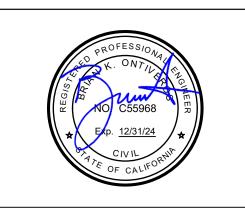
FIREMAN'S PARK BBQ PAVILION AND PLAYGROUND IMPROVEMENTS

CITY OF FERNDALE, HUMBOLDT COUNTY, CALIFORNIA

APRIL 2024





CITY OF FERNDALE

FIREMAN'S PARK
BBQ PAYILION &
PLAYGROUND
IMPROYEMENTS

COYER SHEET

APN: 031-051-003

DRAWINGS SHEET INDEX

CITY OF FERNDALE COUNCIL

PROJECT DIRECTORY

RANDY CADY

PHILLIP OSTLER

JENNY FISK-BECKER

LEONARD LUND

MAYOR

CITY COUNCIL

CITY COUNCIL

CITY OF FERNDALE

SKIP JORGENSEN

JAY PARRISH CITY MANAGER
BRIAN ONTIVEROS CITY ENGINEER
MIKE O'HERN CITY SURVEYOR
KRISTENE HALL CITY CLERK
ARNIE KEMP CITY BUILDING OFFICIAL
JOHNNY HOPPIS PUBLIC WORKS

CITY COUNCIL

OWNER

CITY OF FERNDALE 834 MAIN STREET FERNDALE, CA 95536 PHONE: (707) 786-4224 FAX: (707) 786-9314

ENGINEER

CITY OF FERNDALE
OFFICE OF THE CITY ENGINEER
ONTIVEROS & ASSOCIATES, INC.
BRIAN ONTIVEROS
404 N. FORTUNA BLVD.
FORTUNA, CA. 95540
PHONE: (707) 725-7410

CONTACT INFORMATION

FERNDALE CITY HALL

CITY OF FERNDALE POLICE DEPARTMENT

DEL ORO WATER COMPANY

PACIFIC GAS & ELECTRIC COMPANY

NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

NORTH COAST REGION

(707) 786-4224

(707) 786-4025

(707) 786-4025

(707) 786-4025

(707) 786-4225

(707) 786-4225

(707) 786-4225

PROJECT

LOCATION MAP

Sheet Number	Sheet Title
C0.1	Cover Sheet
C0.2	Project Notes
C1	Existing Site
C2	Proposed Site Plan
C3	Details
A1	BBQ Pavilion Plan
A2	BBQ Pavilion Structural Details
A3	BBQ Details
A4	Structural Notes

MARK DESCRIPTION

APPROVALS

CITY ENGINEER:

SIGNED DATE

CITY MANAGER:

Brian K. Ontiveros, PE C55968

Jay Parrish

SIGNED DATE

PLOT INFORMATION

CAD DWG FILE: P:\23-004 CITY OF FERNDALE\23-004.06
BBQ PAVILLION\CIVIL\NOTES.DWG
PLOT DATE: 5/14/2024 6:07 PM
SAVE DATE: 5/14/2024 6:03 PM

SUBMITTAL STATUS
BID PLANS

PROJECT NO: 23-004:06

DATE: 4/29/2024

DRAWN BY: BAO

СНК'Д ВУ: ВКО

CU.1

GENERAL CIVIL NOTES

A. GENERAL

- 1. This project requires a Class A general engineering contractor's license in the state of California.
- 2. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractor shall coordinate, verify and be responsible for all dimensions, details and conditions before starting the work.
- 3. The drawings were prepared in a manner consistent with existing professional standards and with the understanding that these drawings would be used solely by qualified and experienced construction and/or design professionals for use in the construction of this specific project only. The details indicated on these plans represent general typical details required for communicating this project design intent to such qualified construction professionals and as such may not include all the details necessary for the final completion of the project.
- 4. Contractor shall notify the civil engineer of record in writing immediately of any apparent discrepancies or possible omissions in detailing prior to starting the work. Contractor shall take full responsibility for the consequences of proceeding without written clarification from the C.E.R. relative to any such apparent discrepancies including potential removal and/or replacement of incorrectly installed elements
- 5. The contractor shall verify all stations, locations, elevations, and slopes prior to starting construction. Any discrepancies shall be immediately called to the engineer's attention.
- 6. The construction & installation of improvements shall conform to these plans, the City of Ferndale improvement standards and specifications, and 2022 California Building Code.
- 7. Any changes to these plans are to receive prior approval of the the City Engineer.
- 8. The contractor is to pothole and verify the existence, location and elevation of all utilities prior to the start of work. The locations of all underground utilities may not be shown on these plans. The engineer makes no guarantee as to the existence, location, or elevation of any utilities shown or omitted from these plans. The engineer will assume no responsibility for the completeness or accuracy of underground utilities, whether shown on this plan, or not. The contractor is to notify underground service alert (USA North) at 811 a minimum of 48 hours prior to starting work.
- Construction materials shall be stored so as to ensure the preservation of their quality and fitness for the work. They shall be located and disposed of in a manner such that prompt and proper inspection may be made.
- 10. The contractor shall remove from the site and lawfully dispose of all deleterious material (broken concrete, asphalt pavement, base material, rocks stumps, roots, limbs, etc.) to an approved disposal site.
- 11. If, in the course of development, any archaeological, historical, or paleontological resources are uncovered, construction activities in the affected area shall cease and a qualified archaeologist shall be contacted to review the site and advise the city of the site's significance. If the findings are deemed significant, appropriate mitigation shall be required prior to any resumption of work on the project.
- 12. Contractor Shall be Solely Responsible for Survey Control and Staking as Required to Perform Work. All Survey and Staking (if required) Shall be Performed by a Licensed California Professional Land Surveyor.
- 13. Unless otherwise noted, the contractor shall protect existing survey monuments within work limits. Any monument damaged by the contractor shall be reset in accordance with the California Professional Land Surveyors Act.
- 14. Contractor shall provide and maintain sufficient temporary barriers to provide for the safety of the public.
- 15. All construction shall be performed in compliance with the state of California air pollution control and water regulations. The contractor is responsible for obtaining air and water quality permits from the California department of environmental protection as required. The contractor shall maintain an ongoing dust control program using the application of water and/or
- 16. The location of existing utilities shown on these drawings is based on the best information available to the engineer. Prior to beginning construction it shall be the contractors responsibility to verify these locations at the proposed points of connections and in areas of possible conflict with new utility installation, potholing is required. Should the contractor find any discrepancies between the conditions existing in the field and the information shown on these drawings, he shall notify the city engineer before proceeding with construction.
- 17. The contractor shall be solely and completely responsible for the conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. The contractor shall be responsible for the design and construction of proper shoring of trenches in accordance with occupational safety laws. The duties of the engineer or construction manager do not include review of the adequacy of the contractor's safety in, on, or near the construction site.
- 18. Should it appear that the work to be done, or any matter relative thereto, is not sufficiently detailed or explained on these plans, the contractor shall contact the construction manager for such further explanations as may be necessary.
- 19. The contractor will be responsible for the replacement of all existing improvements damaged or disturbed by this construction project, including: PCC curb, gutter & sidewalk, PCC driveway aprons, the adjustment to grade of all manholes, cleanouts, and valve boxes and private improvements outside the paved roadway not shown for removal or modification on these drawings (NDP for repairs unless noted otherwise on drawings)
- 20. Location and elevation of existing improvements to be joined by new work shall be confirmed by the contractor by field measurements prior to construction of new work.
- 21. All quantities shown on the drawings are approximate and used only for permit and bond purposes only. They shall not be used in any way for bidding or construction purposes. It shall be the contractor's responsibility to make his own quantity estimates for bidding and construction purposes.
- 22. It shall be the contractor's responsibility to perform construction as per plans. Any additions, deletions or changes shall first meet with the approval or the engineer.

