OPERATION & MAINTENANCE MANUAL

DFI No.: D00836
Facility Type: Water Quality
Bioretention Pond

November, 2018

INDEX

1. Identification

Drainage Facility ID (DFI):	**D00836**
Facility Type:	Water Quality Bioretention Pond
Construction Drawings:	49V-019
Location:	District: 08
	Highway No.: 022
	Mile Post: 1.00; 1.06 (beg./end)
	Description: This facility is located along the north side of OR 62 east of the Poplar/Bullock intersection. Access is located via OR 62.

2. Facility Contact Information

Contact the Engineer of Record, Region Technical Center, or Geo-Environmental's Senior Hydraulics Engineer for:

- Operational clarification
- Maintenance clarification
- Repair or restoration assistance

Engineering Contacts:

Region Technical Center Hydro Unit Manager

Or

Geo-Environmental Senior Hydraulics Engineer (503) 986-3365.

3. Construction

Engineer of Record:	Ben Wewerka – OBEC Consulting Engineers
Facility construction:	2018
Contractor:	LTM, Inc. dba Knife River Materials

4. Storm Drain System and Facility Overview

A water quality bioretention pond is a basin that is designed to capture stormwater runoff and infiltrate it through a water quality mixture to remove pollutants. Pollutant removal is accomplished through physical, biological, and chemical treatment processes. The size of these facilities depends on the location and the amount of contributing impervious area.

This bioretention pond is facility is located along the north side of OR 62 east of the Poplar/Bullock intersection. Access for this facility is available from a gated access road that connects to the multi-use path located on the north side of OR 62. The drainage is collected by a series of inlets and conveyed to the facility by a 36-inch storm pipe. The drainage area includes westbound and eastbound lanes of the OR 62. All stormwater is conveyed into the bioretention pond and drains out through a Type D Outlet structure and outfalls into a ditch that eventually flows into Bear Creek; see the Operational Plan, Appendix A.

A. Maintenance equipment access:
The facility can be accessed by a gated access road that connects to the multi-use path located on the north side of OR 62.

B. Heavy equipment access into facility:

☐ Allowed (no limitations)
☒Allowed (with limitations)
Heavy equipment is restricted to the access road on the perimeter of the facility due to the lack of porous pavers inside the facility.
☐ Not allowed

C. Special Features:

☒ Amended Soils
☐ Porous Pavers
☐ Liners
☒ Underdrains

5. Facility Haz Mat Spill Feature(s)

The water quality bioretention pond can be used to store a volume of liquid by blocking the Type D outlet structure.

6. Auxiliary Outlet (High Flow Bypass)

Auxiliary Outlets are provided if the primary outlet control structure can not safely pass the projected high flows. Broad-crested spillway weirs and over flow risers are the two most common auxiliary outlets used in stormwater treatment facility design. The auxiliary outlet feature is either a part of the facility or an additional storm drain feature/structure.

The auxiliary outlet feature for this facility is:

☒ Designed into facility

☐ Other, as noted below

7. Maintenance Requirements

Routine maintenance table for non-proprietary stormwater treatment and storage/detention facilities have been incorporated into ODOT's Maintenance Guide. These tables summarize the maintenance requirements for ponds, swales, filter strips, bioslopes, and detention tanks and vaults. Special maintenance requirements in addition to the routine requirements are noted below when applicable.

The ODOT Maintenance Guide can be viewed at the following website:

http://www.oregon.gov/ODOT/HWY/OOM/MGuide.shtml

Maintenance requirements for proprietary structures, such as underground water quality manholes and/or vaults with filter media are noted in Appendix C when applicable.

The following stormwater facility maintenance table (See ODOT Maintenance Guide) should be used to maintain the facility outlined in this Operation and Maintenance Manual or follow the Maintenance requirements outlined in Appendix C when proprietary structure is selected below:

☒ Table 1 (general maintenance)
☒ Table 2 (stormwater ponds)
☐ Table 3 (water quality or biofiltration swales)
☐ Table 4 (water quality filter strips)
☐ Table 5 (water quality bioslopes)
☐ Table 6 (detention tank)
☐ Table 7 (detention vault)
☐ Appendix C (proprietary structure)

☐ Special Maintenance requirements:

Note: Special maintenance Requirements Require Concurrence from ODOT SR Hydraulics Engineer.

8. Waste Material Handling

Material removed from the facility is defined as waste by the Department of Environment Quality (DEQ). Refer to the roadwaste section of the ODOT Maintenance Yard Environmental Management System (EMS) Policy and Procedures Manual for disposal options:

http://www.oregon.gov/ODOT/Maintenance/Documents/ems_manual.pdf

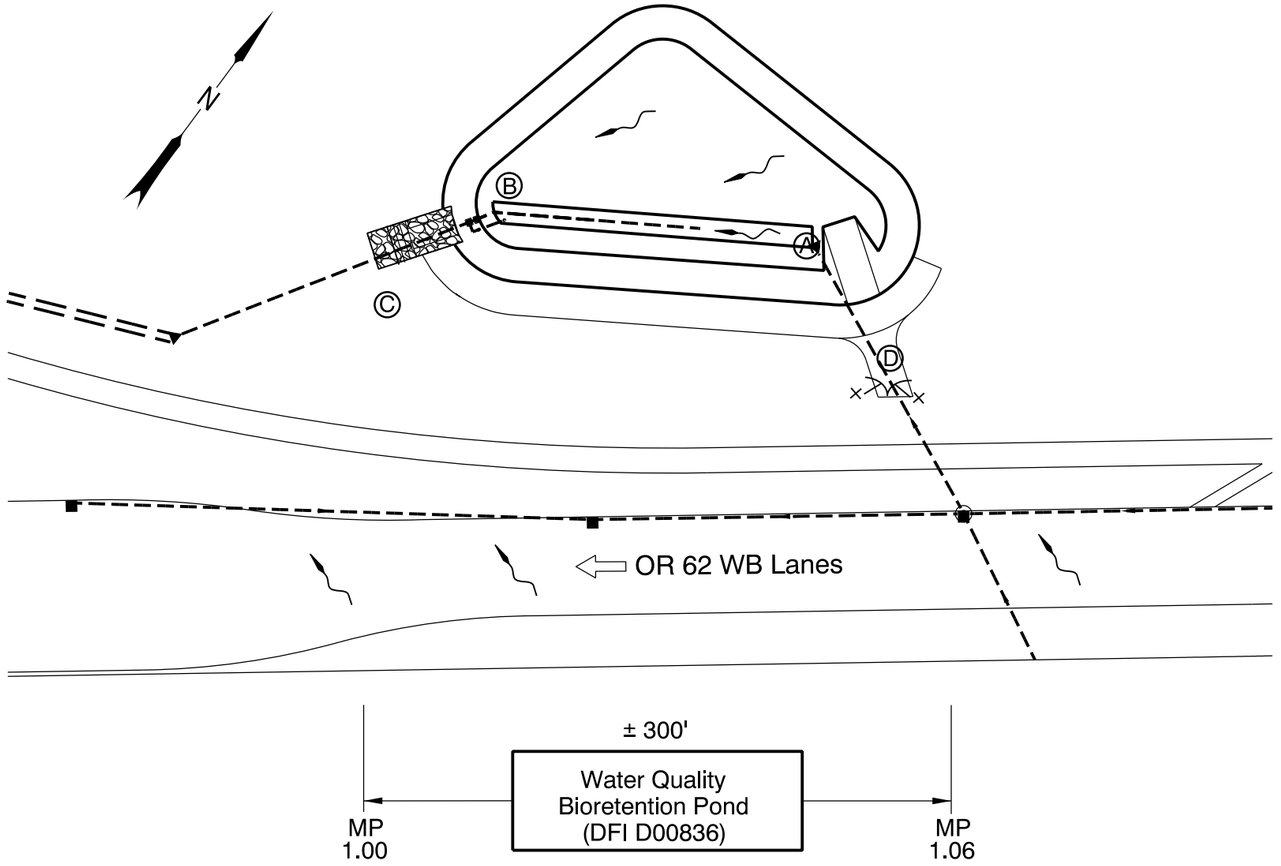
Contact any of the following for more detailed information about management of waste materials found on site:

ODOT Clean Water Unit	(503) 986-3008
ODOT Statewide Hazmat Coordinator	(503) 667-7442
ODOT Region 1 Hazmat Coordinator	(503) 731-8290
ODOT Region 2 Hazmat Coordinator	(503) 986-2647
ODOT Region 3 Hazmat Coordinator	(541) 957-3594
ODOT Region 4 Hazmat Coordinator	(541) 388-6186
ODOT Region 5 Hazmat Coordinator	(541) 963-1590
ODEQ Northwest Region Office	(503) 229-5263

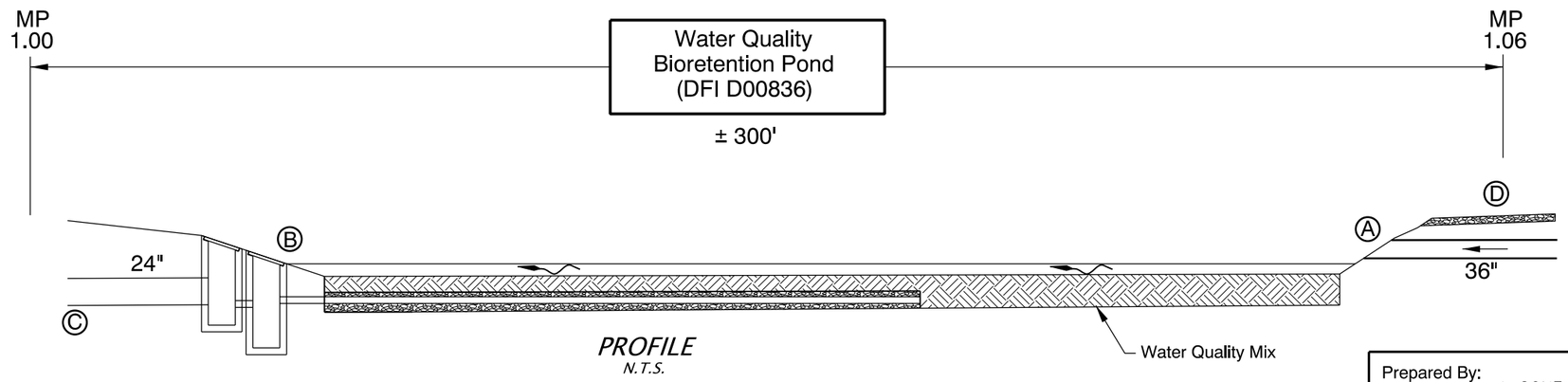
Appendix A

Content:

- **Operational Plan and Profile Drawing(s)**



PLAN
N.T.S.



PROFILE
N.T.S.

LEGEND:

- Ⓐ Pond Inlet
- Ⓑ Pond Outlet
- Ⓒ Outfall
- Ⓓ Maintenance Access
- ◉ and/or ◎ Manhole
- ■ and/or □ Inlet
- Storm Pipe (Facility)
- Storm Pipe
- Conveyance Direction
- Pavement / Facility Flow Path

OREGON DEPARTMENT OF TRANSPORTATION

Prepared By: J. GONZALEZ

Drafted By: J. GONZALEZ

DFI D00836
MAINTENANCE DISTRICT 08 HWY 022
WATER QUALITY BIORETENTION POND
HIGHWAY MP 1.00 TO 1.06
JACKSON

Appendix B

Content:

- **ODOT Project Plan Sheets**
  - ***Cover/Title Sheet***
  - ***Water Quality/Detention Plan Sheets***
  - ***Other Details***

49V-019

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	Title Sheet
1A	Index Of Sheets Cont'd.

