CITY OF MOUNTAIN HOME
ELMORE COUNTY, IDAHO

Legal Notice

REQUEST FOR QUALIFICATIONS

PUBLIC WORKS CONSTRUCTION SERVICES

PRE-QUALIFICATION for
2019-2020 Mountain Home Skate Park

RESPONSES ARE DUE PRIOR TO:
DECEMBER 12TH, 2019

Responses may be mailed or hand-delivered to:

City of Mountain Home
Attn: Nina Patterson
City Clerk
P.O. Box 10
160 South 3rd East
Mountain Home, ID 83647

PART 1 – GENERAL INFORMATION

1.1 PROJECT TITLE

City of Mountain Home Skate Park RFQ – Pre-Qualification Public Works Contractors

1.2 PROJECT DESCRIPTION

The City of Mountain Home ("City") is seeking qualified and experienced respondents ("individuals" or "firms") to submit Statements of Qualifications ("SOQs") from Idaho-licensed public works contractors to be pre-qualified, in accordance with Idaho Code 67-2805(2)(b), to submit competitive bids for the construction of a state of the art regional skate park within the Richard Aguirre Park located at East 10th North Street and North 5th East Street, Mountain Home Idaho 83647 (the "Project"). This RFQ is for public works construction only as the design phase of the Project was previously awarded to Hardcore Skateparks, 1410 Vantage Court Vista, California.

In accordance with Idaho Code 67-2805(2)(b), this Pre-Qualification Phase of the Procurement Process will not consider cost, but instead will prequalify bidders based upon the following criteria: technical competence; experience constructing similar facilities; prior experience with the City of Mountain Home; available non-financial resources, equipment, and personnel; and overall performance history based upon the contractor's entire body of work.

Upon review and evaluation of the SOQ received, each respondent firm deemed qualified by the City of Mountain Home for the Scope of Work will be placed on a list of construction firms eligible to submit bids under a separate formal procurement phase in accordance with Idaho Code 67-2805(2)(b) (v) through (xiii). Only contractors pre-qualified through this process will be allowed to submit a bid for the public works construction project.

1.3 SCOPE OF WORK

The Skate Park will replace an existing facility created over ten years ago that does not meet today's standards for use or safety. The City is receiving grant funding for a state of the art State Comprehensive Outdoor Recreation ("SCORP") skate park located generally in the northeast corner of the Richard Aguirre Park. The skate park will be approximately 10,000 square feet in size. The design phase of the Project has been awarded to Hardcore Skateparks. The awarded contractor will then perform the skate park construction according to the Hardcore Skatepark design documents which are attached hereto and incorporated as if stated in full. The City shall provide certain in-kind grubbing work for the skate park including removal of grass and 6-12 inches of topsoil. (Please see in-kind work breakdown in the Mountain Home Skate Park Budget attachment.) The scope of work is largely cement work. The Skate Park construction and facility plan combines a street course with stairs, banks, ledges, rails, a fly-over gap, and unique hubbas as well as other entry-level and technical elements. The street course goes around a multi-depth flow bowl with artistic features, roll-ins, pool coping, a slight over-vert section and heights that range from 4 feet to 8 feet in depth. Surrounding the park is a

pedestrian path which includes a sitting and spectator area, ADA accessible. Future plans, not part of this construction, will incorporate lighting and water fountains.

1.4 PROJECT LOCATION

Richard Aguirre Park - East 10th North Street and North 5th East Street, Mountain Home Idaho 83647

1.5 PROJECT CONTACT

Jamie McDaniel
Grant Administrator
(208) 587-2173

Questions regarding this RFQ should be addressed to the Project Contact.

1.6 SUBMISSION DEADLINE

December 12, 2019

1.7 SUBMISSION TIME

5:00 P.m. Mountain Standard Time

1.8 SUBMISSION LOCATION

The submission package or envelope must be sealed and plainly marked for delivery as follows:

City of Mountain Home
Attn: Nina Patterson
City Clerk
P.O. Box 10
160 South 3rd East
Mountain Home, ID 83647

Please indicate **"RFQ Mountain Home Skate Park"** on the outside envelope.

To be considered, the submission package must contain:

Exhibit A: Statements of Qualifications

Exhibit B: Required Waiver & Release

Exhibit A: Statements of Qualifications requires that the Respondent provide other documents containing requested information and answer all Yes / No questions found throughout. Failure to supply the requested information or complete any form may be cause to deem the submission non-responsive.

1.9 SUBMISSION INSTRUCTIONS

Carefully read all instructions, requirements and specifications. Give all requested information properly and completely. The title must be referenced on all responses and correspondence related to the RFQ. Submit your proposal with appropriate supplements and/or samples. One (1) SIGNED original submission package and two (2) complete copies are required. Please submit your RFQ proposal via mail or hand deliver to the address below by the submission deadline. Unsigned submissions will not be accepted. Late or incomplete submissions will not be accepted. Email or fax submissions will not be accepted. Respondent assumes full responsibility for the timely delivery of its submission to City.

1.10 ADMINISTRATIVE GUIDANCE

The information provided in this RFQ is designed to provide interested respondents with sufficient information to submit responses meeting minimum requirements, but it is not intended to limit response content or to exclude any relevant or essential data therefrom. Respondents are at liberty and are encouraged to expand upon the specifications to give additional evidence of their ability to provide the services requested in this RFQ.

1.11 SCOPE OF TERMS & CONDITIONS

Before submitting a response, the respondent shall understand all contract conditions referred to in this document, and any addenda issued before the RFQ submission date. It shall be the respondent's responsibility to ensure that the response includes all addenda issued prior to the RFQ submission date. By submitting a response, the respondent acknowledges and accepts the Terms and Conditions described herein.

1.12 RESPONSE PREPARATION COSTS

Respondent will be responsible for all costs (including site visits where needed) incurred in preparing or responding to this RFQ. Mountain Home is not liable for any cost incurred by the respondent associated with the preparation of the response or the negotiation of a contract for services prior to the issuing of the contract.

1.13 RESTRICTIONS

All responses must clearly set forth any restrictions or provisions deemed necessary by the respondent to effectively service the proposed project.

1.14 RFQ RESPONSE

Any response submitted pursuant to this RFQ shall constitute an offer by the respondent to the City. The representations submitted shall be binding upon each respective respondent for (a) sixty (60) days from the submission deadline or (b) until the successful respondent and the City enter into an agreement pursuant to this RFQ, whichever occurs first.

1.15 ADDENDUM TO THE RFQ

In the event that it becomes necessary to revise this RFQ in whole or in part, an addendum will be provided to all respondents and potential respondents of whom the City has record as having received this RFQ. In the event it becomes necessary to revise any part of the RFQ, written addenda will be issued. A statement issued in an addendum shall have the effect of modifying this RFQ as outlined in said addendum. Addenda will be made available by way of the City website: www.mountain-home.us. It is the Respondent's responsibility to check for addenda prior to submitting a submission package.

1.16 ALTERNATIVE RESPONSES

Respondents may not submit more than one response. Each response submitted will be evaluated on its own merits.

1.17 OBJECTIONS

Written objections to prequalification procedures must be received by City at least three (3) business days before the date and time upon which submissions are due. Objections are to be in writing directed to the project contact at the address shown above.

1.18 RIGHTS RESERVED

City reserves the right to act in the public best interest and in furtherance of the purposes of the laws for Purchasing by Political Subdivisions, Chapter 28, Title 67, Idaho Code. City reserves the right to waive any formalities or defects as to form, procedure, or content with respect to its RFQ and any minor irregularities in the submissions received, to request additional data and information from any and all Respondents, to reject any submissions based on real or apparent conflict of interest, to reject any submissions containing inaccurate or misleading information, and to accept the submissions that are in the best interest of City. The issuance of this RFQ and the receipt and evaluation of submissions does not obligate City to take any further action relative to the RFQ. City may in its discretion cancel this process at any time without liability.

1.19 PUBLIC RECORDS

All materials and documents submitted in response to this RFQ become the property of City and will not be returned. City is a public agency. All documents in its possession are public records subject to disclosure under the Idaho Public Records Act, Chapter 1, Title 74, Idaho Code, and will be available for inspection and copying by any person after the RFQ process is complete. If any Respondent claims any part of its submission is exempt from disclosure under the Idaho Public Records Act, Respondent must: 1.) Indicate by marking the pertinent document "CONFIDENTIAL"; and, 2.) Include the specific basis for the position that it be treated as exempt from disclosure. Marking the entire submission as "Confidential" is not in accordance with the Idaho Public Records Act and will not be honored. City, to the extent allowed by law and in accordance with these Instructions, will honor a designation of nondisclosure. By claiming material to be exempt from disclosure under the Idaho Public Records Act, Respondent expressly agrees to defend, indemnify, and hold City harmless from

any claim or suit arising from City's refusal to disclose such materials. Any questions regarding the applicability of the Public Records Act should be addressed to your own legal counsel prior to submission.

1.20 REPRESENTATIONS & WARRANTIES

By submitting a proposal, each respondent represents and warrants that:

- Its proposal is made in good faith.
- Its proposal is not submitted in the interest of, or on behalf of, another person or entity.
- It has not directly or indirectly induced or solicited any other respondent to submit a bid other than in good faith.
- It has not directly or indirectly induced or solicited any other person or entity to abstain from submitting a proposal.
- It has not sought by collusion to obtain for itself any advantage over other respondents or the City.

END OF PART 1

PART 2 – QUALIFICATION INFORMATION

2.1 STATEMENT OF QUALIFICATIONS

Each respondent must submit a complete and concise Statement of Qualifications in response to this RFQ, and must demonstrate the respondent's ability to meet the requirements of this RFQ. Statements of Qualifications must include the following:

1. *Signed cover letter stating interest in project:* Cover letter should indicate respondent's willingness to enter into an agreement with the City. An officer of the company who has authority to commit their firm to the proposed project must **sign** the letter.

2. *General Firm or Individual Qualifications and Capacity:* Include firm or individual's location, where the work will be performed, and firm's or individual's background and demonstrated ability to perform the required services for this project.

3. *Project Team:* Indicate key professionals that will be specifically assigned to work on this project. Also identify project manager. Detailed resumes for key professionals and project manager should be included as an appendix to the proposal. Describe team member's educational background, related experience, experience in providing like services to governmental entities, and individual references within such entities.

4. *Past Work & References: Descriptions* of at least three recent similar/related projects including construction costs and references.

Format and style of the proposal is at the discretion of the respondent. Respondents are encouraged to provide any supplemental information and attachments relevant to the response.

2.2 BASIS FOR SELECTION AND PRE-QUALIFICATION

All proposals submitted in response to this RFQ will be evaluated, and as otherwise set forth in this RFQ. As an initial step in the evaluation process, the City shall review all proposals received by the submission deadline. Next, any timely, yet non-responsive proposals (i.e., those proposals not conforming to the requirements set forth in this RFQ will be eliminated.) All remaining timely and responsive proposals shall then be cursorily reviewed by the City to eliminate from further considerations those submittals which, in the sole discretion and judgment of the City, fail to offer sufficient or substantive provisions which are required to warrant further consideration. The City reserves the right to disqualify any proposal that significantly deviates from the terms, conditions, and specifications contemplated by this RFQ. Any remaining proposals will then be reviewed and evaluated in detail. If the City discovers at any point in the evaluation process that a proposal is lacking required or requested information, the City may remove said proposal from further consideration.

At the conclusion of this initial evaluation phase in accordance with Idaho Code § 67-2805(2)(b), this Request for Qualifications will be evaluated as detailed below. Only

Respondents who complete all information requested, completely and accurately, and receive a score of 75 points or greater will be eligible to bid on the Mountain Home Skate Park Project.

- ❖ Experience constructing similar public works facilities – 30 points possible
- ❖ Key personnel – 20 points possible
- ❖ Overall performance history – 25 points possible
- ❖ References – 15 points possible
- ❖ Prior Experience with Mountain Home – 10 points possible

City may conduct investigations and interviews, if necessary, to determine the performance record and abilities of Respondent to perform the size and type of work to be contracted. By submitting a response to this RFQ, the Respondent is authorizing City to conduct investigations and interviews as needed. City reserves the right to be the sole judge as to the overall acceptability of any response or to judge the individual merits of specific provisions within competing offers.

2.3 PROJECT SCHEDULE (*Tentative*)

Prequalification

Request for Qualifications issued	November 27th, 2019
Last Day for Objections	December 9th, 2019 by 5:00 p.m.
Qualifications Due	December 12th, 2019 by 5:00 p.m.
Selection of Pre-Qualified Contractors	Mountain Home City Council Meeting: December 23rd, 2019
Deadline to Appeal	*7 days from notice of Board decision*

Project Bidding

Invitation to Bid to Pre-Qualified Contractors	by December 27th, 2019
Bids due and Opened	January 23rd, 2020 at 3:00 p.m.
Bid Award	Mountain Home City Council Meeting: January 27th, 2020

Project Construction

Notice to Proceed	January 28th, 2019
Estimated Construction Duration	4 Months

END OF PART 2

EXHIBIT A

RFQ: MOUNTAIN HOME SKATE PARK PROJECT
STATEMENTS OF QUALIFICATIONS (SOQ)
(REQUIRED FOR SUBMISSION)

TO: City of Mountain Home
Attn: Nina Patterson
City Clerk
P.O. Box 10
160 South 3rd East
Mountain Home, ID 83647

THE UNDERSIGNED DECLARES, that he/she holds the position indicated below as a corporate officer or the owner or a partner in the business entity submitting these Qualifications; that the undersigned is informed of all relevant facts surrounding the preparation and submission of these Qualifications; and that the undersigned represents and warrants that all information provided is true, accurate, and complete.

Signature:_____

Print Name / Title:_____

Name of Company:_____

Company Type: ____ Corporation _____ Partnership _____Individual____LLC_____Other

Telephone:_____Fax: _____

E-mail Address:_____

LICENSE: Idaho Public Works Contractor License # _____

Number of years the Company has been in business:_____

Is the Company a parent or subsidiary of another Company?_____Yes _____No

If yes, please explain: _____

Federal Tax ID # _____

ADDENDA: Respondent has reviewed and understands all addenda issued with this RFQ:

Addendum No._____ Dated:_____

Addendum No._____ Dated: _____

INSTRUCTIONS: Review each page of this Exhibit A.
Provide the documents requested and answer all Yes / No questions found herein.

1. SIMILAR PROJECT EXPERIENCE

Contractor's experience completing similar projects will be evaluated. 30 points possible. The Contractor (and the Key Personnel) must have the following project experience:

Contractor Requirements

- ❖ Successfully completed the construction of at least three (3) projects each with a bid price of $200,000 or more within the last ten (10) years.
  - All three (3) projects must have been focused on new construction of a skate park.

