CHAPTER 4

TEST SUMMARY

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TEST SUMMARY OVERVIEW

The QCCS will develop or receive many documents and records while administering a construction project. Those documents and records include those that are needed to justify that the work has been done according to contract requirements.

The documents and records associated with an ODOT construction project must be neatly organized, kept current, and filed in a manner that makes documents easy to find. The purpose of this chapter is to aid the QCCS in determining the documentation requirements for field and non-field tested materials and how to set-up a "Test Summary".

An efficient means of organizing and tracking the project quality and quantity documentation is to use binders and notebooks that are divided by pay item. ODOT uses a "Test Summary" to record the required quality documentation for the materials associated with the pay items and to track the documents when as they are received.

The following documents are used to determine the quality requirements for materials specified for use on a project:

The project Special Provisions
The project Plans
The Standard Specifications
The Supplemental Standard Specifications
ODOT's Qualified Products List (QPL)
The Non-field Tested Materials Acceptance Guide
The Manual of Field Test Procedures that includes:

- The Field Tested Materials Acceptance Guide
- The Field Tested Materials Small Quantity Guideline

There are two types of material quality documentation, non-field tested and field-tested. There is a Test Summary, form 734-1902-A or B (or BQA) for each of the two types. There is also a test Summary sheet for concrete. Some pay items may have both field and non-field tested materials associated with them. All pay items must appear on the A form even if the item consists of only field tested documentation recorded on the B sheet.

The QCCS must assure that the Test Summary form is completed for each pay item, before work starts, to determine what type of documentation is needed prior to receipt, placement, and payment of materials incorporated in the project.

Record quality documentation on the Test Summary, as the work progresses, to assure that the material complies with quality requirements. The purpose of the Test Summary is to verify that the proper and adequate quality documentation has been furnished.

All Contract Change Orders must also be added to the Test Summary. If a CCO modifies testing or acceptance requirements, include a copy of that CCO with the documentation and enter it into the Test Summary. If a CCO deletes a bid item, include a copy of the CCO and record it on the Test Summary sheet for the deleted item.

If a material does not meet the quality requirements specified in the Contract but is determined suitable for the use intended by the Engineer of record with an adjustment to the cost of the material, record the adjustment on the Test Summary by the entry for the failing material.

The Region Assurance Specialist (RAS) will periodically review project documentation. The frequency of those reviews will be planned and will depend on project size, duration, complexity, and Project Manager's experience with ODOT projects.

The RAS will review and provide guidance in quality documentation procedures used to support payments to the Contractor, including Quality documentation requirements as determined by the contract for field and nonfield tested materials.

Included in this section are step by step instruction on how to set-up a Test Summary, an informational example of a documentation checklist and, an example of a Test Summary with the supporting quality documentation.

Please note that, for example purposes only, the Test Summary Sheets and the quality documents are next to each other in the Test Summary Example. When a Test Summary is set-up, the quality documents should be kept in a binder separated by pay item and the Test Summary sheets should be in their own binder. For more information on quality documentation, see Chapter 12B of the Construction Manual.

SET-UP INSTRUCTION FOR TEST SUMMARY FORMS USED ON ODOT CONSTRUCTION PROJECTS

Downloading ODOT Test Summary Forms

Directly logon to ODOT Internet site for Test Summary forms at:

http://www.odot.state.or.us/tsconstruction/ContractAdministration/FTP_Forms.htm

Use of Test Summary Forms

FORM 734-1902-A: TEST SUMMARY (A) (NONFIELD-TESTED MATERIALS)
Materials that fall under "Nonfield Tested":

- Pre-fabricated items made from metal, wood, plastic, glass, pre-cast concrete units, coating materials, geotextile, epoxy, curing compounds, adhesive, etc., not manufactured specifically for a project.
- Fabricated steel or pre-cast concrete units manufactured specifically for a project.
- Proprietary items
- Landscape materials such as seed, plants, trees, sod, fertilizers, soil amendments and conditioners, mulch, bark, etc.
- Materials listed on the "Nonfield-Tested Materials Acceptance Guide".

FORM 734-1902-BQA: TEST SUMMARY (B) - QA (FIELD TESTED MATERIALS)
Materials that fall under "Field Tested":

- Soil, aggregates, stone, and riprap work used in earthwork, backfill, base, shoulders, and paving.
- Asphalt cement used in tack coats and HMAC mixtures.
- Produced by Contractor, Sub-Contractor, or Supplier specific to a project.
- Requires testing by Contractor and/or ODOT Quality Assurance Group in field or field lab.
- Materials listed in the "Field Tested Materials Acceptance Guide", Section 4(D) of the "Manual of Field Test Procedures".

FORM 734-1902-BQA: TEST SUMMARY (B) - QA (FIELD TESTED CONCRETE MATERIALS)
Materials that fall under "Field Tested Concrete":

- Concrete mixtures requiring "Portland Cement" as the primary bonding agent.
- Produced by Contractor, Sub-Contractor, or Supplier specific to a project.
- Requires testing by Contractor and/or ODOT Quality Assurance Group in field or field lab.

TEST SUMMARY (A) (NONFIELD-TESTED MATERIALS)

This form is used to record quality documentation for Nonfield-Tested materials. All "Contract Items" will incorporate materials that fall into one of the following four categories:

- No quality documents required
- Nonfield Tested Materials
- Field Tested Materials
- "Bid Items" with both Nonfield Tested and Field Tested Materials

Even though two of these categories do not include Nonfield Tested materials, all "Bid Items" are to be listed on Test Summary (A) sheets.

Fill in the headings of this Test Summary as follows:

CONTRACT NO. – (Near upper right corner)

- Enter "Contract Number" listed on front cover of "Contract and Bonds for Highway Construction".

SHEET – (Upper right corner)

- The sheet number for page order of the Test Summary may be entered at time of set-up. More sheets may be added during the project, this box can be filled in upon project completion.

ITEM NUMBER AND DESCRIPTIONS – (Six columns with three boxes each, near top under title)

- Each Test Summary (A) sheet is set up to list six individual Bid Items.
- First row - enter "Item Numbers" in top box of each column. These numbers are listed in "Schedule of Items" in the back of the Brown Book.
- Second row - enter item descriptions in the center boxes of each column. Descriptions are listed in "Schedule of Items". These descriptions will automatically be aligned vertically. Some longer item descriptions will have to be abbreviated to fit in these boxes.
- Third row - Bottom box in each column is used to list required quality documents. The following abbreviations are commonly used to describe documents needed for Nonfield Tested Materials:

  T - Test Result Certificate (from Manufacturer)
  QI - Quality Compliance Certificate w/ODOT Materials Lab Inspection Report Number
  Q - Quality Compliance Certificate
  E - Equipment Lists and Drawings
  O - Certificate of Material Origin
  W - Warranty
  L - ODOT Materials Laboratory Report
  F - Field Inspection Report
  QPL - Qualified Products List
  NDR - No Documents Required

- For Field Tested Materials, leave this box blank.
- "Bid Items" with Field Tested Materials, enter "See B Sheet" in the EXPLANATION column with an "X" typed in the INCORPORATED QUANTITIES column just under the Item.

ITEM NO. – (Column with six rows, right of ITEM NUMBER AND DESCRIPTIONS)

- Enter item numbers listed in "Schedule of Items".

UNIT - (Column with six rows, right of ITEM NO)

- Enter the unit of measures listed in "Schedule of Items". The following abbreviations are commonly used for units of measure:

Metric		English	
LS -	Lump Sum	**LS -**	Lump Sum
EA -	Each	**EA -**	Each
HR -	Hour	**HR -**	Hour
M -	Meters	**FT -**	Linear Feet
M2 -	Square Meters	**SF -**	Square Feet
		SY -	Square Yard
HA -	Hectare	**AC -**	Acre
M3 -	Cubic Meters	**CUYD -**	Cubic Yard
KL -	Kiloliter (1,000 liters)	**M-GAL -**	1000 Gallons
MG -	1,000 Kilo-Grams	**TON -**	2,000 Pounds

ORIG. QUANTITY - (Column with six rows, right of the UNIT)

- Enter original quantity listed in "Schedule of Items".

FINAL QUANTITY - (Column with six rows, right of ORIG. QUANTITY)

- This column is for final quantities paid and is filled in at completion of work.

When "Contract Change Orders", CCO, are approved, Test Summary sheets need to be prepared. All line items listed on CCO are to be entered as a separate "Bid Item" on Test Summary (A) sheets, whether quality documents are required or not.

TEST SUMMARY (B) – QA (FIELD TESTED MATERIALS)

This form is used to record quality documentation for Field Tested materials accepted under ODOTs Quality Assurance Program, Section 2 of the "Manual of Field Test Procedures".

Fill in the headings of this Test Summary as follows:

CONTRACT NO. – (Near upper right corner)

- Enter "Contract Number" listed on the front cover of "Contract and Bonds for Highway Construction".

SHEET – (Upper right corner)

- The sheet number for page order of the Test Summary may be entered at time of set-up. More sheets may be added during the project, this box can be filled in upon project completion.

ITEM NO. – (Near top under title)

- Enter "Item Number" listed in "Schedule of Items".

DESCRIPTION – (Right of the ITEM NO)

- Enter in "Item Description" listed in "Schedule of Items".

UNIT – (Under CONTRACT NO)

- Enter unit of measure listed in "Schedule of Items". Abbreviations commonly used listed under Test Summary (A) instructions above.

ORIG. QUANTITY – (Right of UNIT)

- Enter original quantity listed in "Schedule of Items".

FINAL QUANTITY – (Right of ORIG. QUANTITY)

- This box is for final quantity paid and is filled in at completion of work.

TEST METHOD AND FREQUENCY – (Thirteen vertically aligned boxes located under ITEM NO. and DESCRIPTION)

- Five of these boxes list the most common tests and acceptance methods.
    - SOURCE MATERIAL (QUALIFYING)
    - MIX DESIGN
    - DENSITY
    - STRENGTH
    - VISUAL

  The eight remaining blank boxes are for listing specific tests and frequencies required for the material being documented. These requirements may be found in the "Field Tested Materials Acceptance Guide", Section 4(D) in the "Manual of Field Test Procedures".

WORK PHASE – (Under ORIGINAL and FINAL QUANTITY)

- This box is used to identify one or more of the four work phases to be covered by the Test Summary sheet:
    - AGGR. PROD
    - MIX PRODUCTION
    - DENSITY
    - OTHER
- To mark the WORK PHASE, click on the small box to the left of the phase and enter "X".