WATER POLLUTION CONTROL NOTES

- 1. It is the responsibility of the contractor to minimize erosion and prevent the transport of sediment to sensitive areas.
- 2. Sufficient erosion control supplies shall be available on-site at all times to deal with areas susceptible to erosion during rain events.
- 3. Minimize disturbance of existing vegetation only as necessary to complete the work.
- 4. The contractor shall make adequate preparations, including training & equipment, to contain spills of oil and other hazardous materials. See project specifications for additional contractor requirement and responsibilities.
- 5. Activities such as vehicle washing are to be carried out at an off-site facility wherein the water is discharged into a sanitary sewer.
- 6. The contractor shall provide covered waste receptacles for common solid wastes at convenient locations on the job site and provide regular collection of wastes.
- 7. The contractor shall provide sanitary facilities of sufficient number and size to accommodate construction crews and ensure adequate anchorage of such facilities to prevent them from being tipped by the weather or vandalism.
- 8. Appropriate storage and disposal of water from dewatering operations shall be exercised in the event that accumulated water must be removed from a work location.
- Covered and secured storage areas for potentially toxic materials shall be provided by the contractor. All hazardous material containers should be placed in secondary containment.
- 10. Vehicle and equipment & maintenance should be performed off-site whenever practical.
- 11. Soil stockpiles shall be covered, and located at least 50 feet away from drainage channels and stormwater systems.
- 12. Contractor must ensure that the construction site is prepared prior to the onset of any storm.
- 13. All sediment deposited on paved roadways shall be swept at the end of each working day, as necessary or as directed by the city's representative. A stabilized construction entrance may be required to prevent sediment from being deposited on paved roadways.

14. All erosion and sediment control measures shall be maintained in accordance to their

- respective BMP fact sheet until disturbed areas are stabilized. 15. This plan may not cover all the situations that arise during construction due to unanticipated field conditions. Variations may be made to the plan in the field subject to the approval of or at the direction of the city's representative.
- 16. It will be the responsibility of the contractor to fix any deficiencies indicated by the city or the city's representative to prevent erosion and control sediment.

C. UNDERGROUND UTILITY NOTES

- 1. Underground utilities are shown based on a combination of visible physical evidence and available records.
- 2. No representation is made that all the underground utilities shown comprise all such utilities in the area, either in service or abandoned, or that the underground utilities are in the exact locations indicated, although they are shown as accurately as possible from the available information as noted above.
- 3. The City assumes no responsibility for utilities not shown at all or utilities not shown in their
- 4. For dig alert ID number call underground service alert (USA) at 811 for underground locating, a minimum of 2 days before you dig.

D. CONCRETE

- 1. Concrete for curbs and sidewalks shall have minimum ultimate compressive strength of 3000 psi at 28 days and unit weight of 150#/cf. Aggregate shall be per ASTM C33 and Table 2, Size Number 6 or approved alternate.
- 2. Cement shall be tested, Type I Portland cement conforming to ASTM C150.
- 3. Reinforcing steel shall conform to ASTM A615 Grade 60, deformed bars, clean and unrusted.
- 4. Provide concrete with slump at point of placement as follows:
- 4.1. Ramps and sloping surfaces: Not more than 3".
- Slabs, Sidewalk & Other Concrete: Not more than 5".

TESTING AND MATERIALS SCHEDULE

TEST	TEST NUMBER	MATERIAL	LOCATION	STANDARD
Compaction Compaction Compaction Sand Eq. Base Gradation Concrete	Calif. 216 Calif. 216 Calif. 216 Calif. 217 Calif. 202	Trenches Subgrade CI 2 Ag. Base CI 2 Ag. Base CI 2 Ag. Base	1 Test ea. 50' 1 Test ea. 50' 1 Test ea. 50' 1 Test 1 Test None	90% where >30", 95% where <30" 90% where >30", 95% where <30" 95% 22 Min. 1½" Max 5 Sack Transit Mix

The Asphalt Batch Plant is to issue a certification that the materials supplied to this project are in conformance with State Specifications for Type B Asphaltic Concrete.

ABBREVIATIONS

SYMBOLS LEGEND

△ △ ((N) CONCRETE PAVING		
	DEMOLITION AREA		
		(E) MAJOR CONTOUR LINE	
		(E) MINOR CONTOUR LINE	
		(P) MAJOR CONTOUR LINE	
		(P) MINOR CONTOUR LINE	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(E) BUILDING OUTLINE	
——— ОН —		OVERHEAD POWER LINE	
ss		SEWER LINE	
W		WATER LINE	
		GRADE BREAK	
		ROAD CENTERLINE	

ROAD RIGHT OF WAY

UTILITY POLE

DRAINAGE DIRECTION

UTILITY POLE GUY LINE

CAD DWG FILE: P:\23-004 CITY OF FERNDALE\23-004.06 BBQ PAVILLION\CIVIL\NOTES.DWG PLOT DATE: 5/14/2024 6:07 PM SAVE DATE: 5/14/2024 6:03 PM

PLOT INFORMATION

MARK DESCRIPTION

SUBMITTAL STATUS **BID PLANS**

PROJECT NO: 23-004:06 4/29/2024 DATE:

