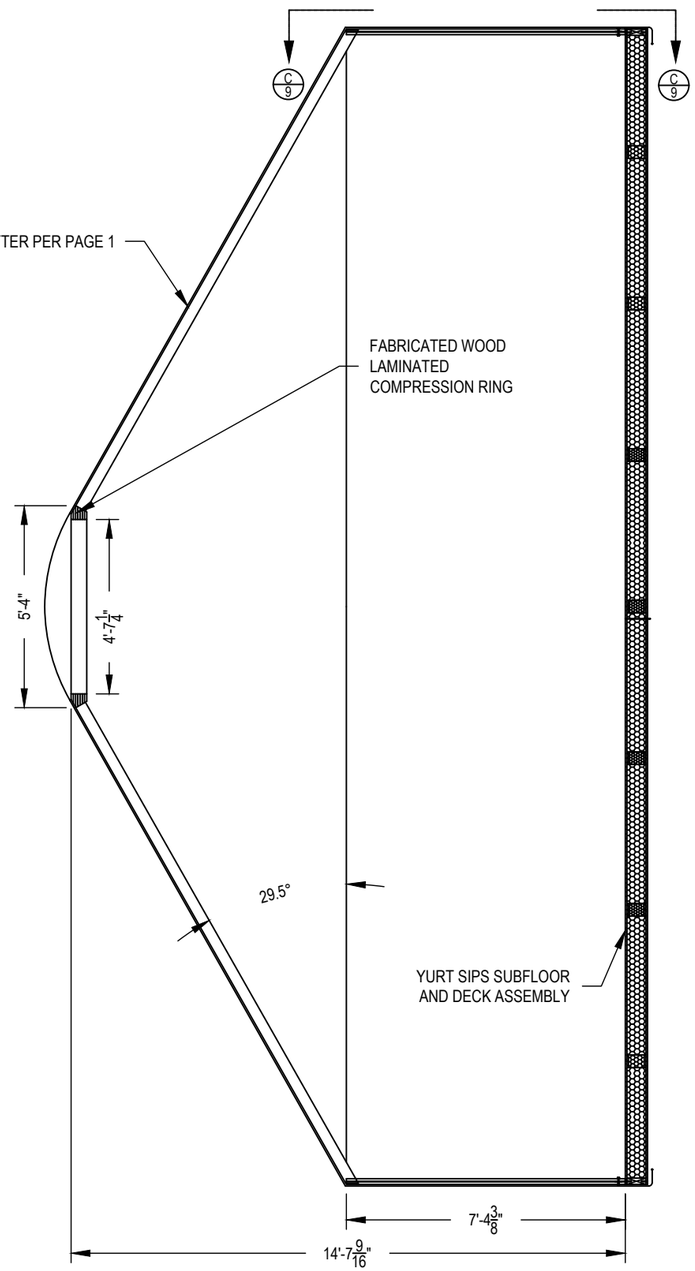
PART DESCRIPTION: Rainier Yurt- 30' Frame
CUSTOMER: N/A
SHEET DESCRIPTION: CONSTRUCTION DETAILS
RAINIER PART #: 30' YURT
CUSTOMER DRAWING #: N/A
PAGE: P7

REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD



Roof Framing Plan A/8

Scale: 1/4"=1'-0"



Section View B/8

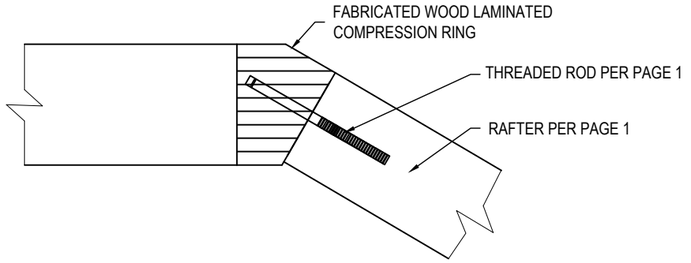
Scale: 1/4"=1'-0"

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www.structure1.com
Corporate Office
250 Main
Klamath Falls,
OR 97603
Phone: (541) 850-6300
Fax: (541) 850-6233
E:info@structure1.com

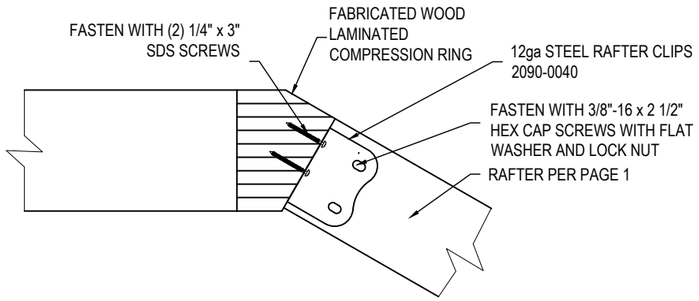
PROJECT #:
Rainier Yurts 223-002

PART DESCRIPTION: Rainier Yurt- 30' Frame			
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: ROOF FRAMING	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 30' YURT	PAGE: P8
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

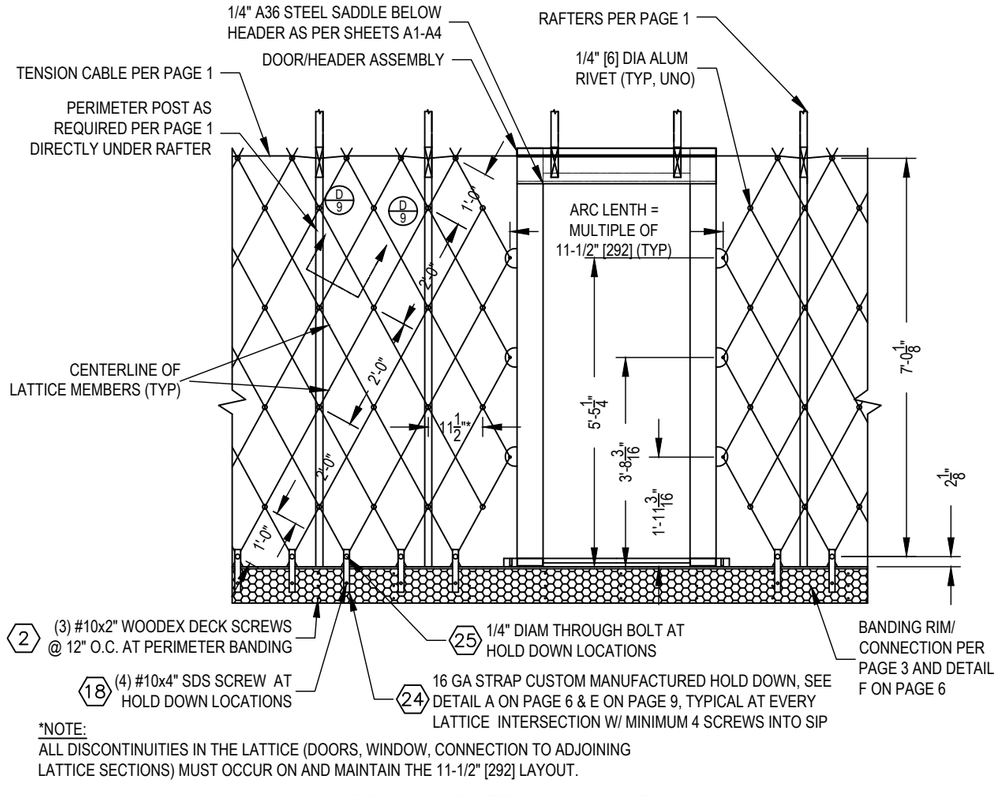
REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD



Section View (A/9)
Scale: 1-1/2" = 1'-0"

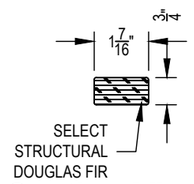


Section View (B/9)
Scale: 1-1/2"" = 1'-0"

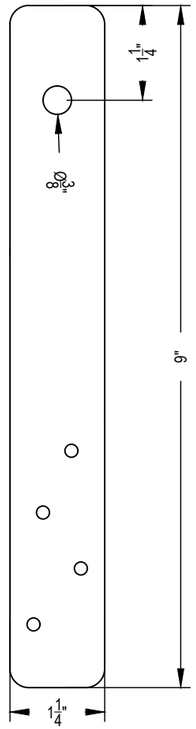


*NOTE:
ALL DISCONTINUITIES IN THE LATTICE (DOORS, WINDOW, CONNECTION TO ADJOINING LATTICE SECTIONS) MUST OCCUR ON AND MAINTAIN THE 11-1/2" [292] LAYOUT.

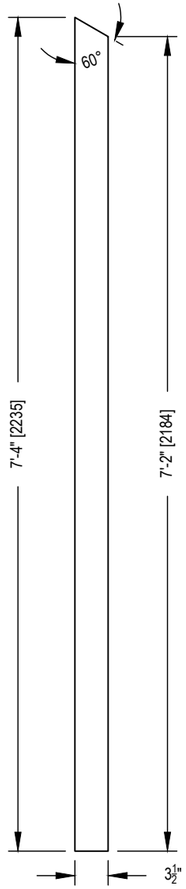
Sidewall Elevation Detail (C/9)
Scale: 3/8"=1'-0"



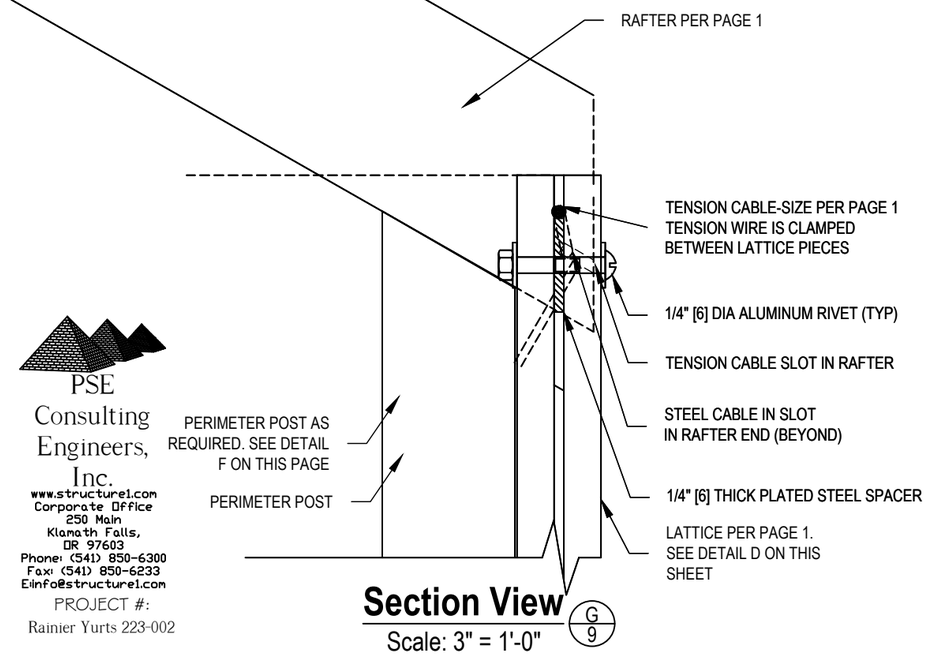
Section View (D/9)
Scale: 3" = 1'-0"



Custom Strap Tie (E/9)
Scale: 6"=1'-0"
16 Gauge Galvanized Steel



Perimeter Post (F/9)
Scale: 3" = 1'-0"
ATTACHMENT TO RAFTER:
Bracket, Simpson Strong-Tie, 20 GA Rigid Tie Connector
ATTACHMENT TO FLOOR:
Bracket, Simpson-Strong-Tie, Bottom, 20GA Z-Max, 2 x 4



Section View (G/9)
Scale: 3" = 1'-0"

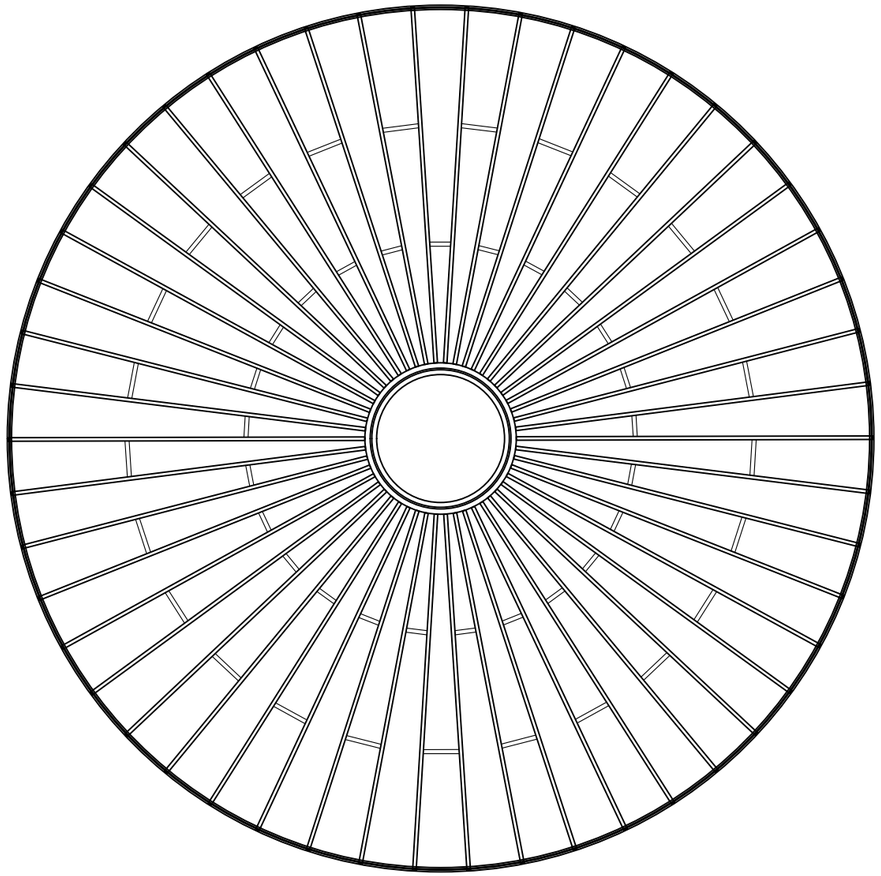
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E:info@structure1.com
PROJECT #:
Rainier Yurts 223-002

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PROJECT #:
Rainier Yurts 223-002

PART DESCRIPTION: Rainier Yurt- 30' Frame			
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: WALL AND RAFTER 2X6	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 30' YURT	PAGE: P9
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

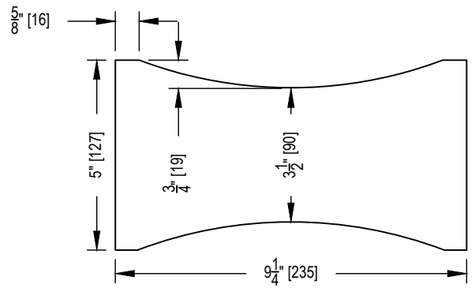
REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD

NOTES:
-EAGLE BLOCKS CUT ON CNC FROM P/N: 1020-0018-Sheet, Plywood, 4' x 8' x 1", Europly Plus



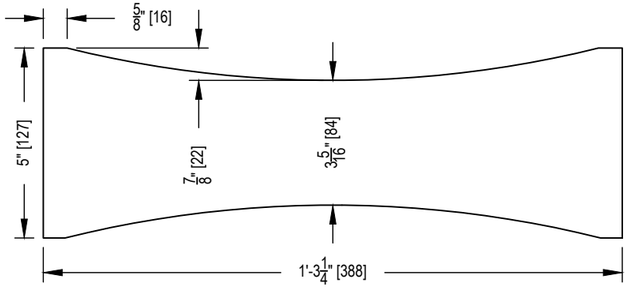
Roof Framing Plan w/ Eagle Blocks (A/10)

Scale: $\frac{3}{16}$" = 1'-0"



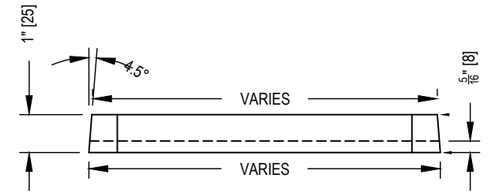
Upper Eagle Blocks for Rafters (C/10)

Scale: 3" = 1'-0"



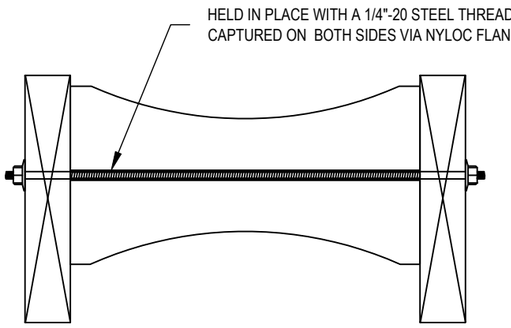
Upper Eagle Blocks for Rafters (D/10)

Scale: 3" = 1'-0"



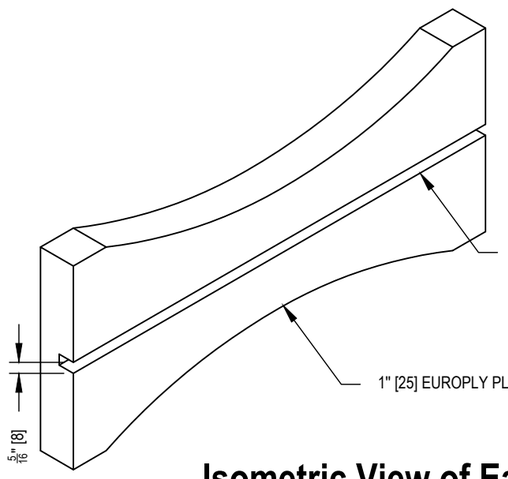
Cross Section of Eagle Blocks (E/10)

Scale: 3" = 1'-0"



Eagle Block Attachment (F/10)

Scale: 3" = 1'-0"



Isometric View of Eagle Blocks (B/10)

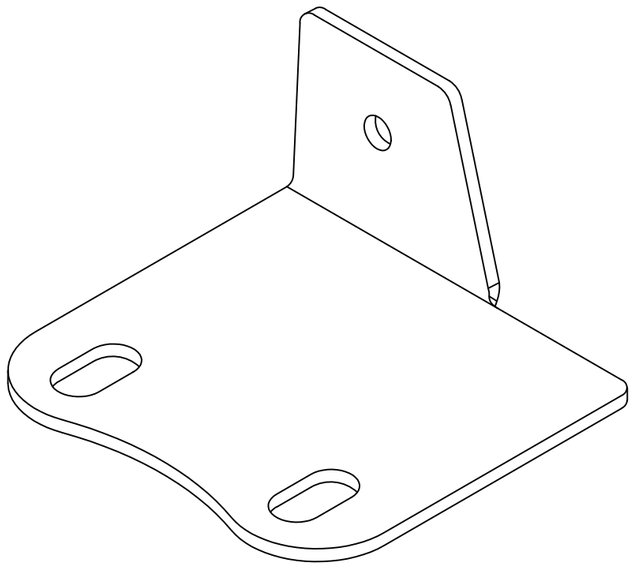
Scale: 3" = 1'-0"

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PROJECT #:
Rainier Yurts 223-002

	PART DESCRIPTION: Rainier Yurt- 30' Frame		
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: EAGLE BLOCKS	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 30' YURT	PAGE: P10
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	

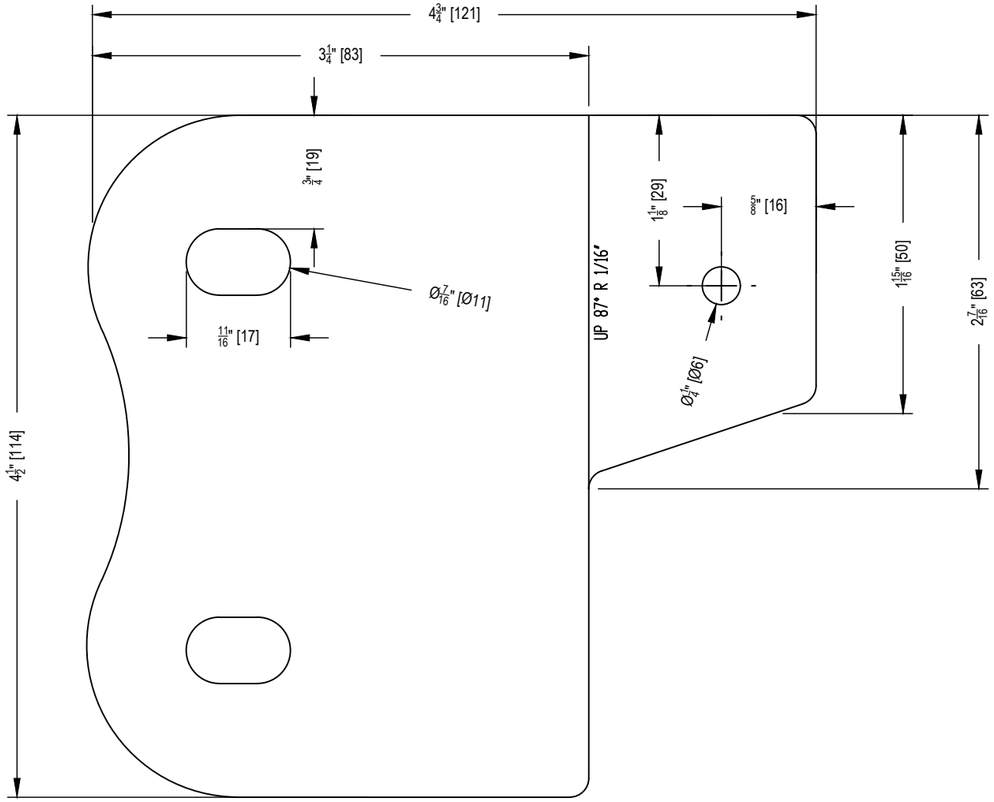
REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	APPR
A	RAINIER YURT FRAME	CMS	04/19/2018	CMS
B	2021 IBC UPDATE	MRD	5/31/2023	MRD



Rafter to Ring Clip Isometric View (A/12)

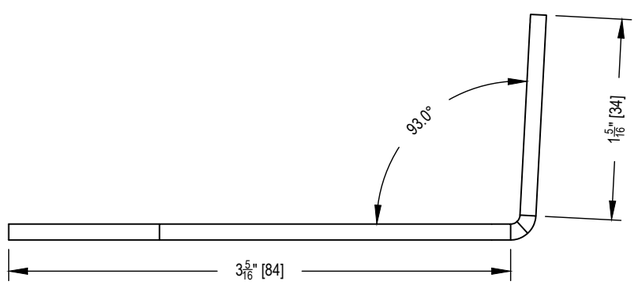
Scale: 1'-0" = 1'-0"

P/N 1110-0008- Sheet, Steel, 4x10x12GA Hot Rolled



Rafter to Ring Clip Flat Pattern (B/12)

Scale: 1'-0" = 1'-0"



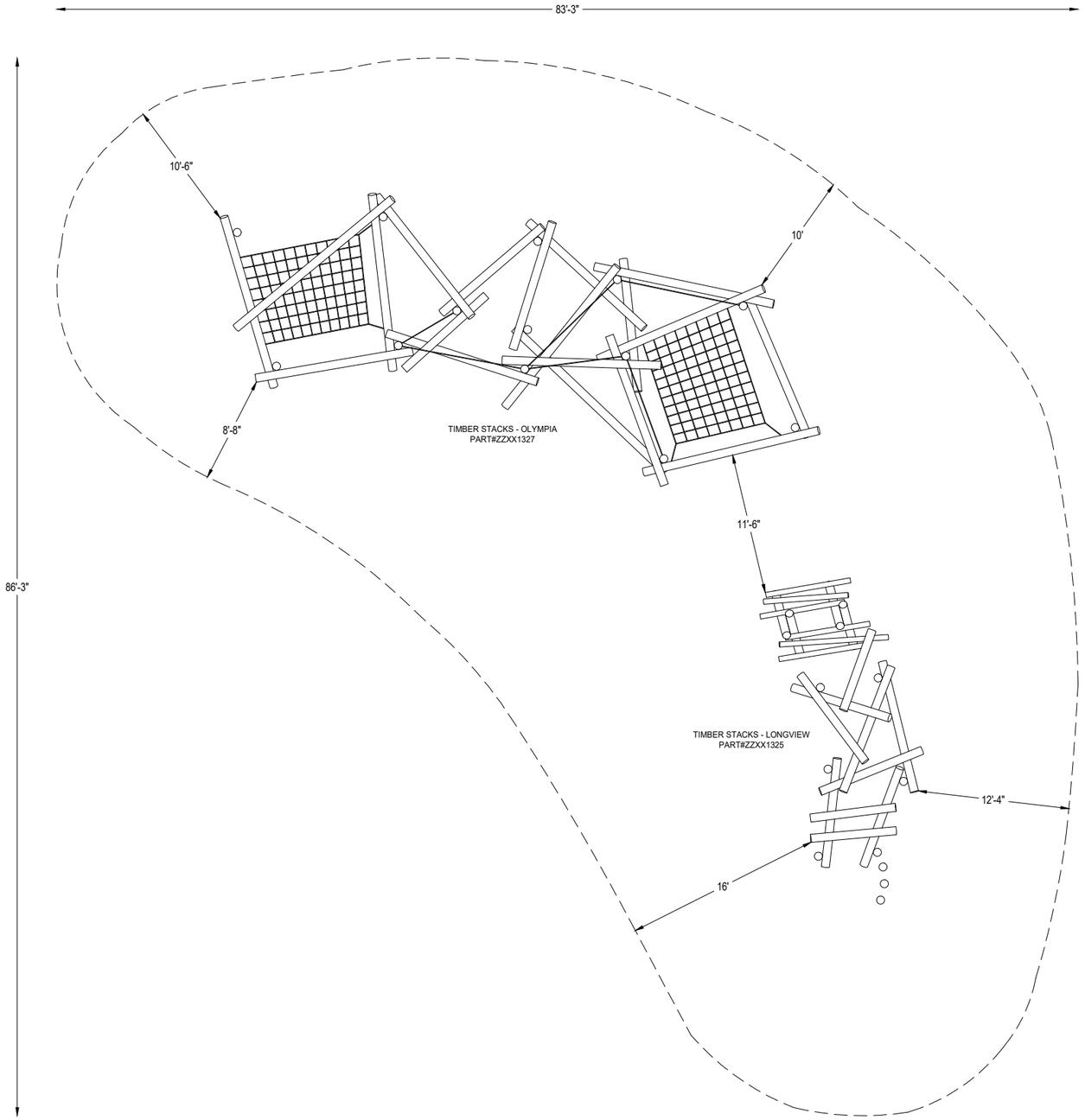
Rafter to Ring Clip Side View (C/12)

Scale: 1'-0" = 1'-0"

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Fax: (541) 850-6233
E:info@structurel.com

PROJECT #:
Rainier Yurts 223-002

	PART DESCRIPTION: Rainier Yurt- 30' Frame		
.X = ± 1/4"	CUSTOMER: N/A	SHEET DESCRIPTION: RAFTER TO RING CLIPS	
.XX = ± 1/16"	RAINIER INDUSTRIES LTD	RAINIER PART #: 30' YURT	PAGE: P12
ANGLES = ± 1°		CUSTOMER DRAWING #: N/A	



*PLAYGROUND SUPERVISION REQUIRED

PLAYWORLD

BIG T RECREATION
11618 S. State Street #1602
Draper, UT 84020

EQUIPMENT SIZE:
N/A

USE ZONE:
83'3" X 86'3"

AREA:
4,355 Sq. Ft.

PERIMETER:
266 Ft. 2 In.

FALL HEIGHT:
7 Ft. 4 In.

USER CAPACITY:
67

AGE GROUP:
5-12

ADA SCHEDULE	Total Elevated Play Activities: 0		
	Total Ground-Level Play Activities: 2		
	Accessible Elevated Activities	Accessible Ground-Level Activities	Accessible Ground-Level Play Types
Required	0	0	0
Provided	0	2	1

✓ ASTM F1487-21
✓ CPSC #325

PROJECT NO:
23-11378A

SCALE:
3/32"=1'0"

DRAWN BY:
MICHAEL BORDNER

Paper Size
B

DATE:
17-APR-2023

STOKES NATURE CENTER - AREA 1

NIBLEY, UTAH

Stokes Nature Center - Area 1

Nibley, Utah

23-11378A

Sales Representative

BIG T RECREATION

Equipment Manufacturer

PLAYWORLD
The world needs play.

Stokes Nature Center - Area 1

Nibley, Utah

23-11378A

Sales Representative

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Nibley, Utah

23-11378A

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Equipment Manufacturer

PLAYWORLD
The world needs play.

STOKES NATURE CENTER

RESTROOM

SHEET SCHEDULE	
SHEET	CONTENTS
1	TITLE PAGE & SPECIFICATIONS
2A	FLOOR PLAN & SPECIFICATIONS
2B	ELEVATION VIEWS & SPECIFICATIONS
3	CMU PLAN & DETAILS & SPECIFICATIONS
4	FOUNDATION PLAN & DETAILS, & SPEC'S

ROMTEC
18240 NORTH BANK ROAD - ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

THESE PLAN VIEW AND ELEVATION DRAWINGS ARE A PRELIMINARY ARCHITECTURAL REPRESENTATION OF THE BUILDING. ALL DIMENSIONS, FEATURES AND COMPONENTS SHOWN ON THESE PRELIMINARY DRAWINGS MAY OR MAY NOT BE PART OF THE QUOTE. PLEASE REFER TO THE "SCOPE OF SUPPLY AND SERVICES" LETTER PROVIDED WITH YOUR QUOTE FOR ROMTEC'S PROPOSED SCOPE OF SUPPLY.

STOKES NATURE CENTER

SECTION 13 34 23 - PRE-ENGINEERED ROMTEC BUILDING

Specification Date: 6/6/2023

SECTION 1: BUILDING PACKAGE OVERVIEW

1.1 SUMMARY

A. Owner will provide a pre-engineered Romtec building package for onsite installation by the building installer and/or contractor (see definitions and scope of work in sections below).

B. The following is an overview of the scope and products included in the Romtec building package.

1.2 OVERVIEW

A. Building package design, engineering, and furnishing all specified building package components shall be provided by Romtec, Inc.

B. The building and its concrete footings, foundation, and slab shall be engineered by Romtec to meet site specific conditions including wind and snow loading, local frost depth, and ground conditions.

C. Building shall be designed to meet local codes and permitting authority approvals for permanent structures.

D. The reviewing authority reserves the right to review or reject all submittals at its sole discretion.

E. All work and materials shall comply with the latest industry building codes and regulations for the state of Utah.

F. Americans with Disabilities Act Accessibility Guidelines (ADAAG) will be followed in design, manufacture, and construction.

1.3 DESIGN & SUBMITTAL DOCUMENTATION

A. Romtec's work shall include the design of the architectural, mechanical, structural, and electrical components that will be required for this building.

B. The building will be designed as a complete building package to be delivered to the job site for construction on-site by the building installer and/or contractor.

C. Romtec shall submit the packaged restroom building preliminary Scope of Supply and Design Submittal (SSDS), including the building plan view and elevation drawings.

D. Romtec will provide complete submittal documentation in the Romtec's standard electronic submittal format for review.

E. The preliminary SSDS will be reviewed by relevant parties and returned to Romtec with any required revisions to the terms, product data sheets, and/or building plan view and elevation drawings noted as comments.

F. Romtec shall make any required corrections or revisions and resubmit the preliminary SSDS until the preliminary SSDS is approved by the relevant parties.

G. Once the preliminary SSDS has been approved, Romtec will provide full sealed plan sets stamped by an engineer licensed in the state that the building is located for review by the permitting authority.

H. Up to three (3) wet stamped sets of the plans and structural calculations shall be provided by Romtec before any additional fees apply. Standard plan set size is 11" x 17".

I. Permitting authority will review the full sealed plan set and return with any required revisions or corrections noted as comments.

J. Romtec shall provide one full round of sealed plan revisions in response to permitting authority comments before any additional fees are allowed.

K. The following sections shall be included in Romtec's preliminary Scope of Supply and Design Submittal. Incomplete submittals will be rejected and returned for revision.

1. INTRODUCTION
2. BUILDING DESIGN,
   (a) SUPPLIED ITEMS
   (b) EXCLUDED ITEMS
   (c) PLAN VIEW AND ELEVATION DRAWINGS
3. PRODUCT DATA
4. WARRANTY & LIMITATIONS

Note: Overall site plan is not part of Romtec's scope.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Romtec's freight shall be based on delivering the product on a 48' to 53' flatbed or van truck and trailers, or as close to those dimensions as can legally access the site. Overall dimensions of the truck and trailers are: 70' overall length, 102" wide and 168" high.

B. Romtec shall deliver organized building package components in stages as shrink-wrapped pallets that correspond to a typical sequence of construction. A bill of material stating the stages of palletized components shall be included with every delivery. All stages as applicable.

1. Stage 1 pallets shall include structural components such as block, frames, vents, beams, connectors, trusses, etc.
2. Stage 2 pallets shall include second stage structural components such as filler wall material, windows, skylights, roofing, etc.
3. Stage 3 pallets shall include structural finish components such as siding material, tile, doors etc.
4. Stage 4 pallets shall include plumbing and electrical fixtures and other finish materials such as toilets, sinks, drinking fountains, electrical fixtures, accessories, etc.

C. Romtec shall coordinate the delivery with the receiving entity (owner, building installer, and/or contractor) as appropriate.

1.5 WARRANTY

A. The building package and all associated components provided by Romtec shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date of delivery of the building package, or, if delivery is delayed for any reason beyond Romtec's control, the date that the building and all its associated components were ready to deliver.

B. Romtec shall pass through to owner all relevant manufacturers warranties for individual products and components of the building package.

FOR BID PURPOSES ONLY

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REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
18240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - RESTROOM
NIBLEY, UTAH

SHEET TITLE: TITLE PAGE SPECIFICATIONS

PROJECT I.D.#: 2032B

DATE: 01/26/2024

DRAWN BY: JRM/ZW

SHEET NO.: 1

LEGEND		
SYMBOL	DESCRIPTION	AREA/ QUANTITY
	GABLE VENT	2
	EXTERIOR WALL LIGHTS	4
	INTERIOR CEILING LIGHTS	5
FD	FLOOR DRAIN	3
	ELECTRICAL OUTLET	2
	16" x 24" EXTERIOR, CMU WALL VENT	2

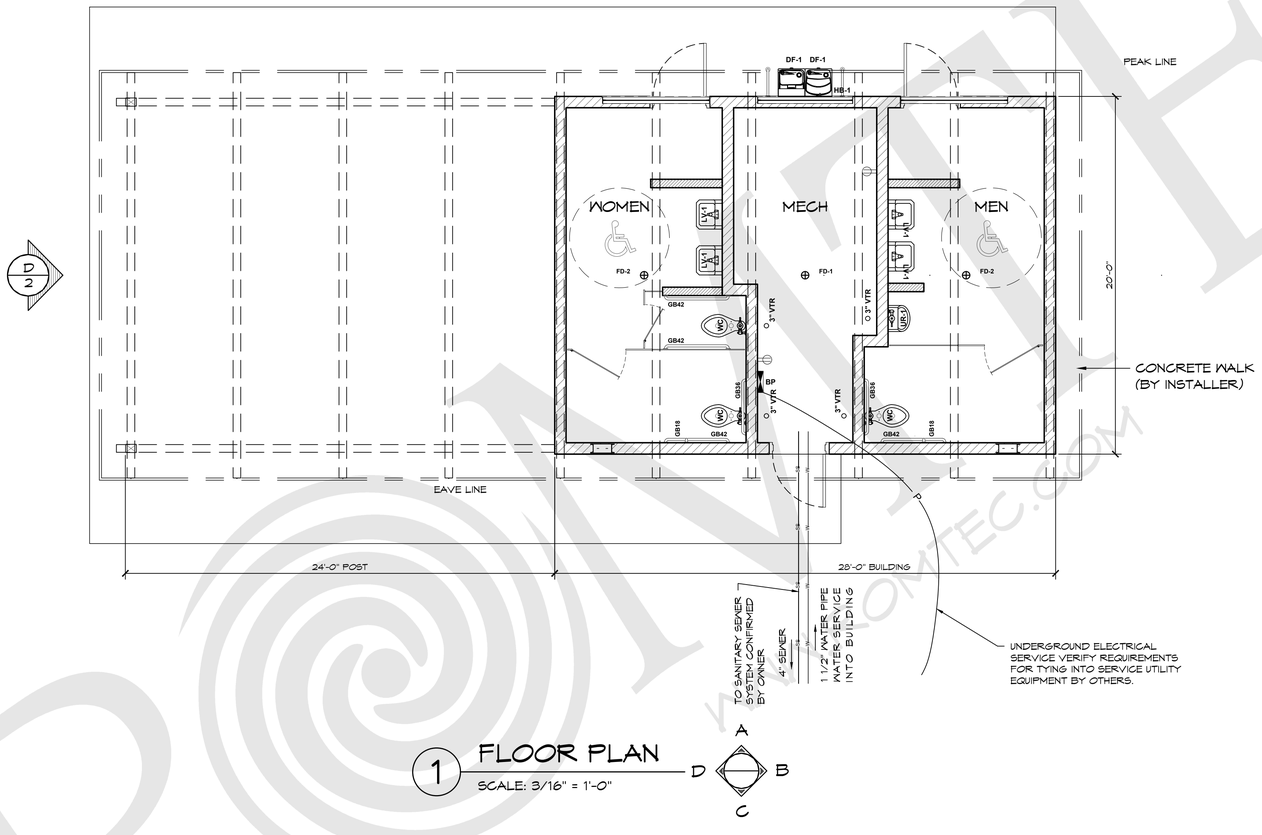
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WALL TYPE SCHEDULE

8" REINFORCED CONCRETE MASONRY BLOCK WALL WITH MORTAR JOINTS, GROUTED SOLID ALL CELLS RUNNING BOND PATTERN.

6" REINFORCED CONCRETE MASONRY BLOCK WALL WITH MORTAR JOINTS, GROUTED SOLID ALL CELLS RUNNING BOND PATTERN.

A/2



D/2

1 FLOOR PLAN
SCALE: 3/16" = 1'-0"

A
D B
C

SECTION 2: BUILDING PACKAGE PRODUCTS

2.1 MANUFACTURER

A. Romtec, Inc.,

18240 North Bank Road, Roseburg, OR 97470

Tel: 541-496-3541; Fax: 541-496-0803; Email: cdooley@romtec.com

Web: www.Romtec.com

2.2 BUILDING DESCRIPTION

A. Refer to plans for quantities, dimensions, locations, and installation methods for the materials and items described in this section.

B. Building dimensions shall match what is indicated on drawings.

C. Romtec will supply the building package products to owner.

D. Owner will supply the Romtec building package products to building installer and/or contractor.

2.3 PLUMBING FIXTURES & ACCESSORIES

A. Toilet shall be floor mount, top supply, white vitreous china.

1. Flush valve shall be a chrome, manual lever with ADA compliant metal oscillating non-hold-open handle.

B. Urinal shall be wall mount, top supply, back discharge, white vitreous china.

1. Flush valve shall be a chrome, manual lever with ADA compliant metal oscillating non-hold-open handle.

C. Lavatory shall be 19 in. x 17 in. white vitreous china and wall hung with anti-splash rim and concealed front overflow.

1. Faucets shall be deck mounted single hole E-tronic 40 traditional sink fauce with dual beam infrared sensor and transformer hard-wire.

D. Grab bars shall be stainless steel.

E. Owner supplied dispensers.

F. Drinking fountain shall be stainless steel, vandal-resistant EZH20 bottle filling station with bi-level vandal-resistant cooler, model VRCTLDDWS non-chilled drinking water.

G. Bradley phenolic restroom partitions.

1. Solid Phenolic core shall be composed of compressed cellulose fibers impregnated with resins. The surface laminate shall be fused to the resin-impregnated core. All edges shall be machined and finished smooth with a 15-degree beveled edge. Materials shall be non-absorbent, impact and graffiti resistant, and impervious to steam, soaps/detergents and mildew.

2. Partition color shall be Graphite Grafix (006F).

2.4 ELECTRICAL

A. Interior and exterior light fixtures

1. Exterior lights to be LED downlights with cast-aluminum housing with corrosion-resistant paint in dark bronze. Polycarbonate lens.

2. Exterior lights controlled by photocell.

3. Interior surface mount, 48" LED light fixtures.

4. Restroom lights controlled by motion sensor.

5. Mech room lights controlled by switch (switches by installer).

B. Main breaker panel.

1. Breaker Panel shall be 100 Amp, single-phase, indoor.

Note: Breaker panel shall be sized to accept only the loads of the Romtec electrical fixture package. Romtec should modify the main breaker panel as needed to be most efficient based on any design changes

REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
18240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - RESTROOM
NIBLEY, UTAH

SHEET TITLE: FLOOR PLAN SPECIFICATIONS

PROJECT I.D.#: 2032B

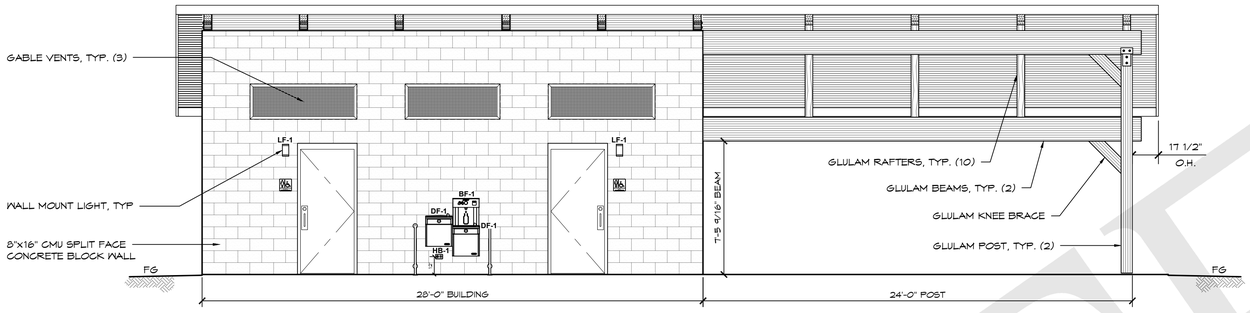
DATE: 01/26/2024

DRAWN BY: JRM/ZW

SHEET NO.: 2A

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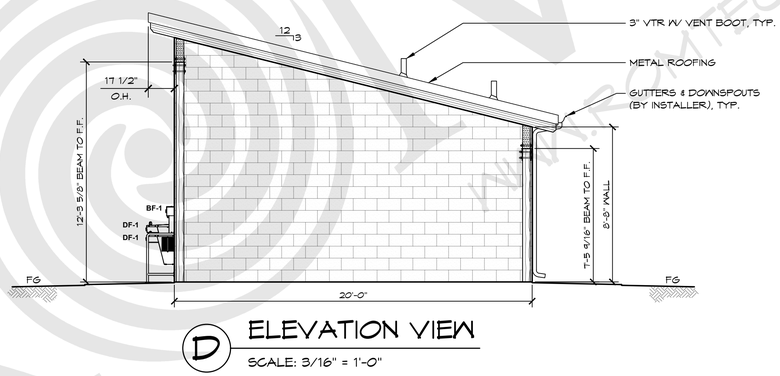
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A ELEVATION VIEW

SCALE: 3/16" = 1'-0"

THESE PLAN VIEW AND ELEVATION DRAWINGS ARE A PRELIMINARY ARCHITECTURAL REPRESENTATION OF THE BUILDING. ALL DIMENSIONS, FEATURES AND COMPONENTS SHOWN ON THESE PRELIMINARY DRAWINGS MAY OR MAY NOT BE PART OF THE QUOTE. PLEASE REFER TO THE "SCOPE OF SUPPLY AND SERVICES" LETTER PROVIDED WITH YOUR QUOTE FOR ROMTEC'S PROPOSED SCOPE OF SUPPLY.



D ELEVATION VIEW

SCALE: 3/16" = 1'-0"

2.5 STRUCTURE

A. Concrete Masonry Units (CMU).

1. Walls shall be constructed of 8"W x 16"L x 8"H split-face mortar joint concrete masonry units (concrete blocks).
2. Blocks shall be manufactured to ASTM C90 designation for load bearing concrete masonry units.
3. Block color to be Tan.

B. Sanitary tile cove base on interior restroom walls.

C. Wire weave vents for natural ventilation.

1. Pre-assembled steel frame with 10-gauge, 1" square lock joint wire weave mesh integral insect screen.
2. Steel frame are powder coated.

D. Door system components

1. Doors shall be Steelcraft® SL18 standard laminated honeycomb core and 18-gauge galvanized steel.
2. Door frame shall be pre-welded Steelcraft® 3-Sided flush frame, 16-gauge galvannealed A-60 steel.
3. Doors and frames are powder coated.
4. Masonry door clips (3/16" dia.) for door frame shall be fitted between the doorframe and concrete blocks to bond frame to wall. Door clips allow full internal grouting of the frame during installation.
5. Hinges shall meet ANSI A5112 with non-removable pin and two ball bearings.
6. Hager 5100 Series Grade 1 door closer is constructed of cast iron, which makes it ideal for heavy duty, high use and abusive environments.
7. Door to have 0.038" gauge, stainless steel protection plates.
8. Doors to have pull handles with stainless steel plates and deadbolt locks.

2.6 ROOFING

A. Roof system.

1. Glulam beam shall be 24F-V4 and architectural grade.
2. Tongue & groove decking shall be 2x6 V-edge deck boards, select deck Douglas fir.

B. Single slope roof extension with glulam beams and posts.

1. Exposed steel components are powder coated.

C. Roofing shall be Fabral, 26-gauge, Horizon 16, standing seam panels, with 16 in. coverage width.

1. Roofing package shall include inside and outside foam closures, matching trim (eaves, gables, and ridge) and fasteners, sheet metal flashing (all sides), and 30# felt (under metal).
2. Roofing color to be selected by the owner from the manufacturers standard color chart.

REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
18240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - RESTROOM
NIBLEY, UTAH

SHEET TITLE: ELEVATIONS SPECIFICATIONS

PROJECT I.D.# 2032B

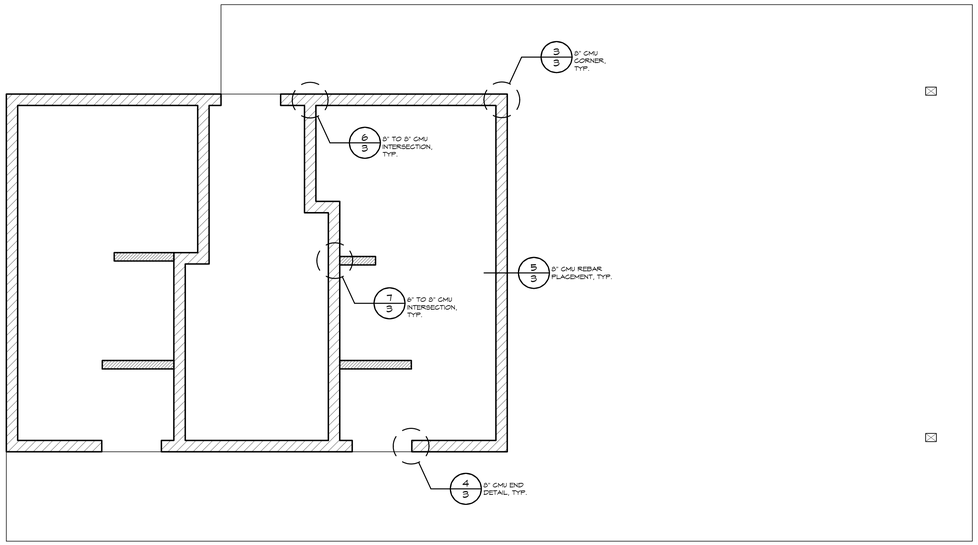
DATE: 01/26/2024

DRAWN BY: JRM/ZW

SHEET NO. 2B

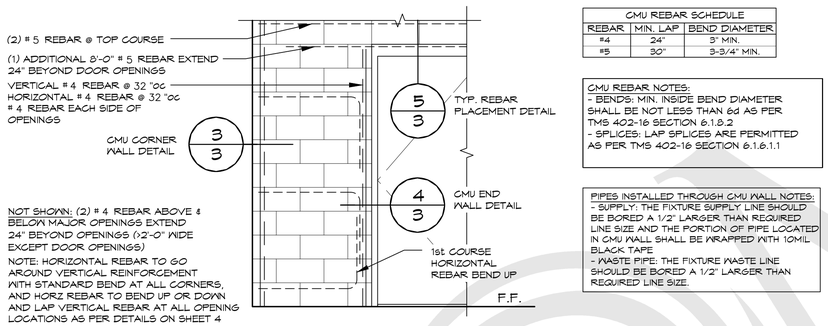
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A STRUCTURAL CMU PLAN

SCALE: 1/4" = 1'-0"



CMU REBAR SCHEDULE		
REBAR	MIN. LAP	BEND DIAMETER
#4	24"	3" MIN.
#5	30"	3-3/4" MIN.

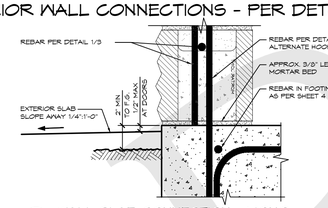
CMU REBAR NOTES:
- BENDS: MIN. INSIDE BEND DIAMETER SHALL BE NOT LESS THAN 6d AS PER TMS 402-16 SECTION 6.1.8.2
- SPLICES: LAP SPLICES ARE PERMITTED AS PER TMS 402-16 SECTION 6.1.6.1.1

PIPES INSTALLED THROUGH CMU WALL NOTES:
- SUPPLY: THE FIXTURE SUPPLY LINE SHOULD BE BORED A 1/2" LARGER THAN REQUIRED LINE SIZE AND THE PORTION OF PIPE LOCATED IN CMU WALL SHALL BE WRAPPED WITH 10MIL BLACK TAPE
- WASTE PIPE: THE FIXTURE WASTE LINE SHOULD BE BORED A 1/2" LARGER THAN REQUIRED LINE SIZE.

1 CMU REBAR LAYOUT DETAIL

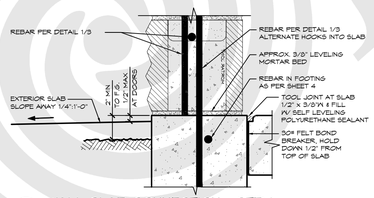
SCALE: 1" = 1'-0"

EXTERIOR WALL CONNECTIONS - PER DETAIL 1/4



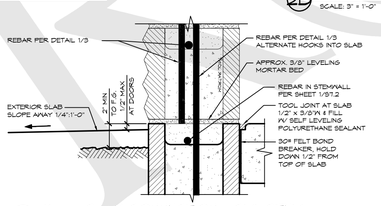
2A WALL-SLAB CONNECTION - MONO

SCALE: 3" = 1'-0"



2B WALL-SLAB CONNECTION - STEM

SCALE: 3" = 1'-0"



2C WALL-SLAB CONNECTION - CMU STEM

SCALE: 3" = 1'-0"

SECTION 3: BUILDING INSTALLER SCOPE

The installing contractor or subcontractor, hereafter designated as the building installer, is responsible for building package installation. Building installer work will generally include foundation/pad construction and building package assembly/construction.

Note: Romtec's scope is separate from the building installer's scope. Romtec, Inc., is the approved building package supplier, not a designated building installer.

3.1 CONSTRUCTION SUBMITTALS

A. If required by owner and/or reviewing authority, building installer shall submit product data sheets and relevant information about the specified building installer supplied products below for review and approval.

3.2 WARRANTY

A. Building installer's work shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date that installation work for the building package is completed, including any relevant final punch list. If final acceptance of the completed building is delayed for reasons beyond building installer's control, the warranty shall be one (1) year from the completion of building installer's installation work and demobilization.

B. Building installer shall pass through to owner all relevant manufacturers warranties for individual products and components supplied by building installer.

3.3 STRUCTURE

A. Masonry (concrete) grout shall be supplied and installed by building installer.

1. Grout shall have a minimum compressive strength of 2,500 psi at 28 days, 9+/-1" slump, with max ½" aggregate, or as required in final approved plans.
2. Fine or coarse grout may be used in accordance with 2009 UBC.
3. All CMU block must be fully grouted and may not be wetted.

Note: If required for installation, building installer will be responsible for providing appropriate equipment and labor for notching CMU block for bond beams, cutting CMU block to make any required shapes, and/or grinding CMU block for fixture mounting.