PROVIDE: Provide at least three (3) examples of Respondent's work equal to or exceeding a project cost of $200,000 within the last ten (10) years. All three (3) projects must have been focused on new construction of a skate park.

Include all of the following project information to verify and evaluate whether the Contractor has the project experience required: Owner names, addresses, phone numbers, email addresses, dates of construction, original contract value, final contract value, descriptions of the projects, descriptions of the work performed, and descriptions of the additional work performed beyond the original contract value if required.

Three examples provided with complete project information._____Yes _____No

2. KEY PERSONNEL

Experience of Key Personnel will be evaluated. 20 points possible. The Key Personnel must have the following project experience:

Project Manager Required Experience

- ❖ At least three (3) full consecutive years of experience as a construction project manager focused on new construction of skate parks.
- ❖ Successfully managed and completed three (3) construction projects each with a bid price of $200,000 or more within the last ten (10) years. All projects shall be focused on new construction of a skate park.

Project Superintendent Required Experience

- ❖ At least three (3) full consecutive years of experience as a project superintendent focused on new construction of skate parks.
- ❖ Successfully supervised and completed three (3) construction projects each with a bid price of $200,000 or more within the last ten (10) years. All projects shall be focused on new construction of a skate park.

PROVIDE: Provide a résumé for each candidate who would fill the positions of Project Manager and Project Superintendent for the Mountain Home Skate Park Project. Be sure the résumés include:

- Employment information such as names, dates of employment, addresses, phone numbers, and email addresses that is sufficient to verify and evaluate the Project Manager's and Project Superintendent's employment history.

- All of the following project information to verify and evaluate whether the Project Manager and Project Superintendent have the required project experience: Owner names, addresses, phone numbers, email addresses, dates of construction, original contract values, final contract values, descriptions of the projects, and descriptions of the work performed.

One (1) alternate candidate résumé for each position may be provided in case the primary candidate's employment and project references cannot be reached or the primary candidate's experience requirements do not meet the requirements. Please be sure to indicate "*Alternate*" on any alternate candidate résumés.

Résumés provided with complete contact information._____Yes _____No

3. OVERALL PERFORMANCE HISTORY

Contractor's overall performance history will be evaluated. 25 points possible.

PROVIDE: Provide answers to the following questions; provide documents where requested.

Provide a statement or letter from a surety insurer authorized to do business in the State of Idaho which states that Contractor's current available bonding capacity is sufficient for the project for which it seeks pre- qualification. Surety insurer must have an A.M. Best financial strength rating of "A-" or better.	
In the last five (5) years, have you or any of the company owners, officers, or partners had their Contractor's license revoked?	
In the last five (5) years, have you or any of the company owners, officers, or partners been "defaulted" or "terminated" by an owner (other than for convenience of the owner)?	
In the last five (5) years, have you or any of the company owners, officers, or partners been convicted of a crime involving any federal, state, or local law related to construction, including any act of dishonesty?	
In the last five (5) years, have you or any of the company owners, officers, or partners been convicted of a crime involving the awarding of a contract on a government construction project or the bidding or performance of a government construction contract?	
Is your company currently in bankruptcy proceedings or has the company filed for bankruptcy at any time during the last five (5) years?	
Is your company currently in default on any loan agreement or financing agreement with a bank, financial institution, or other financial entity?	
In the last five (5) years, has your company ever been denied bond coverage by a surety?	

In the last five (5) years, has any surety company made any payments on your company's behalf as a result of default, to satisfy any claims made against a performance or payment bond, in connection with any public or private construction project?	
In the last five (5) years, has any claim against your company concerning your company's work on a construction project been filed in court or submitted to mediation or arbitration?	
In the last five (5) years, has any insurance carrier, for any form of insurance, refused to renew your company's insurance policy?	
In the last five (5) years, has the U.S. Army Corps of Engineers, Environmental Protection Agency, Idaho Department of Environmental Quality, or any other environmental quality control board cited and assessed penalties against your company or the owner of a project on which your company was the contractor and deemed responsible for the penalties?	
Does your company have a written health and safety (H&S) program / procedures? *If yes, provide a copy, in hardcopy or CD format.*	
Does your company have a health and safety training program? *If yes, provide a copy of the policy and procedures, in hardcopy or CD format.*	
Does your company conduct safety meetings during the course of a construction project? *If yes, provide a copy of the safety meeting policy and a sample agenda.*	

4. REFERENCES

Contractor's References will be evaluated. 15 points possible.

References must be project owners – not subcontractors, building officials, lending institutions, or the like. The City may ask questions relative to Contractor's abilities and competence, including any or all of the following:

- ❖ Contractor's ability to provide adequate supervision on the project.
- ❖ Contractor's ability to work cooperatively with Owner, Architect, and outside parties.
- ❖ Contractor's ability to manage safety on the job site.
- ❖ Contractor's ability to work in accordance with the contract documents.
- ❖ Contractor's ability to provide timely reports, submittals, and scheduling updates.
- ❖ Contractor's utilization of change order requests
- ❖ Contractor's ability to maintain strong public relations and minimize disruption to businesses and the general public.
- ❖ Contractor's interaction with regulatory agencies and utilities.
- ❖ Contractor's ability to keep the project on schedule.
- ❖ Contractor's ability to manage closeout procedures efficiently and effectively.

PROVIDE: Provide three (3) references that can speak to Contractor's abilities and competence on projects equal to or exceeding a project cost of $200,000 within the last ten (10) years. All of the projects shall be focused on new construction of a skate park.

Include all of the following information to verify and evaluate Contractor's References: Owner names, addresses, phone numbers, email addresses, dates of construction, original contract value, final contract value, descriptions of the projects, and descriptions of the work performed.

Contractor may indicate that the References are the same as those that were listed for Section 1 (Similar Project Experience) above, or Contractor may choose to provide different references.

References provided are those in Section 1 above.__Yes _____No

New References are provided with complete contact information._____Yes _____No

5. PRIOR EXPERIENCE WITH CITY

Experience working with City will be evaluated. 10 points possible.

PROVIDE: Provide information about previous projects completed for City. Include the project names, dates of construction, original contract value, final contract value, descriptions of the projects, descriptions of the work performed, descriptions of the additional work performed beyond the original contract value if required, City Project Manager names, and Contractor's Key Personnel who worked on the projects.

Information provided with complete project information._____Yes _____No

END OF EXHIBIT A

EXHIBIT B

REQUIRED WAIVER & RELEASE
(REQUIRED FOR SUBMISSION)

The undersigned Respondent has read this waiver and release and fully accepts City of Mountain Home's (City) discretion and non-liability as stipulated herein, and expressly for, but not limited to, City's decision to proceed with a pre-qualification selection process in response to the Request for Qualifications (RFQ) to pre-qualify public works contractors to bid its Mountain Home Skate Park Project.

A. Discretion of the City: The Idaho-licensed public works contractor making a submission to this RFQ agrees that the City has the right to, unless contrary to applicable state law:

1) Modify or suspend any and all aspects of the process seeking proposals and making any decisions concerning the RFQ;
2) Obtain further information from any person, entity, or group regarding the Respondent, and to ascertain the depth of Respondent's capability and experience for supplying the desired services and in any and all other respects to meet with and consult with any Respondent or any other person, entity, or group;
3) Waive any formalities or defects as to form, procedure, or content with respect to City's RFQ to pre-qualify contractors and any response by any Respondent thereto;
4) Accept or reject any submission received in response to the RFQ, including any submission by the undersigned; or score one proposal over another in accordance with the selection criteria; and
5) Accept or reject all or any part of any materials or statements, including, but not limited to, the nature and type of proposal.

B. Non-Liability of City:

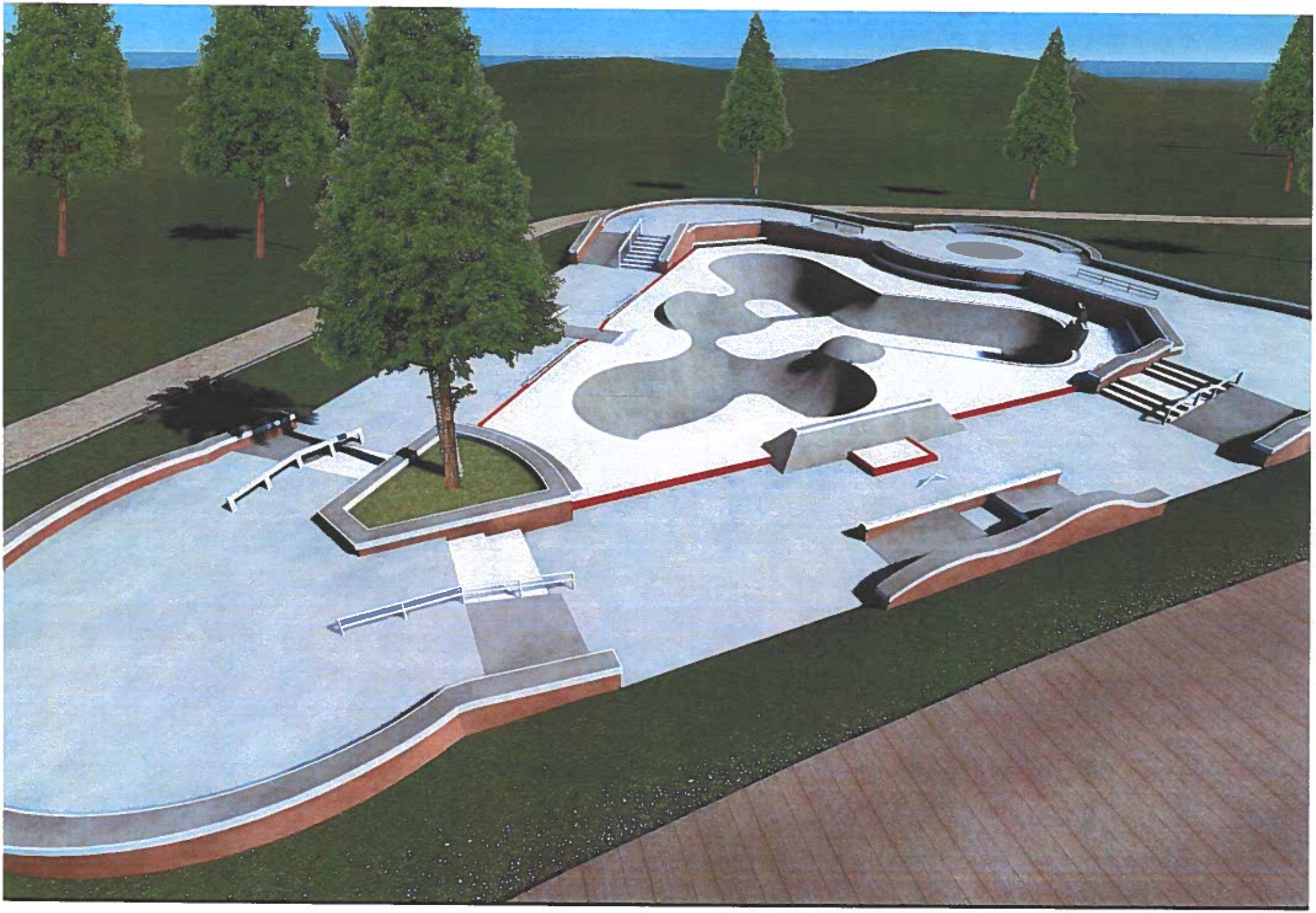
1) The undersigned agrees that City shall have no liability whatsoever of any kind or character, directly or indirectly, by reason of all or any decision made at the discretion of City as identified above.
2) The undersigned, including all team members, have carefully and thoroughly reviewed the RFQ and has found it to be complete and free from ambiguities and sufficient for their intended purpose.

SIGNATURE:_____

Print Name / Title:_____

Name of Firm:_____

Date: _____



CEPT
CALE

MT. HOME, IDAHO

5/31/2018

HARDCO

MOUNTAIN HOME SKATEPARK

ELMORE COUNTY, IDAHO.
LOCATED AT
RICHARD AGUIRRE PARK, MOUNTAIN HOME IDAHO 83647

1. GENERAL
1.1 CONSIDER GENERAL NOTES AS APPLYING TO ALL DRAWINGS, FOR SKATE PARK.
1.2 NOTIFY SKATE PARK DESIGNER OF ANY DISCREPANCIES IN THESE PLANS.
1.3 PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND/OR LOCAL BUILDING CODES.
1.4 THE SKATE PARK DESIGNER SHALL HAVE NO CONTROL OR CHARGE OF, NOR BE RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, SAFETY PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK, THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
1.5 THE CONTRACTOR SHALL WARRANTY ALL OF THEIR WORK DURING CONSTRUCTION. WARRANTY TYPE AND DURATION SHALL CONFORM WITH THE CITY STANDARDS.

2. CONCRETE & REINFORCEMENT WORK
2.1 CONCRETE MIXES SHALL BE DESIGNED BY A TESTING LABORATORY AND APPROVED BY THE SKATE PARK DESIGNER. MIXES SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS, REGARDLESS OF OTHER MINIMUM REQUIREMENTS SPECIFIED HEREIN OR ON THE DRAWINGS. MIX DESIGNS SHALL BE SUBMITTED TO THE SKATE PARK DESIGNER FOR APPROVAL BEFORE USE. DESIGNS SHALL SHOW PROPORTIONS OF CEMENT, FINE AND COARSE AGGREGATES AND WATER, AND GRADATION OF COMBINED AGGREGATES.
2.2 CEMENT: ASTM C150. CEMENT SHALL BE OF SAME BRAND, TYPE AND SOURCE THROUGHOUT PROJECT. WHERE AGGREGATES ARE POTENTIALLY REACTIVE, USE LOW ALKALI CEMENT.
2.3 AGGREGATES SHALL CONFORM TO ASTM C33.
2.4 NO ADMIXTURES WITHOUT APPROVAL. ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE USED. CONCRETE SHALL NOT BE IN CONTACT WITH ALUMINUM.
2.5 CONCRETE MIX DESIGN:
2.5.1 PROVIDE MIX DESIGNS THAT WILL MEET THE MINIMUM REQUIREMENTS LISTED BELOW. INCREASE CEMENT CONTENT OVER THAT SHOWN, IF REQUIRED TO OBTAIN THE COMPRESSIVE STRENGTH.

