

STATEMENT OF WORK
&
REQUEST FOR PROPOSAL

FACILITY SECURITY FENCING – BLM COOS BAY DISTRICT

1. Background – The Coos Bay District of the Bureau of Land Management (BLM or Government) is interested in bringing its administrative building on Airport Lane up to Facility Security Level (FSL) II in accordance with the U.S. Interagency Security Committee Standard (ISCS). The first stage in this process would be the installation of security fencing adjacent to and on either side of the facility itself. The BLM is soliciting a proposal from the Coos County Airport Authority to provide all labor, equipment and materials necessary to install the fencing according to the provisions enumerated below.
2. Location – The BLM administration building to be fenced is located at 1300 Airport Lane, North Bend, Oregon, 97459.
3. Access – The Government will provide access to the Contractor to the extent required to perform this work during normal working hours.
4. Work to be Performed - The Contractor will provide all labor, equipment and materials necessary to install the fencing, vehicle gates and pedestrian gates according to the provisions contained herein and the specifications for chain link fencing systems (02821) attached. The work includes disposal of any waste material in a legally acceptable manner.
5. Government-Furnished Equipment (GFE) – There is no GFE involved in this work.
6. Government-Furnished Material (GFM) – There is no GFM involved in this work.
7. Delivery Schedule and Payments – The duration of this project will be 60 calendar days after issuance of the Notice to Proceed. Payment for this work shall be in accordance with the attached itemization.
8. Government Contacts – The following BLM employee will function as the Contracting Officer's Representative (COR) for this contract: Michael Bohannon (541-751-4251).
9. Provisions of the Work – The Proposal will include a description of how the work will be performed in compliance with Specifications Section 02821 (attached) and the attached drawings. The fence will be nominally 84" tall topped with 3 strands of barbed wire. Fencing posts shall be spaced a maximum of 6' apart.
10. Evaluation of Proposals. Proposals for this work will be evaluated for completeness, prior fence installation experience and cost.

PART 1: GENERAL

1.01 SUMMARY

- A. Description of Work: Furnishing labor, equipment, supplies, and materials to install a chain link fence system including vehicular and pedestrian gates as shown on the drawings.
- B. Location: Work under this Contract is located at 1300 Airport Lane, North Bend in Coos County, Oregon, 97459.

1.02 SUBMITTALS

- A. General: Submittals shall be according to Section 01009 – General Information and Requirements.
- B. Manufacturer's Product Data: Submit three copies of the manufacturer's descriptive data.

1.02 REFERENCES

- A. Referenced Specifications/Standards with Abbreviations and/or Acronyms: Wherever the following acronyms are used in these specifications or on the drawings, they are to be construed the same as the respective expressions represented. The most recent version of the referenced specification shall be used. Copies of the referenced specifications/standards referred to herein may be procured by the Contractor, from the following:

ASTM American Society for Testing and Materials
 100 Barr Harbor Dr.
 West Conshohocken PA 19428-2959

1.03 QUALITY ASSURANCE

- A. Single-Source Supplier: Obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Requirements: Deliver materials to site in an undamaged condition. Store materials off the ground to provide protection against oxidation caused by ground contact.

1.05 PROJECT CONDITIONS

- A. Field Measurements: Verify layout information for fences and gates shown on the drawings in relation to the property survey and existing structures.

PART 2: PRODUCTS

2.01 FENCE FABRIC

- A. Steel Fabric: Shall conform to the requirements of ASTM A392 Type II Class 1, with zinc-coat applied after weaving.
- B. Selvage: Shall be twisted at the top and bottom, not knuckled.