B. Rebar for walls shall be supplied and installed by building installer.

1. All walls shall have # 4 and # 5 rebar. See final approved plans for spacing.
2. All rebar used in the building must meet ASTM A615 manufacturing standards and is to be placed per the final approved plans.

C. Interior block wall finish shall be latex epoxy paint supplied and installed by building installer.

D. Interior floors to be sealed concrete finish supplied by building installer.

E. Sealant for all exposed wood shall be supplied and installed by building installer.

F. Sealant for all exterior CMU block is required, to be supplied and installed by building installer.

G. Gutters and downspouts are supplied and installed by building installer.

3.4 ELECTRICAL

A. Electrical rough-in, installation and trim shall be provided by building installer.

1. All underground and/or overhead service to building shall be as specified in the final site plan.
2. Building installer is responsible for all necessary wire, connectors, grounding, conduit, and related items to install the building package electrical components and meet all relevant national, state, and local codes.
3. Building installer shall supply and install all switches and outlets required to complete the building package installation.

SECTION 4: CONTRACTOR SCOPE ITEMS

The items in this section may be provided by the same building installer as defined in Section 3 above (typically when a single entity is acting as both the building installer and contractor), or the items in this section may be provided by a separate entity such as a general contractor or site contractor, hereafter designated as contractor (typically when the building installer is a separate subcontractor). Contractor work will generally include site preparation and grading, excavations for structures, backfill and/or structural backfill, and any site or utility work outside the building package footprint.

Items in this section are generally to be completed prior to building installer beginning its installation work described in Section 3 above.

4.1 CONSTRUCTION SUBMITTALS

A. If required by owner and/or reviewing authority, contractor shall submit product data sheets and relevant information about the specified contractor supplied products below for review and approval.

4.2 WARRANTY

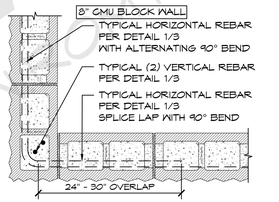
A. Building installer's work shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date that installation work for the building package is completed, including any relevant final punch list. If final acceptance of the completed building is delayed for reasons beyond building installer's control, the warranty shall be one (1) year from the completion of building installer's installation work and demobilization.

A. Building installer shall pass through to owner all relevant manufacturers warranties for individual products and components supplied by building installer.

4.3 ELECTRICAL

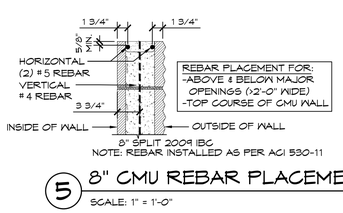
A. Incoming electrical utility lines to within approximately 10' of the building shall be provided by contractor.

1. All underground and/or overhead service to building shall be as specified in the final site plan.
2. Electric meter base and all rough wiring, switches, plugs and circuit breakers shall be as shown on final plans.
3. Contractor supplies and installs the meter base and meter.



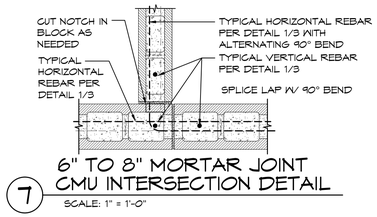
3 MORTAR JOINT CMU CORNER DETAIL

SCALE: 1" = 1'-0"



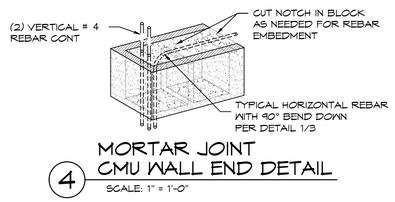
5 8" CMU REBAR PLACEMENT

SCALE: 1" = 1'-0"



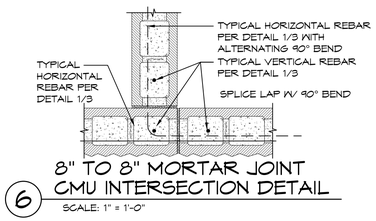
7 6" TO 8" MORTAR JOINT CMU INTERSECTION DETAIL

SCALE: 1" = 1'-0"



4 MORTAR JOINT CMU WALL END DETAIL

SCALE: 1" = 1'-0"



6 8" TO 8" MORTAR JOINT CMU INTERSECTION DETAIL

SCALE: 1" = 1'-0"

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REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
16240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - RESTROOM
NIBLEY, UTAH

SHEET TITLE: STRUCTURAL CMU PLAN & DETAILS SPECIFICATIONS

PROJECT I.D.# 2032B

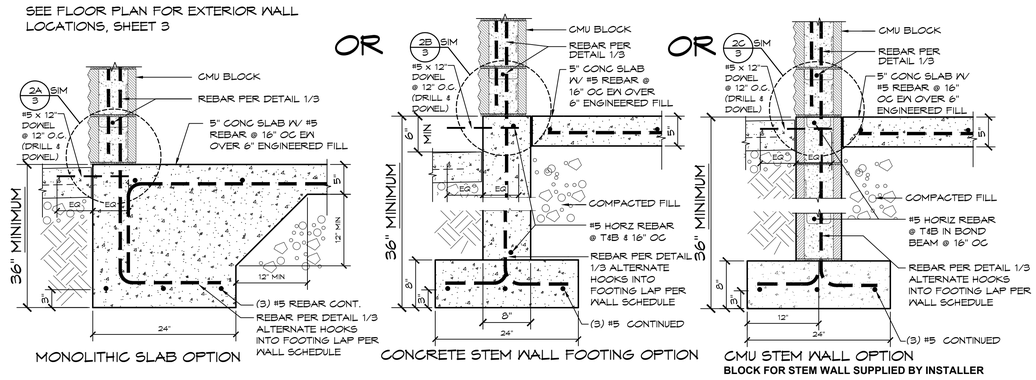
DATE: 01/26/2024

DRAWN BY: JRM/ZW

SHEET NO. 3

EXTERIOR WALL FOUNDATIONS - CHOOSE ONE OF THE FOLLOWING

SEE FLOOR PLAN FOR EXTERIOR WALL LOCATIONS, SHEET 3

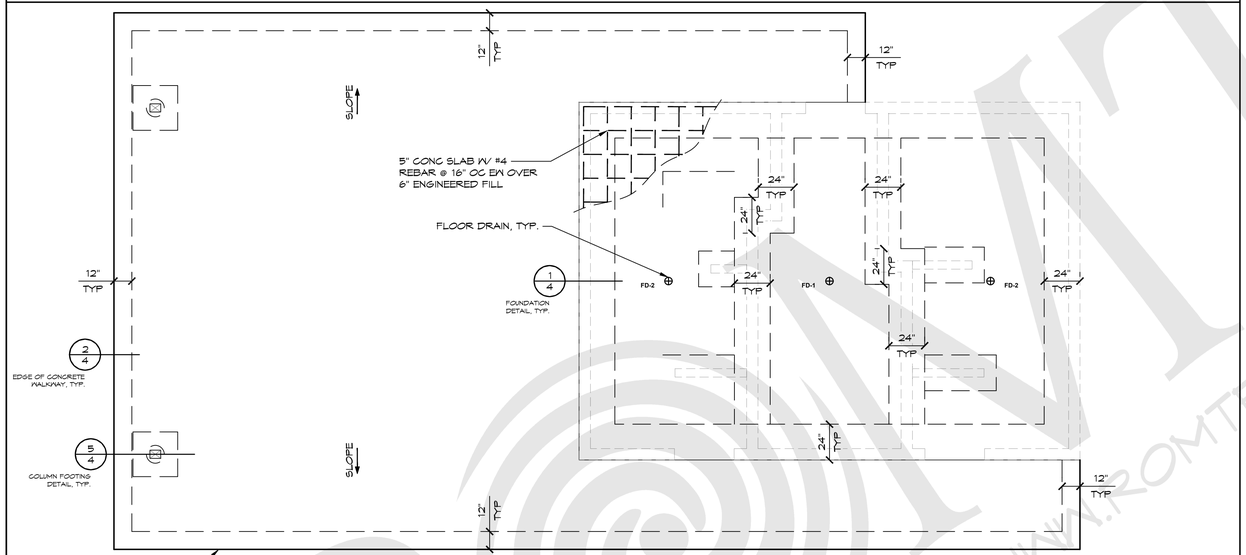


1 EXTERIOR WALL FOUNDATION DETAIL OPTIONS

SCALE: 1" = 1'-0"

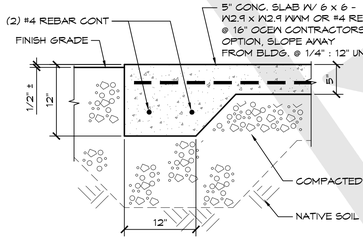
GENERAL NOTES:
* WHEN USING EITHER STEM WALL OPTION RECESS STEM WALL THE THICKNESS OF SLAB AT DOOR THRESHOLD
* PRIVACY WALLS TO HAVE A 30" WIDE x 12" DEEP FOOTING, IF APPLICABLE
* CMU STEM WALL OPTION, CMU BLOCK IS BY INSTALLER
* VERTICAL REBAR IN SLAB/STEM WALL TO MATCH VERTICAL WALL REINFORCEMENT LAP PER WALL SCHEDULE

FOUNDATION DESIGN SHOWN HERE IS PRELIMINARY AND SUBJECT TO CHANGE. FINAL FOUNDATION DESIGN TO BE DETERMINED DURING THE FORTHCOMING FULL DESIGN PHASE FOR THE BUILDING. ANY INCREASED COSTS OR TIME NEEDED TO CONSTRUCT THE FINAL FOUNDATION DESIGN IS BETWEEN THE END OWNER AND THE BUILDING INSTALLER



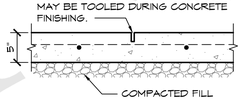
A FOUNDATION PLAN

SCALE: 1/4" = 1'-0"



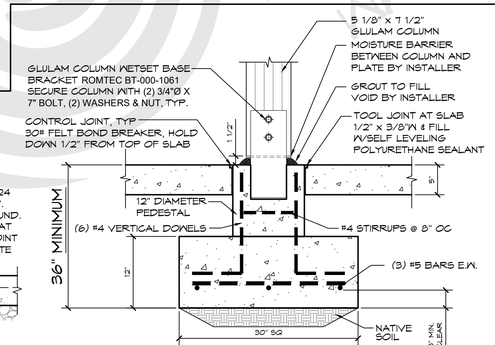
2 EDGE OF CONC. WALKWAY

SCALE: 1" = 1'-0"



3 SAWCUT JOINT

SCALE: 1" = 1'-0"



5 COLUMN FOOTING DETAIL

SCALE: 1" = 1'-0"

3.5 CAST IN-PLACE CONCRETE FOR BUILDING PACKAGE

A. All equipment, labor, trades, and materials for cast-in-place concrete shall be provided by building installer.
   1. Includes all materials and labor for building package foundations/footings and interior slabs.

B. Footings for the building package are to be dug by the building installer and poured on-site to meet local code for permanent structures. A prefabricated, modular mat placed on compacted base is not an accepted equal to a site specific, site poured, engineered foundation.

C. Engineered fill shall be ¾" minus crushed aggregate around footings, foundations, and slabs, or as required in the final approved plans.

D. Slab vapor barrier shall be 6-mil continuous plastic under the concrete slab, or as required in the final approved plans.

E. The foundation shall be installed as designed with all cast in-place concrete poured to dimensions specified, or as required in the final plans.
   1. Footings will be built to minimum 24" depth or greater if required by local frost depth or permitting authority.
   2. Minimum compressive strength of foundation concrete shall be 3,000 psi at 28 days, 4" +/-1" slump, with max ¾" aggregate, cured in accordance with ACI 308, or as required in approved final plans.
   3. Slabs shall have a fine broom finish with joints required in flat work as shown on plans.
   4. Steel rebar shall be installed as specified in final plans.

F. Building installer shall supply and install concrete slab sealer.
   1. Concrete slab sealer shall be a water-based, transparent curing, sealing and dust proofing compound with two (2) coats to be applied per manufacturer's instructions.

3.6 PLUMBING

A. Plumbing rough-in, installation and trim within 10' of the building footprint shall be provided by building installer.
   1. All underground water service and sewer drain(s) from building to be as specified in final approved site plan.
   2. Building water shutoff valve, drain, and all rough piping shall be as shown on final building plans. Final installation location to be determined onsite.
   3. Install the building package plumbing fixtures per the final approved plans.
   4. Piping shall be installed per the final approved plans with minimum pipe sizing per 2009 Uniform Plumbing Code Section 610.

B. Floor drains in the building shall be supplied and installed by building installer.
   1. All floor drains shall be as shown on final approved plans.

3.7 OTHER MATERIALS & EQUIPMENT

A. Unless otherwise specified, the following products and materials are supplied by building installer (if applicable).
   1. Building package installation
   2. Cast-in-place concrete foundations, footings, interior slabs
   3. Concrete slab sealer
   4. Mortar
   5. Concrete grout
   6. Rebar
   7. Latex epoxy paint
   8. Caulk for siding
   9. Plumbing rough in, installation and trim
   10. Electrical rough in, installation and trim
   11. Switches & outlets
   12. Typical fasteners; for example: roofing nails, staples, etc.
   13. Fasteners not included in product packaging
   14. Wood sealant for all decking, glulam beams, posts, and extensions
   15. All other items within the building footprint indicated on final plans or required by building codes to complete installation of the building package which are not specifically stated as supplied by owner or contractor.

3.8 DELIVERY, STORAGE, AND HANDLING

A. The building installer will coordinate with owner and/or Romtec to receive delivery of the building package onsite. This includes all equipment and labor required for off-loading of the delivered building package.

B. The building installer will assume responsibility for adequate protection and maintenance of delivered building package materials from weather, damage, and pilferage during installation work. Any failure to adequately protect building package materials that affects the warranty of those materials will be at building installer's expense.

C. Building installer shall collect and maintain for final delivery to owner any operation & maintenance manuals included by individual product manufacturers with their respective product packaging. Any failure to collect, maintain, and/or deliver these O&M manuals to the owner that results in fees from Romtec for additional copies shall be at building installer's expense.

4.4 CAST IN-PLACE CONCRETE FOR BUILDING EXTERIOR

A. All equipment, labor, trades, and materials shall be supplied by contractor.
   1. Includes all materials and labor for exterior/entry slabs and sidewalks.

B. Refer to drawings for sidewalks and entry slabs.
   1. Minimum concrete compressive strength of 2,500 psi at 28 days.
   2. Remesh or rebar reinforcement shall be used in sidewalks.
   3. All sidewalks shall be finished with a fine broom with control joints installed per the final approved site plan.

4.5 PLUMBING

A. Incoming plumbing to within approximately 10' of the building shall be provided by contractor.
   1. All underground water service and sewer drain(s) from building to be as specified in final approved site plan.
   2. Building water shutoff valve is to be supplied and installed by contractor.
   3. Contractor is responsible to ensure that incoming water pressure is sufficient to meet building package fixture demands.
   4. Minimum water pressure at toilet and urinal flush valves shall be 40 psi with minimum pipe sizing as per 2009 Uniform Plumbing Code Section 610, or as required in final approved plans.

B. Water line drain valve shall be supplied and installed by contractor.

C. Sewer line backflow check valve shall be supplied and installed by contractor.

4.6 OTHER MATERIALS & EQUIPMENT

A. Unless otherwise specified, the following products and materials are supplied by contractor.
   1. All items not specifically listed as supplied by owner or building installer.
   2. Any item listed as supplied by "contractor" or "others".

B. Unless specified in the plans or submittals, contractor supplies the following (if applicable):
   1. Incoming electrical, water, sewer, and gas utilities.
   2. Asphalt paving
   3. Masonry pavers
   4. Sidewalks
   5. Landscaping
   6. Site grading
   7. Exterior/entry slabs
   8. Drain valves and backflow check valves
   9. Branch circuit breakers
   10. Irrigation Equipment
   11. Gutters and downspouts
   12. Fire alarm and fire suppression equipment
   13. Lighting equipment not attached to the building.
   14. All other items exterior of the building footprint indicated on final plans or required by building codes which are not specifically stated as supplied by owner or building installer.

4.7 DELIVERY, STORAGE, AND HANDLING

C. The contractor will assume responsibility for adequate protection and maintenance of the installed building package materials after completion of installation work by building installer. Any failure to adequately protect building package materials that affects the warranty of those materials will be at contractor's expense.

SECTION 5: OWNER'S SCOPE

5.1 ONGOING MAINTENANCE

A. Owner is responsible for ongoing maintenance of the completed restroom building after completion of work by building installer and contractor.

5.2 SITE PLAN

A. Owner (or owner's site engineer) is responsible for providing the final approved site plan to Romtec and/or building installer.

5.3 SPECIAL INSPECTION

A. If required, special inspection(s) services shall be provided by owner.

B. If special inspection(s) are required by the permitting authority or relevant agency(ies), then Romtec, building installer, and/or contractor shall provide reasonable assistance to the owner to accommodate the special inspection(s).

5.4 DELIVERY, STORAGE, AND HANDLING

C. Owner will coordinate with Romtec, building installer, and/or contractor to receive delivery of the building package onsite.

REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
18240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - RESTROOM
NIBLEY, UTAH

SHEET TITLE: FOUNDATION PLAN & DETAILS SPECIFICATIONS

PROJECT I.D.#: 2032B

DATE: 01/26/2024

DRAWN BY: JRM/ZW

SHEET NO.: 4

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STOKES NATURE CENTER

YURT RESTROOM

SHEET SCHEDULE	
SHEET	CONTENTS
1	TITLE PAGE & SPECIFICATIONS
2A	FLOOR PLAN & SPECIFICATIONS
2B	ELEVATION VIEWS & SPECIFICATIONS
3	CMU PLAN & DETAILS & SPECIFICATIONS
4	FOUNDATION PLAN & DETAILS, & SPEC'S

ROMTEC
18240 NORTH BANK ROAD - ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

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STOKES NATURE CENTER

SECTION 13 34 23 - PRE-ENGINEERED ROMTEC BUILDING

Specification Date: 6/6/2023

SECTION 1: BUILDING PACKAGE OVERVIEW

1.1 SUMMARY

A. Owner will provide a pre-engineered Romtec building package for onsite installation by the building installer and/or contractor (see definitions and scope of work in sections below).

B. The following is an overview of the scope and products included in the Romtec building package.

1.2 OVERVIEW

A. Building package design, engineering, and furnishing all specified building package components shall be provided by Romtec, Inc.

B. The building and its concrete footings, foundation, and slab shall be engineered by Romtec to meet site specific conditions including wind and snow loading, local frost depth, and ground conditions.

C. Building shall be designed to meet local codes and permitting authority approvals for permanent structures.

D. The reviewing authority reserves the right to review or reject all submittals at its sole discretion.

E. All work and materials shall comply with the latest industry building codes and regulations for the state of Utah.

F. Americans with Disabilities Act Accessibility Guidelines (ADAAG) will be followed in design, manufacture, and construction.

1.3 DESIGN & SUBMITTAL DOCUMENTATION

A. Romtec's work shall include the design of the architectural, mechanical, structural, and electrical components that will be required for this building.

B. The building will be designed as a complete building package to be delivered to the job site for construction on-site by the building installer and/or contractor.

C. Romtec shall submit the packaged restroom building preliminary Scope of Supply and Design Submittal (SSDS), including the building plan view and elevation drawings.

D. Romtec will provide complete submittal documentation in the Romtec's standard electronic submittal format for review.

E. The preliminary SSDS will be reviewed by relevant parties and returned to Romtec with any required revisions to the terms, product data sheets, and/or building plan view and elevation drawings noted as comments.

F. Romtec shall make any required corrections or revisions and resubmit the preliminary SSDS until the preliminary SSDS is approved by the relevant parties.

G. Once the preliminary SSDS has been approved, Romtec will provide full sealed plan sets stamped by an engineer licensed in the state that the building is located for review by the permitting authority.

H. Up to three (3) wet stamped sets of the plans and structural calculations shall be provided by Romtec before any additional fees apply. Standard plan set size is 11" x 17".

I. Permitting authority will review the full sealed plan set and return with any required revisions or corrections noted as comments.

J. Romtec shall provide one full round of sealed plan revisions in response to permitting authority comments before any additional fees are allowed.

K. The following sections shall be included in Romtec's preliminary Scope of Supply and Design Submittal. Incomplete submittals will be rejected and returned for revision.

1. INTRODUCTION
2. BUILDING DESIGN,
   (a) SUPPLIED ITEMS
   (b) EXCLUDED ITEMS
   (c) PLAN VIEW AND ELEVATION DRAWINGS
3. PRODUCT DATA
4. WARRANTY & LIMITATIONS

Note: Overall site plan is not part of Romtec's scope.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Romtec's freight shall be based on delivering the product on a 48' to 53' flatbed or van truck and trailers, or as close to those dimensions as can legally access the site. Overall dimensions of the truck and trailers are: 70' overall length, 102" wide and 168" high.

B. Romtec shall deliver organized building package components in stages as shrink-wrapped pallets that correspond to a typical sequence of construction. A bill of material stating the stages of palletized components shall be included with every delivery. All stages as applicable.

1. Stage 1 pallets shall include structural components such as block, frames, vents, beams, connectors, trusses, etc.
2. Stage 2 pallets shall include second stage structural components such as filler wall material, windows, skylights, roofing, etc.
3. Stage 3 pallets shall include structural finish components such as siding material, tile, doors etc.
4. Stage 4 pallets shall include plumbing and electrical fixtures and other finish materials such as toilets, sinks, drinking fountains, electrical fixtures, accessories, etc.

C. Romtec shall coordinate the delivery with the receiving entity (owner, building installer, and/or contractor) as appropriate.

1.5 WARRANTY

A. The building package and all associated components provided by Romtec shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date of delivery of the building package, or, if delivery is delayed for any reason beyond Romtec's control, the date that the building and all its associated components were ready to deliver.

B. Romtec shall pass through to owner all relevant manufacturers warranties for individual products and components of the building package.

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REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
18240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - YURT RESTROOM
NIBLEY, UTAH

SHEET TITLE: TITLE PAGE SPECIFICATIONS

PROJECT I.D.#: 2032C

DATE: 01/23/2024

DRAWN BY: JRM

SHEET NO.: 1

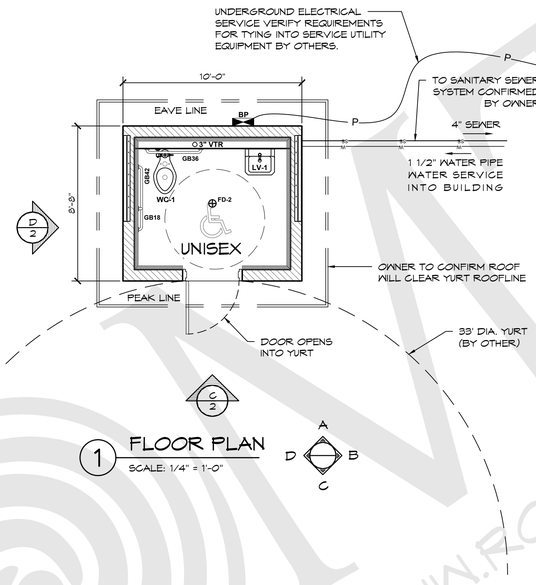
LEGEND		
SYMBOL	DESCRIPTION	AREA/ QUANTITY
	GABLE VENT	2
	EXTERIOR WALL LIGHTS	1
	INTERIOR CEILING LIGHTS	1
FD	FLOOR DRAIN	1

THESE PLAN VIEW AND ELEVATION DRAWINGS ARE A PRELIMINARY ARCHITECTURAL REPRESENTATION OF THE BUILDING. ALL DIMENSIONS, FEATURES AND COMPONENTS SHOWN ON THESE PRELIMINARY DRAWINGS MAY OR MAY NOT BE PART OF THE QUOTE. PLEASE REFER TO THE "SCOPE OF SUPPLY AND SERVICES" LETTER PROVIDED WITH YOUR QUOTE FOR ROMTEC'S PROPOSED SCOPE OF SUPPLY.

WALL TYPE SCHEDULE

8" REINFORCED CONCRETE MASONRY BLOCK WALL WITH MORTAR JOINTS, GROUTED SOLID ALL CELLS RUNNING BOND PATTERN.

8" WOOD FRAMED WALL



1 FLOOR PLAN
SCALE: 1/4" = 1'-0"

SECTION 2: BUILDING PACKAGE PRODUCTS

2.1 MANUFACTURER

A. Romtec, Inc.,

18240 North Bank Road, Roseburg, OR 97470

Tel: 541-496-3541; Fax: 541-496-0803; Email: cdooley@romtec.com

Web: www.Romtec.com

2.2 BUILDING DESCRIPTION

A. Refer to plans for quantities, dimensions, locations, and installation methods for the materials and items described in this section.

B. Building dimensions shall match what is indicated on drawings.

C. Romtec will supply the building package products to owner.

D. Owner will supply the Romtec building package products to building installer and/or contractor.

2.3 PLUMBING FIXTURES & ACCESSORIES

A. Toilet shall be floor mount, top supply, white vitreous china.

1. Flush valve shall be a chrome, manual lever with ADA compliant metal oscillating non-hold-open handle.

B. Lavatory shall be 19 in. x 17 in. white vitreous china and wall hung with anti-splash rim and concealed front overflow.

1. Faucet shall be deck mounted single hole E-tronic 40 traditional sink fauce with dual beam infrared sensor and transformer hard-wire.

C. Grab bars shall be stainless steel.

D. Owner supplied dispensers.

2.4 ELECTRICAL

A. Interior light fixture

1. Interior surface mount, 48" LED light fixture.
2. light controlled by switch (switches by installer).

B. Mechanical exhaust system with inline fan.

C. Main breaker panel.

1. Breaker Panel shall be 100 Amp, single-phase, rain tight.

Note: Breaker panel shall be sized to accept only the loads of the Romtec electrical fixture package. Romtec should modify the main breaker panel as needed to be most efficient based on any design changes.

REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
18240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - YURT RESTROOM
NIBLEY, UTAH

SHEET TITLE: FLOOR PLAN SPECIFICATIONS

PROJECT I.D.# 2032C

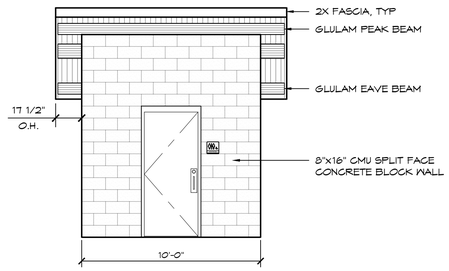
DATE: 01/23/2024

DRAWN BY: JRM

SHEET NO. 2A

FOR BID PURPOSES ONLY

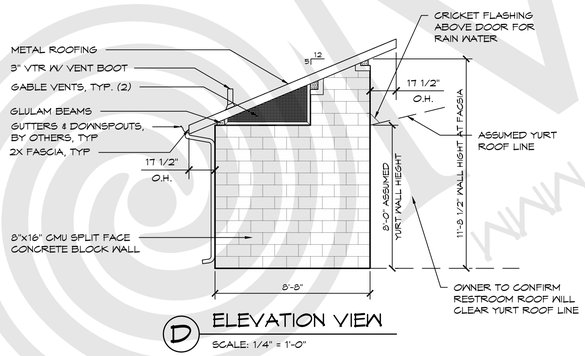
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C ELEVATION VIEW

SCALE: 1/4" = 1'-0"

THESE PLAN VIEW AND ELEVATION DRAWINGS ARE A PRELIMINARY ARCHITECTURAL REPRESENTATION OF THE BUILDING. ALL DIMENSIONS, FEATURES AND COMPONENTS SHOWN ON THESE PRELIMINARY DRAWINGS MAY OR MAY NOT BE PART OF THE QUOTE. PLEASE REFER TO THE "SCOPE OF SUPPLY AND SERVICES" LETTER PROVIDED WITH YOUR QUOTE FOR ROMTEC'S PROPOSED SCOPE OF SUPPLY.



D ELEVATION VIEW

SCALE: 1/4" = 1'-0"

2.5 STRUCTURE

A. Concrete Masonry Units (CMU).

1. Walls shall be constructed of 8"W x 16"L x 8"H split-face mortar joint concrete masonry units (concrete blocks).
2. Blocks shall be manufactured to ASTM C90 designation for load bearing concrete masonry units.
3. Block color to be Tan.

B. Interior wood framed plumbing wall to be finish with smooth, white FRP panels.

C. Sanitary tile cove base on interior walls.

D. Wire weave gable vents for natural ventilation.

1. Pre-assembled steel frame with 10-gauge, 1" square lock joint wire weave mesh integral insect screen.
2. Steel frame are powder coated.

E. Door system components

1. Doors shall be Steelcraft® SL18 standard laminated honeycomb core and 18-gauge galvanized steel.
2. Door frame shall be pre-welded Steelcraft® 3-Sided flush frame, 16-gauge galvannealed A-60 steel.
3. Doors and frames are powder coated.
4. Masonry door clips (3/16" dia.) for door frame shall be fitted between the doorframe and concrete blocks to bond frame to wall. Door clips allow full internal grouting of the frame during installation.
5. Hinges shall meet ANSI A5112 with non-removable pin and two ball bearings.
6. Hager 5100 Series Grade 1 door closer is constructed of cast iron, which makes it ideal for heavy duty, high use and abusive environments.
7. Door to have 0.038" gauge, stainless steel protection plates.
8. Doors to have pull handles with stainless steel plates and deadbolt locks.

2.6 ROOFING

A. Roof system.

1. Glulam beam shall be 24F-V4 and architectural grade.
2. Tongue & groove decking shall be 2x6 V-edge deck boards, select deck Douglas fir.

B. Roofing shall be Fabral, 26-gauge, Horizon 16, standing seam panels, with 16 in. coverage width.

1. Roofing package shall include inside and outside foam closures, matching trim (eaves, gables, and ridge) and fasteners, sheet metal flashing (all sides), and 30# felt (under metal).
2. Roofing color to be selected by the owner from the manufacturers standard color chart.

REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
18240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - YURT RESTROOM
NIBLEY, UTAH

SHEET TITLE: ELEVATIONS SPECIFICATIONS

PROJECT I.D.# 2032C

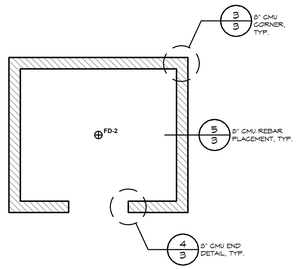
DATE: 01/23/2024

DRAWN BY: JRM

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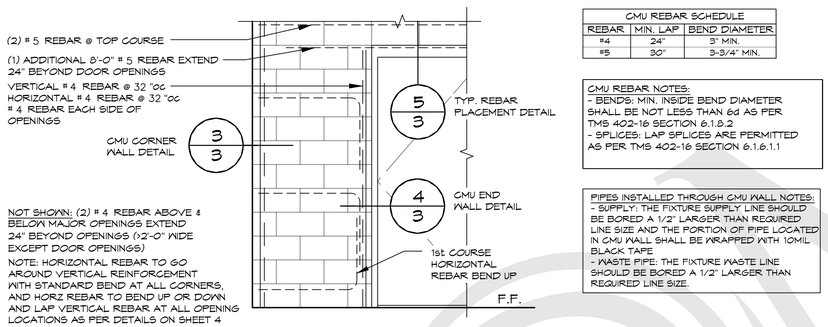
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A STRUCTURAL CMU PLAN

SCALE: 1/4" = 1'-0"



CMU REBAR SCHEDULE		
REBAR	MIN. LAP	BEND DIAMETER
#4	24"	3" MIN.
#5	30"	3-3/4" MIN.

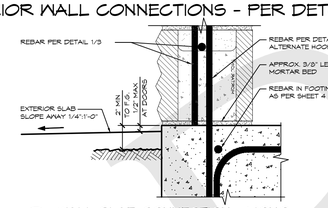
CMU REBAR NOTES:
- BENDS: MIN. INSIDE BEND DIAMETER SHALL BE NOT LESS THAN 6d AS PER TMS 402-16 SECTION 6.1.8.2
- SPLICES: LAP SPLICES ARE PERMITTED AS PER TMS 402-16 SECTION 6.1.6.1.1

PIPES INSTALLED THROUGH CMU WALL NOTES:
- SUPPLY: THE FIXTURE SUPPLY LINE SHOULD BE BORED A 1/2" LARGER THAN REQUIRED LINE SIZE AND THE PORTION OF PIPE LOCATED IN CMU WALL SHALL BE WRAPPED WITH 10MIL BLACK TAPE
- WASTE PIPE: THE FIXTURE WASTE LINE SHOULD BE BORED A 1/2" LARGER THAN REQUIRED LINE SIZE.

1 CMU REBAR LAYOUT DETAIL

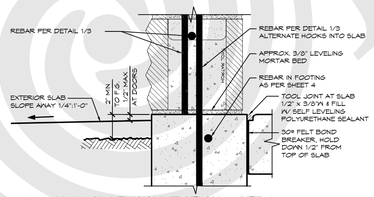
SCALE: 1" = 1'-0"

EXTERIOR WALL CONNECTIONS - PER DETAIL 1/4



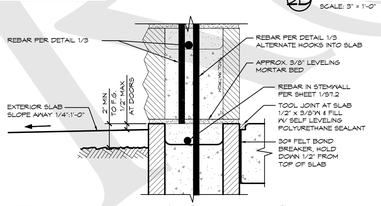
2A WALL-SLAB CONNECTION - MONO

SCALE: 3" = 1'-0"



2B WALL-SLAB CONNECTION - STEM

SCALE: 3" = 1'-0"



2C WALL-SLAB CONNECTION - CMU STEM

SCALE: 3" = 1'-0"

SECTION 3: BUILDING INSTALLER SCOPE

The installing contractor or subcontractor, hereafter designated as the building installer, is responsible for building package installation. Building installer work will generally include foundation/pad construction and building package assembly/construction.

Note: Romtec's scope is separate from the building installer's scope. Romtec, Inc., is the approved building package supplier, not a designated building installer.

3.1 CONSTRUCTION SUBMITTALS

A. If required by owner and/or reviewing authority, building installer shall submit product data sheets and relevant information about the specified building installer supplied products below for review and approval.

3.2 WARRANTY

A. Building installer's work shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date that installation work for the building package is completed, including any relevant final punch list. If final acceptance of the completed building is delayed for reasons beyond building installer's control, the warranty shall be one (1) year from the completion of building installer's installation work and demobilization.

B. Building installer shall pass through to owner all relevant manufacturers warranties for individual products and components supplied by building installer.

3.3 STRUCTURE

A. Masonry (concrete) grout shall be supplied and installed by building installer.

1. Grout shall have a minimum compressive strength of 2,500 psi at 28 days, 9+/-1" slump, with max ½" aggregate, or as required in final approved plans.
2. Fine or coarse grout may be used in accordance with 2009 UBC.
3. All CMU block must be fully grouted and may not be wetted.

Note: If required for installation, building installer will be responsible for providing appropriate equipment and labor for notching CMU block for bond beams, cutting CMU block to make any required shapes, and/or grinding CMU block for fixture mounting.

B. Rebar for walls shall be supplied and installed by building installer.

1. All walls shall have # 4 and # 5 rebar. See final approved plans for spacing.
2. All rebar used in the building must meet ASTM A615 manufacturing standards and is to be placed per the final approved plans.

C. Interior block wall finish shall be latex epoxy paint supplied and installed by building installer.

D. Interior floors to be sealed concrete finish supplied by building installer.

E. Sealant for all exposed wood shall be supplied and installed by building installer.

F. Sealant for all exterior CMU block is required, to be supplied and installed by building installer.

G. Gutters and downspouts are supplied and installed by building installer.

3.4 ELECTRICAL

A. Electrical rough-in, installation and trim shall be provided by building installer.

1. All underground and/or overhead service to building shall be as specified in the final site plan.
2. Building installer is responsible for all necessary wire, connectors, grounding, conduit, and related items to install the building package electrical components and meet all relevant national, state, and local codes.
3. Building installer shall supply and install all switches and outlets required to complete the building package installation.

SECTION 4: CONTRACTOR SCOPE ITEMS

The items in this section may be provided by the same building installer as defined in Section 3 above (typically when a single entity is acting as both the building installer and contractor), or the items in this section may be provided by a separate entity such as a general contractor or site contractor, hereafter designated as contractor (typically when the building installer is a separate subcontractor). Contractor work will generally include site preparation and grading, excavations for structures, backfill and/or structural backfill, and any site or utility work outside the building package footprint.

Items in this section are generally to be completed prior to building installer beginning its installation work described in Section 3 above.

4.1 CONSTRUCTION SUBMITTALS

A. If required by owner and/or reviewing authority, contractor shall submit product data sheets and relevant information about the specified contractor supplied products below for review and approval.

4.2 WARRANTY

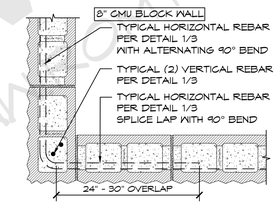
A. Building installer's work shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date that installation work for the building package is completed, including any relevant final punch list. If final acceptance of the completed building is delayed for reasons beyond building installer's control, the warranty shall be one (1) year from the completion of building installer's installation work and demobilization.

A. Building installer shall pass through to owner all relevant manufacturers warranties for individual products and components supplied by building installer.

4.3 ELECTRICAL

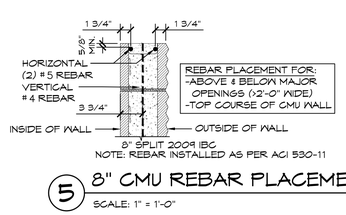
A. Incoming electrical utility lines to within approximately 10' of the building shall be provided by contractor.

1. All underground and/or overhead service to building shall be as specified in the final site plan.
2. Electric meter base and all rough wiring, switches, plugs and circuit breakers shall be as shown on final plans.
3. Contractor supplies and installs the meter base and meter.



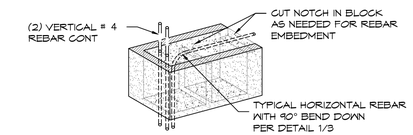
3 MORTAR JOINT CMU CORNER DETAIL

SCALE: 1" = 1'-0"



5 8" CMU REBAR PLACEMENT

SCALE: 1" = 1'-0"



4 MORTAR JOINT CMU WALL END DETAIL

SCALE: 1" = 1'-0"

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REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
16240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - YURT RESTROOM
NIBLEY, UTAH

SHEET TITLE: STRUCTURAL CMU PLAN & DETAILS
SPECIFICATIONS

PROJECT I.D.# 2032C

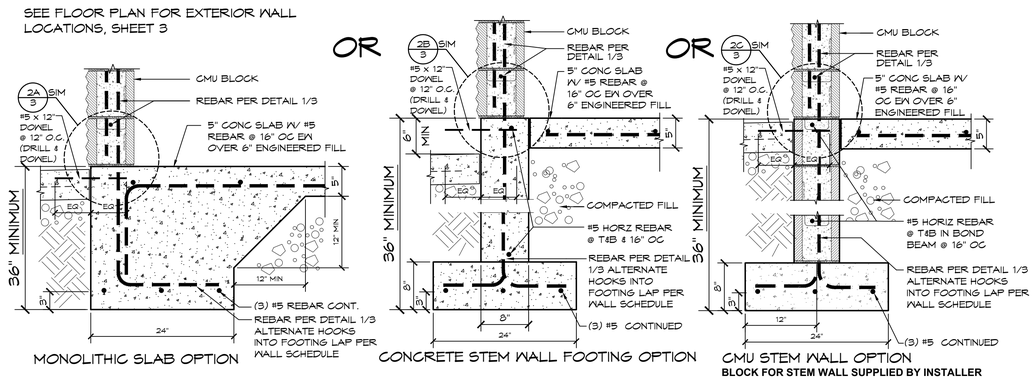
DATE: 01/23/2024

DRAWN BY: JRM

SHEET NO. 3

EXTERIOR WALL FOUNDATIONS - CHOOSE ONE OF THE FOLLOWING

SEE FLOOR PLAN FOR EXTERIOR WALL LOCATIONS, SHEET 3

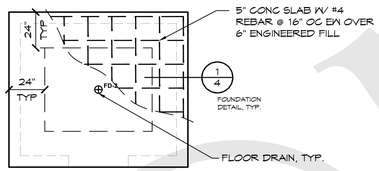


1 EXTERIOR WALL FOUNDATION DETAIL OPTIONS

SCALE: 1" = 1'-0"

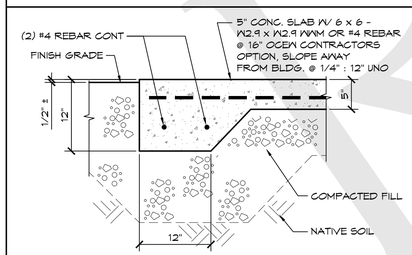
GENERAL NOTES:
* WHEN USING EITHER STEM WALL OPTION RECESS STEM WALL THE THICKNESS OF SLAB AT DOOR THRESHOLD
* PRIVACY WALLS TO HAVE A 30" WIDE x 12" DEEP FOOTING, IF APPLICABLE
* CMU STEM WALL OPTION, CMU BLOCK IS BY INSTALLER
* VERTICAL REBAR IN SLAB/STEM WALL TO MATCH VERTICAL WALL REINFORCEMENT LAP PER WALL SCHEDULE

FOUNDATION DESIGN SHOWN HERE IS PRELIMINARY AND SUBJECT TO CHANGE. FINAL FOUNDATION DESIGN TO BE DETERMINED DURING THE FORTHCOMING FULL DESIGN PHASE FOR THE BUILDING. ANY INCREASED COSTS OR TIME NEEDED TO CONSTRUCT THE FINAL FOUNDATION DESIGN IS BETWEEN THE END OWNER AND THE BUILDING INSTALLER



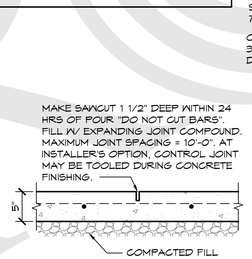
A FOUNDATION PLAN

SCALE: 1/4" = 1'-0"



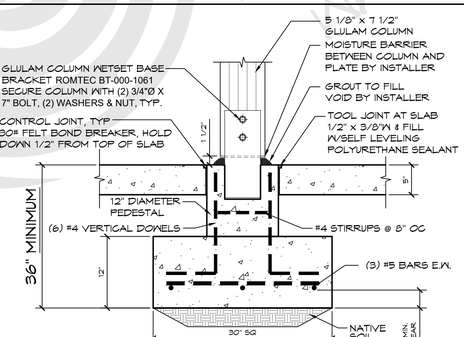
2 EDGE OF CONC. WALKWAY

SCALE: 1" = 1'-0"



3 SAWCUT JOINT

SCALE: 1" = 1'-0"



5 COLUMN FOOTING DETAIL

SCALE: 1" = 1'-0"

3.5 CAST IN-PLACE CONCRETE FOR BUILDING PACKAGE

A. All equipment, labor, trades, and materials for cast-in-place concrete shall be provided by building installer.
   1. Includes all materials and labor for building package foundations/footings and interior slabs.

B. Footings for the building package are to be dug by the building installer and poured on-site to meet local code for permanent structures. A prefabricated, modular mat placed on compacted base is not an accepted equal to a site specific, site poured, engineered foundation.

C. Engineered fill shall be ¾" minus crushed aggregate around footings, foundations, and slabs, or as required in the final approved plans.

D. Slab vapor barrier shall be 6-mil continuous plastic under the concrete slab, or as required in the final approved plans.

E. The foundation shall be installed as designed with all cast in-place concrete poured to dimensions specified, or as required in the final plans.
   1. Footings will be built to minimum 24" depth or greater if required by local frost depth or permitting authority.
   2. Minimum compressive strength of foundation concrete shall be 3,000 psi at 28 days, 4" +/-1" slump, with max ¾" aggregate, cured in accordance with ACI 308, or as required in approved final plans.
   3. Slabs shall have a fine broom finish with joints required in flat work as shown on plans.
   4. Steel rebar shall be installed as specified in final plans.

F. Building installer shall supply and install concrete slab sealer.
   1. Concrete slab sealer shall be a water-based, transparent curing, sealing and dust proofing compound with two (2) coats to be applied per manufacturer's instructions.

3.6 PLUMBING

A. Plumbing rough-in, installation and trim within 10' of the building footprint shall be provided by building installer.
   1. All underground water service and sewer drain(s) from building to be as specified in final approved site plan.
   2. Building water shutoff valve, drain, and all rough piping shall be as shown on final building plans. Final installation location to be determined onsite.
   3. Install the building package plumbing fixtures per the final approved plans.
   4. Piping shall be installed per the final approved plans with minimum pipe sizing per 2009 Uniform Plumbing Code Section 610.

B. Floor drains in the building shall be supplied and installed by building installer.
   1. All floor drains shall be as shown on final approved plans.

3.7 OTHER MATERIALS & EQUIPMENT

A. Unless otherwise specified, the following products and materials are supplied by building installer (if applicable).
   1. Building package installation
   2. Cast-in-place concrete foundations, footings, interior slabs
   3. Concrete slab sealer
   4. Mortar
   5. Concrete grout
   6. Rebar
   7. Latex epoxy paint
   8. Caulk for siding
   9. Plumbing rough in, installation and trim
   10. Electrical rough in, installation and trim
   11. Switches & outlets
   12. Typical fasteners; for example: roofing nails, staples, etc.
   13. Fasteners not included in product packaging
   14. Wood sealant for all decking, glulam beams, posts, and extensions
   15. All other items within the building footprint indicated on final plans or required by building codes to complete installation of the building package which are not specifically stated as supplied by owner or contractor.

3.8 DELIVERY, STORAGE, AND HANDLING

A. The building installer will coordinate with owner and/or Romtec to receive delivery of the building package onsite. This includes all equipment and labor required for off-loading of the delivered building package.

B. The building installer will assume responsibility for adequate protection and maintenance of delivered building package materials from weather, damage, and pilferage during installation work. Any failure to adequately protect building package materials that affects the warranty of those materials will be at building installer's expense.

C. Building installer shall collect and maintain for final delivery to owner any operation & maintenance manuals included by individual product manufacturers with their respective product packaging. Any failure to collect, maintain, and/or deliver these O&M manuals to the owner that results in fees from Romtec for additional copies shall be at building installer's expense.

4.3 CAST IN-PLACE CONCRETE FOR BUILDING EXTERIOR

A. All equipment, labor, trades, and materials shall be supplied by contractor.
   1. Includes all materials and labor for exterior/entry slabs and sidewalks.

B. Refer to drawings for sidewalks and entry slabs.
   1. Minimum concrete compressive strength of 2,500 psi at 28 days.
   2. Remesh or rebar reinforcement shall be used in sidewalks.
   3. All sidewalks shall be finished with a fine broom with control joints installed per the final approved site plan.

4.4 PLUMBING

A. Incoming plumbing to within approximately 10' of the building shall be provided by contractor.
   1. All underground water service and sewer drain(s) from building to be as specified in final approved site plan.
   2. Building water shutoff valve is to be supplied and installed by contractor.
   3. Contractor is responsible to ensure that incoming water pressure is sufficient to meet building package fixture demands.
   4. Minimum water pressure at toilet and urinal flush valves shall be 40 psi with minimum pipe sizing as per 2009 Uniform Plumbing Code Section 610, or as required in final approved plans.

B. Water line drain valve shall be supplied and installed by contractor.

C. Sewer line backflow check valve shall be supplied and installed by contractor.

4.5 OTHER MATERIALS & EQUIPMENT

A. Unless otherwise specified, the following products and materials are supplied by contractor.
   1. All items not specifically listed as supplied by owner or building installer.
   2. Any item listed as supplied by "contractor" or "others".

B. Unless specified in the plans or submittals, contractor supplies the following (if applicable):
   1. Incoming electrical, water, sewer, and gas utilities.
   2. Asphalt paving
   3. Masonry pavers
   4. Sidewalks
   5. Landscaping
   6. Site grading
   7. Exterior/entry slabs
   8. Drain valves and backflow check valves
   9. Branch circuit breakers
   10. Irrigation Equipment
   11. Gutters and downspouts
   12. Fire alarm and fire suppression equipment
   13. Lighting equipment not attached to the building.
   14. All other items exterior of the building footprint indicated on final plans or required by building codes which are not specifically stated as supplied by owner or building installer.

4.6 DELIVERY, STORAGE, AND HANDLING

C. The contractor will assume responsibility for adequate protection and maintenance of the installed building package materials after completion of installation work by building installer. Any failure to adequately protect building package materials that affects the warranty of those materials will be at contractor's expense.

SECTION 5: OWNER'S SCOPE

5.1 ONGOING MAINTENANCE

A. Owner is responsible for ongoing maintenance of the completed restroom building after completion of work by building installer and contractor.

5.2 SITE PLAN

A. Owner (or owner's site engineer) is responsible for providing the final approved site plan to Romtec and/or building installer.

5.3 SPECIAL INSPECTION

A. If required, special inspection(s) services shall be provided by owner.

B. If special inspection(s) are required by the permitting authority or relevant agency(ies), then Romtec, building installer, and/or contractor shall provide reasonable assistance to the owner to accommodate the special inspection(s).

5.4 DELIVERY, STORAGE, AND HANDLING

C. Owner will coordinate with Romtec, building installer, and/or contractor to receive delivery of the building package onsite.

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ROMTEC
16240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - YURT RESTROOM
NIBLEY, UTAH

SHEET TITLE: FOUNDATION PLAN & DETAILS SPECIFICATIONS

PROJECT I.D.# 2032C

DATE: 01/23/2024

DRAWN BY: JRM

SHEET NO. 4

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STOKES NATURE CENTER

GATEHOUSE

SHEET SCHEDULE	
SHEET	CONTENTS
1	TITLE PAGE & SPECIFICATIONS
2	FLOOR PLAN & SPECIFICATIONS
3	CMU PLAN & DETAILS & SPECIFICATIONS
4	FOUNDATION PLAN & DETAILS, & SPEC'S

ROMTEC
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STOKES NATURE CENTER - GATEHOUSE

SECTION 13 34 23 - PRE-ENGINEERED ROMTEC BUILDING

Specification Date: 6/14/2023

SECTION 1: BUILDING PACKAGE OVERVIEW

1.1 SUMMARY

A. Owner will provide a pre-engineered Romtec building package for onsite installation by the building installer and/or contractor (see definitions and scope of work in sections below).

B. The following is an overview of the scope and products included in the Romtec building package.

1.2 OVERVIEW

A. Building package design, engineering, and furnishing all specified building package components shall be provided by Romtec, Inc.

B. The building and its concrete footings, foundation, and slab shall be engineered by Romtec to meet site specific conditions including wind and snow loading, local frost depth, and ground conditions.

C. Building shall be designed to meet local codes and permitting authority approvals for permanent structures.

D. The reviewing authority reserves the right to review or reject all submittals at its sole discretion.

E. All work and materials shall comply with the latest industry building codes and regulations for the state of Utah.

F. Americans with Disabilities Act Accessibility Guidelines (ADAAG) will be followed in design, manufacture, and construction.

1.3 DESIGN & SUBMITTAL DOCUMENTATION

A. Romtec's work shall include the design of the architectural, mechanical, structural, and electrical components that will be required for this building.

B. The building will be designed as a complete building package to be delivered to the job site for construction on-site by the building installer and/or contractor.

C. Romtec shall submit the packaged Gatehouse building preliminary Scope of Supply and Design Submittal (SSDS), including the building plan view and elevation drawings.

D. Romtec will provide complete submittal documentation in the Romtec's standard electronic submittal format for review.

E. The preliminary SSDS will be reviewed by relevant parties and returned to Romtec with any required revisions to the terms, product data sheets, and/or building plan view and elevation drawings noted as comments.

F. Romtec shall make any required corrections or revisions and resubmit the preliminary SSDS until the preliminary SSDS is approved by the relevant parties.

G. Once the preliminary SSDS has been approved, Romtec will provide full sealed plan sets stamped by an engineer licensed in the state that the building is located for review by the permitting authority.

H. Up to three (3) wet stamped sets of the plans and structural calculations shall be provided by Romtec before any additional fees apply. Standard plan set size is 11" x 17".

I. Permitting authority will review the full sealed plan set and return with any required revisions or corrections noted as comments.

J. Romtec shall provide one full round of sealed plan revisions in response to permitting authority comments before any additional fees are allowed.

K. The following sections shall be included in Romtec's preliminary Scope of Supply and Design Submittal. Incomplete submittals will be rejected and returned for revision.