STATE OF OREGON

DEPARTMENT OF TRANSPORTATION

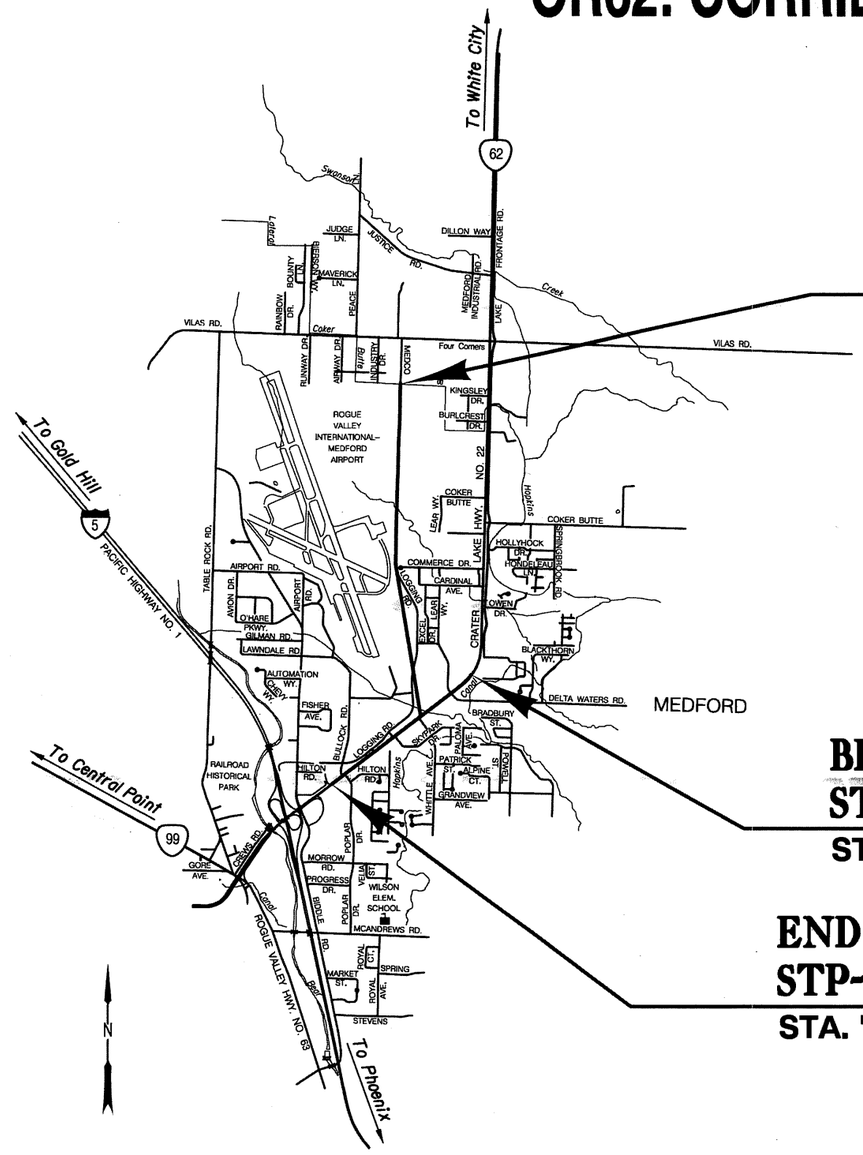
PLANS FOR PROPOSED PROJECT

GRADING, DRAINAGE, STRUCTURES, PAVING, SIGNING, ILLUMINATION, SIGNALS & ROADSIDE DEVELOPMENT

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)

CRATER LAKE HIGHWAY

JACKSON COUNTY
FEBRUARY 2016

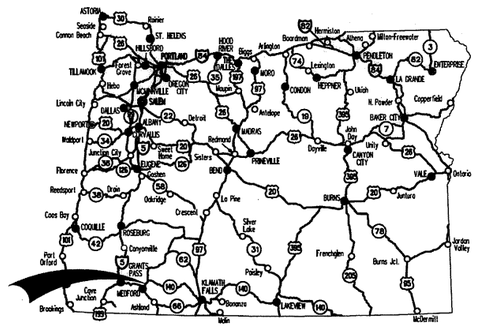


BEGINNING OF PROJECT
STP-S022(040)
STA. "B" 2197+00 (M.P. 1.69)

BEGINNING OF PROJECT
STP-S022(040)
STA. "EX" 2297+00 (M.P. 1.73)

END OF PROJECT
STP-S022(040)
STA. "NBB" 155+58 (M.P. 0.70)

Sec. 6, 7, 18, T. 37 S., R. 1 W., W.M.



Overall Length Of Project – 2.70 Miles

ATTENTION:
Oregon Law Requires You To Follow Rules Adopted By The Oregon Utility Notification Center. Those Rules Are Set Forth In OAR 952-001-0010 Through OAR 952-001-0090. You May Obtain Copies Of The Rules By Calling The Center. (Notes The Telephone Number For The Oregon Utility Center Is (503) 232-1987.)

PLANS PREPARED FOR
OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OREGON TRANSPORTATION COMMISSION

Tammy Baney	CHAIR
Sean O'Hollaren	COMMISSIONER
Alando Simpson	COMMISSIONER
Susan Morgan	COMMISSIONER
David Lohman	COMMISSIONER
Matthew L. Garrett	DIRECTOR OF TRANSPORTATION

These plans were developed using ODOT design standards. Exceptions to these standards, if any, have been submitted and approved by the ODOT Chief Engineer or their delegated authority.

Approving Authority: _____
Signature & date

JAIME JORDAN - PROJECT MANAGER
Print name and title

_____
Concurrence by ODOT Chief Engineer

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION	STATE	1

I:\Projects\0019\0019092\001909201\Roadway\Deliverables\13994f_1.tsl 12/16/2015 1:39:55 PM

INDEX OF SHEETS CONT'D.

SHEET NO.	DESCRIPTION
1A-2	Index Of Sheets Cont'd.
1A-3	Std. Drg. Nos.
1A-4	Layout Sheet
1B, 1B-2	Prospective Staging Area
2, 2A Thru 2A-25 Incl.	Typical Sections
2B Thru 2B-37 Incl.	Details
2C, 2C-2	Traffic Control Details
2C-3 Thru 2C-5A Incl.	Traffic Control Plan Advance Signing
2C-6 Thru 2C-19 Incl.	Traffic Control Plan
2C-19A	Traffic Control Plan Section
2C-19B	Traffic Control Plan Temporary Drainage
2C-20, 2C-21	Traffic Control Plan
2C-21A	Traffic Control Plan Section
2C-21B	Traffic Control Plan Temporary Drainage
2C-22, 2C-23	Traffic Control Plan
2C-23A	Traffic Control Plan Section
2C-23B	Traffic Control Plan Temporary Drainage
2C-24 Thru 2C-30 Incl.	Traffic Control Plan
2C-30A	Traffic Control Plan Temporary Drainage
2C-31 Thru 2C-50 Incl.	Traffic Control Plan
2D Thru 2D-7 Incl.	Pipe Data Sheet
3	Alignment And General Construction
3A	Profile
3B	Drainage, Utilities & Profile
4	Alignment And General Construction
4A	Profiles
4B	Drainage, Utilities & Profile
4C	Construction Notes
5	Alignment And General Construction
5A, 5A-2	Profiles
5B	Drainage & Utilities
5C	Drainage & Utilities Profile
6	Alignment And General Construction
6A	Profiles
6B	Drainage & Utilities
6C	Drainage & Utilities Profile
7	Alignment And General Construction
7A	Profile
7B	Drainage, Utilities & Profile
8	Alignment And General Construction
8A, 8A-2	Profiles
8B	Drainage, Utilities & Profile
9	Alignment And General Construction
9A	Profile
9B	Drainage & Utilities
9C	Profile
10	Alignment Plan
10A	General Construction
10A-2	Profiles

INDEX OF SHEETS CONT'D.

SHEET NO.	DESCRIPTION
10B	Drainage & Utilities
10C	Profiles
11	Alignment Plan
11A	General Construction
11A-2	Profiles
11B	Drainage & Utilities
11C	Profiles
12	Alignment Plan
12A	General Construction
12A-2	Construction Notes
12A-3 Thru 12A-5 Incl.	Profiles
12B, 12B-2	Alignment Plan
12B-3	Profile
12C	Drainage & Utilities
12D	Construction Notes
12E, 12F	Profiles
13	Alignment Plan
13A	General Construction
13A-2	Construction Notes
13A-3, 13A-4	Profiles
13B	Drainage & Utilities
13C	Construction Notes
13D, 13E	Profiles
14	Alignment And General Construction
14A	Construction Notes
14A-2	Profiles
14B	Drainage & Utilities
14C	Construction Notes
14D	Profiles
15	Alignment And General Construction
15A	Profile
15B	Drainage & Utilities
15C	Profiles
16	Alignment, General Construction & Profiles
16A	Profile
16B	Drainage, Utilities & Profile
GEO/HYDRO	
GA Thru GA-4 Incl.	Erosion Control Details
GA-5 Thru GA-19 Incl.	Erosion Control Plan
GB Thru GB-5 Incl.	Geotechnical Data
RETAINING WALL NO. 21633	
GC	Plan And Elevation
GC-2	General Notes And Misc. Details
GC-3	Typical Section
RETAINING WALL NO. 21648	
GC-4	Plan And Elevation
GC-5	General Notes And Misc. Details
GC-6	Details
RETAINING WALL NO. 22197	
GC-7	Plan And Elevation
GC-8	General Notes And Misc. Details
GC-9	Wall Elevation
GC-10	Wall Details 1
GC-11	Wall Details 2

INDEX OF SHEETS CONT'D.

SHEET NO.	DESCRIPTION
GEO/HYDRO	
GE	Drainage Plan
GE-A	Details
GE-1	Drainage Plan
GE-1A	Details
GE-2	Drainage Plan
GE-2A, GE-2B	Details
GE-3	Drainage Plan
GE-3A Thru GE-3D Incl.	Details
GE-4	Drainage Plan
GE-4A Thru GE-8 Incl.	Details
GG-1 Thru GG-3 Incl.	Temporary Water Management Concept Plan
GN-1	Planting Notes
GN-2	Landscape Details
GN-2A	Planting Details
GN-3 Thru GN-5 Incl.	Planting Plan
GN-6, GN-7	Layout Plan
GN-8, GN-9	Enlarged Planting Plan
STRUCTURES GENERAL PLAN	
94998	General Plan And Structure Drawing Index
BRIDGE NO. 21631	
94999	Plan And Elevation
95000	General Notes And Miscellaneous Details
95001	Foundation Data
95002	Foundation Plan
95003	Construction Sequence And Pay Limits
95004	Deck Plan
95005	Typical And Partial Deck Sections
95006	Modified Deck Bulb-T Girder Details
95007	Modified Deck Bulb-T Girder Schedule And Misc. Details
95008	Plan And Elevation - Bent 1
95009	Typical Bent Details - Bent 1
95010	Plan And Elevation - Bent 2
95011	Typical Bent Details - Bent 2
95012	Miscellaneous Bent Details
95013	Bent 1 Wingwall -, Left
95014	Bent 1 Wingwall - Right
95015	Bent 2 Wingwall And Endblock
95016	Fence And Rail Details - 1
95017	Fence And Rail Details - 2
95018	Modified End Panel Details
95019	Miscellaneous Details
BRIDGE NO. 21643	
95020	Plan And Elevation
95021	General Notes And Misc. Details
95022	Foundation Data
95023	Foundation Plan
95024	Construction Sequence
95025	Typical Section
95026	Deck Plan
95027	26" Slab Schedule And Details
95028	Plan And Elevation - Bent 2 (Bent 1 Similar)

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION		1A

INDEX OF SHEETS CONT'D.