TEST SUMMARY (B) – QA (FIELD TESTED CONCRETE MATERIALS)

This form is used to record quality documentation for Field Tested "Portland Cement" concrete mixtures accepted under ODOTs Quality Assurance Program. Aggregate production for these mixtures are still recorded on TEST SUMMARY (B) – QA (FIELD TESTED MATERIALS), as listed above.

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Fill in the headings of this Test Summary as follows:

CONTRACT NO. – (Near upper right corner)

- Enter "Contract Number" listed on the front cover of "Contract and Bonds for Highway Construction", (Brown Book).

SHEET – (Upper right corner)

- The sheet number for page order of the Test Summary may be entered at time of set-up. More sheets may be added during the project, this box can be filled in upon project completion.

CLASS OF CONCRETE – (Near top under title)

- Structural Concrete, Section 00540 – When one class of structural concrete is used for multiple "Bid Items", enter "Structural Concrete, Class XX". (XX is concrete class in Metric or English.) If a structural concrete class is used in one "Bid Item", enter "Item Description" listed in "Schedule of Items".
- Commercial Grade Concrete (CGC), Section 00440 – When CGC is used for multiple "Contract Items", enter "Commercial Grade Concrete, Class XX". (20 MPa (3,300 psi) is used unless another strength is specified.) If only one "Bid Item" uses CGC, enter "Item Description" listed in "Schedule of Items".
- Other Concrete Items – Such as Drilled Shaft, Latex, Microsilica, and Pavement. Enter "Item Description" listed in "Schedule of Items".

ORIG. QUANTITY – (Right of UNIT)

- Structural Concrete, Section 00540 – Determine and enter the total estimated volume and unit listed in Special Provisions for Lump Sum items. If any of the "Contract Items" quantities are not Lump Sum or volume, also list original quantities listed in "Schedule of Items".
- Commercial Grade Concrete (CGC), Section 00440 – The "Schedule of Items" may list various quantity units, (each, length, area, volume, and Lump Sum). In cases where an estimated volume can not be determined, leave this box blank and keep track of the quantities used. If only one "Bid Item" uses CGC, enter original quantity and unit listed in "Schedule of Items".
- Other Concrete Items – Enter original quantity and unit listed in "Schedule of Items".

FINAL QUANTITY – (Right of the ORIG. QUANTITY)

- This box is for final quantity paid and is filled in at completion of work.

TESTING FREQUENCIES – (Under CLASS OF CONCRETE)

- Enter testing frequencies listed in the "Field Tested Materials Acceptance Guide", Section 4(D) of the "Manual of Field Test Procedures". The Special Provisions may revise this frequency.

U.S. Hwy 26: Mail Creek Section

Contract No. 12900 EA# CON02288

NDR = No Documents Required
CMO = Certificate of Materials Origin
L = Materials Lab Report
E = Equipment Lists & Drawings
SS = Standard Specifications
Q = Quality Compliance Certificate
F = Field Inspection Report
T = Test Results Certificate
QPL = Qualified Products List
SP = Special Provisions
FTMAG = Field Tested Materials Acceptance Guide

Bid Item	Item Name	Unit	Qty	Quality	Quantity - Rounding
	TEMPORARY FEATURES AND APPURTENANCES				
0010	Mobilization	LS	100%	NDR	5% of contract amount @ 5%, 10% of contract amount @ 10%, pay remaining amount when contract is complete. (See SS 00210.90.)
0020	Temp. Protection & Direction of Traffic	LS	100%	NDR	Based on % of Contract Complete
0030	Temporary Signs	M2	75	NDR	At least to the nearest 0.1 M2
0040	Temporary Barricades - Type III	EA	10	NDR	Each
0050	Temporary Concrete Barrier - Reflectorized	M	168	NDR	At least to the nearest 0.1 M of Lay Length
0060	Moving Temporary Concrete Barrier	M	126	NDR	At least to the nearest 0.1 M of Lay Length
0070	Temporary Impact Attenuator	EA	2	NDR	Each
0080	Moving Temporary Impact Attenuator	EA	2	NDR	Each
0090	Temporary Plastic Drums	EA	30	NDR	Each
0100	Temporary Flexible Pavement Markers	EA	600	NDR	Each
0110	Portable Changeable Message Signs	EA	2	NDR	Each
0120	Flaggers	Hr	864	NDR	Nearest 0.5 Hour
0130	Erosion Control	LS	1	Erosion Control Monitoring Form	Pay per Lump Sum Schedule (See SS 00280.91.)
0140	Construction Entrances	EA	2	NDR	Each
0150	Sediment Barrier	M	125	Q, F	At least to the nearest 0.1 M
0160	Sediment Fence - Unsupported	M	150	NDR	At least to the nearest 0.1 M
0170	Plastic Sheeting	M2	250	NDR	At least to the nearest 0.1 M2
0180	Sediment Mat	M2	50	Q, F	At least to the nearest 0.1 M2
0190	Erosion Control Matting - Slope	M2	300	NDR	At least to the nearest 0.1 M2
0200	Straw Bales	EA	20	NDR	Each
0210	Mulching	HA	0.3	Q, F	Nearest 0.1 HA
0220	Permanent Seeding	LS	100%	T, F	Pay per Lump Sum Schedule (Seed tested within 18 months of planting date.)

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Bid Item	Item Name	Unit	Qty	Quality	Quantity - Rounding
	ROADWORK				
0230	Clearing and Grubbing	LS	100%	NDR	Per Lump Sum Schedule
0240	Ditch Excavation	M3	6000	FTMAG 00405	At least to the nearest 0.1 M3
0250	General Excavation	M3	4500	FTMAG 00330	At least to the nearest M3, Original Cross-Section
0260	Watering	KL	700	NDR	Nearest 0.1 KL On Sprinkling Tally Sheet
0270	Subgrade Geotextile	M2	4400	Q, F	At least to the nearest M2
	DRAINAGE AND SEWERS				
0280	300 mm Culvert Pipe - 1.5 m Depth	M	22.32		At least to the nearest 0.1 M
	Concrete Pipe (Class V)			Q, CMO, L, F	
	Metal Steel			Q, CMO, F	
	Aluminum			Q, F	
	Trench Excavation and Backfill			FTMAG 00405	
0290	450 mm Culvert Pipe - 1.5 m Depth	M	39		At least to the nearest 0.1 M
	Concrete Pipe (Class V)			Q, CMO, L, F	
	Trench Excavation and Backfill			FTMAG 00405	
0300	Sloped End Sections - 300 mm	EA	4		Each
	Metal Steel			Q, CMO, F	
	Aluminum			Q, F	
0310	Sloped End Sections - 450 mm	EA	1	Q, CMO, L, F	Each
0320	Trench Resurfacing	M2	12.6		At least to the nearest 0.1 M2
	HMAC			FTMAG 00745	
	Aggregate			FTMAG 00641	

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Bid Item	Item Name	Unit	Qty	Quality	Quantity - Rounding
	BRIDGES				
0330	Bridge Removal Work	LS	100%	NDR	Per Lump Sum Schedule
0340	Shoring - Cribbing and Cofferdams	LS	100%	E	Per Lump Sum Schedule
0350	Structure Excavation	LS	100%	NDR	Per Lump Sum Schedule (84 M3)
0360	Granular Structure Backfill	LS	100%	FTMAG 00510	Per Lump Sum Schedule (22.05 M3)
0370	Furnish Pile Driving Equipment	LS	100%	NDR	Per Lump Sum Schedule (75% when equipment is furnished, 25% when complete and equipment is removed. (See SS 00520.91.)
0380	Furnish PP 325 X 9.53 Steel Piles	M	224	T, CMO, L, F	Nearest M each pile.
0390	Drive PP 325 X 9.53 Steel Piles	EA	16	NDR	Each
0400	PP 325 X 9.53 Steel Pile Splices	EA	4	F, Welding Procedure As Per Special Provisions	Each (Paid when pile lengths exceed the estimated pile lengths listed in SP 00520.11 by 1.5 M.)
0410	Reinforcement	LS	100%		Per Lump Sum Schedule (4,000 kg)
	On QPL			CMO, F	
	Not on QPL			T, CMO, L, F	
0420	Structural Concrete - Class 25	LS	100%	FTMAG 00540	Per Lump Sum Schedule (52.84 M3)
0430	End Panel - Precast	LS	100%		Per Lump Sum Schedule (166.5 M2)
	Structural Concrete - Class 25			FTMAG 00540	
	Reinforcement				
	On QPL			CMO, F	
	Not on QPL			T, CMO, L, F	
	Controlled Low-Strength Material			Commercial quality concrete sand	Acceptance based on Engineer's review and approval of written certification and trial batch cylinder reports. (See SS 00442.)
	Expansion Joint				
	Fabricated Steel Items			T, CMO, L, F	
	Proprietary Devices			Q, E, CMO, F	

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Bid Item	Item Name	Unit	Qty	Quality	Quantity - Rounding
	Joint Fillers			Q, F	
	Dowels			Q, CMO, F	

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Bid Item	Item Name	Unit	Qty	Quality	Quantity - Rounding
	Elastomeric Bearing Pads				
	Nonlaminated			T, F	
	Laminated			T, CMO, L, F	
0440	1220 mm Precast Prestressed Box Beams	M	338.05		Theoretical horizontal length shown in plans to the nearest 0.1 M. Total lengths of each member type and round to the nearest M.
	Precast Unit			T, CMO, L, F	
	Tie Rods, Nuts, and Washers			T, CMO, L, F	
	Dowels			Q, CMO, F	
	Elastomeric Bearing Pads				
	Nonlaminated			T, F	
	Laminated			T, CMO, L, F	
0450	Asphaltic Plug Joint Seals	LS	100%	Q, F	Per Lump Sum Schedule (25 M)
0460	Type "F" Concrete Rail (To be changed from pre-cast to cast-in- place.)	LS	100%	T, CMO, L, F	Per Lump Sum Schedule (86.26 M)
	Structural Concrete - Class 25			FTMAG 00540	
	Reinforcement				
	On QPL			CMO, F	
	Not on QPL			T, CMO, L, F	