1. INTRODUCTION
2. BUILDING DESIGN,

(a) SUPPLIED ITEMS

(b) EXCLUDED ITEMS

(c) PLAN VIEW AND ELEVATION DRAWINGS

3. PRODUCT DATA
4. WARRANTY & LIMITATIONS

Note: Overall site plan is not part of Romtec's scope.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Romtec's freight shall be based on delivering the product on a 48' to 53' flatbed or van truck and trailers, or as close to those dimensions as can legally access the site. Overall dimensions of the truck and trailers are: 70' overall length, 102" wide and 168" high.

B. Romtec shall deliver organized building package components in stages as shrink-wrapped pallets that correspond to a typical sequence of construction. A bill of material stating the stages of palletized components shall be included with every delivery. All stages as applicable.

1. Stage 1 pallets shall include structural components such as block, frames, vents, beams, connectors, trusses, etc.
2. Stage 2 pallets shall include second stage structural components such as filler wall material, windows, skylights, roofing, etc.
3. Stage 3 pallets shall include structural finish components such as siding material, tile, doors etc.
4. Stage 4 pallets shall include plumbing and electrical fixtures and other finish materials such as toilets, sinks, drinking fountains, electrical fixtures, accessories, etc.

C. Romtec shall coordinate the delivery with the receiving entity (owner, building installer, and/or contractor) as appropriate.

1.5 WARRANTY

A. The building package and all associated components provided by Romtec shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date of delivery of the building package, or, if delivery is delayed for any reason beyond Romtec's control, the date that the building and all its associated components were ready to deliver.

B. Romtec shall pass through to owner all relevant manufacturers warranties for individual products and components of the building package.

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REV	DATE	BY	DESCRIPTION

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ROMTEC
18240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - GATEHOUSE
NIBLEY, UTAH

SHEET TITLE: TITLE PAGE SPECIFICATIONS

PROJECT I.D.#: 2032A

DATE: 01/23/2024

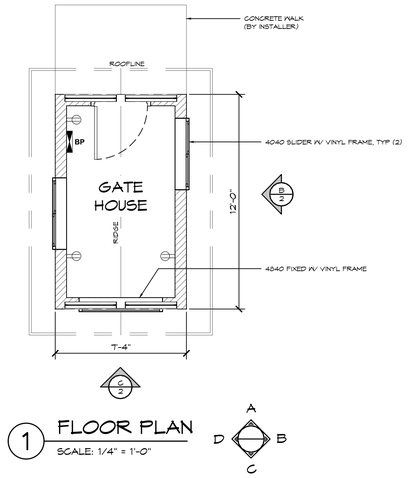
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SHEET NO.: 1

LEGEND		
SYMBOL	DESCRIPTION	AREA/ QUANTITY
	GABLE VENT	4
	EXTERIOR WALL LIGHTS	4
	INTERIOR CEILING LIGHTS	2
⏚	ELECTRICAL OUTLET	3

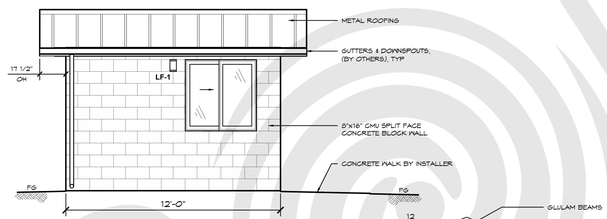
WALL TYPE SCHEDULE

8" REINFORCED CONCRETE MASONRY BLOCK WALL WITH MORTAR JOINTS, GROUTED SOLID ALL CELLS RUNNING BOND PATTERN.

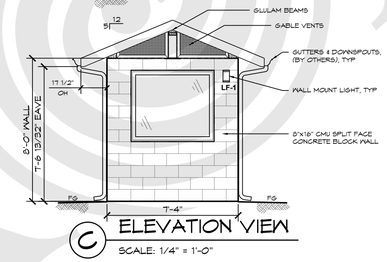


1 FLOOR PLAN
SCALE: 1/4" = 1'-0"

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B ELEVATION VIEW
SCALE: 1/4" = 1'-0"



C ELEVATION VIEW
SCALE: 1/4" = 1'-0"

SECTION 2: BUILDING PACKAGE PRODUCTS

2.1 MANUFACTURER

A. Romtec, Inc.,

18240 North Bank Road, Roseburg, OR 97470

Tel: 541-496-3541; Fax: 541-496-0803; Email: cdooley@romtec.com

Web: www.Romtec.com

2.2 BUILDING DESCRIPTION

A. Refer to plans for quantities, dimensions, locations, and installation methods for the materials and items described in this section.

B. Building dimensions shall match what is indicated on drawings.

C. Romtec will supply the building package products to owner.

D. Owner will supply the Romtec building package products to building installer and/or contractor.

2.3 ELECTRICAL

A. Interior and exterior light fixtures

1. Exterior lights to be LED downlights with cast-aluminum housing with corrosion-resistant paint in dark bronze. Polycarbonate lens.
2. Exterior lights controlled by photocell.
3. Interior surface mount, 48" LED light fixtures.
4. Gatehouse lights controlled by switch (switches by installer).

B. Main breaker panel.

1. Breaker Panel shall be 100 Amp, single-phase, indoor.

Note: Breaker panel shall be sized to accept only the loads of the Romtec electrical fixture package. Romtec should modify the main breaker panel as needed to be most efficient based on any design changes.

2.4 STRUCTURE

A. Concrete Masonry Units (CMU).

1. Walls shall be constructed of 8"W x 16"L x 8"H split-face mortar joint concrete masonry units (concrete blocks).
2. Blocks shall be manufactured to ASTM C90 designation for load bearing concrete masonry units.
3. Block color to be Tan.

B. Sanitary tile cove base on interior Gatehouse walls.

C. Wire weave vents for natural ventilation.

1. Pre-assembled steel frame with 10-gauge, 1" square lock joint wire weave mesh integral insect screen.
2. Steel frame are powder coated.

D. Door system components

1. Doors shall be Steelcraft® SL18 standard laminated honeycomb core and 18-gauge galvanized steel.
2. Door frame shall be pre-welded Steelcraft® 3-Sided flush frame, 16-gauge galvannealed A-60 steel.
3. Doors and frames are powder coated.
4. Masonry door clips (3/16" dia.) for door frame shall be fitted between the doorframe and concrete blocks to bond frame to wall. Door clips allow full internal grouting of the frame during installation.
5. Hinges shall meet ANSI A5112 with non-removable pin and two ball bearings.
6. Hager 5100 Series Grade 1 door closer is constructed of cast iron, which makes it ideal for heavy duty, high use and abusive environments.
7. Door to have 0.038" gauge, stainless steel protection plates.
8. Doors to have pull handles with stainless steel plates and deadbolt locks.

2.5 ROOFING

A. Roof system.

1. Glulam beam shall be 24F-V4 and architectural grade.
2. Tongue & groove decking shall be 2x6 V-edge deck boards, select deck Douglas fir.

B. Single slope roof extension with glulam beams and posts.

1. Exposed steel components are powder coated.

C. Roofing shall be Fabral, 26-gauge, Horizon 16, standing seam panels, with 16 in. coverage width.

1. Roofing package shall include inside and outside foam closures, matching trim (eaves, gables, and ridge) and fasteners, sheet metal flashing (all sides), and 30# felt (under metal).
2. Roofing color to be selected by the owner from the manufacturers standard color chart.

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ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - GATEHOUSE
NIBLEY, UTAH

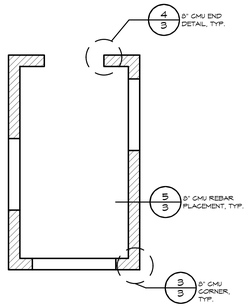
SHEET TITLE: FLOOR PLAN SPECIFICATIONS

PROJECT I.D.# 2032A

DATE: 01/23/2024

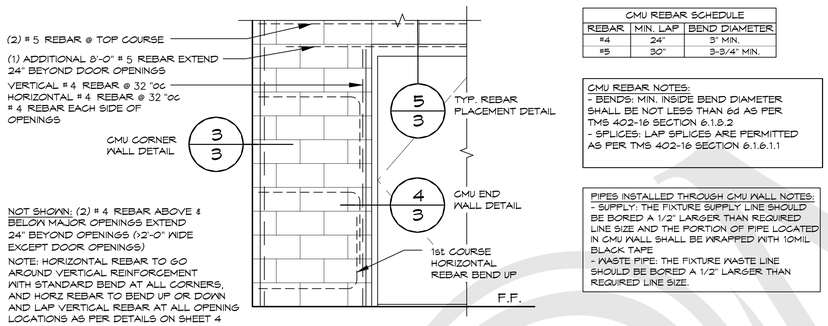
DRAWN BY: JS

SHEET NO. 2



A STRUCTURAL CMU PLAN

SCALE: 1/4" = 1'-0"



CMU REBAR SCHEDULE		
REBAR	MIN. LAP	BEND DIAMETER
#4	24"	3" MIN.
#5	30"	3-3/4" MIN.

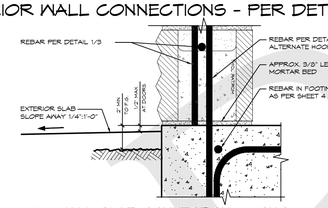
CMU REBAR NOTES:
- BENDS: MIN. INSIDE BEND DIAMETER SHALL BE NOT LESS THAN 6d AS PER TMS 402-16 SECTION 6.1.8.2
- SPLICES: LAP SPLICES ARE PERMITTED AS PER TMS 402-16 SECTION 6.1.6.1.1

PIPES INSTALLED THROUGH CMU WALL NOTES:
- SUPPLY: THE FIXTURE SUPPLY LINE SHOULD BE BORED A 1/2" LARGER THAN REQUIRED LINE SIZE AND THE PORTION OF PIPE LOCATED IN CMU WALL SHALL BE WRAPPED WITH 10MIL BLACK TAPE
- WASTE PIPE: THE FIXTURE WASTE LINE SHOULD BE BORED A 1/2" LARGER THAN REQUIRED LINE SIZE.

1 CMU REBAR LAYOUT DETAIL

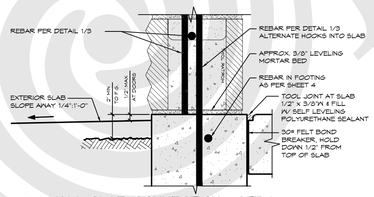
SCALE: 1" = 1'-0"

EXTERIOR WALL CONNECTIONS - PER DETAIL 1/4



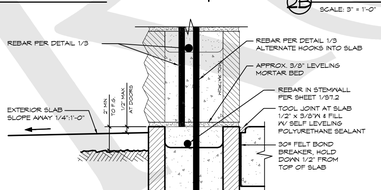
2A WALL-SLAB CONNECTION - MONO

SCALE: 3" = 1'-0"



2B WALL-SLAB CONNECTION - STEM

SCALE: 3" = 1'-0"



2C WALL-SLAB CONNECTION - CMU STEM

SCALE: 3" = 1'-0"

SECTION 3: BUILDING INSTALLER SCOPE

The installing contractor or subcontractor, hereafter designated as the building installer, is responsible for building package installation. Building installer work will generally include foundation/pad construction and building package assembly/construction.

Note: Romtec's scope is separate from the building installer's scope. Romtec, Inc., is the approved building package supplier, not a designated building installer.

3.1 CONSTRUCTION SUBMITTALS

A. If required by owner and/or reviewing authority, building installer shall submit product data sheets and relevant information about the specified building installer supplied products below for review and approval.

3.2 WARRANTY

A. Building installer's work shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date that installation work for the building package is completed, including any relevant final punch list. If final acceptance of the completed building is delayed for reasons beyond building installer's control, the warranty shall be one (1) year from the completion of building installer's installation work and demobilization.

B. Building installer shall pass through to owner all relevant manufacturers warranties for individual products and components supplied by building installer.

3.3 STRUCTURE

A. Masonry (concrete) grout shall be supplied and installed by building installer.

1. Grout shall have a minimum compressive strength of 2,500 psi at 28 days, 9+/-1" slump, with max ½" aggregate, or as required in final approved plans.
2. Fine or coarse grout may be used in accordance with 2009 UBC.
3. All CMU block must be fully grouted and may not be wetted.

Note: If required for installation, building installer will be responsible for providing appropriate equipment and labor for notching CMU block for bond beams, cutting CMU block to make any required shapes, and/or grinding CMU block for fixture mounting.

B. Rebar for walls shall be supplied and installed by building installer.

1. All walls shall have # 4 and # 5 rebar. See final approved plans for spacing.
2. All rebar used in the building must meet ASTM A615 manufacturing standards and is to be placed per the final approved plans.

C. Interior block wall finish shall be latex epoxy paint supplied and installed by building installer.

D. Interior floors to be sealed concrete finish supplied by building installer.

E. Sealant for all exposed wood shall be supplied and installed by building installer.

F. Sealant for all exterior CMU block is required, to be supplied and installed by building installer.

G. Gutters and downspouts are supplied and installed by building installer.

3.4 ELECTRICAL

A. Electrical rough-in, installation and trim shall be provided by building installer.

1. All underground and/or overhead service to building shall be as specified in the final site plan.
2. Building installer is responsible for all necessary wire, connectors, grounding, conduit, and related items to install the building package electrical components and meet all relevant national, state, and local codes.
3. Building installer shall supply and install all switches and outlets required to complete the building package installation.

SECTION 4: CONTRACTOR SCOPE ITEMS

The items in this section may be provided by the same building installer as defined in Section 3 above (typically when a single entity is acting as both the building installer and contractor), or the items in this section may be provided by a separate entity such as a general contractor or site contractor, hereafter designated as contractor (typically when the building installer is a separate subcontractor). Contractor work will generally include site preparation and grading, excavations for structures, backfill and/or structural backfill, and any site or utility work outside the building package footprint.

Items in this section are generally to be completed prior to building installer beginning its installation work described in Section 3 above.

4.1 CONSTRUCTION SUBMITTALS

A. If required by owner and/or reviewing authority, contractor shall submit product data sheets and relevant information about the specified contractor supplied products below for review and approval.

4.2 WARRANTY

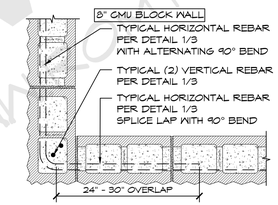
A. Building installer's work shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date that installation work for the building package is completed, including any relevant final punch list. If final acceptance of the completed building is delayed for reasons beyond building installer's control, the warranty shall be one (1) year from the completion of building installer's installation work and demobilization.

A. Building installer shall pass through to owner all relevant manufacturers warranties for individual products and components supplied by building installer.

4.3 ELECTRICAL

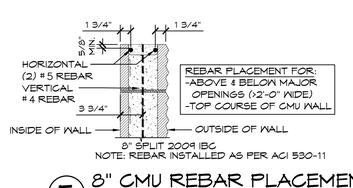
A. Incoming electrical utility lines to within approximately 10' of the building shall be provided by contractor.

1. All underground and/or overhead service to building shall be as specified in the final site plan.
2. Electric meter base and all rough wiring, switches, plugs and circuit breakers shall be as shown on final plans.
3. Contractor supplies and installs the meter base and meter.



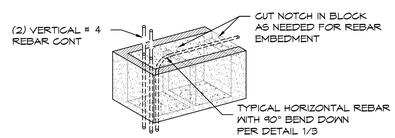
3 MORTAR JOINT CMU CORNER DETAIL

SCALE: 1" = 1'-0"



5 8" CMU REBAR PLACEMENT

SCALE: 1" = 1'-0"



4 MORTAR JOINT CMU WALL END DETAIL

SCALE: 1" = 1'-0"

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REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

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16240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - GATEHOUSE
NIBLEY, UTAH

SHEET TITLE: STRUCTURAL CMU PLAN & DETAILS SPECIFICATIONS

PROJECT I.D.# 2032A

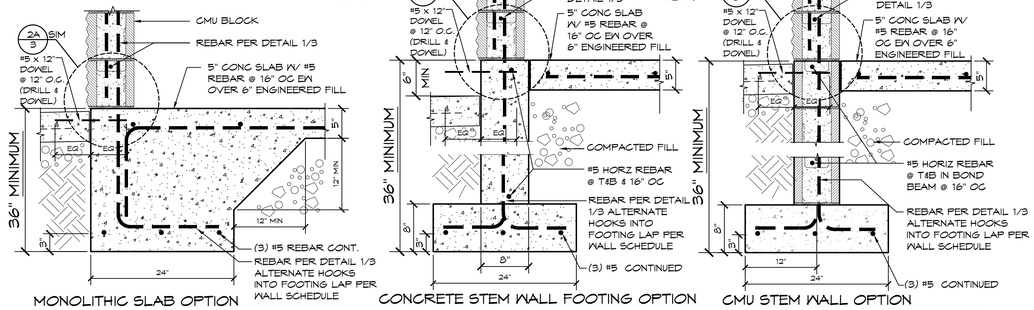
DATE: 01/23/2024

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SHEET NO. 3

EXTERIOR WALL FOUNDATIONS - CHOOSE ONE OF THE FOLLOWING

SEE FLOOR PLAN FOR EXTERIOR WALL LOCATIONS, SHEET 3

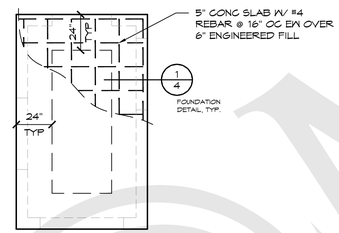


1 EXTERIOR WALL FOUNDATION DETAIL OPTIONS

SCALE: 1" = 1'-0"

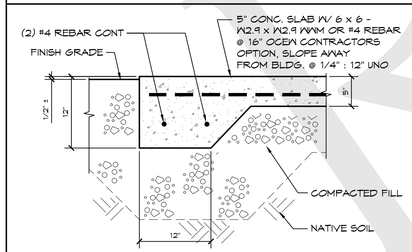
GENERAL NOTES:
* WHEN USING EITHER STEM WALL OPTION RECESS STEM WALL THE THICKNESS OF SLAB AT DOOR THRESHOLD
* PRIVACY WALLS TO HAVE A 30" WIDE x 12" DEEP FOOTING, IF APPLICABLE
* CMU STEM WALL OPTION, CMU BLOCK IS BY INSTALLER
* VERTICAL REBAR IN SLAB/STEM WALL TO MATCH VERTICAL WALL REINFORCEMENT LAP PER WALL SCHEDULE

FOUNDATION DESIGN SHOWN HERE IS PRELIMINARY AND SUBJECT TO CHANGE. FINAL FOUNDATION DESIGN TO BE DETERMINED DURING THE FORTHCOMING FULL DESIGN PHASE FOR THE BUILDING. ANY INCREASED COSTS OR TIME NEEDED TO CONSTRUCT THE FINAL FOUNDATION DESIGN IS BETWEEN THE END OWNER AND THE BUILDING INSTALLER



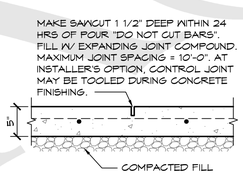
A FOUNDATION PLAN

SCALE: 1/4" = 1'-0"



2 EDGE OF CONC. WALKWAY

SCALE: 1" = 1'-0"



3 SAWCUT JOINT

SCALE: 1" = 1'-0"

3.5 CAST IN-PLACE CONCRETE FOR BUILDING PACKAGE

A. All equipment, labor, trades, and materials for cast-in-place concrete shall be provided by building installer.
   1. Includes all materials and labor for building package foundations/footings and interior slabs.

B. Footings for the building package are to be dug by the building installer and poured on-site to meet local code for permanent structures. A prefabricated, modular mat placed on compacted base is not an accepted equal to a site specific, site poured, engineered foundation.

C. Engineered fill shall be ¾" minus crushed aggregate around footings, foundations, and slabs, or as required in the final approved plans.

D. Slab vapor barrier shall be 6-mil continuous plastic under the concrete slab, or as required in the final approved plans.

E. The foundation shall be installed as designed with all cast in-place concrete poured to dimensions specified, or as required in the final plans.
   1. Footings will be built to minimum 24" depth or greater if required by local frost depth or permitting authority.
   2. Minimum compressive strength of foundation concrete shall be 3,000 psi at 28 days, 4" +/-1" slump, with max ¾" aggregate, cured in accordance with ACI 308, or as required in approved final plans.
   3. Slabs shall have a fine broom finish with joints required in flat work as shown on plans.
   4. Steel rebar shall be installed as specified in final plans.

F. Building installer shall supply and install concrete slab sealer.
   1. Concrete slab sealer shall be a water-based, transparent curing, sealing and dust proofing compound with two (2) coats to be applied per manufacturer's instructions.

3.6 PLUMBING

A. Plumbing rough-in, installation and trim within 10' of the building footprint shall be provided by building installer.
   1. All underground water service and sewer drain(s) from building to be as specified in final approved site plan.
   2. Building water shutoff valve, drain, and all rough piping shall be as shown on final building plans. Final installation location to be determined onsite.
   3. Install the building package plumbing fixtures per the final approved plans.
   4. Piping shall be installed per the final approved plans with minimum pipe sizing per 2009 Uniform Plumbing Code Section 610.

B. Floor drains in the building shall be supplied and installed by building installer.
   1. All floor drains shall be as shown on final approved plans.

3.7 OTHER MATERIALS & EQUIPMENT

A. Unless otherwise specified, the following products and materials are supplied by building installer (if applicable).
   1. Building package installation
   2. Cast-in-place concrete foundations, footings, interior slabs
   3. Concrete slab sealer
   4. Mortar
   5. Concrete grout
   6. Rebar
   7. Latex epoxy paint
   8. Caulk for siding
   9. Plumbing rough in, installation and trim
   10. Electrical rough in, installation and trim
   11. Switches & outlets
   12. Typical fasteners; for example: roofing nails, staples, etc.
   13. Fasteners not included in product packaging
   14. Wood sealant for all decking, glulam beams, posts, and extensions
   15. All other items within the building footprint indicated on final plans or required by building codes to complete installation of the building package which are not specifically stated as supplied by owner or contractor.

3.8 DELIVERY, STORAGE, AND HANDLING

A. The building installer will coordinate with owner and/or Romtec to receive delivery of the building package onsite. This includes all equipment and labor required for off-loading of the delivered building package.

B. The building installer will assume responsibility for adequate protection and maintenance of delivered building package materials from weather, damage, and pilferage during installation work. Any failure to adequately protect building package materials that affects the warranty of those materials will be at building installer's expense.

C. Building installer shall collect and maintain for final delivery to owner any operation & maintenance manuals included by individual product manufacturers with their respective product packaging. Any failure to collect, maintain, and/or deliver these O&M manuals to the owner that results in fees from Romtec for additional copies shall be at building installer's expense.

4.4 CAST IN-PLACE CONCRETE FOR BUILDING EXTERIOR

A. All equipment, labor, trades, and materials shall be supplied by contractor.
   1. Includes all materials and labor for exterior/entry slabs and sidewalks.

B. Refer to drawings for sidewalks and entry slabs.
   1. Minimum concrete compressive strength of 2,500 psi at 28 days.
   2. Remesh or rebar reinforcement shall be used in sidewalks.
   3. All sidewalks shall be finished with a fine broom with control joints installed per the final approved site plan.

4.5 PLUMBING

A. Incoming plumbing to within approximately 10' of the building shall be provided by contractor.
   1. All underground water service and sewer drain(s) from building to be as specified in final approved site plan.
   2. Building water shutoff valve is to be supplied and installed by contractor.
   3. Contractor is responsible to ensure that incoming water pressure is sufficient to meet building package fixture demands.
   4. Minimum water pressure at toilet and urinal flush valves shall be 40 psi with minimum pipe sizing as per 2009 Uniform Plumbing Code Section 610, or as required in final approved plans.

B. Water line drain valve shall be supplied and installed by contractor.

C. Sewer line backflow check valve shall be supplied and installed by contractor.

4.6 OTHER MATERIALS & EQUIPMENT

A. Unless otherwise specified, the following products and materials are supplied by contractor.
   1. All items not specifically listed as supplied by owner or building installer.
   2. Any item listed as supplied by "contractor" or "others".

B. Unless specified in the plans or submittals, contractor supplies the following (if applicable):
   1. Incoming electrical, water, sewer, and gas utilities.
   2. Asphalt paving
   3. Masonry pavers
   4. Sidewalks
   5. Landscaping
   6. Site grading
   7. Exterior/entry slabs
   8. Drain valves and backflow check valves
   9. Branch circuit breakers
   10. Irrigation Equipment
   11. Gutters and downspouts
   12. Fire alarm and fire suppression equipment
   13. Lighting equipment not attached to the building.
   14. All other items exterior of the building footprint indicated on final plans or required by building codes which are not specifically stated as supplied by owner or building installer.

4.7 DELIVERY, STORAGE, AND HANDLING

C. The contractor will assume responsibility for adequate protection and maintenance of the installed building package materials after completion of installation work by building installer. Any failure to adequately protect building package materials that affects the warranty of those materials will be at contractor's expense.

SECTION 5: OWNER'S SCOPE

5.1 ONGOING MAINTENANCE

A. Owner is responsible for ongoing maintenance of the completed Gatehouse building after completion of work by building installer and contractor.

5.2 SITE PLAN

A. Owner (or owner's site engineer) is responsible for providing the final approved site plan to Romtec and/or building installer.

5.3 SPECIAL INSPECTION

A. If required, special inspection(s) services shall be provided by owner.

B. If special inspection(s) are required by the permitting authority or relevant agency(ies), then Romtec, building installer, and/or contractor shall provide reasonable assistance to the owner to accommodate the special inspection(s).

5.4 DELIVERY, STORAGE, AND HANDLING

C. Owner will coordinate with Romtec, building installer, and/or contractor to receive delivery of the building package onsite.

REV	DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION

ROMTEC
16240 NORTH BANK ROAD
ROSEBURG, OR 97470
(541)-496-3541 FAX (541)-496-0803

PROJECT: STOKES NATURE CENTER - GATEHOUSE
NIBLEY, UTAH

SHEET TITLE: FOUNDATION PLAN & DETAILS SPECIFICATIONS

PROJECT I.D.# 2032A

DATE: 01/23/2024

DRAWN BY: JS

SHEET NO. 4

FOR BID PURPOSES ONLY

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2696 East US Highway 89 | P.O. Box 4204 Logan, UT 84323 | 435-755-3239 | www.logannature.org

17 June 2024

To: Nibley City Planning Commission
Nibley City Council
Nibley City Staff

Re: Stokes Nature Center (SNC) Nibley Nature Park Site Plan Review

Thank you for the opportunity to address the Nibley Staff comments on our Nibley Nature Park Site Plan. We are excited to be moving forward with this long-awaited project and look forward to working with Nibley City to make this project a success. We have previously met with City staff and are confident we can resolve any outstanding items. We appreciate their willingness to help us identify potential obstacles and offer reasonable solutions when appropriate

While many of the comments raised during City staff's 6-3-2024 review will be promptly addressed as requested, there are a few items that we will need to request be addressed through a development agreement with the City as they will require exceptions to existing City standards. The following provides a summary of those items and the rationale for why they are in conflict with requirements that we must follow because of our existing Deed of Conservation Easement with the State of Utah. First, we provide a little background on how we intend to use the site.

Proposed Site Uses

The Nibley Outdoor Classroom and Nature Park will be used in two ways. The primary function is as an outdoor learning space. From Monday-Thursday, it will be used as a preschool and field trip destination for elementary schools. The preschool starts at 9:00 and ends at 3:30. There are two classes, morning and afternoon, and each is comprised of no more than 8 children at a time with 2 teachers, meaning only 10 people will be on the property during these activities. Field trips are 20-30 students with two teachers and would be on the property approximately 1-2 times a month. Students will typically be transported by school bus or passenger van for field trips to the site.

The only other visitation during those weekdays would be if we host an event in the evenings on the property. These would consist generally of about 20-30 people. The proposed pavilion allows for four large picnic tables that can sit 24-28 people at one time. The proposed 30-foot and 33-foot diameter yurts can host up to 20 and 30 people at one time, respectively. Although

the proposed amphitheater can sit up to 80 people maximum at one time, the more common size of group for this facility will be between 50 and 60 people at one time.

The second usage of the site is as a nature park open to the public to come and enjoy the site trail system and other amenities. This would typically be on Fridays, Saturdays, and Sundays, mirroring the hours at the Logan Canyon nature center itself. We would have 1-2 employees or trained volunteers on site at all times when the park is open to the public. Based on current visitation to the nature center, we would estimate no more than 100 people per day at the site on these days. This level of visitation would be spread out throughout the entire hours of operation which would most likely be 10 am – 4 pm on those three days.

Other special events would be scheduled from time to time on site, typically during the weekends. Certain special events would be the only time that visitation may exceed the limits of the proposed parking. For those events, we would have 4-5 employees on site for safety and would utilize the parking lot across the street as needed. Special events would be limited by ticket sales to ensure we do not exceed the capacity of the on-site amenity and parking capacity.

Parking on site has been designed with these activities in mind and would be sufficient at 30 total spaces. In the event of needing additional parking, the church across the street has agreed that we can utilize their parking lot to avoid anyone parking on the street or causing a hazard. While we believe parking on site is sufficient to meet nearly all of our needs, we will also have bike racks available and will welcome walk-ins to the site.

Existing Conservation Easement

The property was placed under a Deed of Conservation Easement (CE) in 2002 that is overseen by the State of Utah Division of Wildlife Resources (UDWR). The purpose of the CE is to protect or enhance forever the natural wildlife habitat at the site and other related conservation values including ecological, scenic, aesthetic, water resources, and open space values. As part of the CE, the general public is not granted access to the property and UDWR has the right to prevent any activity on, or use of the property, which is inconsistent with the CE. The CE further identifies the "Permitted Uses" and the "Prohibited Uses" of the property. In general, permitted uses include limited recreational facilities, repair and replacement of fencing, improvement of water resources, invasive species control, and wildlife habitat enhancements. Prohibited uses include commercial or industrial facilities, game farming, grazing, ranching, wildlife disturbance or harassment, roads, OHVs, dumping, mineral activities, timber harvesting, and farming.

Nibley City Trail Master Plan

Early in the planning process for the Nibley City and Cache County Trail Master Plans, SNC and design consultant staff met with trail planners and UDWR staff multiple times to discuss the potential for a public trail to traverse the site in 2017 and 2018. Initially SNC and design team staff were supportive of the concept. However, when we approached UDWR with the idea, they were adamantly opposed to locating a public trail through the property. This is primarily due to the CE restrictions that prohibit wildlife disturbance or harassment by people, vehicles, or domestic animals. As such, the UDWR will not permit us to construct a public access trail through the site. However, the same trail alignment could be achieved on the adjacent property when it is developed by simply moving the proposed trail alignment to the other side of the

property boundary shared with SNC. This item will need to be enumerated as an exception to City requirements in a development agreement.

Fencing Height

As part of our requirements to control public access to the property as per the CE, we are also requesting that the fencing height restriction be enumerated as an exception to City requirements in a development agreement. The SNC must control public access to the property at all times. The current fencing along the front of the property at 2600 South is a 6-foot tall chain link fence. We are proposing to replace that fence with a more aesthetically pleasing wildlife fencing that will be more transparent and attractive while also prohibiting people from climbing over. The typical 3.5 to 4-foot high fence that would be allowed along the frontage of the property is not sufficient to prohibit access by people and domestic animals. Additionally, the CE requires that we prohibit access to the entire encumbered property. As such, we cannot offer to locate the fence set back from the property lines (which would then allow uncontrolled access to the setback portion of the property). We need to have our 8-foot tall wildlife fencing along the front and sides of the property to control public access at all times and will leave the lower wildlife-friendly fencing along the rear property line to accommodate wildlife movement to and through the property. This item will need to be enumerated as an exception to City requirements in a development agreement.

Water Shares Transfer

SNC intends to retain its existing water shares to use for landscape irrigation purposes across the site. Rather than use culinary water, we would prefer to use our secondary water shares for the purposes of irrigating the wildlife habitats on our property. The design plans show the construction of a secondary landscape irrigation system that utilizes our existing water shares for this purpose. This item will need to be enumerated as an exception to City requirements in a development agreement.

Thank you again for the opportunity to work with the City on these remaining items. We look forward to resolving any remaining concerns in the coming days.

Sincerely,

Kendra Penry

Kendra Penry, Executive Director
Stokes Nature Center

Ent 816569 Bk 1208 Pg 704
Date 12-Mar-2003 9:38AM Fee $0.00
Michael Gleed, Rec. - Filed By DP
Cache County, UT
For UTAH DEPT OF NATURAL RES

DEED OF CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT ("Easement"), made as of this 11th day of September, 2002, by ALICE DENNEY whose address is 168 ½ West 300 North, Logan, Utah 84321 ("Grantor"), and the UTAH DEPARTMENT OF NATURAL RESOURCES, DIVISION OF WILDLIFE RESOURCES ("Division") whose address is 1594 West North Temple, Salt lake City, Utah 84114;

WITNESSETH:

WHEREAS, the purpose of this conservation easement is to protect or enhance forever the natural wildlife habitat, (agricultural productivity, open space and scenic qualities) of the real property described below;

WHEREAS, Grantor is the owner of all the real property in Cache County, State of Utah, described in the attached Exhibit A ("Property") and approximately located on the map attached as Exhibit B; and

WHEREAS, the Property has significant wildlife habitat values, ecological, scenic, aesthetic, and open space values as recognized in the Utah Land Conservation Easement Act, (Utah Code Ann. §57-18-1 to 57-18-7); and Grantor intends to convey this Easement under the statutory provisions of that Act and other applicable provisions of Utah statutory and common law; and

WHEREAS, the Property constitutes a valuable element of the natural habitat of the Blacksmith's Fork watershed and ecosystem and the ecosystem's ecological, scenic, aesthetic and open space values, including flora, fauna, and soils; the Property provides significant wildlife habitat, and the maintenance of such natural habitat helps support wildlife populations in the Cache Valley ecosystem. All these natural habitat, ecological, scenic, wildlife, aesthetic, water resource, and open space values ("Conservation Values") are worthy of conservation and of great importance to Grantor, the Division, and the State of Utah; and

WHEREAS, Grantor desires and intends that the Conservation Values of the Property be conserved and maintained by the continuation, initiation, or introduction of activities on the Property that will not compromise the Conservation Values including such activities as fishing, hiking, bird watching, cross-country skiing, and snowshoeing ("Primary Uses"); and

WHEREAS, Grantor, as the fee owner of the Property, holds the right to identify, conserve, enhance, and protect in perpetuity the Conservation Values of the Property; and

WHEREAS, Grantor desires and intends to transfer certain of such rights to the Division, provided Grantor's right to use the Property for the Primary Uses is also protected and conserved in the manner set forth in this Easement; and

WHEREAS, the State of Utah has recognized the importance of both public and private efforts to conserve and protect the state's natural resources by the enactment of Utah Code Ann. §57-18-1 to 57-18-7; and

WHEREAS, the Division undertakes the responsibility to conserve and protect natural areas and significant wildlife habitat for ecological, scientific, recreational, and educational purposes; and the Division is a non-profit, tax exempt organization under Section 501(c)(3) of the Internal Revenue Code, and a qualified conservation easement holder under Utah Code Ann. §57-18-3; and the Division is a qualified organization under Section 170(h)(3) of the Internal Revenue Code to receive and hold conservation easements; and

WHEREAS, the parties desire that any interpretation of this Easement be construed to further the conservation, protection, and enhancement of the Property's Conservation Values; and

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and pursuant to Utah Code Ann. §57-18-1 to 57-18-7, and other applicable provisions of Utah statutory and common law, Grantor hereby conveys and warrants to the Division this perpetual Easement over the Property. The scope of this Easement is set forth in this deed.

Ent 816569 Bk 1208 Pg 705

SECTION I - RIGHTS OF THE DIVISION

The total property (hereafter referred to as "Property") owned by Grantor which will be encumbered by this Conservation Easement is described in Exhibit A and Exhibit B. The rights conveyed by Grantor to the Division to perpetually maintain the Conservation Values of the Property in this Easement include the following:

A. Identification and Protection. The Division has the right to identify, conserve and protect in perpetuity, and to enhance by mutual agreement the Conservation Values on the Property in the manner set forth in this Easement, subject to Grantor's reserved rights in this Easement.

B. Access. The general public is not granted access to the Property under this Easement. The Division has the right to enter upon the Property to inspect, monitor, and enforce compliance with this Easement at reasonable times. The Division also has the right to enter

upon the Property with advance notice and permission from Grantor or Grantor's agent to observe or study the natural resources protected by this Easement in a manner that will not unreasonably interfere with the use of the Property by Grantor. *Notwithstanding the forgoing, nothing herein shall limit such other landowners who presently have vested rights of access to the property for access to their water rights in the pond.*

The Division shall have the unilateral right of immediate entry upon the Property if, in the Division's sole judgement, such entry is necessary to prevent immediate damage or destruction to the Conservation Values of this Easement.

C. Conservation, Enforcement, Injunction, and Restoration. The Division has the right to prevent any activity on, or use of the Property, which is inconsistent with this Easement. The Division is entitled to take any legal action to prevent such activity, including but not limited to, obtaining an injunction in a court of competent jurisdiction. The Division further has the right to enforce the reasonable restoration of such areas or features of the Property damaged or impaired by any activities or omissions to prevent such activities inconsistent with this Easement. The Division and Grantor each shall be entitled to recover its reasonable attorney's fees in enforcing its rights under this Easement.

D. Signs. The Division has the right to place signs on the Property, which identify the Property as being protected by this Easement. The number and location of the signs are subject to Grantor's approval, which will not be unreasonably withheld.

SECTION II- GENERAL EFFECT OF EASEMENT

A. Perpetual Restrictions. This Easement shall run with and encumber the title to the Property in perpetuity and shall bind Grantor and all future owners, assigns, and tenants of the Property.

B. Permitted Uses in General. This Easement shall confine the use of the Property to activities such as the Primary Uses or Permitted Uses, consistent with the purposes and terms of this Easement. Any activity on or use of the Property inconsistent with the purposes or terms of this Easement or detrimental to the Conservation Values expressed in this Easement is expressly prohibited.

C. Dedication of Property. Pursuant to the terms of Utah Code Ann.§57-18-1 to 57-18-7, the Property conserved by this Easement, as described in Exhibit A and B, is declared open space and natural land, and may not be converted or directed to any uses other than those provided in this Easement.

SECTION III - PERMITTED USES AND PRACTICES

The following uses and practices, while not an exhaustive recital of permitted uses and practices, are consistent with this Easement. The uses and practices described in this section may not be precluded or prevented by this Easement, except under the following circumstances. The uses and practices may be precluded when this Easement requires the Division's prior approval of an activity as provided in Section IV of this Easement or when such uses or practices are conducted or allowed to take place in a manner which violates the terms of this Easement, poses a serious threat of material damage to the Conservation Values protected by this Easement, or constitutes a prohibited use or practice as set forth in Section V of this Easement.

A. Residential or Recreational Facilities. Residential housing and facilities will not be permitted on the subject property. Recreational facilities may be allowed where conservation and open space values will not be compromised and when mutually agreed upon by the Division.

B. Ranching, Grazing, and Farming Facilities. Grantor intends that grazing and ranching will not take place on the subject property. The property will be set aside for Wildlife Habitat and open space purposes.

Replacement or repair of existing fences within the Property boundaries and construction of new fences on the Property's exterior boundary shall be constructed in such a manner and with such materials as not to unduly endanger wildlife safety or to materially inhibit wildlife movement. The Division's prior written approval, consistent with Section IV of this Easement, must be obtained prior to replacing, repairing, or constructing any fencing on the Property that unduly endangers wildlife safety or that materially inhibits wildlife movement.

C. Ranching, Grazing and Farming Activities. Grantor intends that grazing and ranching will not take place on the subject property. The property will remain free of these activities for Wildlife Habitat and open space purposes. Grazing will be allowed only for the manipulation of vegetation to benefit wildlife habitat.

Ent 816569 Bk 1208 Pg 707

D. Subdivision. No subdivision of the subject property will be allowed.

E. Hunting and Fishing. Hunting, trapping and fishing are permitted on the Property only to the extent such activities are consistent with state and federal laws and regulations. The intent of this provision is to permit levels of hunting, trapping and/or fishing which are not detrimental to sustainable levels of wildlife and fish populations. The parties agree and acknowledge that hunting may be a desirable management tool to balance wildlife numbers with range and habitat condition.

F. Water Resources. Grantor may improve water resources on the Property if such improvement is necessary or beneficial to wildlife or fisheries on the Property. Such improvements must be consistent with the terms of this Easement and the conservation values protected therein, as well as comply with all applicable laws and regulations. Such improvements include dug-out development and watering tank installation, provided the improvement does not result in any water pollution having a detrimental effect on fish, aquatic life, wildlife, their habitat, or their passage.

Upon approval by the Division as required in Section IV of this Easement, Grantor may also carry out activities to restore and enhance aquatic, terrestrial, and wetland habitat for fish and wildlife use and production. Such activities may include stream bank stabilization, improvement to the quality and quantity of water available, and development of watering facilities and ponds; provided such activities are conducted in a manner consistent with accepted waterway stabilization, rehabilitation, and enhancement methods, state and federal laws and regulations, and the terms and intent of this Easement.

Water usage or distribution on the Property shall not be altered in such a manner as to compromise the terms of this Easement or the Conservation Values protected therein, as identified in the Baseline Inventory.

G. Agrichemicals and Biological Controls. Grantor may use agrichemicals and biological controls on the Property, including but not limited to insects, fertilizers, biocides, herbicides, pesticides, insecticides and rodenticides. Agrichemical and biological controls may only be used in accordance with all applicable laws, and in those amounts and with that frequency of application constituting the minimum necessary to accomplish reasonable ranching and grazing objectives. The use of such agents shall be conducted in a manner to minimize any adverse effect on the natural values of the Property and to avoid any impairment of the natural ecosystems and their processes.

Ent 816569 Bk 1208 Pg 708

H. Predators. Grantor may use legal methods to control predatory and problem animals as permitted by state and federal laws.

I. Vegetation and Riparian Management. Maintenance of a healthy tree cover is integral to wildlife, wildlife habitat, and water quality, and the scenic and aesthetic provisions of this Easement. As such, all activities affecting the vegetation and riparian area will be conducted in a manner that maintains long term health and sustains and perpetuates the mix of naturally occurring species in representative ages and group sizes, in accordance with best management practices. Consistent with these recognitions, Grantor may cut or prune trees and brush which constitute a hazard to persons, property, or roads.

All other proposed vegetation manipulations, including the cutting and removal of trees to abate disease or infestation, to perpetuate a healthy riparian forest, or to provide or enhance diverse habitat for wildlife, must be approved by the Division. The Division reserves the right to have consultants or employees such as professional botanists, biologists, hydrologists, ecologists, zoologists, etc. make on-site evaluations to provide recommendations to the Grantor. Such review shall be at the Division's sole cost and expense.

J. Residual Rights. Except as expressly limited by this Easement, Grantor may exercise and enjoy all rights as owner of the Property, including the right to use the Property for any purpose not inconsistent with this Easement.

SECTION IV - PRIOR APPROVAL OF ACTIONS BY DIVISION

If any provision of this Easement requires Grantor to obtain the Division's approval prior to performing any act or undertaking any enterprise, Grantor shall not perform that act or undertake that enterprise until the notice and approval provisions of this Section have been fully satisfied. Nothing in this Section shall in any way prohibit or limit the Division's ability to obtain writs or injunctive relief relating to any violation of this Easement.

A. Grantor's Written Notice. Prior to the commencement of any activity, use or enterprise which requires the Division's approval, Grantor will first notify the Division in writing of the proposed activity, use or enterprise. The notice must fully inform the Division of all material aspects of the proposed activity, use or enterprise. Grantor will send such notices to the Division by registered or certified mail, return receipt requested, addressed to the Utah Division of Wildlife Resources at P.O. Box 146301, 1594 West North Temple, Salt Lake City, Utah 84114-6301, Attention: Habitat Section, or to such other address as the Division may designate in writing.

Ent 816569 Bk 1208 Pg 709

B. Division's Response. The Division shall have forty five (45) days from the date such notice is received (as indicated by the registered or certified return receipt) to review the proposed activity, use, or enterprise and to notify Grantor of any objections it may have to the activity, use, or enterprise. The objections, if any, shall be based upon the Division's opinion that the proposed activity, use or enterprise is likely to cause material damage to the Property's Conservation Values or is otherwise inconsistent with the purpose and/or provisions of this Easement. If, in the Division's judgment, the proposal presented by Grantor can be modified to avoid material damage to the Conservation Values and otherwise comply with the purpose and provisions of this Easement, then the response shall inform Grantor how the proposed activity, use or enterprise may be modified to conform with this Easement. Except as provided in Subsection C of this Section, Grantor may commence the proposed activity, use, or enterprise only after it receives the Division's express written approval, and only in the manner explicitly

proposed by the Grantor and approved by the Division. The Division will send such response to Grantor by registered or certified mail, return receipt requested, addressed to Grantor at 1681/2 West 300 North Logan, Utah 84321 and also to Alice Denney c/o Alan Vail 2475 South Main, Nibley, Utah 84321, or to such other address as Grantor may designate in writing.

C. Division's Failure to Respond. If the Division fails to post its response to a proposal presented by Grantor within forty five (45) days after it receives the proposal by registered or certified mail, or within forty five (45) days after the Division has received adequate information to evaluate the proposed activity, whichever is later, then the proposed activity, use or enterprise shall be deemed consistent with the terms of this Easement, and the Division will have no further right to object to the activity, use or enterprise described in the proposal. The forty five (45) day period shall not begin to run for purposes of this paragraph until such time the Division has received adequate information from Grantor to effectively evaluate the proposed activity. In the event the Division requires additional information to evaluate the proposed activity, the Division shall request the information from Grantor as soon as practicable and in any case not later than 45 days after the receipt of the notice of the proposed activity.

D. Force Majeure. Grantor will not be obligated to send a notice to the Division, and the Division will not be entitled to bring an action against Grantor for undertaking any prudent activity in a bona fide emergency situation to prevent, abate, or mitigate the immediate threat of significant damage to the Property resulting from causes beyond Grantor's control, including fire, flood, storm, and earth movement. Grantor will promptly notify the Division of any injury to the Property caused by such events or the efforts to prevent, abate, or mitigated any damage caused by such events.

Ent 816569 Bk 1208 Pg 710

SECTION V - PROHIBITED USES AND PRACTICES

Any activity on or use of the Property inconsistent with the purposes of this Conservation Easement and which is likely to cause material damage to the Conservation Values is expressly prohibited. Grantor agrees that the following uses and practices, though not an exhaustive recital of inconsistent uses and practices, are explicitly deemed inconsistent with the purposes of this Easement, and shall be prohibited.

A. Commercial Facilities and Activities. Grantor will not establish or conduct any commercial or industrial facilities or activities on the Property (other than those necessary or beneficial in the operation or use of the Property expressly permitted by this Easement), including but not limited to any restaurant, night club, campground, trailer park, bed and breakfast, motel, hotel, lodge, swimming pool, snowmobiling, skiing, gas station, retail outlet or facility for the manufacture or distribution of any product.

B. Game Farming or Game Farm Animals. Grantor will not construct or operate a game farm on the Property, nor will Grantor raise or hold game farm animals on the Property.

Game farm animals include game farm animals regulated or prohibited by the Utah Legislature, the Division of Wildlife Resources, or the Department of Agriculture and Food.

C. Wildlife Disturbance or Harassment. Harassment of wildlife on the Property by people, vehicles or domestic animals is prohibited.

D. Alternation of Watercourses and Topography. Grantor will not change, disturb, alter, excavate, or impair any watercourse or wetland or the topography of the ground on the Property, except as expressly permitted by Section III, Subsection G of this Easement.

E. Non-native Species. Grantor will not introduce into the general area of the Property any non-native plant or animal species other than those generally accepted for wildlife purposes, except as provided for in Section III, Subsection H of this Easement, and approved by the Division.

F. Subdivision. Grantor does not have the right nor will any attempt be made to divide, subdivide, or take any action which creates an actual or *de facto* subdivision of the Property, except as expressly provided for in Section III, Subsection D of this Easement.

G. Construction. The Grantor will not construct any structures or facilities on the Property except as specifically provided for in Section III, Subsections A and B.

H. Roads. Grantor will not construct any new roads except as specifically provided for in Section III, Subsection B. Any new road construction requires the prior approval of the Division, as provided in Section IV of this Easement. Any new road approved by the Division and constructed for temporary use will be reclaimed and restored to its original condition within six (6) months following discontinued use.

I. Off-Road Vehicles. Grantor will not use vehicles off the existing roads and travelways in a manner which may result in; 1) significant soil erosion or compaction, 2) adverse impacts to the natural appearance of the Property, 3) interference with vegetation, or 4) interference with the natural habitats of animal species occurring on the Property. The parties recognize, however, that use of off-road vehicles may be necessary for the manipulation of vegetation for wildlife benefit, and fencing, and invasive weed control, and such limited use is therefore expressly permitted, provided that all reasonable efforts are made to minimize any adverse impact of the use consistent with the terms and intent of this Easement.

J. Commercial Feed Lot. Grantor will not establish or maintain any commercial feed lot on the Property. For purposes of this Easement, a commercial feed lot is defined as a permanently constructed, confined area or facility, within which the land is not grazed or cropped annually, used for purposes of engaging in the business of receiving and feeding livestock for hire.

Ent 816569 Bk 1208 Pg 711

K. Dumping. Trash, debris, ashes, sawdust, and other non-compostable refuse may not be dumped or otherwise disposed of on the Property.

L. Utilities. Additional utility structures and systems are prohibited. Absent the Division=s prior approval as required in Section IV of this Easement, any additional permitted utility structures or systems must be buried and the disturbed area restored.

M. Mineral Activities. Exploration or extraction of oil, gas, rock, gravel, sand, minerals, artifacts, or other materials found in, on, or under the Property is prohibited by open-pit or surface mining methods. No sub-surface exploration or extraction of oil, gas, rock, gravel, sand, minerals, artifacts, or other materials (including the lease, sale, or other disposition of the rights to such materials) may impair or destroy the Property's Conservation Values. No mineral activities inconsistent with '170(h)(5)(B) of the Internal Revenue Code are permitted.

N. Timber Harvesting. Grantor does not have the right to harvest timber on the Property except as specifically allowed in Section III, Subsection J.

O. Raptor Nests. Grantor will not move or destroy any known or readily identifiable raptor nest at any time, regardless of its active/inactive or occupied/unoccupied status. Grantor will not cut or disturb any trees or other vegetation within 300 feet of any known or readily identifiable active raptor nest during the nesting season, or remove any crown trees or over story vegetation within 300 feet of any known or readily identifiable active raptor nest at any time. However, as specifically allowed in Section III, Subsection J, diseased trees not containing a raptor nest may be cut down and removed during the non-nesting season to abate infestations.

P. Billboards. Grantor will not construct, maintain, or erect any commercial signs or billboards on the Property. Small signs may be displayed, however, to advertise the Property for sale, to identify the Property owner, to post the Property as private, or to post the Property as protected by this Easement.

Q. Aircraft Facilities. Grantor will not construct or erect any aircraft facilities or aircraft landing facilities on the Property.

R. Cultivation or Farming. Additional sodbusting is prohibited except as provided in Section II, subsection I.

Ent 816569 Bk 1208 Pg 712

SECTION VI - BREACH, RESTORATION, AND REMEDIES

A. Breach and Restoration. Where the Division becomes aware of a violation or potential violation of any restriction contained in this Easement, or becomes aware of any damage or potential damage to the Conservation Values associated with the Property, whether precipitated by Grantor or by a third party, the Division may notify Grantor in writing of such violation, potential violation, damage or potential damage. Upon Grantor's receipt of such notice, Grantor agrees to immediately take action to prevent or stop the activity which potentially or actually violates the terms or intent of this Easement.

Grantor shall have thirty (30) days after receipt of such notice to undertake actions, including restoration of the Property, that are reasonably calculated to swiftly correct the conditions caused by such violation. If Grantor fails to take such corrective action, the Division may undertake appropriate action, including legal action, to effect such corrections. The cost of such corrections, including the Division's expenses, court costs, and legal fees, shall be paid by Grantor. In the event Grantor is found not in violation of this Easement, then Grantor's legal fees shall be paid by the Division.