DRAWING NO.	DESCRIPTION
95029	Typical Bent Section And Bearing Details
95030	Wingwalls - Bent 2 (Bent 1 Similar)
95031	Bridge Rail Details
95032	Miscellaneous Details
	BRIDGE NO. 21632
95033	Plan And Elevation
95034	General Notes And Typical Section
95035	Foundation Data
95036	Structure Details - 1
95037	Structure Details - 2
95038	Miscellaneous Details
	CULVERT NO. 21644
95039	Plan And Elevation
95040	General Notes And Typical Section
95041	Foundation Data
95042	Culvert Replacement Staging Details - 1
95043	Culvert Replacement Staging Details - 2
95044	Transition Structure Plan
95045	Transition Structure Typical Sections
95046	Wingwall And Apron Details
	CULVERT NO. 21641
95047	Plan And Elevation
95048	General Notes And Typical Section
95049	Foundation Data
95050	Wingwall And Apron Details
	CULVERT NO. 21642
95051	Plan And Elevation
95052	General Notes And Typical Section
95053	Foundation Data
95054	Culvert Details - 1
95055	Culvert Details - 2
95056	CL-4R Modified Chain Link Fence Details
	RETAINING WALL NO. 21634
95057	Plan And Elevation
95058	General Notes And Construction Sequence
95059	Foundation Data
95060	Typical Section And Details
95061	Wall Elevation
95062	Ground Anchor Details - 1
95063	Ground Anchor Details - 2
95064	Pile And Ground Anchors Data Table 1
95065	Pile And Ground Anchors Data Table 2
95066	Miscellaneous Details
	RETAINING WALL NO. 21635
95067	Plan And Elevation
95068	General Notes And Construction Sequence
95069	Foundation Data
95070	Typical Section And Details
95071	Wall Elevation
95072	Ground Anchor Details - 1
95073	Ground Anchor Details - 2
95074	Pile And Ground Anchors Data Table 1
95075	Pile And Ground Anchors Data Table 2
95076	Drainage & Joint Details
	RETAINING WALL NO. 22150
95077	Plan And Elevation
95078	General Notes

INDEX OF SHEETS CONT'D.

DRAWING NO.	DESCRIPTION
95079	Foundation Data
95080	Wall Elevation And Architectural Wall Treatment
95081	Typical Sections
95082	Miscellaneous Details
	RETAINING WALL NO. 22151
95083	Plan And Elevation
95084	General Notes
95085	Foundation Data - 1
95086	Foundation Data - 2
95087	Foundation Data - 3
95088	Elevations And Architectural Treatment - 1
95089	Elevations And Architectural Treatment - 2
95090	Elevations And Architectural Treatment - 3
95091	Typical Sections
95092	Miscellaneous Details
	RETAINING WALL NO. 21636
95093	Plan And Elevation
95094	General Notes
95095	Foundation Data
95096	Wall Elevation
95097	Architectural Wall Treatment
95098	Typical Section And Details
95099	Miscellaneous Details
	RETAINING WALL NO. 21678
95100	Plan And Elevation
95101	General Notes
95102	Foundation Data
95103	Architectural Wall Treatment
95104	Typical Section And Details
	RETAINING WALL NO. 21637
95105	Plan And Elevation
95106	General Notes
95107	Foundation Data
95108	Architectural Wall Treatment
95109	Typical Section And Details
	RETAINING WALL NO. 21679
95110	Plan And Elevation
95111	General Notes
95112	Foundation Data
95113	Architectural Wall Treatment
95114	Typical Section And Details
	RETAINING WALL NO. 21638
95115	Plan And Elevation
95116	General Notes
95117	Foundation Data
95118	Architectural Wall Treatment
95119	Typical Section And Details
	RETAINING WALL NO. 21639
95120	Plan And Elevation
95121	General Notes
95122	Foundation Data
95123	Wall Elevation
95124	Architectural Wall Treatment
95125	Typical Section And Details
95126	Rail Details

INDEX OF SHEETS CONT'D.

DRAWING NO.	DESCRIPTION
	RETAINING WALL NO. 21640
95127	Plan And Elevation
95128	General Notes
95129	Foundation Data
95130	Architectural Wall Treatment
95131	Typical Section And Details
95132	Miscellaneous Details
	SIGN STRUCTURE NO. 21645
S-15147	Monotube Cantilever Elevation
	SIGN STRUCTURE NO. 21646
S-15148	Monotube Cantilever Elevation
S-15148A	Drilled Shaft Details
	SIGN STRUCTURE NO. 21647
S-15149	Plan And Elevation
	PERMANENT PAVEMENT MARKINGS
ST	Striping Details
ST-2 Thru ST-9 Incl.	Striping Plan
	PERMANENT SIGNING
S-15134 Thru S-15146 Incl.	Permanent Signing
	ILLUMINATION
I-2400	Illumination Legend
I-2401	Illumination Details
I-2402 Thru I-2409 Incl.	Illumination Plan
I-2410, I-2411	Illumination Details
	TRAFFIC SIGNALS
18115	Legend
18116	Signal Plan
18117	Signal Removal Plan
18118	Detector Plan
18119	Existing Utility Plan
18120	Detector Plan
18121	Signal Details
18122	Strain Pole Foundation
15-017A	Automated Traffic Recorder Plan
15-017B	Automated Traffic Recorder Removal Plan
15-017C	Existing Utility Plan
ITS-1770	ITS Legend
ITS-1771 Thru ITS-1773 Incl.	ITS Plan
ITS-1774, ITS-1775	Fiber Splice Diagram
ITS-1776	ITS Details
ITS-1777	CCTV Details - 1
ITS-1778	CCTV Details - 2
	SANITARY SEWER
1	RVSS Relocation Plans
5001 Thru 5004 Incl.	Sanitary Sewer Plan And Profile

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION		1A-2

Std. Drg. Nos.	
RD100	- Mailbox Support
RD101	- Mailbox Installation
RD140	- Roadway Cross Slopes Superelevated Sections
RD300	- Trench Backfill, Bedding, Pipe Zone And Mult. Installations
RD302	- Street Cut
RD306	- Concrete Encasement, Cradle And Cap Details
RD312	- Subsurface Drain
RD316	- Sloped Ends For Metal Pipe
RD317	- Culvert Embankment Protection
RD318	- Sloped Ends For Concrete Pipe
RD319	- Miscellaneous Culvert Details
RD320	- Paved End Slope For Culverts 60" Maximum Pipe Size
RD326, RD327	- Coupling Bands For Corrugated Metal Pipe
RD328	- Slotted C.M.P. Drain Details
RD335	- Standard Storm Sewer Manhole
RD336, RD338, RD342, RD344	- Manholes
RD345	- Pipe To Manhole Connections
RD346	- Large Precast Manhole
RD348	- Manhole With Inlet
RD356	- Manhole Cover & Frames
RD360	- Manhole Frame Adjustment
RD362	- Sanitary Cleanout
RD363	- Gutter Transition At Inlet
RD364	- Concrete Inlets Type G-1, G-2, G-2M & G-2MA
RD365	- Frames & Grates for Concrete Inlets
RD366	- Concrete Inlets Type CG-1, CG-2 & Curb Inlet Channel
RD370	- Ditch Inlet Type D
RD372	- Ditch Inlet Top, Option 1 Type CG-3
RD376	- Miscellaneous Drainage Structures
RD380, RD384, RD386, RD388, RD390, RD393	- Pipe Fill Height Tables
RD398	- Culvert ID Marker
RD399	- Stormwater Treatment and Storage Facility Field Marker
RD400, RD405, RD410, RD415, RD420, RD440, RD450	- Guardrail
RD470	- Guardrail Over Low-Fill Culverts
1 RD480	- 31" Guardrail and Metal Median Barrier
1 RD481	- 31" Guardrail and Metal Median Barrier Height Conversion
RD500	- Precast Concrete Barrier Pin And Loop Assembly
RD515	- Median Barrier Anchoring Details
RD516	- Securing Concrete Barrier To Roadway
RD520	- Cast-In-Place Conc. Barrier Transition To Bridge Rail Type "F"
RD545	- Precast Tall (42") Concrete Barrier
RD530	- Guardrail Transition To Concrete Barrier
RD610	- Asphalt Concrete Pavement (ACP) Details
RD700, RD701	- Curbs
RD705	- Islands
RD706	- Traffic Separators And Transitions
RD707	- Island Nose Treatments
RD710	- Accessible Route Islands
RD715	- Approaches And Non-Sidewalk Driveways
RD720	- Sidewalks
2 RD735	- Curb Line Sidewalk Driveways or Alleys (Options F and G) ODOT Highways
RD750	- Curb Line Sidewalk Driveways - Local Jurisdictions
RD755	- Sidewalk Ramp Details
RD757	- Sidewalk Ramp Replacement Options
RD759	- Truncated Dome Detectable Warning Surface
RD770, RD771	- Pedestrian Handrail
RD810	- Barbed And Woven Wire Fences

Std. Drg. Nos.	
RD815	- Chain Link Fence
RD820	- Fence Gates
RD1000	- Construction Entrances
RD1005	- Check Dams Types 1, 3 & 4
RD1010	- Inlet Protection Type 2, 3, 6 & 7
RD1015	- Inlet Protection Type 4
RD1032	- Sediment Barrier Type 8
BR165	- Bridge End Panel
BR195	- Bridge ID Marker
BR200	- Concrete Bridge Rail Type "F"
BR203	- Transition Concrete Bridge Rail To Guardrail
BR236	- Trailing End Bridge Connection Conc. Bridge Rail To Guardrail
BR240, BR241, BR242, BR260	- Protective Fencing
BR350	- Temp. Diaphragm Beam For Prestressed Conc. Girders
BR420	- 26" Precast Prestressed Slab
BR445	- Precast Prestressed Boxes & Slabs
BR720	- Standard Gravity Retaining Wall Details
BR760	- Moment Slab On MSE Wall
BR800	- Box Culvert Wingwalls Details
BR805	- Box Culvert Extensions Details
BR830	- Cast-In-Place Conc. Box Culverts
BR840, BR841	- Standard Double Box Culvert Details
BR970	- Luminaire Base On Structures With Mounting Details
TM200	- Sign Installation Details
TM201	- Miscellaneous Sign Placement Details
TM211	- Signing Details US And Interstate Route Shields
TM212	- Signing Details Oregon Route Signs
TM221	- Signing Details Milepost Marker
TM222	- Installation Details Milepost Marker Posts
TM223	- Conventional Roads Directional Sign Layout Name Streets
TM224	- Signing Details Directional Sign Layout
TM230, TM231, TM232, TM233	- Mounting Details For Removable Legend
TM301	- Illumination Control Cabinets
TM302	- Pad-Mount Illumination Control Cabinet
TM452	- Strain Pole Details
TM457	- Vehicle, Ped. Signal & Push Button Mounting Details
TM458	- Pedestrian Ramp Placement Details
TM460	- Vehicle Signal Details
TM462	- Adjustable Signal Head Mounting Details
TM463	- Spanwire Mounting Details
TM465	- Overhead Sign, Fire Preemption & Photoelectronic Details
TM467	- Ped. Signal And Ped. Push Button Details
TM470	- Color Code Charts
TM472	- Traffic Signal Junction Boxes
TM475	- Loop Details
TM480	- Loop Entrance Details
TM482	- Controller Cabinet And Foundation Details
TM485	- Service Cabinets And Service Cabinet Wiring Details