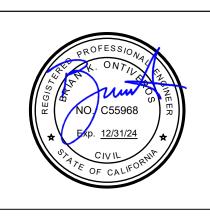
DRAWN BY: BAO CHK'D BY: BKO

SHEET --

ONTIVEROS & ASSOCIAT CONSULTING ENGINEERS AND SURVEYORS

404 N. Fortuna Blvd. • Fortuna, CA 95540

Phone (707) 725-7410 • Fax (707) 725-7411 Ontiveros.Assoc@att.net



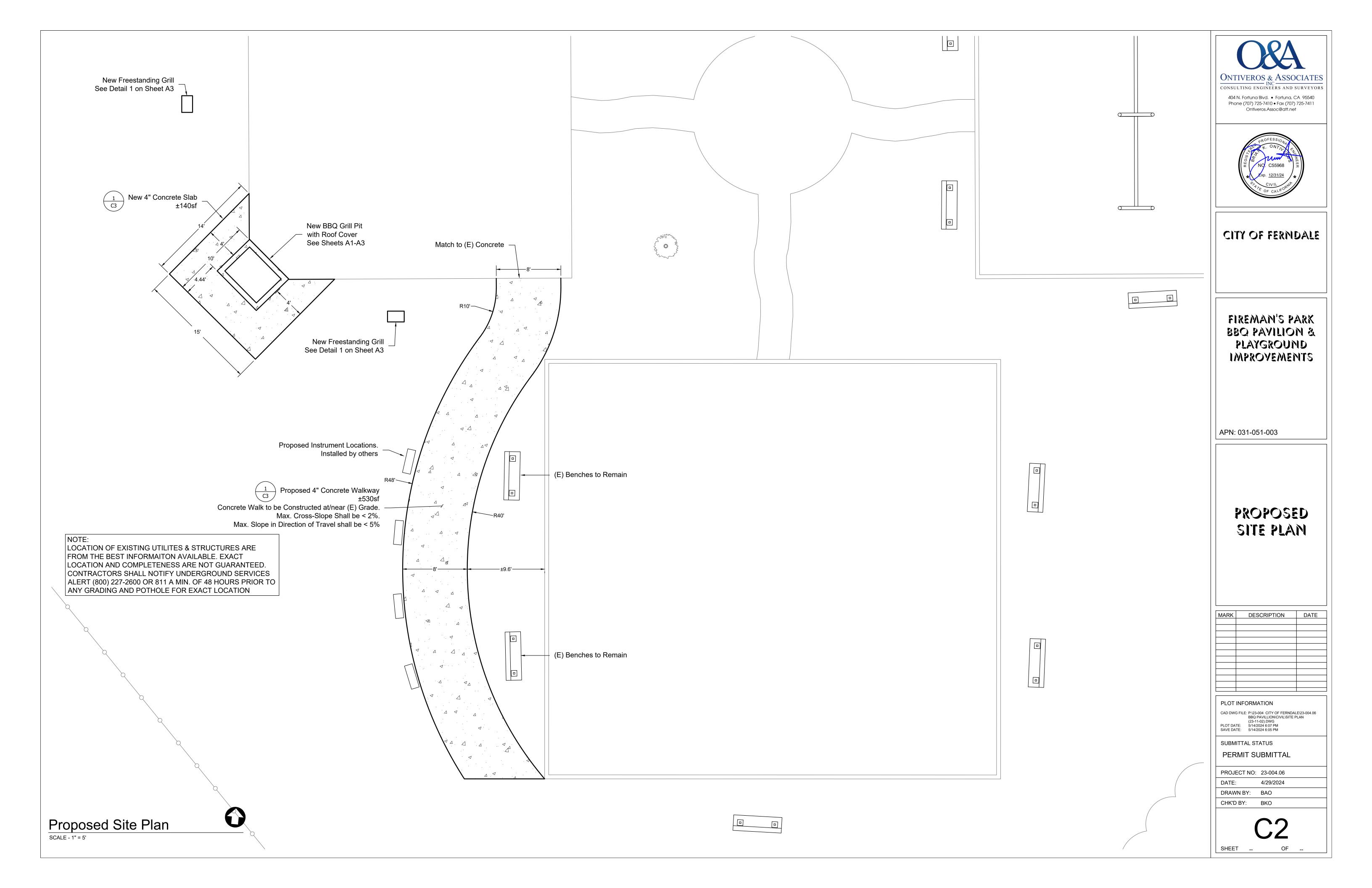
CITY OF FERNDALE

FIREMAN'S PARK BBQ PAVILION & PLAYGROUND **IMPROVEMENTS**

APN: 031-051-003

PROJECT NOTES





EROSION CONTROL MEASURES

1. General Notes

- 1.1. These erosion and sediment control measures will be operable during the rainy season (October 15 April 15) or in the dry season (April 15 October 15) when there is a 72-hour forecast of rain (40% chance or greater).
- .2. Under no circumstances should concentrated drainage be allowed to flow off site.
- 1.3. Temporary erosion control devices which interfere with the work shall be relocated or modified when the engineer of record (EOR) so directs as the work progresses.
- 1.4. All loose soil and debris shall be removed from the street areas upon starting operations and periodically there after as directed by the EOR. All entrances shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way.
- 1.5. The contractor shall have tools, equipment and materials to provide erosion control measures made necessary by a construction operation, on the job site before beginning that operation.
- 1.6. Adjacent properties shall be protected from storm waters, mud, silt, etc on a daily basis.
- 1.7. IF EROSION AND SEDIMENT CONTROL MEASURES FAIL TO PERFORM AS EXPECTED, WORK SHALL IMMEDIATELY CEASE AND NOT CONTINUE UNTIL THE CONTRACTOR HAS REPAIRED ALL FAILED MEASURES AS DIRECTED BY THE EOR TO ADDRESS ANY FAILED MEASURES. A letter shall be prepared by the EOR and delivered to the contractor acknowledging all repairs have been completed as directed prior to work resuming.
- **2. EROSION AND SEDIMENT CONTROL BMPs** The following BMPs are incorporated and made a part of these drawings. See the BMP Fact Sheets for more detailed information.

2.1. STREET SWEEPING and VACUUMING - SE-7

- 2.1.1. Any sediment that is tracked onto pavement will be removed immediately by sweeping.
- 2.1.2. The sediment collected by sweeping shall be removed or stabilized on-site.
- 2.1.3. If non-vactor type sweepers are used, the deposition of these sweepers must be removed from sidewalks and gutters.
- 2.1.4. The pavement shall not be cleaned by washing/flushing streets.
- 2.1.4. The pavement shall not be cleaned by washing/flushing stree2.1.5. Streets shall be checked daily for tracked debris.

- 2.2. STORM DRAIN INLET PROTECTION SE-10
 2.2.1. Every storm drain inlet receiving runoff from unstabilized or otherwise active work areas should be
- 2.2.2. At a minimum DI's shall be protected with a gravel bag berm to pond water prior to entering the DI.
- 2.2.3. Additionally, the DI may be outfitted with a geotextile insert to catch additional debris.2.2.4. DI protection shall be inspected weekly, prior to forecasted rain events, daily during extended rain
- events, and after the conclusion of rain events.
- 2.2.5. Remove excess buildup of sediment that is more than $\frac{1}{3}$ the height of the sandbag berm.

2.3. PRESERVATION of EXISTING VEGETATION - EC-2

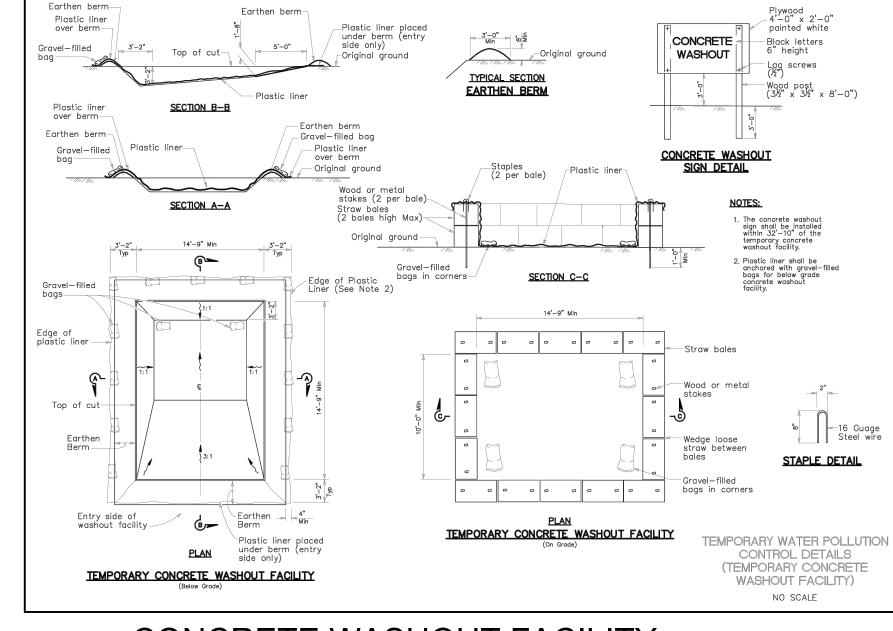
- 2.3.1. Minimize the amount of existing vegetation that must be disturbed for construction.

 2.3.2. Mark areas to be preserved with temporary fencing. Silt fencing may be used for boundary
- 2.3.3. Include sufficient setback to protect roots of nearby vegetation.

2.4. CONCRETE WASTE MANAGEMENT - WM-8

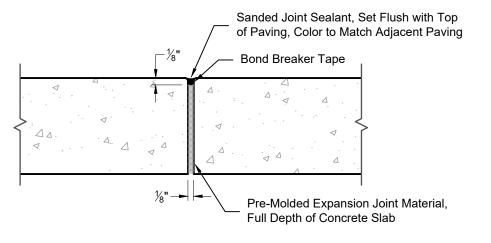
- 2.4.1. Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- 2.4.2. Avoid mixing excess amounts of concrete.
- 2.4.3. Perform washout of concrete trucks in designated areas only, where washout will not reach
- 2.4.4. Do not wash out concrete trucks into storm drains, open ditches, streets, streams or onto the ground. Trucks should always be washed out into designated facilities.
- 2.4.5. Do not allow excess concrete to be dumped onsite, except in designated areas.2.4.6. For onsite washout:
- 2.4.6.1. Locate washout areas at least 50 feet from storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
- 2.4.6.2. Washout wastes into the temporary washout where the concrete can set, be broken up, and then disposed properly.
- 2.4.6.3. Washouts shall be implemented in a manner that prevents leaching to underlying soils.

 Washout containers must be water tight and washouts on or in the ground must be lined with a suitable impervious liner, typically a plastic type material.
- 2.4.6.4. Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile or dispose in the trash.

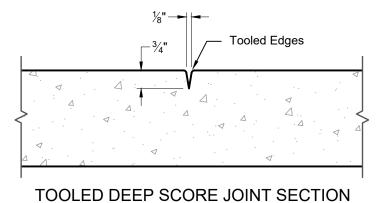


CONCRETE WASHOUT FACILITY

SCALE: NTS (or Provide Similar to Adequately Contain Concrete)



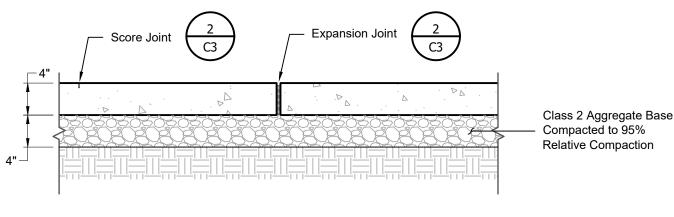
EXPANSION JOINT SECTION



NOTES

- 1. LOCATE EXPANSION JOINTS AT INTERVALS OF NOT MORE THAN 20 FEET, UNLESS INDICATED OTHERWISE, OR AS DIRECTED BY ENGINEER OF RECORD.
- 2. FORM TOOLED SCORE JOINTS IN FRESH CONCRETE BY GROOVING AND FINISHING EACH EDGE OF JOINT WITH A RADIUSED JOINTER TOOL. LOCATE TOOLED SCORE JOINTS AT INTERVALS OF NOT MORE THAN 5 FEET, UNLESS INDICATED OTHERWISE.