B. Injunctive and Other Relief. In the event Grantor undertakes or causes to be undertaken any activity on the Property that requires the Division's prior approval and such approval is not obtained consistent with Section IV of this Easement, or where Grantor undertakes or causes to be undertaken any activity in violation or potential violation of the terms of this Easement; the Division shall have the right to obtain injunctive relief or writs from courts of competent jurisdiction to stop any unauthorized activities and/or force the restoration of that portion of the Property affected by such activity to a similar or equivalent condition that existed prior to the unauthorized activity. Such restoration may include, but is not limited to, restoring soils, replanting suitable native vegetation, and/or taking such other action as the Division deems necessary to achieve restoration. In such case, the costs of restoration and litigation, including reasonable attorney's fees, shall be borne by Grantor or those of its successors or assigns against whom a judgment is entered. In the event a judgment is entered against the Division in an effort to seek injunctive relief or restoration and Grantor is held not to be in violation of this Easement, the Division shall pay Grantor's costs of litigation, including reasonable attorney's fees.

C. Actual or Threatened Non-Compliance. Grantor acknowledges that actual or threatened instances of non-compliance under this Easement constitute immediate and irreparable harm. The Division is entitled to invoke the equitable jurisdiction of any court to enforce this Easement.

D. Cumulative Remedies. The Division's remedies set forth in this Easement are cumulative. Any, or all, of the remedies may be invoked by the Division if there is an actual or threatened violation of this Easement.

E. Delay in Enforcement. A delay in enforcement shall not be construed as a waiver of the Division's right to enforce the terms of this Easement.

Ent 816569 Bk 1208 Pg 713

SECTION VII - COSTS AND TAXES

Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the Property, including responsibility for the control of noxious weeds in accordance with all applicable Utah laws. Grantor shall pay any and all lawful taxes, assessments, fees, and charges levied by competent authority on the Property.

SECTION VIII - INDEMNITY

Grantor agrees to bear all costs of operation, upkeep and maintenance of the Property, and agrees to indemnify the Division against all claims and obligations arising from such operation, upkeep, and maintenance activities. Grantor also agrees to defend and indemnify the Division against obligations arising from past, present or future dumping of hazardous materials on the Property, and any obligations associated with their cleanup or containment.

SECTION IX - ASSIGNMENT OF EASEMENT

The Division may not transfer or assign its interest in the Property created by this Easement except to a "qualified organization" (within the meaning of Section 170(h) (3) of the Internal Revenue Code) which is organized or operated primarily or substantially for one or more of the conservation purposes specified in Section 170(h) (4) (a) of said Code. Any such qualified organization shall agree to enforce the conservation purposes protected by this Easement.

SECTION X - BASELINE DATA

The parties acknowledge that an inventory of baseline data relating to the Property has been completed by competent professionals familiar with the Property, and furnished to the Division by Grantor. Copies of this inventory of baseline data are on file in the Divisions Northern Region Office, Habitat Manager. The parties acknowledge that this collection of baseline data contains an accurate representation of the Property's condition and natural resources as of the date of the execution of this Easement in accordance with Treasury Regulation 1.170A-14(g)(5)(I).

Ent 816569 Bk 1208 Pg 714

Notwithstanding the foregoing, should a future controversy arise over the biological and/or physical condition of the Property, the parties may use all relevant documents, surveys, reports and other information to assist in resolving the controversy.

If range or habitat conditions significantly improve on the Property, the parties may agree to prepare an updated inventory of baseline data to document the improved conditions. The updated inventory of baseline data must be approved in writing by the parties. Upon approval, the updated inventory of baseline data will be used as the baseline for future monitoring.

SECTION XI - EXTINGUISHMENT OF DEVELOPMENT RIGHTS

Grantor hereby acknowledges the extinguishment of all development rights associated with the Property, except those specifically reserved herein. Grantor agrees that all rights or interests in such development rights are terminated and extinguished, and may not be used on or transferred to any portion of the Property as it now or hereafter may be described, or to any other adjacent property, nor used for the purpose of calculating permissible lot yield or density of the

Property or any other property with regard to any land use or zoning which affects, or may affect, the Property.

SECTION XII
SUBSEQUENT SALE, EXCHANGE, OR INVOLUNTARY CONVERSION

Grantor and the Division agree that the conveyance of this Easement creates a property right immediately vested in the Division. The Division's property right in this Easement shall be based on the condition and improvements on the Property at the time the Easement is established, and this condition shall be documented as referred to in Section X, above. For purposes of this Section, the property right shall be deemed to have a fair market value at least equal to the proportionate value this Easement bears to the entire value of the Property as a whole at the time of its creation. That proportionate value of the Division's property rights shall remain constant. Should a change in conditions give rise to the extinguishment of this Easement, as provided in Treasury Regulation Section 1.170A-14(g)(6)(I), or extinguishment of a portion of the Division's rights under this Easement, the Division on a subsequent sale, exchange, conveyance, or involuntary conversion of the Property or a portion of the Property shall be entitled to a portion of the proceeds at least equal to such proportionate value of this Easement as established at the time of its creation. All interpretations of the Division's property rights shall follow Treasury Regulation Section 1.170.

Whenever all or part of the Property is taken in exercise of eminent domain, or under claim of rights of eminent domain, by public, corporate, or other authority so as to abrogate the restrictions imposed by this Easement, Grantor shall and the Division may join in appropriate actions to recover the full value of the Property taken and all incidental or direct damages resulting from such taking. All reasonable expenses incurred by Grantor or the Division in any such action shall first be reimbursed out of the recovered proceeds; the remainder of such proceeds shall be divided between Grantor and the Division in proportion to their interest in the Property, as provided in the first paragraph of this Section.

Grantor agrees that reference to this Easement will be made in any subsequent deed, or other legal instrument, by means of which any interest in the Property (including any leasehold interest) is conveyed, and that a copy of this Easement will be attached thereto. Grantor will notify the Division in writing of any conveyance of interest by sending written notice to the Division as provided in Section IV, Subsection A. Grantor agrees to provide notice of this Easement to all successors in interest, and to any potential purchasers or subsequent owners. In the event Grantor elects to sell the Property, Grantor agrees to provide notice of this Easement in any sale or solicitation materials or information. Any failure to comply with the terms of this paragraph shall in no manner render this Easement or any provisions of this Easement unenforceable.

Ent 816569 Bk 1208 Pg 715

SECTION XIII - MISCELLANEOUS PROVISIONS

A. Partial Invalidity. If any provision of this Easement, or the application of this Easement, or the application of this Easement to any person or circumstance is found to be invalid, the remainder of the provisions of this Easement, and the application of such provisions to persons or circumstances other than those to which it is found to be invalid, shall not be affected thereby.

B. Enforcement. Grantor intends that enforcement of the terms and provisions of this Easement shall be at the discretion of the Division, and that the Division's failure to exercise its rights under this Easement, in the event of any breach by Grantor, shall not be considered a waiver of the Division's rights under this Easement in the event of any subsequent breach.

C. "Grantor" and "Division". The term "Grantor", as used in this Easement, and any pronouns used in place thereof shall mean and include the above-named Grantor, and its heirs, personal representatives, executors, successors and assigns. The term "Division", as used in this Easement, and any pronouns used in place thereof shall mean the Division of Wildlife Resources of the Utah Department of Natural Resources and its successors and assigns.

D. Titles. Section and Subsection titles and subtitles are for convenience only and shall not be deemed to have legal effect.

E. Amendment. Nothing in this Easement shall be construed to preclude Grantor from making a subsequent conveyance of rights in the Property to further protect its Conservation Values, provided, however, that any such subsequent conveyance shall not impair any conservation purpose sought to be advanced by this Easement.

F. Liberal Construction. This Easement shall be liberally construed in favor of maintaining the Conservation Values of the Property, and in accordance with Utah Code Ann.§57-18-1 to 57-18-7. The parties acknowledge that each has reviewed and revised this Easement with the assistance of counsel, and that no rule of construction resolving ambiguities against the drafting party shall be employed in interpreting this Easement.

G. Successors. This Easement is binding upon, and will inure to the benefit of Grantor's and the Division's successors in interest and assigns. All subsequent owners of the Property are bound to all provisions of this Easement to the same extent as Grantor.

H. Governing Law. This Easement will be interpreted and construed in accordance with applicable Utah laws.

Ent 816569 Bk 1208 Pg 716

I. Entire Agreement. This Easement sets forth the entire agreement of the parties. It is intended to supersede all prior discussions or understandings.

J. Compliance With Law. All uses and practices permitted by this Easement, including the Primary Uses, shall comply with all applicable state and federal laws.

K. Effective Date. The effective date of this Easement will be the date signed by all parties.

L. Notice Requirements. Grantor hereby acknowledges that the Division, at least three days prior to the execution of this Easement, discussed with it the types of conservation easements available, the legal effect of each easement, and the advisability of consulting legal counsel concerning the possible legal and tax implications associated with granting this Easement.

M. Right of First Refusal. In the event Grantor chooses to sell or convey the remaining interest in the Property encumbered by this Easement, The Division shall have the Right-of-First-Refusal to purchase said remaining interest at a value equal to any bona fide offer to purchase the remaining interest. It is understood that water is essential to the maintenance of the Conservation Values associated with the Easement Property, therefore, in the event Grantor chooses to sell or convey any or all water rights attached or used on the Property described in this Easement at the date of its execution, the Division shall have the Right-of-First-Refusal to purchase or acquire said water rights or shares at a value equal to any bona fide offer to purchase the rights or shares.

N. Change of Conditions. The fact that any use of the Property expressly prohibited by this Easement or otherwise determined inconsistent with the purpose of this Easement may become significantly more valuable or economical than permitted uses, or that neighboring properties may in the future be put entirely to uses inconsistent with this Easement, has been considered by Grantor in granting this Easement. It is Grantor's belief that any such changes will increase the public's benefit and interest in the continuation of this Easement, and it is the intent of both Grantor and the Division that any such changes not be considered circumstances sufficient to terminate this Easement, in whole or in part. In addition, the inability to carry on any or all of the permitted uses, or the unprofitability of doing so, shall not impair the validity of this Easement or be considered grounds for its termination.

Ent 816569 Bk 1208 Pg 717

IN WITNESS WHEREOF, Grantor and the Division execute this Easement.

GRANTOR:

By _____
Alice Denney

DIVISION:

UTAH DIVISION OF WILDLIFE RESOURCES

By _____
Kevin Conway
Director of the Division of Wildlife Resources

STATE OF UTAH)
: ss.
County of Cache)

On this 11th day of September 2002, Alice Denney, known to me to be the person whose name is subscribed to the instrument set forth above, personally appeared before me, Joseph M. Chambers, a Notary Public for the State of Utah, and acknowledged that she executed the same.

IN WITNESS WHEREOF, I hereunto set my hand and affix my ~~notarial~~ seal on the date above written.

(SEAL) JOSEPH M. CHAMBERS Notary Public - State of Utah 84 [illegible] AVENUE [illegible] [illegible]

Notary Public for the State of Utah
Residing at Provo Bench Utah
My commission expires 11/22/2005

STATE OF UTAH)
: ss.
County of Salt Lake)

On this 4th day of March, 2003, Kevin Conway, who is known to me to be the Director of the Utah Division of Wildlife Resources, and the person whose name is subscribed to the instrument set forth above, personally appeared before me, Kevin Conway, a Notary Public for the State of Utah, and acknowledged that he executed the same on behalf of Division of Wildlife Resources, Department of Natural Resources, State of Utah.

IN WITNESS WHEREOF, I hereunto set my hand and affix my notarial seal on the date above written.

(SEAL) NOTARY PUBLIC BRENT KENNETH HUTCHINGS 1594 West North Temple Ste 2110 Salt Lake City, Utah 84116-3154 COMMISSION EXPIRES MARCH 16, 2003 STATE OF UTAH

Notary Public for the State of Utah
Residing at Salt Lake City, Utah
My commission expire March 16, 2003

Ent 816569 Bk 1208 Pg 718

C:\AWPDATA\REALESTA\Denney Conservation Easement.wpd

Property Subject to Easement:

Beginning 20 Rods North and 16 Rods East of the South West Corner of the South East Quarter of South East Quarter of Section 16, Township 11 North, Range 1 East, Salt Lake Base and Meridian; Thence North 3 rods, Thence West 13 Rods, Thence North 13 Rods, Thence West 3 Rods, Thence North 89 feet, Thence East 670 Feet, Thence Southeasterly to the point of beginning.

4.95 Acres
Cache County Parcel Number: 03-004-0011

AND

Beginning 683 Feet North and 679 Feet West from the South East Corner of Section 16, Township 11 North, Range 1East, Salt Lake Base and Meridian; Thence East 132.5 Feet Southeasterly to west line of State Road, Thence Southeasterly along said west line to it's intersect with south line of the Southeast Quarter of Section 16, Thence West 744 Feet, Thence North 20 Rods, Thence East in Nibley Corporation Limits to it's change in direction running Northwesterly, Thence Northwesterly to Point of beginning.
Less 2 acres as shown on Exhibit B

4.36 Acres
Cache County Parcel Number: 03-004-0016

Ent 816569 Bk 1208 Pg 719

C:\AWPDATA\REALESTA\Nibley Easement Legal.wpd

CACHE COUNTY FIRE DISTRICT

600 North 1020 East
Hyrum, Utah 84319
TEL: (435) 755-1670

June 3, 2024

Tom Dickinson
455 West 3200 South
Nibley, Utah 84321

RE: Stokes Nature Center Education Park

Tom

I reviewed the plans for the Stokes Nature Center Education Park. The Fire District has the following comments. A key box will need to be installed on the gate to gain access in the event of an emergency after hours. [IFC 506.1] There will need to be a No Parking Fire Lane sign in the driveway. [IFC 505.2] There will need to be a fire extinguisher in the yurt's. [IFC 906.1]

If you have any questions or concerns, please contact me.

Thank you,

Jason Winn
Fire Marshal
Cache County Fire District
(435) 755-1674

NIBLEY CITY PARKS, RECREATION, AND OPEN SPACE MASTER PLAN

2024









MGB+A
STUDIO

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INTRODUCTION

EXECUTIVE SUMMARY

This document is designed to serve as an evaluation and guideline for the ongoing development and planning initiative of Nibley City's Parks, Recreation, and Open Space. Its primary focuses are to,

- Maintain existing recreational resources to high standards that support community health, wellness, & safety.
- Enhances existing recreational areas and programming.
- Safeguard the City's natural and cultural assets on current public open space on current public property or consider acquiring other land according to defined strategies.
- Identify current demands trends & needs to pursue new acquisitions of land.



FIGURE 1 - ANHDER PARK

The Introduction section outlines the planning process, giving overall information of the activities, research, and Nibley City's vision and goals to this undertaking.

The Demographics section is a summary of Nibley City's demographic trends helps understand the composition of its population and the projecting average growth. The City prioritizes meeting all citizen needs not the majority demographics alone.

The Existing Conditions section is an inventory of parks and open spaces and a comparison with national trends. This analysis establishes a base point for Nibley City's current resources comparable levels of services (LOS), such as residents per park, programs, trails, and amenities.

Community participation is highlighted as a crucial resource for understanding the demands and allocating resources for future recreational programs, parks, and open spaces. Chapter Four summarizes significant findings from an online survey and in-person inputs which will aid future planning efforts.

With this important information an action plan is provided. This plan includes guidelines for the maintenance and management of existing parks and open spaces, framework scenarios to facilitate discussion, prioritizing actions in phases, and finally, strategies for funding projects in the near and distant future. For example, review & reporting on Parks & Recreation Master Plan including addendums & Open Space Priority mapping is required prior to initiating future land acquisition. Additionally, Project maintenance cost of potential improvements must be reviewed & reported prior. *See the Open Space Strategic Plan section on pg. 90.



FIGURE 2 - ELKHORN PARK

MASTER PLAN PROCESS

This Parks, Recreation & Open Space Master Plan update was built upon the strategies presented in the 2017 edition of the Nibley Parks & Recreation Master Plan and emphasized a variety of community engagement efforts. The process continued with a Steering Committee (SC) meeting comprised of Nibley City employees, residents, and planning consultants. The committee met regularly with the consultant throughout the span of the project to guide decisions made during each part of the process.



FIGURE 3 - PARKS & RECREATION ADVISORY COMMITTEE

STEERING COMMITTEE MEMBERS,

- Levi Roberts — Nibley City – City Planner
- Chad Wright — Nibley City – Recreation Director
- Nathan Laursen — Nibley City – City Council
- Kendal Welker — Nibley City – Parks and Recreation Advisory
- Matt Logan — Nibley City – Planning & Zoning Commission
- Tom Dickinson — Nibley City – City Engineer
- Larry Jacobsen — Nibley City – Mayor
- Karina Brown — Nibley City – Planning Commission
- Rod Elwood — Nibley City – Parks Division Manager

Public input leveraged existing community events to maximize input & resulted in 1,840 responses (about a quarter of the population). Other inventory efforts included National Recreation & Parks Association (NRPA) comparison & a physical maintenance tour assessing repair and maintenance needs.

This document responds to the analysis relating the inventoried data to Nibley City. The following efforts constitute the remaining components of this master plan document:

- Regional coordination helped refine capital improvement prioritization
- Alternate master plan options for capital improvement
- A preferred master plan scenario refined from master plan alternates
- Open space preservation planning
- An action plan incorporating budgets from funding identification
- Park concepts exhibiting intent, guiding capital improvement



FIGURE 4 - CITIZENS' PARTICIPATION AT THE FOOD TRUCK ROUND-UP EVENT

The overall master plan process is represented in the following diagram, organized primarily by chronology:

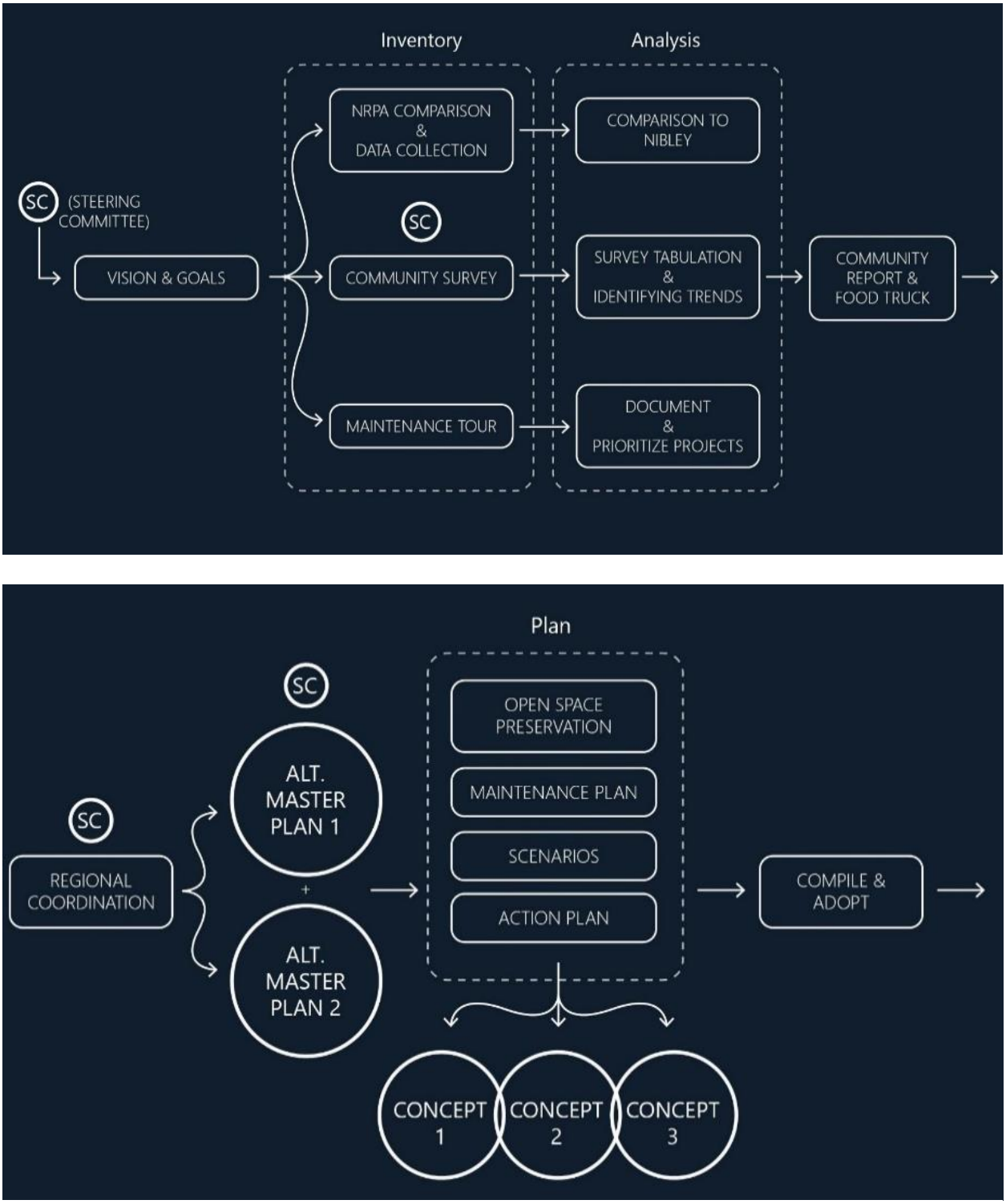


FIGURE 5 - MASTER PLAN PROCESS DIAGRAM

VISION AND GOALS

VISION

The City's vision for this plan is to motivate, inspire, and guide the community's approach in developing recreational and open areas that provide leisure and quality life for its residents.



FIGURE 6 – PUBLIC ENGAGEMENT MATERIALS FROM HERITAGE DAYS

GOALS

1. Plan for projected increase & growth
2. Provide high-quality recreation amenities
3. Coordinate with regional goals
4. Preserve critical natural and cultural resources
5. Promote responsible financial, maintenance, and management practices
6. Match community interests
7. Sustain a high quality of life for Nibley's residents



FIGURE 7 - "MY PERFECT PARK" INSPIRATIONAL DRAWING TABLE AT FOOD TRUCK ROUND-UP EVENT

DEMOGRAPHICS

Nibley city has unique demographic conditions which guide master planning priorities. Nibley city exhibits rapid growth with a young population. Residents represent a variety of ethnicities. Most have average education with a small percentage in economic poverty. As with all inventoried data throughout the document, both the factual & estimated statistics or based on the time of this master plan document development in 2023 & 2024.

POPULATION GROWTH

Nibley City, like the rest of Cache County, has recently experienced high amounts of population growth at an estimated rate of 8% over the past 3 Years[1]. From 2010 to 2020, the population grew 34% from 5,466 to 7,328. Applying these projections are not perfect, but they are useful for guiding decisions about what the community will need in the future and how resources should be distributed going forward. Analyzing the trends at the level of decades appears to be the most prudent scale for the planning efforts herein.



FIGURE 8 - CHILDREN FROM NIBLEY ELEMENTARY SCHOOL

TABLE 1 - MUNICIPAL POPULATION PROJECTIONS

Municipality	2020 (census)[1]	2022 (census)[1]	2030
Cache County	133,154	140,145	
Nibley City	7,332	7,926	9,654[2]

AGE[1]

Nibley City has a significantly youthful population. The following are key metrics for understanding community demand for park infrastructure:

- Median age is 26.5
- 40% are at 18 years or younger
- 6% are 65 years or older

[1] https://www.census.gov/

[2] Zions Public Finance – Nibley Parks Demographics

ETHNICITY[2]

Nibley City is primarily composed of white ethnicities. However, special care has been taken to understand the needs of minority ethnicities.

- 0.4% are Hawaiian or Pacific Islander
- 1.3% are Native American or Alaska Native
- 1.6% are Asian
- 2.8% of households are various mixed ethnicities
- 14% are Hispanic or Latino

EDUCATION[3]

Nibley City is represented primarily by those with an education from high school graduate & higher.

- 95% are high school graduates or achieved higher education (including bachelor's)
- 40% obtained a bachelor's degree or higher

OTHER[3]

Other demographic summaries are as follows,

- Disability under 65 years old 7%
- Median household income $100,108
- Persons in poverty 5.3%
- Mean commute time 17 minutes

[2] https://www.census.gov/
[3] https://www.census.gov/quickfacts/nibleycityutah

EXISTING CONDITIONS

EXISTING PARKS

Based on the total acreage of 84.07 shown in Table 2 - Current City Maintained Park Acreage (2023), Nibley City's current overall Level of Service (LOS) for acres/population is 9.9 acres of developed parkland per 1000 residents. If the City's population growth continues as projected in Table 1 - Municipal Population Projections, the city will need to develop over 77 acres of new parkland by the year 2040 to maintain the current level of service.

The City is well-equipped to meet this demand since it already owns 103.34 acres of land that can be developed into parks in the future (see Table 3 – City-Owned Land for Potential Future Parks).

Nibley City has 13 existing parks in total that are divided into two categories:

Neighborhood Parks – intended to serve the immediate surrounding community to provide access to outdoor recreation, leisure activities, and opportunities for socialization.

Open Spaces – provide natural areas for passive recreation, enjoyment of nature, and stormwater management.



FIGURE 9 - NIBLEY OPENSPACE

TABLE 2 - CURRENT CITY MAINTAINED PARK ACREAGE (2023)

Park	Acres
Neighborhood Parks	
Anhder Park	6.75
City Hall	6.50
Clear Creek Park and Trail	4.28
Elkhorn Park	4.11
Firefly Park	20.00
Heritage Park (Virgil Gibbons)	13.50
Mt. Vista Open Space & Trail	2.00
Subtotal	57.14
Open Spaces	
Discovery Park/Sunrise Meadows	9.13
Morgan Farm	7.95
Nibley Gardens	3.50
Subtotal	41.16
Trail Corridors	
Blacksmith Fork River Trail	3.87
Meadow Creek Trail	0.49
Hyrum Slough Trail	1.38
Subtotal	5.74
TOTAL	**104.04**



FIGURE 10 - NIBLEY OPEN SPACE

CITY-OWNED LAND FOR POTENTIAL FUTURE PARKS

Nibley city is in a good position from a property standpoint, owning sufficient land to accommodate public space demand.

TABLE 3 – CITY-OWNED LAND FOR POTENTIAL FUTURE PARKS

City-Owned Land for Potential Future Parks	Acres
3200 S/1200 W Park	19.61
Firefly Park Addition	1.69
Nibley Regional Park	48.5
Ridgeline Park	16.82
River Hollow Park	9.93
TOTAL	**96.55**

PARK INVENTORY

The capital improvement inventory has been updated in conjunction with the master plan leveraging a host of multidisciplinary expertise. The process for the maintenance inventory began after public input & municipal directive prioritized maintenance of existing infrastructure. An expert parks team comprised of consultants & Nibley government officials inventoried & developed the provided framework.

TABLE 4 - CURRENT CITY PARK INFRASTRUCTURE NEEDS

Code	Amenity Disparity
	***Virgil Gibbons* Heritage Park**
1.01	Damaged dugout shade components
	Firefly Park
2.02	Weed & natural vegetation maintenance
	Clear Creek Park and Trail
3.01	Mosquitos are prevalent
3.02	Poor pond quality
	Discovery Park/Sunrise Meadows
	None reported
	Nibley Gardens
5.1	Lack of landscape maintenance
5.2	Turf repair
	Meadow View Park

6.1	Incessant stormwater routing through park
6.2	Sediment build-up
City Hall	
	Restrooms for Sports Fields
Anhder Park (Nibley Park)	
8.01	Low restroom amount
8.02	Amphitheater undersized
8.03	Needed fence structure members missing
8.04	Mow edge needed including mow curb under fencing
8.05	Unbalanced evening demand given lack of lighting at other parks
8.06	Swing set structure needs adjustment for safety
8.07	Low electrical connection amount
8.08	Low pavilion accessibility
8.09	Irrigation infrastructure is outdated
8.10	Parking availability low for events/children's theater
8.11	Tree rings are minimal
8.12	Bike track has motorcycles usage
8.13	Storage containers use valuable space
8.14	Asphalt trail surface irregularity
8.15	Baseball 3rd base receives flooding
8.16	Baseball dugouts get too hot
8.17	Backstop is worn out
8.18	More garbage receptacles needed
8.19	Entry drive removal was left unimproved
8.20	Vehicles block sidewalk near angled parking
8.21	Crossing 3200 N is precarious
8.22	Trail to north crossing is precarious
Mt. Vista Open Space & Trail	
	None reported
Meadow Creek Park & Trail	
	None reported
Blacksmith Fork River Trail	
	None reported
Elkhorn Park	
12.01	Athletic fields undulate
12.02	Irrigation infrastructure is outdated
12.03	Parking lot is crowded with cars for child pickup
12.04	Trees aging and dropping large branches during windstorms creating a risk for park patrons

NRPA COMPARISON

Each year, the National Recreation and Parks Association (NRPA) provides statistics for parks and recreation departments across the nation in their Agency Performance Review publication.[4] Their data is broken up by municipality size and listed with metrics for the median, lower quartile, and upper quartile of each category. Since Nibley has a current population of 7,920 (see Table 1 - Municipal Population Projections), the NRPA numbers used in this document for comparison are the median values from the "Less than 20,000" category. See Appendix B – NRPA Comparison Table, for a full list of categories that were compared.



FIGURE 11 - HERITAGE PARK

SUMMARY OF OBSERVATIONS



FIGURE 12 - 5TH AND 6TH GRADE SOCCER PROGRAM

- **Residents per Park** - Nibley provides twice the number of parks than the national median for the "Residents Per Park" category. Even if no parks are added by 2040, Nibley will still be meeting the national median for residents per park.
- **Level of Service** (LOS) – for parks and recreation measures the number of recreation facilities per population, i.e., fields, tennis courts, indoor gyms, trail miles, park acres, etc. Current standards are compared to desired standards to project the number of facilities needed to reach desired standards and meet the demands of new growth. Although Nibley provides twice the number of parks in residents per park than the national median, the cumulative acreage and subsequent LOS is lower. The nationwide median LOS is 13 acres of parkland per 1,000 residents and Nibley's LOS currently sits at 9.9. If no new parkland is developed by 2040, Nibley's LOS will fall to 5.0 which is less than half of the national median and even below the lower quartile metric (6.0) for the category.
- **Trails** – Nibley currently has about 3.9 miles of trails in its park system. The national median is 4.0 miles, so the city will only need to add 0.1 miles of trail by 2040 to meet the national median.
- **Amenities** – By comparison with NRPA medians, the recreation amenities in Table 5 – NRPA Recommended Amenities for Nibley City (2023 vs 2040), have the lowest level of service in Nibley and therefore have greater justification in being prioritized as projects. This information is only provided as a point of reference. Local trends and preferences may direct the city to prioritize other elements.

[4] https://www.nrpa.org/publications-research/research-papers/agency-performance-review/

TABLE 5 – NRPA RECOMMENDED AMENITIES FOR NIBLEY CITY (2023 VS 2040)

Amenity	Amount Needed Now (2023)	Amount Needed by 2040
Basketball Courts	2	4
Tennis Courts	2	5
Dog Parks	-	1
Community Gardens	-	1
Swimming Pools	1	2
Multiuse Courts	2	3
Tot Lots	1	3
Skate Parks	-	1
Football Fields	1	2
Pickleball Courts	-	1
Golf Course	-	1
Synthetic Fields	-	1
Ice Rink	1	2
Lacrosse Fields	1	2
Hockey Field	-	1
Indoor Recreation Center	1	2
Community Center	1	2
Senior Center	-	1
Amphitheater	-	1
Nature Center	-	1
Aquatic Center	-	1
Stadium	1	2
Teen Center	-	1
Arenas	1	3

CONTEXT CLARIFICATION

Each state varies from the NRPA results as the tabulations generally reflect averages. Utah has unique conditions that influence the actual level of service provided in each community. Cache county & Nibley City specifically also have unique conditions that affect what resources are ideal locally. For example, elevated numbers of church meeting houses commonly provide access to indoor basketball courts. The sport of pickleball is another level of service consideration where popularity has risen substantially compared to other states.

COMMUNITY ENGAGEMENT

Nibley City strives to work collaboratively with its residents to achieve goals with sound solutions in order to provide a quality of life and the well-being of its community. Community engagement allows the City to understand recreational needs, parks priorities, enhancing connectivity, and access to all of the above as well as fostering equity, inclusion, and environmental stewardship. To accomplish this, the activities outlined below were completed.

SURVEYS

Public input was a powerful driver of the decision-making process for the duration of this master planning. The engagement efforts included:

- Activities for Heritage Days event at Elkhorn Park
    - In-person interviews
    - Handing out cards with a QR code to direct to the online survey along the parade and during the activities
- A digital and printed survey
- A second digital survey for commentary on individual parks
- An in-person engagement activity for the Food Truck Roundup at Heritage Park

The surveys were offered in both English and Spanish to include the large Hispanic population (13.5%)[5] residing in Nibley.



FIGURE 13 - IN-PERSON PARTICIPATION AT HERITAGE DAYS



FIGURE 14 - DIGITAL AND PRINTED SURVEY

[5] https://www.census.gov/quickfacts/nibleycityutah

SURVEY ANALYSIS

The survey was distributed to all of Nibley City through both online and in-person efforts. The following section illustrates the survey results, first, by demographic trends and distribution; second, parks and amenities usage patterns and preferences; and finally, prioritization of City's funds.

This data will allow an understanding of Nibley City residents' impressions about the existing conditions of parks, open spaces, and recreational opportunities; the allocation of funding in the near future; as well as some concerns about the protection and improvement of the City's natural and cultural assets.

DEMOGRAPHICS TRENDS AND DISTRIBUTION

- Gender – The Majority of respondents were females (59.5%)
- Age Group - The Majority of respondents were between 25-44 Years (61.19%)
- Ethnicity – The Majority of were Caucasian (90.31%)
- Area of Residency – The Majority of respondents were from the Western half of the City (57.58%)

Overall, the survey had a good representative number in each demographic category.

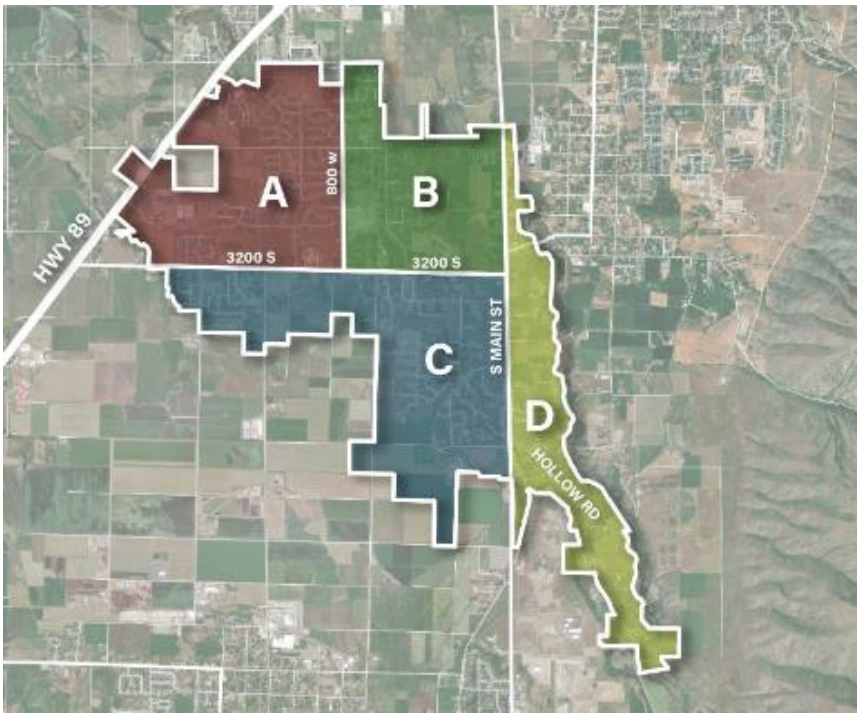


FIGURE 15 - DEMOGRAPHIC DISTRIBUTION MAP

PARKS AND AMENITIES USAGE PATTERNS AND PREFERENCES

- **Open Space Definition**

  Most residents associated the term open space with trails, conservation areas, and agricultural fields. Empty lots, sports fields, and city parks were not as commonly affiliated with the term.

- **Favorite Existing Parks**

  This chart exhibits direct results from this master plan survey effort.

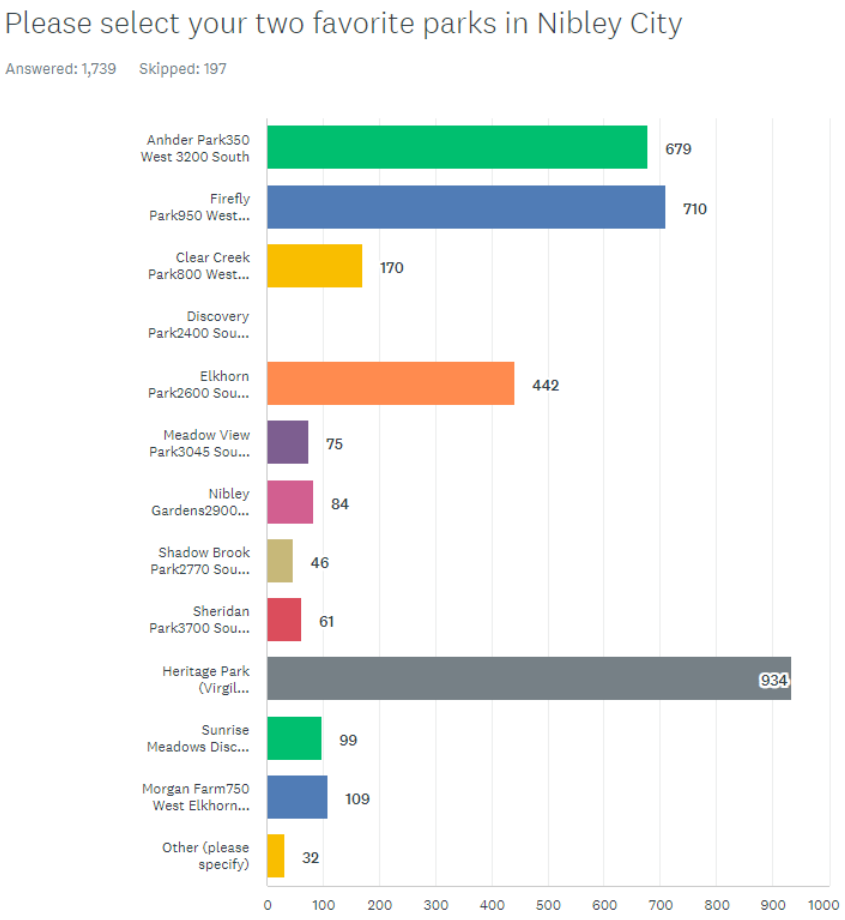


FIGURE 16 - FAVORITE EXISTING PARK SURVEY RESULTS

NEW PARK LOCATION PREFERENCES

The survey included a question to determine where Nibley residents were most interested in seeing a new park built. Their 1,500 individual responses were tabulated and displayed as a heatmap. The top 10 most requested locations are highlighted.

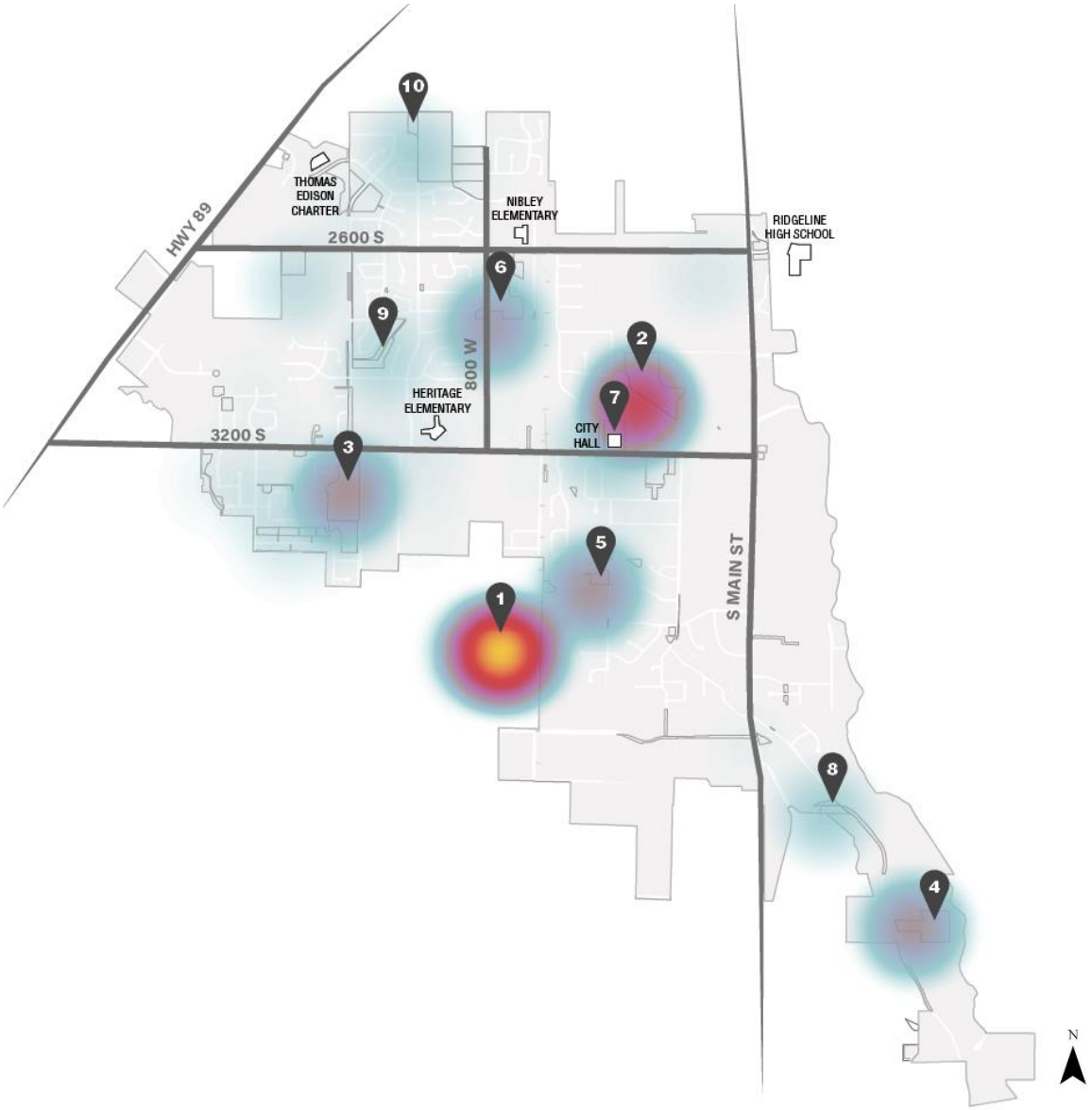


FIGURE 17 - PREFERED LOCATION FOR NEW PARKS HEAT MAP

*For a comprehensive documentation of the survey results, see Appendix C – Community Input Survey Results and Appendix D – Individual Parks Survey Results.

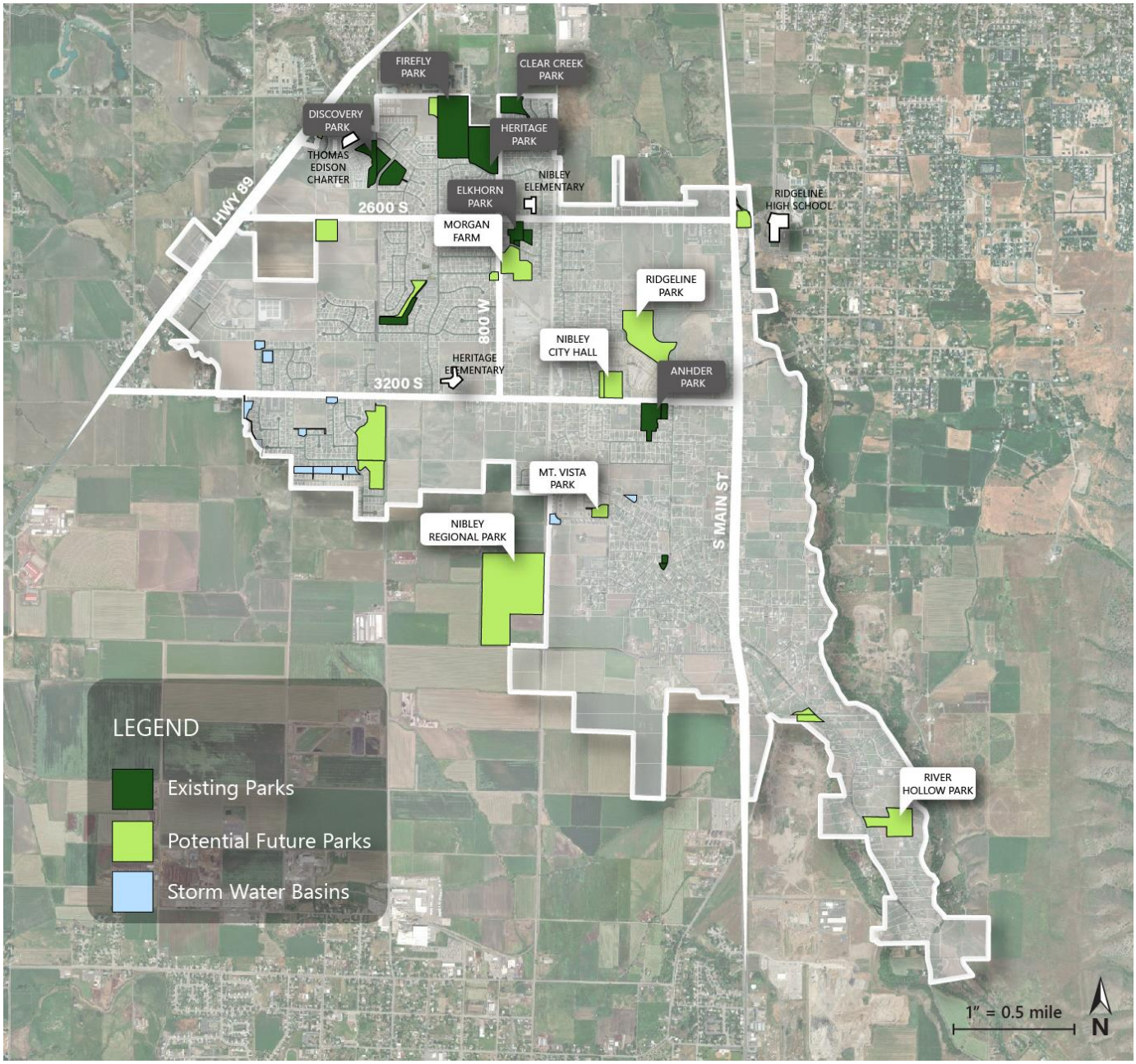


FIGURE 18 - EXISTING AND POTENTIAL PARKS

There were, in total, 943 participants which identified 10 top locations for a new park, however, a significant number of residents expressed their preference for city funds to be implemented in the management and maintenance of existing facilities, rather than building new ones. Considering prioritizing existing infrastructure coincides with the City's initiative.

TABLE 6 - EXISTING PARKS DISTANCE

Top 10 New Park Locations (Ordered by Most Distant from Existing Parks)	Votes (From Community Input)	Percentage
River Hollow Park	72	7.6%
Hollow Road	23	2.4%
Nibley Regional Park	312	33.0%
3200 S/1200 W Park	73	7.7%
Mt Vista Park	69	7.3%
Ridgeline Park	162	17.0%
Nibley City Hall	24	2.5%
Nibley Gardens Addition	19	2.0%
Morgan Farm	53	5.6%
Firefly Park Addition	19	2.0%

*See the Open Space Strategic Plan (page 90) for buffers & mapping based on park distribution needs.

EXISTING AMENITIES

The most popular recreation amenities were focused on passive recreation including walking trails, playgrounds, picnic tables, and pavilions. Among the active recreation amenities, the most popular were soccer fields, baseball, pickleball (included in “other” category), tennis, and disc golf.

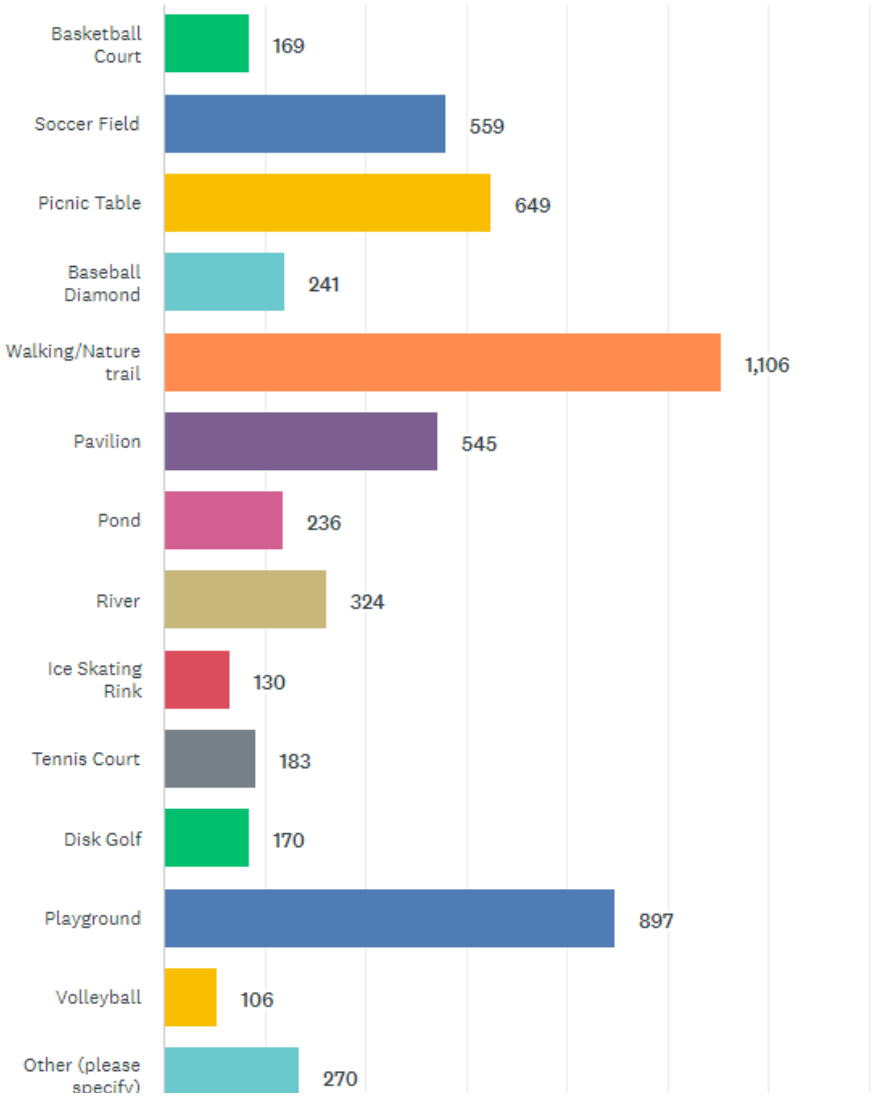


FIGURE 19 - PREFERED EXISTING AMENITIESW

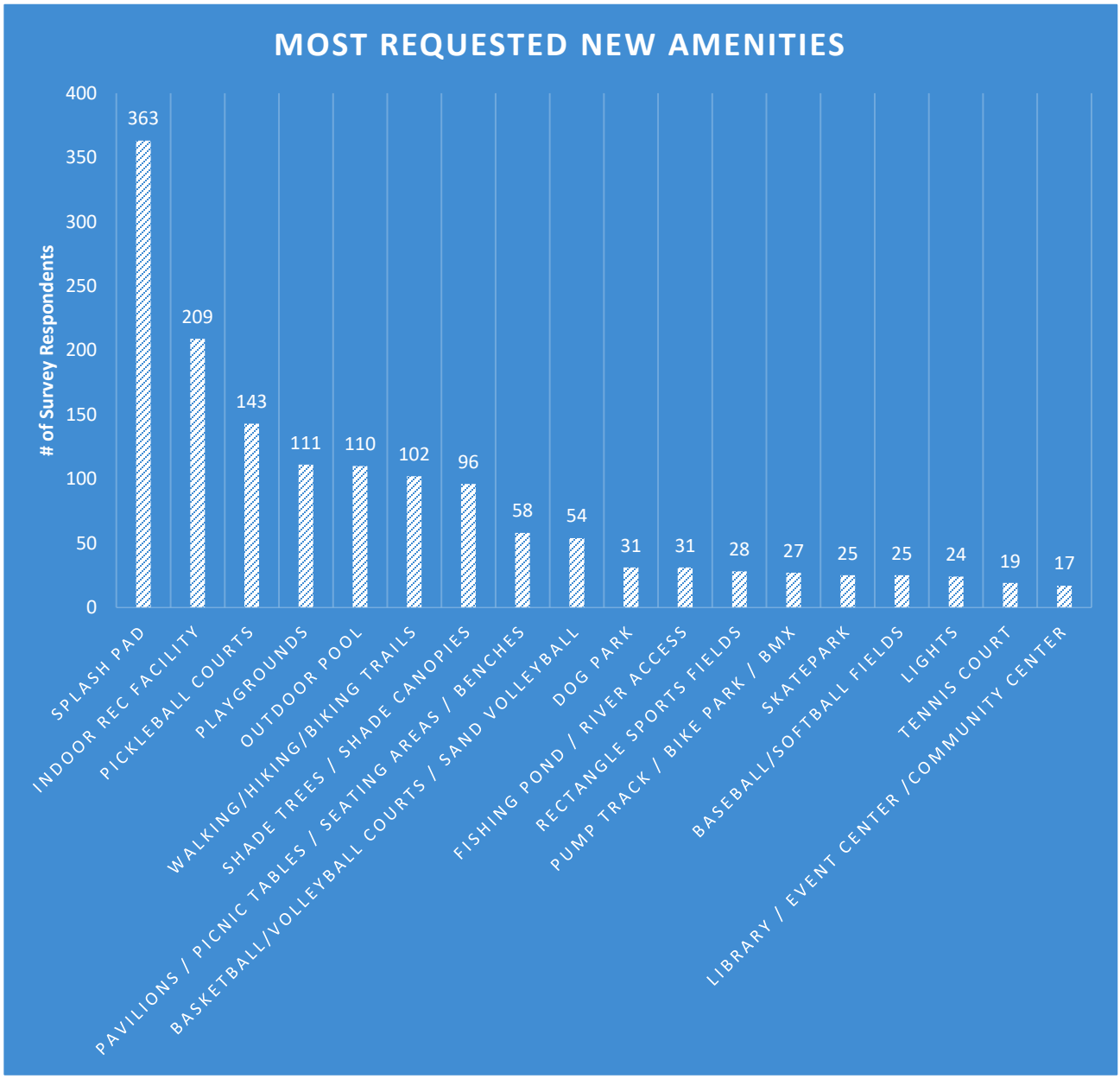


FIGURE 20 - NEW AMENITY DEMANDS

The Indoor Recreation Facility, described in the survey, would likely include a swimming pool, gym, sports fields & courts, & indoor playgrounds.