SAMPLE ONLY. CONTRACTOR'S RESPONSIBILITY TO SUBMIT ADEQUATE MIX DESIGN.					
MIN. 28-DAY COMPRESSIVE STRENGTH (PSI)	MIN. CEMENT CONTENT (POUNDS)	MAX. SLUMP (INCHES)	MAX. AGGREGATE SIZE (INCHES)	MAX. AIR ENTRAINING (PERCENT)	CONCRETE TYPE
4000	480	3" - 5"	1"	PER LOCAL MIX DESIGN EXPERT	I/II

2.6 SHOTCRETE MIX DESIGN:
2.6.1 ACI STANDARD 506, LATEST EDITION, "SPECIFICATION FOR MATERIALS, PROPORTIONING AND APPLICATION OF SHOTCRETE" AND ACI 506.2, LATEST EDITION, "RECOMMENDED PRACTICES FOR SHOTCRETE" SHALL BE FOLLOWED.
2.6.2 MIX DESIGNS FOR SHOTCRETE CONTAINING FLY ASH SHALL BE BY AN INDEPENDENT TESTING LABORATORY. ONLY ASTM C618 CLASS F FLY ASH SHALL BE USED. THE AMOUNT OF FLY ASH USED SHALL NOT EXCEED 20 PERCENT BY WEIGHT OF THE COMBINED WEIGHT OF FLY ASH PLUS CEMENT.
2.6.3 PROVIDE MIX DESIGNS THAT WILL MEET THE MINIMUM REQUIREMENTS LISTED BELOW. INCREASE CEMENT CONTENT OVER THAT SHOWN, IF REQUIRED TO OBTAIN THE COMPRESSIVE STRENGTH.

SAMPLE ONLY. CONTRACTOR'S RESPONSIBILITY TO SUBMIT ADEQUATE MIX DESIGN.					
MIN. 28-DAY COMPRESSIVE STRENGTH (PSI)	MIN. CEMENT CONTENT (POUNDS)	MAX. SLUMP (INCHES)	MAX. AGGREGATE SIZE (INCHES)	MAX. AIR ENTRAINING (PERCENT)	CONCRETE TYPE
4000	600	2" - 3"	3/8"	PER LOCAL MIX DESIGN EXPERT	I/II

2.6.4 SURFACE PREPARATION: EXPOSED EXISTING CONCRETE SHALL BE SANDBLASTED CLEAN. SURFACES SHALL BE FOLLOWED BY WETTING AND DAMP DRYING JUST PRIOR TO SHOTCRETE APPLICATION.
2.6.5 ANY REBOUND OR ACCUMULATED LOOSE AGGREGATE SHALL BE REMOVED FROM THE SURFACES TO BE COVERED PRIOR TO PLACING THE INITIAL OR ANY SUCCEEDING LAYERS OF SHOTCRETE. REBOUND SHALL NOT BE REUSED AS AGGREGATE.
2.6.6 JOINTS IN WALL POURS ARE PERMISSIBLE. AT JOINTS, SHOTCRETE SHALL BE SLOPED TO A THIN EDGE. BEFORE PLACING ADDITIONAL MATERIAL, ALL SURFACES SHALL BE THOROUGHLY CLEANED AND WETTED AND ALL REINFORCING STEEL SHALL BE BRUSHED FREE OF LATENT SHOTCRETE MATERIAL.
2.6.7 ANY IN-PLACE SHOTCRETE MATERIAL WHICH EXHIBITS SAGS OR SLOUGHS, SEGREGATION, HONEYCOMBING, SAND POCKETS OR OTHER OBVIOUS DEFECTS SHALL BE REMOVED AND REPLACED.
2.6.8 TESTING AND INSPECTION OF IN-PLACE SHOTCRETE SHALL BE IN ACCORDANCE WITH 2015 IBC.
2.7 CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCHING AND SHALL NOT EXCEED A TEMPERATURE OF 90°F UNLESS PRE-APPROVED BY THE SKATE PARK DESIGNER.
2.8 CONCRETE CYLINDERS SHALL BE TAKEN AND TESTED PER THE CODE BY AN INDEPENDENT TESTING LABORATORY FOR STRUCTURAL POURS OVER 50 CUBIC YARDS OF CONCRETE. HISTORICAL DATA SHALL BE SUBMITTED AND APPROVED PRIOR TO THE POUR IF NO TEST SAMPLES ARE TAKEN FOR POURS LESS THAN 50 CUBIC YARDS.
2.9 DURING THE CURING PERIOD, CONCRETE SHALL BE MAINTAINED AT A TEMPERATURE ABOVE 40°F AND IN MOIST CONDITION. FOR INITIAL CURING, CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST FOR 24 HOURS AFTER PLACEMENT IS COMPLETE. FINAL CURING SHALL CONTINUE FOR SEVEN DAYS AFTER PLACEMENT AND SHALL CONSIST OF APPLICATION OF CURING COMPOUND PER ASTM C309. APPLY AT A RATE SUFFICIENT TO RETAIN MOISTURE, BUT NOT LESS THAN 1 GALLON PER 200 SQUARE FEET. COVER CONCRETE WITH POLYETHYLENE PLASTIC TO MAINTAIN TEMPERATURE IF NECESSARY. LAP SEAMS IN THE PLASTIC 6" AND TAPE. WEIGHT DOWN THE PLASTIC AS NEEDED.
2.10 THE CONTRACTOR SHALL FIX ALL CRACKS AND DISPLACEMENTS LARGER THAN 1/16".
2.11 ALL CONCRETE WHICH DURING THE LIFE OF THE STRUCTURE WILL BE SUBJECTED TO FREEZING TEMPERATURES WHILE WET, SHALL HAVE A WATER CEMENT RATIO NOT EXCEEDING 0.53 BY WEIGHT AND SHALL CONTAIN ENTRAINED AIR AS PER ACI 301. SUCH CONCRETE SHALL INCLUDE EXTERIOR SLABS, PERIMETER FOUNDATIONS, EXTERIOR CURBS AND GUTTERS, ETC.
2.12 EXPOSED CONCRETE SLABS ON GRADE AND SLABS ON METAL DECK THAT ARE TO REMAIN EXPOSED, GROUND, POLISHED, OR SEALED SHALL CONSIDER PROPER MIX DESIGN AND CURING TO AVOID CRACKING. LIMIT SHRINKAGE TO 0.04% (400 MICRO STRAIN) OR LESS. CONSIDER SLOW MOIST CURE, LOW WATER CEMENT RATIO, WATER REDUCING OR SHRINKAGE REDUCING ADMIXTURES. CRACKS THAT APPEAR IN EXPOSED CONCRETE TO BE REPLACED WITH EQUIVALENT AGGREGATE APPEARANCE. CONTRACTOR SHALL SUBMIT SHRINKAGE REPORTS WITH CONCRETE DESIGN MIXES.
2.13 CONDUITS, PIPES, AND SLEEVES EMBEDDED IN CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF IBC SECTION 1906.
2.14 USE INTERMEDIATE GRADE ASTM A615, GRADE 60 FOR ALL REINFORCING. USE ASTM A706, GRADE 60 FOR ALL REINFORCING THAT IS TO BE WELDED. USE A108, GRADE 60, FOR ALL WELDED ANCHORS REFER TO AWS SPEC FOR WELDING WITHOUT PREHEAT. WELDING OF REINFORCING BARS TO BE IN ACCORDANCE WITH ALL BUILDING CODES.
2.15 ALL WELDED WIRE FABRIC REINFORCING SHALL BE ASTM A185 GRADE 65. LAP OF AT LEAST TWO CROSS WIRES.
2.16 OBSERVE FOLLOWING REINFORCEMENT CLEARANCES:
3" AT SURFACES POURED AGAINST EARTH
2" AT FORMED SURFACES EXPOSED TO EARTH OR WEATHER
1-1/2" AT OTHER SURFACES, EXCEPT WHERE SHOWN OTHERWISE.
2.17 SECURE REINFORCING REBAR, ANCHOR BOLTS, INSERTS, ETC. RIGIDLY IN PLACE PRIOR TO POURING CONCRETE OR GROUT.
2.18 SUPPORT HORIZONTAL REINFORCING ON GALVANIZED CHAIRS OR OTHER APPROVED METHOD (MORTAR BLOCKS ARE ACCEPTABLE/ APPROVED METHOD) OF SUPPORT FOR FOOTINGS AND SLABS ON GRADE.
2.19 REMOVE FORMS AT FOLLOWING MINIMUM TIMES AFTER POURING: AT SLAB EDGES - 24 HOURS; AT WALLS LESS THAN 4'-0" HIGH - 36 HOURS.
2.20 MAKE HOOKS ACI 318-99 STANDARD HOOKS UNLESS OTHERWISE NOTED. PROVIDE 135 DEGREE MINIMUM TURN, PLUS 4" EXTENSION AT FREE ENDS OF COLUMN PILASTER TIES.
2.21 MAKE LAPS CONTACT SPLICES. DEVELOPMENT LENGTHS, HOOK EMBEDMENT PER ACI 318-99, UNLESS OTHERWISE NOTED. STAGGER LAP SPLICES WHERE POSSIBLE.
2.22 ALL REBAR SHALL BE COLD BENT.
2.23 WHERE REINFORCING IS SHOWN CONTINUOUS THRU CONSTRUCTION JOINTS, LENTON FORM SAVERS DOWEL BAR SPLICE DEVICES AS MANUFACTURED BY ERICO PRODUCTS, INC. (ICC - ER 63867) OR EQUIVALENT MAY BE USED. SIZES AND TYPES SHALL BE SELECTED TO DEVELOP THE FULL TENSION STRENGTH OF THE BAR PER ICC-ER RESEARCH REPORT.
2.24 MINIMUM CLEARANCE BETWEEN PARALLEL REINFORCEMENT BARS SHALL BE 2-1/2". LAP SPLICES IN REINFORCING BARS SHALL BE BY THE NON-CONTACT LAP SPLICE METHOD WITH AT LEAST 2" CLEARANCE BETWEEN BARS.
2.25 REGARDLESS OF WHICH FOUNDATION OPTION IS SELECTED, FLOORS MAY BE SUPPORTED AS SLABS-ON-GRADE; HOWEVER, THE SLAB DESIGN SHOULD DEPEND UPON THE SUBGRADE MATERIAL. IF THE SLAB-ON-GRADE FLOOR IS TO BE CONSTRUCTED OVER A PLACED NEW CONTROLLED FILL SUBGRADE, IT SHOULD BE SUPPORTED ON A MINIMUM 6-INCH THICK LAYER OF FREE DRAINING ¼Ø TO ½Ø INCH CRUSHED STONE. HOWEVER, IF THE SLAB-ON-GRADE IS TO BE PLACED OVER THE EXISTING UNCONTROLLED FILL, THE THICKNESS OF THE GRAVEL LAYER SHOULD BE INCREASED TO A MINIMUM THICKNESS OF 12 INCHES. ALL SLAB SUBGRADES SHOULD BE INSPECTED AND APPROVED BY THE GEOTECHNICAL SPECIAL INSPECTOR PRIOR TO THE GRAVEL LAYER PLACEMENT.

3. REHABILITATION OF CAST IN PLACE CONCRETE (Cast in Place or Shotcrete)
3.1 DO NOT APPLY FRP REINFORCEMENT MATERIALS IF RAINING, SNOWING, OR DEW CONDENSATION IS EXPECTED OR EXISTING CONCRETE SURFACE IS WET OR IF THE AMBIENT OR SURFACE TEMPERATURES ARE BELOW 40° F.
3.2 THE AMBIENT TEMPERATURE AND TEMPERATURE OF THE EPOXY COMPONENTS SHALL BE BETWEEN 50° F AND 80° F AT THE TIME OF MIXING. SEE APPROPRIATE TECHNICAL DATA SHEETS FOR MORE SPECIFIC INSTRUCTIONS.
3.3 PRECAUTIONS SHOULD BE TAKEN TO AVOID DAMAGE TO ANY SURFACE NEAR THE WORK ZONE DUE TO MIXING AND HANDLING OF THE SPECIFIED MATERIAL.
3.4 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FUME CONTROL AND SHALL TAKE NECESSARY PRECAUTIONS AGAINST INJURY TO INSTALLER PERSONNEL OR ADJACENT BUILDING OCCUPANTS DURING APPLICATION OF PRIMER AND RESIN, ETC. CONTRACTOR PERSONNEL SHALL USE PROTECTIVE EQUIPMENT AND AREA SHALL BE WELL VENTED TO THE OUTSIDE, AS A MINIMUM, INSTALLER MUST TAKE THE FOLLOWING PRECAUTIONS:
1. CONTRACTOR TO LOCATE AND PROTECT BUILDING AIR INTAKE DURING APPLICATION.
2. CONTRACTOR TO FOLLOW ALL STATE, FEDERAL, AND LOCAL SAFETY REGULATIONS.
3. CONTRACTOR TO FOLLOW ALL MANUFACTURERS' SAFETY REQUIREMENTS AS INDICATED ON APPROPRIATE MSDS SHEETS.
3.5 INSPECT SURFACES TO RECEIVE THE WORK AND REPORT IMMEDIATELY IN WRITING TO THE ENGINEER AS REQUIRED IN THE GENERAL CONDITIONS ANY DEFICIENCIES IN THE SURFACE THAT RENDER IT UNSUITABLE FOR PROPER EXECUTION OF THIS WORK.
3.6 PROTECT VEHICLES, CONCRETE, AND OTHER ITEMS SURROUNDING WORK AREA FROM DUST OR DAMAGE DUE TO WORK OF THIS SECTION.
3.7 SUBSTRATE MUST BE CLEAN, SOUND AND FREE OF SURFACE MOISTURE. REMOVE DUST, LAITANCE, GREASE, OILS, CURING COMPOUNDS, WAXES, IMPREGNATIONS, FOREIGN PARTICLES, COATINGS AND DISINTEGRATED MATERIALS BY MECHANICAL MEANS (I.E. SHOT BLASTING, SANDBLASTING, ETC.). FOR BEST RESULTS, SUBSTRATE SHOULD BE DRY. SURFACES PREPARED BY LOW PRESSURE WATER CLEANING OR HIGH PRESSURE WATER JETTING METHODS SHOULD BE ALLOWED TO DRY FOR 24HRS. MINIMUM [AT 73°F]. SURFACE MUST BE CLEAN, DRY AND SOUND. REMOVE DUST FROM CRACKS BY BRUSHING OR BY BLOWING CLEAN WITH OIL FREE COMPRESSED AIR OR A VACUUM SHOP VACUUM.