Std. Drg. Nos.	
TM488	- Terminal Cabinet Detail
TM490	- Crosswalk Closure Detail
TM498	- Interconnect Wiring Details
TM500, TM501, TM502, TM503	- Pavement Marking Standard Details
TM515	- Raised Pavement Markers
TM520, TM521	- Durable Pavement Markings
TM530	- Intersection Pavement Markings
TM531	- Turn Arrow Marking Details
TM539	- Median And Left Turn Channelization Details
TM560, TM561	- Alignment Layout
TM570	- Traffic Delineators
TM571	- Traffic Delineators Steel Post Details
TM576	- Traffic Delineator Installation
TM602	- Triangular Base Breakaway Multi-Direction Slip Base
TM622, TM623, TM624, TM625, TM626, TM627	- Monotube Cantilever Sign Support
TM629, TM630	- Slip Base & Fixed Base Luminaire Supports
TM635	- Breakaway Sign & Luminaire Supports
TM652	- Traffic Signal Supports (Steel Details)
TM653	- Traffic Signal Supports (Foundation Requirements)
TM660	- Traffic Strain Pole Supports General Details And Design Criteria
TM661	- Traffic Strain Pole Supports Notes, Reactions and Details
TM670	- Wood Post Sign Supports
TM671	- 3 Second Gust Wind Speed Map
TM675	- Extruded Aluminum Panels
TM676	- Sign Attachments
TM677	- Sign Mounts
TM678	- Secondary Sign Mounting Details
TM680	- Signal Pole Mounts
TM681, TM687, TM688	- Perforated Steel Square Tube Sign Supports
TM800	- Tables, Abrupt Edge And PCMS Details
TM810	- Temporary Reflective Pavement Markers
TM820	- Temporary Barricades
TM821	- Temporary Sign Supports
TM830	- Temporary Concrete Barrier And Rumble Strips
TM831	- Temporary Impact Attenuators
TM840	- Closure Details
TM841, TM842, TM843	- Intersection Details
TM844	- Temporary Pedestrian Access Routing
TM851, TM852	- Non-Freeway Multi-Lane Sections

Standard Drawings located on the web at:
http://www.oregon.gov/ODOT/HWY/ENGSERVICES/standard_drawings_home.shtml

No.	DATE	REVISIONS	BY
1	1-27-16	Added std. drawing nos.	S.A.P.
2	2-16-17	Added std. drawing no.	S.A.P.

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION		1A-3

Sec. 18, T. 37 S., R. 1 W., W.M.
(MEDFORD)

49V-019

"NB" 45+00
"NB" 45+19.40 P.T.=
"NBB" 137+59.65 P.O.T.
"NBB" 140+00
"NBB" LINE
"NBB" 145+00
POPLAR DR.
Asph. conc. 138+88 35'
Asph. conc. 142+36 35'
Asph. conc. 143+06 22'
R/W
Paving limit
Sidewalk to remain
60' R.
CRATER LAKE HWY.
S52°34'43"W
S51°32'54"W
"SBB" 43+12.18
Δ 101°49" Lt.
90' R.
Access control line
"M" 30+00
"M" 31+98.67 P.C.
+04.1, 13.72'
"SBB" 40+00
"M" LINE
"SBB" 35+00
"M" 35+00
"M"
R 1125' C.R.
Δ 31°46'57"
T 320.28'
S84°21'40"W
"M" 38+22.12 P.I.
BULLOCK RD.
"SBB" LINE
"SBB" 45+00

NOTE:
Const. fencing 1' inside of R/W line or as directed.

LEGEND
- REMOVAL OF SURFACINGS
- REMOVAL OF WALKWAYS, DRIVEWAYS & ISLANDS
- CONTAMINATED SOIL REMOVAL

REGISTERED PROFESSIONAL ENGINEER
70925
OREGON
JUNE 14, 2007
STANLEY ANGELOFF PETROFF
EXPIRES: 12/31/16

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

Designed By - Stan Petroff
Checked By - Mike Sweeney
Drafted By - OBEC CAD

ALIGNMENT AND GENERAL CONSTRUCTION

SHEET NO. 14

I:\Projects\0019\0019092\00190920l\Roadway\Deliverables\13994f_14.pl13 11/10/2015 7:59:38 AM

(1) South Pond
Contaminated soil removal – 2,241 cu. yds.

(2) Note not used

(3) Removal of structure
(By others)

(4) Const. asph. appr.
(4A) Const. P.C. conc. valley gutter

(5) Const. curb and gutter
Remove extg. curb

(6) See sht. 13A, note 7
Const. type "C" conc. island, mountable
Remove extg. conc. island

(7) Const. type "C" conc. island, mountable
Removal of island – 169 sq. yds.
(For details, see sht. 2B-30)

(8) Const. type "C" conc. island, mountable
(Cut through design)
(For details, see sht. 2B-9)

(9) Const. P.C. conc. dwy., option N-2
Const. asph. conc. connection

(10) Const. P.C. conc. sidewalk
Remove extg. sidewalk
(10A) Match extg. sidewalk – 3
(For details, see sht. 2B-19)

(11) Const. P.C. conc. sidewalk ramp, option K – 5

(12) Structure no. 21646
Sta. "NBB" 145+00
Const. new cantilever sign structure
Const. new sign structure drilled shaft
(For drg. nos., see sht. 1A)

(13) Sta. "M" 30+00 to Sta. "M" 32+10 Rt.
Remove extg. fence – 644'

(14) Sta. "SBB" 35+49.62 to Sta. "SBB" 39+04.11, Rt.
Const. type CL-6R fence – 382'
(14A) Inst. 20'-6' double chainlink gate
(14B) Connect to extg. fence

(15) Remove mailbox

(16) Remove and reinstall mailbox supports – 2

(1) (17) ~~Removal of driveways – 3~~
Removal of surfacing – 192 cu. yds.

(18) Const. street connection – 2

(19) Inst. traffic signal at Delta Waters Intersection
(For drg. nos., see sht. 1A)

(20) Removal of island – 222 sq. yds.

(21) Sta. "NBB" 144+20 to Sta. "NBB" 147+06, Lt.
Contaminated soil removal – 90 ~~sq.~~ cu. yds. (2)

(22) Sta. "SBB" 40+00 to Sta. "SBB" 43+40, Rt.
Contaminated soil removal – 454 cu. yds.

(23) Sta. "NBB" 145+00 (sign footing)
Contaminated soil removal – 35 cu. yds.

No.	DATE	REVISIONS	BY
(1)	1-29-16	Modified note	S.A.P.
(2)	2-2-16	Revised note	S.A.P.

REGISTERED PROFESSIONAL ENGINEER
70925
OREGON
JUNE 14, 2007
STANLEY ANGELOFF PETROFF
EXPIRES: 12/31/16

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 1026 EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

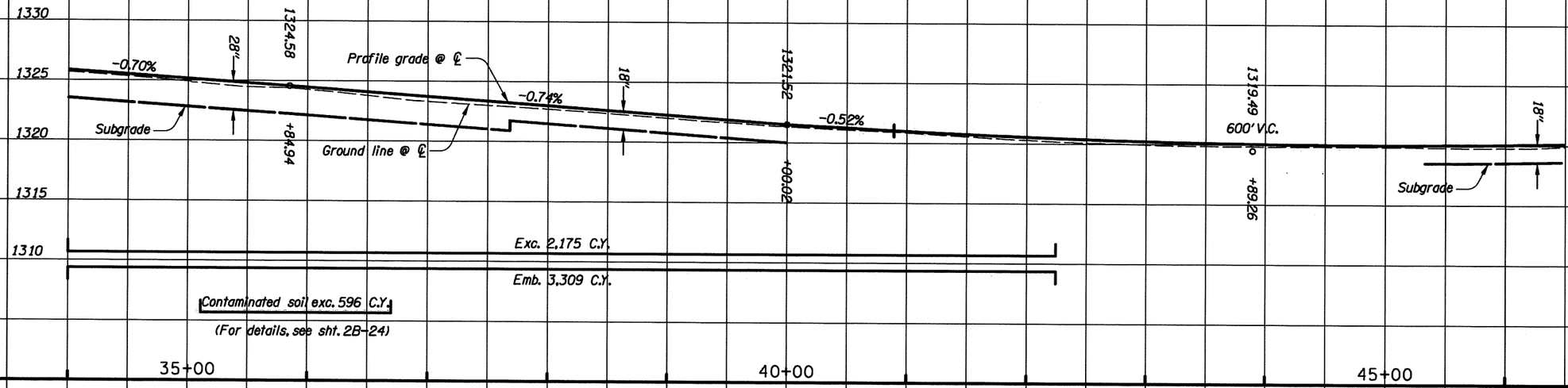
Designed By - Stan Petroff
Checked By - Mike Sweeney
Drafted By - OBEC CAD

CONSTRUCTION NOTES

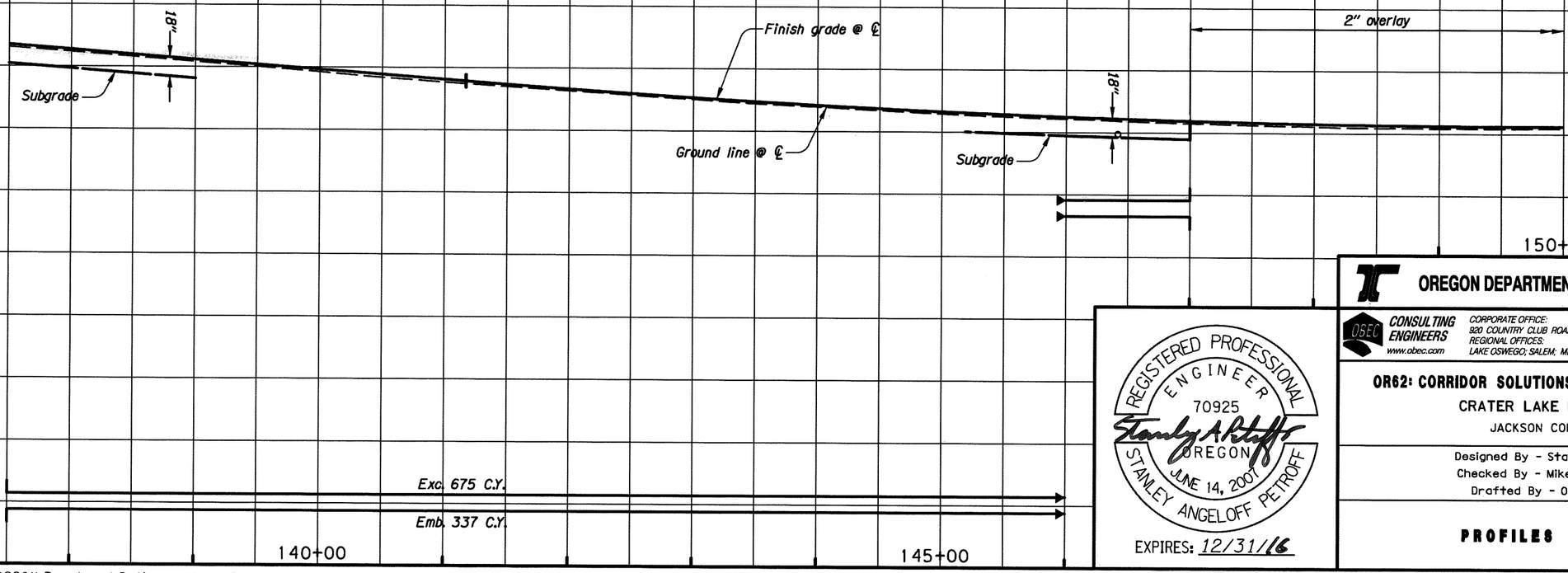
SHEET NO. 14A

49V-019

"SBB" LINE



"NBB" LINE



OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com

CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

REGISTERED PROFESSIONAL ENGINEER
70925
Stanley A Petroff
OREGON
JUNE 14, 2007
STANLEY ANGELOFF PETROFF

EXPIRES: 12/31/16

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)