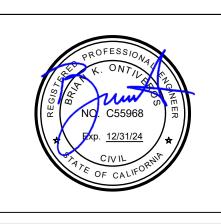


NOTES

- 6" HIGH WARNING CURB REQUIRED PER CBC WHEN VERTICAL DROP ADJACENT TO SIDEWALK EXCEEDS 4". 6" HIGH RETAINING CURB MAY BE USED AS FIELD CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER OF RECORD IN THE FIELD.
- 2. WALKS AND SIDEWALKS SHALL CONFORM TO THE 2022 CBC.
- 3. CONCRETE SURFACE SHALL BE TROWELED SMOOTH AND HAVE A BROOM FINISH.
- 4. SLOPE CONCRETE PAVING SECTIONS AWAY FROM BUILDINGS AND OTHER STRUCTURES AND TOWARDS LANDSCAPING AND DRAINAGE FACILITIES.
- 5. MAXIMUM CROSS SLOPE OF SIDEWALKS AND WALKWAYS SHALL BE 2%.
- 6. WHERE (N) CONCRETE PAVING ABUTS (E) CONCRETE PAVING, DRILL AND DOWEL #4 REBAR 6" INTO (E) CONCRETE PAVING @ 24" O.C. AND PROVIDE EXPANSION JOINT, PER 2, C3







CITY OF FERNDALE

FIREMAN'S PARK
BBQ PAYILION &
PLAYGROUND
IMPROVEMENTS

APN: 031-051-003

DETAILS

MARK	DESCRIPTION	DATE

PLOT INFORMATION

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BBQ PAVILLION\CIVIL\SITE PLAN
(23-11-02).DWG
PLOT DATE: 5/14/2024 6:07 PM