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Bid Item	Item Name	Unit	Qty	Quality	Quantity - Rounding
	BASES				
0470	Cold Plane Pavement Removal - 0-50 mm	M2	600	NDR	At least to the nearest 0.1 M2
0480	Aggregate Base	MG	4,550	FTMAG 00641	At least to the nearest 0.01 Mg, Pay Per Truck Tickets
	WEARING SURFACES				
0490	Level 3 12.5 mm Dense HMAC	MG	2400	FTMAG 00745	At least to the nearest 0.01 Mg, Pay Per Truck Tickets
0500	PG 64-22 Asphalt in HMAC	MG	144	FTMAG 00745	At least to the nearest 0.01 Mg, (Tank Stick, Small Quantity, and/or Truck Tickets, Test Results)
0510	Extra For Asphalt Approaches	EA	6	NDR	Each

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Bid Item	Item Name	Unit	Qty	Quality	Quantity - Rounding
	PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES				
0520	Guardrail Type 2A	M	217.17		At least to the nearest 0.1M Each Run
	Steel Beam Rail			QPL, CMO, F	
	Metal Post and Blocks			T, CMO, F	
	Wood Post and Blocks				
	Stamped "S"			F	Note "S" Stamp on F, for Mat. Lab Inspection
	Not Stamped "S"			T, Q, F	"T" is for Preservative treatment & "Q" is for grading certificate of lumber.
	Rail & Hardware			QPL, CMO, F	
0530	Guardrail Type 3	M	15.24	See Item 0520	At least to the nearest 0.1M Each Run
0540	Guardrail Anchors - Type 1 Modified	EA	1	Q, CMO, L, T	Each
0550	Guardrail End Pieces - Type B	EA	1	See Item 0520	Each
0560	Guardrail Transition	EA	4	See Item 0520	Each
0570	Guardrail Terminals - Non Flared	EA	2	See Item 0520	Each
0580	Guardrail Terminals - Flared	EA	1	See Item 0520	Each
0590	Milepost Markers Post	EA	1	QPL, CMO, F	Each (See requirements for Type 1 Delineators)
0600	Painted Permanent Pavement Striping	M	1520		Nearest M Each Run
	Paint			QPL, F	
	Beads			QPL, F	

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Bid Item	Item Name	Unit	Qty	Quality	Quantity - Rounding
	RIGHT OF WAY DEVELOPMENT AND CONTROL				
0610	Permanent Seeding - Mix No.1	HA	0.13	T, F	Nearest 0.1 HA (Seed tested within 18 months of planting date.)
0620	Soil Testing	EA	1	L, T	Each
0630	Topsoil	M3	140	T, Q, L, F	At least to the nearest 0.1 M3 in the Haul Vehicle
0640	Conifer Trees - Seedlings	EA	700		Each
	Plants			Q, F	Q - Department of Agriculture Nursery Shipping Certificate With shipping invoice containing information specified in 01040.19.
	Soil Amendments and Conditioners			Q, F	
0650	Conifer Trees - 900 mm Height	EA	18	Same as Item 0640	Each
0660	Deciduous Trees - 20 mm Height	EA	13	Same as Item 0640	Each
0670	Deciduous Trees - No. 5 Container	EA	26	Same as Item 0640	Each
0680	Tubeling Plants - 525 CM3 Container	EA	460	Same as Item 0640	Each
0690	Plant Cuttings - Large	EA	1015	F	Each. Cuttings of regionally native species. Contractor needs written approval of cutting stock sources before cutting and furnish written description of cutting site(s), date & time of cutting. (See SS 01040.19(h-9).)
0700	Grass Straw Mulch	MG	0.25	Q, F	At least to the nearest 0.01 Mg, Pay Per Truck Tickets
0710	Boulders	EA	15	Visual	Each
0720	High Pressure Water	LS	100%	NTR	Per Lump Sum Schedule
0730	Haul And Place Logs With Root Wads	EA	6	Visual	Each
0740	Class 350 Riprap	M3	1040	FTMAG 00390	At least to the nearest 0.1 M3 in place. At least to the nearest 0.1 M3 in the Haul Vehicle, with vehicle measure equivalent to 0.70 M3. (See SS 00390.82.)

SNAKE RIVER (NYSSA) BRIDGE
F. E. WARD, INC.

SCHEDULE OF ITEMS

ITEM NO.	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)	TEST SUMMARY EXAMPLE PAGE
MOBILIZATION AND TRAFFIC CONTROL						
0010	ON-THE-JOB TRAINING	HOUR	300.00	2.00	600.00	4-25(Sht.1)
0020	MOBILIZATION	LS	ALL	420,000.00	420,000.00	4-25(Sht.1)
0030	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	10,000.00	10,000.00	4-25(Sht.1)
0040	TEMPORARY SIGNS	M2	105.00	180.00	18,900.00	4-25(Sht.1)
0050	TEMPORARY BARRICADES	EACH	25.00	150.00	3,750.00	4-25(Sht.1)
0060	TEMPORARY CONCRETE BARRIER, REFLECTORIZED	M	229.00	125.00	28,625.00	4-25(Sht.1)
)070	MOVING TEMPORARY CONCRETE BARRIER	M	229.00	65.00	14,885.00	4-27(Sht.2)
0080	TEMPORARY IMPACT ATTENUATORS	EACH	2.00	4,500.00	9,000.00	4-27(Sht.2)
0090	MOVING TEMPORARY IMPACT ATTENUATORS	EACH	2.00	500.00	1,000.00	4-27(Sht.2)
0100	TEMPORARY PLASTIC DRUMS	EACH	45.00	45.00	2,025.00	4-27(Sht.2)
0110	TEMPORARY FLEXIBLE PAVEMENT MARKERS	EACH	2000.00	8.00	16,000.00	4-27(Sht.2)
0120	TEMPORARY TRAFFIC SIGNAL INSTALLATION, COMPLETE	LS	ALL	45,000.00	45,000.00	4-27(Sht.2)
0130	SEQUENTIAL ARROW SIGNS	EACH	1.00	3,500.00	3,500.00	4-29(Sht.3)
0140	PORTABLE CHANGEABLE MESSAGE SIGNS	EACH	2.00	9,000.00	18,000.00	4-29(Sht.3)
0150	FLAGGERS	HOUR	2000.00	36.00	72,000.00	4-29(Sht.3)

SNAKE RIVER (NYSSA) BRIDGE
F. E. WARD, INC.

SCHEDULE OF ITEMS

ITEM NO.	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)	TEST SUMMARY EXAMPLE PAGE
0160	EROSION CONTROL	LS	ALL	7,500.00	7,500.00	4-29(Sht.3)
0170	INLET PROTECTION	EACH	19.00	75.00	1,425.00	4-29(Sht.3)
0180	PERMANENT SEEDING, FERTILIZING, AND MULCHING	LS	ALL	3,600.00	3,600.00	4-29(Sht.3)
0190	TEMPORARY MULCHING	HA	0.30	8,000.00	2,400.00	4-33(Sht.4)
0200	SILT FENCE, UNSUPPORTED	M	390.00	9.00	3,510.00	4-33(Sht.4)
ROADWORK						
0210	CONSTRUCTION SURVEY WORK	LS	ALL	50,000.00	50,000.00	4-33(Sht.4)
)220	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	ALL	7,500.00	7,500.00	4-33(Sht.4)
0230	CLEARING AND GRUBBING	LS	ALL	25,000.00	25,000.00	4-33(Sht.4)
0240	GENERAL EXCAVATION	M3	1170.00	23.00	26,910.00	4-33,37(Sht.4&4B)
0250	STONE EMBANKMENT	M3	1010.00	17.00	17,170.00	4-45(Sht.5A)
0260	WATER QUALITY SWALE	LS	ALL	6,500.00	6,500.00	4-45(Sht.5A)
0270	RIPRAP GEOTEXTILE, TYPE	M2	18.00	4.00	72.00	4-45(Sht.5A)
0280	LOOSE RIPRAP, CLASS 50	M3	8.00	135.00	1,080.00	4-45(Sht.5A)
DRAINAGE AND SEWERS						
0290	600 MM STORM SEWER PIPE	M	154.00	250.00	38,500.00	4-45,57(Sht.5A&B)
0300	EXTRA FOR PIPE UNDER PAVEMENT	M	52.00	75.00	3,900.00	4-45(Sht.5A)
:310	PIPE PROTECTION BLOCK	M	1.00	500.00	500.00	4-63,75(Sht.6A&B)

SNAKE RIVER (NYSSA) BRIDGE
F. E. WARD, INC.

SCHEDULE OF ITEMS

ITEM NO.	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)	TEST SUMMARY EXAMPLE PAGE
0320	CONCRETE MANHOLES	EACH	1.00	2,500.00	2,500.00	4-63 (Sht.6A)
0330	CONCRETE MANHOLES, TYPE SEDIMENTATION	EACH	1.00	4,000.00	4,000.00	4-63 (Sht.6A)
0340	CONCRETE INLETS, TYPE CG-2	EACH	4.00	1,500.00	6,000.00	4-63,75 (Sht.6A&B)
0350	CONCRETE INLETS, TYPE D	EACH	1.00	1,400.00	1,400.00	4-63 (Sht.6A)
0360	CONCRETE INLETS, TYPE G-2	EACH	2.00	1,400.00	2,800.00	4-63,75 (Sht.6A&B)
0370	DRAINAGE CURBS	M	108.00	30.00	3,240.00	4-75,81 (Sht.6B&7A)
BRIDGE NO. 18776						
0380	BRIDGE REMOVAL WORK	LS	ALL	200,000.00	200,000.00	4-81 (Sht.7A)
0390	TEMPORARY WORK BRIDGE	LS	ALL	275,000.00	275,000.00	4-81 (Sht.7A)
0400	SHORING, CRIBBING, ETC.	LS	ALL	50,000.00	50,000.00	4-81 (Sht.7A)
0410	STRUCTURE EXCAVATION	LS	ALL	7,500.00	7,500.00	4-81 (Sht.7A)
0420	GRANULAR WALL BACKFILL	LS	ALL	4,000.00	4,000.00	4-81,83 (Sht.7A&B)
0430	FURNISH DRILLING EQUIPMENT	LS	ALL	25,000.00	25,000.00	4-85 (Sht.8A)
0440	DRILLED SHAFTS, 1.80 M DIAMETER	M	77.00	850.00	65,450.00	4-85 (Sht.8A)
0450	PERMANENT SHAFT CASINGS	M	41.00	1,600.00	65,600.00	4-85 (Sht.8A)
0460	DRILLED SHAFT CONCRETE	LS	ALL	40,000.00	40,000.00	4-85,97 (Sht.8A&B)
0470	DRILLED SHAFT REINFORCEMENT	LS	ALL	75,000.00	75,000.00	4-85 (Sht.8A)
0480	CSL TEST ACCESS TUBES	M	635.00	20.00	12,700.00	4-85,97 (Sht.8A&B)

SNAKE RIVER (NYSSA) BRIDGE
F. E. WARD, INC.