CRATER LAKE HIGHWAY

JACKSON COUNTY

Designed By - Stan Petroff
Checked By - Mike Sweeney
Drafted By - OBEC CAD

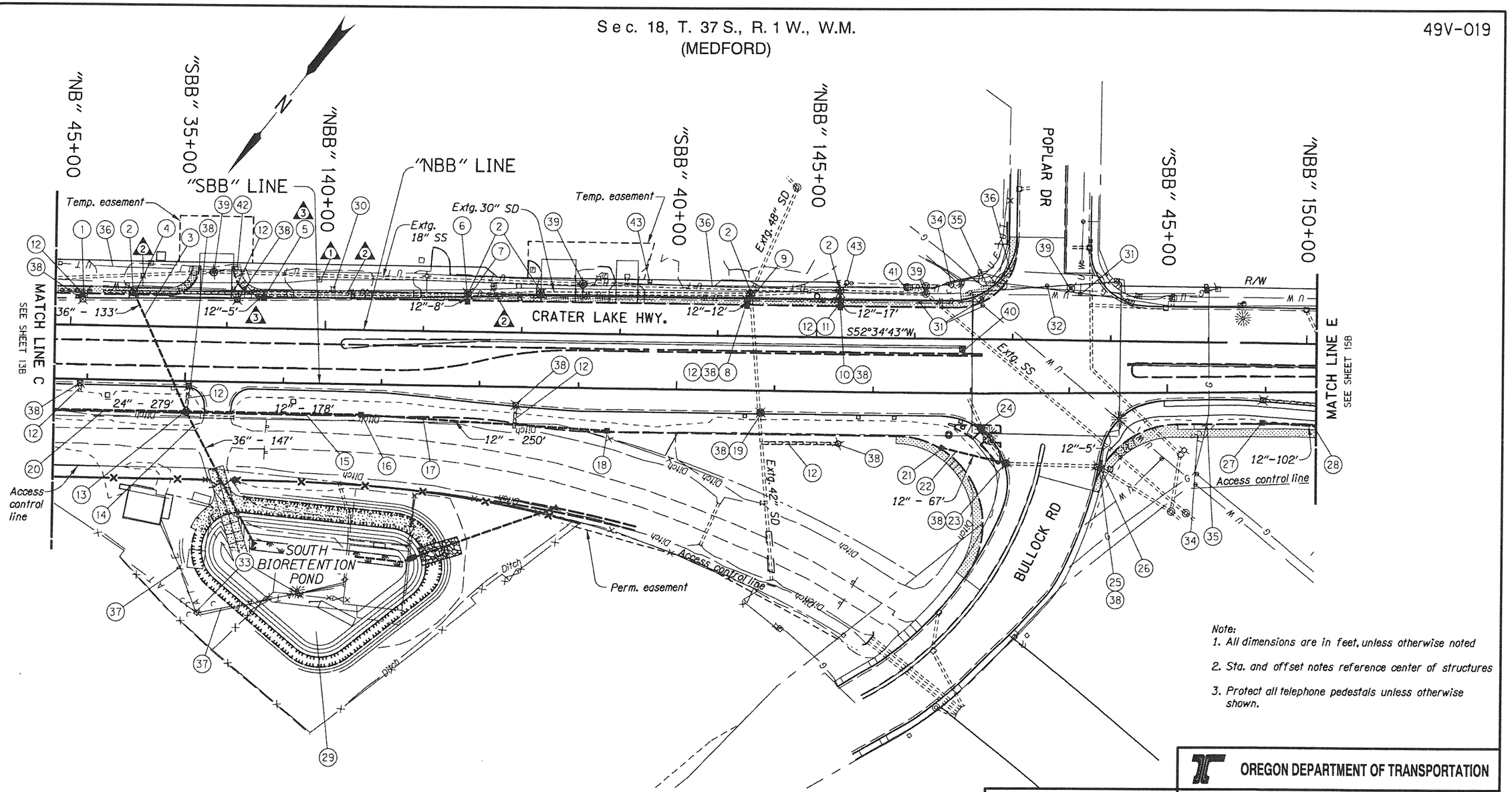
PROFILES

SHEET NO. 14A-2

I:\Projects\0019\0019092\001909201\Roadway\Deliverables\13994f_14A-2.prf15 11/3/2015 12:35:44 PM

Sec. 18, T. 37 S., R. 1 W., W.M.
(MEDFORD)

49V-019



Note:
1. All dimensions are in feet, unless otherwise noted
2. Sta. and offset notes reference center of structures
3. Protect all telephone pedestals unless otherwise shown.

LEGEND

- ADJUST MANHOLE
- ABANDON PIPE
- REMOVE INLET
- ADJUST INLET

For profiles, see sheet 14D

No.	DATE	REVISIONS	BY
1	4-18-16	Fiber optic vaults, adjusted by others	S.D.W.
2	4-18-16	Water meters, adjusted by others	S.D.W.
3	10-26-16	Relocate inlet & add pipe	J.L.J.

REGISTERED PROFESSIONAL ENGINEER
65488PE
OREGON
JANUARY 10, 2006
JAIME LEE JORDAN
EXPIRES: 06/30/17

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6069
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

Designed By - Jaime Jordan
Checked By - Ben Wewerka
Drafted By - S. Wolfer

DRAINAGE & UTILITIES

SHEET NO. 14B

I:\Projects\0019\0019092\001909201\Roadway\Deliverables\13994f_14B.dr14 11/2/2016 10:27:52 AM

(1) Sta. "NBB" 137+51.70, 30.73' Lt.
Const. type "CG-2" inlet
over extg. storm sewer

(2) Minor adj. manhole - 4

(3) Sta. "NBB" 138+04.31, 34.37' Lt. to
Sta. "SBB" 35+01.86, 30.73' Rt.
Inst. 36" storm sew. pipe - 133'
5' depth

(4) NBB 138+04.31, 34.37' Lt.
Plug extg. 30" storm sewer
outflow at manhole

(5) Sta. "NBB" 139+37.2 ~~30.16'~~ 30.73' Lt. to
Sta. ~~"NBB" 139+09.95,~~ ~~30.73'~~ Lt. to
Const. type "CG-2" inlet
~~over extg. storm sewer~~
Inst. 12" storm sew. pipe - 5'
5' depth
Connect to extg. structure
Plug extg. 30" storm sewer
upstream of connection

(6) Sta. "NBB" 141+44.71, 30.73' Lt.
Const. type "CG-2" inlet

(7) Sta. "NBB" 141+44.71, 30.73' Lt.
to "NBB" 141+44.71, 39.17' Lt.
Inst. 12" storm sew. pipe - 8'
5' depth
Connect to extg. manhole

(8) Sta. "NBB" 144+29.37, 30.73' Lt.
Const. type "CG-2" inlet

(9) Sta. "NBB" 144+29.37, 30.73' Lt. to
Sta. "NBB" 144+32.81, 42.52' Lt.
Inst. 12" storm sew. pipe - 12'
5' depth
Connect to extg. manhole

(10) Sta. "NBB" 145+23.67, 30.73' Lt.
Const. type "CG-2" inlet

(11) Sta. "NBB" 145+23.67, 30.73' Lt. to
Sta. "NBB" 145+23.09, 47.09' Lt.
Inst. 12" storm sew. pipe - 17'
5' depth
Connect to extg. structure

(12) Remove pipe - ~~153'~~ 281'

(13) Sta. "SBB" 35+01.86, 30.73' Rt.
Const. 84" storm sewer manhole with
type "G-2" inlet

(14) Sta. "SBB" 35+01.86, 30.73' Rt.
to "SBB" 35+72.27, 159.55' Rt.
Inst. 36" storm sew. pipe - 147'
5' depth
Const. sloped end
Const. paved end slope - 67 sq. ft.

(15) Sta. "SBB" 36+80.00, 30.73' Rt. to
Sta. "SBB" 35+01.86, 30.73' Rt.
Inst. 12" storm sew. pipe - 178'
5' depth

(16) Sta. "SBB" 36+80.00, 30.73' Rt.
Const. type "CG-2" inlet

(17) Sta. "SBB" 39+30.00, 42.73' Rt. to
Sta. "SBB" 36+80.00, 30.73' Rt.
Inst. 12" storm sew. pipe - 250'
5' depth

(18) Sta. "SBB" 39+30.00, 42.73' Rt.
Const. type "CG-2" inlet

(19) Sta. "SBB" 40+86.27, 22.08' Rt.
Const. 72" storm sewer manhole
over extg. storm sewer

(20) See sht. 13C, note 21

(21) Sta. "SBB" 42+70.90, 55.48' Rt.
Const. type "CG-2" inlet

(22) Sta. "SBB" 42+70.90, 55.48' Rt. to
Sta. "SBB" 43+35.24, 71.05' Rt.
Inst. 12" storm sew. pipe - 67'
5' depth

(23) Sta. "SBB" 42+35.24, 71.05' Rt.
Const. storm sewer manhole
over extg. storm sewer

(24) Sta. "SBB" 43+11.21, 35.31' Rt.
Const. inlet cap
(See dwg. no. RD376)

(25) Sta. "SBB" 44+27.01, 74.40' Rt. to
Sta. "SBB" 44+31.83, 75.91' Rt.
Inst. 12" storm sew. pipe - 5'
10' depth
Connect to extg. storm sewer

(26) Sta. "SBB" 44+31.83, 75.91' Rt.
Const. type "CG-2" inlet
over extg. storm sewer

(27) Sta. "SBB" 45+96.58, 30.73' Rt.
Const. type "CG-2" inlet

(28) Sta. "SBB" 45+96.58, 30.73' Rt. to
Sta. "SBB" 46+98.08, 37.12' Rt.
Inst. 12" storm sew. pipe - 102'
5' depth

(29) Const. south bioretention pond (D00836)
(For details, see sht. GE-4)

(30) Adj. water meter (By others)

(31) Adj. water valve - 4 (By others)

(32) Adj. gas valve (By others)

(33) Remove utility pole - 2 (By others)

(34) Relocate utility pole anchors - 2 (By others)

(35) Adjust gas line (By others)

(36) Relocate tel. line (By others)

(37) Remove power and tel. lines (By others)

(38) Remove inlet/manhole - 11

(39) Minor adj. manhole - 5
(City of Medford non-reimbursable)

(40) Adjust inlet

(41) Adjust telephone manhole
(By others, during construction)

(42) Relocate Telephone pedestal (By others)

(43) Protect telephone pedestal during construction - 2

Note:
All dimensions are in feet, unless otherwise noted

No.	DATE	REVISIONS	BY
1	5-6-16	Revised note	J.L.J.
2	10-26-16	Relocate inlet & add pipe	J.L.J.