3.8 CURING:
1. PROTECT CONCRETE SURFACES AGAINST RAPID DRYING. KEEP SEALED WITH CURE AGENT FOR NECESSARY AMOUNT OF TIME TO REACH CONCRETE STRENGTH AND INHIBIT MOISTURE LOSS AFTER PLACING PER MANUFACTURER'S RECOMMENDATION.
2. APPLY TO EXPOSED SURFACE OF CONCRETE AS SOON AS MANUFACTURER RECOMMENDS WITH AN AIRLESS SPRAYER.
3. APPLY TO SIDES OF CONCRETE PAVING UPON REMOVAL OF FORM BOARDS.
4. MEET REQUIREMENTS OF MANUFACTURER'S CURRENT PRINTED APPLICATION INSTRUCTIONS.
5. UNIFORMLY APPLY 2 COATS AND APPLY THE SECOND COAT AT A RIGHT ANGLE TO THE FIRST COAT.
6. APPLY COMPOUND TO FORM A CONTINUOUS, UNIFORM, COHERENT FILM THAT WILL NOT CHECK, CRACK, OR PEEL.
7. DO NOT APPLY TO CONCRETE THAT IS STILL BLEEDING, OR HAS A VISIBLE WATER SHEEN ON THE SURFACE.
8. PROTECT PAVING SURFACES FROM FOOT TRAFFIC WITH SCUFF-PROOF PAPER.
9. IMMEDIATELY RE-COAT DAMAGED AREAS OF CURING COMPOUND.
10. PROTECT SURFACE FROM WATER, ADJACENT SHOTCRETE WORK AND DEBRIS.
3.9 CONTRACTOR TO REMOVE ALL CURE AGENT FROM CONCRETE SURFACE WITH POWER WASHING EQUIPMENT AND SOFT BRUSH NOT CAUSING ABRASION TO FINISH WORK SURFACE PRIOR TO FINAL INSPECTION. NO CURE AGENT SHALL BE PRESENT ON ANY SURFACES FOR FINAL INSPECTION ACCEPTANCE. REMOVE DEBRIS AND TRASH RESULTING FROM SPECIFIED WORK.

CONTACT
SKATE PARK DESIGNER

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SKATE PARK STRUCTURE LEGEND

SKATE PARK STRUCTURE SHOTCRETE: MIN 6" THK 4,000 PSI THICK W/ GRADE 40, #3 REBAR @ 18" O.C BOTH WAYS UNLESS SHOWN OTHERWISE. SEE SPECIFICATIONS.

SKATE PARK STRUCTURE CONCRETE: MIN 5" THK 4,000 PSI THICK W/ GRADE 40, #3 REBAR @ 18" O.C BOTH WAYS UNLESS SHOWN OTHERWISE SEE SPECIFICATIONS

SUBBASE: COMPACTED, 6" THICK, 3/4" CLASS 5 AGGREGATE BASE

SUBGRADE: COMPACT SUBRAGE TO 90% RELATIVE COMPACTION.

SKATEPARK INDEX OF SHEETS

SHT NO.		DESCRIPTION
1	SK0.0	COVER & GENERAL NOTES
2	SK0.1	GENERAL NOTES CONTINUED
3	SK1.0	DEMOLITION PLAN
4	SK1.1	LAYOUT PLAN
5	SK1.2	CONCRETES & METALS PLAN
6	SK1.3	JOINTING PLAN
7	SK1.4	GRADING & DRAINAGE PLAN
8	SK2.0	SECTIONS KEY PLAN
9	SK2.1	SECTIONS PLAN
10	SK2.2	SECTIONS PLAN
11	SK2.3	SECTIONS PLAN
12	SK3.0	CONSTRUCTION DETAILS
13	SK3.1	CONSTRUCTION DETAILS

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14143 STATE OF IDAHO JAMES ALLAN LANE

MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
COVER & GENERAL NOTES

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4. STRUCTURAL STEEL
4.1 ASTM A-36 FOR CHANNEL (C), MISCELLANEOUS CHANNEL (MC), ANGLES, AND PLATES.
4.2 ASTM A-53 GRADE B OR A-501 FOR STEEL PIPES
4.3 ASTM A-500 GRADE B, Fy=46 KSI FOR TUBE STEEL (TS) / HOLLOW STRUCTURAL SECTION (HSS) TUBE STEEL FOR SIZES UP TO 5/8" THICK.
4.4 ASTM A-307 OR A-36 PLAIN ANCHOR BOLTS
4.5 ASTM A-1085, Fy=50 KSI FOR HSS SQUARE, RECTANGULAR AND ROUND

5. WELDING
5.1 ALL CONSTRUCTION AND TESTING PER AMERICAN WELDING SOCIETY CODES AND RECOMMENDATIONS. ALL WELDING SHALL BE BY WELDERS HOLDING CURRENT CERTIFICATES VALIDATED BY AN INDEPENDENT LAB & HAVING CURRENT EXPERIENCE IN TYPE OF WELD CALLED FOR. THE CONTRACTOR SHALL SUBMIT WELDING CERTIFICATES FOR EACH WELDER PRIOR TO COMMENCING THE WORK.
5.2 WELDING RODS TO BE LOW HYDROGEN TYPE, E70 SERIES, PER AWS D1.1 TYPICALLY EXCEPT E-8010 SERIES FOR STEEL SHEET METAL PER AWS D1.3 AND REINFORCING WELDMENTS PER AWS D1.4. USE E80 SERIES WELDING RODS FOR A706 REBAR.
5.3 FIELD INDICATED WELDS MAY BE DONE IN SHOP & SHOP INDICATED WELDS MAY BE DONE IN FIELD ONLY IF SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION.

6. ANCHORS
6.1 REINFORCING OR THREADED RODS DRILLED AND EPOXIED INTO EXISTING CONCRETE AS DETAILED ON THE DRAWINGS SHALL BE ONE OF THE FOLLOWING OR APPROVED EQUIVALENT:
6.1.1 SIMPSON "SET-XP" ICC REPORT ESR-2508
6.1.2 HILTI "RE-500 V3" ICC REPORT ESR-3814
6.1.3 POWERS "PE1000+" ICC REPORT ESR-2583
6.2 INSTALLATION OF EPOXIED DOWELS SHALL FOLLOW THE STRICT RECOMMENDATIONS OF THE MANUFACTURER AND THE APPLICABLE ICC REPORT AND HAVE A MINIMUM 9 DIAMETERS EMBEDMENT.
6.3 INSTALLATION SHALL FOLLOW THE STRICT RECOMMENDATIONS OF THE MANUFACTURER AND THE APPLICABLE ICC ER REPORT. CONTRACTOR SHALL HAVE APPROPRIATE ICC ER REPORT ON-SITE DURING ALL INSTALLATIONS.
6.4 ANY ENGINEERING DESIGN PROVIDED BY CONTRACTOR OR OTHERS AND SUBMITTED FOR REVIEW SHALL BE BY AN INSURED REGISTERED STRUCTURAL ENGINEER WITH CONTINUOUS FIVE YEARS OF EXPERIENCE IN THE TYPE OF DESIGN SUBMITTED.

7. SPECIAL INSPECTION
7.1 PROVIDE SPECIAL STRUCTURAL INSPECTION AS REQUIRED BY BUILDING CODES FOR THE FOLLOWING ITEMS:
7.1.1 CONCRETE: DURING THE TAKING OF TEST SPECIMENS & PLACING OF REINFORCED CONCRETE WHERE F'C > 2,500 PSI, EXCEPT SLABS ON GRADE.
7.1.2 BOLTS INSTALLED IN CONCRETE: DURING INSTALLATION OF EMBEDDED BOLTS IN CONCRETE AND DURING INSTALLATION OF EXPANSION BOLTS & EPOXY BOLTS / REBAR INTO EXISTING CONCRETE.
7.1.3 REINFORCING STEEL: DURING PLACING OF REINFORCING STEEL, FOR ALL CONCRETE REQUIRED TO HAVE SPECIAL INSPECTION BY THE CONCRETE SECTION ABOVE AND PLACING REINFORCING STEEL IN EPOXIED HOLES PER ABOVE.
7.1.4 SHOTCRETE: DURING THE TAKING OF TEST SPECIMENS AND PLACING OF ALL SHOTCRETE.
7.2 SCHEDULING OF SPECIAL STRUCTURAL INSPECTIONS:
7.2.1 THE CONTRACTOR SHALL ALLOW A MINIMUM OF 24 HOURS NOTIFICATION FOR THE SCHEDULING OF SPECIAL STRUCTURAL INSPECTIONS.

DESIGN CRITERIA NOTES

1. BUILDING CODES: CONSTRUCTION AND DESIGN TO CONFORM TO THE FOLLOWING LOCAL CODES AND ORDINANCES.

2. DESIGN CRITERIA DESIGN TO CONFORM TO THE FOLLOWING:
DEAD LOAD (ASD VALUES)
SELF WEIGHT
LIVE LOADS (ASD VALUES)
100 PSF FLOOR

WIND LOADS (ULT WIND SPEED):
115 MPH UTL
90 MPH ASD

SEISMIC LOADS (ULT VALUES):
D SITE CLASS (BASED ON ASCE 7-10 ALLOWANCE)
II SEISMIC RISK CATEGORY
C SEISMIC DESIGN CATEGORY

SEISMIC DESIGN PARAMETERS

PARAMETER		VALUE
MAPPED SPECTRAL ACCELERATION @ 0.2 SEC PERIOD	Ss	0.2794
MAPPED SPECTRAL ACCELERATION @ 1 SEC PERIOD	S1	0.0994
SITE MODIFIED SPECTRAL ACCELERATION @ 0.2 SEC PERIOD	Sms	0.440
SITE MODIFIED SPECTRAL ACCELERATION @ 1 SEC PERIOD	Sm1	0.229
DESIGN SPECTRAL ACCELERATION @ 0.2 SEC PERIOD	Sds	0.294
DESIGN SPECTRAL ACCELERATION @ 1 SEC PERIOD	Sd1	0.153

SEISMIC FORCE RESISTING SYSTEMS AND ANALYSIS METHODS EQUIVALENT LATERAL FORCE PROCEDURE

SOIL CRITERIA NOTES

1. GEOTECHNICAL INVESTIGATION:
IF THERE IS NO SOIL REPORT AVAILABLE FOR THIS PROJECT, THE OWNER / CITY SHALL RETAIN A SOIL ENGINEER TO VERIFY EXCAVATIONS FOR ASSUMED ALLOWABLE SOIL BEARING, LOW SETTLEMENT AND SWELL POTENTIAL, AND TO MAKE ANY ADDITIONAL RECOMMENDATIONS.

IN THE EVENT BUILDING OFFICIAL WAIVES INVESTIGATION REQUIREMENT THEN THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY WITH RESPECT TO SOILS AND WILL BASE SOIL INFORMATION ON CODE PRESUMPTIVE VALUES. STRUCTURAL DESIGN IS BASED ON REPORT, ALL SOILS RECOMMENDATIONS, TESTS, OBSERVATIONS, AND REQUIREMENTS CORRESPONDING TO CONSTRUCTION DOCUMENTS TO BE ADHERED TO.

2. SOIL DESIGN VALUES:
1500 PSF ALLOWABLE SOIL BEARING CAPACITY
40 PCF UNRESTRAINED ACTIVE EQUIVALENT SOIL PRESSURE
70 PCMN MODULUS OF SUB GRADE REACTION

CONCRETE AND REINFORCEMENT NOTES

1. CONCRETE CONSTRUCTION TO CONFORM TO:
ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
318-14 CHAPTER 26 CONTRACTOR TO HAVE AT JOB SITE TO REFER TO FOR CONSTRUCTION
ACI 301-10 SPECIFICATION FOR STRUCTURAL CONCRETE (SEE FOR SLAB ON GRADE & MIX DESIGN)
ACI 302-1R-04 GUIDE CONCRETE FLOOR AND SLAB CONSTRUCTION
ACI 302-2R-06 GUIDE CONCRETE SLABS THAT RECEIVE MOISTURE-SENSITIVE FLOORING MATERIALS
ACI 117-10 SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS
ACI 308R-01 GUIDE TO CURING CONCRETE
ACI 360-10 GUIDE TO DESIGN OF SLABS ON GROUND
ACI 305.1-06 HOT WEATHER CONCRETING
ACI 306R-10 GUIDE TO COLD WEATHER CONCRETING
ASTM C-150 PORTLAND CEMENT TYPE I OR II (USE TYPE V WHEN KNOW SULFATE SOILS EXIST)
ASTM C-33 AGGREGATE (USE MAX ¾" FOR ICF WALLS)
ASTM C-94 READY MIXED CONCRETE.
ASTM C-260 STANDARD SPECIFICATION FOR AIR ENTRAINING ADMIXTURES FOR CONCRETE (USE AT ALL EXPOSED CONCRETE)
ASTM C-494/N-04 STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR CONCRETE
ASTM C-618 STANDARD SPECIFICATION FOR COAL FLY ASH AND RAW OR CALCINED NATURAL POZZOLAN FOR USE IN CONCRETE (USE FLY ASH CLASS F REPLACE CEMENT UP TO 40%)
ASTM C-1017-13 STANDARD SPECIFICATIONS FOR CHEMICAL ADMIXTURES FOR USE IN PRODUCING FLOWING CONCRETE

2. CONCRETE REINFORCEMENT TO CONFORM TO:
ASTM A615-15 STANDARD SPECIFICATION FOR DEFORMED AND PLAIN CARBON STEEL BARS FOR CONCRETE REINFORCEMENT
ASTM A706-14 STANDARD SPECIFICATION FOR DEFORMED AND PLAIN LOW ALLOY STEEL BARS FOR CONCRETE REINFORCEMENT (USE WHEN WELDING BARS)
ASTM A1064 STANDARD SPECIFICATION FOR CARBON STEEL WIRE AND WELDED WIRE REINFORCEMENT, PLAIN AND DEFORMED, FOR CONCRETE

3. STRENGTH OF CONCRETE 28 DAY STRENGTH 4,000 PSI MINIMUM ALL CONCRETE ELEMENTS

4. CONCRETE COVER FOR REINFORCEMENT CAST IN PLACE NON-PRESTRESSED CONCRETE
3 IN ——CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND
2 IN ——EXPOSED TO WEATHER OR IN CONTACT WITH GROUND (#6 TO #18 BARS)
1 1/2 IN —EXPOSED TO WEATHER OR IN CONTACT WITH GROUND (#5 AND LESS)
1 1/2 IN —NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND
3/4 IN ——SLABS JOISTS AND WALLS NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND

5. REINFORCEMENT DETAILING TO CONFORM TO ACI 318-14 AND CRSI MANUAL
SEE REINFORCEMENT DETAILS FOR STANDARD BENDS, HOOKS, AND DEVELOPMENT LENGTHS PROVIDE CLASS B TENSION LAP AT ALL SPLICE LOCATIONS WHEN DIFFERENT BAR SIZES LAP LARGER BAR TO GOVERN UNLESS NOTED ON DOCUMENTS CONCRETE AND ALUMINUM NOT TO BE IN CONTACT WITH EACH OTHER, DISSIMILAR MATERIAL