2.02 FENCE FRAMING

- A. Round Type II Steel: Cold formed and welded steel pipe complying with ASTM F1043, Group IC, with minimum yield strength of 50,000 psi; sizes as indicated on drawings. Protective coating conforming to the requirements of ASTM F1043, external coating Type B, zinc with organic overcoat, 0.9 oz/SF minimum zinc coating with chromate conversion coating and verifiable polymer film. Internal coating Type B, minimum 0.9 oz/SF zinc or Type D, zinc pigmented, 81 percent nominal coating, minimum 3 mils thick.
- B. Rails: Manufacturer's longest lengths, minimum of 17 LF, with swaged-end or expansion-type coupling, approximately 6" long for joining. Provide rail ends or other means for attaching top rail securely to each gate post and fence post. Rails must not rotate.

2.03 GATES/ENTRYWAYS

- A. Requirements: Gate frames shall be welded at corners. Gates assembled with corner fittings shall have adjustable truss rods of 3/8" minimum diameter on panels. Truss rods shall be of the same base metal and finish as the gate frame.
- B. Sliding Gates: Sliding gates for vehicular traffic shall be installed in the locations on the drawings and shall be cantilever-type complying with ASTM F1184 Type II and ASTM F2200. Gates shall open and close by chain-drive activators with the gates supported by rollers on pipe railing. Gate rollers shall conform to ASTM F1184 Type II Class 1 and shall be equipped with safety guard covers. Fence fabricate for the gates shall be identical to the material and finish as the rest of the fence. The frames of the gates shall match the material and finish as the framework of the fence itself. Fence openings for vehicular gates shall extend the entire width of the paved roadway. Trim asphalt curbs to accommodate movement of the sliding gates. The sliding gates shall be comprised of as many bays as necessary to accommodate a minimum width of 6' per bay.
- C. Pedestrian Gates: Walk-in gates for pedestrian traffic shall be installed in the locations on the drawings and shall be swing-type. Fence fabricate for the gates shall be identical to the material and finish as the rest of the fence. The frames of the gates shall match

the material and finish as the framework of the fence itself. The opening width of each pedestrian gate shall be a minimum of 36”.

2.04 BARBED MATERIAL

- A. Barbed Wire Supporting Arms: Manufacturer’s standard barbed wire supporting arms conforming to ASTM F626, metal and finish to match fence framework, with provisions for anchorage to posts and for attaching 3 rows of barbed wire to each arm. Arms shall withstand 250 pounds downward pull at outermost end of arm without failure. Provide following type:
 - 1. Single 35-degree arm for three strands of barbed wire, one for each corner post.
 - 2. Single 45-degree arm for three strands of barbed wire, one for each line post.
- B. Barbed Wire: Three-strand, 12.5 gauge steel wire with 14 gauge four point barbs spaced not more than 5” apart; metallic-coated finish to match fabric.
 - 1. Galvanized Finish: Comply with ASTM A121, chain link fence grade with Class 3 zinc coating with not less than 0.8 oz/SF as determined by ASTM A90.

2.05 FITTINGS AND ACCESSORIES

- A. Material: Fabricate from hot-dip galvanized with a minimum of 1.2 oz/SF of zinc coating of surface area and comply with ASTM F626. Tie wires, clips, and hog rings shall withstand forming and twisting operations without cracking or flaking of the coating. If the zinc or aluminum can be removed after installation by rubbing with bare fingers, it will be rejected.
- B. Post Caps: Shall be designed to fit snugly over posts and exclude moisture from inside the post when tubular posts are used.
- C. Tension (Stretcher) Bars: Hot-dip galvanized steel with a minimum length of 2” or less than the full height of fabric and a zinc coating of 1.2 oz/SF minimum. Provide one bar for each gate and two for each corner post, except where fabric is integrally woven into the posts.
- D. Tension and Brace Bands: Shall be pressed steel, hot-dip galvanized with a minimum zinc coating of 1.2 oz/SF.
- E. Tension Wire: Shall be metallic-coated steel marcelled tension wire conforming to ASTM A824 with finish to match fabric.
 - 1. Coating Type II, Class 2, with a zinc coating weight of 1.2 oz/SF minimum, as determined by ASTM A90.