REGISTERED PROFESSIONAL ENGINEER
65498PE
OREGON
JANUARY 10, 2006
JAIME LEE JORDAN
EXPIRES: 06/30/17

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6069
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

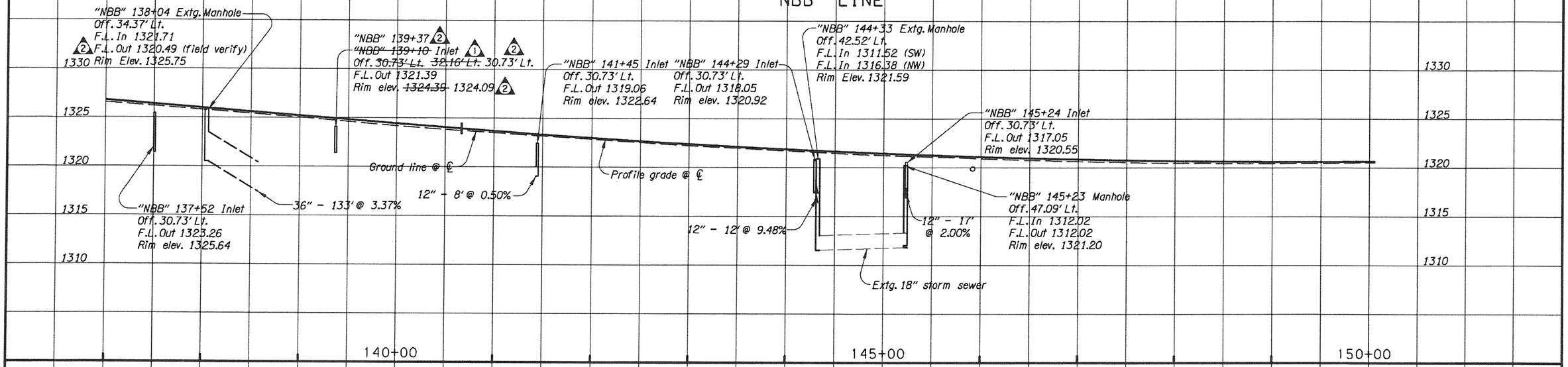
OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

Designed By - Jaime Jordan
Checked By - Ben Wewerka
Drafted By - S. Wolfer

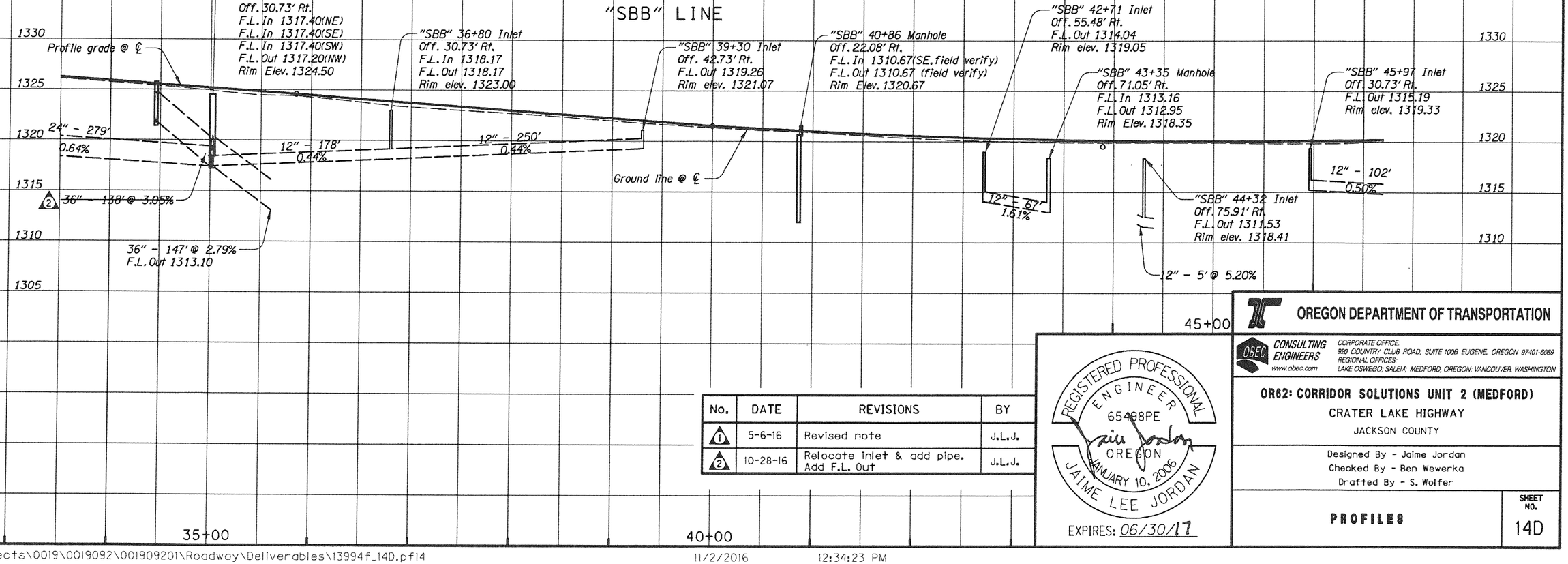
CONSTRUCTION NOTES

SHEET NO. 14C

"NBB" LINE



"SBB" LINE



No.	DATE	REVISIONS	BY
1	5-6-16	Revised note	J.L.J.
2	10-28-16	Relocate inlet & add pipe. Add F.L. Out	J.L.J.

REGISTERED PROFESSIONAL ENGINEER
65488PE
OREGON
JANUARY 10, 2006
JAIME LEE JORDAN
EXPIRES: 06/30/17

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)

CRATER LAKE HIGHWAY

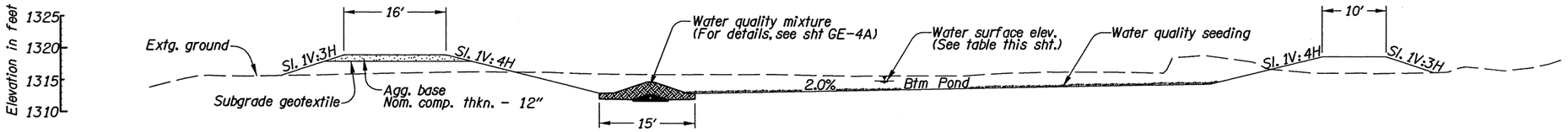
JACKSON COUNTY

Designed By - Jaime Jordan
Checked By - Ben Wewerka
Drafted By - S. Wolfer

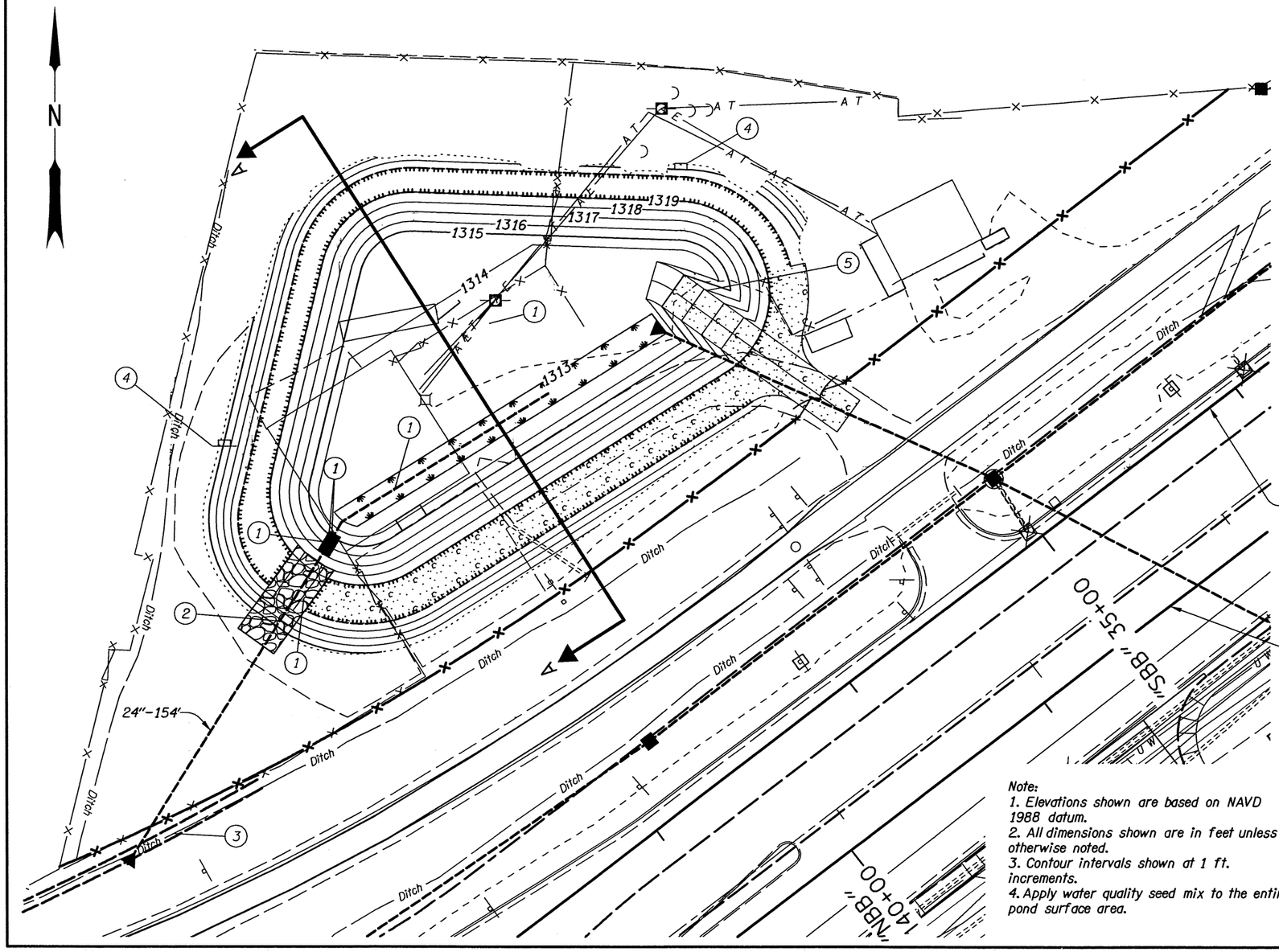
PROFILES

SHEET NO. 14D

SOUTH BIORETENTION POND
(Drainage Facility ID #D00836)



SECTION A-A VIEW



(1) Const. Bioretention Pond, DFI #D00836
(For details, see shts. GE-2B, GE-4A & GE-4B)

(2) Inst. 24" Storm sewer (5' depth) - 154'
Const. sloped end (1:2)
Const. paved end slope - 25 sq. ft.
Const. riprap protection (Class 100) - 5 cu. yds.
(See dwg. no. RD 317)

(3) Const. 2 ft. flat bottom ditch
(1V:2H & 1V:3H side slopes)
Ditch excavation - 130 cu. yds.
(For details, see Sht. GE-4B)

(4) Inst. facility field markers, type S2 - 2
(See drg. no. RD399)

(5) Const. maintenance access road
Agg. base - 430 tons
Subgrade geotextile - 700 sq. yds.
(For details, see sht. GE-4C)

POND STORAGE DATA		
STORM EVENT	WATER SURFACE ELEVATION	STORAGE VOLUME
Water Quality	1315.31'	0.48 Ac-Ft
2 Year	1316.09'	0.75 Ac-Ft
10 Year	1316.68'	0.97 Ac-Ft
50 Year	1317.21'	1.19 Ac-Ft

Note:
1. Elevations shown are based on NAVD 1988 datum.
2. All dimensions shown are in feet unless otherwise noted.
3. Contour intervals shown at 1 ft. increments.
4. Apply water quality seed mix to the entire pond surface area.