STRUCTURAL STEEL NOTES

1. STEEL CONSTRUCTION TO CONFORM TO
AISC 14TH EDITION STEEL CONSTRUCTION MANUAL.

2. STRUCTURAL STEEL TO CONFORM TO

ASTM A992 (FY 50 KSI)	W AND T SECTIONS
ASTM A36 (FY 36 KSI)	CHANNELS, PLATES, BARS, ANGLES
ASTM A500 GR B (FY 46 KSI)	HSS SQUARE AND RECTANGULAR SECTIONS
ASTM A500 GR B (FY 42 KSI)	HSS ROUND SECTIONS
ASTM A53 GR B (FY 35 KSI)	PIPE SECTIONS
ASTM A1085 (FY 50 KSI)	HSS SQUARE, RECTANGULAR, ROUND SECTIONS

3. ANCHOR RODS TO CONFORM TO

ASTM F1554	ANCHOR ROD ASSEMBLY (GRADE 36 UNLESS NOTED OTHERWISE)
ASTM A36	THREADED ANCHOR ROD
ASTM A307 GR A	STANDARD SPECIFICATION FOR CARBON STEEL BOLTS, STUDS, TREADED ROD

4. HEADED STUDS TO CONFORM TO
ASTM A108 ——.3/8 TO 3/4 INCH DIAMETER

5. PAINTING TO CONFORM TO
DO NOT PAINT SURFACES TO RECEIVE HEADED STUDS
DO NOT PAINT STEEL TO BE ENCASED IN CONCRETE

6. WELDING TO CONFORM TO
AWS D1.1/D1.1M 2015 STRUCTURAL WELDING CODE
AWS D1.3/D1.3M 2008 STRUCTURAL WELDING CODE SHEET STEEL
AWS D1.4/D1.4M 2015 STRUCTURAL WELDING CODE REINFORCING STEEL
WELDERS TO HOLD CURRENT CERTIFICATION FOR WELD TYPE BEING PERFORMED
E70 KSI WELD UTILIZED IN DESIGN CALCULATIONS WELDS TO CONFORM

7. GROUTING UTILIZED WITH STEEL TO CONFORM TO
6000 PSI NON SHRINK NON METALLIC GROUT

SPECIAL STRUCTURAL INSPECTION NOTES TO CONFORM TO IBC CHAPTER 17

1. SPECIAL INSPECTOR:
INDEPENDENT FROM CONTRACTOR WITH NO CONFLICTS OF INTEREST ABLE TO PERFORM WORK AND TESTS WITH PROPER CALIBRATED EQUIPMENT FURNISH INSPECTOR INFORMATION TO BUILDING OFFICIAL UPON REQUEST

CONTRACTOR RESPONSIBILITY:
COMPLY WITH IBC CHAPTER 17 SECTION 1704

INSPECTIONS:
COMPLY WITH IBC CHAPTER 17 SECTION 1705
RANDOMLY SELECT SUSPECT ITEMS FOR REVIEW
RANDOMLY SELECT READY MIX TRUCKS FOR REVIEW
REVIEW PROJECT FOR GENERAL CONFORMANCE TO CONSTRUCTION DOCUMENTS
NOTIFY STRUCTURAL ENGINEER OF ISSUES OR CONCERNS WITH PROJECT
STRUCTURAL ENGINEER REQUIRES THE FOLLOWING AS A MINIMUM BE PERFORMED ON A PERIODIC FREQUENCY

CONCRETE:
CYLINDERS - 1 TRUCK EVERY 5 TRUCKS FOR PROJECT SAME DAY MIX DESIGN AND PLANT ADDITIONAL CYLINDERS IF DIFFERENT DAY MIX DESIGN OR PLANT
SUBMIT 7 DAY 14 DAY, AND 28 DAY BREAKS TO STRUCTURAL ENGINEER ONLY WITHIN 24 HOURS OF RESULTS VIA EMAIL, ENGINEER TO DISTRIBUTE TO PARTIES
REINFORCING - SIZE, LOCATION, QUANTITY, DEVELOPMENT LENGTH, PROPER COVER FINISHING AND CURING METHODS AND PROCEDURE
IDENTIFY MISSING REINFORCEMENT

STEEL:
STEEL - SIZE, LOCATION, CONNECTIONS, TOLERANCES
FILLET WELDS - VISUAL OBSERVATION, SIZE, LENGTH
BOLTS - SIZE, QUANTITY, IDENTIFICATION MARKINGS, TIGHTENING PROCEDURE
FULL PENETRATION WELDS - TESTED BY TESTING AGENCY

POST INSTALLED ANCHORS:
PERFORM IN ACCORDANCE WITH MANUFACTURES REQUIREMENTS.

STRUCTURAL OBSERVATION NOTES

1. SPECIAL OBSERVER
OWNER TO EMPLY STRUCTURAL ENGINEER OF RECORD OR A STRUCTURAL OBSERVER WHEN STRUCTURAL OBSERVER IS NOT THE ENGINEER OF RECORD.
1. SUBMIT QUALIFICATIONS OF PERSON AND ANY DESIGNATED OBSERVERS TO ENGINEER OF RECORD FOR APPROVAL.
2. SUBMIT COPY ELECTRONICALLY OF ALL CORRESPONDENCE, VIDEOS, ETC. TO ENGINEER OF RECORD FOR PROJECT FILES.

2. OBSERVATION PROGRAM

SPECIAL STRUCTURAL INSPECTOR / DEPUTY INSPECTOR TO SUBMIT VIDEOS VIA WEB OF CONSTRUCTION TO STRUCTURAL OBSERVER AS FOLLOWS. VIDEOS TO SHOW ENOUGH INFORMATION AND DETAIL.
1. MAT FOUNDATION JUST PRIOR TO PLACEMENT OF CONCRETE

3. CONTRACTOR TO ALLOW FOR 1-2 DAY REVIEW TIME AND POTENTIAL CORRECTIONS REQUIRED IN SCHEDULE. CORRECTIONS PROVIDED TO CONTRACTOR IN WRITTEN FORMAT.

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14193 STATE OF IDAHO JAMES ALLEN LANE

MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
GENERAL NOTES

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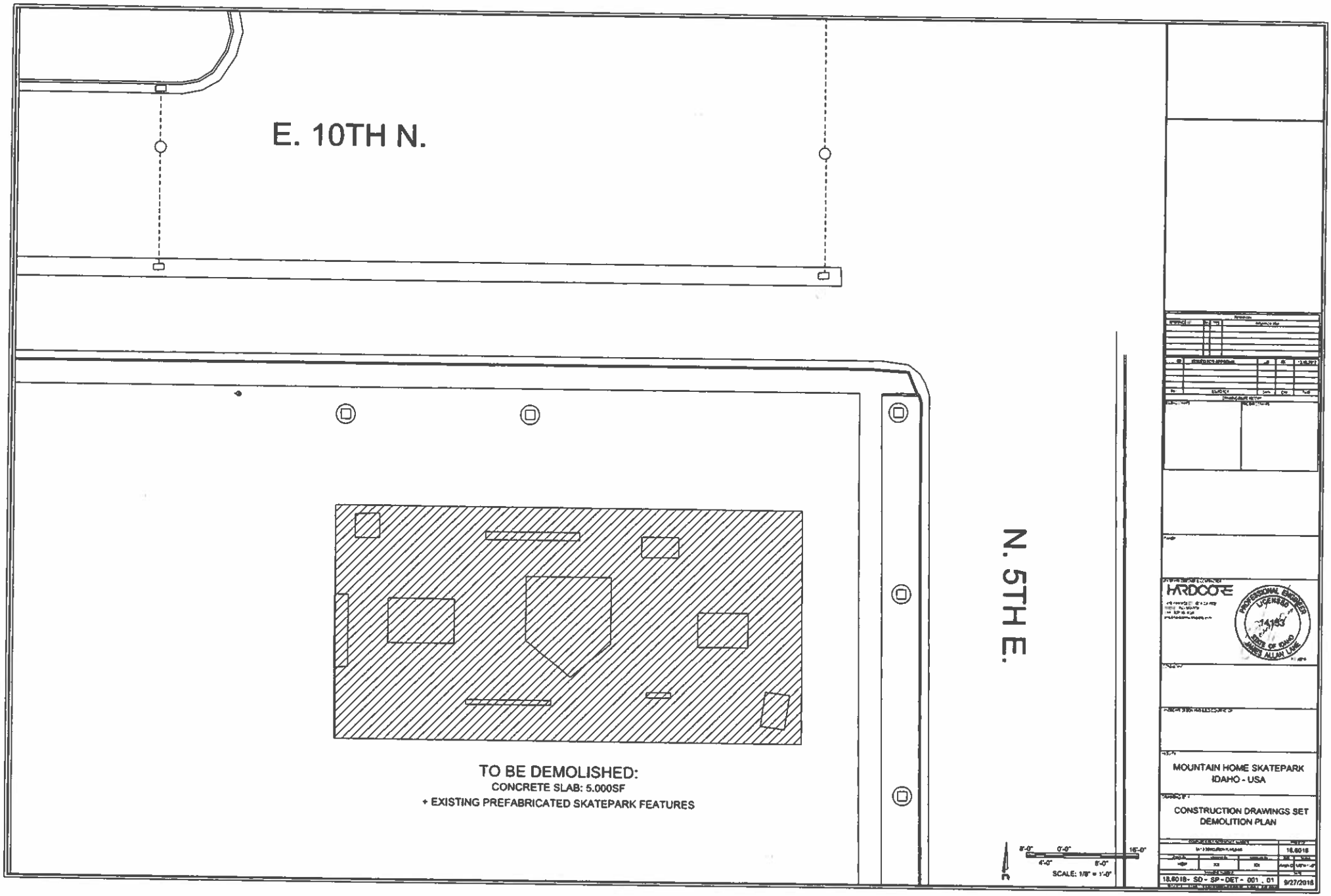
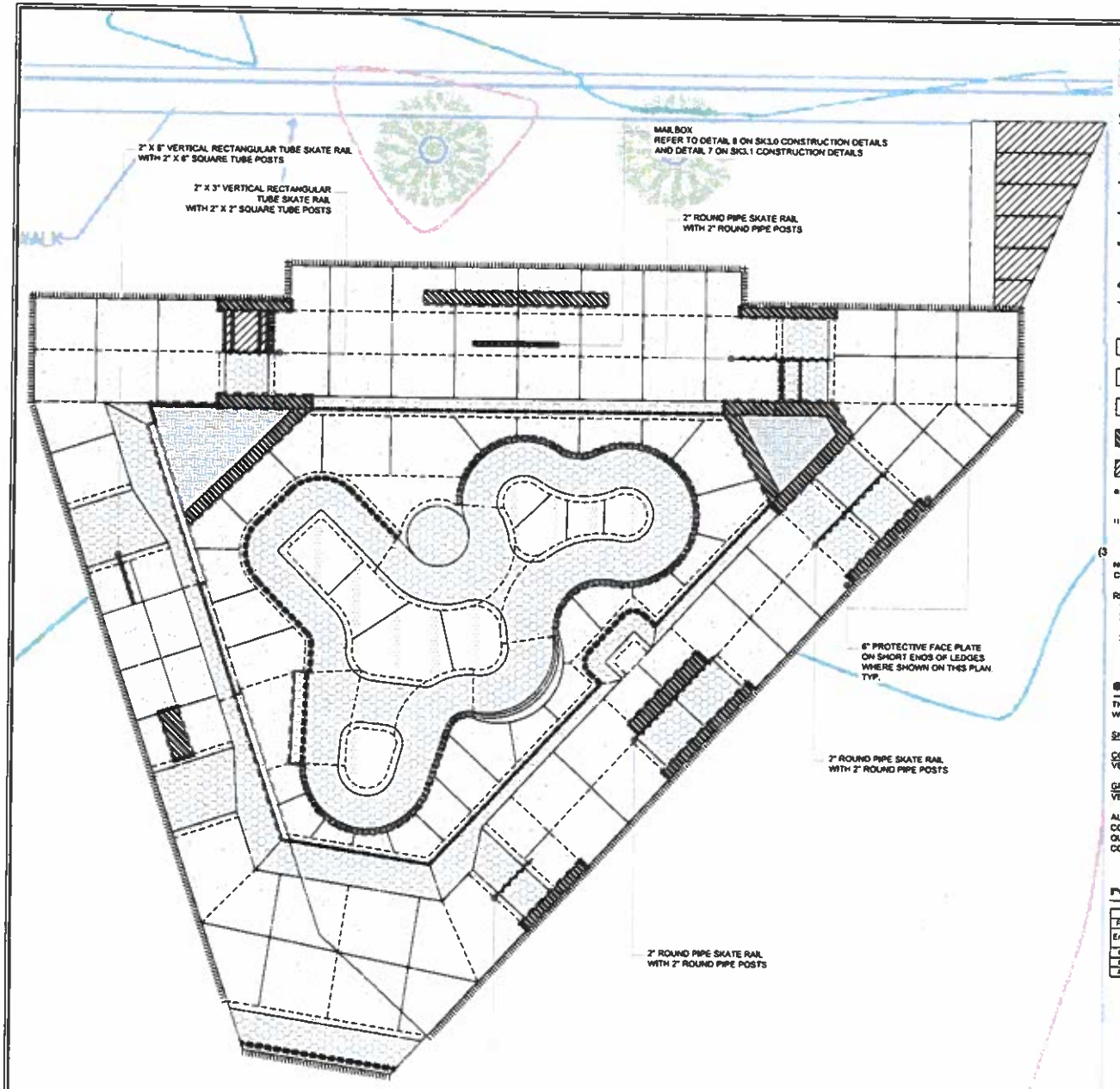
9/27/2018


E. 10TH N.
N. 5TH E.
TO BE DEMOLISHED:
CONCRETE SLAB: 5.000SF
+ EXISTING PREFABRICATED SKATEPARK FEATURES
SCALE: 1/8" = 1'-0"
HARDCORE
MOUNTAIN HOME SKATEPARK
IDAHO - USA
CONSTRUCTION DRAWINGS SET
DEMOLITION PLAN
18.6018
18.6018- SD - SP - DET - 001 . 01
9/27/2018



scope of work

BASE BID

ADD ALTERNATE

concrete & metals legend

- 6" C-CHANNEL — REFER TO DETAIL 2 ON SK-3.1 CONSTRUCTION DETAILS
- 6" PROTECTIVE STEEL FACE PLATE — REFER TO DETAIL 3 ON SK-3.1 CONSTRUCTION DETAILS
- 4" X 4" BENT PLATE — REFER TO DETAIL 4 ON SK-3.1 CONSTRUCTION DETAILS
- 2" ROUND STEEL PIPE COPING — REFER TO DETAIL 5 & 6 ON SK-3.1 CONSTRUCTION DETAILS
- POOL COPING — REFER TO DETAIL 8 ON SK-3.1 CONSTRUCTION DETAILS
- SKATE RAILS — SIZE AS SHOWN PER THIS PLAN; REFER TO DETAIL 9 & 10 ON SK-3.1 CONSTRUCTION DETAILS
- 5" REINFORCED TOP DECK — REFER TO DETAIL 5 ON SK-3.0 CONSTRUCTION DETAILS
- 6" REINFORCED BOTTOM DECK — SIMILAR TO DETAIL 5 ON SK-3.0 CONSTRUCTION DETAILS
- 8" REINFOCED TRANSITION & BANKS — REFER TO DETAIL 1, 2, 3, & 4 ON SK-3.0 CONSTRUCTION DETAILS
- GRIND LEDGES — REFER TO DETAIL 7 ON SK-3.0 CONSTRUCTION DETAILS
- CONCRETE STAIRS — REFER TO DETAIL 1 ON SK-3.1 CONSTRUCTION DETAILS
- TURNDOWN WALL — REFER TO DETAIL 9 ON SK-3.0 CONSTRUCTION DETAILS
- THICKENED EDGE — REFER TO DETAIL 6 ON SK-3.0 CONSTRUCTION DETAILS

NOTE: ALL EXPOSED CONCRETE AND SHOTCRETE SURFACES TO BE NATURAL GRAY IN COLOR & SMOOTH TROWEL FINISH UNLESS OTHERWISE NOTED.