FACILITIES MOST USED OUTSIDE OF NIBLEY

Top used facilities outside of Nibley were Swimming Pools, Splash Pads, and Hiking Trails.

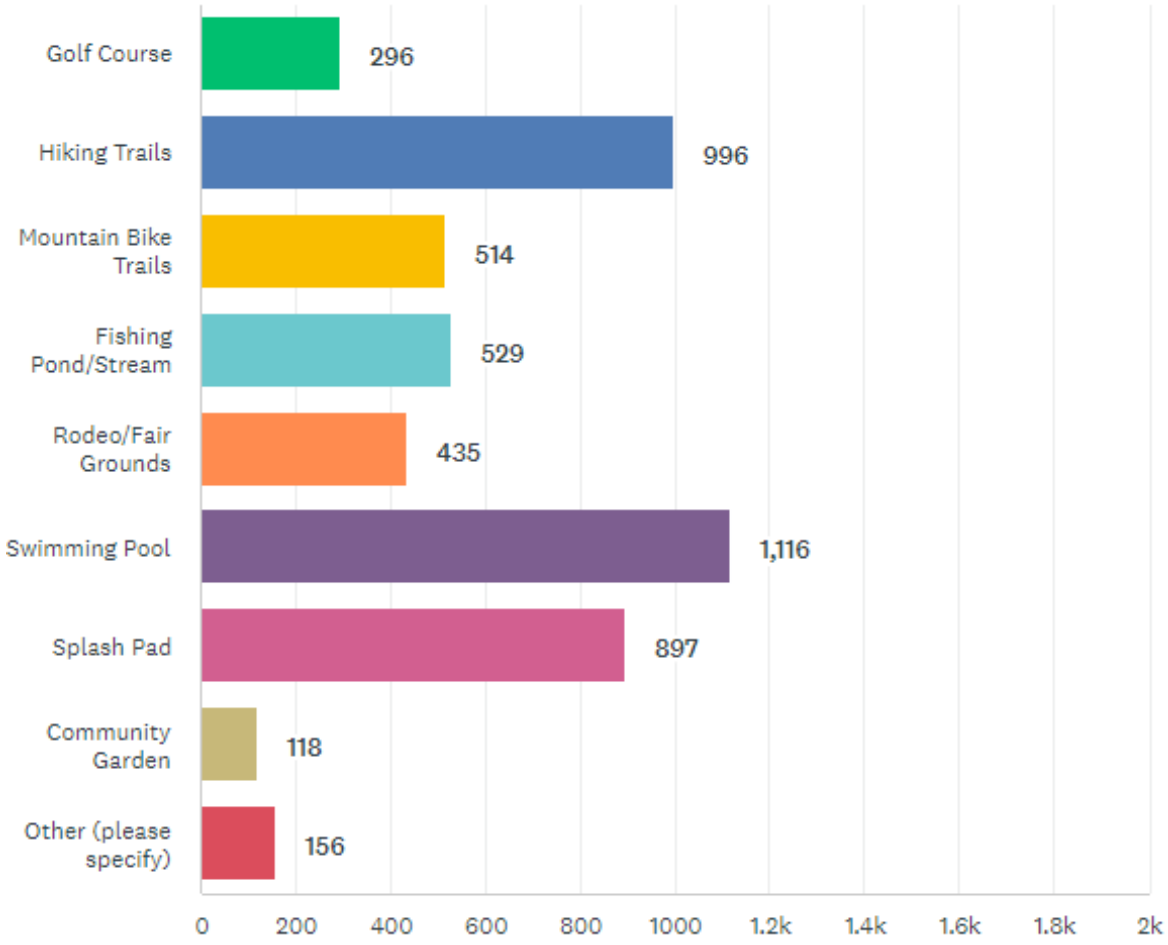


FIGURE 21 - PREFERED FACILITIES OUTSIDE NIBLEY CITY

LACK OF FACILITIES

Many people communicated a lack of park facilities/amenities in the southeast and southwest parts of Nibley.

*See appendix D for recreation programs planning.

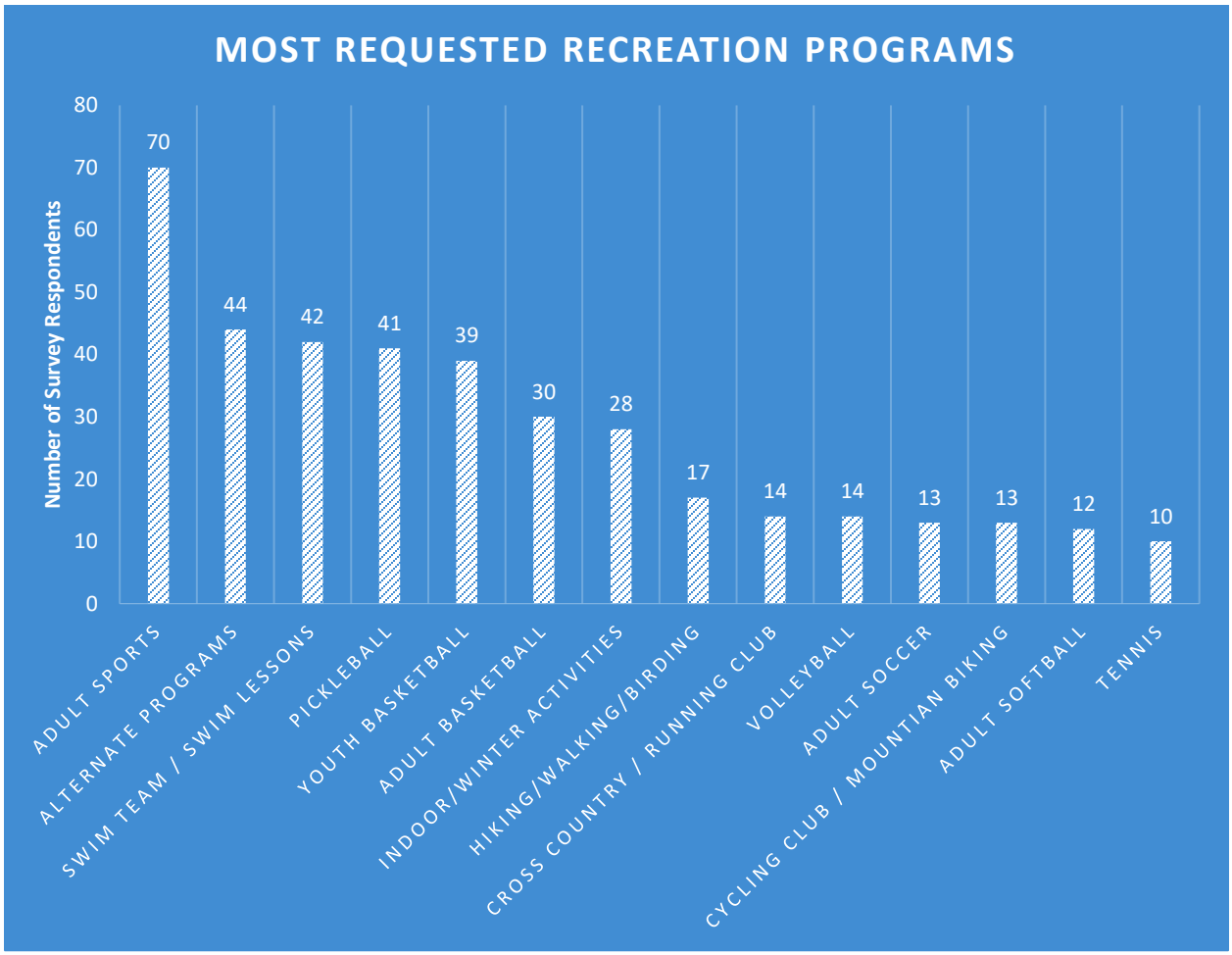


FIGURE 22 - RECREATION PROGRAM DEMANDS

PROGRAM PARTICIPATION

Nearly 80% of the community expressed an interest in participating in youth and/or adult recreation programs; youth programs were about 20% more popular than adult programs.

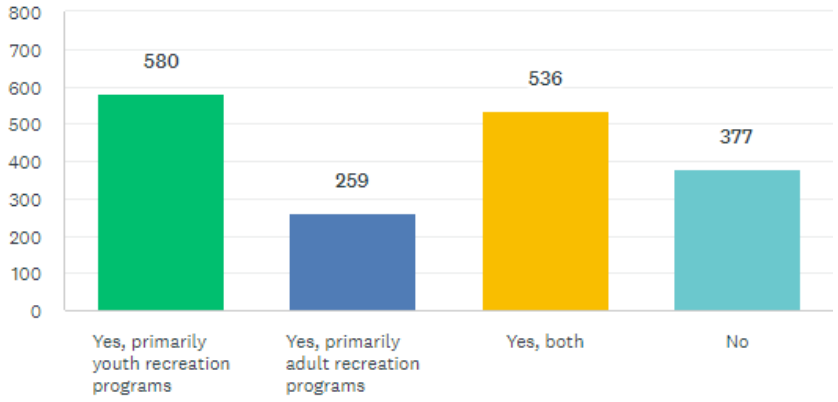


FIGURE 23 - PROGRAM PARTICIPATION SURVEY RESULTS

ORGANIZED SPORTS FACILITIES

Providing new facilities for organized sports was given the highest priority, and it was the most consistently requested item in the community's written responses. It seems that residents of Nibley City value passive recreation spaces and desire to preserve open space, but the lack of organized sports facilities is likely an inconvenience for practice and/or games.

INDOOR REC CENTER

An overwhelming number of people (84%) support an indoor recreation center. Most suggested that it be located either in the Nibley Regional Park location or the Ridgeline Park Location. The most popular elements to be included in a new indoor rec facility were a swimming pool, an indoor gym, an indoor track, pickleball courts, a rock-climbing wall, and basketball/other sports courts.

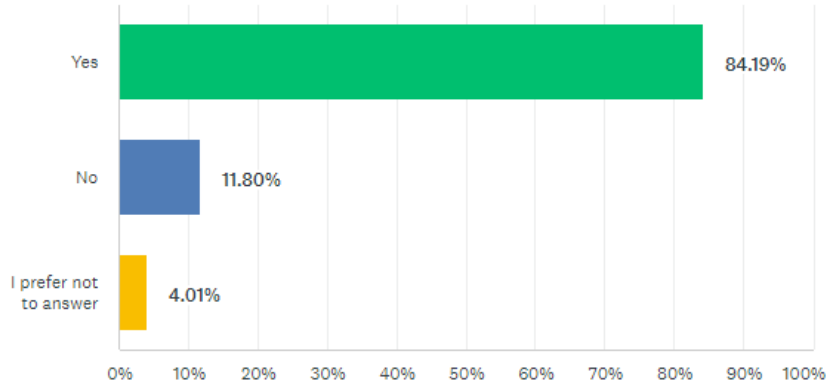


FIGURE 24 - INDOOR RECRATION CENTER PREFERENCE RESULTS

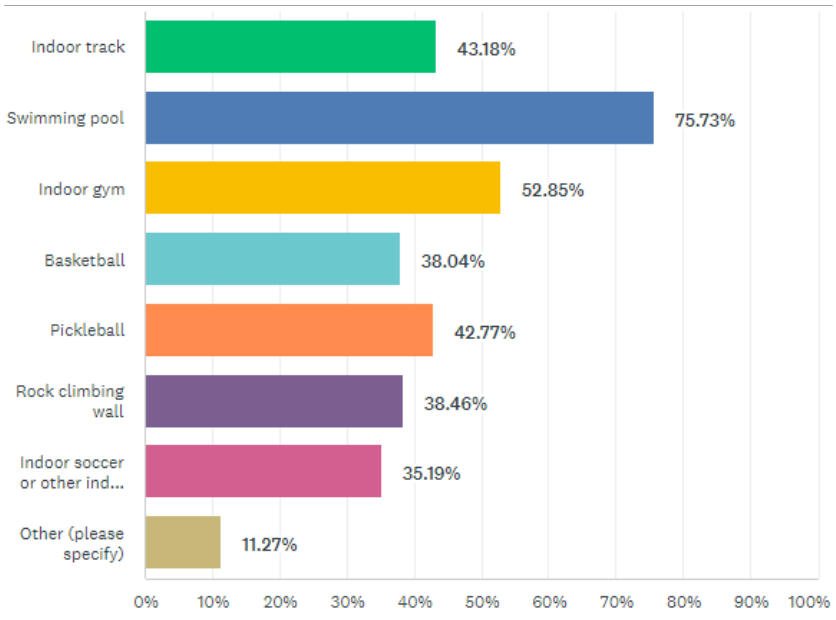


FIGURE 25 - NEW RECREATION CENTER AMENITIES

PRIORITIZATION OF CITY FUNDS

The community determined a similar amount of priority for all park and open space types except for building new sports facilities for organized sports. The organized sports category was consistently ranked the highest priority although the other categories were well represented.

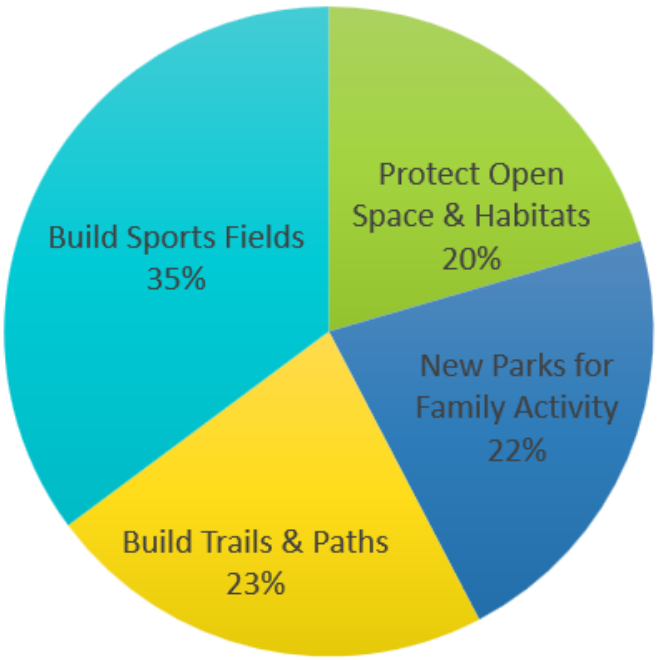


FIGURE 26 - FUNDING PRIORITY RESULTS

Organized Sports Facilities

Nibley residents have identified a highly valuable recreational resource would be indoor sports space given the adverse weather for any given season.

Build or Maintain

Many people commented that they would prefer city funds to be directed to better maintenance and management of the existing facilities rather than building new ones.

Firefly Population

Several locals reached out to stress the importance of protecting the firefly habitat in firefly park. The light pollution from the Strata apartments puts the firefly population at risk.

Morgan Farm

Generally, the community loves Morgan Farm and doesn't desire much change to its current state. The most popular ideas for the site were to preserve housing for animals and preserve the

agricultural character of the site although several were supportive of improving the site to enhance its use and/or add other uses, such as event space, outdoor classrooms, and community gardens.

Morgan Farm it is a unique public facility that is operated in partnership with local caretakers. It currently includes an old barn, farming implements, and housing for various farm animals. The city is deciding what should be included in the future uses of this parcel. Please select the ideas that you support.

Answered: 1,729 Skipped: 207

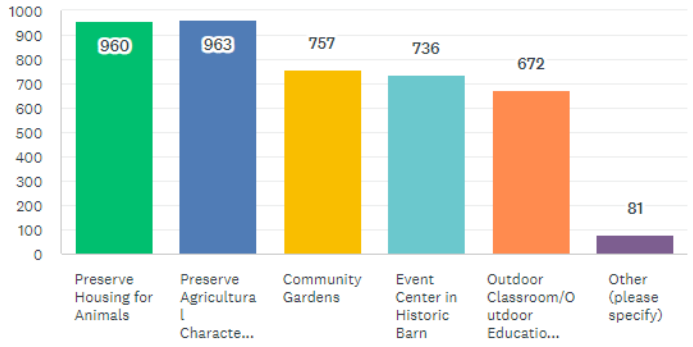


FIGURE 27 - MORGAN FARM IMPLEMENTATION RESULTS

Areas of Conflict

Only two significant topics were apparently controversial. Striking the balance of addressing needs in compromise is a major priority for planning efforts.

- Parks along Hollow Road
- Strata Apartments (Logan) and light pollution of Firefly Park

PARKS MASTER PLAN
PUBLIC INPUT FINDINGS

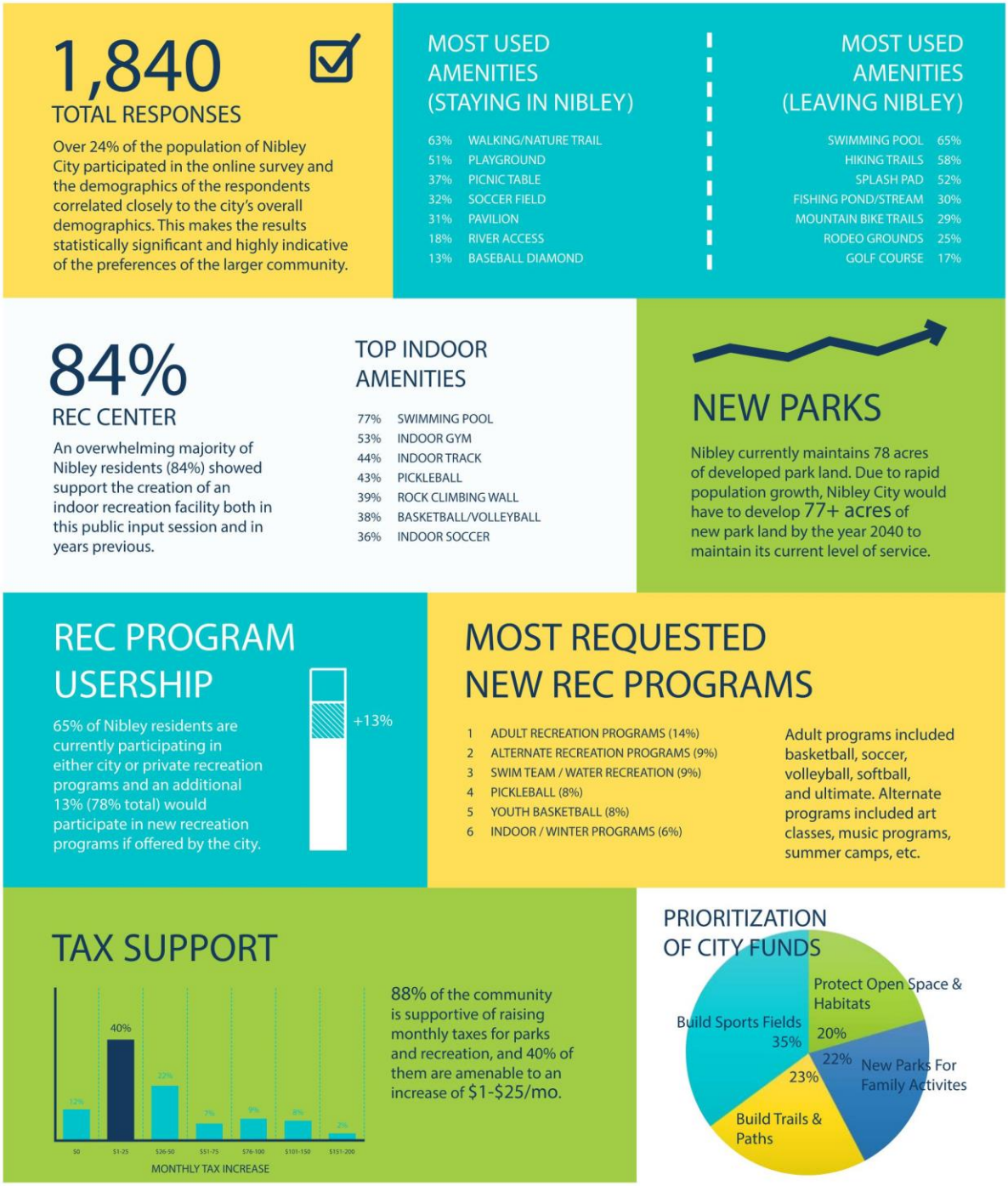


FIGURE 28 - SURVEY SUMMARY

MAINTENANCE STRATEGY

Nibley City is committed to the health, welfare, and safety of its residents and the provision of well-maintained parks and open spaces. Therefore, the preservation and enhancement of the current parks is a priority, leaving capital improvements a secondary collective aspiration. A list of financial guidelines is identified to track fulfill this intent.

MAINTENANCE GUIDELINES

The specific recommendations for Nibley City are as follows:

- Standard turf maintenance costs: $18,000 per acre annually
- Standard personnel needed:
    - 8 full-time employees per 100 acres
    - 20 seasonal employees per 100 acres
- Purchase of new mowing equipment every eight to ten years:
    - 2 area mowers per 100 acres ($100,000 each)
    - 4 riding mowers per 100 acres ($30,000 each)
- Purchase of pickup trucks:
    - 8 - 12 years
    - 12 trucks per 100 acres (1 per user) which can be used to plow snow
- Purchase of maintenance tools and supplies
- Maintenance of Playground Equipment: weekly
- Purchase of Playground Equipment:
    - 8 – 10 years usually
    - 15 – 20 years depending of the weather conditions, usage, and quality
- Fertilizing: two times per year minimum
- Inspection of playgrounds: weekly
- Cleaning of restrooms: once or twice daily
- Pavilion cleaning: before each event
- Extra expenses: community support, team building, inspections, playground repair, landscaping, and facility cleaning.



COMPARING COST OF MAINTENANCE

The cost of maintenance can be compared to other cities, depending on the amount of park acreage. One example is the maintenance budget for Salt Lake City, $15.5 million per 850 acres. Another precedent is, that Salt Lake City uses service pickup trucks all season, using three of twelve as dumper trucks with snowplows.

FIGURE 29 – HERITAGE PARK

GENERAL FACILITIES MAINTENANCE AND MANAGEMENT

The following is an initial draft of a maintenance management schedule for Nibley City as a resource for maintenance to track tasks throughout the year. A refined version for each park can articulate ongoing maintenance cost.

TABLE 7 - MAINTENANCE SCHEDULE DRAFT (NEXT PAGE)

Nibley City Parks, Recreation, & Open Spaces Updated: March 2024

Site Management Plan

SERVICE CALENDAR

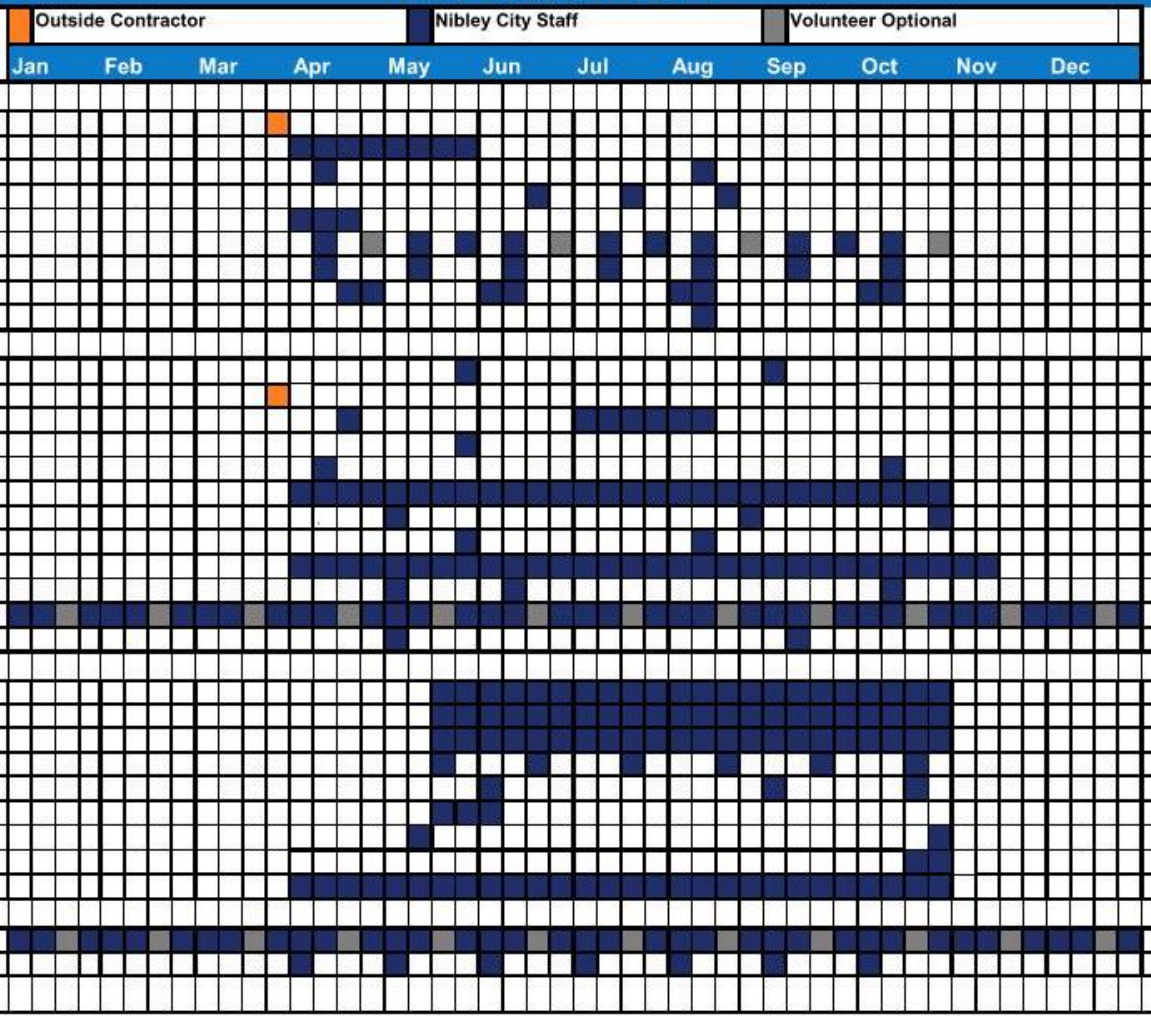


	Number of Times Per Year	Cost Per Each Event	TOTAL COST
MANAGEMENT			
INSPECTION	2		$ -
SAFETY MEETING	16		$ -
EMPLOYEE PERFORMANCE	1		$ -
GOALS/ PERFORMANCE APPRAISAL	1		$ -
SUPERVISOR MEETING	12		$ -
PREPARE ANNUAL BUDGET	1		$ -
SEASONAL FLOWERS			
PURCHASE ANNUALS	3		$ -
PLANT ANNUALS	2		$ -
AGRICULTURAL SOILS REPORT	1		$ -
INSPECTION/PHOTOS	2		$ -
ORDER BULBS	1		$ -
PLANT BULBS	5		$ -
APPLY PRE-EMERGENT	2		$ -
REPLACE SOIL/SOIL AMENDMENTS	2		$ -
REMOVE FLOWERS	4		$ -
DEAD-HEAD SPENT FLOWERS	25		$ -
WEED/CLEAN UP BEDS	32		$ -
SPRAY INSECTICIDES	3		$ -
FERTILIZE	6		$ -
TREES			
PRUNING	8		$ -
TREE REPLACEMENT	12		$ -
ANNUAL ARBORIST INSPECTION	2		$ -
INSPECTION/PHOTOS OF TREES	1		$ -
SPRAY DISEASE/PESTS	1		$ -
TREE INJECTION	2		$ -
FERTILIZE	4		$ -
RAKE LEAVES	16		$ -
BARK MULCH CLEAN UP	3		$ -
SHRUBS			
PURCHASE MULCH	1		$ -
APPLY TOP DRESSING MULCH	3		$ -
SPRAY FOR APHIDS	4		$ -
REPLACEMENT	8		$ -
AGRICULTURAL SOILS REPORT	1		$ -
INSPECTION/PHOTOS	1		$ -
SPRAY PRE-EMERGENT	1		$ -
PRUNE SPRING FLOWERING SHRUBS	4		$ -
PRUNE DECIDUOUS SHRUBS	8		$ -
WEED	14		$ -

Name:Nibley City Parks, Recreation, & Open Spaces Updated: March 2024

Site Management Plan

SERVICE CALENDAR



	Number of Times Per Year	Cost Per Each Event	TOTAL COST
GROUNDCOVERS/PERENNIALS			
AGRICULTURAL SOILS REPORT	1		$ -
REPLACEMENT	8		$ -
APPLY PRE-EMERGENT	2		$ -
SLUG & SNAIL BAIT ON PERENNIALS	3		$ -
APPLY TOP DRESSING MULCH	3		$ -
WEED	14		$ -
EDGING	7		$ -
FERTILIZE	8		$ -
INSPECTION/PHOTOS	1		$ -
LAWNS			
AERATE	2		$ -
AGRICULTURAL SOILS REPORT	1		$ -
CRAB GRASS CONTROL	7		$ -
FUNGICIDE	1		$ -
APPLY PRE-EMERGENT	2		$ -
EDGING	28		$ -
FERTILIZE	3		$ -
INSPECTION/PHOTOS	2		$ -
MOWING	30		$ -
MEADOW GRASS MOWING	3		$ -
PICK UP TRASH	52		$ -
SPRAY BROADLEAF WEED KILLER	2		$ -
IRRIGATION SYSTEM			
REPAIR SPRINKLER SYSTEM	28		$ -
CHECK/REPLACE BROKEN HEADS	28		$ -
VALVE REPAIR/REPLACEMENT	28		$ -
ADJUST FOR DISTRIBUTION UNIFORMITY	7		$ -
ADJUST WATERING TIMES	4		$ -
SPRING START-UP	3		$ -
MAINTENANCE OF PIPELINE SYSTEM	1		$ -
DRAIN SYSTEM/PREP FOR WINTER	2		$ -
INSPECTION	28		$ -
HARD SURFACES			
PICK UP TRASH	300		$ -
SPRAY FOR WEEDS IN SIDEWALK CRACKS	7		$ -

Name:Nibley City Parks, Recreation, & Open Spaces Updated: March 2024

Site Management Plan

SERVICE CALENDAR

Outside Contractor | Nibley City Staff | Volunteer Optional

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Number of Times Per Year	Cost Per Each Event	TOTAL COST
HARD SURFACES (cont.)															
CLEAN BENCHES													52		$ -
CLEAN SIGNS													3		$ -
CLEAN/SWEEP GUTTERS/SIDEWALKS													52		$ -
CLEAN PAVILIONS/PATIOS													36		$ -
CLEAN BATHROOMS													52		$ -
CLEAN PLAYGROUND AREAS													36		$ -
CLEAN SPORT AREAS													28		$ -
FILL SIDEWALK CRACKS WITH CAULK													8		$ -
SEAL PARKING LOTS													1		$ -
SEAL SIDEWALKS													3		$ -
POWER WASH SIDEWALKS													7		$ -
INSPECT & REPAIR GATES													36		$ -
INSPECT, CLEAN & REPAIR FENCES													18		$ -
WASH AND TREAT WALLS													9		$ -
CLEAN PARKING LOT													52		$ -
INSPECTION													52		$ -
WATER INFRASTRUCTURE															
POOL CHEMICAL BALANCE													52		$ -
PUMP INSPECTION													52		$ -
EXTERIOR LIGHTING															
CHECK FOR BURNED OUT LIGHTS													52		$ -
CHECK FOR DAMAGED FIXTURES													52		$ -
CLEAN EXTERIOR LIGHTING													16		$ -
INSPECTION													52		$ -
SITE DRAINAGE															
CLEAN-OUT MAINTENANCE													16		$ -
LEAF/DEBRIS CLEARING													52		$ -
SITE DRAINAGE INSPECTION													16		$ -
EQUIPMENT/MAINTENANCE															
HOSE REPAIR													1		$ -
TOOLS, HAND: INVENTORY													2		$ -
CLEAN EQUIPMENT													52		$ -
TRUCK MAINTENANCE/REPAIR													52		$ -
LAWN MOWER MAINTENANCE/REPAIR													52		$ -
RIDING MOWER MAINTENANCE													52		$ -
OTHER SMALL ENGINE EQUIPMENT													52		$ -
PLAYGROUND EQUIPMENT/MAINTENANCE															
SWINGS													42		$ -
SLIDES													42		$ -
PLAY STRUCTURES													42		$ -
AMENITY MAINTENANCE															
PAVILION MAINTENANCE													36		$ -
STAGE MAINTENANCE															
DIAMOND FIELD MAINTENANCE															
SPORTS COURT MAINTENANCE															
RECTANGLE FIELD MAINTENANCE													36		$ -
TOTAL PROJECTED BUDGET															$ -

Page 3 of 3

PARK FACILITIES MANAGEMENT PLAN

Maintaining existing recreation infrastructure is prioritized over building new parks. However, future funding & city growth will eventually lead to developing additional amenities. The cost for establishing new parks depends on many factors like location, size, existing infrastructure, and desired amenities. Nibley City is committed to prioritizing the maintenance and improvement of the existing infrastructure before adding new amenities.



FIGURE 30 – HERITAGE PARK

MANAGEMENT INFRASTRUCTURE IMPROVEMENTS

As needed, technological improvements are to be integrated into existing systems & processes. This will save maintenance labor, improve sustainability, & maintenance cost. One point is to integrate cameras for security & maintenance observations. Another is replacing high energy light fixtures with energy efficient luminaires & necessary components.

ANHDER PARK

This park included a soccer/baseball field, restroom building, a pickleball court, tennis court, amphitheater, playground, and open lawn. Some improvements are proposed in the Anhder Park Concept.

TABLE 8 – ANHDER PARK PROPOSED IMPROVEMENTS

	Minimal Improvement	Ideal Improvement
8.01	Expand existing restroom building to include 4 unisex restrooms	- Demolish existing single restroom building - New restroom building to be installed with 4 unisex restrooms, located at current pavilion
8.02	Amphitheater width expansion Walk lighting for movies in the park	- Storage, walk lighting, & theater backdrop - New storage building location for Children's Theater equipment
8.03	Install lower structure members on fence	
8.04	Install mow curb under fence	
8.05		- Add lighting to other parks
8.06		Replace old chain-link fencing at softball field with new fencing that has a mow strip and utilize portable outfield fencing during sports seasons.
8.07	Remove extra swing set beam	- Remove old swing set - Install new swing set
8.08	Upgrade 100-amp breaker, providing food vendor electrical connections	- Large amperage provisions
8.09		- Pavilion to be demolished - New pavilion to be installed at the location of the current restroom building
8.10	Install field sprinkler heads with manual valve control	- Upgrade to weather-trak - Add quick coupler
8.11		- Develop off street parking
8.12	Cut turf & mulch tree rings up to drip line	
8.13	Provisions to discourage motors bike use	- Signage & enforcement
8.14	Relocate to city parks office Install pavilion in the storage containers place	- Relocate contents to expanded amphitheater storage building - Install pavilion in the storage containers place
8.15	Demolish affected asphalt trail sections Install aggregate base & new asphalt at border of parking lot.	
8.16	Install swale for better drainage	- Install curbing to reroute storm run-off east to softball field
8.17	Install dugout shade provisions	
8.18	Replace backstop	- Install backstop with adult size overhangs
8.19	Empty garbage cans daily	

8.20	Landscape previous access drive area Storm water collection needed along concrete edge near previous access drive	- Consider programming use here
8.21	Add wheel stops	
8.22	Add cross walk	- Add crossing lights - Install bump outs on W 3200 S



FIGURE 31 – ANHDER PARK

The softball field is maintained to serve as a multi-functional field for other recreational active programming & passive uses.

Public input survey responses indicated approval of the pickleball, playground, & sports fields. Common requests for park improvements included more seating & more sports courts among various requests for amenities,

- More lighting

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for long range amenity replacements.

*See the Anhder Park concept & replacement schedule on page 83

BLACKSMITH FORK RIVER TRAIL

This trail starts at the intersection of 200 North and 300 West, Millville, a cross street of Ridgeline High School. It is owned and maintained by Nibley City, and in the future, it will connect to the Blacksmith Fork River Trail.

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 9 - BLACKSMITH FORK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Concrete Path	20-30	2015	2040
Metal Bench	10-20	2015	2030

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

CITY HALL PARK

This park is an open space for soccer/flag football use. Its connection with the City Office building provides indoor and outdoor spaces for gathering groups.

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 10 - CITY HALL PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Natural Grass Field	5-7	2023	2028-30
Asphalt Parking	15-20	2023	2038-43

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

CLEAR CREEK PARK & TRAIL

A neighborhood park that offers passive and some active recreation opportunities. This park includes a soccer field, a small playground, and walking paths.

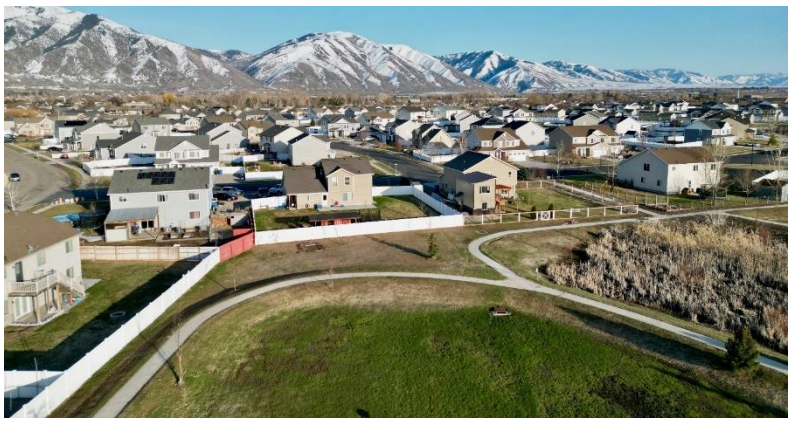


FIGURE 32 – NIBLEY CITY

TABLE 11 – CLEAR CREEK PARK & TRAIL PROPOSED MAINTENANCE

	Minimal Improvement	Ideal Improvement
3.01	Introduce rivulets	- Develop fishing pond
3.02	Algae bloom mitigation	- Develop fishing pond
3.03		- Install shade structure and concrete pad
3.04		- 6' privacy wall
3.05		- Fishing pond

Public input survey responses indicated approval of the zipline, pavilion, fields, & paths. Common requests for park improvements included more trees & shade, among various amenities,

- Picnic tables
- More play equipment such as swings & slides
- Benches

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 12 - CLEAR CREEK PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Natural Grass Field	5-7	2023	2028-30
Asphalt Parking	15-20	2023	2038-43
Restroom Building	30-50	2025	2065
Prefabricated Playground	15-20	2025	2043
Structures	15-30	2020	2035-50

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

DISCOVERY PARK/SUNRISE MEADOWS

This park has active and passive recreational opportunities. It includes ecological areas, walking paths, and a disc golf course.

Proposed maintenance items:

- Sprinklers finished on the West side
- More trees in the northwest basins
- Maintenance of the wetland areas

Public input survey responses indicated approval of the disc golf course. The most common requests for park improvements were improved signage and pedestrian safety.

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 13 - DISCOVERY PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Natural Grass Field	5-7	2015	2020-22
Concrete Path	20-30	2010	2030-40

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

ELKHORN PARK

This park has open space for passive and active use. It includes a field for sports, a pavilion, and parking.

TABLE 14 – ELKHORN PARK PROPOSED MAINTENANCE

	Minimal Improvement	Ideal Improvement
12.01	Regrade athletic field	
12.02	Replace irrigation system	
12.03		Install pickup location at elementary school
12.04	Remove aging trees posing risk to site users	Replace aging trees posing risk to site users
12.05	Install Boulders to limit vehicle access	Install Bollards to limit vehicle access

Public input survey responses indicated approval of the playground & shade. Common requests for park improvements included baseball field improvements, infrastructure for younger children, & benches near the playground.



FIGURE 33 - ELKHORN PARK

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 15 - ELKHORN PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Asphalt Parking Lot	15-20	2000	2015-20
Natural Grass Field	5-7	1995	2000-02
Restroom Building	30-50	2000	2030-50
Picnic Table	20-30	2000	2020-30
Pavilion	20-30	2025	2050

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.



FIGURE 34 – ELKHORN PARK

FIREFLY PARK

This park includes ecological areas, two overlook towers, a nature playground, outdoor classroom, restrooms, small parking, and walking paths that connect to Heritage Park.

TABLE 16 – FIREFLY PARK PROPOSED MAINTENANCE

	Minimal Improvement	Ideal Improvement
2.01	Naturalized vegetation maintenance	Create naturalized maintenance plan specific for Firefly Park

Public input survey responses indicated overwhelming approval of the ecological components, fireflies, & paths. Survey responses also indicated approval of disallowing dogs, the outlooks, & playground. Common requests for park improvements included trees & shade, light screening, more ecological measures, & allowing dogs among various requests for amenities,

- More or improved playground equipment
- More outlooks and a wildlife viewing bridge



FIGURE 35 – OUTDOOR CLASSROOM

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 17 - FIREFLY PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Lookout Tower			
Concrete footings or anchors	20-30	2018	2038-48
Structures	15-30	2018	2033-48
Other			
Asphalt Parking Lot	15-20	2016	2031-36
Prefabricated Playground	15-20	2016	2031-36
Concrete Path	20-30	2016	2036-46
Restroom Building	30-50	2023	2053-63
Picnic Table	10-15	2017	2027-32
Metal Bench	10-20	2016	2026-36

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.



FIGURE 36 – FIREFLY PARK

HERITAGE PARK

This park provides opportunities for active and passive recreational activities. It has soccer fields, a baseball field, a playground, a big parking lot on the northeast side, a small parking lot on the southwest side, and a pavilion with two separate areas and restrooms.



FIGURE 37 – HERITAGE PARK

TABLE 18 – HERITAGE PARK PROPOSED MAINTENANCE

	Minimal Improvement	Ideal Improvement
1.01	Replace dugout shade structure	- Install a stronger shade structure

Public input survey responses indicated approval of the playground, paths, sports fields, & pavilion. Common requests for park improvements included an improved playground on the north end of the site with shade, a running water fountain, & pickleball courts among various amenities,

- Other sports courts
- Splash pad
- Benches & Picnic Tables

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 19 - HERITAGE PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Diamond Field			
Infield	3-5	2011	2014-16
Grass Outfield	5-7	2011	2016-18
Fencing & Backstops	3-5	2011	2014-16
Zipline			
Steel Cables	10-20	2020	2030-40
Trolleys & Pulleys	5-10	2020	2025-30
Harnesses	5-10	2020	2025-30
Concrete footings or anchors	20-30	2020	2040-50
Other			
Asphalt Parking Lot	15-20	2010	2025-30
Natural Grass Field	5-7	2011	2016-18
Prefabricated Playground	15-20	2008	2043
Concrete Path	20-30	2011	2050
Restroom Building	30-50	2008, 2019	2038-58, 2049-69
Picnic Table	10-15	2008, 2019	2018-23, 2029-34
Pavilion	20-30	2008, 2019	2028-38, 2039-49
Metal Bench	10-20	2008	2018-28

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

MEADOW VIEW PARK

This vast majority of this neighborhood park is used as a stormwater basin that offers some passive and active recreation opportunities. It has a playground, and sports practice field.

TABLE 20 – MEADOW VIEW PARK PROPOSED MAINTENANCE

	Minimal Improvement	Ideal Improvement
6.01	Storm water mitigation infrastructure	- Upgrade retention basin for ongoing receival
6.02	Siltation clean-up	

Public input survey responses indicated approval of the playground. The most common request for park improvement was adding swings. There are currently size constraints for improvements due to the size of the stormwater basin.

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 21 - MEADOWVIEW PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Natural Grass Field	5-7	2002	2007-09
Concrete Path	20-30	2002	2022-32
Prefabricated Playground	15-20	2002	2017-22
Metal Bench	10-20	2002	2012-22

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

MORGAN FARM



FIGURE 38 – MORGAN FARM

This historic site is a landmark for Nibley City and Cache Valley. It offers an open space and cultural and recreational activities throughout the year. It has farm animals, a community garden, displays of farm vehicles, and a historic barn that may have the potential of functioning as an event center for community activities with significant upgrades to the structure. There are no proposed maintenance items for this park, although several improvements to amenities are being explored. The farm caretakers are currently working on developing a 501(C)(3) that would continue to maintain and improve the farm.

MT. VISTA OPEN SPACE & TRAIL

This is a neighborhood park with open space located on 3600 South and 450 West.

Public input survey responses indicated approval of the size, openness, & proximity to residents. The most common request for park improvement was adding a playground, which was constructed as of June 2024.

The City has tentative plans for also developing a restroom, and pavilion and may consider a future expansion of the playground.

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 22 - MT. VISTA LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Natural Grass Field	5-7	2022	2027-29
Concrete Path	20-30	2022	2042-52
Prefabricated Playground	15-20	2024	2039-44

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

NIBLEY GARDENS

This neighborhood park offers an open space with walking paths that connect with other vicinity walking paths. It is located at 2980 South and 1200 West.



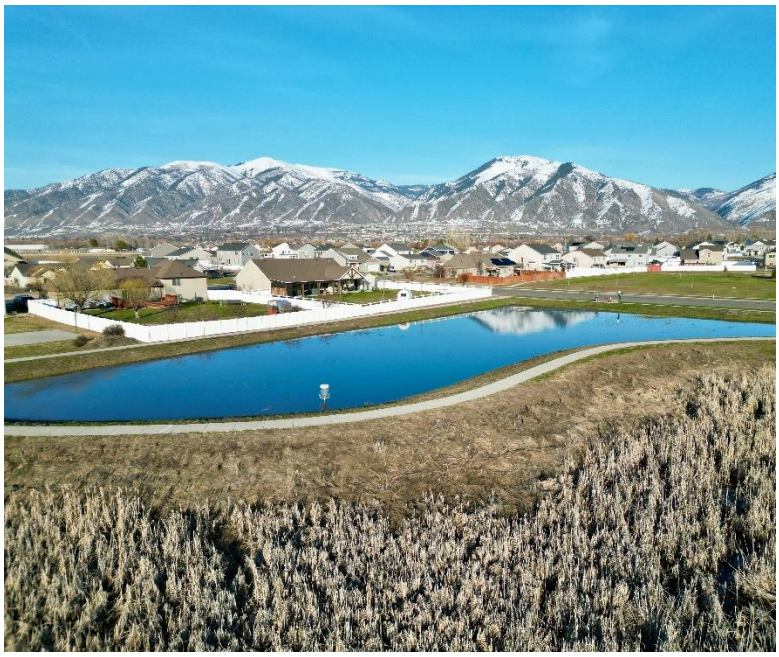


FIGURE 39 – NIBLEY GARDENS

TABLE 23 – NIBLEY GARDENS PROPOSED MAINTENANCE

		Minimal Improvement	Ideal Improvement
5.01		Landscape maintenance	

The following amenities are present & should be replaced given the adjusted lifecycle schedule.

TABLE 24 - NIBLEY GARDENS LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Natural Grass Field	5-7	2009	2014-16
Concrete Path	20-30	2009	2029-39

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

PROPOSED NEW AMENITIES

Among the improvements aggregated from the input from the expert parks team mentioned at the beginning of this section. This was extracted from the general maintenance plan inventory in the interest of avoiding disrupting a concise improvement procession. The following is being considered for various locations including remaining at Anhder park with improvements.

Children's Theater

The current Children's theater is located at Anhder Park. One proposal is to locate to a larger park & provide several additional improvements.

- Fencing
- Walk lighting
- Theater backdrop
- Larger platform than the one in Anhder Park
- Wider seating than the one in Anhder Park for 1000 users (supports 250 users)
- Shade sails
- Playground
- Building
  - Providing shade
  - Children's Theater storage
  - Green room
  - Restrooms
  - Storage

At the time of planning, the Children's Theater is most likely to remain at Anhder Park. However, given sufficient demand, may be relocated to the Regional Park or elsewhere.

MASTER PLANNED IMPROVEMENT – LIFECYCLE UPKEEP

Outside of regular annual maintenance, lifecycle frequency & expense is an integral component to prioritizing resources. The following infrastructure & amenities are components of the existing parks & master planned proposed parks.

- High school soccer field:
    - Natural grass field: 5-7 years (with regular maintenance such as aerating, overseeding, and fertilizing)
    - Artificial turf field: 8-12 years (depending on usage and quality of turf)
- Diamond fields:
    - Infield playing surface (clay or dirt): 3-5 years (with regular grooming, watering, and addition of new material)
    - Grass outfield: 5-7 years (with regular maintenance such as mowing, aerating, and overseeding)
    - Fencing and backstops: 20-30 years (with occasional repairs and maintenance)
- Recreation pool:
    - Concrete pool shell: 20-30 years (with regular maintenance and occasional repairs)
    - Pool liner (if applicable): 7-10 years (depending on material and usage)
    - Pool equipment (pumps, filters, etc.): 10-15 years (with regular maintenance and occasional replacements)
- Asphalt parking lot: 15-20 years (with regular maintenance such as crack sealing and resurfacing)
- Prefab playground: 15-20 years (depending on usage and quality of materials)
- Restroom building: 30-50 years (with regular maintenance and occasional renovations)
- Picnic table: 10-15 years (depending on material and exposure to elements)
- Amphitheater concrete stage: 30-50 years (with regular maintenance such as sealing and repairs)
- Mobile bleachers: 15-20 years (depending on usage and maintenance)
- Tennis court: 15-25 years (with regular resurfacing and maintenance)
- Pickleball courts: 10-15 years (depending on usage and maintenance)
- Pavilion: 20-30 years (depending on material and maintenance)
- Gravel path: 5-7 years (may require periodic replenishment and grading)
- Dog park:
    - Fencing: 15-20 years (with occasional repairs)
    - Agility equipment: 10-15 years (depending on material and usage)
    - Ground surface (such as grass or artificial turf): 5-7 years (may require reseeding or replacement)
- Skate Park:
    - Concrete ramps and features: 15-20 years (with occasional repairs and resurfacing)
    - Steel elements (rails, ramps): 10-15 years (depending on wear and tear)
- Splash pad:
    - Concrete pad: 20-30 years (with regular maintenance and occasional repairs)

    - Water features and pumps: 10-15 years (with regular maintenance and occasional replacements)
- Concrete path: 20-30 years (with regular maintenance such as sealing and occasional repairs)
- Nature playground equipment:
    - Wooden structures: 10-15 years (with regular inspections, maintenance, and occasional replacements)
    - Natural materials (rocks, logs): 20-30 years (with minimal maintenance)
- Boat ramp:
    - Concrete surface: 20-30 years (with regular maintenance and occasional repairs)
    - Steel elements (rails, winches): 10-15 years (depending on corrosion and wear)
- Zip line:
    - Steel cables: 10-20 years (with regular inspections for wear and tear, and occasional replacement)
    - Trolleys and pulleys: 5-10 years (depending on usage and maintenance)
    - Harnesses and safety equipment: 5-10 years (depending on usage and manufacturer recommendations)
    - Concrete footings or anchors: 20-30 years (with minimal maintenance)
    - Launching and landing platforms:
    - Structures: 15-30 years (with regular inspections, maintenance, and occasional repairs or replacement)

*See General Facilities Maintenance and Management on page 30 for annual schedule

RECREATION PLAN

Healthy lifestyles result in individuals that are happy and productive citizens who give back to our community and enjoy a higher quality of life. Nibley City recognizes that there are socio-economic benefits to a healthy, productive, self-sufficient citizenry; and Nibley City is committed to offering the community recreation programs, events, and facilities to that end. The Recreation Department will offer meaningful purpose-driven recreation programs and events with the ultimate goal of bringing the community together through shared, positive experiences. The primary objective of all recreation offerings is first to build community, and second to support citizens in living a healthy lifestyle; meeting both of these objectives results in a higher quality of life. Supplementary benefits of recreation for participants may include developing additional skills, valuable life lessons, and personal insights that will empower participants to face life's challenges and contribute to our community.