- F. Hog Rings: Shall be 12-gauge steel wire with a minimum of 0.8 oz/SF of zinc coating in accordance with ASTM A641 Class 3.
- G. Tie Wires: Provide tie wire constructed of the same material as the fencing fabric.
 - 1. Security Tie Wires: Shall be either 6 gauge wire with coating to match fence fabric according to ASTM F626.

2.06 GROUND RODS AND ACCESSORIES

- A. Material: Shall be ¾-inch copper rod, and length shall be 8 feet. Ground connection shall use minimum No. 4 solid copper conductor.

2.07 CONCRETE

- A. Concrete: Shall be minimum 28 day compressive strength of 3,000 psi according to ASTM C94 and C143.

PART 3: EXECUTION

3.01 PREPARATION

- A. Scheduling: Do not begin installation and erection before final grading is completed, unless otherwise permitted.
- B. Excavation: Drill or hand-excavate holes using post-hole digger to diameters and spacings indicated, in firm, undisturbed or compacted soil.
 - 1. Excavate holes for each post to minimum diameter recommended by fence manufacturer, but not less than four times the largest cross section of post, or as indicated on drawings.
 - 2. Unless otherwise indicated, excavate hole depths approximately 3” lower than post bottom, with bottom of posts set not less than 36” below finish grade surface.
- D. Bedrock: If bedrock is encountered when digging post holes, continue excavation to depth indicated or 18” into bedrock, whichever is less, with a minimum diameter of 2” larger than outside diameter of post. Clear post holes of loose material.

3.02 CHAIN LINK FENCE FRAMING INSTALLATION

- A. General: Construct and install fence to comply with ASTM F567 and manufacturer's written instructions.
- B. Alignment: Set posts plumb, and align posts in holes 6” above bottom of excavation. Space a maximum of 10 feet center to center, unless otherwise staked or indicated on

the drawings, to the grades indicated. Locate a terminal post at each change in horizontal or vertical direction of 30 degrees or more.

- C. Concrete Set Posts: Place concrete around posts and vibrate or tamp for consolidation. Extend concrete 2" above grade and trowel to a crown to shed water. Check each post for vertical, horizontal and top alignment, and hold in position during placement and finishing operations.
 - 1. Cure Time: Allow concrete to cure a minimum of 72 hours before performing other work on posts.
- D. Terminal Post Bracing:
 - 1. Install horizontal pipe brace at mid-height on each side of terminal posts. Firmly attach with fittings.
 - 2. Securely fasten diagonal braces to the terminal post and the adjacent line post or its footing or a footing of equal size. There shall be no more than a 50 degree angle between the brace and the ground. Securely fasten horizontal braces with truss rods to the adjacent line post and terminal posts.
- E. Tension Wire: Provide tension wire at bottom of fabric. Install tension wire before stretching fabric and attach to each post with ties. The fasten the bottom tension wire within the bottom 6" of fabric. Securely fasten the tension wire to the corner and gate posts. The tension wire shall be taut and free of sag.
- F. Top Rail: Support the top rail at each post so that a continuous brace from end to end of each stretch of fence is formed. Securely fasten the top rail to the corner and gate posts and join with sleeves or coupling to allow for expansion and contraction.
- H. Tie Wires: Use wire of proper length to secure fabric firmly to posts and rails. Bend ends of wire to minimize hazard to persons or clothing.
 - 1. Maximum Spacing: Tie fabric to line posts 12" center to center and to rails and braces 24" center to center.
- I. Barbed Wire: Extend end members of gate frames above top member of gate to match the height of adjacent fence and prepare to receive the same number of strands as adjacent arms of fence posts. Pull taut to remove sag, firmly install it in the slots of the extension arms and secure it. Provide necessary clips for securing wire to extensions.
- J. Fasteners: Install nuts for tension bands and carriage bolts on the side of the fence opposite the fabric side. Peen ends of bolts or score threads to prevent removal of nuts.
- M. Gates: Install gates plumb and level in a closed position, according to manufacturer's written instructions for full opening without interference. Install ground-set items in

concrete for anchorage. Attach hardware by means that will prevent unauthorized removal. Peen as necessary. Adjust hardware for smooth operation and lubricate where necessary.