SUBMITTAL STATUS
BID PLANS

SAVE DATE: 5/14/2024 6:05 PM

PROJECT NO: 23-004.06

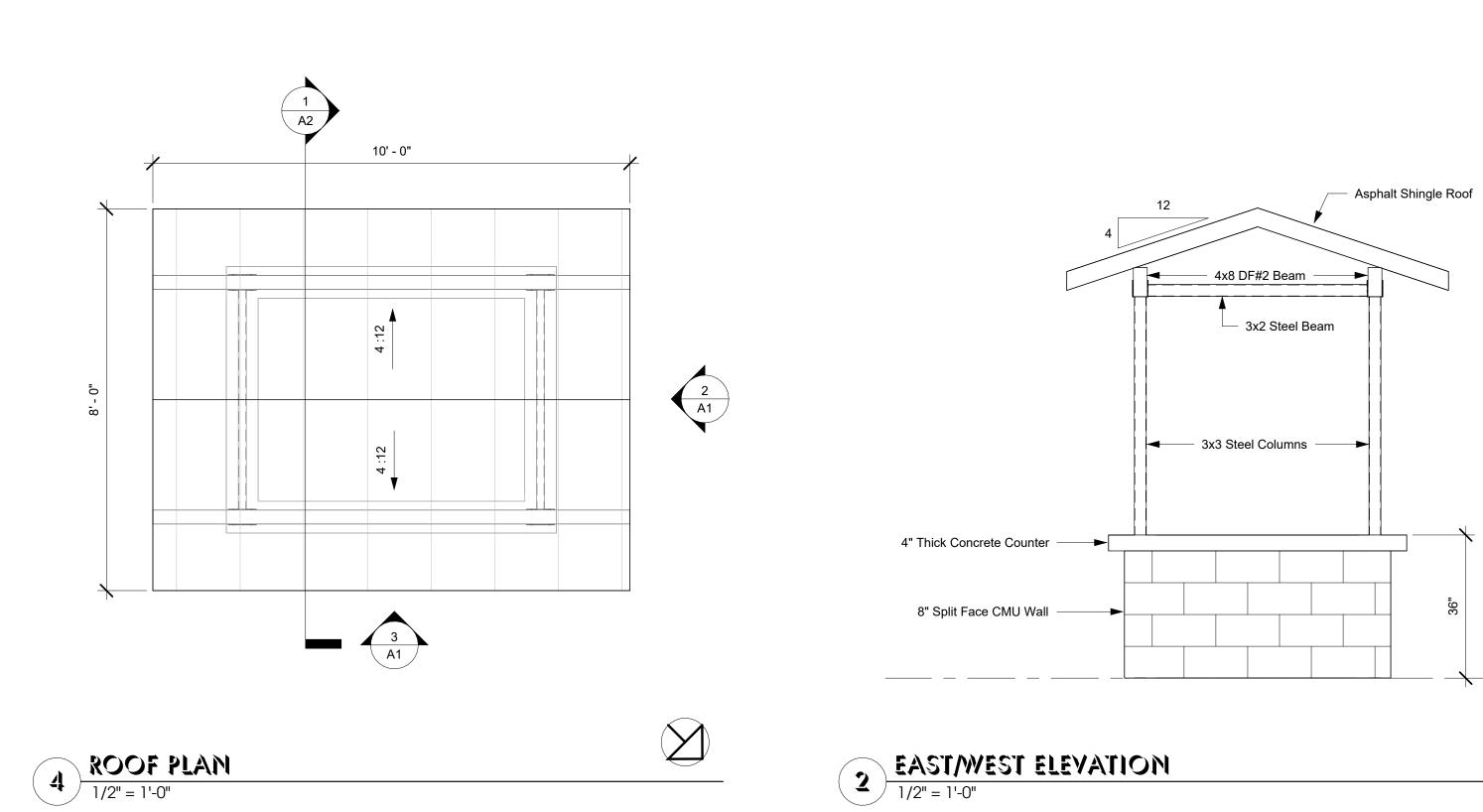
DATE: 4/29/2024

DRAWN BY: BAO

CHK'D BY: BKO

 C_3

SHEET - OF



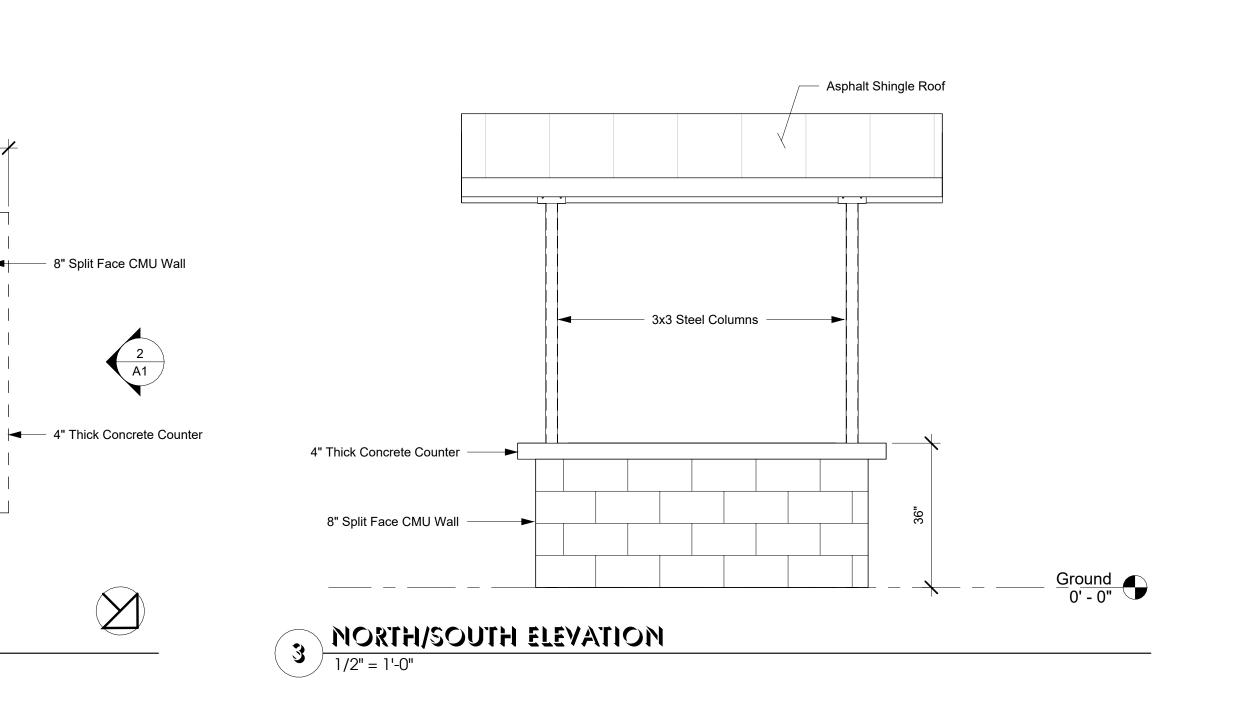
- 8" Split Face CMU Wall

92" Concrete Counter

BBQ Pit See Plan by

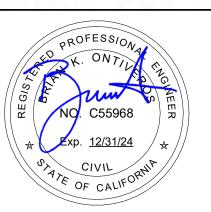
Ovenworks

1 FLOOR PLAN
1/2" = 1'-0"



Ground 0' - 0"





CITY OF FERNDALE

BBQ PAYILLION

City of Ferndale

APN: 031-051-003

BBQ PAYILION

MARK	DESCRIPTION	DATE

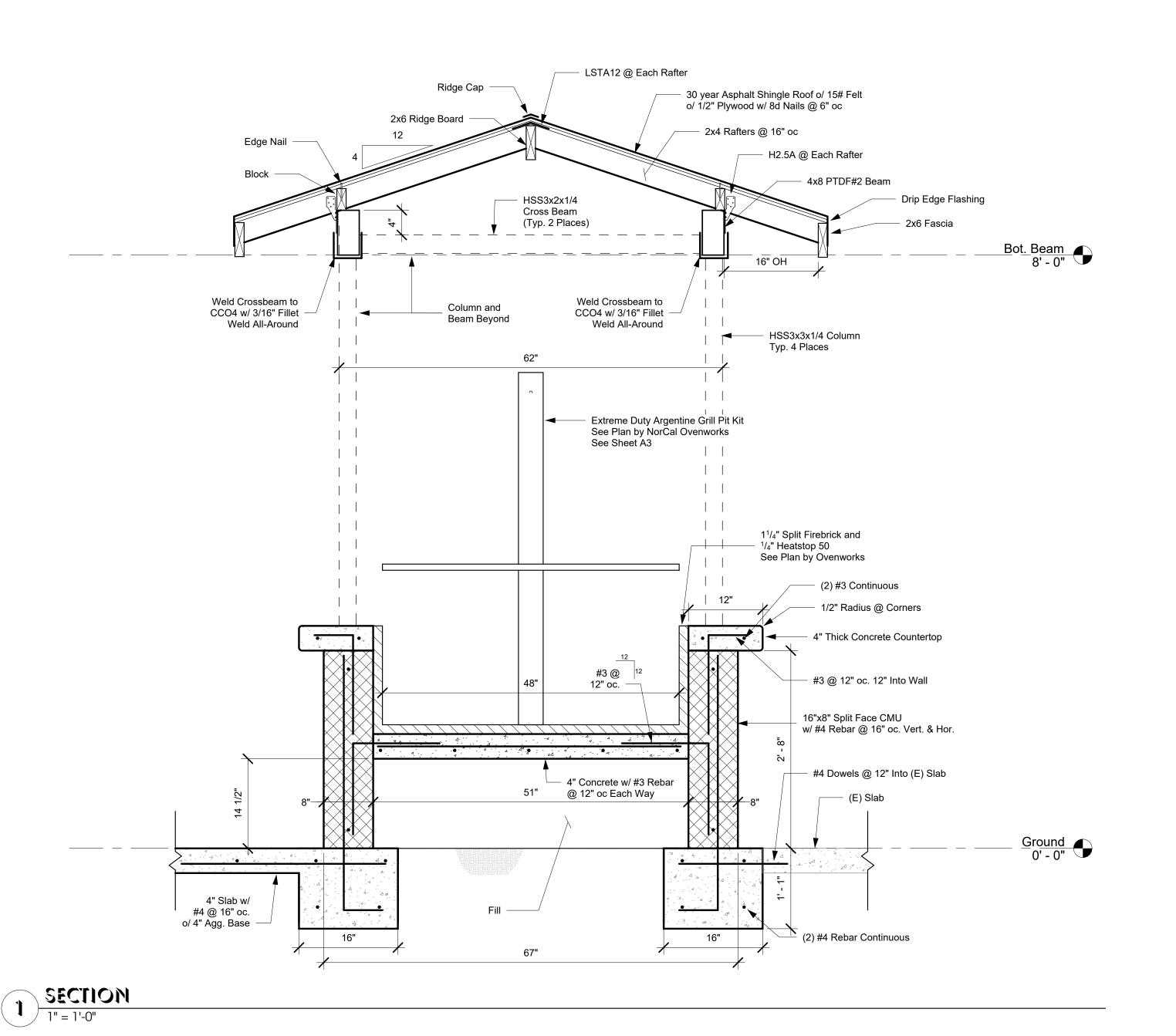
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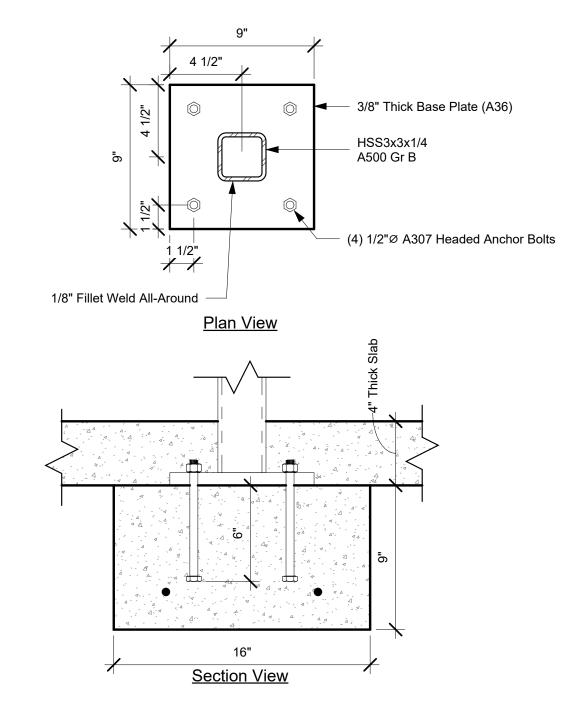
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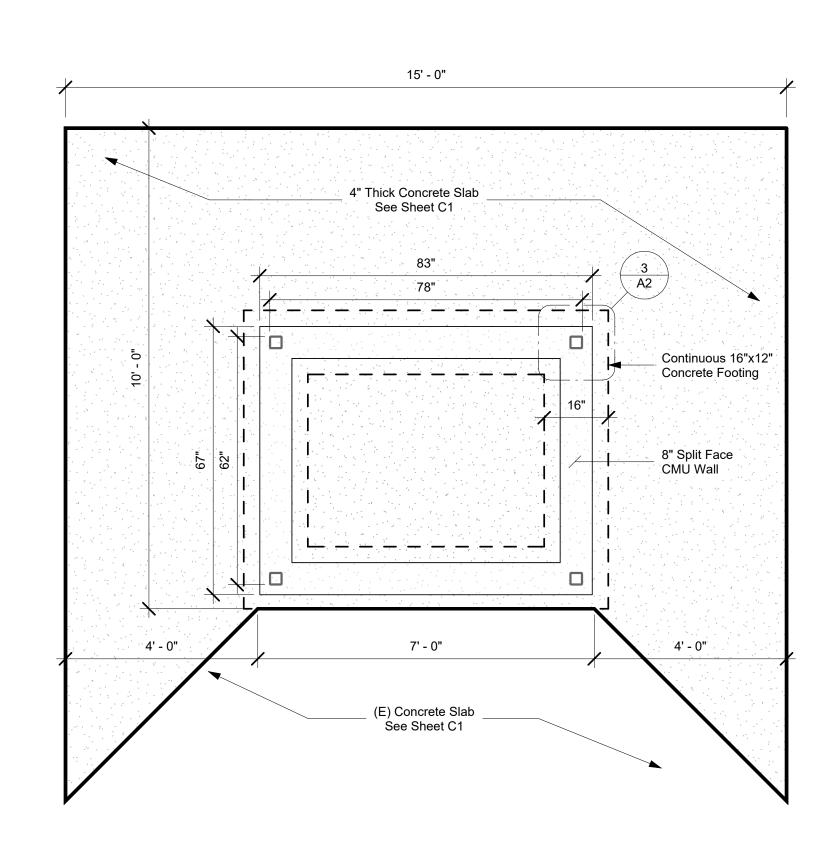
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	Date	4/29/2024
	Drawn by	BJO
	Checked by	BKO