1.0 RECREATION DEPARTMENT GUIDING PRINCIPLES:

1.1 CITIZEN CORE VALUES*

- Family Unity
- Recreation
- Healthy Living
- Education
- Security

*Citizen core values were established previously with the 2017 Parks, Recreation, Trail and Open Space master plan based on survey results

1.2 RECREATION DEPARTMENT CORE VALUES:

- *Community Connectivity*
- *Health and Wellness*
- *Quality of Life*

1.3 RECREATION VISION:

A Happy, Healthy, Connected Community

1.4 RECREATION MISSION STATEMENT:

To create a Happy, Healthy, Connected Community through shared experiences.

1.5 RECREATION STRATEGIES:

To support what Citizens value through the recreation guiding principles by offering information, activities, clinics, programs, and events.

2.0 RECREATION DEPARTMENT CORE VALUES

Support the Citizens of Nibley and use as a guide the Nibley City General plan, Economic Development Plan and Active Transportation Plans:

2.1 FACILITATE COMMUNITY CONNECTIVITY

The Recreation department will support continued expansion and improvement of trails & pathways that connect parks, schools, community focal points, wilderness areas, and trail systems of surrounding cities to facilitate movement and interaction of our citizens, recreation and active transportation. The Recreation department will also increase and encourage positive in person face-to-face interaction through youth and adult sports, fitness programs, indoor recreation space, and quality experiences at community events.

2.2 SUPPORT QUALITY OF LIFE

By offering unique and innovative events, experiences, activities, programs, facilities and spaces, that meet the collective interests of our citizens. The creation of healthy experiences, and the development of efficient multi use indoor and outdoor facilities and spaces supported by the recreation department include: indoor recreation spaces, open space landscapes, nature appreciation sites, historic sites, arts and cultural enrichment space, sports fields and courts, playgrounds, multi-use waterways, parks, trails and pathways.

2.3 IMPROVE HEALTH AND WELLNESS

Through programs, events, and self-guided experiences that include the following interests: fitness, youth and adult athletics, art, culture, history, and education focused on a holistic family approach to mental, emotional, and physical health and wellness.

3.0 RECREATION DEPARTMENT OBJECTIVES & GOALS

3.1 RECREATION OBJECTIVES:

1. Hold well-managed cost-effective events that meet the recreation mission and vision while emphasizing and supporting citizen values.
2. Offer recreation-level youth and adult sports that build community through shared positive experiences.
3. Increase appreciation for the historic and agricultural heritage of Nibley City through education and meaningful hands on experiences that connect citizens to valuable lessons from the past.
4. Support the development and improvement of facilities and spaces that support the recreation mission.
5. Address the needs of both passive and active participants in recreation programs.
6. Connect generations through shared experiences.
7. Improve the overall health of citizens through wellness programming and education.
8. Build a sense of community by organizing events that create opportunities for shared positive experiences and or highlight the skills and talents of Nibley City and Cache Valley residents.

3.2 (2024-2027) RECREATION DEPARTMENT OBJECTIVES:

1. Support the update to the Parks and Recreation Master Plan that includes citizen input and incorporates and supports the active transportation plan.
2. Lead efforts to complete an Indoor Recreation space feasibility study.
3. Support efforts to explore collaboration possibilities for the shared cost and use of Indoor Recreation Facilities with surrounding communities, local schools, Public Private partners, businesses, and others.
4. If determined feasible, with adequate interest from Nibley citizens, support the design and construction of indoor recreation facilities.
5. If constructed, support the opening and operation of Indoor Recreation space
6. Add cost effective and sustainable adult recreation programs.
7. Evaluate growth in youth and adult sports and event space usage to forecast needed park development including outdoor athletic fields.
8. Support as needed a feasibility study and a final design for a regional park to accommodate athletic field and court needs along with desired event space.

3.3 (5 YEAR-BY 2029) RECREATION DEPARTMENT OBJECTIVES:

1. Add youth summer camps and similar program offerings.
2. Offer or support nature and outdoor recreation clinics, programs and events.
3. Evaluate recreation offerings in comparison to recreation agencies in Utah of a similar size that have been recognized by the Utah Parks and Recreation Association as a class-one department of the year agencies, to determine if an adequate level of service has been achieved.
4. If determined feasible, and desired by the community support restoration, preservation, and physical improvements at Morgan Farm with heritage based experiential education and programs.
5. If desired by the community offer heritage-based programing and events at Morgan Farm
6. Assist in the planning and development of connection corridor trails and bike paths
7. Incrementally improve the participant experience for city events, recreation, and fitness programs

4.0 COMMUNITY STRENGTHS, AND RECREATION FOCUS

4.1 YOUNG VIBRANT COMMUNITY:

With 43% of the city's residents under 19 years-old (according to the 2020 Census), there is an abundance of youthful energy in Nibley. The abundance of youthful energy is shared by surrounding communities which creates opportunities for Nibley City to lead out in supporting wholesome recreation for youth of all ages. This also creates a unique opportunity for the recreation department to introduce and foster healthy recreational pursuits that will potentially last a lifetime for its citizens.

Focus: Continue to support the administration and development of youth and adult sports, summer camps, fitness, health and wellness programs to support the physical health of Nibley Citizens. If including youth of surrounding communities is advantageous for Nibley participants and the Nibley Recreation department, Nibley City will continue to include participation in Nibley programs for youth from outside of Nibley

Action Steps:

1. Continuously monitor existing programs for participation trends and effectiveness
2. Facilitate both active and passive recreation opportunities for both youth and adults that are fun, family friendly, and build community unity.
3. Have adequate paid and volunteer staff to support programing

4.2 VOLUNTEERISM:

Individual Citizens and Citizen groups within Nibley City have a strong sense of service and community cooperation. Our Parks and Recreation Advisory committee has been a valuable resource for the City Council, city staff, and the community in keeping in keeping us all connected and communicative regarding relevant parks and recreation offerings and opportunities. The city sponsored Youth Council and Nibley Royalty Academy programs offer service and leadership opportunities for enthusiastic and capable youth throughout the city which have supported numerous events and programs. The Cache Wildlife Association has supported local conservation efforts, nature education and nature appreciation efforts. The Nibley Children's Theatre, Cache Quilters, BLUE Crew, local schools, and other organizations have contributed to our Heritage Days experiences. Other adult volunteers have led sports teams, event committees, and programs that also foster a sense of community. The spirit of volunteerism and service will continue to contribute to the quantity, quality, and success of the recreation available in Nibley.

Focus: Continued support of the organizations mentioned above

Action Steps:

1. Support community volunteers with available resources including event and program promotion channels.
2. Show appreciation for volunteer service through special recognition.
3. Explore expanding volunteer opportunities and connections with local school groups.

4.3 HERITAGE:

Residents and local leadership see the value of preserving the city's historic agricultural and cultural amenities. This has been maintained in part through the tradition of Heritage Days and ownership of the historic Morgan Farm property.

Focus: The recreation department will enhance the value of Nibley's heritage by supporting Heritage Days and offering meaningful hands-on heritage-based experiences that empower citizens with valuable lessons from the past that will guide their future and the future of Nibley.

Action Steps:

1. Support Heritage Days by leading Heritage Days planning, promotion, purchasing, donation and sponsorship management, event coordination and event management.
2. Coordinate and or support the promotion, integration, and development of Morgan Farms activities, and support the development of a comprehensive plan for heritage based special events and community programing at Morgan Farm

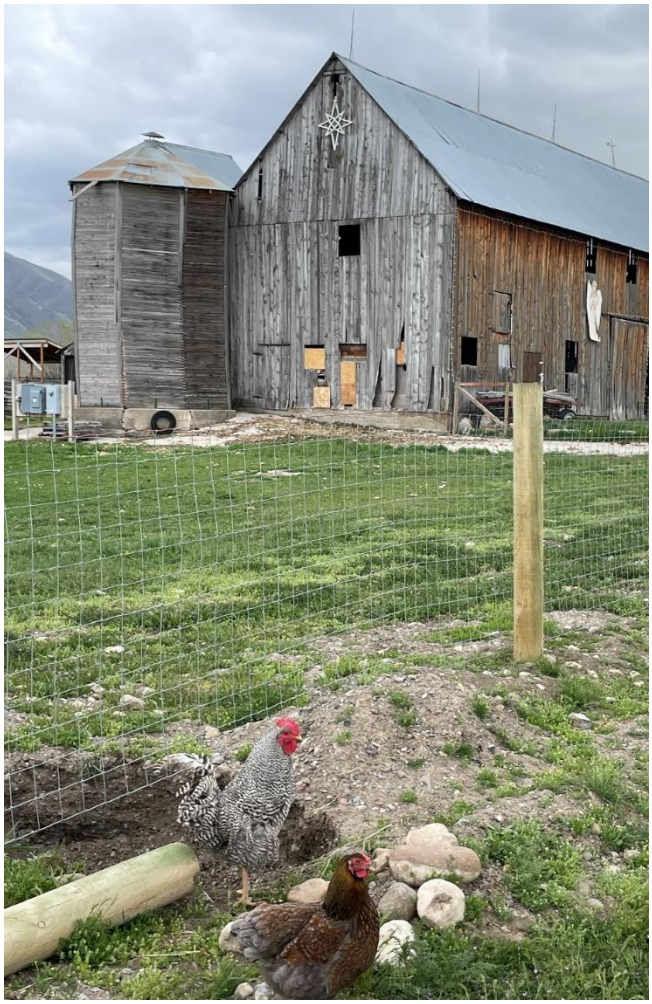


FIGURE 40 – MORGAN FARM

4.4 PARKS, PATHWAYS, TRAILS, AND OPEN SPACE:

One of the city's greatest assets is open space maintained and preserved in part by agricultural land, city parks, pathways and trails.

Focus: Supporting appropriate access, use, and maintenance of existing parks, pathways, trails and open space and participating in the development and management of new amenities.

Action Steps:

1. Assist in identifying and planning appropriate recreation use for open space
2. Continue in managing the scheduling of sports fields and recreation facilities
3. Coordinate with Nibley City's Parks Director for sports field preparation, and assist in monitoring field condition to prevent overuse, resulting in costly and time consuming field repairs.
4. Facilitate nature appreciation and conservation by working with other organizations to develop interpretive experiences and signage along trails and parks.

5. Develop a “no child left inside” nature and conservation-based recreation programming
6. Implement promotional campaigns and community outreach to foster appreciation and appropriate use of parks, pathways, trails, sports fields, and recreation facilities.



FIGURE 41 – NIBLEY OPEN SPACE

5.0 COMMUNITY CHALLENGES AND RECREATION FOCUS:

5.1 POPULATION GROWTH CONSIDERATIONS:

Population growth in Nibley has increased rapidly at times and has generally averaged 2-3% annually. Needs assessments from the current Parks and Recreation plan update, findings from the Parks and Trails and Master Plan adopted in 2017 and 2011 and findings from the 2011 plan based on the Small Community Park Standards indicated that Nibley does not have adequate indoor or outdoor facilities to support our population growth rate for recreation facilities. It is anticipated that the active transportation plan being created in 2024 will also identify shortfalls in service compared to population growth. An even more significant challenge to population growth is coming from recent and proposed housing developments where Logan City and Nibley City meet. Residents of these South Logan communities across the street from Nibley Parks will effectively be a part of the Nibley City through school, recreation,

and religious participation, however, there is not a tax base to support subsidized participation or wear and tear on existing park facilities.

Nibley City will not be able to keep pace and fully serve its growing population until improvements to the recreation infrastructure are addressed. Although some recent progress has been made in creating additional athletic fields, the rate of athletic field planned is not keeping pace with population growth. Development of centralized athletic fields to meet the needs of youth and adult sports need to be addressed and may result in the greatest immediate beneficial impact for the community. Centralized fields also offer efficiencies in maintenance and maximize the benefit of community interaction. Supporting the development of versatile multi-use athletic fields with a focus of first meeting current demands and transitioning into forecasting for future demands for athletic field space is recommended.

5.2 CHALLENGE: INDOOR RECREATION SPACE:

With the exception of the community center at City Hall, and limited access to the Mountain Peak Volleyball Facility, there is a shortage of indoor recreation space available for recreation programs and events. Lack of indoor recreation space significantly limits the mental, emotional, and physical benefits of recreation and the type and amount of recreation programs we are able to offer. While some programs and events can be reasonably held outside, they are limited by weather, and daylight constraints. Some years use of outdoor facilities is limited to 6-7 months out of the year.

Solution: development of multi-use indoor recreation spaces to support indoor recreation programs

Action Steps:

1. Complete an Indoor Recreation Feasibility study to explore possible solutions to indoor recreation space shortfalls
2. Explore the possibility and development of a cost effective and versatile multi-use recreation fieldhouse space that is designed to serve as an indoor/outdoor facility. Implementation of several large doors along multiple walls of the indoor facility similar to other innovative facilities created in the U.S. and Canada will allow the space to be converted into a covered indoor/outdoor recreation space. The focus of the design will be to maximize the number of recreation programs that meet the needs of the community in the space created.
3. Develop and maintain mutually beneficial relationships with area schools including but not limited to Ridgeline High, a new Nibley Middle School, Heritage Elementary, Nibley Elementary, Thomas Edison Charter School, and Little Wonders Pre-School for the use of their indoor facilities until a City owned facility can be developed.
4. Explore community interest and the feasibility of year round passive and active recreation spaces including winter recreation options like: cross country ski and Snow Bike Trails, a seasonal ice rink.

5.3 CHALLENGE: SUPPORTING EXISTING COMMUNITY PROGRAMS AND FILLING THE GAPS

There are a number of facilities, programs, and events, offered by organizations other than Nibley City, some of which rely on some form of support from Nibley City. Careful planning and scheduling must take place to avoid competing with these organizations. Mutually beneficial relationships must be maintained between Nibley City and these organizations while still balancing reasonable and appropriate support from city staff. These community offerings have a wide range of benefits for Nibley Citizens that merit a reasonable level of support when in line with city and recreation department objectives and interests. Some organizations use our athletic fields and allow city use of their facilities and or promotional channels.

Organizations, facilities, programs & events

Hyrum Senior Center, Hyrum City Library, the Cache Valley Wildlife Association, Local Boys, Girls and Cub Scouting programs. Religious organization youth and adult programs and other affiliated events and activities, Cache Valley City Celebrations, PTA and Local School activities and programs including : fun runs, field days, seasonal events, music, dance, and dramatic performances, school dances, science and history fairs, etc., and Stokes Nature Center: nature appreciation and conservation programs, activities, and events. Other community partner organizations outlined in the Community Partnership Policy (Nibley City Resolution 22-09) should also be considered.

Solution: schedule city events and programs around significant events and programs from these organizations as much as possible

Action Steps:

1. Build and or maintain a mutually beneficial relationship with these organizations and continue to evaluate appropriate support based on demonstrated community benefit.
2. When appropriate partner with these organizations to maximize community benefit and or cross promotional opportunities.
3. Explore the possibility of offering programs or events that are not offered by these organizations and explore expanding these offerings more widely.

5.4 CHALLENGE: LIMITED OUTDOOR MULTI-SPORT FIELD SPACE:

Nibley parks currently offer pavilions, playgrounds, baseball/softball fields, a disc golf course, and multi-sport athletic fields including the newest field at City Hall (2024). In recent years athletic fields have predominately been used for Nibley City Recreation programs, however, the parks and recreation departments have facilitated field rental and scheduling for practices, games and tournaments for multiple competitive athletic teams and Ridgeline High school teams. In general, the Nibley City Recreation leagues have displaced much of the competitive team use in Nibley as recreation programs have grown. Competitive teams from Nibley often schedule practices and games outside of Nibley, or when possible, schedule lesser quality Nibley school fields. The Nibley City recreation department has also historically used elementary school playground fields for soccer and softball; however, school field availability is limited, larger athletic field possibilities are very limited, and the quality of these fields is generally not the same as our Nibley City athletic fields. With growing enrollment at Nibley Elementary schools, the quality of school fields declines, and portable classrooms are eliminating field space. While we currently have athletic field spaces to accommodate younger players the larger field sizes for most sports are simply not possible which pushes both recreation level and competitive level play for older players, and adults to fields and or programs outside of Nibley. With the historic population growth of Nibley there will come a point where participation will be capped if additional athletic fields are not created. Lack of available field time and space particularly for youth sports limits the number of participants that can play in a season and significantly restricts the number of games and practices possible (particularly with baseball and softball), and, as a result the overall quality, and impact of the experience. It also significantly reduces the likelihood that these players will continue with a given sport offered by these programs, and significantly diminishes the value of youth sports programs for our community. Finally, the distribution of athletic fields throughout the city, limits participation particularly of larger families and significantly limits the value of consolidated community interaction and consolidated management and maintenance of athletic fields.

Solutions: develop a multi-sport athletic field complex, explore short term management practices to maximize the use of existing fields, continue to follow outlined priority scheduling, and explore expanding mutually beneficial cooperative agreements with local schools.

manage use of existing fields by establishing improved priority scheduling for Nibley City Recreation programs, improve the management and scheduling process of other sports field users to establish greater equity, and assist in developing multi-use sports fields. Assist in establishing additional athletic fields to meet current and forecasted needs

Action Steps:

1) Use portable outfield fences to facilitate expanded multi-sport usage of field space.
2) Invest in the development of multi-sport fields that utilize artificial turf to support heavy usage, and field lighting to expand the amount of field time available.
3) Develop formalized interlocal agreements with area schools for field and facility use
4) Establish the following priority scheduling for sports fields and park scheduling:

    Priority Levels:

    a) Nibley City Recreation Events and Programs
    b) Cache County School District and Thomas Edison South School programs
    c) Community Partners (as noted in the Nibley Community Partner Policy (established by Nibley City Resolution 23-14)
    d) Non-Profit Organizations
    e) For Profit Organizations

5) Other Priority Considerations:

a) Generally, youth programs will take priority over adult programs
b) The recreation department will consider field and facility rental applications generally on a first-come, first- serve basis.
c) Teams with participants that have a greater number of Nibley residents will have a higher priority with scheduling requests than those that don't. Verification may be required to confirm.

6) Evaluate and improve the management and efficiency of field scheduling for leagues and events for organizations outside of Nibley recreation programs and events.

6.0 SELECTION OF RECREATION OFFERINGS

The Nibley City Recreation Department is committed to offering the highest quality recreation events and programs possible with the available resources allocated to the recreation budget. The following recreation determining factors will be utilized to optimize the possibility of positive outcomes for events and programs:

Determining Factors: standards and tools used in the selection, implementation, and continuation of recreation programs and events

1. **Community Interest Match**
2. **Purpose Driven**
3. **Successful Positive Outcomes**
4. **Innovative Programs and Solutions**
5. **Resource Efficiency & Cost Recovery**
6. **Participant Feedback**
7. **Educational, Cultural, Heritage Value**
8. **Resource Match**

6.1 COMMUNITY INTEREST MATCH

Every effort will be made to determine community interest in recreation events and programs prior to, during, and after an event or program. This data will be used to prioritize what, if and when a particular event or program will be offered.

6.2 PURPOSE DRIVEN

Events and recreation programs will have a stated purpose that matches and supports recreation and citizen values. Additional related objectives supporting the main purpose of the program may also be selected depending on the event or program.

6.3 SUCCESSFUL POSITIVE OUTCOME

The overall net result of events and recreation programs will have a measurable positive outcome. If the positive outcome is not reached, the Recreation Director will determine if and when the event or program will be eliminated entirely, or repeated with appropriate adjustments made based on feedback and data collected.

6.4 INNOVATIVE PROGRAMS AND SOLUTIONS

While community interest will drive the introduction of most programs and events offered to the community the recreation department will explore and experiment with a limited number of new, innovative ideas to reach the stated recreation objectives. In some cases it may be difficult to predict whether or not an objective can be met with a new innovative idea because the community has no prior experience with it. As innovative programing and events are introduced on an experimental basis, recreation best practices will be applied and a cost-effective clinic, workshop, or test event will be offered if possible before committing significant resources. When possible, advice from other community recreation providers that have offered similar programs or events will be pursued to guide the format, promotion, and implementation strategy of these programs and events. Innovative and creative solutions to challenges faced in existing programming and events will also be applied and evaluated to improve the overall quality of recreation offerings.

6.5 RESOURCE EFFICIENCY & COST RECOVERY

The recreation department will be prudent and efficient in the use of all resources available to support an event or program. Events and or programs that include a participant fee will be evaluated for cost recovery as needed and will continue to be offered if 1. the revenue covers the cost or 2. the Nibley City council sees value in subsidizing the event or program. Participant fees shall be commensurate with and projected to cover actual costs and be generally in line with what other cities charge for a comparable event or program. It may be determined that a given event or program merits being subsidized because of a purpose driven positive outcome that benefits the community and the participants in a meaningful and lasting way. The Nibley City Council will approve subsidized programs and events based on recommendations and data provided by the recreation department as needed. It is recommended that subsidized programs and events be kept to a minimum, since they occupy valuable resources that could be used in more cost- effective endeavors to improve and support the community through recreation.

6.6 PARTICIPANT FEEDBACK

The recreation department will seek feedback from participants, coaches, and parents in the form of surveys, interviews, and live program and event observations. Data collected will be evaluated and used to improve recreation offerings, identify trends in participation, and determine if positive outcome objectives have been achieved.

6.7 EDUCATIONAL, CULTURAL, HERITAGE VALUE

The recreation department recognizes the value of offerings that expand the mind beyond a participant's paradigms and will implement innovative recreation programs and events that meet a broad range of interests to reach a wider range of participants.

6.8 RESOURCE MATCH

The recreation department will implement recreation offerings based on the resources available or will request additional city budget funding, or secure additional support through donations, sponsorships, or agreements with other organizations with resources to support a particular event or program.

7.0 RECREATION OBJECTIVES & ACTION STEPS:

7.1 COMMUNITY EVENTS OBJECTIVES

Hold well-managed cost-effective events that meet the recreation mission and vision, while emphasizing and supporting citizen values.

Action Steps:

- **Consistent engagement of the community through:** various well- planned special events that are based on common citizen interests and are aimed to either reach a specified demographic or all Nibley residents.
- **Apply Quality Recreation Determining Factors with a focus on:**
    - **Innovation:** offer fun, new, family-friendly events and programs and creative elements to existing events and programs.
    - **Resource Acquisition and Efficiency:** seek donations, sponsorships, and volunteer support. Foster and establish event partners with mutually beneficial interests in reaching desired outcomes. Execute a purchasing strategy that is cost effective and places resources at the heart of the experience rather than disposable decorations. Execute a promotional strategy that is both efficient and far reaching.
    - **Purpose Driven:** ensure that each event matches stated recreation and citizen values.

7.2 SPORTS & ATHLETICS

Offer recreation level youth and adult sports that build community through shared positive experiences.

- **7.21 Action Steps:**
    - Maintain a recreation level experience for all youth and adult sports. The emphasis for all sports and athletic programs will be creating community unity, inclusive participation, learning the basic fundamentals of a given sport, and having fun.
    - Facilitate participation of all citizens regardless of their ability, background or experience. (Every reasonable accommodation will be made for participants with special needs, including inclusive participation in programs when appropriate, and or possible referrals to adaptive programs, activities, and events that best serve individuals with physical and or mental challenges).
    - Create a plan to adhere to new UT legislation regarding House Bill Utah HB 257 with guidance from the Nibley City legal counsel, law enforcement, and recommendations from other related organizations.
    - Build community and harmony between participants through inclusive recreation experiences [exclusive player selection formats typical of All Star teams, travel teams, accelerated, and or competitive level sports are not as effective in building broad-based community unity and will not be a focus of Nibley City Recreation programs (see also non-affiliated recreation organization support)]. All Star team selection from Nibley City

recreation teams will only occur with approval from the Recreation Director and only in the case that is required for participation in an otherwise inclusive multi-city recreation league.
    - Organize sports clinics, tournaments, and or leagues based on common interests of Nibley citizens.
    - Introduce new innovative athletic programs on an experimental basis.
    - Create opportunities for multi-generation sports and athletic experiences.
    - Support development of centralized sports and athletic facilities to promote maximum community interaction, and efficiency in scheduling and offering the benefits of recreation.
- **7.21 Action Steps Cont. (Sports and Athletics)**
    - Participate in youth sports support programs and or training available through the National Alliance for Youth Sports and or similar programs that emphasize fun, safety, sportsmanship, and the creation of meaningful and positive recreation experiences https://youtu.be/XPKmnBDccTg
    - Create and promote inclusion (everyone plays) and positive interaction expectations that focus on community unity between players, coaches, parents, spectators, officials, and league administrators.
        - Although competition is a natural element of sports and athletics, good sportsmanship is the first priority and is expected of players, coaches, parents, spectators, officials, and administrators
- **7.22 Support the following in their role as:**
    - **Participants/Players:** with help from coaches and officials educate them on sportsmanship, safe participation, game fundamentals, and the rules of the game.
    - **Parents**: facilitate the registration process and connection with coaches. Educate them on the value of sports and athletics while also encouraging them to avoid over scheduling their children. Promote a safe environment with help from the parks department, through facility and equipment inspections and coach background screening.
    - **Coaches:** provide training, team equipment, and coaching materials to support participants in their experience. Serve as a liaison between parents, officials, spectators, and other coaches. Assist them in establishing and managing a fair play environment that includes an emphasis on equitable playing time of participants.
    - **Officials:** provide them and or the official's coordinator with adequate information regarding league rules and schedules to effectively perform their duties. When necessary, serve as a liaison between coaches, participants, parents, spectators, and league administrators.
    - **Spectators:** promote positive cheering and support of participants.
    - **League Administrators:** with cooperative multi-city leagues, promote cooperation and support others in their league assignments.
- **7.23 Forms: The following will be used to address safety, awareness, and liability questions**
    - Concussion Policy
    - Background Check Policy
    - Team registration/waiver
    - Registration/liability waivers

7.3 NON-AFFILIATED RECREATION ORGANIZATION SUPPORT OBJECTIVES

There are other recreation providers that operate in and around Nibley that are not affiliated with Nibley City Recreation. These organizations are both public and private entities and are both non-profit and for profit organizations that offer programs such as youth and adult sports leagues, races, dancing, fitness, and art programs. Some of these providers are referred to as a school, club, competitive league, super league, accelerated league, and or travel leagues. While some clubs and leagues offer inclusive recreation level experiences, others involve exclusive player selection and specialized training. Nibley City Recreation recognizes the value of all recreation pursuits and will support these non-affiliated organizations in the following way:

- **7.31 Field and Facility Rental:** (based on the field and facility use priority schedule)
- **7.32 Promotion support** will only be available to:
    - organizations included on the Nibley Community Partners list
    - organizations with a signed agreement with the recreation department to provide parks and recreation services and experiences.
    - All other organizations must have a sponsorship contract in place prior to promoting their organization on Nibley City property or through Nibley City social media platforms or other Nibley City promotional resources.
- **7.33 Non-affiliated organization limitations**
    - Storage of equipment on Nibley City property is subject to availability and requires a pre-paid rental contract or similar agreement, and insurance documentation listing Nibley City Corp as additional insured.
    - Nibley City recreation, event equipment or other city property or equipment is NOT available for non-affiliated recreation providers without prior approval from the Nibley City Recreation Director

- **7.34 Field & Facility use Priority Schedule:**

  The scheduling of sports fields, parks, and facilities will be managed by the Recreation Director after confirming suitability and field/facility condition with the Parks Director. Time and availability for passive-use recreation by Nibley citizens will also be considered in scheduling. (See also 5.3 and 5.4)

  Priority Levels:
    1. Nibley City Recreation Events and Programs
    2. Cache County School District and Thomas Edison South School programs and events
    3. Non-Profit Organizations
    4. For Profit Organizations
- **7.35 Field & Facility use fees:**

  Usage fees as noted in the consolidated fee schedule shall be applied based on organization type and community benefit to offset the costs of materials, maintenance, and the impact of additional use at Nibley parks, trails, fields, and facilities.

7.4 INCREASE APPRECIATION FOR THE NIBLEY HERITAGE OBJECTIVE:

Through storytelling, education, and meaningful hands-on experiences that connect citizens to valuable lessons from the past. The Recreation Department will explore creating and fostering mutually beneficial relationships with the Hyrum Museum, The American West Heritage Center, Utah Pioneer Heritage Arts, Cache Center for the Arts, National Society of the Sons of Utah Pioneers, Daughters of Utah Pioneers, and any organization affiliated with the Nibley City Morgan Farm.



FIGURE 42 – MORGAN FARM

7.5 SUPPORT THE DEVELOPMENT AND OR IMPROVEMENT OF FACILITIES AND SPACES THAT SUPPORT THE RECREATION MISSION:

In harmony with priorities set forth in the current Nibley Parks and Recreation master plan, Nibley Active transportation Master Plan, and any regional efforts to create or improve facilities Nibley City will support the development of recreation spaces with cooperation from the Parks Department and public officials.

7.6 ADDRESS THE NEEDS OF BOTH PASSIVE AND ACTIVE PARTICIPANTS IN RECREATION PROGRAMS:

- Facilitate passive recreation by:
    - Supporting trail and park development
    - Providing Equipment Rentals: Disc Golf, Kubb, Spike Ball, etc.
    - Facilitating Nature/Conservation interpretive trail signs
    - Facilitating improved access to outdoor recreation options both within and outside city limits for Nibley citizens.
- Facilitate active recreation options as outlined in this recreation plan

7.7 CONNECT GENERATIONS THROUGH SHARED EXPERIENCES:

- Offer end-of-season youth sports parent's games, family friendly events, Daddy Daughter and Mother Son activities and programs. Support other celebrations connecting generations especially held in Nibley.

7.8 INCREASE THE OVERALL HEALTH OF CITIZENS THROUGH WELLNESS PROGRAMMING AND EDUCATION:

- Offer affordable group fitness programs and fun run events
- Support community health organizations in promoting walking, biking, and other activities associated with wellness

- Partner with organizations that provide citizens with wellness education. Nibley City will NOT however, partner with organizations, educators, programs, or materials that offer controversial health and wellness information including those that promote wellness that contradicts religious practice or observance, and or general medical practice.

8.0 RECREATION DEPARTMENT OPERATIONS

8.1 COMMUNITY RELATIONS ROLE:

The Recreation-Community Services Director will manage and or contribute to community outreach, engagement, and promotion under the supervision of the City Manager for recreation programs and events and other community initiatives through:

- Social Media
- E-mail campaigns
- Texting Campaigns
- City Newsletter
- City Website
- Local Event Websites
- Cross-Promotional Social media and newsletters
- Schools: flyers, signs, newsletters, social media
- Press Releases: about events, infrastructure developments, positive participant outcomes, department awards and achievements
- Interagency and cross-promotional communications
- Community promotional signage

8.2 FUNDING:

Funding for recreation will be accepted from organizations with missions that are congruent with the recreation vision, mission, and core values of the department and its citizens.

Revenue to support recreation events and programs will come from the following sources

- Program fees
- Nibley City Budget
- Field and Facility Rentals
- Concessions
- Grants & Endowments
    - Nibley City Recreation will seek grants and endowments that match existing or pre-planned programming and events our community has a demonstrated interest in, rather than planning programs and events prescribed by grants and endowments that may not match community interests and recreation programs and objectives.
- Sponsorships
    - Nibley City Recreation will seek sponsorships and other in-kind donations for events and programs. Although any and all donations or funds offered will be considered by Nibley City Recreation, we will seek to find the best match between the program/event and the business or organization supporting it. Any donations received valued over $5,000 require a signed sponsorship agreement between Nibley City and the donor outlining the benefits and details of the sponsorship. Nibley City will not accept sponsorships from organizations offering products or services that are illegal for minors or pose a known serious health risk. In general, mutually beneficial cross-promotional relationships are preferred but not required.
    - Sponsorship organization opportunities may include but are not limited to:
        - Banners or other signage at events and sports fields
        - Logos on flyers, apparel, social media posts, city recreation website, registration forms
        - Event, program, and or facility passes
        - Shout out announcements at events, games, tournaments, or races
        - Opportunity to present awards, prizes, or gifts
        - Opportunity to use event or program materials for special offers or discounts.
        - Booth space at events, games, or tournaments

The Recreation Department will explore the advantages of establishing a 501(c)3 to efficiently process sponsorship donations, endowments, and grants.

8.3 STAFFING:

The success and positive impact the Recreation Department will have on the community relies heavily on adequate staffing. While the department will utilize volunteers, interns, and seasonal staff for various seasonal programs and events, having committed long- term employees with specialized training and or experience are needed to reach the outlined recreation plan action steps, goals, and objectives. The Recreation Director and City Manager will closely monitor recreation staffing needs and seek funding from the City Council for full time recreation positions.

Staffing models from NRPA (National Recreation and Parks Association) guidelines [see 1.2 below], and cities of comparable size such as: Mapleton, Tremonton, Smithfield, and Nephi will be used as benchmark recreation departments to establish staff ratio comparisons with comparable agency recreation offerings

1.2 NRPA Staffing Model Standards
https://www.nrpa.org/uploadedFiles/PageBuilder_Proragis/Content/common_elelments/PRORAGIS-national-database-report-2013-NRPA.pdf

8.4 PROFESSIONAL ORGANIZATIONS & CERTIFICATIONS

Membership, programs, and certifications from the following organizations have demonstrated benefits to the continued development and improvement of recreation programs, events and professional development of department staff including but not limited to:

- NURPA: Northern region of the Utah Recreation and Parks Association
- URPA: Utah Recreation and Parks Association
- NRPA: National Recreation and Parks Association
- NAYS: National Alliance of Youth Sports
- Athletic Business Organization
- Rocky Mt. Living History Association
- NAI: National Association of Interpretation
- Nordic United
- US Ice Rink Association
- Utah Association of Fairs and Events

8.5 CITY-OWNED RECREATION & EVENT EQUIPMENT

The Recreation department will maintain an inventory of all city-owned recreation and event equipment, including recreation rental equipment. The Recreation Director will determine if, when, and how citizens and or other organizations may be able to use or rent city owned recreation equipment. Equipment especially theatre sets and costumes may be used by other individuals and or organizations with approval from the Nibley Children's Theatre Director and or the Nibley City Recreation Director.

8.6 STRATEGIC PARTNERSHIPS:

The Recreation department will pursue support from and mutually beneficial relationships with the following organizations.

- USU Kinesiology Department
    - Including the Recreation Management Department and associated student club
- Cache County Schools & School District
- Thomas Edison School
- Little Wonders
- Campsaver
- Bike Shops
- Bike Coalitions
- Cache County Trails
- Nordic United
- Area Ski Resorts
- Willow Park Zoo
- Cache Wildlife Association
- Stokes Nature Center
- Sporting Goods and Running Stores
- Youth and Adult Sports Organizations
- Race Directors and Organizations
- Dance Studios
- Artists Guilds
- Utah Pioneer Heritage Arts Association
- Historical Associations: Sons & Daughters Pioneers, Hyrum Museum
- Boys Scouts of America
- Girls Scouts
- 4H/Cache Makers
- FFA: Future Farmers of America
- Service Clubs like: Lions Club & Rotary Club
- BPAC: Bicycle and pedestrian Advisory Committee
- BRHD: Bear River Health Department
- BRAG: Bear River Association of Governments
- The Family Place
- Local Religious Organizations
- Nordic United
- Hyrum Library
- Hyrum Senior Center

9.0 OTHER COMMUNITY RESOURCES: *SUPPORTED BY THE RECREATION DEPARTMENT AND MADE AVAILABLE TO NIBLEY RESIDENTS*

9.1 HYRUM SENIOR CENTER:

Nibley City Recreation will continue financial **and promotional support of their programs for our Senior Residents**

Considerations and Recommendations:

- Based on local and national trends regarding a decline in the use of senior centers by the "baby boomer" generation the creation of a Nibley City Senior Center is not recommended at this time.

9.2 HYRUM LIBRARY:

Hyrum City provides library services for Nibley City Residents library services including: study rooms and tables, books, magazines, electronic media, a meeting room, and computers.

Considerations and Recommendations:

- Continued financial and promotional support of their programs for our residents
- Partnering with the library for community education
- The recreation department will focus on a mutually-beneficial cross-promotional agreement with the Library for programs offered by both organizations

9.3 NIBLEY CITY CHILDREN'S THEATRE

With decades of experience in building confidence in Nibley Youth through theater, the Nibley City Children's Theatre has a long-standing tradition of presenting a play for audiences during Heritage Days.

Considerations and Recommendations:

- Continued financial and promotional support of the theater will be both a benefit to the youth participants and the audience.
- Additional options for play equipment storage and facilities should be pursued.
- The creation of bylaws and leadership succession plans are recommended.

9.4 NIBLEY YOUTH COUNCIL

A program that gives Nibley City Youth leadership and volunteer opportunities

Considerations and Recommendations:

- Continued financial and promotional support of this youth leadership program is critical to the success of community events and youth leadership development in Nibley.
- Development of an Adult Leader structure that accommodates the natural succession of at least two top quality adult leaders as their children advance beyond the program**.**
- The creation of bylaws and leadership succession and recruitment plans are recommended.

9.4 NIBLEY ROYALTY ACADEMY

A program that gives Nibley City Youth character and skills based training along with leadership and volunteer opportunities

Considerations and Recommendations:

- Continued financial and promotional support of program is critical to the success of community events and youth leadership development in Nibley.
- Continued refinement of bylaws and leadership succession and recruitment plans are recommended.

9.5 CACHE VALLEY WILDLIFE ASSOCIATION

A group of residents and others who share an interest in promoting conservation and wildlife habitat

Considerations and Recommendations:

- Continued financial and promotional support of community education and events
- Continued collaboration for the promotion of establishing wildlife habitat within Nibley City
- Continued support and collaboration for the Nibley Firefly Park interpretive and educational experience along with continued maintenance of the pollinator garden

FRAMEWORK SCENARIOS

Framework Scenario in the planning of parks and recreation helps stakeholders to envision the future development, management, and identify potential outcomes. In this case, the framework options were used to facilitate discussion of a preferred scenario, prioritizing the capital improvement projects & amenities. The outcome of the discussion reiterated the importance of the maintenance of the existing infrastructure before adding new amenities or parks.

As a part of the Master Plan, these two framework scenarios for Nibley City were provided to evaluate the current demands and to develop a tailored action plan, divided in three phases, that will serve as a guide for the future development and maintenance of the City parks, open spaces, and programming.

OPTION 1

The first option focuses on the expansion of passive recreation, amenities, and locations, and the preservation of open spaces. The following are highlights from the first framework scenario:

Key Features

- Passive Recreation/Open Space Preservation and Maintenance Primary Emphasis
    - Phase 1 (0-5 yrs.) – River Hollow Park, Nibley Regional, Firefly Park Protections
    - Phase 2 (5-15 yrs.) – Existing Park Maintenance Upgrades, 3200 S/1200 W Park, Mt Vista Park, Ridgeline Park
    - Phase 3 (15+ yrs.) – Additional Parks
- Programming
    - Indoor Recreational Facility managed as a regional partnership
    - Nature Conservation/Open Space Preservation Areas
        - Firefly Park Improvements/Protections
    - Hiking/Walking Trails
    - Picnic Tables
    - Pavilions
    - Maintenance Upgrades

The priority in this option is the preservation and maintenance of existing parks, featuring Firefly Park, River Hollow Park, and Nibley Regional Park in the first five years. For programming, the interest relies on a new recreational facility with indoor activities and managed by a regional partnership. The programming also focuses on adding shelter and gathering amenities, trails, and the overall maintenance of existing facilities.

MASTER PLAN ALTERNATE 1

SPREAD-OUT PASSIVE RECREATION

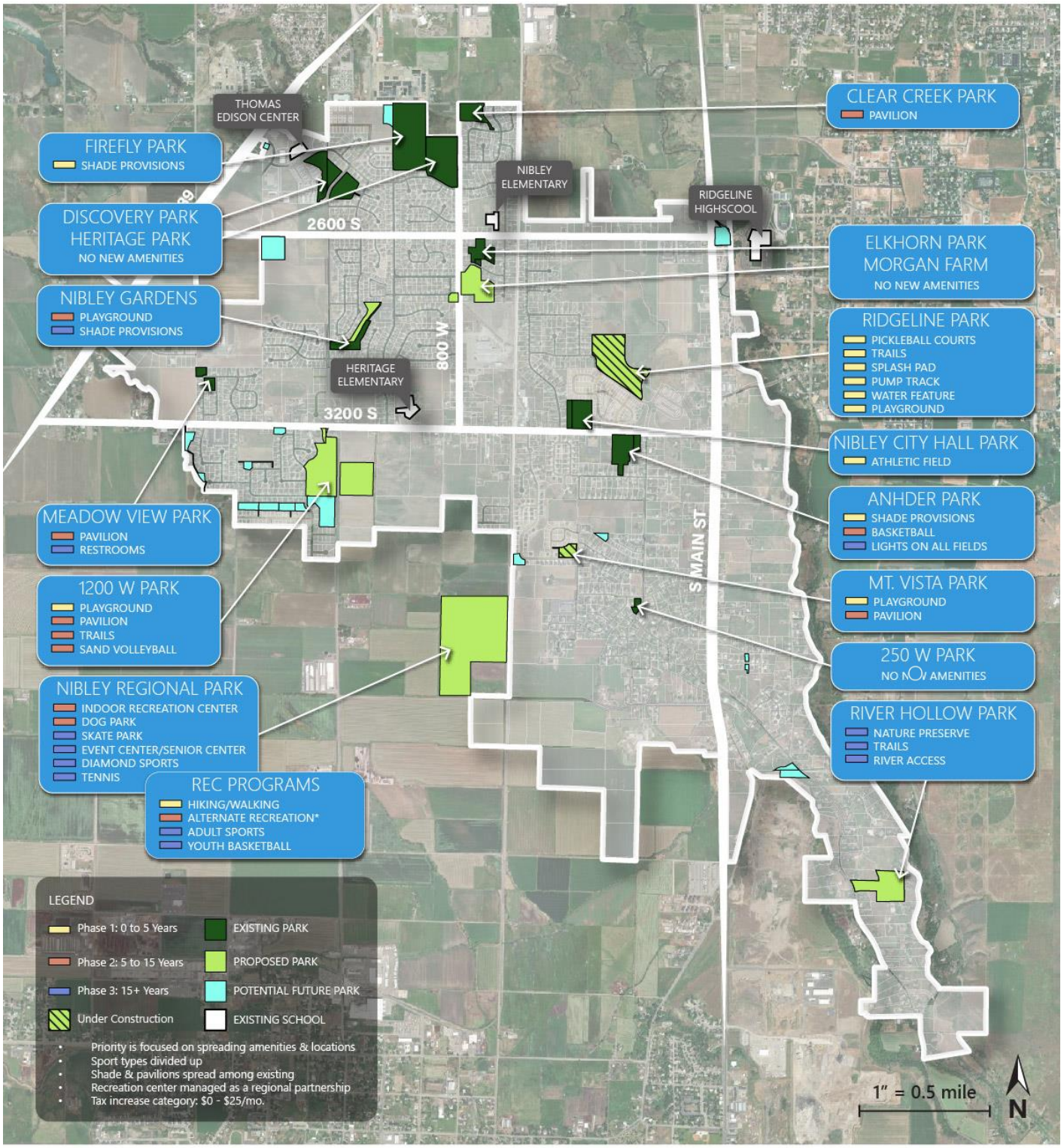


FIGURE 43 - FRAMEWORK SCENARIO OPTION 1

OPTION 2

The second option focuses on active recreation and amenities. The following are highlights from the second of two framework scenario options:

Key Features

- Organized Sports and New Facilities Primary Emphasis
    - Phase 1 (0-5 yrs.) – Nibley Regional, Ridgeline Park
    - Phase 2 (5-15 yrs.) – 3200 S/1200 W Park, River Hollow Park, Mt Vista Park
    - Phase 3 (15+ yrs.) – Additional Projects
- Programming
    - Indoor Recreational Facility managed by Nibley City at Regional (NOT Ridgeline Park) or other space as determined by an Indoor Recreation feasibility study.
        - Swimming Pool
    - Outdoor Sports Facilities
    - Playgrounds
    - Splash Pad
    - Soccer
    - Baseball
    - Pickleball
    - Tennis
    - Frisbee Golf
    - Dog Park

The purpose of this option is to concentrate on the use of the existing facilities for sports and to upgrade amenities. For programming, the interest lies in a new recreational facility managed by the City with a swimming pool and outdoor sports and recreational facilities.

MASTER PLAN ALTERNATE 2

CONCENTRATED ACTIVE RECREATION

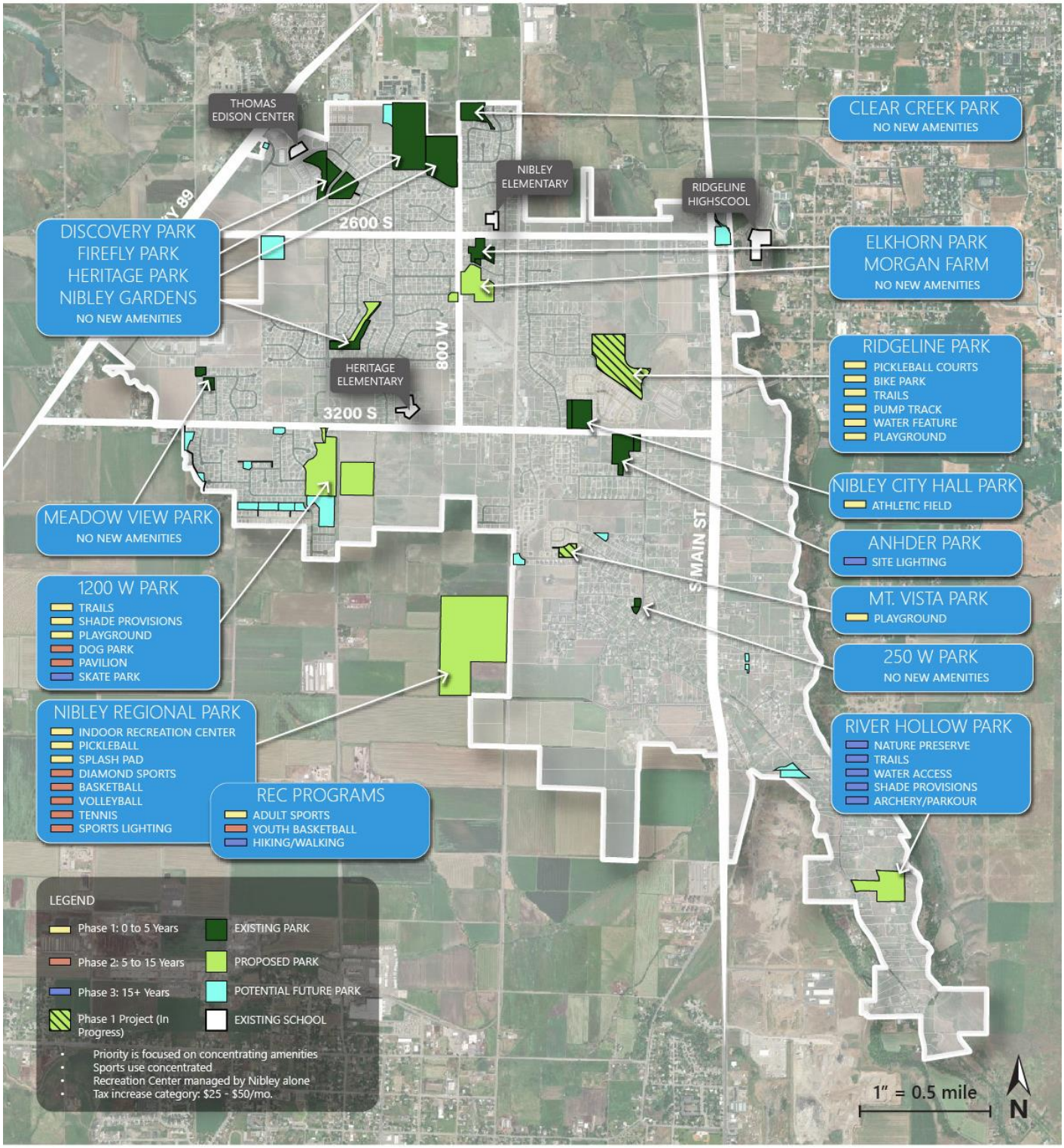


FIGURE 44 - FRAMEWORK SCENARIO OPTION 2

PROPOSED MASTER PLAN

As public input was aggragated into major planning intent throughout the development process, the steering committee, the Planning Commision, Parks & Recreation Committee, and the City Council were able to provide input on the framework scenario options. Mapping the proposed master plan quickly exhibits which elements to prioritize and when.

PREFERRED PLAN

The following scale was developed to capture a consolidated preference for prioritization concerning the master plan.

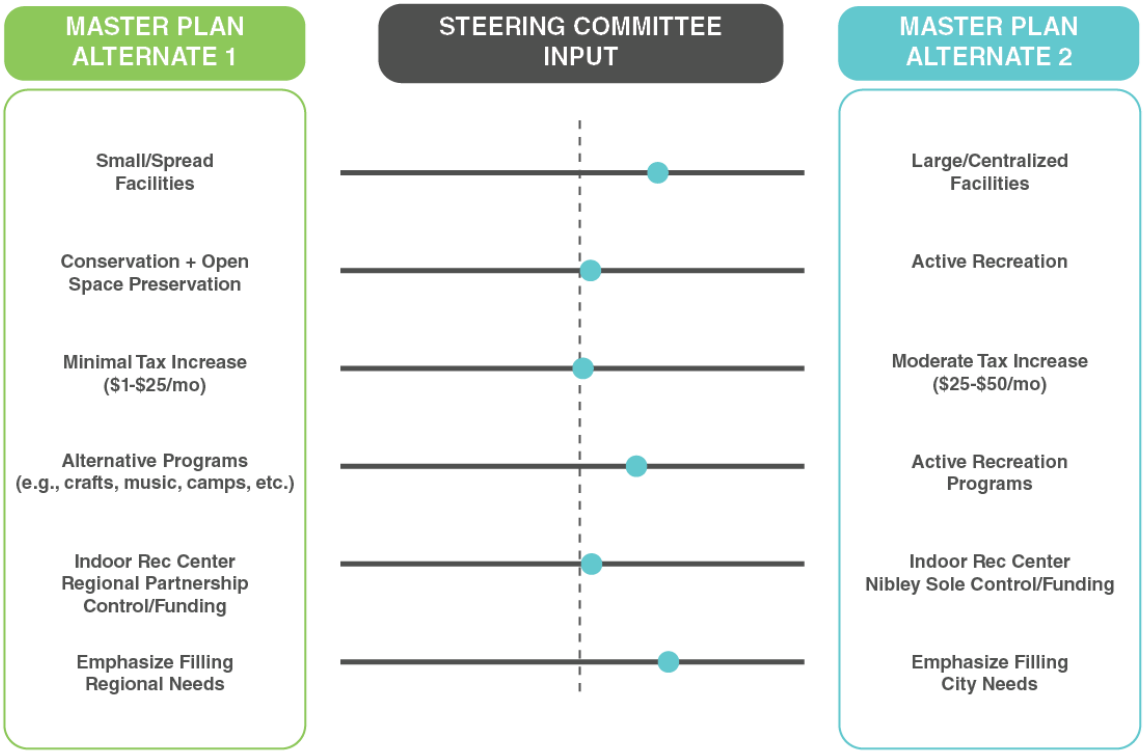


FIGURE 45 - STEERING COMMITTEE INPUT PREFERENCES

The phrase “concentrated active recreation” was coined to communicate the preferred master plan intent. Nibley residents generally have good access to open space and recreation. Therefore, in response to public input and steering committee insight, indoor recreation was prioritized to extend beyond the local seasonality. Additionally, program elements were consolidated to help give purpose to spaces. For

example, River Hollow Park is a more natural setting with passive uses, while Nibley Regional Park exhibits more formal and active amenities.