RECOMMENDED TRANSITION CONSTRUCTION SEQUENCE:

1. INSTALL METAL COPING AND FORMS
2. INSTALL SHOTCRETE, USING THE COPING AND FORMS TO GUIDE PLACEMENT AND SHAPING
3. INSTALL FLATBOTTOM AND TOP DECKS.

skate park specialty construction:

THE FOLLOWING ITEMS HAVE BEEN DEEMED AS SPECIALTY CONSTRUCTION WORK WITHIN THE CONTRACT DOCUMENTS:

SHOTCRETE APPLICATION, CUTTING, SCULPTING AND FINISH.

COPING/RAIL INSTALLATION CONSISTING OF SETTING TO HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS.

GRIND LEDGE INSTALLATION CONSISTING OF SETTING TO HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS.

ALL WORK RELATED TO THE SPECIALTY CONSTRUCTION OF THE SKATE PARK SHALL BE COORDINATED WITH SITE DESIGN GROUP, INC. THE SKATE PARK DESIGNER, AND THE QUALIFIED SKATE PARK SPECIALTY CONTRACTOR, PRIOR TO THE START OF CONSTRUCTION.

rebar development lengths

Normal Weight Concrete

Rebar Size		3000psi				4000psi			
English	Metric	Top Bars ld	Bot. Bars ld	ldh		Top Bars ld	Bot. Bars ld	ldh	
#3	#10	21" (53.34cm)	16" (40.64cm)	6"	(15.32cm)	18" (45.72cm)	14" (35.56cm)	7"	(17.78cm)
#4	#13	28" (71.12cm)	22" (55.88cm)	11"	(27.94cm)	25" (63.50cm)	19" (48.26cm)	9"	(22.86cm)
#5	#16	36" (91.44cm)	27" (68.58cm)	14"	(35.56cm)	31" (78.74cm)	24" (60.96cm)	12"	(30.48cm)

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

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14133 STATE OF IDAHO JAMES ALLAN LANE

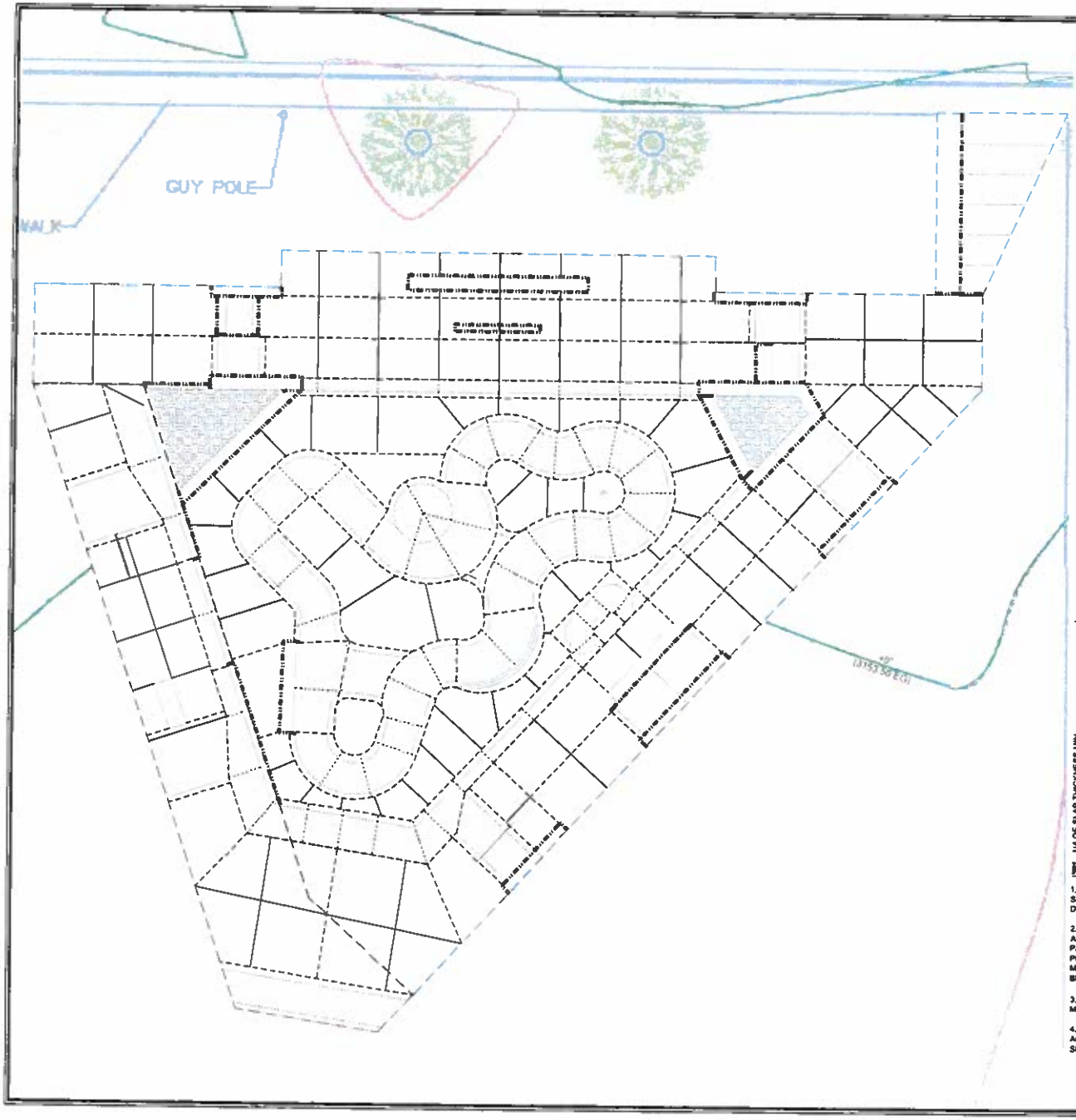
MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
JOINTING PLAN

18.8018

18.8018 - SD - SP - DET - 001 , 01

6/27/2018



scope of work

BASE BID

ADD ALTERNATE

jointing legend

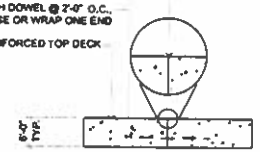
S.J. OR C.J.
TO BE DETERMINED BY SPECIALTY CONTRACTOR ON-SITE

C.J. - COLD JOINT, SEE FOLLOWING DETAIL
SCALE: 1" = 1'-0"

1/8" TOOLED JOINT BOTH SIDES, FLAT TOOL POLYURETHANE ELASTOMERIC SEALANT AT JOINT OPENING

#4 X 18" SMOOTH DOWEL @ 2'-0" O.C., GREASE OR WRAP ONE END

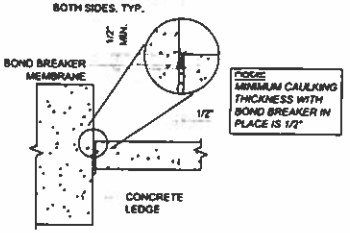
REINFORCED TOP DECK



E.J. - EXPANSION JOINT, SEE FOLLOWING DETAIL
SCALE: 1" = 1'-0"

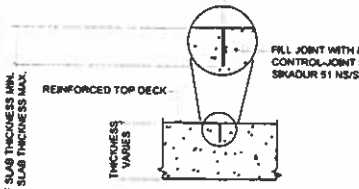
POLYURETHANE ELASTOMERIC SEALANT, TOOL FLAT & SMOOTH SIKAFLEX-2C, NS/SL OR EQUAL.

1/8" TOOLED RADIUS BOTH SIDES, TYP.



S.J. - SAWCUT JOINT, SEE FOLLOWING DETAIL
SCALE: 1" = 1'-0"

1/8" SAW-CUT



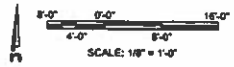
jointing notes

1. JOINTING PLAN IS DIAGRAMATIC ONLY. CONTRACTOR TO SNAP CHALK LINES FOR ALL SAW-CUT JOINTS AND SET ALL OTHER JOINT FORMS FOR REVIEW BY THE SKATE PARK DESIGNER AND/ OR OWNER.

2. ONLY EXPANSION JOINTS ARE TO BE USED BETWEEN VERTICAL SURFACES & ADJACENT CONCRETE SLAB, PER THIS PLAN UNLESS OTHERWISE SPECIFIED BY THE PARK DESIGNER. SLOPED SURFACES AND BOWL AREA: SAW CUT JOINTS ARE TO BE PERFORMED WITH ONE OF THE TWO FOLLOWING: WORM-DRIVE CIRCULAR SAW WITH A MASONRY DIAMOND BLADE, AND OR A HANDHELD GRINDER WITH A MASONRY DIAMOND BLADE FOR THE TOP AND BOTTOM OF THE SAW.

3. SAW-CUT JOINTS TOLERANCE TO BE ¼ OF THE SLAB MINIMUM, AND ⅓ OF THE SLAB MAXIMUM.

4. THE CONTRACTOR SHALL RECEIVE APPROVAL FROM THE SKATE PARK DESIGNER FOR ANY PROPOSED JOINTING DEVIATIONS PRIOR TO CONSTRUCTION THROUGH SUBMITTED SHOP DRAWINGS.



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

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14153 STATE OF IDAHO JAMES ALLAN LANE

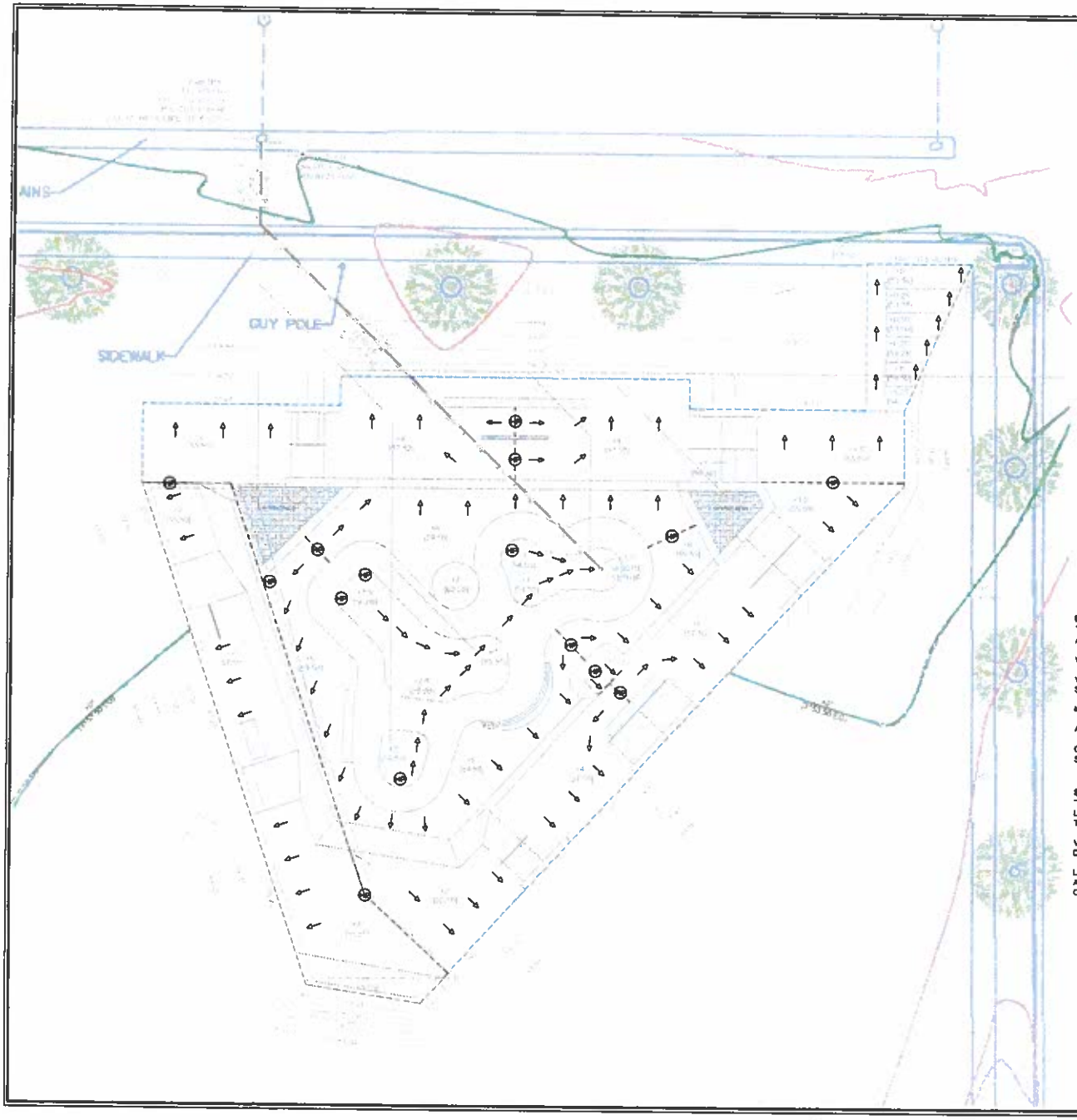
MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
JOINTING PLAN

18.8018

18.8018 - SD - SP - DET - 001 . 01

9/27/2018



scope of work

BASE BID

ADD ALTERNATE

grading & drainage legend

EXISTING 3154.00 COUNTOUR

EXISTING 3153.50 COUNTOUR

3153.50 = +0' (53.50)

PROPOSED CONTOURS

BREAK IN GRADE

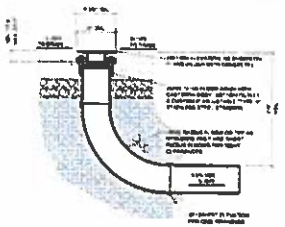
HP HIGH POINTS TO AVOID WATER POOLING

WATER FLOW DIRECTION, 1% MINIMUM

6" (MIN.) PVC DRAIN PIPE

PIPE FLOW DIRECTION, 1% MINIMUM

DRAIN INLET, SEE DETAIL BELOW
SCALE: 1" = 1'-0"



notes to contractor

ALL AREAS DISTURBED BY GRADING OPERATIONS TO BE FINE GRADED SOILS.

VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING WORK.

VERIFY HEIGHTS WITH THE VERTICAL REFERENCE AND SECTIONS/PROFILES. NOTIFY SKATE PARK DESIGNER OF ANY DISCREPANCIES.

MATCH ALL CENTER LINES OF PIPE.

ALL SPOT ELEVATIONS ARE TOP OF CONCRETE UNLESS OTHERWISE NOTED.

CONTRACTOR TO PROTECT ALL EXCAVATIONS FROM SOIL EROSION AND WATER SATURATION USING APPROPRIATE CONSTRUCTION METHODS.

survey notes

LOCATE ALL SURVEY MARKS, INCLUDING BENCH MARKS AND PROPERTY LINES IN ORDER THAT THE EXACT LINES OF CONSTRUCTION LIMITS AND GRADES MAY BE DETERMINED.

VERIFY ENTIRE LAYOUT PRIOR TO START OF CONSTRUCTION WITH THE SKATE PARK DESIGNER AND THE OWNER'S REPRESENTATIVE.

LOCATE AND PROTECT CONTROL POINTS PRIOR TO STARTING SITE WORK AND PRESERVE ALL PERMANENT REFERENCE POINTS DURING CONSTRUCTION. REPLACE PROJECT CONTROL POINTS WHICH MAY BE LOST OR DESTROYED.

10'-0" 0'-0" 20'-0"
5'-0" 10'-0"
SCALE: 1" = 10'-0"

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14133 STATE OF IDAHO JAMES ALLAN LAKE

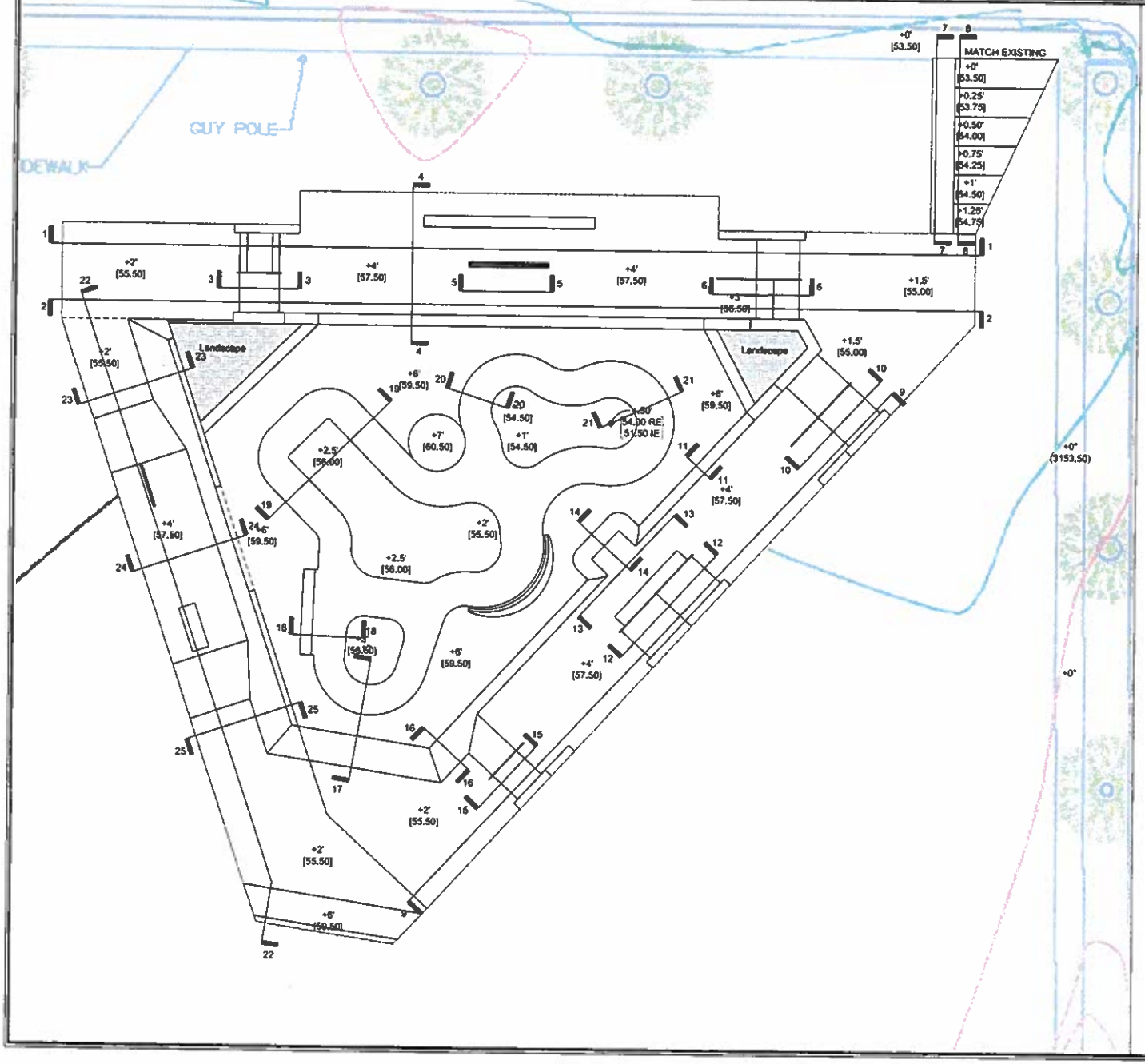
MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
GRADING & DRAINAGE PLAN

18.0018

18.0018 - SD - SP - DET - 001 . 01

9/27/2018



scope of work

BASE BID

ADD ALTERNATE

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

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14153 STATE OF IDAHO JAMES ALLAN LAKE

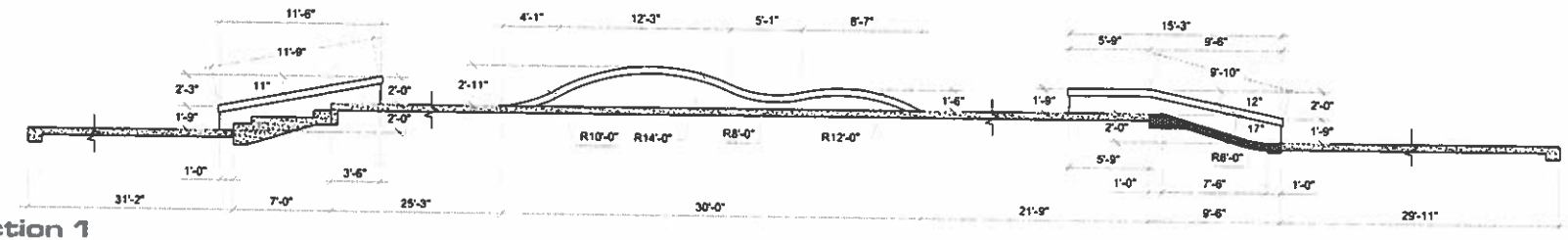
MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
SECTIONS KEY PLAN

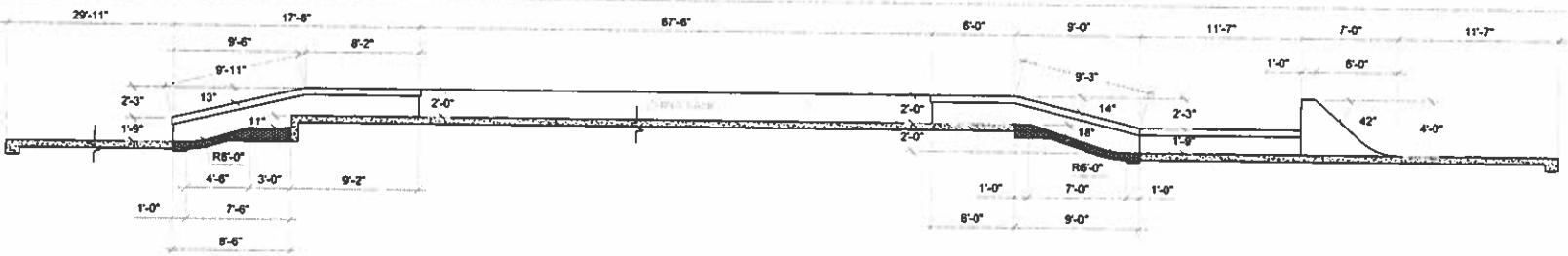
18.6018

18.6018- SD - SP - DET - 001 . 01

9/27/2018



section 1



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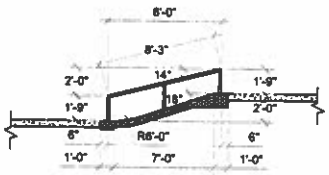

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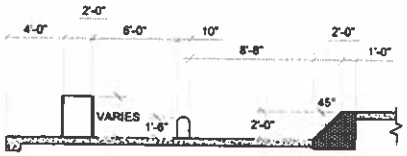
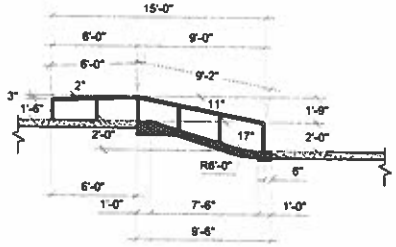


section 4

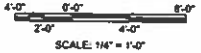
section 5



section 6

section 7

section 8



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

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14183 STATE OF IDAHO JAMES ALLAN LANE

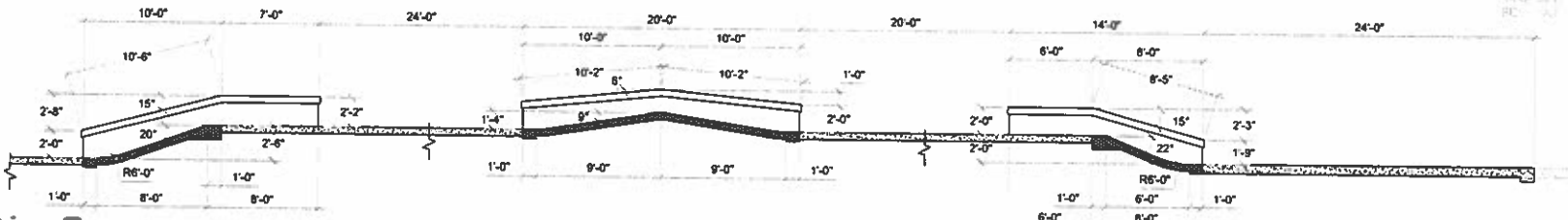
MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
SECTIONS

18.6018

18.6018- SO - SP - DET - 001 . 01

9/27/2018



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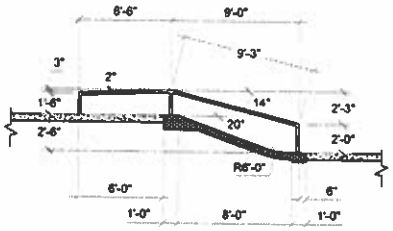

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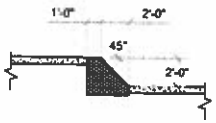

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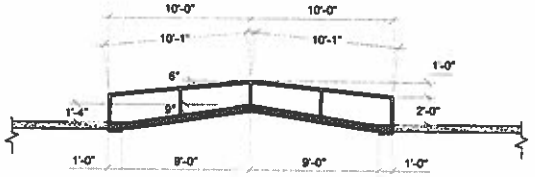

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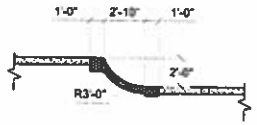
section 13



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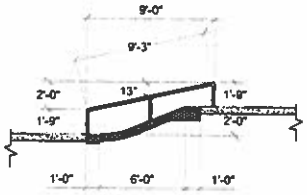

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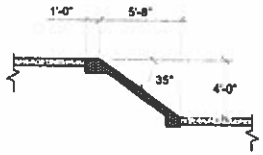

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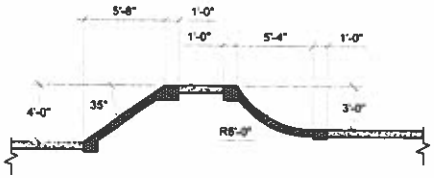

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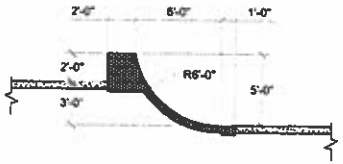


section 18

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

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14183 STATE OF IDAHO JAMES ALLAN LANE

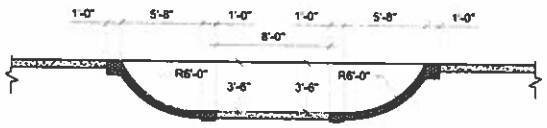
MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
SECTIONS

18.6018

18.6018- SO - SP - DET - 001 , 01

9/27/2018



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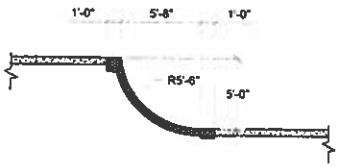

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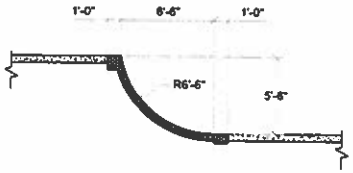