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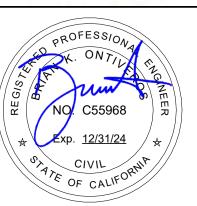












CITY OF FERNDALE

BBO PAVILLION

City of Ferndale

APN: 031-051-003

STRUCTURAL DETAILS

MARK	DESCRIPTION	DATE

Drawing Information

CAD DWG FILE: P:\23-004 City of Femdale\23-004.06 BBQ Pavillion\Revit\BBQ Pit.rvt

SAVE DATE: 5/14/2024 5:52:37 PM

Project Status

Bid Set

Project number	23-004.0
Date	4/29/202
Drawn by	BJO/BA
Checked by	BK

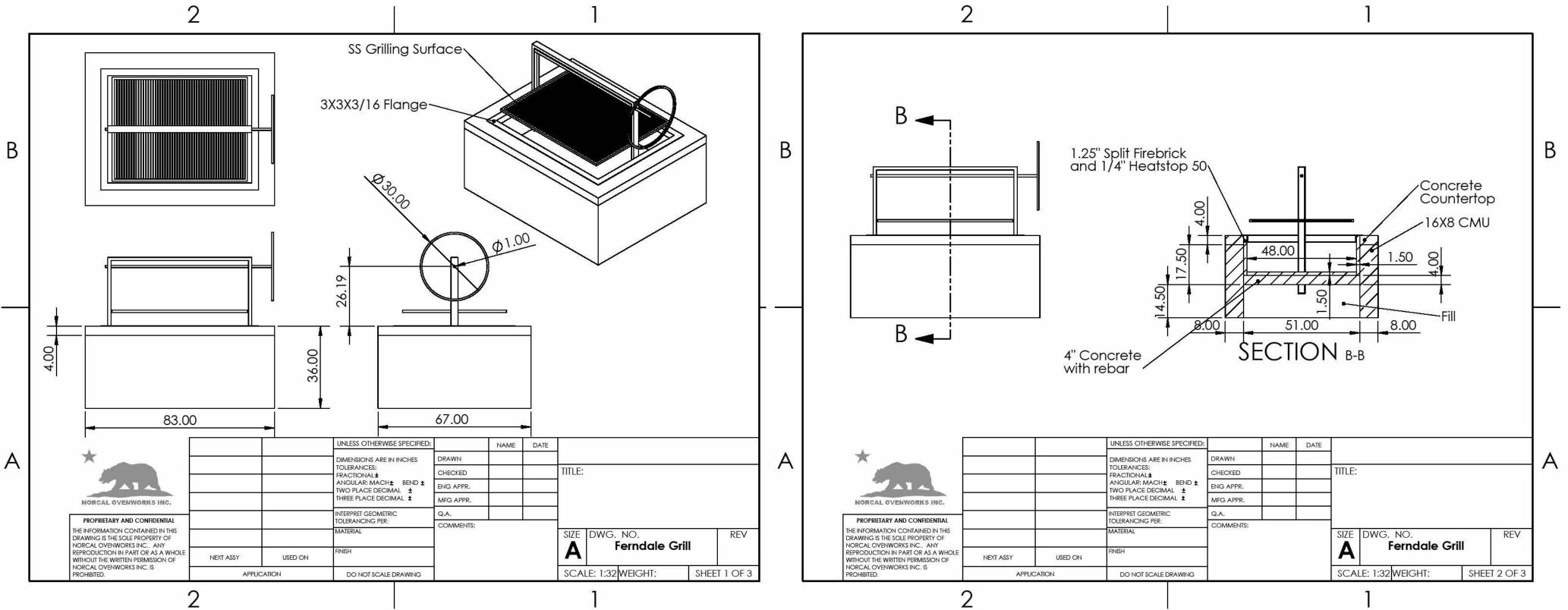


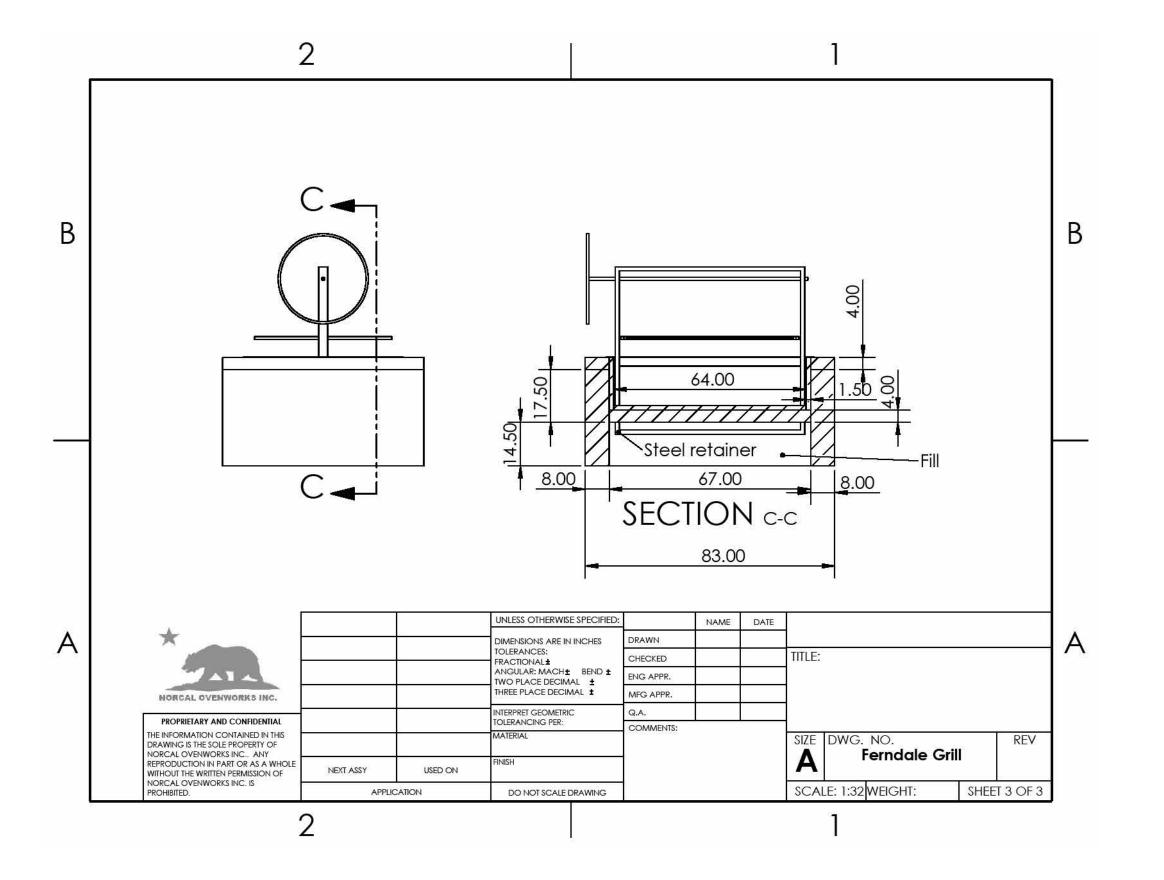
Example Image of Extreme Duty Argentine Grill Pit Argentine Grill



NORCAL OVENWORKS INC. gary@norcalovenworks.com

Barbeque Insert Contact
Gary Knackstedts
NorCal Oven works Inc. Heritage Backyard Inc. Texas Design and Fab Inc.
116 River Park Lane
Georgetown, TX 78626
Tel: 916-794-0707
Cell: 916-798-8902







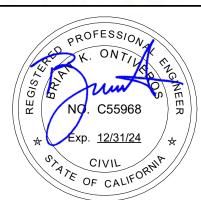
Free Standing Barbeque.