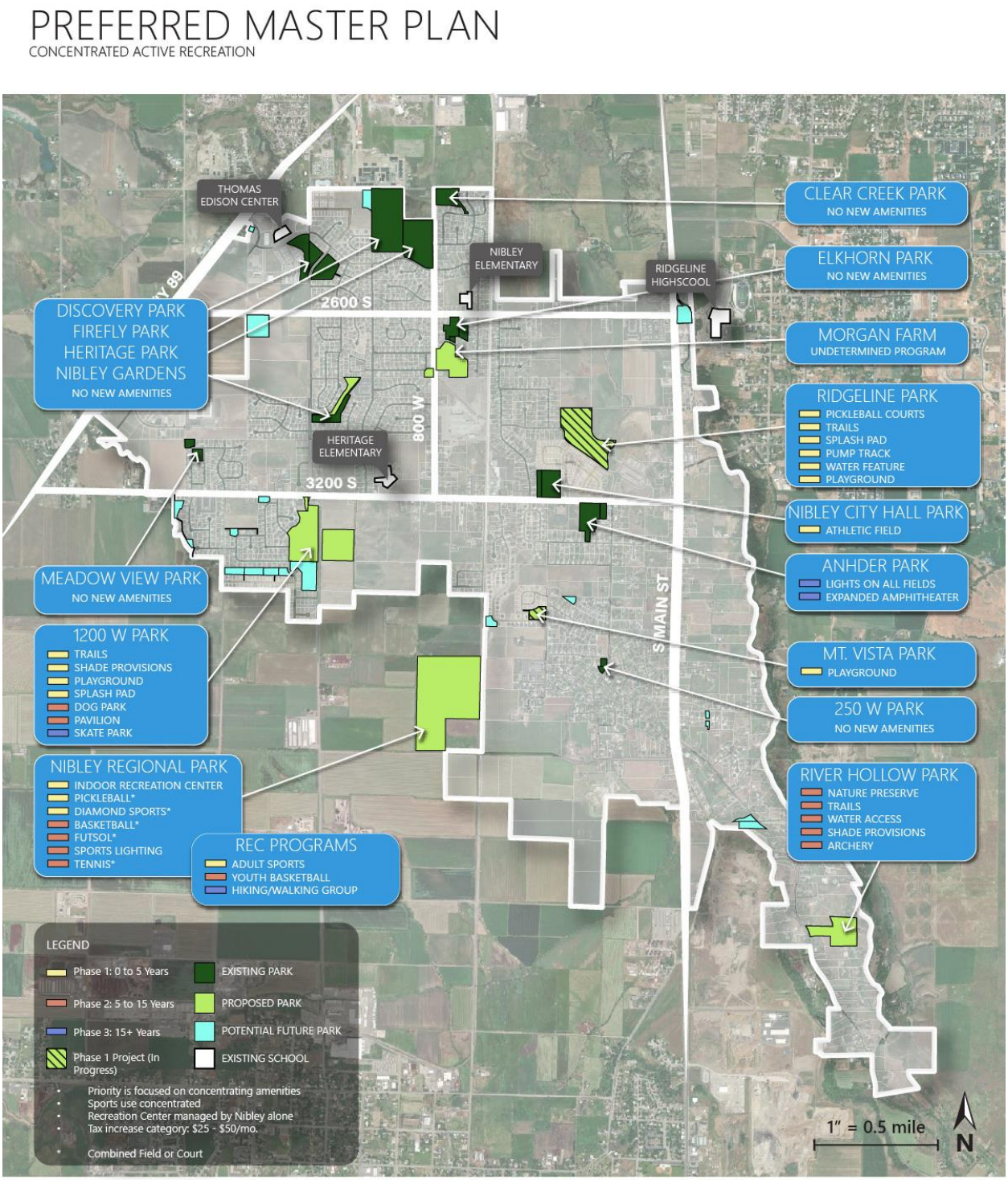


FIGURE 46 - PREFERED MASTER PLAN

EXISTING TRAILS PLAN

The existing trails plan was adopted in 2017 with the previous Master Plan and will be updated by the Nibley City Active Transportation Plan, once complete.

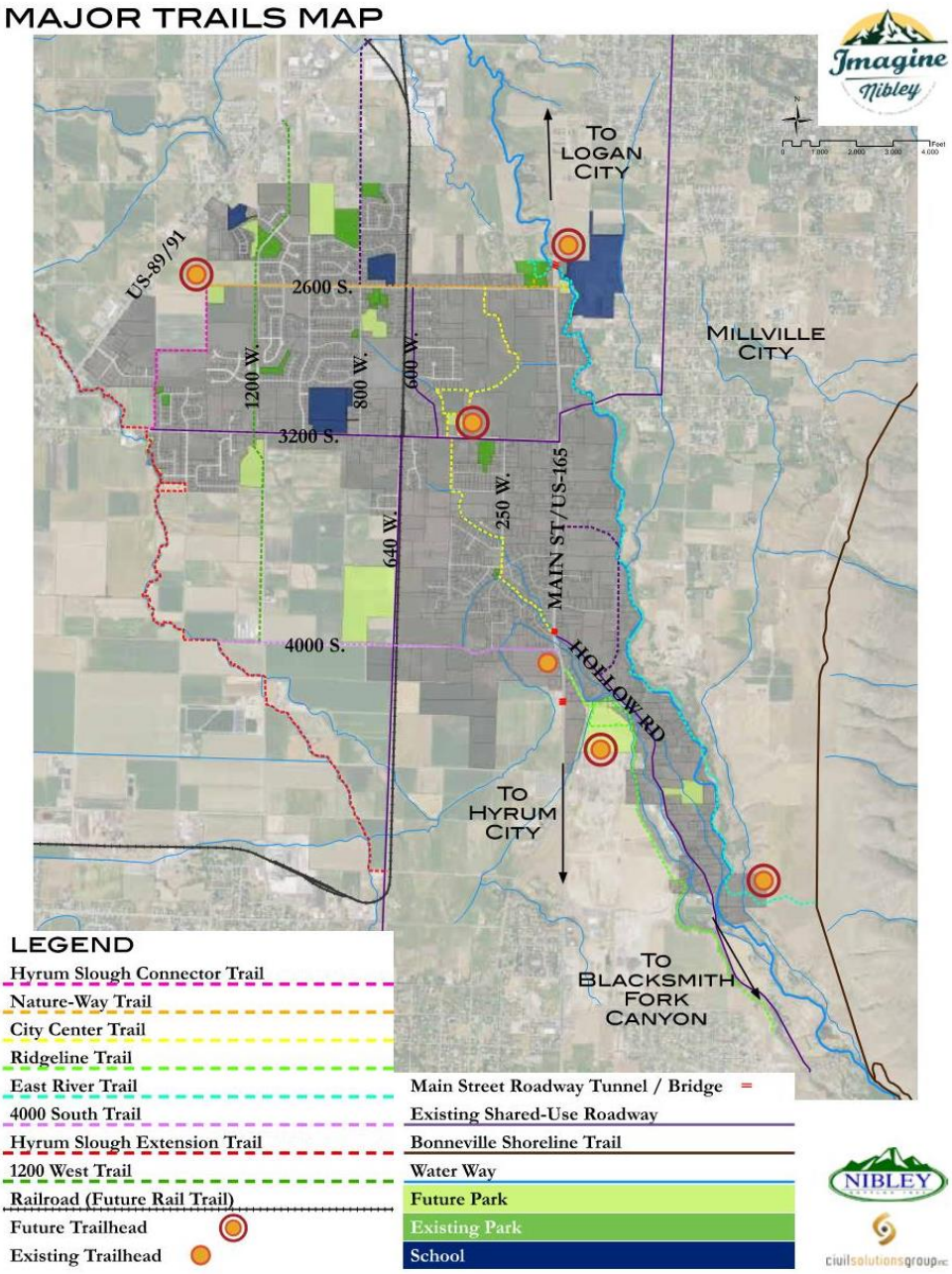


FIGURE 47 - 2017 NIBLEY CITY'S MAJOR TRAILS MAP

*Refer to the 2017 Nibley City Parks, Trails, Recreation & Open Space Master Plan for more information

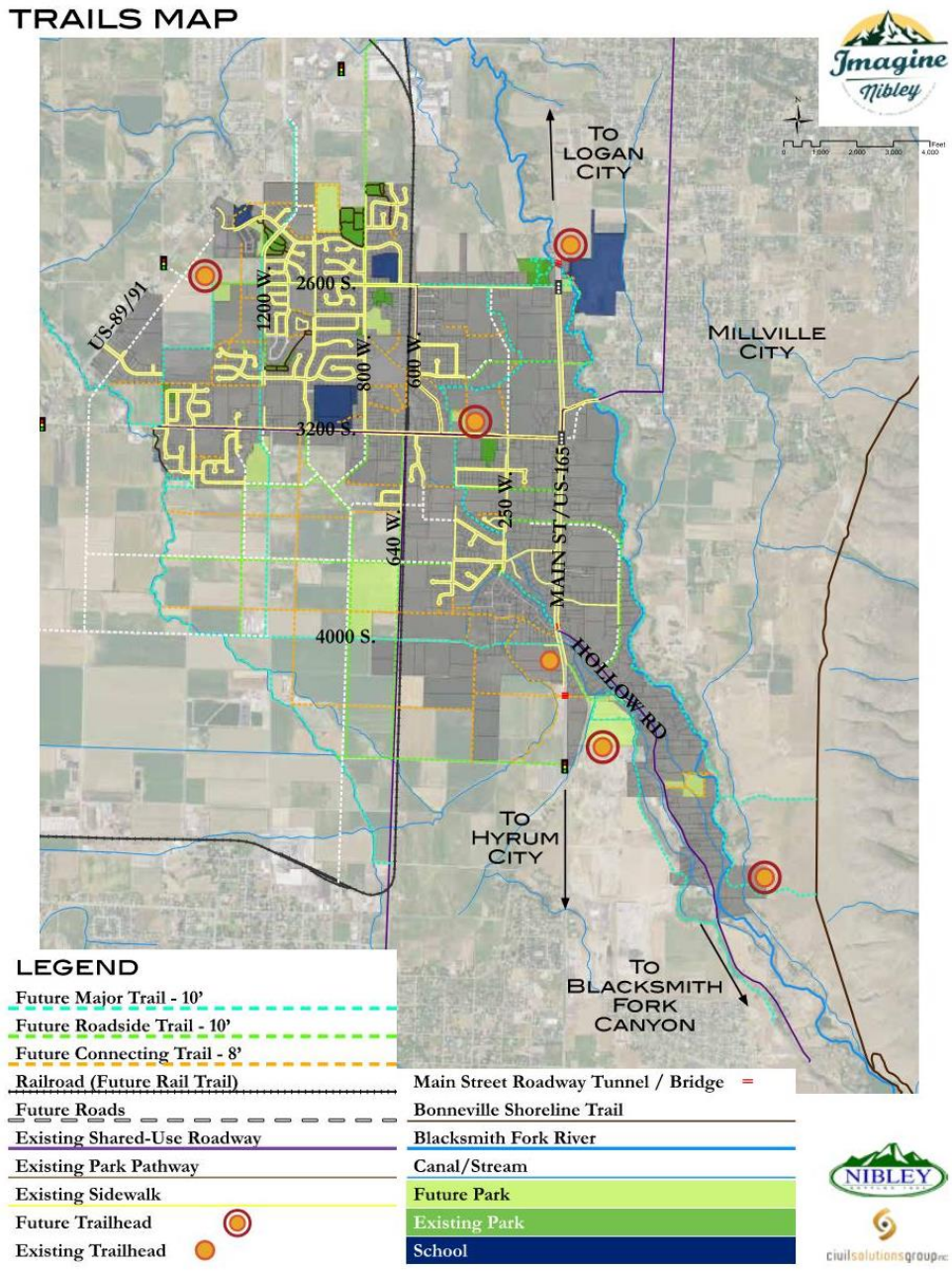


FIGURE 48 - 2017 NIBLEY CITY TRAILS MAP

*Refer to the 2017 Nibley City Parks, Trails, Recreation & Open Space Master Plan for more information

CONCEPTUAL DESIGNS

REGIONAL PARK

The proposed Nibley Regional Park is located S 4000 W and S 640 W. This regional park will include a brand-new recreational center with indoor sports facilities, a plaza, outdoor swimming pools, a playground, restrooms, three parking lots, and angled parking around the perimeter of the complex. Some other amenities include six individual soccer fields, one baseball field with removable fencing, one mixed used soccer/baseball field, and mixed used sports courts. The mixed used sports courts will have the following, from top left to bottom right:

- 1 futsal with 2 basketball and 2 pickleball courts,
- 1 tennis with 4 pickleball courts,
- 2 basketballs with 2 futsal courts, and
- 1 individual futsal court.

This complex will provide open spaces, shade trees, and walking paths that will connect all main amenity areas. This concept plan also integrates a future potential phase in the southeast corner with one more baseball field, two more soccer fields, and a mixed used baseball/soccer field.

Realizing the regional park will involve a regional approach with other Cache County cities. See Funding Strategies & Action Plan for funding approach.

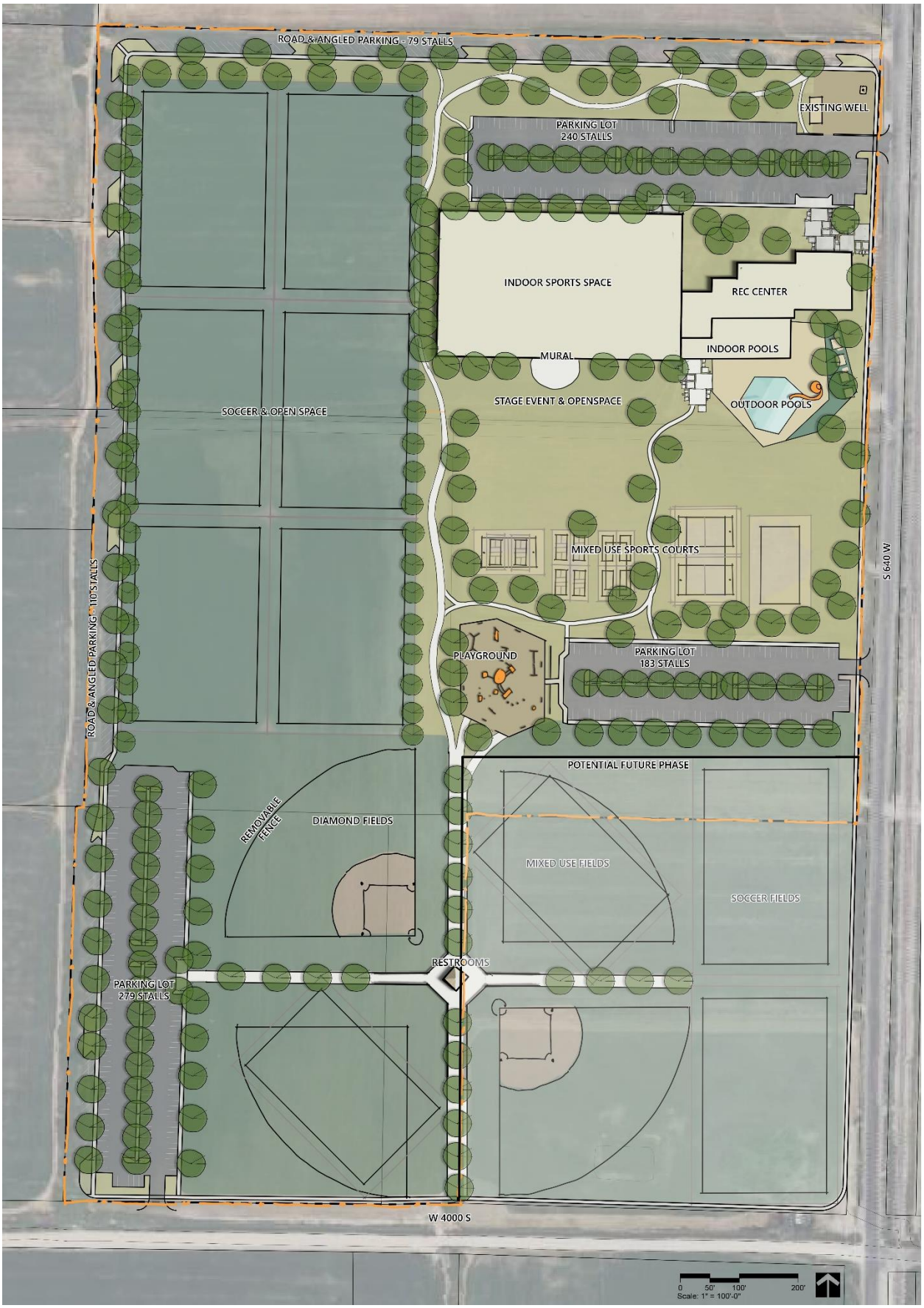


FIGURE 49 - REGIONAL SPORTS PARK

TABLE 25 - PROPOSED REGIONAL PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Rectangle Field			
Natural Grass Field	5-7	2025	2031
Artificial Turf Field	8-12	2025	2035
Diamond Field			
Infield	3-5	2025	2029
Grass Outfield	5-7	2025	2031
Fencing & Backstops	3-5	2025	2029
Recreation Pool			
Pool Shell	20-30	2025	2050
Pool Liner	7-10	2025	2034
Pool Equipment	10-15	2025	2038
Other			
Asphalt Parking Lot	15-20	2025	2043
Prefabricated Playground	15-20	2025	2043
Concrete Path	20-30	2025	2050
Nature Playground Equipment	10-15	2025	2038
Restroom Building	30-50	2025	2065
Picnic Table	10-15	2025	2038
Amphitheater Conc. Stage	30-50	2025	2065
Tennis court	15-25	2023	2043
Pickleball Courts	10-15	2023	2036
Pavilion	20-30	2025	2050
Gravel Path	5-7	2025	2031
Metal Bench	10-20	2025	2040

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

ANHDER PARK

The improvements to Anhder Park will emphasize the park's key features and amenities. An improved amphitheater will have additional bleachers, lighting, and a brand-new concession, restrooms, and pavilion closer to it. On the northwestern corner, ADA access will lead to the beginning of the walking path, following of a picnic table area that will allow families to watch games on the existing softball field with a removeable fencing. The small existing playground will be replaced with a bigger playground next to the extended parking lot on the northeastern corner. A small pavilion will be placed on the former playground and some added shade trees around the site will complement the improvements, but the park will keep the existing pickleball courts, open space, and walking paths.

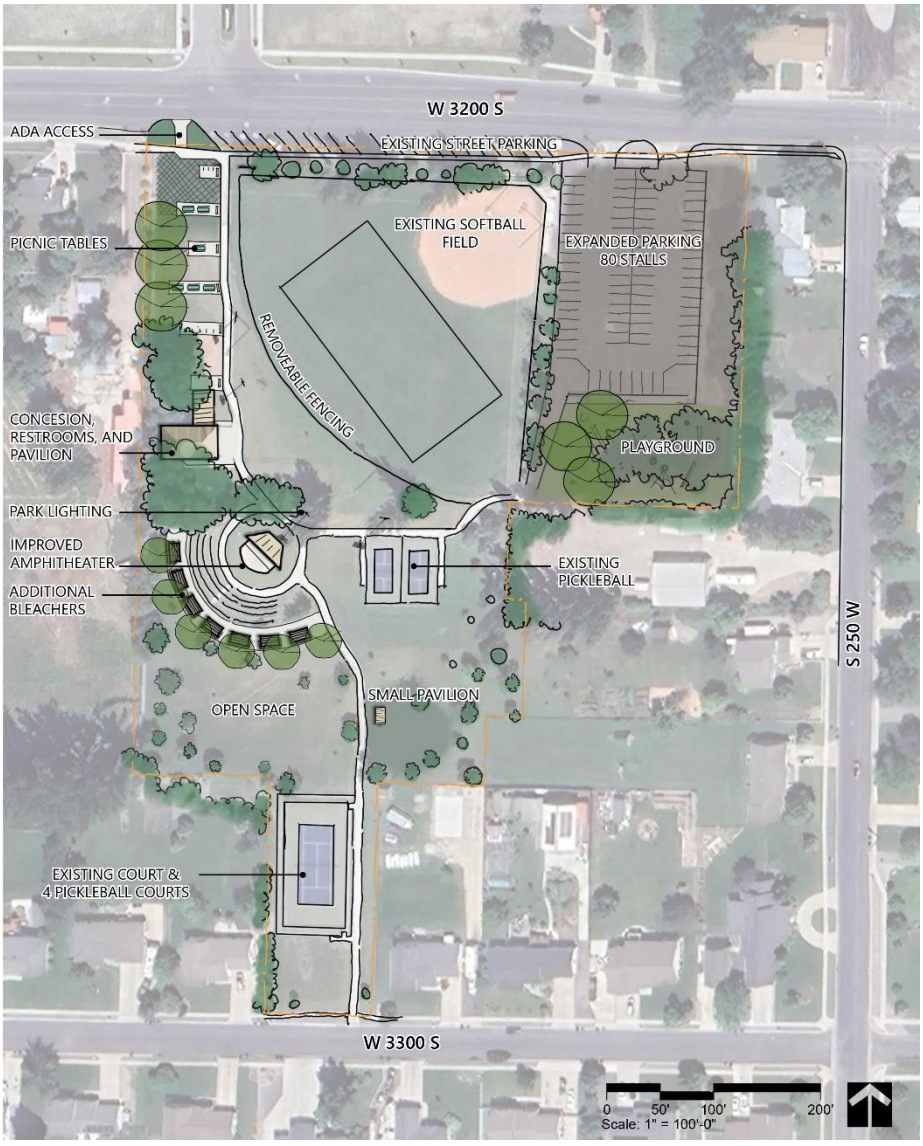


FIGURE 50 - IMPROVED NEIGHBORHOOD ANHDER PARK

The softball field will continue to be maintained as a multi-functional sports field for active & passive uses. See the following amenity Lifecycle Replacement Schedule.

TABLE 26 - PROPOSED ANHDER PARK IMPROVEMENTS LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Natural Grass Field	5-7	2025	2031
Diamond Field			
Infield	3-5	2015	2025
Grass Outfield	5-7	2015	2025
Fencing & Backstops	3-5	2015	2025
Other			
Asphalt Parking Lot	15-20	2025	2043
Prefabricated Playground	15-20	2025	2043
Restroom Building	30-50	2025	2065
Picnic Table	10-15	2025	2038
Amphitheater Conc. Stage	30-50	2025	2065
Mobile Bleachers	15-20	2025	2043
Tennis court	15-25	2023	2043
Pickleball Courts	10-15	2023	2036
Pavilion	20-30	2025	2050
Gravel Path	5-7	2025	2031
Metal Bench	10-20	2025	2040

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

1200 WEST PARK

This neighborhood park is divided into three sections. The first section, to the east of S 1200 W, will include amenities for all ages and purposes like a dog park, a small splash pad, a (Change format of content on Right Margin for better readability) playground, a pavilion, a skate park, some shade trees, and a parking lot. The second section maximizes the open space opportunity to the west of 1200 W with sports fields & trails circulating delineated wetlands.



FIGURE 51 - 1200 W PARK (EAST)

The third section will emphasize passive recreational activities and preservation of the natural features with a viewing tower towards the wetland and an open space on the north of the site. A full-size soccer field, an indoor sports field, and a parking lot in the southern area will host active recreational activities. Some shade trees and a walking path around the whole park will connect these two different areas, as well as connecting with the neighborhood and existing sidewalks. The third section has two existing basins, a linear nature playground, some shade trees, and a walking path that connects both ends of the existing roads.



FIGURE 52 - 1200 W PARK (WEST)

TABLE 27 - PROPOSED 1200 W PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Rectangle Field			
Natural Grass Field	5-7	2025	2031
Artificial Turf Field	8-12	2025	2035
Dog Park			
Fencing	15-20	2025	2043
Agility Equipment	10-15	2025	2038
Skate Park			
Concrete Ramps & Features	15-20	2025	2043
Steel Elements	10-15	2025	2038
Splash Pad			
Concrete Pad	20-30	2025	2050
Water Feature & Pumps	10-15	2025	2038
Other			
Concrete Path	20-30	2025	2050
Nature Playground Equipment	10-15	2025	2038
Asphalt Parking Lot	15-20	2025	2043
Prefabricated Playground	15-20	2025	2043
Restroom Building	30-50	2025	2065
Picnic Table	10-15	2025	2038
Amphitheater Conc. Stage	30-50	2025	2065
Mobile Bleachers	15-20	2025	2043
Tennis court	15-25	2023	2043
Pickleball Courts	10-15	2023	2036
Pavilion	20-30	2025	2050
Gravel Path	5-7	2025	2031
Metal Bench	10-20	2025	2040

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

RIVER HOLLOW PARK

Two main features will be the focus of this proposed park: a recreation pond and an archery course on the east side. On the west side, there will be an open space with a naturalized playground, restrooms, a parking lot with a boat drop next to the pond, and a walking path connecting to the east side. The walking path could potentially link with a regional trail in the future. Additionally, some trees will be added to the existing vegetation to provide shade and create a more naturalistic feeling.



FIGURE 53 - RIVER HOLLOW PARK

TABLE 28 - PROPOSED RIVER HOLLOW PARK LIFECYCLE SCHEDULE

Lifecycle Replacement Schedule			
Amenity	*Life Cycle (Years)*	*Install Year*	*Replacement Year Estimate*
Rectangle Field			
Natural Grass Field	5-7	2025	2031
Boat Ramp			
Concrete Surface	20-30	2025	2050
Steel Elements	10-15	2025	2038
Other			
Asphalt Parking Lot	15-20	2025	2043
Restroom Building	30-50	2025	2065
Picnic Table	10-15	2025	2038
Pavilion	20-30	2025	2050
Gravel Path	5-7	2025	2031
Metal Bench	10-20	2025	2040

*See Master Planned Improvement – Lifecycle Upkeep on page 48 for full list & descriptions. Install year to be adjusted per buildout. Life cycle to be adjusted per product selection. Replacement year to be updated accordingly.

OPEN SPACE STRATEGIC PLAN

PRIORITIES

The graphics below are resources for initial considerations concerning land acquisition and sale in the future. Land acquisition is the focus of this mapping is to find recommendations for future land uses for parks, open spaces, and land preservation. The first priority is exhibiting preference for existing park expansion in conjunction with spreading out open space throughout the city for universal juxtaposition & access. The follow priorities are Nibley City boundary proximity relating to annexation likelihood. Lastly the presence of wetlands being protected & preserved.

The following maps give an understanding of three different priorities then exhibit those priorities in a consolidated map. The visualization represents an initial step in acquisition analysis. The Base Map shows Nibley City's boundaries in red and the annexation declaration boundary in solid gray. The subsequent maps exhibit the land acquisition priorities. The use of lighter shades communicates preference for acquisition, while darker shades display disinclination for acquisition. Disinclination is expressed for proximity to a park (outside of immediate adjacency) in interest of equitable land distribution for open space & park access in the future.



FIGURE 54 – NIBLEY OPEN SPACE

BOUNDARY PROXIMITY

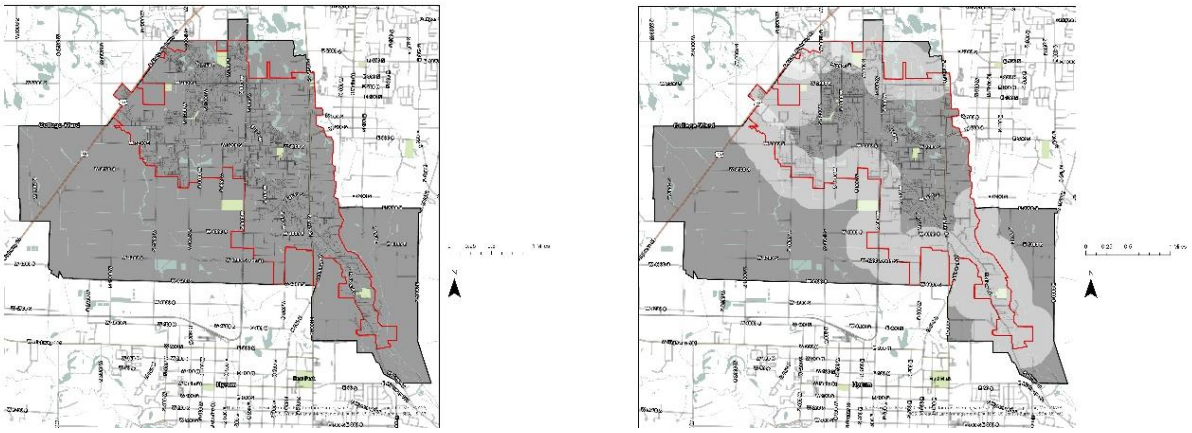


FIGURE 55 – BASE MAP AND PRIORITY 1

The map on the left is the base map. The map on the right exhibits the priority for annexation boundary proximity.

This exhibits preference for land acquisition closer to the city boundaries. The lighter shade shows the preferences for land acquisition around the city boundaries regarding annexation. In this case, the planning and construction of new parks will benefit existing and future development mainly in the southwest of the city boundaries.

PRESENCE OF WETLANDS

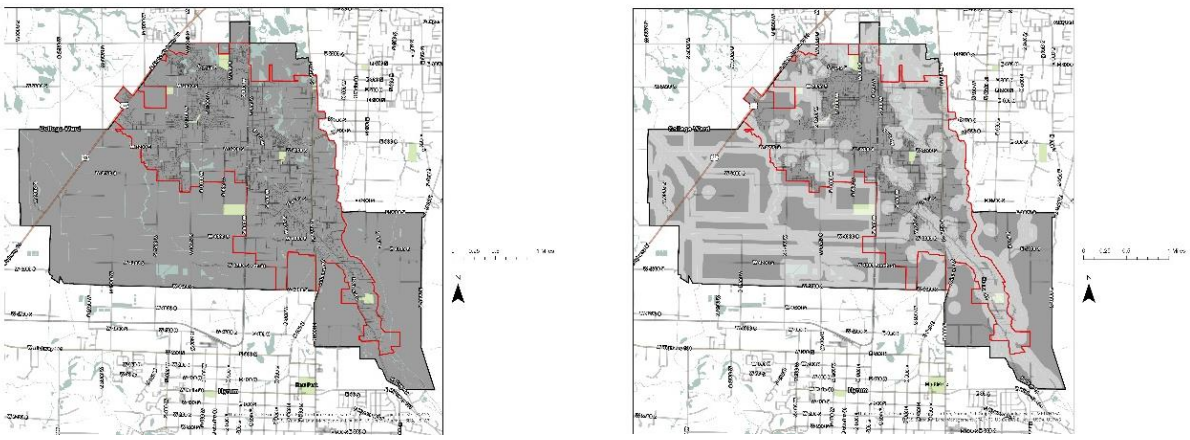


FIGURE 56 – BASE MAP AND PRIORITY 2

The map on the left is the base map. The map on the right exhibits the priority properties with wetlands present. This priority emphasizes preservation of sensitive ecosystems that will require careful and balanced management and protection. This is an opportunity to enhance these ecosystems and provide appropriate recreational activities and education.

EXISTING OPEN SPACE

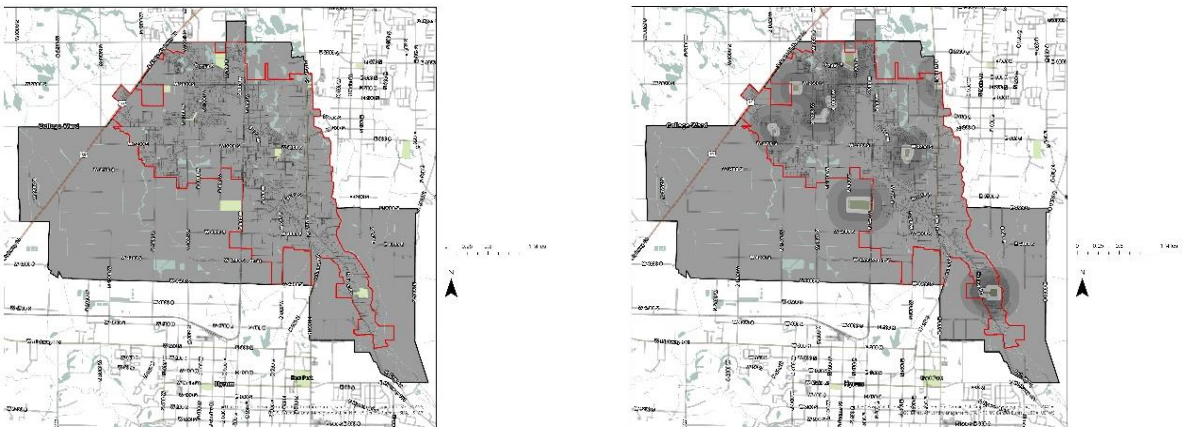


FIGURE 57 – BASE MAP & EXISTING OPEN SPACE

This scenario focuses on Nibley City's existing parks and open spaces. The disinclination is for land acquisition occurring near but nonadjacent existing parks perimeter diminishing to the extents of a quarter mile. The recommendation in this case is to pursue land acquisition for areas with less parks and open space access.

However, land adjacent to an existing park is recommended for expansion and/or addition of amenities that can be easily integrated.

COMBINED PRIORITIES

The following map exhibits all the priorities as a graphic summary. This exhibits a first step for future land acquisition analysis.

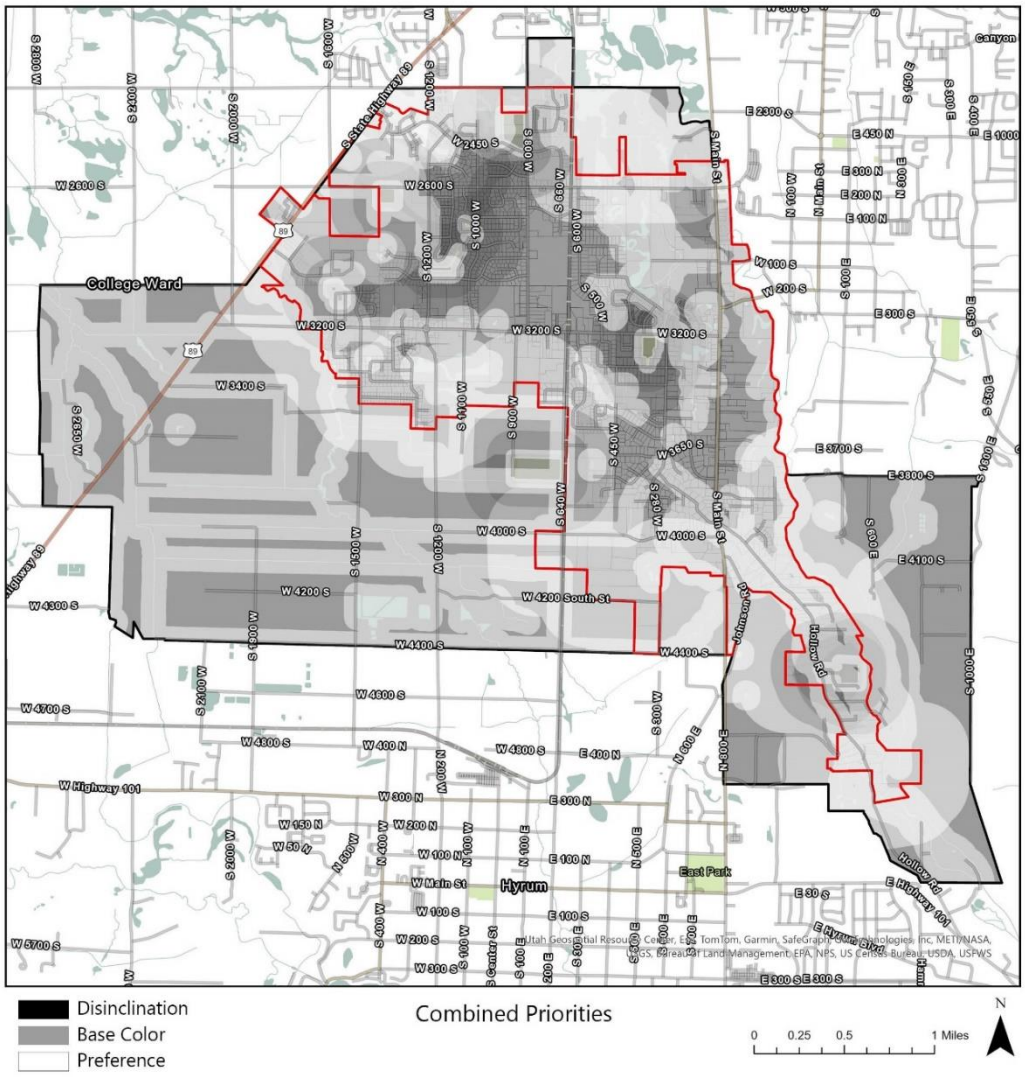


FIGURE 25 – SUMMARY OF THE THREE PRIORITIES

OPEN SPACE STRATEGIES

Nibley currently owns enough land held against NRPA comparables. Master Planning processes have determined concentrated activity to be the preference over spreading amenities. For these reasons more emphasis will be placed on maintaining and improving existing infrastructure. However, inevitable growth will lead to the need for future public land acquisition as articulated in the following strategies.

CONTINUE TO PROMOTE AND UTILIZE OPEN SPACE SUBDIVISION TO INCENTIVIZE OPEN SPACE PRESERVATION WITHIN NEWLY DEVELOPED SUBDIVISIONS:

- Refine Open Space Subdivision Design standards to ensure newly dedicated open space reflects the community's values.
- Consider a payment in-lieu of Open Space which could be used toward improving planned parks.
- Ensure ongoing maintenance of dedicated open space through proper maintenance plans and evaluation of existing conservation easements.

PROMOTE TRANSFER OF DEVELOPMENT RIGHTS ORDINANCE AS A TOOL TO PRESERVE PLANNED OPEN SPACE LAND

- Review sending and receiving zones, based upon combined priorities map.
- Educate property owners and developers about TDR options.

ACQUIRE AND MAINTAIN NEW OPEN SPACE IN STRATEGIC LOCATIONS

- Focus property acquisitions on locations adjacent to existing and planned parks and open space locations. – see Combined Priorities above
- Review existing land for suitability of continued open space preservation.
- Review & reporting on the following is required prior to initiating future land acquisition.
    - Parks & Recreation Master Plan including addendums
    - Review of the Open Space Priority mapping
    - Projected maintenance cost of potential improvements as coordinated with the Parks Department
    - A comparable development cost & estimate summarizing upfront capital improvement.

FUNDING STRATEGIC PLAN

The financial analysis located in Appendix A summarizes Nibley's general fund & articulates general fund & capital improvement requirements. The Action Plan on pg. 98 specifies steps to move forward with acquiring various funding resources.

RECREATION CENTER

The capital improvements proposed in this plan may be realized as proportional funding opportunities are realized. Pending a rec center analysis (*see Action Plan on pg. 98), the rec center is likely to be approached as a regional asset with other cities as stakeholders.

TAX INCREASE SENTIMENT

Based on the public input survey results, the community at large expressed a willingness to support raising taxes by an average of $42.42/month. However, 25% of respondents specified they would support raising taxes by an increase of between $1-$25/month, so a number within that range is more representative of the community's true level of support.

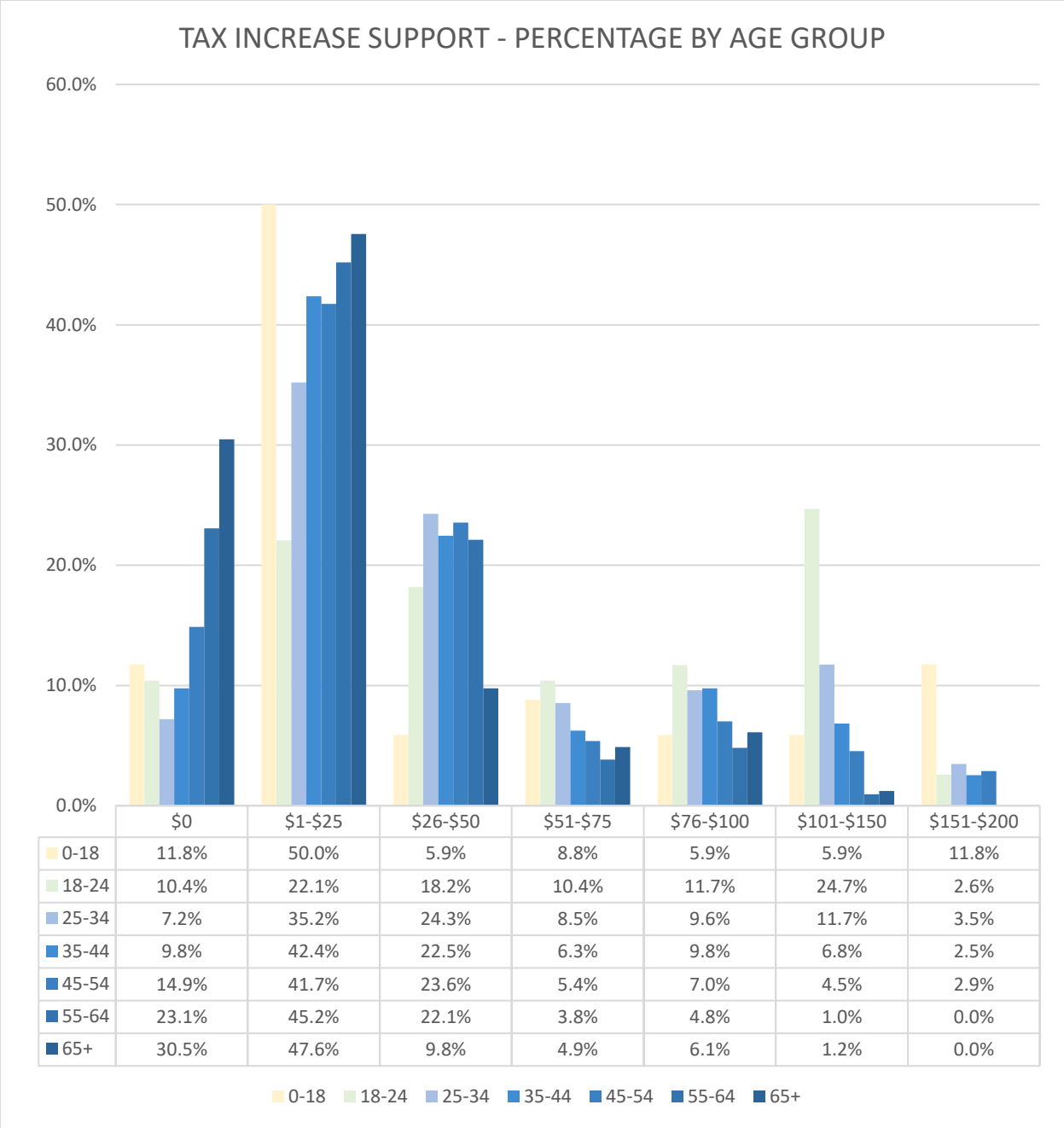
The demographic least supportive of a tax increase was the 65+ community which, on average, leaned towards a tax increase of 10-$20/mo.

The demographic most supportive of a tax increase was the 25–55-year-old community which, on average, preferred a tax increase of $29-45/mo.

A 12.3% of respondents marked "0" for the amount of tax increase they would support and at least **16.5% of the comments conveyed great concern regarding a tax increase of any kind**. Residents suggested that expenses incurred for new parks or new facilities should be funded through impact fees and facility admission costs. If taxes are used to construct new facilities (like an indoor recreation center), Nibley residents request free entry or a discounted rate. The group most concerned about a tax increase are those in the 65+ community, specifically those who live on a fixed income.

The comments supporting a tax increase were generally based on the prospect of building an indoor recreation facility. However, most proposed that the cost of building and maintaining a facility like this should be shared between municipalities in Cache Valley.

*See the Action Plan for specific fundraising initiatives.



	$0	$1-$25	$26-$50	$51-$75	$76-$100	$101-$150	$151-$200
0-18	11.8%	50.0%	5.9%	8.8%	5.9%	5.9%	11.8%
18-24	10.4%	22.1%	18.2%	10.4%	11.7%	24.7%	2.6%
25-34	7.2%	35.2%	24.3%	8.5%	9.6%	11.7%	3.5%
35-44	9.8%	42.4%	22.5%	6.3%	9.8%	6.8%	2.5%
45-54	14.9%	41.7%	23.6%	5.4%	7.0%	4.5%	2.9%
55-64	23.1%	45.2%	22.1%	3.8%	4.8%	1.0%	0.0%
65+	30.5%	47.6%	9.8%	4.9%	6.1%	1.2%	0.0%

FIGURE 58 - TAX INCREASE SUPPORT

$25/mo = Median

$42.42/mo = Average

CONTINUED FUNDING

Nibley currently funds parks & recreation with impact fees, user fees, and general funds. Additionally, Nibley City is likely to establish opportunities for sponsorship, naming rights, & partnerships to contribute to ongoing parks funding sources.

Assessment to initiate other funding resources will be undertaken. Sales tax revenue bond, monthly park fees, special districts, RAPZ tax, Utah Outdoor Recreation Grant, Land & Water Conservation Fund, & other grants are among the immediate considerations.

ACTION PLAN

INTRODUCTION

The following section outlines a course of action for the City to adopt in order to achieve the Master Plan recommended here. The actual rate of population growth may result in an earlier or later buildout. This timeline should be adjusted to match the rate of growth and pressing community needs.

0 TO 5 YEAR HORIZON

Programs:

- Begin fundraising efforts – call for bond, changes in taxes (if possible), pinning down matching funds, receiving funding commitments from partners.
    - Elevate taxation to appropriate level – see Tax Increase Support above
    - Utah Outdoor Recreation Grant (UORG) – see Addendum A
    - Land and Water Conservation Fund (LWCF) – see Addendum A
    - Evaluate user fees & adjust as needed
- Propose that a Community Investment Coordinator/Consultant be instated to manage ongoing funding efforts.
- Complete the recreation center study
- Request an allocation of city staff time to assist with Parks and Recreation planning, design, budgets, and grant-writing.
- Develop a donation platform for the regional park.
- Develop partnerships with the county and adjacent communities for shared projects including the rec center at the regional park.
- Expand programs and secure contracts with facilities to use them.
- Create budget allocation for capital improvements & programs.
- Establish recreation programs management according to the recreation programs plan.

Policies:

- Publish this plan widely and make it available on the Internet, in City offices, etc.
- Commission a masterplan QR code quick access.
- Mark the master plan similar to the public input process.
- Develop a shared project plan with the Planning Department to achieve many shared projects, such as trails, bike lanes, and parks in new developments.
- Continue meeting as an Advisory Committee to implement this plan.
- Establish an official status, rights, and responsibilities for the Advisory Committee.
- Create an Open Space Advisory Committee for Nibley City and implement the open space plan.
- Develop a progress report and present it to the Planning Commission and City Council twice yearly or as needed.
- Participate in the Cache County trails committee.

- Evaluate joining with other South Cache Cities to develop a comprehensive, regional recreation program.
- Develop a regularly scheduled (every 2 years) recreation input process (survey, open house, public hearing) to invite public input.
- Establish a Memorandum of Understanding with city departments to consult the Advisory Committee on development decisions that impact parks.
- Refine policies requiring developers to include parks, trails, and open space in their developments.
- Develop and implement an Active Transportation Plan to promote a walkable, bikeable community – with trails, sidewalks, bike lanes, etc.

TABLE 29 – SELECT CAPITAL IMPROVEMENT PROJECTS

Improvement Project	Estimated Cost	Notes
1200 W Park Construction	$10,813,536	Phase 1 Construction
Anhder Park	$1,664,501	Anhder Park Improvements
River Hollow Park	$2,084,514	River Hollow Park Improvements
Other Parks Improvements	$100,000	

5 TO 15 YEAR HORIZON

Programs:

- Adjust park impact to reflect the impact fee study.
- Articulate item carry over from 0 to 5 years.
- Continue fundraising efforts
    - Analyze funding plans
    - Explore any new funding options
- Request an annual budget allocation for Recreation and Parks, to be drawn from multiple sources.
- Request an annual operational budget for the Advisory Committee to use for surveys, meetings, plans, etc.
- Continue fundraising efforts – call for bond, changes in taxes (if possible), pinning down matching funds, receiving funding commitments from partners.

Recreation Programs:

- Make necessary adult sports administration refinements.
- Establish youth basketball administration structure.

OVER 15 YEARS HORIZON

Recreation Programs:

- Establish hiking & walking group administration structure.
- Articulate action item carry over from 5 to 15 years.
- Continue fundraising efforts

- Analyze funding plans
- Explore any new funding options

APPENDIX A - PARKS AND RECREATION FINANCIAL ANALYSIS

Zions Public Finance developed the following Parks & Recreation Financial Analysis. The financial position summarization & funding strategies are an integral part of realizing the Parks & Recreation planning intent.

The Parks and Recreation Financial Analysis is prepared to analyze ways in which the City can continue to maintain operating service levels, keep up with the demands of new growth and expand facilities and amenities for City residents. This Financial Analysis is organized as follows:

- General Fund Park Operating Costs
- Capital Improvement Needs
- Funding Options for Capital Improvements

GENERAL FUND

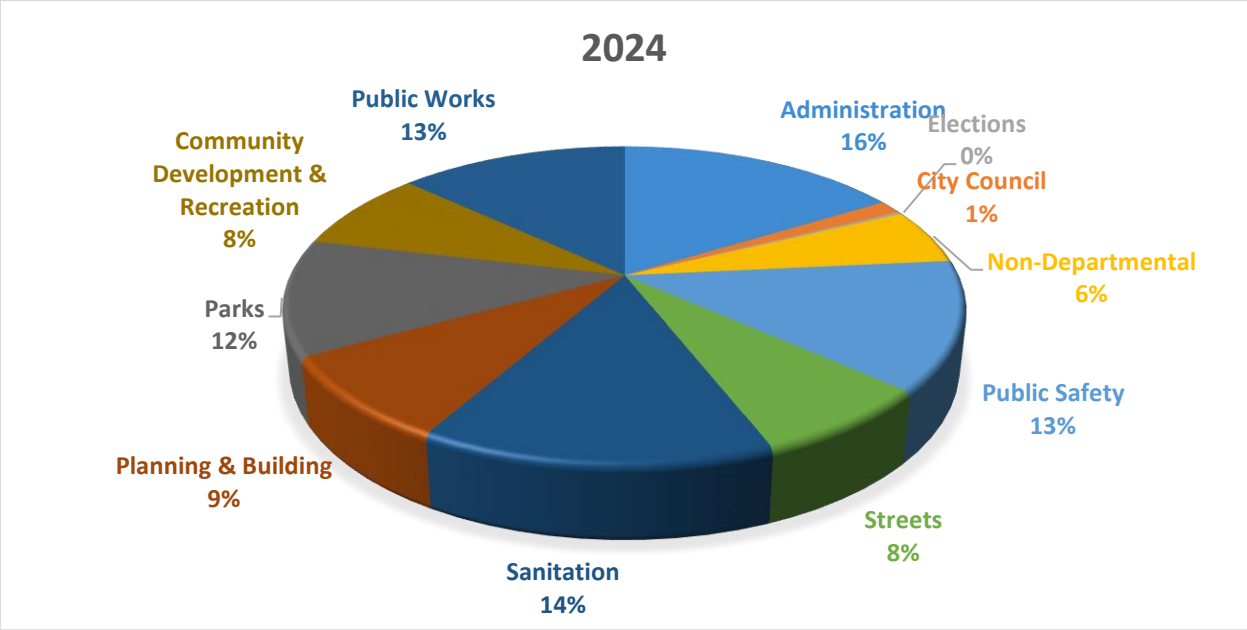
Nibley's FY2024 General Fund budget totaled nearly $4.3 million in 2024. Parks accounted for 12 percent of total expenses, or just over $500,000.

TABLE 1: NIBLEY CITY OPERATING EXPENSES, BUDGET FY2024

Description	2024	% of City Budget
Administration	$693,473	16%
City Council	$56,228	1%
Elections	$11,025	0%
Non-Departmental	$241,848	6%
Public Safety	$561,855	13%
Streets	$317,520	7%
Sanitation	$608,580	14%
Planning & Building	$369,889	9%
Parks	$502,740	12%
Community Development & Recreation	$350,540	8%
Public Works	$559,282	13%
TOTAL	**$4,272,980**	**100%**

Source: Nibley City Budget BY2024

FIGURE 1: NIBLEY CITY OPERATING EXPENSES, BUDGET FY2024



The City projects park expenses to increase between $25,000 to $32,000 per year between 2024 and 2030, thus maintaining a fairly constant percentage (12%) of General Fund expenses. The increased expenses represent a five percent annual increase to keep up with growth[6] and inflationary costs but do not include funding for capital projects. If the City desires to increase its service levels, it will need to find additional funding sources for park capital improvements.