SCHEDULE OF ITEMS

ITEM NO.	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)	TEST SUMMARY EXAMPLE PAGE
0490	FURNISH PILE DRIVING EQUIPMENT	LS	ALL	10,000.00	10,000.00	4-107(Sht.9)
0500	FURNISH PP 324 X 12.70 STEEL PILES	M	192.00	75.00	14,400.00	4-107(Sht.9)
0510	DRIVE PP 324 X 12.70 STEEL PILES	EACH	16.00	700.00	11,200.00	4-107(Sht.9)
0520	PP 324 X 12.70 STEEL PILE SPLICES	EACH	1.00	500.00	500.00	4-107(Sht.9)
0530	REINFORCEMENT	LS	ALL	100,000.00	100,000.00	4-107(Sht.9)
0540	COATED REINFORCEMENT	LS	ALL	105,000.00	105,000.00	4-107(Sht.9)
0550	STRUCTURAL CONCRETE, CLASS 25	LS	ALL	40,000.00	40,000.00	4-117,141(Sht10A&D)
0560	STRUCTURAL CONCRETE, CLASS 30	LS	ALL	625,000.00	625,000.00	4-117,129(Sht10A&C)
0570	REINFORCED CONCRETE BRIDGE END PANELS	M2	198.00	160.00	31,680.00	4-117,127,129 (Sht10A-C)
0580	STRUCTURAL STEEL	LS	ALL	930,000.00	930,000.00	4-117(Sht10A)
0590	BEARING DEVICES, BENT 1	EACH	5.00	1,800.00	9,000.00	4-117(Sht10A)
0600	BEARING DEVICES, BENT 2	EACH	5.00	1,800.00	9,000.00	4-117(Sht10A)
0610	BEARING DEVICES, PIER 1	EACH	4.00	4,000.00	16,000.00	4-149(Sht.11)
0620	BEARING DEVICES, PIER 2	EACH	2.00	3,000.00	6,000.00	4-149(Sht.11)
0630	BEARING DEVICES, PIER 3	EACH	2.00	3,800.00	7,600.00	4-149(Sht.11)
0640	BEARING DEVICES, PIER 4	EACH	4.00	3,100.00	12,400.00	4-149(Sht.11)
650	CLEAN BEARINGS	EACH	4.00	500.00	2,000.00	4-149(Sht.11)

SNAKE RIVER (NYSSA) BRIDGE
F. E. WARD, INC.

SCHEDULE OF ITEMS

ITEM NO.	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)	TEST SUMMARY EXAMPLE PAGE
0660	27 MM ELECTRICAL CONDUIT	M	3.00	92.00	276.00	4-149(Sht.11)
0670	35 MM ELECTRICAL CONDUIT	M	222.00	17.00	3,774.00	4-153(Sht.12A)
0680	53 MM ELECTRICAL CONDUIT	M	222.00	23.00	5,106.00	4-153(Sht.12A)
0690	FINGER PLATE EXPANSION JOINT	LS	ALL	50,000.00	50,000.00	4-153(Sht.12A)
0700	1067 VERTICAL CONCRETE BRIDGE RAIL	LS	ALL	125,000.00	125,000.00	4-153(Sht.12A)
RETAINING WALL NO. 1 (BRIDGE NO. 19175)						
)710	RETAINING WALL, MSE	M2	136.00	275.00	37,400.00	4-153,165,181 (Sht.12A-C)
RETAINING WALL NO. 2 (BRIDGE NO. 19176)						
0720	RETAINING WALL, MSE	M2	303.00	295.00	89,385.00	4-153,165,181 (Sht.12A-C)
BASES						
0730	COLD PLANE PAVEMENT REMOVAL, 0 - 50 MM DEEP	M2	3500.00	3.50	12,250.00	4-191(Sht.13A)
0740	AGGREGATE BASE	MG	2900.00	18.00	52,200.00	4-191,195,207 (Sht.13A-C)
WEARING SURFACES						
0750	LEVEL 3, 12.5 MM DENSE HMAC	MG	2000.00	55.00	110,000.00	4-191,213,231,243 (Sht.13A,D,E,F)
0760	PG 64-28 ASPHALT IN HMAC	MG	120.00	260.00	31,200.00	4-191 (Sht.13A)
			TOTAL		4,114,213.00	

Oregon Departr Transportation

TEST SUMMAR A)

(NONFIELD TESTED MATERIALS)

CONTRACT NO.	SHEET
C12770	1

REVIEWERS AND DATES

ITEM NO.	UNIT	ORIGINAL QUANTITY	FINAL QUANTITY
0010	HR	300	
0020	LS	100	
0030	LS	100	
0040	m²	105	
0050	EA	25	
0060	M	229	

LINE	DATE OF SAMPLE, TEST, OR INSPECTION	FIR REPORT NO.	DATA SHEET NO. OR MATERIALS LAB. "I" REPORT NO.	LAB REPORT NO.	TEST RESULTS CERTIFICATE	QUALITY COMPLIANCE CERTIFICATE	"Q" WITH MATERIALS "I" REPORT NO.	EQUIPMENT LISTS AND DRAWINGS	CERTIFICATE OF MATERIALS ORIGIN	0010 ON-THE-JOB TRAINING	0020 MOBILIZATION	0030 TP & DT	0040 TEMPORARY SIGNS	0050 TEMPORARY BARRICADES	0060 TEMP. CONCRETE BARRIER, REFL.	EXPLANATIONS AND NONCOMPLIANCE MATERIALS DESCRIPTION
										NDR	NDR	NDR	NDR	NDR	NDR	
		F		L	T	Q	QI	E	O	INCORPORATED QUANTITIES						
1															X	Salvaged Barrier - No doc. Required
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																

734-1902-A (10-01)

Oregon Departr Transportation

TEST SUMMAR (A)

(NONFIELD TESTED MATERIALS)

CONTRACT NO.	SHEET
C12770	2

REVIEWERS AND DATES

ITEM NO.	UNIT	ORIGINAL QUANTITY	FINAL QUANTITY
0070	M	229	
0080	EA	2	
0090	EA	2	
0100	EA	45	
0110	EA	2000	
0120	LS	100	

LINE	DATE OF SAMPLE, TEST, OR INSPECTION	FIR REPORT NO.	DATA SHEET NO. OR MATERIALS LAB. "I" REPORT NO.	LAB REPORT NO.	TEST RESULTS CERTIFICATE	QUALITY COMPLIANCE CERTIFICATE	"Q" WITH MATERIALS "I" REPORT NO.	EQUIPMENT LISTS AND DRAWINGS	CERTIFICATE OF MATERIALS ORIGIN	0070 MOVING TEMP. CONCRETE BARRIER	0080 TEMP. IMPACT ATTENUATORS	0090 MOVING TEMP. IMPACT ATTENUATORS	0100 TEMPORARY PLASTIC DRUMS	0110 TEMP. FLEXIBLE PAVEMENT MARKERS	0120 TEMP. TRAFFIC SIGNAL INSTALL, Complete	EXPLANATIONS AND NONCOMPLIANCE MATERIALS DESCRIPTION
										NDR	NDR	NDR	NDR	NDR	NDR	
		F		L	T	Q	QI	E	O	INCORPORATED QUANTITIES						
1																
2																
3																
4																
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734-1902-A (10-01)

Oregon Department of Transportation

TEST SUMMARY (A)

(NONFIELD TESTED MATERIALS)

CONTRACT NO.	SHEET
C12770	3

REVIEWERS AND DATES

ITEM NO.	UNIT	ORIGINAL QUANTITY	FINAL QUANTITY
0130	EA	1	
0140	EA	2	
0150	HR	2000	
0160	LS	100	
0170	EA	19	
0180	LS	100	

LINE	DATE OF SAMPLE, TEST, OR INSPECTION	FIR REPORT NO. (F)	DATA SHEET NO. OR MATERIALS LAB. "I" REPORT NO.	LAB REPORT NO. (L)	TEST RESULTS CERTIFICATE (T)	QUALITY COMPLIANCE CERTIFICATE (Q)	"Q" WITH MATERIALS "I" REPORT NO. (QI)	EQUIPMENT LISTS AND DRAWINGS (E)	CERTIFICATE OF MATERIALS ORIGIN (O)	0130 SEQUENTIAL ARROW SIGNS (NDR)	0140 PORTABLE CHANGEABLE MESSAGE SIGN (NDR)	0150 FLAGGERS (NDR)	0160 EROSION CONTROL (NDR)	0170 INLET PROTECTION (NDR)	0180 PERM. SEEDING, MULCH, FERTILIZER (FT/FQ/FQ)	EXPLANATIONS AND NONCOMPLIANCE MATERIALS DESCRIPTION
										INCORPORATED QUANTITIES						
1	7/14/03	1			X	X									X	Oregon Certified Seed / Fertilizer
2	See Notes														X	See BI 0190 for Mulch Certification
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																

734-1902-A (10-01)

22-16-8

GUARANTEED ANALYSIS

Total Nitrogen (N).....22.00%

- 3.36% Ammoniacal Nitrogen
- 10.75% Water Insoluble Nitrogen
- 5.10% Urea Nitrogen
- 2.79% Slowly Available Water Soluble Nitrogen

Available Phosphate (P2O5).....16.00%

Soluble Potash (K2O).....8.00%

Sulfur (S).....0.62%

Derived From: Ammonium Phosphate, Potassium Chloride, Urea, Ureaform.

Blend Code 089

Product Code 162040

Information received by the Washington State Department of Agriculture regarding the components in this product is available on the internet at http://www.wa.gov/agr/

Net Wt. 50 lbs.