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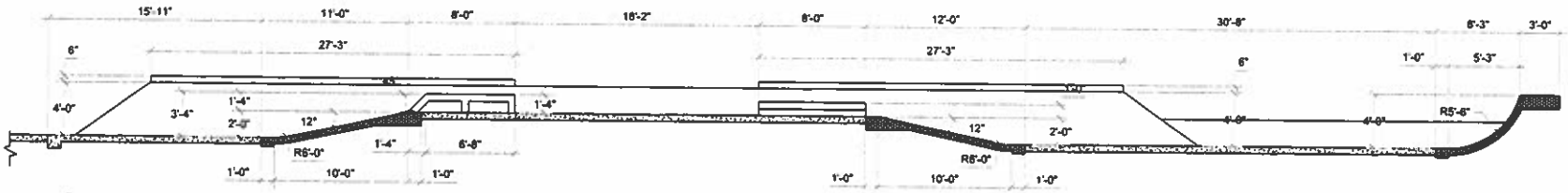
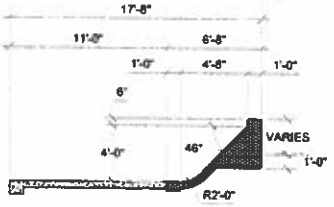
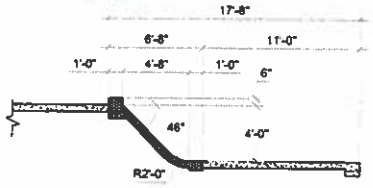


section 22 add alternate section



section 23 add alternate section

section 24 add alternate section



section 25 add alternate section

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

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14133 STATE OF IDAHO JAMES ALLAN LANE

MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
SECTIONS

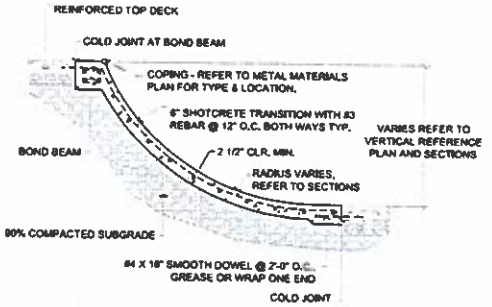
18.6018

18.6018 - SD - SP - DET - 001 . 01

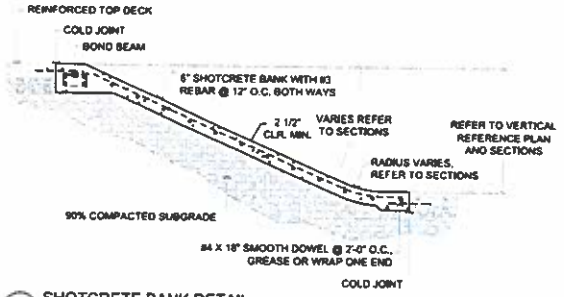
9/27/2018

special note:

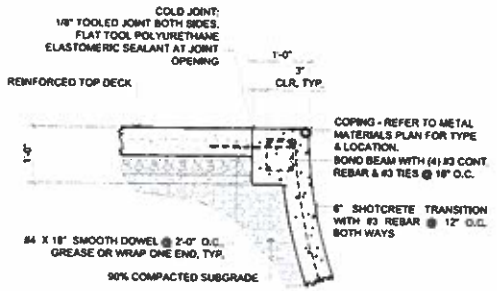
ALL TRANSITIONS (RADIAL WALLS) AND BANKS (EMBANKMENT WALLS) SHALL BE CUT, SCREEDED AND INSPECTED WITH TEMPLATES CUT TO THE SPECIFIED RADIUS/ ANGLE. CONTRACTOR IS TO SUBMIT SHOP DRAWINGS FOR TEMPLATE SIZE, MATERIAL AND LOCATION TO BE USED FOR APPROVAL BY CITY ENGINEER AND SKATE PARK DESIGNER. ALL SHOTCRETE TRANSITIONS AND BANKS TO BE POURED AND INSPECTED PRIOR TO ALL CONCRETE FLATWORK. CONTRACTOR IS TO SUBMIT POUR SCHEDULE BY LOCATION AND SEQUENCE FOR REVIEW BY CITY ENGINEER AND SKATE PARK DESIGNER.



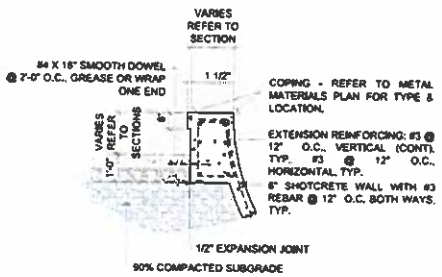
1 SHOTCRETE TRANSITION DETAIL
SCALE: 1/2" = 1'-0"



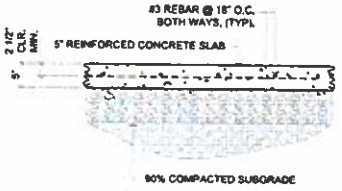
2 SHOTCRETE BANK DETAIL
SCALE: 1" = 1'-0"



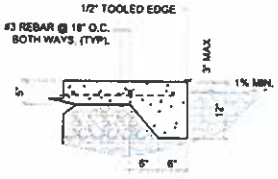
3 BOND BEAM DETAIL
SCALE: 1" = 1'-0"



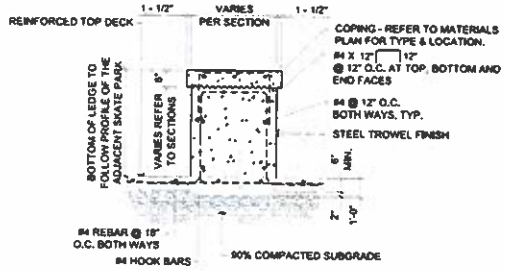
4 SHOTCRETE EXTENSION DETAIL
SCALE: 1/2" = 1'-0"



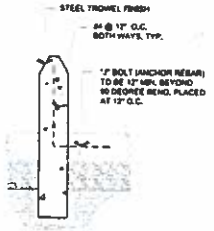
5 REINFORCED TOP DECK DETAIL
SCALE: 1" = 1'-0"



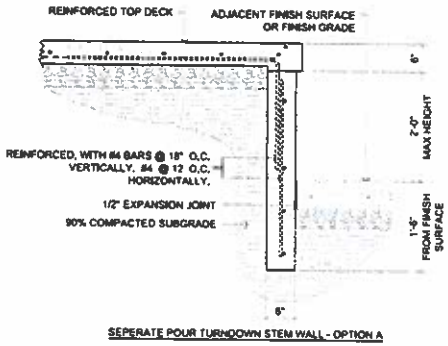
6 THICKENED EDGE DETAIL
SCALE: 1/2" = 1'-0"



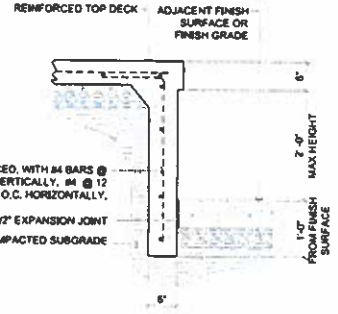
7 GRIND LEDGE DETAIL
SCALE: 1/2" = 1'-0"



8 MAILBOX LEDGE DETAIL
SCALE: 1/2" = 1'-0"

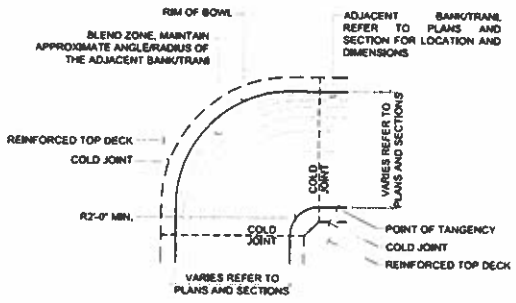


SEPERATE POUR TURNDOWN STEM WALL - OPTION A



MONOLITHIC POUR TURNDOWN STEM WALL DETAIL - OPTION B

9 TURNDOWN WALL DETAIL
SCALE: 1" = 1'-0"



10 BOWL CORNER DETAIL
SCALE: 1-0" = 1'-0"

HARDCORE

PROFESSIONAL ENGINEER LICENSED 14193 STATE OF IDAHO JAMES ALLAN LANE

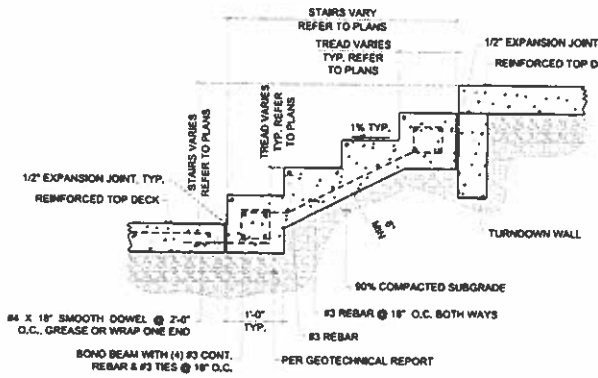
MOUNTAIN HOME SKATEPARK
IDAHO - USA

CONSTRUCTION DRAWINGS SET
CONSTRUCTION DETAILS

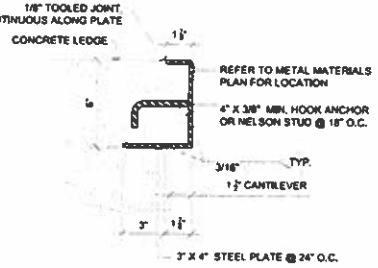
18.6018

18.6018 - SD - SP - DET - 001 . 01

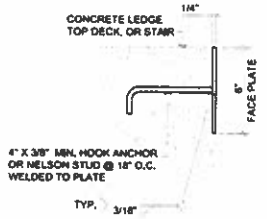
9/27/2018



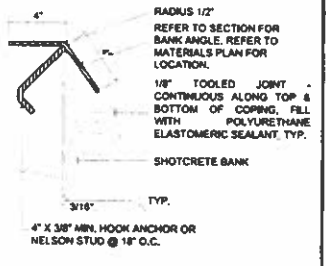
1 CONCRETE STAIRS DETAIL
SCALE: 1" = 1'-0"



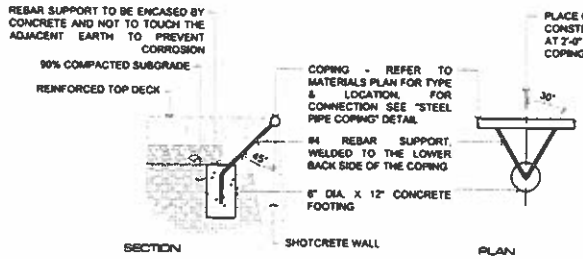
2 6" C-CHANNEL STEEL COPING DETAIL
SCALE: 1" = 1'-0"



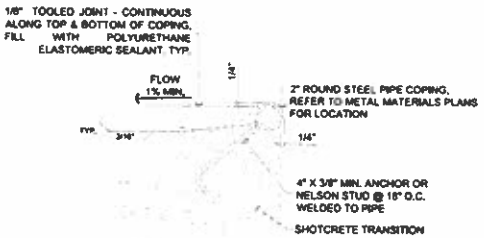
3 6" PROTECTIVE STEEL FACE PLATE
SCALE: 1" = 1'-0"



4 4" X 4" BENT PLATE DETAIL
SCALE: 1" = 1'-0"

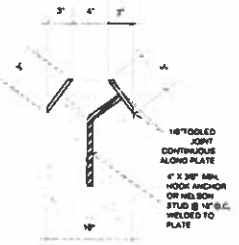


5 COPING CONSTRUCTION SUPPORT DETAIL
SCALE: 1" = 1'-0"

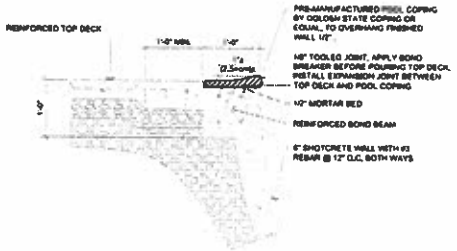


NOTE:
WELD & GRIND SMOOTH END CAPS WHERE PIPE ENDS ARE EXPOSED. NO OPEN PIPES OR CONCRETE FILLED CAPS WILL BE ACCEPTED. REFER TO DETAIL 9 ON THIS SHEET.

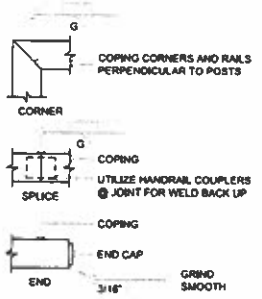
6 2" ROUND STEEL PIPE COPING DETAIL
SCALE: 1" = 1'-0"



7 3" STEEL FACE PLATE
SCALE: 1" = 1'-0"



8 POOL COPING DETAIL
SCALE: 1" = 1'-0"



9 COPING/RAIL JOINT WELDS
SCALE: N.T.S.

rail/post chart

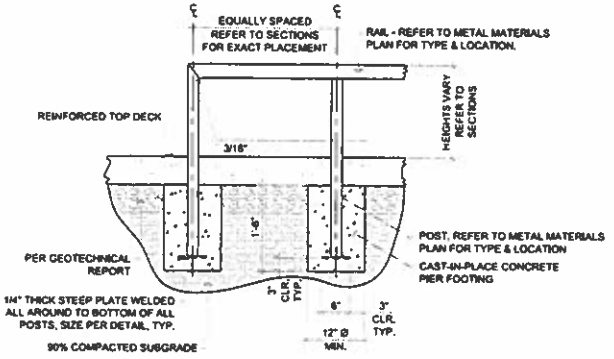
ROUND PIPE

RAIL	POST
2" ROUND	2" ROUND

VERTICAL FLAT BAR

RAIL	POST
2" X 2" SQUARE	2" X 2" SQUARE
2" X 6" SQUARE	2" X 6" SQUARE

USE THESE RAIL/POST COMBINATIONS UNLESS OTHERWISE NOTED.



10 TYPICAL RAIL AND FOOTING DETAIL
SCALE: 1" = 1'-0"

HARDCORE

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LICENSED
14143
STATE OF IDAHO
JAMES ALLAN LANE

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IDAHO - USA

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18.8018- SD - SP - DET - 001 , 01

9/27/2018

CITY OF MOUNTAIN HOME MATCHING CONTRIBUTION
MOUNTAIN HOME SKATE PARK

IN-KIND GRUBBING (STREETS DEPARTMENT)			
Equipment	**Hours**	**Rate + Wage**	**Total**
Grader	30	$ 125.00	$ 3,750.00
Loader	30	$ 100.00	$ 3,000.00
Dumptruck	40	$ 85.00	$ 3,400.00
Dumptruck	40	$ 85.00	$ 3,400.00
Dumptruck	40	$ 85.00	$ 3,400.00
Roller	10	$ 85.00	$ 850.00
TOTAL			$ 17,800.00