TABLE 2: NIBLEY CITY PARK EXPENSE PROJECTIONS

	2024	2025	2026	2027	2028	2029	2030
Park Expenses as Projected by City	$502,710	$527,877	$554,271	$581,984	$611,084	$641,638	$673,720
Total Operating Expenses	$4,272,979	$4,548,226	$4,844,401	$5,100,316	$5,369,848	$5,653,728	$5,952,725
Park Expenses as % of General Fund	11.76%	11.61%	11.44%	11.41%	11.38%	11.35%	11.32%
Increased Expenses per Year		$25,167	$26,394	$27,713	$29,100	$30,554	$32,082

[6] Assumes growth of about 246 persons annually

Source: Nibley City Budget

The City currently has 175.51 park acres of which 84 are developed. This represents an average operating cost of $6,284 per developed acre,[7] or 80 percent of the national average of $7,823 per acre.[8] This means that Nibley is already efficient with its operating costs and likely does not have excess funding for capital costs. And, if Nibley adds additional amenities or mowed acres to its existing parks, operating costs per acre would increase to maintain the additional facilities. The additional costs shown in Table 3 below do not include the additional operating costs if a recreation center were to be built.

Based on the City's Parks Impact Fee Analysis completed in 2022, the City would need to add approximately 5 to 6 acres per year through 2032, of which 2-3 acres would be developed acres, in order to maintain current service levels. The added annual cost, assuming the City's current cost of $6,284 per developed acre, is covered in the City's projected parks budget shown in Table X above.

TABLE 3: NIBLEY CITY OPERATING EXPENSE PROJECTIONS FOR NEW GROWTH ONLY

Year	Population	Growth per Year	Developed Park Acres Needed	Increased Cost per Year with Inflation*
2024	8,180			
2025	8,409	229	2.35	$15,221.31
2026	8,644	235	2.41	$16,088.73
2027	8,886	242	2.49	$17,065.01
2028	9,135	249	2.56	$18,085.38
2029	9,391	256	2.63	$19,151.62
2030	9,654	263	2.70	$20,265.56
2031	9,924	270	2.77	$21,429.09
2032	10,202	278	2.85	$22,725.95

*An inflation rate of 3 percent per year has been used in the analysis

CAPITAL IMPROVEMENT NEEDS

The City has identified the following capital improvement projects as part of its Parks Master Plan:

TABLE 4: NIBLEY CITY PROPOSED CAPITAL IMPROVEMENT PROJECTS

Capital Costs	Amount
Regional Park	$84,929,161
Regional Park - Future Phase	$2,529,518
1200 W Park	$10,813,536

[7] Calculated based on anticipated costs of $527,877 divided by 84 acres
[8] 2024 NRPA Agency Review

Anhder Park	$1,664,501
River Hollow	$2,084,514
Other Parks	$100,000
TOTAL	**$102,121,230**

Source: Nibley City

The majority of funding for these projects is not included in the City's General Fund projections for parks and recreation. Therefore, additional funding sources will need to be utilized if the capital improvement projects listed above are to be constructed. The City may want to update its Capital Improvement Plan completed in 2022 to include the projects shown above and identify funding sources.

FUNDING SOURCES

Impact Fees

Impact fees are one-time fees charged to new development to offset the capital costs associated with new development. They are one source of funding for new capital improvements to maintain service levels and expand capacity for new growth as it occurs. The City's Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA) completed in 2022 projects growth of approximately 265 persons or about 68 households per year. Park impact fees are charged only to residential units. The City has enacted a fee of $9,003 per single-family residential unit and $6,613 per multi-family unit. Therefore, impact fees will produce revenues of roughly $600,000 per year or just over $6 million over 10 years. Impact fee revenues could support a general obligation (GO) or sales tax revenue bond in the amount of approximately $8 million.[9]

Bonding

A general obligation (GO) or sales tax revenue bond could be issued by the City. A GO bond would require voter approval at an election but would achieve a slightly lower interest rate than a sales tax bond. The following shows some sample impacts on property owners in Nibley given various bonding scenarios to accomplish the capital improvements shown above.

TABLE 5: POTENTIAL BONDING SCENARIOS

	Scenario 1	Scenario 2	Scenario 3
Nibley Taxable Value 2023	$654,678,778	$654,678,778	$654,678,778
Annual Property Tax Revenues	$1,000,000	$2,000,000	$500,000
Tax Rate Necessary	0.0015275	0.0030549	0.0007637
Annual Property Tax Impact on $500,000 Primary Residential Unit	$420	$840	$210
Bond Amt Issued	$13,300,000	$26,600,000	$6,600,000
Bond Rate	4.25%	4.25%	4.25%
Bond Term in Years	20	20	20

[9] Assumes a 20-year term and 4.25 percent interest; GO bond rates would be slightly lower at around 4.0 percent in the current market

Special Districts

Utah law allows for the creation of special districts based on Utah Code §17B. Such districts can also issue bonds. Districts may be created for a variety of purposes including park operations, recreational facilities and services. A special service district created under Title 17D is a hybrid entity in that it is an independent governmental entity, except when it comes to the levy of taxes or assessments, the issuance of debt, or the holding of an election. These actions must be approved by the governmental entity that created the special service district. In reality, special service districts are still ultimately under the control of their creating entities. A special service district may be created by a city or county to provide a variety of services, including parks and recreation. However, if the boundaries of the special district match those of Nibley City, there would be no purpose in creating a district. If a recreation district were created for a larger area, that includes surrounding communities, then taxable value and bonding capacity would increase.

Two examples of recreation districts are Snyderville Basin Special Recreation District (SBSRD) and South Davis Recreation District. Basic special districts have a maximum levy of 0.0008.[10] SBSRD has enacted a current rate of 0.0004 while the rate for South Davis is only 0.000153. These districts have taxable values that are considerably higher than that of Nibley City.

TABLE 6: SBSRD AND SOUTH DAVIS RECREATION DISTRICT COMPARISON

	SBSRD	South Davis
Taxable Value	$19,420,646,121	$12,971,631,948
Tax Rate	0.0004	0.000153
Total Taxes Generated Annually	$7,768,258	$1,984,660
Annual Property Tax Impact on $500,000 Primary Residential Unit	$110	$42

User Fees

While user fees generally don't generate significant revenues, it is still good practice to regularly review fees charged for rentals, recreation programs, etc. to ensure that costs are being covered.[11] If costs are not covered, then General Fund monies are diverted to these uses which could legitimately be covered through fees, thereby reducing funds available for other purposes.

Recreation, Arts and Parks Tax (RAPZ Tax)

This tax has already been enacted to the full 0.10 percent in Cache County. Nibley City could apply for these funds for various projects, but obtaining this funding is generally highly competitive.

[10] Utah Code 17B-b-1002(1)

[11] In some cases, such as for youth and senior programs, many cities have the policy of subsidizing some of the costs.

Grants – Utah Office of Outdoor Recreation

The Utah Office of Outdoor Recreation has several different grant programs, a few of which are listed below.

> ***Utah Outdoor Recreation Grant (UORG)*** is for new outdoor recreation infrastructure projects and helps communities build recreation amenities that support local economic development. Within the UORG program are the UORG Tier 1 ($15,001-$200,000), Regional Asset Tier (Up to $750,000), Mini-Grant (Up to $15,000), and the Utah Outdoor Classroom Grant (Up to $15,000).

> ***Land and Water Conservation Fund (LWCF)*** is a federally-funded program established to assist government agencies with the creation of high-quality, public outdoor recreation facilities. LWCF grants have been used to construct golf courses, swimming pools, and parks.

Other grants are available for restoration of high-use and high-priority trails, boating access and motorized recreation.

Monthly Park Fees

While some cities charge monthly park fees with their water bills, Nibley City would need to work closely with its attorney before enacting such fees. There has been recent litigation in Utah regarding road fees which can be collected if part of a separate utility fund for the maintenance of roads. However, the City needs to be very careful that any fees collected are not viewed as a backdoor tax rather than a fee. If park fees were to be enacted by the City Council, at a rate of $5 per month, the City could generate approximately $9,585 per month or $115,020 annually.[12]

[12] Assumes 1,915 households in Nibley City;
https://www.census.gov/quickfacts/fact/table/nibleycityutah,UT/POP010220

APPENDIX B – NRPA COMPARISON TABLES

TABLE 30 - NRPA GENERAL CATEGORIES COMPARISON TABLE

NRPA COMPARISON – GENERAL CATEGORIES					
Category	**2023 NRPA Performance Review (Less than 20,000 Median)**	**Nibley City**	**Current Difference**	**Nibley City 2030**	**2030 Difference**
Residents per Park	1,225	609	-616	743	-482
Acres of Parkland per 1,000 Residents	13	9.9	-3.1	5.0	-8.0
Park and Recreation Agency FTEs	11.3	4	5.7	-	-
FTEs per 10,000 Residents	11.5	3	5.5	-	-
Revenue as Percentage of Operating Expenditures (Cost Recovery)	26%	61%	35%	-	-
Annual Operating Expenditures	$1,200,000.00	$502,710	-$697,290	-	-
Operating Expenditures per Capita	$120.79	$63.43	-$57.36	$52.08	$68.71
Parks and Recreation Revenues per Capita	$31.31	$38.61	$7.30	$31.74	$0.43
Miles of Trail	4.0	3.9	-0.1	3.9	-0.1

TABLE 31 - NIBLEY CITY PROYECTED PERFORMANCE PLAN

Amenities	2023 NRPA Performance Review (Less than 20,000 Median)	Nibley City	Current Difference	Nibley City 2040	2040 Difference	Number of Existing Amenities	Amenities Needed 2023	Amenities Needed 2040	Phase 1 Project	Phase 2 Project	Phase 3 Project
Playgrounds	2,014	990	-1024	1,966	-48	8	-7.5	-7.0	0	0	0
Basketball Courts	3,729	7,920	4191	15,725	11996	0	2.1	4.2	2	2	1
Baseball Field - Youth (Duplicated in NRPA, may also be 5,033 or 19,556)	3,114	2,640	-474	5,242	2128	3	-2.2	-1.3	0	0	0
Tennis Court (Outdoor)	2,805	7,920	5115	15,725	12920	1	1.8	4.6	2	2	1
Multipurpose Fields	3,859	1,056	-2803	2,097	-1762	7.5	-7.2	-7.0	0	0	0
Dog Parks	11,100	7,920	-3180	15,725	4625	0	0.7	1.4	1	0	1

Softball Fields - Adult	5,800	2,640	-3160	5,242	-558	3	-2.5	-2.1	0	0	0
Softball Fields - Youth	5,079	2,640	-2439	5,242	163	3	-2.5	-2.0	0	0	0
Community Gardens	8,178	7,920	-258	15,725	7547	0	1.0	1.9	1	0	1
Swimming Pools	9,745	7,920	-1825	15,725	5980	0	0.8	1.6	1	0	1
Soccer Fields - Youth	3,600	1,056	-2544	2,097	-1503	7.5	-7.2	-6.9	0	0	0
Multiuse Courts	5,093	7,920	2827	15,725	10632	0	1.6	3.1	2	1	1
Tot lots	5,816	7,920	2104	15,725	9909	0	1.4	2.7	1	1	1
Soccer Fields - Adult	6,955	1,056	-5899	2,097	-4858	7.5	-7.3	-7.2	0	0	0
Skate Parks	10,726	7,920	-2806	15,725	4999	1	-0.3	0.5	0	0	1
Football Fields	8,637	7,920	-717	15,725	7088	0	0.9	1.8	1	0	1
Pickleball (Outdoor)	3,252	3,960	708	7,863	4611	2	-0.8	0.4	0	0	1
18-Hole Golf Courses	9,587	7,920	-1667	15,725	6138	0	0.8	1.6	1	0	1
Multiuse Courts (Outdoor)	4,868	7,920	3052	15,725	10857	0	1.6	3.2	2	1	1
Synthetic Fields	9,518	7,920	-1598	15,725	6207	0	0.8	1.7	1	0	1
Ice Rinks (Outdoor)	8,045	7,920	-125	15,725	7680	0	1.0	2.0	1	0	1
Lacrosse Fields	9,786	7,920	-1866	15,725	5939	0	0.8	1.6	1	0	1
Overlay Fields	8,707	7,920	-787	15,725	7018	0	0.9	1.8	1	0	1
Hockey Field	18,000	7,920	-10080	15,725	-2275	0	0.4	0.9	0	1	0
Recreaction Centers/Gyms	9,745	7,920	-1825	15,725	5980	0	0.8	1.6	1	0	1
Community Centers	8,829	7,920	-909	15,725	6896	0	0.9	1.8	1	0	1
Senior			-6080		1725	0	0.6	1.1	1	0	1

Centers	14,000	7,920		15,725							
Performance Amphitheaters	11,100	7,920	-3180	15,725	4625	1	-0.3	0.4	0	0	1
Nature Centers	10,633	7,920	-2713	15,725	5092	1	-0.3	0.5	0	0	1
Aquatic Centers	11,650	7,920	-3730	15,725	4075	0	0.7	1.3	1	0	1
Stadiums	9,250	7,920	-1330	15,725	6475	0	0.9	1.7	1	0	1
Teen Centers	14,593	7,920	-6673	15,725	1132	0	0.5	1.1	1	0	1
Indoor Ice Rinks	8,000	7,920	-80	15,725	7725	0	1.0	2.0	1	0	1
Arenas	5,531	7,920	2389	15,725	10194	0	1.4	2.8	1	1	1

APPENDIX C – COMMUNITY INPUT SURVEY RESULTS

Over twenty-four percent of Nibley City's population responded to the online survey. Statistically, this percentage correlates with the City's overall demographics. The results are significant and important as they indicate the preferences of the community at large. The online survey was open during the months of June and July with a higher volume of responses occurring in July.

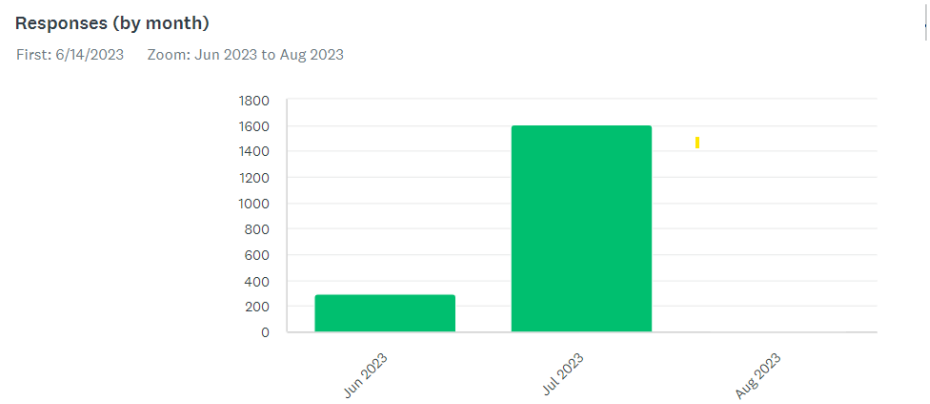


FIGURE 59 - SURVEY RESPONSES TIMEFRAME

Results concerning recreation facilities indicate that an overwhelming majority support the construction of a recreation facility with indoor amenities such as swimming pools, gyms, rock climbing walls, track, basketball/volleyball/pickleball courts, and indoor soccer field. Currently, the most used amenities are walking paths/trails, playgrounds, picnic tables, pavilions, sport fields, and access to the City's natural features like river.

The most requested recreational programs are sports for adults, alternative recreation programs (art and craft classes, summer camps, etc.), swimming and water recreation, pickleball, youth basketball, and indoor/winter programs. More than half of the respondents participate in the City or private recreation program, and other thirteen percent would like to participate in new recreation programs if offered by the City.

Residents mainly enjoy swimming pools, splash pads, fishing ponds streams, hiking/bike trails outside the City, which requires special attention for future programming and planning for new facilities and amenities.

Prioritization of City funding for new facilities were almost equal in four areas concerning to building new sports fields, trails and walking paths, family-oriented activities, and protection of open spaces and natural habitats. To aid with these goals, eighty eight percent of the community support up to $25 tax raised.

APPENDIX D – INDIVIDUAL PARKS SURVEY RESULTS

This survey collected residents' feedback of Nibley City's parks and gathered 442 responses. The four questions asked respondents to name a park, what they like about the park, what could be improved, and what they would like to add to that park.

The park with the most responses was Firefly Park which residents love and have concerns about the preservation of its ecological components, its naturalistic settings, and walking paths. Some park improvements and amenities were trees and shade, light screening, preservation of the views, a bigger playground, and not allowing dogs in the park.

Anhder Park was the second most popular, and in overall, residents were happy about its features and amenities. Some improvements were adding more pickleball courts, a splash pad, and lightning.

Residents would like to have a shaded playground, baseball field improvements, younger children play infrastructure, and benches near the playground in Elkhorn Park.

Heritage Park has many features that residents approve of, like sport fields, playground, pavilion, parking lot, and restrooms. Some improvements that they would like include more shade, playground upgrade, a running water fountain, pickleball courts, among other amenities.

The next popular park was Clear Creek Park with its zipline, disc golf field, pavilion, fields, and walking paths. Residents would like to have more trees and shade and play equipment.

Lastly, respondents mention these other places: Discovery Park/Sunrise Meadows, Nibley Gardens, Mt. Vista Park, Meadow View Park, West Park, and all the Nibley Parks in general, that would like to see improvements in the future and are part of this master plan.

	1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement	*1 space per 100 square feet of floor space, but not less than 10 spaces*	*1 space per each 2 beds*
	Churches, Theaters, Meeting Rooms, Places of Public Assembly	Drive-in Food Estalishments	Hospitals, Convalescent Homes, Nursing Homes
UTAH			
Park City	4	1	1
North Logan	2	2	2
Smithfield	2	1	2
Hyrum			
Alpine	1	1	1
Vineyard	2	1	2
Cedar City	4	1	2
Providence	4	1	1
Logan (pg.163)	2	2	1
Clearfield	4	1	1
Morgan	2	4	2
Brigham City	1	1	4
Mapelton	4	1	1
North Salt Lake	4	2	4
Saratoga Springs	1	1	1
Syracuse	1	1	1
Lindon	2	1	1
St. George	1	1	1
Woods Cross	4	1	4
West Bountiful	2	2	4

NIBLEY PAI

3 spaces per professional member, plus 1 space per professional and staff employee

Professional Offices (i.e. Doctors, Lawyers, Dentists, Chirporactors, Insurance Offices, Real Estate Brokerage Firms, Beauticians)

2
1
2
1
1
2
1
1
2
1
1
1
1
1
1
1
1
1
1



RKING REQUIREMENTS

2 off-street parking in addition to any carport or garage for single-family dewlling units. 3 off-street spaces in addition to any carport or garage for two-family dwelling units. If any dwelling unit is added after the orignial building permit is issued, the parking requirements shall reflect that increase. Additional parking standards for residential dwelling units within R-PUD overlay zones are provided in NCC 19.28. Additional parking standards for residential dwelling units within R-M zones are provided in NCC 19.20.040.

1 space per 4 fixed seats, plus 1 space per each 40 square feet of sloor area for movable seats under maximum seating arrangment

Residential Dwelling Units	Restaurant, Cafeteria, Café
2	2
1	2
1	1
4	4
1	1
2	4
1	4
1	1
2	1
2	2
2	1
2	2
2	2
2	1
1	1
2	1
1	1
2	1
1	1

1 space per 200 square feet of floor space	*1.5 spaces per 2 employees working on highest employment shift*
Retail Stores, Businesses Selling or Catering to the Public, Recreational Places of Assembly	Other Uses Not Listed
1	1
1	1
1	1
1	1
2	2
1	1
1	1
2	1
1	1
2	1
1	1
1	1
4	1
1	1
1	1
1	1
1	1
4	1
1	1

Existing Parking Categories

Churches, theaters, meeting rooms, places of public assembly	1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement
Drive-in food establishments	1 space per 100 square feet of floor space, but not less than 10 spaces
Hospitals, convalescent homes, nursing homes	1 space per each 2 beds
Professional offices such as doctors, lawyers, dentists, chiropractors, insurance offices, real estate brokers, beauticians	3 spaces per professional member, plus 1 space per professional and staff employee

Residential dwelling units	2 off-street spaces in addition to any carport or garage for single-family dwelling units. 3 off-street spaces in addition to any carport or garage for two-family dwelling units., If any dwelling unit is added after the original building permit is issued, the parking requirements shall reflect that increase. Additional parking standards for residential dwelling units within R-PUD overlay zones are provided in NCC 19.28. Additional parking standards for residential dwelling units within R-M zones are provided in NCC 19.20.040.
Restaurant, cafeteria, cafe	1 space per 4 fixed seats, plus 1 space per each 40 square feet of floor area for movable seats under maximum seating arrangement
Retail stores, businesses selling or catering to the public, recreational places of assembly	1 space per 200 square feet of floor space
Other uses not listed	1.5 spaces per 2 employees working on highest employment shift

New Parking Categories

Churches, theaters, meeting rooms, places of public assembly	1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement
Food Establishments with Drive-through	8 spaces per 1,000 sq ft
Food Establishments without Drive-through	10 spaces per 1,000 sq ft
Hospital	3 spaces per 1,000 sq ft

	1 space per 2 beds
Assisted Living or Nursing Home	
Professional offices with frequent client visitation such as doctors, lawyers, dentists, chiropractors, insurance offices, real estate brokers, beauticians	4 spaces per 1,000 sq ft
Corporate or General Office with infrequent client visitation	3 spaces per 1,000 sq ft
Convenience store, gas station	10 spaces per 1,000 sq ft
Supermarket, Grocery Store	4 spaces per 1,000 sq ft
Building Supply,Hardware Store, Agricultural Implements or Nursery	1 space per 1,000 sq ft
Other retail stores, businesses selling or catering to the public, recreational places of assembly	5 spaces per 1,000 sq ft

Residential, Single Family	2 spaces per dwelling
Residential, Multi-family or Attached(2 or more bedrooms)	2.25 spaces per dwelling
Residential, Multi-family (1 or fewer bedrooms)	1.25 spaces per dwelling
Residential, Accessory dwelling unit or secondary dwelling unit	1 space per dwelling
Manufacturing and specialty trades	3 spaces per 1,000 sq ft
Warehousing	1.5 spaces per 1,000 sq ft
Schools, High School or College	0.4 spaces per student
Schools, Elementary or Middle	0.2 spaces per student
Daycare	0.3 spaces per child
Hotel or Bed & Breakfast	1 space per room
Short Term Rental	1 space per 4 maximum occupants
Motor Vehicle Sales & Service	3 spaces per 1,000 sq ft

Land Use Category	Parking Category
Temporary Office/Model Home	Professional offices such as doctors, lawyers, dentists, chiropractors, insurance offices, real estate brokers, beauticians
Assisted Living Facility/Nursing Home	Hospitals, convalescent homes, nursing homes
Group Living Facility [1]	Hospitals, convalescent homes, nursing homes
Housing, Single-Family	Residential dwelling units
Housing, Two-Family	Residential dwelling units
Housing, Multi-Family	Residential dwelling units
Accessory Dwelling Unit[3]	Accessory Dwelling Unit[3]
Bed and Breakfast Inn	Other uses not listed
Residential	
Artisan Shop	Other uses not listed
Home Occupation	Other uses not listed
Housing, Short-Term Rental[4]	Housing, Short-Term Rental[4]
Use	
Agricultural/Animal	
Ag Implement Sales and Service	Retail stores, businesses selling or catering to the public, recreational places of assembly
Agricultural Production	Other uses not listed
Animal Crematorium	Other uses not listed
Arboretum/Nature Center	Retail stores, businesses selling or catering to the public, recreational places of assembly
Farmers' Market	Retail stores, businesses selling or catering to the public, recreational places of assembly

Floral Shop	Retail stores, businesses selling or catering to the public, recreational places of assembly
Garden Center/Nursery	Retail stores, businesses selling or catering to the public, recreational places of assembly
Pet Services	Retail stores, businesses selling or catering to the public, recreational places of assembly
Veterinary Clinic, Large Animal	Professional offices such as doctors, lawyers, dentists, chiropractors, insurance offices, real estate brokers, beauticians
Veterinary Clinic, Small Animal	Professional offices such as doctors, lawyers, dentists, chiropractors, insurance offices, real estate brokers, beauticians
Use	
Public, Institutional, and Civic Uses	
Bus/Transit Terminal	Other uses not listed
Cemetery	Other uses not listed
Church/Places of Worship	Churches, theaters, meeting rooms, places of public assembly
Club/Service Organization/Lodge	Churches, theaters, meeting rooms, places of public assembly
College/University	Churches, theaters, meeting rooms, places of public assembly
Government Services	Professional offices such as doctors, lawyers, dentists, chiropractors, insurance offices, real estate brokers, beauticians
Hospital	Hospitals, convalescent homes, nursing homes

Public Park	Retail stores, businesses selling or catering to the public, recreational places of assembly
Private Park	Retail stores, businesses selling or catering to the public, recreational places of assembly
Utility Substation	Other uses not listed
School	Churches, theaters, meeting rooms, places of public assembly
Use	
Commercial	
Auditorium	Churches, theaters, meeting rooms, places of public assembly
Bail Bonds/Pawnbroker	Retail stores, businesses selling or catering to the public, recreational places of assembly
Bakery	Drive-in food establishments
Banks/Financial Institutions	Retail stores, businesses selling or catering to the public, recreational places of assembly
Beauty Salon/Spa	Retail stores, businesses selling or catering to the public, recreational places of assembly
Business Equipment Sales and Service	Retail stores, businesses selling or catering to the public, recreational places of assembly
Car Wash	Retail stores, businesses selling or catering to the public, recreational places of assembly
Catering/Commercial Kitchen	Other uses not listed
Check Cashing/Credit Services	Retail stores, businesses selling or catering to the public, recreational places of assembly

Construction Sales and Service	Retail stores, businesses selling or catering to the public, recreational places of assembly
Daycare/Preschool, Commercial	Churches, theaters, meeting rooms, places of public assembly
Funeral Home	Churches, theaters, meeting rooms, places of public assembly
Gasoline Service Station	Retail stores, businesses selling or catering to the public, recreational places of assembly
Gasoline, Wholesale	Retail stores, businesses selling or catering to the public, recreational places of assembly
Hotel/Motel	Other uses not listed
Laundry Service	Retail stores, businesses selling or catering to the public, recreational places of assembly
Liquor Store	Retail stores, businesses selling or catering to the public, recreational places of assembly
Low Power Radio Service/Cell Tower	Other uses not listed
Meal Preparation & Assembly	Other uses not listed
Medical/Dental Offices and Clinic	Professional offices such as doctors, lawyers, dentists, chiropractors, insurance offices, real estate brokers, beauticians
Medical Sales and Service	Other uses not listed
Personal Instruction Services	Retail stores, businesses selling or catering to the public, recreational places of assembly
Motor Vehicle Sales and Service	Retail stores, businesses selling or catering to the public, recreational places of assembly
Office, Corporate	Other uses not listed

Offices, Professional	Other uses not listed
Parking, Commercial	Other uses not listed
Plumbing Services	Other uses not listed
Printing/Copying, Commercial	Other uses not listed
Protective Services	Other uses not listed
Recreation/Entertainment, Commercial	Retail stores, businesses selling or catering to the public, recreational places of assembly
Restaurant	Drive-in food establishments
Retail	Retail stores, businesses selling or catering to the public, recreational places of assembly
Repair Service, General	Other uses not listed
Research and Development	Other uses not listed
Research Service	Other uses not listed
Sexually Oriented Business	Retail stores, businesses selling or catering to the public, recreational places of assembly
Transportation Services	Other uses not listed
Use	
Industrial	
Junk/Salvage Yard	Other uses not listed
Manufacturing, Heavy	Other uses not listed
Manufacturing, Industrial	Other uses not listed
Manufacturing, Light	Other uses not listed

Mineral Extraction	Other uses not listed
Pest Control	Other uses not listed
Recycling Collection Facility	Other uses not listed
Sign Shop	Other uses not listed
Sports Facilities	Retail stores, businesses selling or catering to the public, recreational places of assembly
Storage Facility	Other uses not listed
Warehousing	Other uses not listed
Warehousing, Residential Storage	Other uses not listed
Welding/Machine Shop	Other uses not listed

Current Standard is sufficient for use
Need to review/adjust current standard
Need new category
Does not fit ITE standard or current standard. Special Case that may nc

Required Parking	ITE designa	ITE avg	ITE 85th pe	ITE Ind Vari	ITE avg rate
3 spaces per professional member, plus 1 space per professional and staff employee	712 - small	1.85/1000	2.5/1000 s	1000 sq ft	1.85
1 space per each 2 beds	254- Assist	0.4/ bed	0.55/bed	Beds	0.4
1 space per each 2 beds	253- Congr	0.36/dwell	0.48/dwell	Dwelling U	0.36
2 off-street spaces in addition to any carport or garage for s	Single-Fam	1.41/DU	2.27/DU	Dwelling U	1.41
3 off-street spaces in addition to any carport or garage for t	Single-Fam	1.41/DU	2.27/DU	Dwelling U	1.41
2.33/dwelling unit for 2 or more bedrooms. 1.83/dwelling unit for 1 or less bedrooms	217- Multif	0.92, 1.27	1.27, 1.59	Dwelling U	1.27
2 spaces per dwelling unit	Multifamily	1.27/1000	1.59/1000	Dwelling U	1.27
1.5 spaces per 2 employees working on highest employment shift	310- Hotel	0.64/room	0.87/room	Rooms	0.64
1.5 spaces per 2 employees working on highest employment shift	110 - Gene	0.67/1000	2.18/1000	sq ft	
1.5 spaces per 2 employees working on highest employment shift					
1 space per 4 occupants					
1 space per 200 square feet of floor space	812- Buildi	0.57/ 1000	0.75/ 1000	1000 sq ft	0.57
1.5 spaces per 2 employees working on highest employment shift					
1.5 spaces per 2 employees working on highest employment shift					
1 space per 200 square feet of floor space	580 - Muse	0.9/1000 s	1.34/1000	1000 sq ft	0.9
1 space per 200 square feet of floor space					

1 space per 200 square feet of floor space	822 - Strip	2.79/1000	4.44/1000	1000 sq ft 2.79
1 space per 200 square feet of floor space	812- Buildi	0.57/ 1000	0.75/ 1000	1000 sq ft 0.57
1 space per 200 square feet of floor space	822 - Strip	2.79/1000	4.44/1000	1000 sq ft 2.79
3 spaces per professional member, plus 1 space per professional and staff employee	640- Anim	3.08/ 1000	4.27/1000	1000 sq ft 3.08
3 spaces per professional member, plus 1 space per professional and staff employee	640- Anim	3.08/ 1000	4.27/1000	1000 sq ft 3.08

1.5 spaces per 2 employees working on highest employment shift	090 Park-a	84.62/100	197/1000	boardings
1.5 spaces per 2 employees working on highest employment shift				
1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement	560- Churc	13.94/100	17.32/100	1000 sq ft 13.94
1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement	560- Churc	13.94/100	17.32/100	1000 sq ft 13.94
1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement	550- Unive	0.32/stude	0.45/stude	Students 0.32
3 spaces per professional member, plus 1 space per professional and staff employee	730- government office building			1000 sq ft 2.36
1 space per each 2 beds	610- Hospi	3.89/bed	6.46/bed	bed 3.89

1 space per 200 square feet of floor space	411- Publi	0.77/acre	5.52/acre	acre	0.77
1 space per 200 square feet of floor space	411- Publi	0.77/acre	5.52/acre	acre	0.77
1.5 spaces per 2 employees working on highest employment shift					
1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement	520- Elem	0.14, 0.10, 0.19, 0.19,		student (el	0.14

1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement	441 - Live	0.25/seat	0.52/seat	seat	0.25
1 space per 200 square feet of floor space	912- Drive-	3.4/1000 S	5.03/1000	1000 sq ft	3.4
1 space per 100 square feet of floor space, but not less than 10 spaces	936- Coffe	10.36, 5.1/	16.8, 10.7	1000 sq ft (	10.36
1 space per 200 square feet of floor space	912- Drive-	3.4/1000 S	5.03/1000	1000 sq ft	3.4
1 space per 200 square feet of floor space	822 - Strip	2.79/1000	4.44/1000	1000 sq ft	2.79
1 space per 200 square feet of floor space	822 - Strip	2.79/1000	4.44/1000	1000 sq ft	2.79
1 space per 200 square feet of floor space					
1.5 spaces per 2 employees working on highest employment shift	110 - Gene	0.67/1000	2.18/1000	1000 sq ft	0.67
1 space per 200 square feet of floor space	912- Drive-	3.4/1000 S	5.03/1000	1000 sq ft	3.4

1 space per 200 square feet of floor space	812- Buildi	0.57/ 1000	0.75/ 1000	1000 sq ft 0.57
1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement	565 - Day C	0.25/Stude	0.34/Stude	Student 0.25
1 space per 5 fixed seats and 1 space per 50 square feet of floor area for movable seats under maximum seating arrangement				
1 space per 200 square feet of floor space	945 - Conv	8.21/1000	10.65/100	1000 sq ft 8.21
1 space per 200 square feet of floor space	945 - Conv	8.21/1000	10.65/100	1000 sq ft 8.21
1.5 spaces per 2 employees working on highest employment shift	310- Hotel	0.64/room	0.87/room	Rooms 0.64
1 space per 200 square feet of floor space				
1 space per 200 square feet of floor space	899 - Liquc	1.76/1000	2.69/1000	1000 sq ft 1.76
1.5 spaces per 2 employees working on highest employment shift				
1.5 spaces per 2 employees working on highest employment shift				
3 spaces per professional member, plus 1 space per professional and staff employee	630- Walk-	3.67/1000	4.52/1000	1000 sq ft 3.67
1.5 spaces per 2 employees working on highest employment shift				
1 space per 200 square feet of floor space	493 - Athle	3.09/1000	4.88/1000	1000 sq ft 3.09
1 space per 200 square feet of floor space	943- Auto I	1.79/1000	3.08/1000	1000 sq ft 1.79
1.5 spaces per 2 employees working on highest employment shift	714- Corpc	2.18/1000	3.26/1000	1000 sq ft 2.18

1.5 spaces per 2 employees working on highest employment shift	710- Gene	1.95/1000	2.98/1000	1000 sq ft	1.95
1.5 spaces per 2 employees working on highest employment shift					
1.5 spaces per 2 employees working on highest employment shift	180- Speci	1.76/1000	4.06/1000	1000 sq ft	1.76
1.5 spaces per 2 employees working on highest employment shift	920- Copy,	3.01/1000	3.01/1000	1000 sq ft	3.01
1.5 spaces per 2 employees working on highest employment shift	710- Gene	1.95/1000	2.98/1000	1000 sq ft	1.95
1 space per 200 square feet of floor space	437 - Bouw	3.69/1000	4.08/1000	1000 sq ft	3.69
1 space per 100 square feet of floor space, but not less than 10 spaces	930-937(v	5.1-16.18/	10.75-19.66/1000 sq ft		
1 space per 200 square feet of floor space	813-823, 8	0.57-3.11/	0.75-5.24/1000 sq ft		
1.5 spaces per 2 employees working on highest employment shift	180- Speci	0.71/empl	1.68/empl	1000 sq ft	1.76
1.5 spaces per 2 employees working on highest employment shift	760- R&D (	2.56/1000	2.77/1000	1000 sq ft	2.56
1.5 spaces per 2 employees working on highest employment shift	760- R&D (	2.56/1000	2.77/1000	1000 sq ft	2.56
1 space per 200 square feet of floor space	822 - Strip	2.79/1000	4.44/1000	1000 sq ft	2.79
1.5 spaces per 2 employees working on highest employment shift	150- Warel	0.77/empl	1.08/empl	1000 sq ft	0.37

1.5 spaces per 2 employees working on highest employment shift				
1.5 spaces per 2 employees working on highest employment shift	140- Manu	0.81/empl	1.21/empl	1000 sq ft	0.92
1.5 spaces per 2 employees working on highest employment shift	140- Manu	0.81/empl	1.21/empl	1000 sq ft	0.92
1.5 spaces per 2 employees working on highest employment shift	140- Manu	0.81/empl	1.21/empl	1000 sq ft	0.92

1.5 spaces per 2 employees working on highest employment shift				
1.5 spaces per 2 employees working on highest employment shift	180- Speci	0.71/empl	1.68/empl	1000 sq ft 1.76
1.5 spaces per 2 employees working on highest employment shift	170- Utility	0.72/empl	2.75/employee, 9.01/1000 sq ft	
1.5 spaces per 2 employees working on highest employment shift	180- Speci	0.71/empl	1.68/empl	1000 sq ft 1.76
1 space per 200 square feet of floor space	493- Athlet	3.09/1000	4.88/1000 sq ft	
1.5 spaces per 2 employees working on highest employment shift				
1.5 spaces per 2 employees working on highest employment shift	150- Warel	0.77/empl	1.08/employee, 1.08/:	1000 sq ft
1.5 spaces per 2 employees working on highest employment shift	150- Warel	0.77/empl	1.08/employee, 1.08/:	1000 sq ft
1.5 spaces per 2 employees working on highest employment shift	140- Manu	0.81/empl	1.21/employee, 3.36/:	1000 sq ft

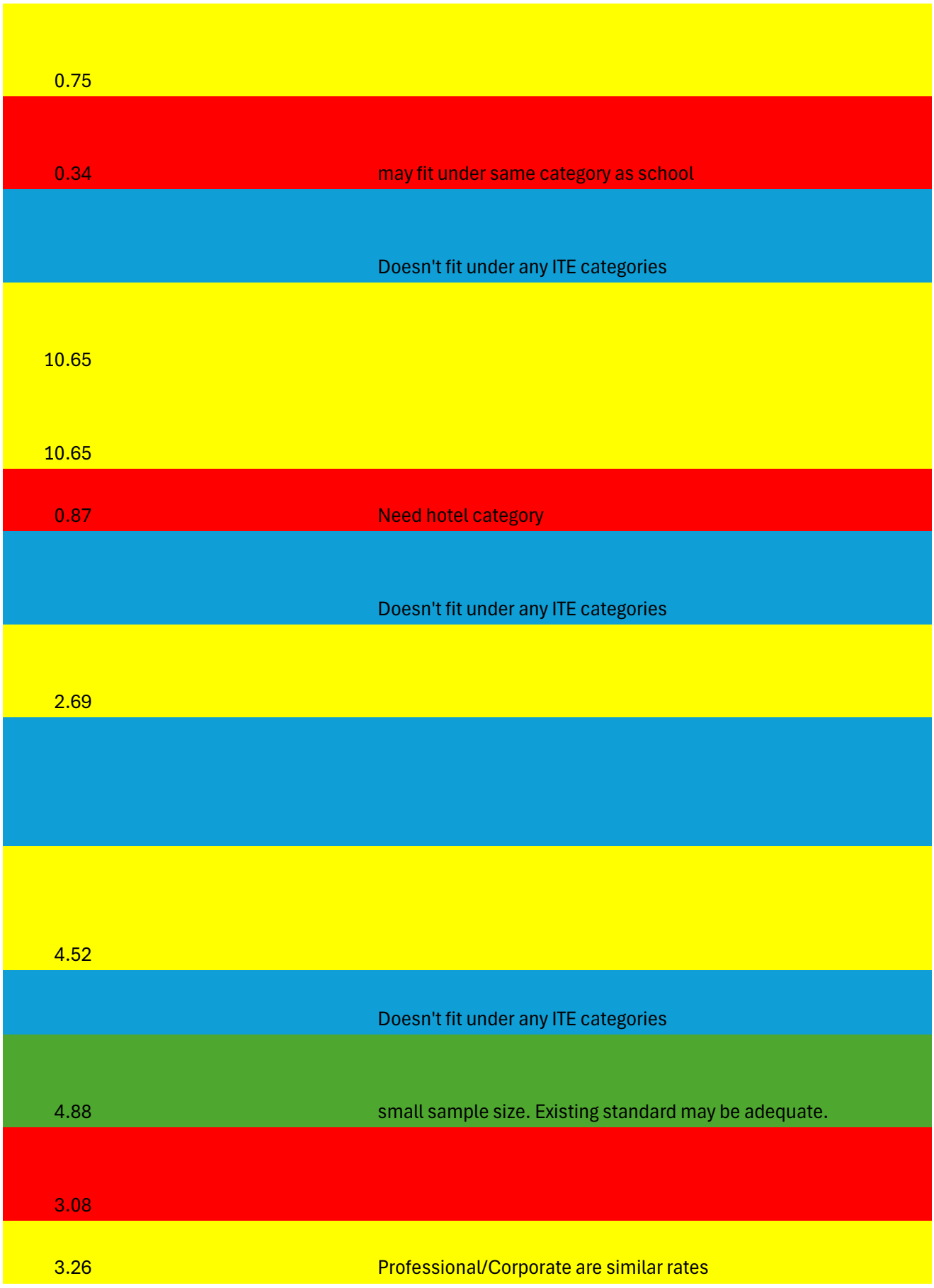
ɔt need to be adjusted or addressed

ITE 85th pe	ITE Ind Vari	ITE avg rate	ITE 85th pe	notes
2.5				consider different office categories
0.55				
0.48				Need to add group living to nursing homes
2.27				Should we include garage space?
2.27				Should we include garage space?
1.59	Dwelling U	0.92	1.27	Listed in R-M & R-PUD ordinance. Move to parking section for all zon
1.59	Dwelling U	0.92	1.27	Due to limited size, could be based on multi-family or attached sing
0.87				Need to add hotels to chart
				Category may not fit use well. If it is home-based, parking could be b
				Listed in STR ordinance. Coule be combined with hotel, but this is di
0.75				Closest Use Category, but not great match. Home Improvement Sup
1.34				Closest Use Category, but not great match.

4.44				Closest Use Category, but not great match. Could fit under general r
0.75				Closest Use Category, but not great match. Home Improvement Sup
4.44				Closest Use Category, but not great match. Could fit under general r
4.27				Ratios similar to general retail
4.27				Ratios similar to general retail

17.32				High compared to some local exa small sample size (4 samples). Seems excessive.
17.32				High compared to some local examples
0.45				
4.04	Employees	0.89	3.86	
6.46	1000 sq ft	2.25	3.62	Hospital demonstrates higher demand/bed than assisted living

5.52				Huge range, small sample size, 488- Soccer field is 50-70/field with
5.52				Huge range, small sample size, 488- Soccer field is 50-70/field with
0.19	student (hi	0.26	0.32	Charter & Private have similar rates with small sample size. Makes s
0.52				small sample size
5.03				
16.8	1000 sq ft (	5.1	10.75	Some variation with drivethrough but existing standard is generally a
5.03				
4.44				Closest Use Category, but not great match. Could fit under general r
4.44				
2.18				Category may not fit use well.
5.03				


0.75
0.34
may fit under same category as school
Doesn't fit under any ITE categories
10.65
10.65
0.87
Need hotel category
Doesn't fit under any ITE categories
2.69
4.52
Doesn't fit under any ITE categories
4.88
small sample size. Existing standard may be adequate.
3.08
3.26
Professional/Corporate are similar rates

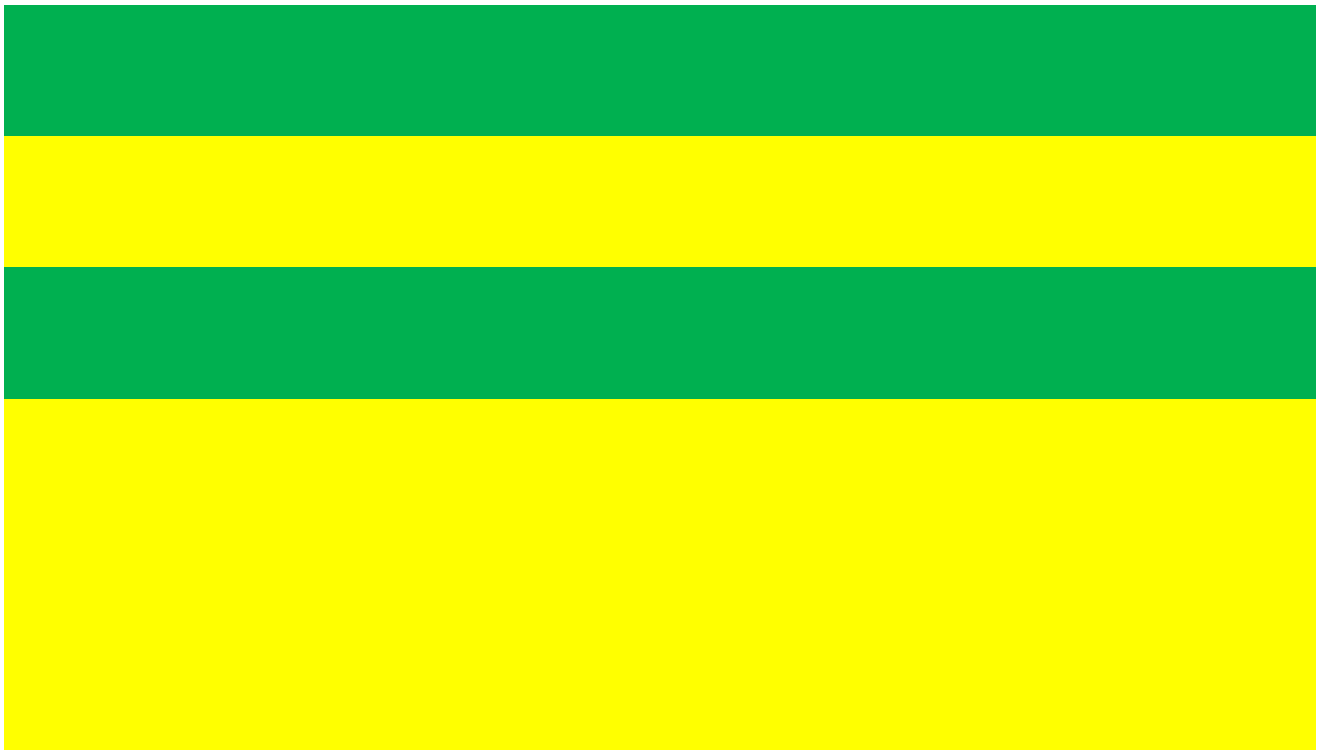
2.98				Professional/Corporate are similar rates
4.06				
3.01				Very low sample size (1)
2.98				Professional/Corporate are similar rates
4.08				
				Existing standard may be adquate. Could add provision for drive-thr
				There is a lot of variation in retail. Should be split up into different ca
4.06	employee	0.71	1.68	Low R sq for square footage. Employees may be better indicator.
2.77				Small sample size
2.77				Small sample size
4.44				Closest Use Category, but not great match. Could fit under general r
1.08	employee	0.77	1.08	

3.36	employee	0.81	1.21	low R sq on square footage
3.36	employee	0.81	1.21	low R sq on square footage
3.36	employee	0.81	1.21	low R sq on square footage

4.06	employee	0.71	1.68	Low R sq for square footage. Employees may be better indicator.
				Low R sq for square footage. Employees may be better indicator.
4.06	employee	0.71	1.68	Low R sq for square footage. Employees may be better indicator.
				small sample size

0.37	1.08	employee	0.77	1.08
0.37	1.08	employee	0.77	1.08
0.37	1.08	employee	0.77	1.08

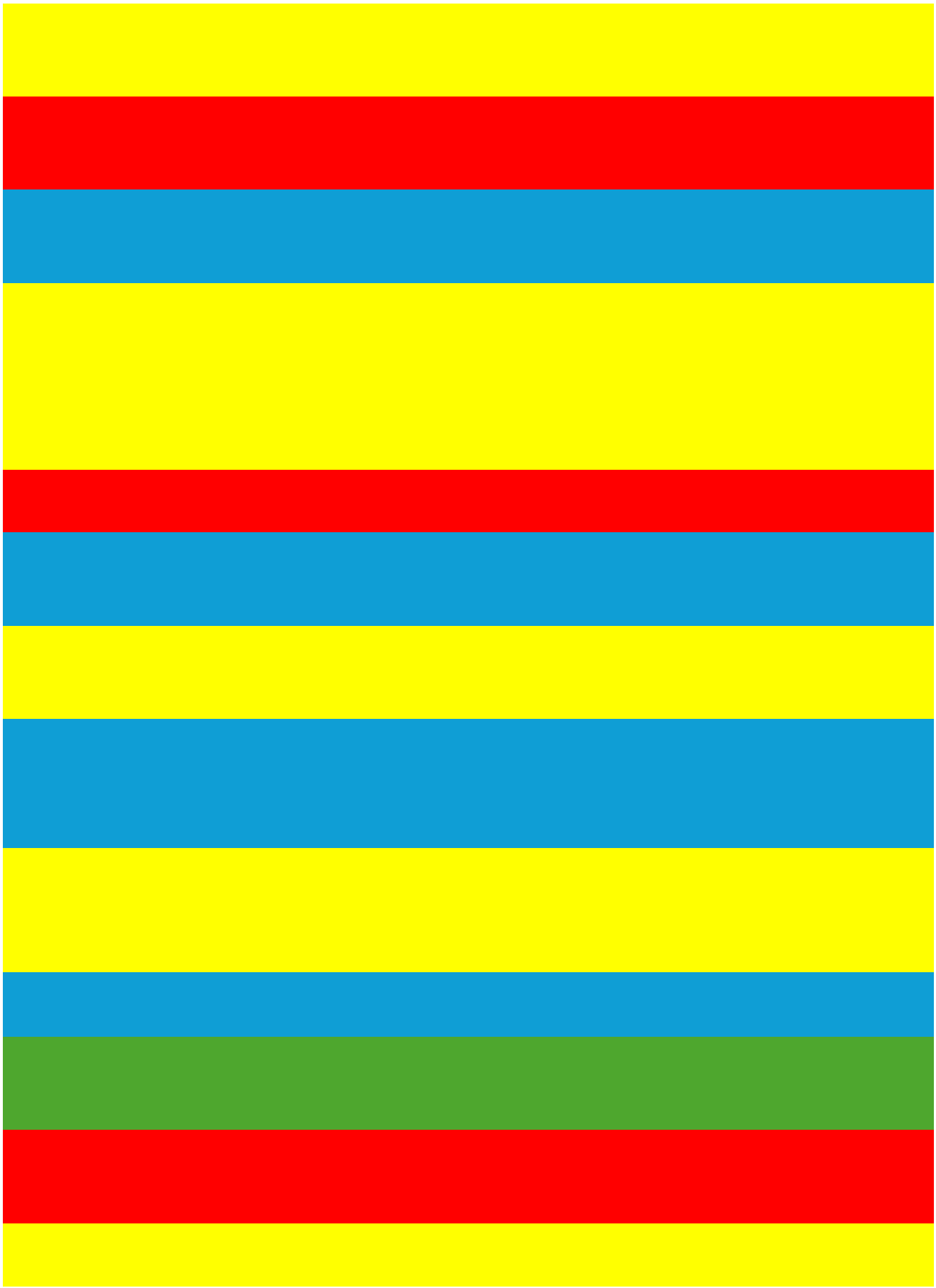






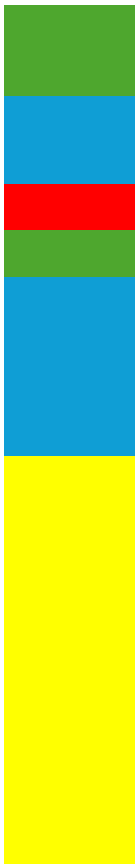




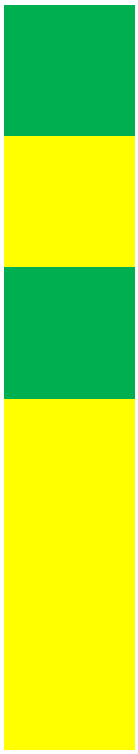


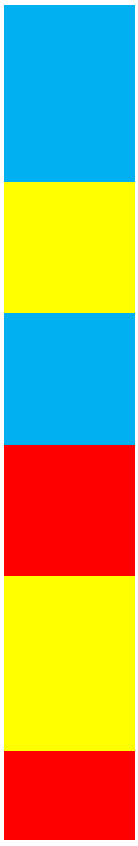

tegories (Supermarket (higher), hardware/home improvement(lower), general retail(moderate), convenience (hig


















hest)