REGISTERED PROFESSIONAL ENGINEER
79131
OREGON
JUNE 14, 2007
BENJAMIN P. WEWERKA
EXPIRES: 06/30/16

OREGON DEPARTMENT OF TRANSPORTATION

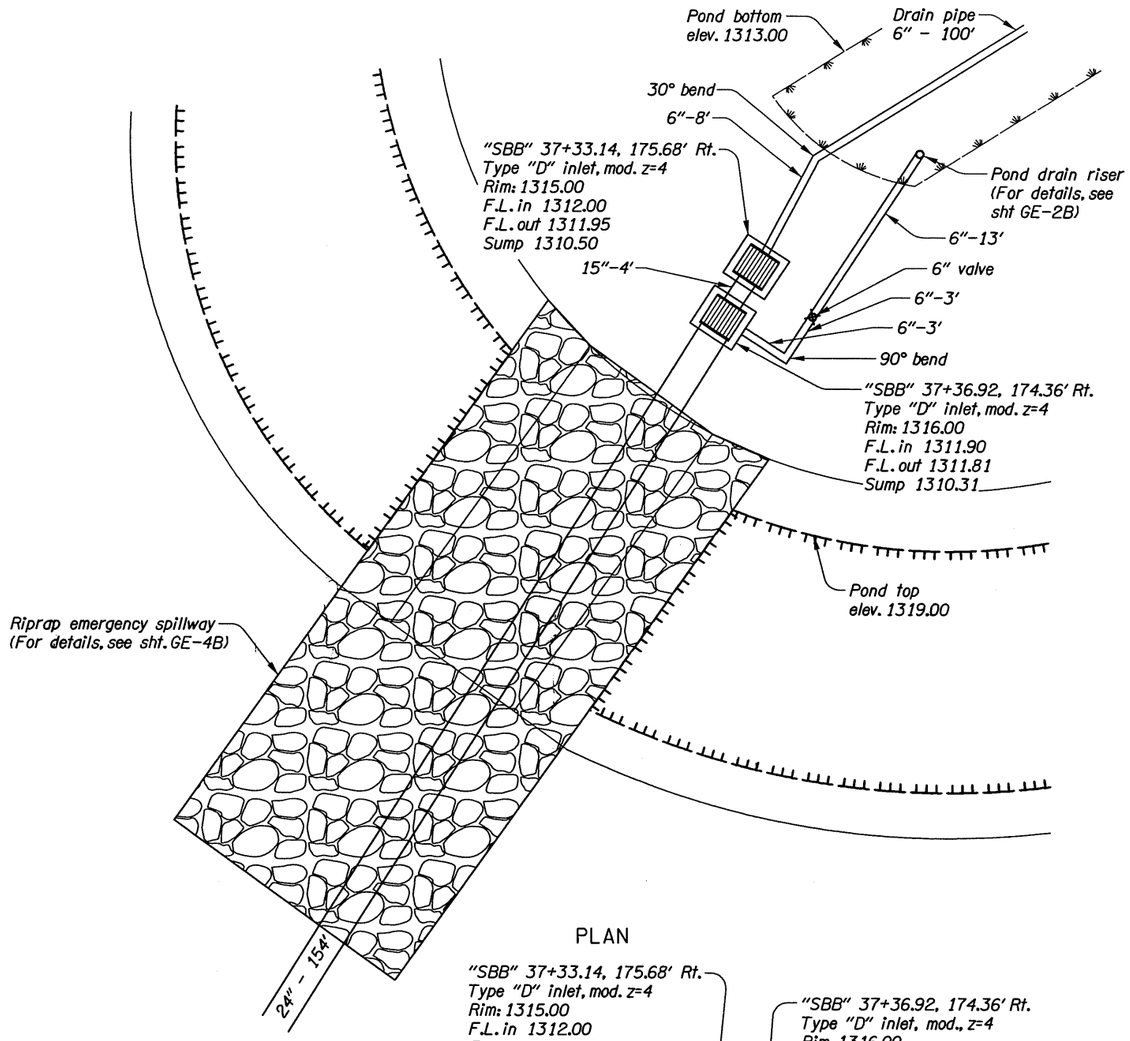
OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

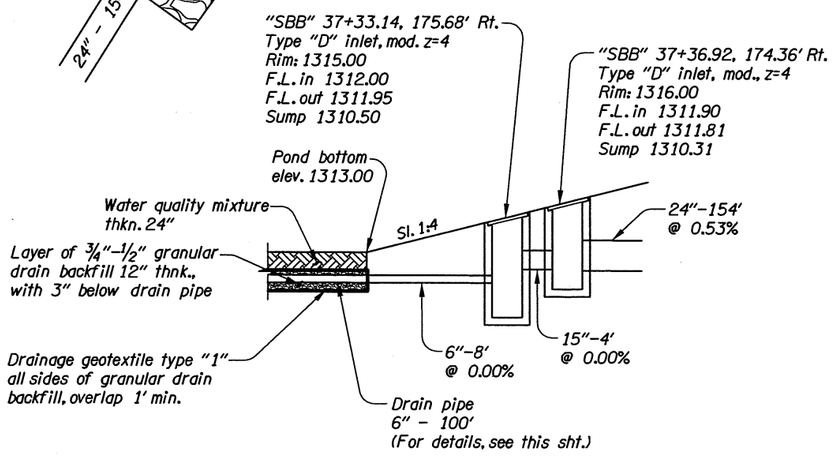
Designed By - Ben Wewerka
Checked By - Amy Jones
Drafted By - S. Wolfer

DRAINAGE PLAN

SHEET NO. GE-4

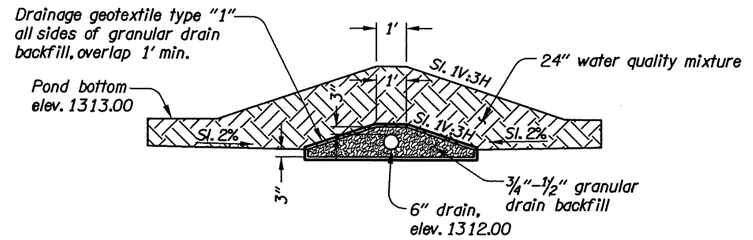


PLAN



SECTION

OUTFALL STRUCTURE DETAIL



DRAIN PIPE DETAIL

REGISTERED PROFESSIONAL ENGINEER
79131
OREGON
JUNE 14, 2007
BENJAMIN P. WEWERKA

EXPIRES: 06/30/12

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)

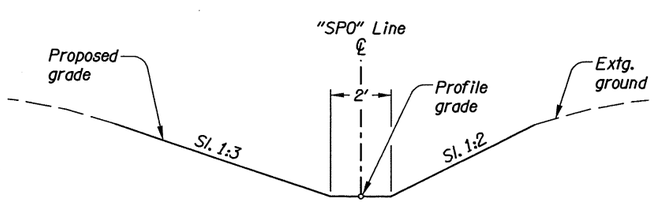
CRATER LAKE HIGHWAY

JACKSON COUNTY

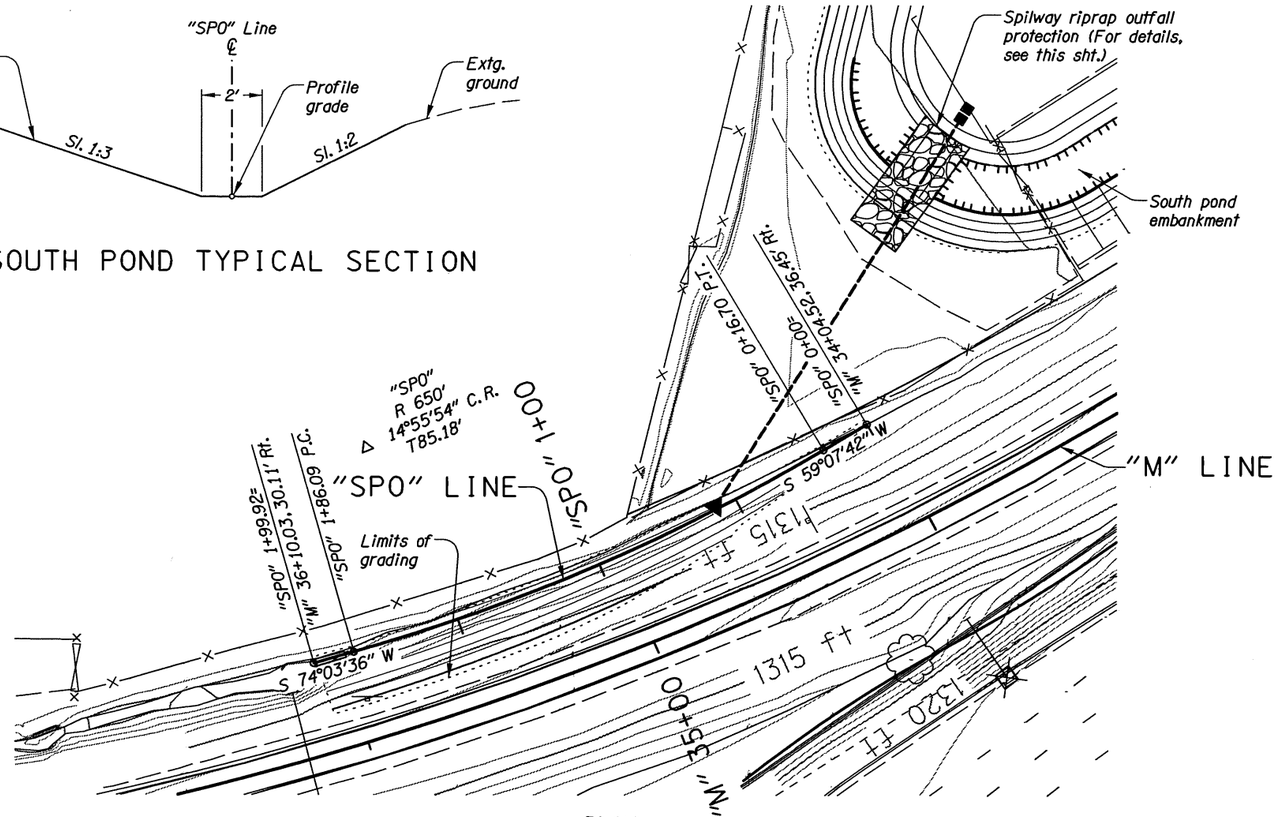
Designed By - Ben Wewerka
Checked By - Amy Jones
Drafted By - S. Wolfer