U.A.P. Pacific
150 So. Main Street
Fremont, Nebraska 68025-5697

IRWIN & SONS AG SUPPLY
22537 HWY 36 CHESHIRE OR 97419

%PURESEED	KIND	ORIGIN	%GERM
25.29	SODAR WHEATGRASS	OR	95
26.29	SPINY HOPSAGE	OR	91
37.29	SHADSCALE	OR	97
6.99	BUSH SEEPWEED	OR	94
4.40	PINE BLUEGRASS	OR	97
0.01	OTHER CROP		
1.60	INERT MATTER		
0.03	WEED (NON NOX)		

LOT # S89-058 AMS 710

TEST DATE 5/03 NET WT: 50 LBS

OREGON STATE HIGHWAY MIX

IRWIN & SONS WARRANTS TO THE EXTENT OF THE PURCHASE PRICE THAT SEEDS SOLD ARE AS DESCRIBED ON THE CONTAINER WITHIN RECOGNIZED TOLERANCES. SELLER GIVES NO OTHER OR FURTHER WARRANTY EXPRESSED OR IMPLIED.

Oregon Department of Transportation

FIELD INSPECTION

CONTRACT NO. 12770	REPORT NO. 1 FOR BID ITEM NO 180
MANUAFACTURER OR SUPPLIER: UAP PACIFIC / IRWIN & SONS	BID ITEM NAME: PERM SEED, FERT, MULCH
QUANTITY DELIVERED: 50 lbs EA	QUANTITY ACCEPTED: 50 lbs EA. / QUANTITY REJECTED: EXPLAIN Ø

VERIFIED ON MATERIALS: ☐ HEAT, LOT OR BATCH NO. ☐ AASHTO / ASTM SPEC. NO. ☐ OSHD LABEL OR MARK ☒ OTHER (EXPLAIN)

SUPPORT DATA: ☒ TEST RESULT CERTIFICATE ☒ QUALITY COMPL. CERTIFICATE ☐ EQUIP. LIST & DRAWINGS ☐ OTHER (EXPLAIN)

INSPECTED BY: Phil Dirt DATE: 7-14-03

REMARKS: FERT. & SEED MEET SECTION 00280 SP

VISUAL INSPECTION PER TEST RESULTS ON TAG AND CERTIFICATION

734-2207 (4-97)

Oregon Department of Transportation

TEST SUMMARY (A)

(NONFIELD TESTED MATERIALS)

CONTRACT NO.	SHEET
C12770	4

REVIEWERS AND DATES

ITEM NO.	UNIT	ORIGINAL QUANTITY	FINAL QUANTITY
0190	HA	0.30	
0200	M	390	
0210	LS	100	
0220	LS	100	
0230	LS	100	
0240	M³	1170	

LINE	DATE OF SAMPLE, TEST, OR INSPECTION	FIR REPORT NO.	DATA SHEET NO. OR MATERIALS LAB. "I" REPORT NO.	LAB REPORT NO.	TEST RESULTS CERTIFICATE	QUALITY COMPLIANCE CERTIFICATE	"Q" WITH MATERIALS "I" REPORT NO.	EQUIPMENT LISTS AND DRAWINGS	CERTIFICATE OF MATERIALS ORIGIN	0190 TEMPORARY MULCHING	0200 SILT FENCE, UNSUPPORTED	0210 CONSTRUCTION SURVEY WORK	0220 REMOVAL OF STRUCTURES & OBSTRUCTIONS	0230 CLEARING & GRUBBING	0240 GENERAL EXCAVATION	EXPLANATIONS AND NONCOMPLIANCE MATERIALS DESCRIPTION
		F		L	T	Q	QI	E	O	F, Q	NDR	NDR	NDR	NDR		
										INCORPORATED QUANTITIES						
1	7/14/03	1				X				X						Crop Inspection - OSU Certified
2	See Notes.														X	See B-Sheet (Field Tested Material)
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
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18																
19																
20																

734-1902-A (10-01)

FIELD INSPECTION REPORT

REPORT NO. 1	FOR BID ITEM NO. 190, 180
PROJECT NAME (SECTION) SNAKE RIVER (NYSSSA) BRIDGE	CONTRACT NO. 12270
HIGHWAY CENTRAL OREGON	F.A. PROJECT NO. X-BHF-STP-S007(32)
PROJECT MANAGER RIC YOUNG	

REASON FOR THIS REPORT: [✓] INSPECTION OF MATERIAL [ ] MATERIALS ON HAND [ ] OTHER (EXPLAIN)

MATERIALS DELIVERED FOR PROJECT

TYPE OF MATERIAL: Temporary Mulch			DATE DELIVERED: 7-14-03
SOURCE OF MATERIAL (MANUFACTURER OR FABRICATOR): Pennington Seed Inc.		DELIVERED TO (NAME OF CONTRACTOR / SUB CONTRACTOR): Grass Growers	
QUANTITY DELIVERED: 0.5	UNIT: Mg	QUANTITY ACCEPTED: 0.5	QUANTITY REJECTED (EXPLAIN): None
TOTAL ACCEPTED TO DATE: 0.50	ESTIMATED TOTAL REQUIRED: 0.30	SAMPLE DATA SHEET NO. FOR SAMPLE SENT TO MATERIALS LAB FOR TESTS	

SUPPORTING DATA

- [ ] MATERIALS INSPECTION I- ____ TEST ____ LABORATORY ____
- [ ] MATERIALS LABORATORY INSPECTION LABEL OR MARK.
- [✓] TEST RESULTS CERTIFICATE
- [ ] QUALITY COMPLIANCE CERTIFICATE
- [ ] CONFORMANCE TO EQUIPMENT LIST AND DRAWINGS (EXPLAIN)
- [ ] CERTIFICATE OF MATERIALS ORIGIN FOR PERMANENTLY INCORPORATED IRON OR STEEL MATERIALS AND THEIR COATINGS ON FEDERAL AID PROJECTS
- [✓] FIELD TESTS OR OBSERVATIONS (EXPLAIN)

REMARKS AND EXPLANATIONS, MATERIALS DESCRIPTIONS, DATES OF MANUFACTURE, HEAT AND LOT NOS. DAMAGED OR SUBSTANDARD MATERIALS, REASONS FOR REJECTION AND DISPOSITION OF REJECTED MATERIALS.

Grass straw Mulch
applied with tackifier

certified weed free

Visually inspected, suitable for use intended

Record #25

WHERE INSPECTED	DATE	INSPECTED AND PREPARED BY
JOBSITE	7-14-03	[signature]

734-3469 (8-00)

eed Certification Service
regon State University
1 Crop Science Bldg.
orvallis, OR 97331-3003
hone: 541-737-4513

Crop Inspection Final Report

OREGON STATE UNIVERS EXTENSIO SERVIC

eld No: 90-33	Variety and Crop:	Fenway Red fescue		Status:	Passed
res Applied: 33	Generation:	Certified	Acres Passed: 33	Generation:	Certified
her Crops:		*** None Observed ***			

eeds: Cheatgrass-T, Common mullein-T, Dandelion-T, Russian thistle-T

ohibited Weeds: Canada thistle-T, Field bindweed-T

stricted Weeds: *** None Observed ***

mments: Average appearance. Average stand. Adequately isolated. Clean borders. F heading.

ntractor	: Blue Mountain Seeds, Inc
anted	: Apr 01, 2000
gible Through	: 2010
ass	: PRIVATE
ECD Code	:
S	: 3S-40E-3
cal	: E side Lower Cove Rd, 1 3/4 N of
unty	: Union
pector	: Gordon Cook

Grower: 2 06 21 13248 25589 58599

Murchison, Dennis
69899 OR HWY 237
COVE OR 97824

Date Inspected: Jun 04 2002

Description of Codes: -T = Trace, -M = Many, -E = Excessive. * = More found. Please call Seed Certification Office for detail.

eed Certification Service
regon State University
1 Crop Science Bldg.
orvallis, OR 97331-3003
hone: 541-737-4513

Crop Inspection Final Report

OREGON STATE UNIVERS EXTENSIO SERVIC

eld No: 99-2	Variety and Crop:	Flyer Red fescue		Status:	Passed
res Applied: 23	Generation:	Certified	Acres Passed: 23	Generation:	Certified
her Crops:		*** None Observed ***			

eeds: Rattail fescue-T

ohibited Weeds: Field bindweed-T, Quackgrass-T

stricted Weeds: *** None Observed ***

mments: Average appearance. Adequately isolated. Average stand. Good heading.

ntractor	: Pennington Seed Inc. of Oregon
anted	: Apr 01, 1999
gible Through	: 2009
ass	: PRIVATE
ECD Code	:
S	: 3S-40E-16
cal	: 4 parcels - E side Conley Ln, 3/
unty	: Union
pector	: Mike Grimes

Grower: 2 06 27 13248 29939 59161

Murchison, Dennis
69599 OR HWY 237
COVE OR 97824

Date Inspected: Jun 04 2002

Description of Codes: -T = Trace, -M = Many, -E = Excessive. * = More found. Please call Seed Certification Office for detail.

Oregon State Department of Transportation

TEST SUMMARY (B-QA)

(FIELD TESTED MATERIALS)

CONTRACT NO.	SHEET
12770	4B

REVIEWERS AND DATES

ITEM NO	DESCRIPTION	UNIT	ORIG. QUANT.	FINAL QUANT.
240	General Excavation	m³	1,170	

LINE	DATE OF SAMPLE, TEST, OR INSPECTION	REPORT NO.	DATA SHEET NO.	LAB REPORT NO.	TESTING BY: QUALITY CONTROL BY CONTRACTOR	REGION-QUALITY VERIFICATION	REGION-INDEPENDENT ASSURANCE	CONTRACTOR-INDEPENDENT ASSURANCE (SPLIT SAMPLE)		TEST METHOD AND FREQUENCY: SOURCE MATERIAL (QUALIFYING)	MIX DESIGN							MAXIMUM DENSITY CURVE		DENSITY	STRENGTH	VISUAL DEFLECTION	QUANTITIES: IN COMPLIANCE INCORPORATED	NON-COMPLIANCE INCORPORATED	EXPLANATIONS AND NON-COMPLIANCE
1	9/1/03	1			X			X										X								6+210 RT
2	9/1/03	QV-1				X	X																			6+210 RT
3	9/14/03	1			X															X						98% Complies
4	9/14/03	QV-1				X	X													X						97% Passing Verification
5	9/15/03	2			X															X		X				Too Rocky to Test 6+206 RT
6																										
7																										
8																										
9																										
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21																										