3.04 CHAIN LINK FENCE FABRIC INSTALLATION

A. Fabric:

1. Place chain-link fabric on the outside of the area enclosed.
2. Place the fabric by securing one end, applying sufficient tension to remove slack before making attachment elsewhere. Tighten the fabric to provide a smooth uniform appearance free from sag.
3. Cut the fabric by untwisting a picket and attach each span independently at terminal posts. Use stretcher bars with tension bands at maximum 15" intervals or other approved method of attachment.
4. Install fence fabric 1" above ground level. Fasten the fabric to the line posts at intervals not exceeding 15". Fasten the fabric to the rail or tension wire at intervals not exceeding 24".
5. Join rolls of wire fabric by weaving a single picket into the ends of the rolls to form a continuous mesh.

B. Tension (Stretcher) Bars: Thread through fabric and secure to end, corner, pull, or gate posts with tension bands spaced not over 15" center to center.

3.05 GROUNDING INSTALLATION

- A. A typical ground rod installation adjacent to each corner post and at each gate post shall be used. Use 8 LF ground rod installation according to a manufacturer's instruction.
- B. Use copper conductor to connect from the posts to the ground rods as shown on the drawings. The connection shall be made with inline crimp terminals and according to manufacturer's instructions.

3.06 CLEANING

- A. Clean up debris and unused material, and remove from the site.

PART 4: MEASUREMENT AND PAYMENT

4.01 METHOD OF MEASUREMENT

- A. Units: The work described in this section will be measured and paid for on a lump sum basis.