DETAILS

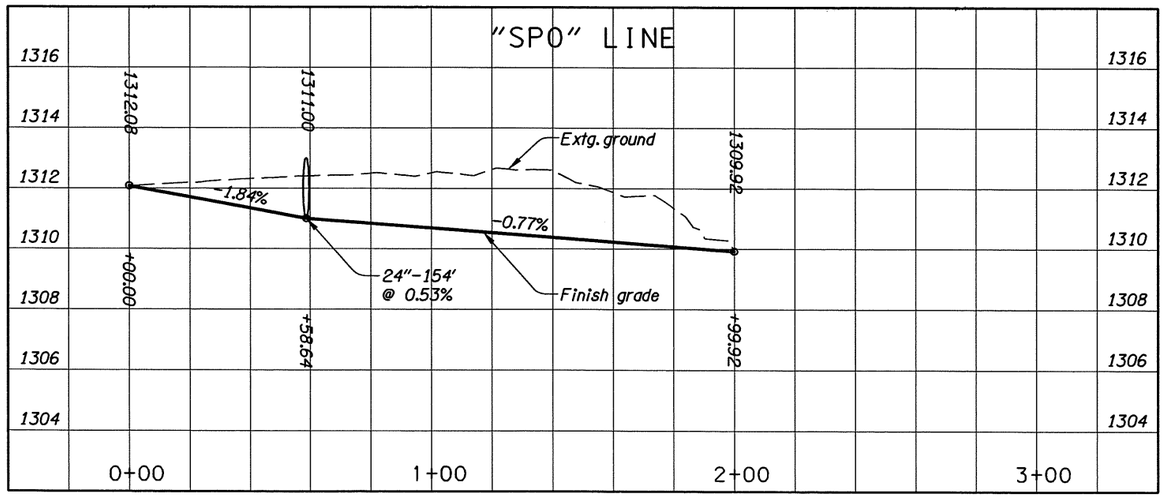
SHEET NO. GE-4A



SOUTH POND TYPICAL SECTION

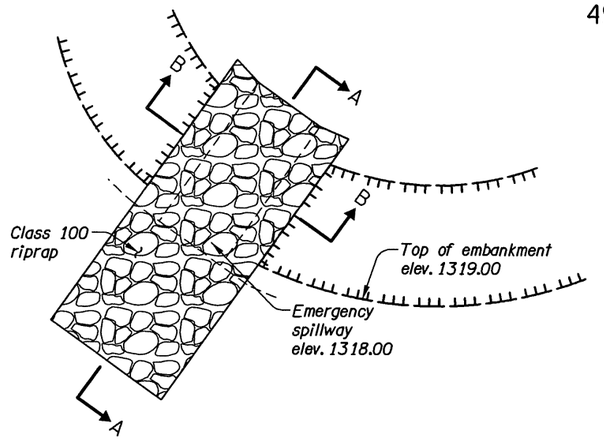


PLAN

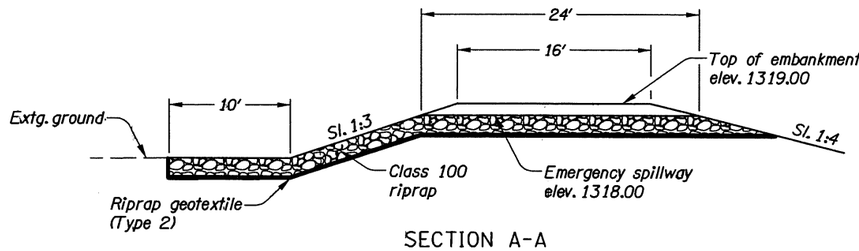


PROFILE

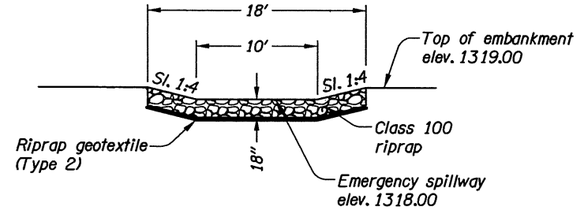
SOUTH POND OUTFALL DITCH



PLAN



SECTION A-A



SECTION B-B

SOUTH POND RIPRAP DETAIL

49V-019

REGISTERED PROFESSIONAL ENGINEER
79131
OREGON
JUNE 14, 2007
BENJAMIN P. WEWERKA
EXPIRES: 06/30/16

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

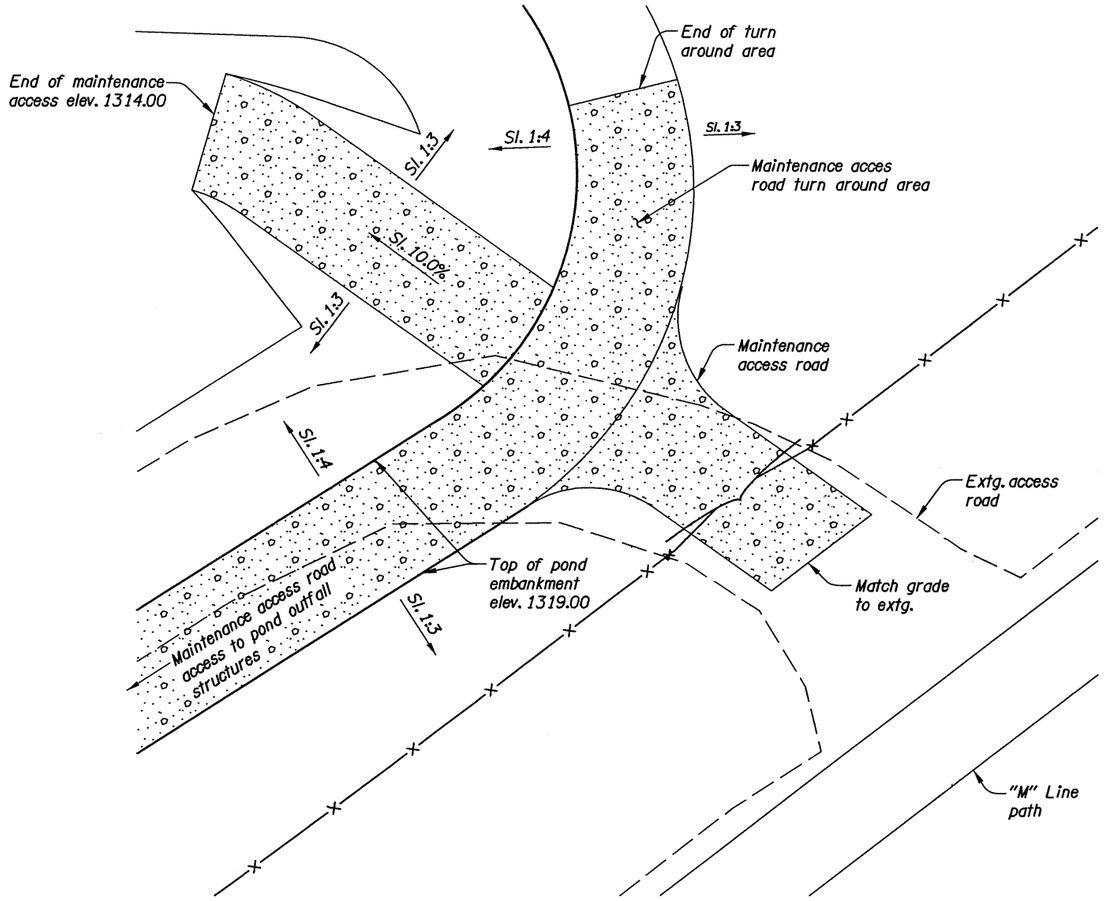
OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

Designed By - Ben Wewerka
Checked By - Amy Jones
Drafted By - S. Wolfer

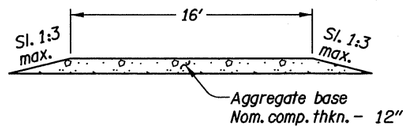
DETAILS

SHEET NO. GE-4B

49V-019



PLAN



SECTION

SOUTH POND MAINTENANCE ACCESS DETAIL

REGISTERED PROFESSIONAL ENGINEER
79131
OREGON
JUNE 14, 2007
BENJAMIN P. WEWERKA

EXPIRES: 06/30/11

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)

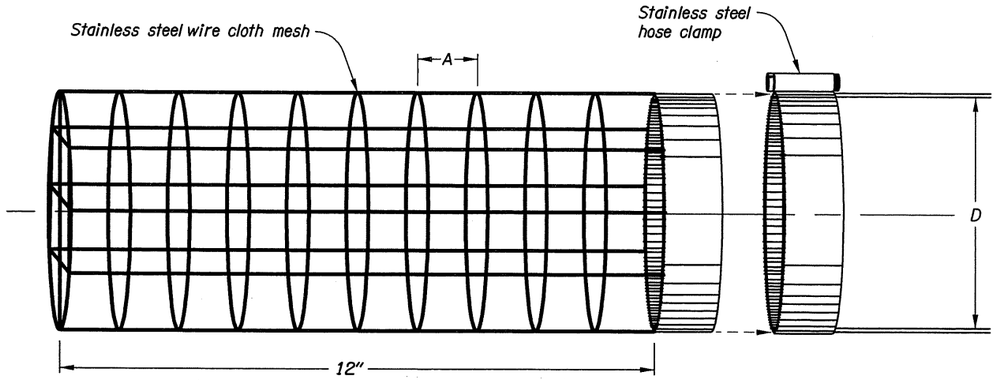
CRATER LAKE HIGHWAY

JACKSON COUNTY

Designed By - Ben Wewerka
Checked By - Amy Jones
Drafted By - S. Wolfer

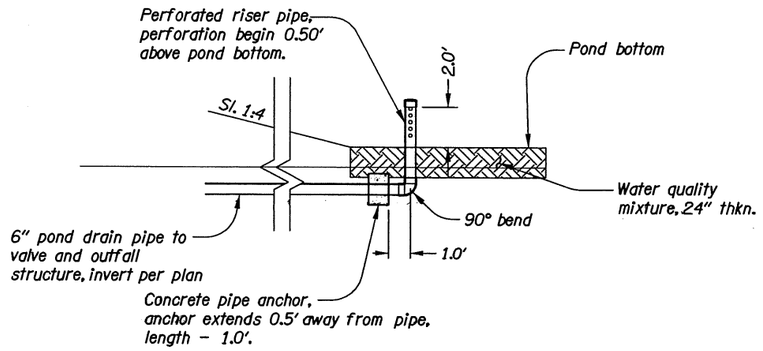
DETAILS

SHEET NO. GE-4C

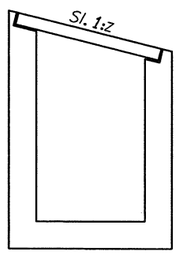


Facility	Riser Diameter (D)	Max. Opening Size (A)
D00834	6"	1"
D00835	6"	2"

WATER QUALITY ORIFICE SCREENING



POND DRAIN DETAIL



Notes:
For "z" see construction notes on plan views.
For details not shown see RD370.

MODIFIED TYPE "D" INLET

REGISTERED PROFESSIONAL ENGINEER
79131
OREGON
JUNE 14, 2007
BENJAMIN P. WEWERKA
EXPIRES: 06/30/16

OREGON DEPARTMENT OF TRANSPORTATION

OBEC CONSULTING ENGINEERS
www.obec.com
CORPORATE OFFICE:
920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089
REGIONAL OFFICES:
LAKE OSWEGO; SALEM; MEDFORD, OREGON; VANCOUVER, WASHINGTON

OR62: CORRIDOR SOLUTIONS UNIT 2 (MEDFORD)
CRATER LAKE HIGHWAY
JACKSON COUNTY

Designed By - Ben Wewerka
Checked By - Amy Jones
Drafted By - S. Wolfer

DETAILS

SHEET NO.
GE-2B