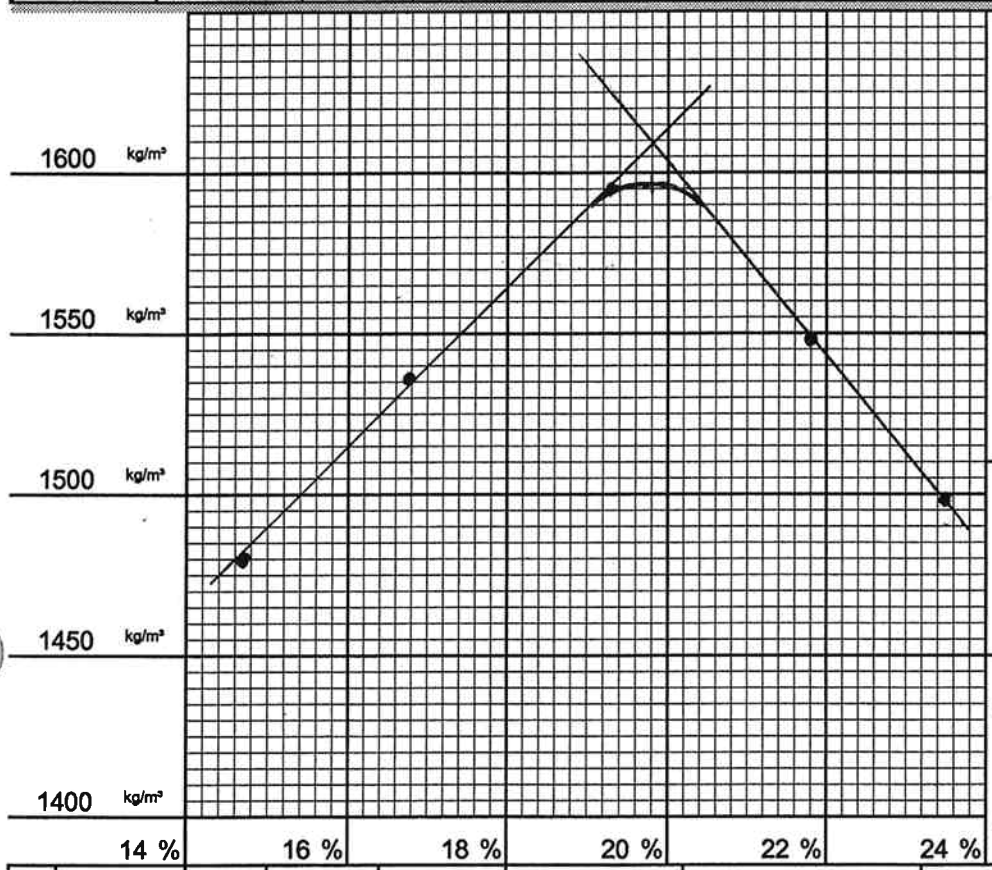
WORK PHASE

	AGGR. PROD
	MIX PRODUCTION
X	DENSITY
	OTHER

734-1902-B(4-96)

MAXIMUM DENSITY OF CONSTRUCTION MATERIALS

PROJECT NAME (SECTION)					CONTRACT NUMBER
Snake River (Nyssa) Br					12770
CONTRACTOR OR SUPPLIER			PROJECT MANAGER		BID ITEM NUMBER
F. E. Ward			Ric Young		240
SOURCE NAME			SOURCE NUMBER		MATERIAL SIZE
native			native		
TEST NO.	DATE	TIME	SAMPLED AT	MATERIAL DESCRIPTION	TO BE USED IN
1	9/01/2003	10:15a	6+210, 4 RT	soil	sub-base



TEST METHOD

T 99 [X] T 180 [ ]

A [X] D [ ]

SAMPLE

+ 4.75	132.3
- 4.75	5632
Total	5764.3
Pc	2.3 %
+ 19 mm	0
- 19 mm	5764.3
Total	5764.3
Pc	0 %

SOILS

MAX DRY DENSITY OF THE FINES

D_f 1596 kg/m³

OPTIMUM MOISTURE % THE FINES

MC_f 19.8 %

BASE AGG

Stock Pile AVE. P_c %

RELATIVE MAX DRY DENSITY

D_d kg/m³

COMBINED OPTIMUM MOISTURE %

MC_T %

TEST NO.	MASS OF MOLD AND MATERIALS	MASS OF MOLD	(M) MASS OF WET MATERIAL	(A) WET DENSITY kg/m³	SPEEDY MOISTURE % WET (B)	SPEEDY MOISTURE % DRY (C)	OVEN MOISTURE % WET(a)	OVEN MOISTURE % DRY(b)	OVEN MOISTURE % % M (C)	(D) DRY DENSITY kg/m³
1	5845.8	4243.7	1602.1	1698			436.2	380.3	14.7	1480
2	5936.1	4243.7	1692.4	1794			386.3	330.7	16.8	1536
3	6049.0	4243.7	1805.3	1902			436.7	365.9	19.3	1594
4	6004.9	4243.7	1761.2	1884			495.2	406.5	21.8	1547
5	5958.2	4243.7	1714.5	1849			540.1	437.5	23.5	1498
6										
7										
8										

101.6mmMOLD (A) =(M) X 1.060
152.4mmMOLD (A) =(M) X 0.471

SPEEDY MOISTURE %

$$(C) = \frac{(B)}{100 - (B)} \times 100$$

OVEN MOISTURE %

$$(C) = \frac{(a) - (b)}{(b)} \times 100$$

$$(D) = \frac{(A)}{(C) + 100} \times 100$$

AASHTO T85 SPECIFIC GRAVITY OF COARSE AGGREGATE	Oven Dry Mass (A)	SSD Mass (B)	Weight in Water (C)	Gsb (A) / [(B)-(C)]	Gsb SSD (B) / [(B)-(C)]	Gsa (A) / [(A)-(C)]	ABSORPTION [(B)-(A)]/(A)]X100

AGGREGATES $P_f = 1.00 - P_c$ $k = Gsb \times 1000$ If Material is manufactured use Average Pc from T 27 MC_c = ABSORPTION

AASHTO T224 COARSE PARTICLE CORRECTION

MAXIMUM COMBINED DRY DENSITY

$$100 / (P_f / D_f + P_c / k) = D_d$$

OPTIMUM COMBINED MOISTURE

$$(MC_f \times P_f + MC_c \times P_c) / 100 = MC_T$$

[X] QUALITY CONTROL [ ] VERIFICATION [ ] INDEPENDENT ASSURANCE

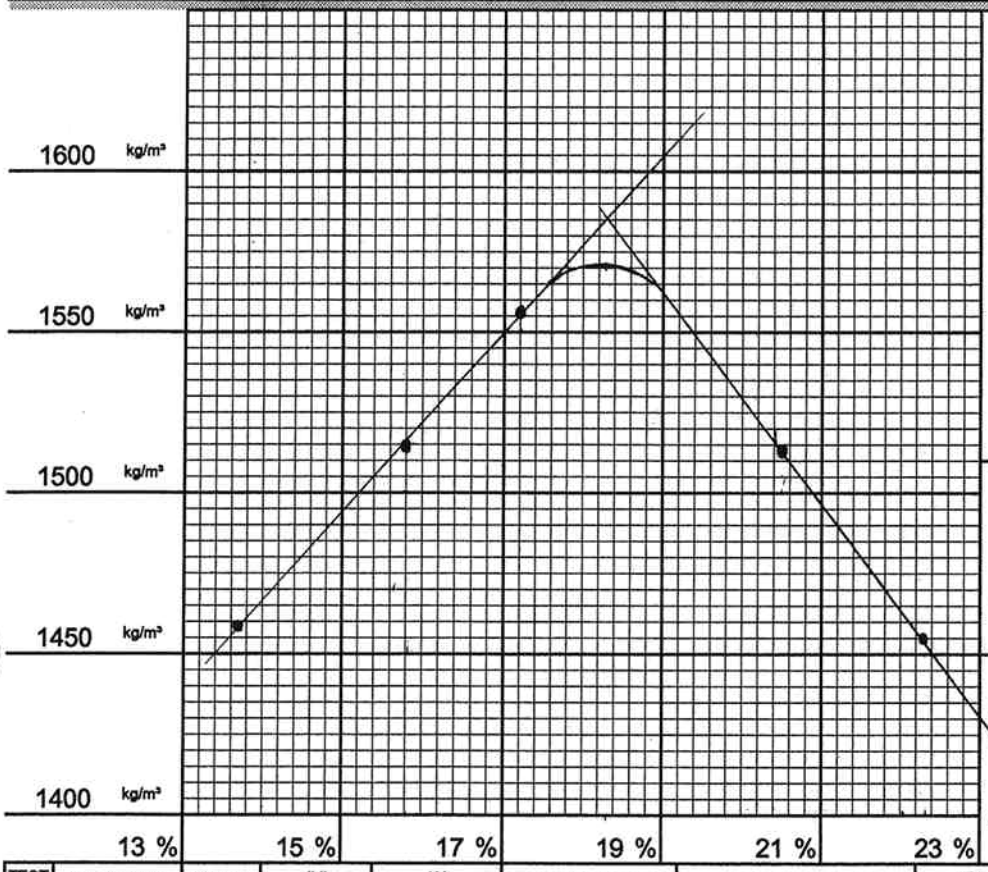
CERTIFIED TECHNICAN (PLEASE PRINT) AND CARD NUMBER	COMPANY NAME	SIGNATURE	DATE
Cedric F. Rogers #43217	MT&I	Cedric Rogers	9-1-03

Jackie Wardon 9-2-03

3468 9-02

MAXIMUM DENSITY OF CONSTRUCTION MATERIALS

PROJECT NAME (SECTION)					CONTRACT NUMBER
Snake River (Nyssa) Br					12770
CONTRACTOR OR SUPPLIER			PROJECT MANAGER		BID ITEM NUMBER
F. E. Ward			Ric Young		240
SOURCE NAME			SOURCE NUMBER		MATERIAL SIZE
native			native		
TEST NO.	DATE	TIME	SAMPLED AT	MATERIAL DESCRIPTION	TO BE USED IN
QV-1	9/01/2003	10:15a	6+210, 4 RT	soil	sub-base



TEST METHOD

T 99 [X] T 180 [ ]

A [X] D [ ]

SAMPLE

+ 4.75	217.1
- 4.75	5350.6
Total	5567.1
Pc	3.9 %
+ 19 mm	0
- 19 mm	5567.1
Total	5567.4
Pc	0 %