Provide TWO Pilot Rock Heavy-Duty Jumbo Steel Park-Style Charcoal Grills — 24 1/4in. x 16 1/8in., Model# CBP-

- Commercial-quality grill is constructed of 1/8in. plate steel with 3/8in. to 1/2in. round steel bars for exceptional durability
- Ergonomic handles allow you to lift the grate to 4 different cooking heights or tip it back out of
- the way for easy cleaning
 24 1/4in.L x 16 1/8in.W x 10in.H grill box swivels a full 360° for wind control
- Sturdy 2-piece, 40in.L x 2 3/8in. dia. pipe base (bury 14in. under ground for maximum stability) Includes locking pin.

BBQ DETAIL





CITY OF FERNDALE

BBQ PAVILLION

City of Ferndale

APN: 031-051-003

BBQ DETAILS

MARK	DESCRIPTION	DATE

Drawing Information

CAD DWG FILE: P:\23-004 City of Ferndale\23-004.06 BBQ Pavillion\Revit\BBQ Pit.rvt

SAVE DATE: 5/14/2024 5:52:38 PM

Project Status

Bid Set

 Project number
 23-004.06

 Date
 4/29/2024

 Drawn by
 BJO/BAO

 Checked by
 BKO



SHEET

STRUCTURAL DESIGN BASIS

LOADS
Roof Live Load
Roof Dead Load

= 20 psf (reducible).

GENERAL NOTES

- . All work shall conform to the requirements of the 2022 California Building Code, ASCE 7-16 and/or prevailing local codes. Compliance with additional noted standards shall be to the most recently accepted/published standards, as approved by the governing agency.
- The drawings were prepared in a manner consistent with existing professional standards and with the understanding that these drawings would be used solely by qualified and experienced construction and/or design professionals for use in the construction of this specific project only. The details indicated on these plans represent general typical details required for communicating this project design intent to such qualified construction professionals and as such may not include all the details necessary for the final completion of the project
- 3. Drawings shall NOT be scaled. All dimensions shall be determined and verified by the contractor prior to commencing work.
- 4. Refer to Civil drawing for sidewalk slabs and dimensions.
- 5. Elevations on plans and details are to heights above finished ground floor elevation reference 0'-0".
- 6. The contractor shall notify the designer or civil engineer of record in writing immediately of any apparent discrepancies or possible omissions in detailing prior to starting the work. Contractor shall take full responsibility for the consequences of proceeding without written clarification from the C.E.R. relative to any such apparent discrepancies including potential removal and/or replacement of incorrectly installed elements.
- 7. The structure has been designed to be stable and self-supporting after the construction is complete. It is the contractor's sole responsibility for the building's stability during construction. This responsibility also includes but is not limited to method and sequence of erection, temporary shoring and temporary bracing.
- 8. It is the contractor's sole responsibility to follow all applicable safety codes and regulations during all phases of construction.
- 9. Should any information on the structural drawings conflict with the specifications or any other part of the drawings, the contractor shall notify the engineer and an interpretation will be given.
- 10. All sections, details, notes, dimensions and conditions are applicable at any other location where conditions and details are similar but are not specifically noted as such or are not
- 11. Any substitutions shall be submitted to the Engineer prior to installation, shall have previous approval from the governing building department, and shall have either an International Conference of Building Officials research report or a National Evaluation Report.

EARTHWORK AND FOUNDATIONS

- 1. In lieu of a soils report an allowable soil bearing value of 1500 psf for dead plus live loads, has been used. These values may be increased by one-third for combined loads, including wind and seismic.
- 2. Earthwork, including, but not limited to, site clearing, grubbing, and stripping should be conducted during dry weather conditions. All sod, vegetation and topsoil within the uppermost one foot of the areas proposed for development, and from the areas five feet beyond the proposed building and addition footprints, should be removed to the extent feasible. Any debris encountered at or below the existing ground surface should be removed from within the building and addition footprints. Additionally, excavate as required to accommodate design grades and planned minimum fill or pavement section thickness.
- 3. Subgrade Preparation Remove any additional topsoil encountered below the stripped ground surface at one foot below existing grade. The exposed subgrade should be proof-rolled with a loaded ten-yard dump truck to a firm and unyielding surface. Any unsuitable material, if encountered should be overexcavated, and replaced with compacted engineered fill as recommended in the soils report.
- 4. Provide adequate shoring for vertical excavations or slopes sides of excavation not less than 1 vertical to 3/4 horizontal.
- 5. Footings shall be poured directly against excavated surfaces. Foundations should be embedded a minimum of 13 inches below finish grade into suitably dense, undisturbed native bearing soils or compacted engineered fill. Minimum width of footings should be 16

CONCRETE

- 1. All work to conform to the requirements of the ACI "Building Code Requirements for Reinforced Concrete" (ACI 318-latest edition) and "Details and Detailing of Concrete Reinforcement" (ACI 315-latest edition).
- 2. Concrete shall have minimum ultimate compressive strength at 28 days of 3000 psi (normal weight) at all structural concrete elements.
- . Cement shall be tested, type II portland conforming to ASTM C150.
- 4. Prior to placing concrete, mix designs shall be submitted for review.
- Provide concrete with slump at point of placement as follows:

 Reinforced foundation systems: Not less than 2" and not more than 5".
- 6. Concrete Slabs on Grade (S.O.G.) shall be divided by expansion, weakened (control) or construction joints into areas not exceeding 400 square feet. The ratio of length to width shall not exceed 1-1/2 to 1. Proposed layout indicating the location of the expansion, control and/or construction joints shall be submitted to the Engineer of Record prior to the start of construction. All extra reinforcing required at joints must be shown on reinforcing shop
- 7. Saw-cut control joints immediately after concrete has set sufficiently so that cutting does not produce shredding of the concrete, but before concrete has had a chance to crack due to initial shrinkage. The cutting period will vary according to the rate of setting of the concrete. It is the contractor's sole responsibility to cut these joints at the proper time and using the proper procedure to minimize shrinkage cracking and to produce clean, straight joints.
- 8. No opening for pipes, conduits, etc. shall be made in concrete without the approval of the Engineer of Record unless shown on the drawings.
- P. Refer to architectural and mechanical/electrical/plumbing drawings for all depressions, reveals, grooves, reglets, dovetails, curbs, tread inserts, slab inserts, projections, sills, pipe sleeves, duct openings, conduit openings, etc. That are to be cast with concrete.
- 10. All proprietary anchoring systems to be installed into concrete or masonry elements in strict accordance with the manufacturer's instructions using the required supplemental components such as screen tubes, roweling adhesives, etc.

REINFORCING STEEL

- Reinforcing steel shall be detailed, fabricated and installed according to the "Manual of Standard Practice of Reinforced Concrete Construction" by the Concrete Reinforcing Steel Institute (CRSI) as well as ACI 315 and ACI 318.
- 2. Reinforcing steel shall conform to ASTM A615 Grade 60, deformed bars, clean and unrusted.
- 3. All lap splices of reinforcement shall be a min. of 40 bar diameters.
- 4. Development length noted in these drawings shall be equal to 80% of the length noted in the lap splice
- 5. All 90° hooks shown on the drawings, unless noted otherwise, shall be standard hooks as defined by ACI 318-08 and CRSI. Stirrup/tie hooks and seismic hooks noted on the drawings shall be 135° hooks as defined by ACI 318-08 and CRSI.
- 6. Provide additional reinforcing as shown in details and around all openings in concrete slabs.
- Reinforcing shall have the following minimum protective cover of concrete unless otherwise noted:

Concrete poured against ground
Formed concrete surfaces in contact with ground
Formed concrete surfaces exposed to weather
Formed concrete surfaces in interior spaces
Slabs on grade:

3" 2" 1-1/2" 3/4" 1" clear from top of slab

Concrete accessories must be adequate to maintain reinforcing accurately in place and be non-corrosive, non-staining type.