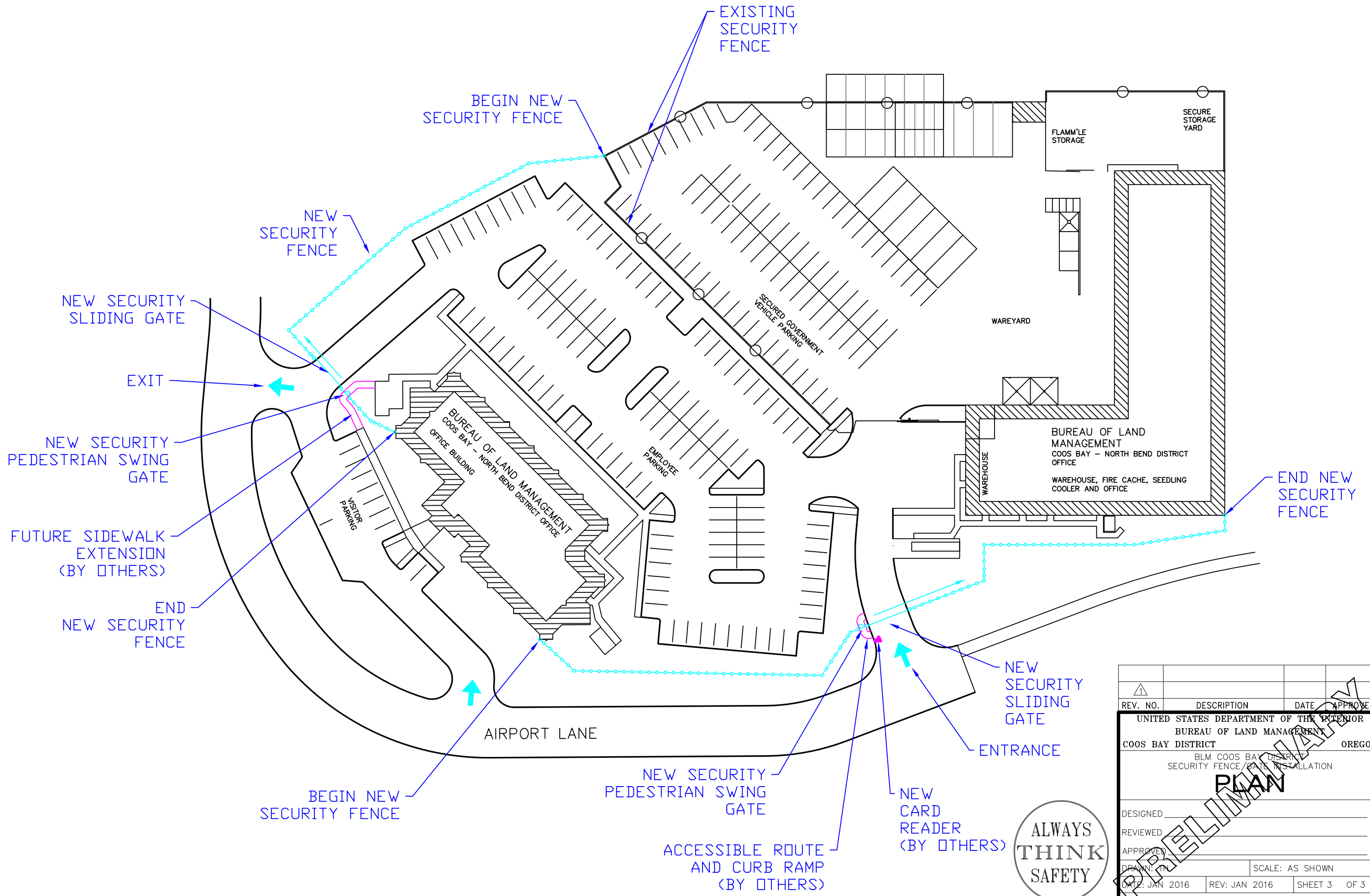
4.02 BASIS OF PAYMENT

- A. Payment: Prices and payment will be full compensation for the work described in this section. Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
02821(01) Chain-Link Fence & Gates	Lump Sum