SOILS

MAX DRY DENSITY OF THE FINES

D_f 1570 kg/m³

OPTIMUM MOISTURE % THE FINES

MC_f 18.3 %

BASE AGG

Stock Pile AVE. Pc ____ %

RELATIVE MAX DRY DENSITY

D_d ____ kg/m³

COMBINED OPTIMUM MOISTURE %

MC_T ____ %

TEST NO.	MASS OF MOLD AND MATERIALS	MASS OF MOLD	(M) MASS OF WET MATERIAL	(A) WET DENSITY kg/m³	SPEEDY MOISTURE % WET (B)	SPEEDY MOISTURE % DRY (C)	OVEN MOISTURE % WET(a)	OVEN MOISTURE % DRY(b)	OVEN MOISTURE % % M (C)	(D) DRY DENSITY kg/m³
1	5827.3	4259.3	1568	1658			425.0	373.7	13.7	1458
2	5914.7	4259.3	1655.4	1755			380.0	328.1	15.8	1515
3	6012.6	4259.3	1753.3	1825			421.9	360.0	17.2	1557
4	5961.5	4259.3	1702.2	1823			472.6	392.2	20.5	1513
5	5907.6	4259.3	1648.3	1780			487.6	398.7	22.3	1455
6										
7										
8										

101.6mmMOLD (A) =(M) X 1.060
152.4mmMOLD (A) =(M) X 0.471

SPEEDY MOISTURE %

$$(C) = \frac{(B)}{100 - (B)} \times 100$$

OVEN MOISTURE %

$$(C) = \frac{(a) - (b)}{(b)} \times 100$$

$$(D) = \frac{(A)}{(C) + 100} \times 100$$

AASHTO T85 SPECIFIC GRAVITY OF COARSE AGGREGATE	Oven Dry Mass (A)	SSD Mass (B)	Weight in Water (C)	Gsb (A) / [(B)-(C)]	Gsb SSD (B) / [(B)-(C)]	Gsa (A) / [(A)-(C)]	ABSORPTION [[(B)-(A)]/(A)]X100

AGGREGATES $P_f = 1.00 - P_c$ $k = Gsb \times 1000$ If Material is manufactured use Average Pc from T 27 MC_c = ABSORPTION

AASHTO T224 COARSE PARTICLE CORRECTION

MAXIMUM COMBINED DRY DENSITY

$$100 / (P_f / Df + Pc / k) = D_d$$

OPTIMUM COMBINED MOISTURE

$$(MC_f \times P_f + MC_c \times P_c) / 100 = MC_T$$

[ ] QUALITY CONTROL [X] VERIFICATION [ ] INDEPENDENT ASSURANCE

CERTIFIED TECHNICAN (PLEASE PRINT) AND CARD NUMBER	COMPANY NAME	SIGNATURE	DATE
RUSS ELMS #914	ODOT	Russ Elms	9-1-03

3468 9-02

NUCLEAR COMPACTION TEST REPORT

PROJECT NAME (SECTION)		CONTRACT NUMBER
Snake River (Nyssa) Br		12770
CONTRACTOR OR SUPPLIER	PROJECT MANAGER	BID ITEM NUMBER
F. E. Ward	Ric Young	240

CODES FOR ROLLER TYPES		ROLLER TYPE AND DESCRIPTION (MANUFACTURE, WEIGHT, ETC)
SDV-SINGLE DRUM VIBRATORY	SF- SHEEP FOOT	Ingersoll-Rand SDV
DDV-DOUBLE DRUM VIBRATORY	GR - GRID ROLLER	

REPRESENTS MATERIAL / AREA INCORPORATED

From Station	6+208	Off Set	10m Rt	Distance Below Grade	1m
To Station	6+213	Off Set	10m Lt	Distance Below Grade	0.4m

Check Appropriate [ ] Material deflected under loaded equipment [X] Material did not deflect under loaded equipment

TEST NUMBER	1
DATE OF TEST	9/14/2003
TEST LOCATION (STATION)	6+211.3
DISTANCE LT. OR RT. OF CENTERLINE (METERS)	6.2 Rt

LIFT 2	DIST BELOW GRADE 1	LIFT THICKNESS 200mm	SOURCE DEPTH 200mm

AASHTO T 310	Wet Density kg/m³	Moisture kg/m³	Dry Density kg/m³	Percent Moisture
Shot 1	1850	283	WD - M	(M / DD) X 100
Shot 2	1846	287		
Average	WD 1848	M 285	DD 1563	%M 18

AASHTO T 99						
A	4.75 Pc	COARSE 142.1	FINE 4965.3	% Coarse 2.8
D	19 Pc	COARSE	FINE	% Coarse

MASS OF MOLD AND MATERIALS	MASS OF MOLD	MASS OF WET MATERIAL	WET DENSITY kg/m³ (A)	SPEEDY MOISTURE % WET (B)	SPEEDY MOISTURE % DRY (C)	AASHTO T 255 / T 265 MOISTURE % WET(a)	AASHTO T 255 / T 265 MOISTURE % DRY(b)	AASHTO T 255 / T 265 MOISTURE % M (C)	DRY DENSITY kg/m³ (D)
6005	4243.7	1761.3	1815			392	334	17.4	1546

101.6mmMOLD (A) =(M) X 1.060
152.4mmMOLD (A) =(M) X 0.471
(C) = unaltered one-point Mois.

SPEEDY MOISTURE % $(C) = \frac{(B)}{100 - (B)} \times 100$

T 255 / T 265 MOISTURE % $(C) = \frac{(a) - (b)}{(b)} \times 100$

DRY DENSITY kg/m³ $(D) = \frac{(A)}{(C)+100} \times 100$

AASHTO T 224	CURVE NO.	DRY DENSITY D_f	OPTIMUM MOISTURE	MCf	k (Gsb x 1000)	MCc
Pf = 100 - Pc	1	1596	19.8			

IN-PLACE COMBINED MOISTURE
Within 1 % of T 310 % Moisture?
If not Correct T 310 DD

$W = ((C)P_f + MC_cP_c) / 100$
+ /100
W=

OPTIMUM COMBINED MOISTURE (MCT)
Based on Curve Info.

$MC_T = (MC_fP_f + MC_cP_c) / 100$
+ /100
MC_T=

CORRECTED DRY DENSITY
DD = WD / (1+(W/100))
DD = WD / 1+(W/100)

RELATIVE MAXIMUM DRY DENSITY kg/m³
$Dd = \frac{Pf}{Df} + \frac{Pc}{k}$ 100

Dd = 100 / + /

PERCENT COMPACTION
Original or Corrected (DD / Dd) x 100

Percent Required	95	PERCENT OBTAINED	98

Check appropriate based on spec. [X] Moisture is within specification [ ] Moisture is not within specification

REMARKS

Valerie Winslow 9-2-03

[X] QUALITY CONTROL [ ] VERIFICATION

TYPE GAUGE-SERIAL NUMBER: Humboldt 1342

CERTIFIED TECHNICIAN (PLEASE PRINT) AND CARD NUMBER	COMPANY NAME	SIGNATURE	DATE
Cedric F. Rogers #43217	MT & I	Cedric Rogers	9-14-03

NUCLEAR COMPACTION TEST REPORT

PROJECT NAME (SECTION)		CONTRACT NUMBER
Snake River (Nyssa) Br		12770
CONTRACTOR OR SUPPLIER	PROJECT MANAGER	BID ITEM NUMBER
F. E. Ward	Ric Young	240

CODES FOR ROLLER TYPES		ROLLER TYPE AND DESCRIPTION (MANUFACTURE, WEIGHT, ETC)
SDV-SINGLE DRUM VIBRATORY	SF- SHEEP FOOT	Ingersoll-Rand SDV
DDV-DOUBLE DRUM VIBRATORY	GR - GRID ROLLER	

REPRESENTS MATERIAL / AREA INCORPORATED

From Station	6+207	Off Set	10m Rt	Distance Below Grade	1m
To Station	6+214	Off Set	10m Lt	Distance Below Grade	0.4m

Check Appropriate [ ] Material deflected under loaded equipment [X] Material did not deflect under loaded equipment

TEST NUMBER	QV-1
DATE OF TEST	9/14/2003
TEST LOCATION (STATION)	6+209.5
DISTANCE LT. OR RT. OF CENTERLINE (METERS)	5 Lt

LIFT	2	DIST BELOW GRADE	1	LIFT THICKNESS	200mm	SOURCE DEPTH	200mm

AASHTO T 310	Wet Density kg/m³	Moisture kg/m³	Dry Density kg/m³	Percent Moisture
Shot 1	1792	263	WD - M	(M / DD) X 100
Shot 2	1788	259		
Average	WD 1790	M 261	DD 1529	%M 17

AASHTO T 99						
A	4.75 Pc	COARSE 160.7	FINE 4921.2	% Coarse 3.1
D	19 Pc	COARSE	FINE	% Coarse

MASS OF MOLD AND MATERIALS	MASS OF MOLD	MASS OF WET MATERIAL	WET DENSITY kg/m³ (A)	SPEEDY MOISTURE % WET (B)	SPEEDY MOISTURE % DRY (C)	AASHTO T 255 / T 265 MOISTURE % WET(a)	AASHTO T 255 / T 265 MOISTURE % DRY(b)	AASHTO T 255 / T 265 MOISTURE % M (C)	DRY DENSITY kg/m³ (D)
5992.2	4259.3	1732.9	1783			377.4	322.4	17.1	1523

101.6mmMOLD (A) =(M) X 1.060
152.4mmMOLD (A) =(M) X 0.471
(C) = unaltered one-point Mois.

SPEEDY MOISTURE % $(C) = \frac{(B)}{100 - (B)} \times 100$

T 255 / T 265 MOISTURE % $(C) = \frac{(a) - (b)}{(b)} \times 100$

DRY DENSITY kg/m³ $(D) = \frac{(A)}{(C)+100} \times 100$

AASHTO T 224	CURVE NO.	DRY DENSITY D_f	OPTIMUM MOISTURE	MCf	k (Gsb x 1000)	MCc
Pf = 100 - Pc	QV-1	1570	18.3			

IN-PLACE COMBINED MOISTURE
Within 1 % of T 310 % Moisture?
If not Correct T 310 DD

$W = ((C)P_f + MC_cP_c) / 100$
+ /100
W=

CORRECTED DRY DENSITY
DD = WD / (1+(W/100))
DD = WD / 1+(W/100)

OPTIMUM COMBINED MOISTURE (MCT)
Based on Curve Info.