WOOD FRAMING NOTES

- All work to conform to the requirements of the "national design specification for wood construction" (ANSI/AWC NDS-2018) as recommended by the American Forest & Paper Association.
- 2. All lumber shall be graded and grade stamped by an agency Certified by the Board of Review of the American Lumber Standards Committee and manufactured in accordance with Product Standard 20-70, as published by the Department of Commerce.
- 3. The standard wood details and the nailing, etc., called for in these notes are minimum requirements and will apply to all work except where more stringent requirements are shown
- 4. All lumber shall be Douglas Fir-Larch, or equivalent species. Lumber shall be of the following grades UNO on the plans:

 2x/3x Studs & Plates

 DF#2.

2x/4x Framing Members DF#2. 6x & larger Beams and columns DF#2.

- 5. All structural lumber shall have a moisture content of less than 19% at the time of construction.
- 6. All beams and joists shall be seat cut for full uniform bearing at supports, hangers, beam seats and column caps.
- 7. Nailing for all connections not specifically noted shall conform to table 2304.10.2 of the 2022 CBC.
- 8. All bolts and lag screws in conjunction with wood construction shall conform to ASTM A307. Holes in wood shall be a minimum of 1/32" to a maximum of 1/16" larger than the bolt diameter, and except where larger plate or structural steel is attached, shall have the following minimum size plate washers installed under both heads and nuts:

Bolt Size Plate Size
1/2" dia. 3/16" x 2" sq
5/8" dia 1/4" x 2-1/2" sq
3/4" dia 5/16" x 2-3/4" sq
7/8" dia 5/16" x 3" sq
1" dia 3/8" x 3-1/2" sq

- 9. All bolts, lag screws, or other timber connectors shall be installed in conformance with the National Design Specification for Wood Construction of the National Forest Products Association,
- 10. Framing connections shall be Simpson "Strong Ties" of the catalog designations indicated or proven equivalent. A common nail of the size designated in the catalog shall be provided in each hole unless alternate bolting is noted on the drawings or otherwise noted. All connectors detailed for bolts shall have detailed bolts installed. All Simpson Strong-Tie connectors shall be installed per catalog C-C-2024 requirements. Equivalent connections of other manufacturers having the same capacity and having ICBO approval may be used.
- 11. Framing connections open to the elements or in contact with preservative treated wood shall be hot dipped zinc-coated galvanized steel, stainless steel or mechanically deposited zinc coated steel.
- 12. All nails to be standard common full length nails with full heads, meeting the requirements of Federal Specification FF—N-105B (Reference 25).

 8d = 0.131" shank diameter

 10d = 0.148" shank diameter

16d = 0.162' shank diameter

13. Nails into pressure treated material to be galvanized. Nails must not be overdriven. See specifications for machine nailing requirements. See CBC Table 2304.10.2 for other requirements.

WOOD STRUCTURAL PANELS

- 1. Structural panels shall be installed based on the recommendations of the American Plywood Association and/or the specific manufacturer of the plywood.
- 2. Typical Pitched Roof Sheathing: 19/32" 5-PLY APA Structural Sheathing (32/16) Plywood and nailed with 8d @ 6"oc edges and 12"oc field. UNO
- Sheathing shall be exterior grade where either side of sheathing is permanently exposed to
- 4. All roof sheathing shall be installed with the face grain perpendicular to the supports and a 1/8" gap at all panel edges unless recommended otherwise by the panel manufacturer. Panel edges shall be blocked as indicated on the plans. Where blocking is not specifically required for the roof sheathing, ply clips or tongue and groove plywood shall be used. Subfloor sheathing shall be unblocked unless noted otherwise on the structural drawings. Subfloor sheathing shall be glued down to the supporting members and glued at the tongue and groove joints.
- 5. All sheathing panels shall be installed with end joints staggered unless noted otherwise on the drawings. No Structural panel less than 24" in width shall be allowed for either horizontal or vertical panels.
- 6. All structural panel nailing shall be with common nails of the size specified on the plans. Roof sheathing shall utilize ring shank nails. Stainless steel (type 316) nails shall be used at permanently exposed exterior areas. All nails that are not exposed to the elements but in contact with preservative treated lumber shall be minimum hot-dipped galvanized meeting ASTM A153.
- 7. PEN or EN indicates Plywood Edge Nail along total length of member.
- 8. All necessary steps shall be taken to ensure that the installed structural panel remains dry prior to covering with the applicable finishes.

MASONRY

Concrete block masonry units shall be normal weight 8x8x16 hollow load bearing concrete units with special shapes as required to complete work. All blocks shall conform to ASTM C90, Grade N, Type II.

- 2. Bond beam units shall be single 8x8 concrete units.
- Provide horizontal construction joints when grouting is stopped for a period of one hour or longer.
- 4. All blocks shall be laid in true alignment and accurately spaced courses using the common running bond pattern (vertical joints staggered) with vertical courses aligning. Mortar joints shall be struck flush and tooled to a concave joint.
- Reinforcement shall be erected prior to laying blocks. See wall details for rebar requirements. Minimum concrete block reinforcing shall be as follows:
- A. 1-#4 vertical @ 16" o.c., 1-#4 Horizontal @ 16" o.c.

 B. At wall ends: 1-#4 vertical; At top & bottom of walls: 1-#4 Horizontal @ top &
- C. Bar splices shall be as shown on the drawings except bars marked continuous may be lap spliced in convenient lengths. Unless otherwise indicated, the length of lap
- shall be 48 bar diameters minimum.
- D. Bars shall be held rigid during grout pours.E. Reinforcement shall conform to ASTM A615 Grade 60.
- Mortar shall be type S and conform to ASTM C 270.
- 7. Grout shall be in accordance with the ASTM C476 and shall have a minimum ultimate compressive strength of 2000 psi @ 28 days and a minimum unit weight of 135#/cf.
- 8. Concrete surfaces receiving concrete blocks shall be cleaned & wire brushed to expose coarse aggregate.
- 9. Blocks to be Split Face and Color per City Engineer.

STRUCTURAL STEEL

 Steel design, fabrication, and erection shall conform with "AISC Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings" and the "Code of Standard Practice for Steel Buildings and Bridges".

2. The grade and specification of the steel members shall be as follows:

a. Hot Rolled W-Shapes ASTM A992
b. Channels, plates, and angles (UNO) ASTM A36
c. Tubular Steel (HSS Shapes) ASTM A500 Gr. B (Fy=46 ksi)
d. Bolting ASTM A325
e. Rods ASTM A529/A572 Gr. 50
f. Zee Purlins ASTM A653

- 3. Welding shall conform to the AWS codes for building construction. Welding shall be performed. in accordance with a welding procedure specification (WPS) as required in the latest Edition of AWS Standard D1.1 and approved by the engineer of record. Welds shall utilize E70XX electrodes and shall be a minimum of 3/16" in size unless noted otherwise. All Welding Shall be Contiuously Inspected, Except Shop Welding Performed in the Shop of an Approved Fabricator.
- All Structural Steel Shall be Primed with a 2 Mil. Thick Red or Grey Oxide Primer Before Shipment to the Project Site. Do not Paint Surfaces to be Welded and/or Embedded in Concrete.





CITY OF FERNDALE

BBQ PAYILLION

City of Ferndale

APN: 031-051-003

STRUCTURA MOTES

MARK	DESCRIPTION	DATE

CAD DWG FILE: P:\23-004 City of Ferndale\23-004.06 BBQ Pavillion\Revit\BBQ Pit.rvt

SAVE DATE: 5/14/2024 5:52:39 PM

Drawing Information

Project Status

Bid Set

 Project number
 23-004.06

 Date
 4/29/2024

 Drawn by
 BJO

 Checked by
 BKO



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