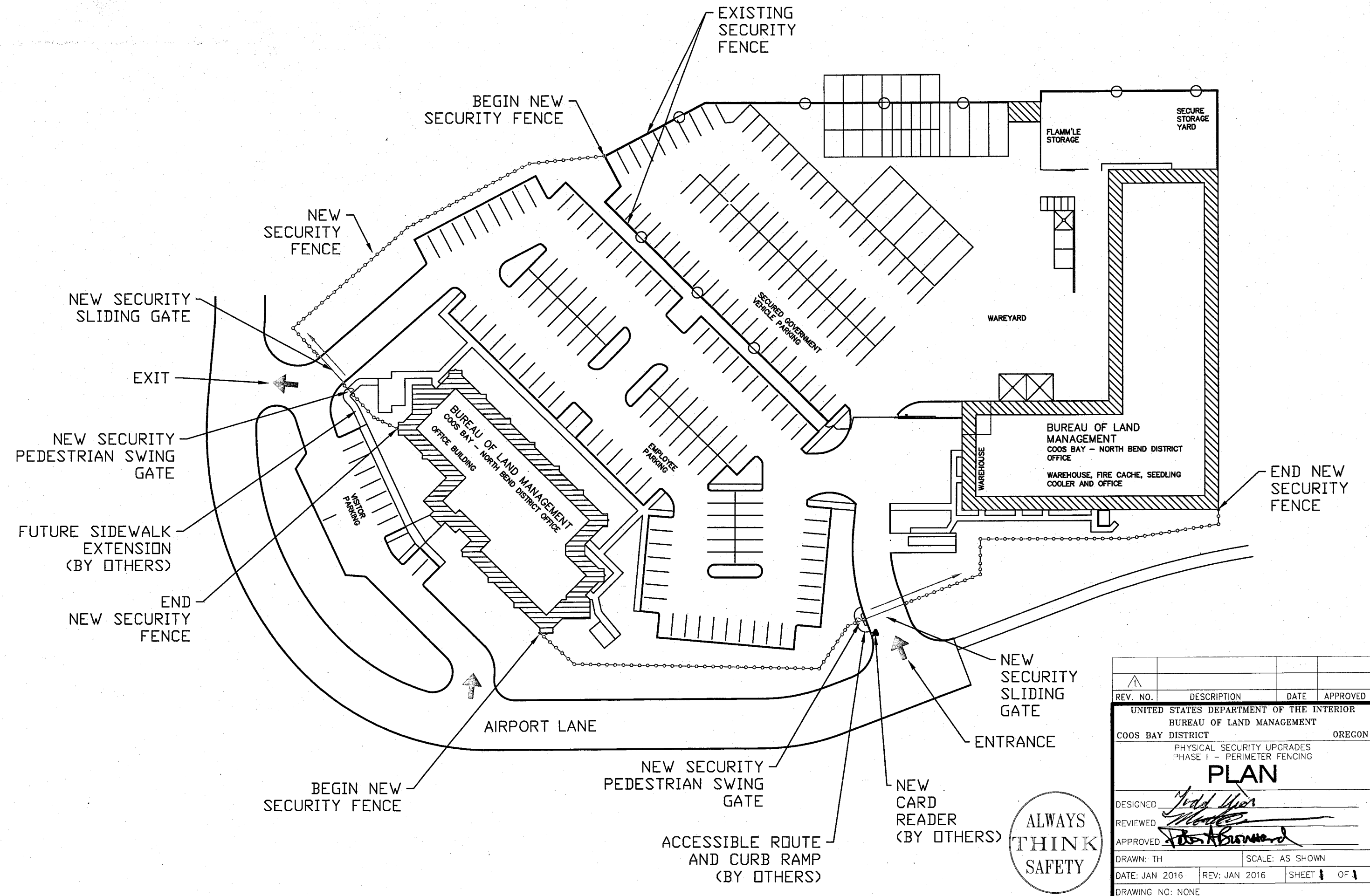
END OF SECTION 02821

AutoCAD Civil 3D 2010
 PATH: Q:\Eng\9150 Bldings & Rec Sites\Security Upgrades\DWG
 FILENAME: 03-CB DISTRICT - SECURITY FENCE
 X-REF: FILENAME: NONE



REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT COOS BAY DISTRICT OREGON BLM COOS BAY DISTRICT SECURITY FENCE/GATE INSTALLATION <h2 style="text-align: center;">PLAN</h2>			
DESIGNED			
REVIEWED			
APPROVED			
DRAWN: TN	SCALE: AS SHOWN		
DATE: JAN 2016	REV: JAN 2016	SHEET 3 OF 3	
DRAWING NO: NONE			

AutocAD Civil 3D 2010
 PATH: Q:\Eng\9150 Bldgs & Rec Sites\Security Upgrades\DWG
 FILENAME: CBDO Security Fence
 X-REF: FILENAME: NONE



REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT COOS BAY DISTRICT OREGON			
PHYSICAL SECURITY UPGRADES PHASE I - PERIMETER FENCING PLAN			
DESIGNED	<i>Judd Hines</i>		
REVIEWED	<i>Mark</i>		
APPROVED	<i>John A. Brown</i>		
DRAWN: TH	SCALE: AS SHOWN		
DATE: JAN 2016	REV: JAN 2016	SHEET 1 OF 1	
DRAWING NO: NONE			

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- A. Material: Shall be ¾” copper rod, and length shall be 8 LF. Ground connection shall use minimum No. 4 solid copper conductor.

2.07 CONCRETE

- A. Concrete: Shall be minimum 28 day compressive strength of 3,000 psi according to ASTM C94 and C143.

PART 3: EXECUTION

3.01 PREPARATION

- A. Scheduling: Do not begin installation and erection before final grading is completed, unless otherwise permitted.
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<u>Pay Item</u>	<u>Pay Unit</u>
02821(01) Chain-Link Fence & Gates	Lump Sum

END OF SECTION 02821