$MC_T = (MC_fP_f + MC_cP_c) / 100$
+ /100
MC_T=

PERCENT COMPACTION
Original or Corrected (DD / Dd) x 100

RELATIVE MAXIMUM DRY DENSITY kg/m³

$Dd = \frac{100}{\frac{P_f}{D_f} + \frac{P_c}{k}}$

Dd = 100 / (+)

Percent Required	95	PERCENT OBTAINED	97

Check appropriate based on spec. [X] Moisture is within specification [ ] Moisture is not within specification

REMARKS

[ ] QUALITY CONTROL [X] VERIFICATION

TYPE GAUGE-SERIAL NUMBER: Humboldt 1347

CERTIFIED TECHNICIAN (PLEASE PRINT) AND CARD NUMBER	COMPANY NAME	SIGNATURE	DATE
RUSS ELMS #914	ODOT	Russ Elms	9-14-03

NUCLEAR COMPACTION TEST REPORT

PROJECT NAME (SECTION)		CONTRACT NUMBER
Snake River (Nyssa) Br		12770
CONTRACTOR OR SUPPLIER	PROJECT MANAGER	BID ITEM NUMBER
F. E. Ward	Ric Young	240

CODES FOR ROLLER TYPES	ROLLER TYPE AND DESCRIPTION (MANUFACTURE, WEIGHT, ETC)
SDV-SINGLE DRUM VIBRATORY SF- SHEEP FOOT DDV-DOUBLE DRUM VIBRATORY GR - GRID ROLLER	Ingersoll-Rand SDV

REPRESENTS MATERIAL / AREA INCORPORATED

From Station	6+206	Off Set	10m Rt	Distance Below Grade	1m
To Station	6+208	Off Set	10m Lt	Distance Below Grade	0.4m

Check Appropriate [ ] Material deflected under loaded equipment [X] Material did not deflect under loaded equipment

TEST NUMBER	2
DATE OF TEST	9/15/2003
TEST LOCATION (STATION)	6+206.8
DISTANCE LT. OR RT. OF CENTERLINE (METERS)	9

LIFT 2	DIST BELOW GRADE 0.6	LIFT THICKNESS 200mm	SOURCE DEPTH

AASHTO T 310	Wet Density kg/m³	Moisture kg/m³	Dry Density kg/m³	Percent Moisture
Shot 1	1959	208	WD - M	(M / DD) X 100
Shot 2	1957	212		
Average	WD 1958	M 210	DD 1748	%M 12

AASHTO T 99						
A	4.75 Pc	COARSE 2079	FINE 2440	% Coarse 46
D	19 Pc	COARSE 1762	FINE 2757	% Coarse 39

MASS OF MOLD AND MATERIALS	MASS OF MOLD	MASS OF WET MATERIAL	WET DENSITY kg/m³ (A)	SPEEDY MOISTURE % WET (B)	SPEEDY MOISTURE % DRY (C)	AASHTO T 255 / T 265 MOISTURE % WET(a)	AASHTO T 255 / T 265 MOISTURE % DRY(b)	AASHTO T 255 / T 265 MOISTURE % % M (C)	DRY DENSITY kg/m³ (D)

101.6mmMOLD (A) =(M) X 1.060 152.4mmMOLD (A) =(M) X 0.471 (C) = unaltered one-point Mois.	SPEEDY MOISTURE %	T 255 / T 265 MOISTURE %	DRY DENSITY kg/m³
	(C)= (B) / (100 - (B)) X100	(C)= (a) - (b) / (b) X100	(D)= (A) / ((C)+100) X100

AASHTO T 224	CURVE NO.	DRY DENSITY D_f	OPTIMUM MOISTURE	MCf	k (Gsb x 1000)	MCc
Pf = 100 - Pc						

IN-PLACE COMBINED MOISTURE Within 1 % of T 310 % Moisture? If not Correct T 310 DD	$W = ((C)P_f + MC_cP_c) / 100$ + /100 W=
OPTIMUM COMBINED MOISTURE (MCT) Based on Curve Info.	$MC_T = (MC_fP_f + MC_cP_c) / 100$ + /100 MC_T=
RELATIVE MAXIMUM DRY DENSITY kg/m³	$Dd = \frac{100}{\frac{Pf}{Df} + \frac{Pc}{k}}$ Dd = 100 / (+)

CORRECTED DRY DENSITY

DD = WD / (1+(W/100))

DD = WD / 1+(W/100)

PERCENT COMPACTION

Original or Corrected (DD / Dd) x 100

Percent Required		PERCENT OBTAINED	

Check appropriate based on spec. [ ] Moisture is within specification [ ] Moisture is not within specification

REMARKS Material is blend of cobbles to fines. Tested by defection method (ODOT TM 158). Used loaded 10cy dump truck. No yielding, deflection, reaction, or pumping observed.

[X] QUALITY CONTROL [ ] VERIFICATION TYPE GAUGE-SERIAL NUMBER: Humboldt 1342

CERTIFIED TECHNICIAN (PLEASE PRINT) AND CARD NUMBER	COMPANY NAME	SIGNATURE	DATE
Cedric F. Rogers #43217	MT & I	Cedric F. Rogers	9-15-03

9-16-03

Oregon Department of Transportation

TEST SUMMARY (A)

(NONFIELD TESTED MATERIALS)

CONTRACT NO.	SHEET
C12770	5-A

REVIEWERS AND DATES

LINE	DATE OF SAMPLE, TEST, OR INSPECTION	FIR REPORT NO.	DATA SHEET NO. OR MATERIALS LAB. "I" REPORT NO.	LAB REPORT NO.	TEST RESULTS CERTIFICATE	QUALITY COMPLIANCE CERTIFICATE	"Q" WITH MATERIALS "I" REPORT NO.	EQUIPMENT LISTS AND DRAWINGS	CERTIFICATE OF MATERIALS ORIGIN	STONE EMBANKMENT (0250)	WATER QUALITY SWALE (0260)	RIP-RAP GEOTEXTILE, TYPE 2 (0270)	LOOSE RIP-RAP, CLASS 50 (0280)	600mm STORM SEWER PIPE (0290)	EXTRA FOR PIPE UNDER PAVEMENT (0300)	EXPLANATIONS AND NONCOMPLIANCE MATERIALS DESCRIPTION
		F		L	T	Q	QI	E	O	INCORPORATED QUANTITIES						
										F	F, Q, L	F, T	L	F, Q, O, L	NDR	
1	6/13/03	1			X							X				Geotextile Fabric (FIR on back of cert)
2	6/13/03	1								X						Visual Examination of Materials
3	6/13/03	1		03-002401										70.9 m		Class V PCC (Bell & Spigot) Pipe
4	See Notes													X		See B-Sheet #5-B for Backfill Materials
5	4/13/03			03-001053									X			01-001-5 Annual Source Compliance
6	6/24/03	1											X			Visual Examination of Materials
7	9/24/03	2												25 m		ADS Polyethylene Pipe - APL Materials
8	6/18/03	3				X			X					67 m		Ductile Iron Pipe
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																

ITEM NUMBERS AND DESCRIPTIONS

ITEM NO.	UNIT	ORIGINAL QUANTITY	FINAL QUANTITY
0250	M³	1010	
0260	LS	100	
0270	M²	18	
0280	M³	8	
0290	M	154	
0300	M	52	

734-1902-A (10-01)

Ten Cate Nicolon

FIR ON BACK

Mirafi® 1160N Certification

Attn: Mike Dituri
White Cap
3825 E. Trent
Spokane, WA 99202

Fax#: 509-535-5245

Project: NYSSA
Roll#: 9110112938
Contractor: Crea Construction

This is to certify that Mirafi® 1160N is a nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. 1160N is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.69 (380)	1.69 (380)
Grab Tensile Elongation	ASTM D 4632	%	50	50
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.62 (140)	0.62 (140)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	5098 (740)	
Puncture Strength	ASTM D 4833	kN (lbs)	1.05 (235)	
Apparent Opening Size (AOS)	ASTM D 4751	mm (U.S. Sieve)	0.150 (100)	
Permittivity	ASTM D 4491	sec^{-1}	0.7	
Permeability	ASTM D 4491	cm/sec	0.20	
Flow Rate	ASTM D 4491	$l/min/m^2$ ($gal/min/ft^2$)	2037 (50)	
UV Resistance (at 500 hours)*	ASTM D 4355	% strength retained	70	

* Certification based on independent lab testing.

Sworn and subscribed before me this 16th day of June, 2003

Linda Evans
My commission expires December 8, 2005

Melissa Medlin
Quality Manager

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1160N.DOC
Revision: 6

Ten Cate Nicolon USA
Bonar® • MiraDRN® • Mirafi® Industrial Fabrics and Construction Products
365 South Holland Drive / Pendergrass, Georgia 30567 / 706 693 2225 / 1 888 795 0808 / Fax 706 693 4400
A subsidiary of Royal Ten Cate

Oregon Department of Transportation

FIELD INSPECTION

CONTRACT NO. 12770	REPORT NO. 1 FOR BID ITEM NO 0270
MANUAFACTURER OR SUPPLIER TEN CARE NICOLON	BID ITEM NAME RIP RAP GEO. TYPE 2
QUANTITY DELIVERED 120 M² / QUANTITY ACCEPTED 120 M²	QUANTITY REJECTED EXPLAIN 0

VERIFIED ON MATERIALS: ☐ HEAT, LOT OR BATCH NO. ☐ AASHTO / ASTM SPEC. NO. ☐ OSHD LABEL OR MARK ☒ OTHER (EXPLAIN) LABLE

SUPPORT DATA: ☒ TEST RESULT CERTIFICATE ☐ QUALITY COMPL. CERTIFICATE ☐ EQUIP. LIST & DRAWINGS ☐ OTHER (EXPLAIN)

INSPECTED BY Phil Dirt DATE 6-13-03

REMARKS MEETS REQUIREMENTS OF SEC. 02320

734-2207 (4-97)

Oregon Department of Transportation

FIELD INSPECTION REPORT

REPORT NO. 1	FOR BID ITEM NO. 250
PROJECT NAME (SECTION) Snake River (Nyssa) Bridge Section	CONTRACT NO. 12770
HIGHWAY Central Oregon	F.A. PROJECT NO. X-BHF-STP-S007(32)
PROJECT MANAGER Ric Young	

REASON FOR THIS REPORT: [✓] INSPECTION OF MATERIAL [ ] MATERIALS ON HAND [ ] OTHER (EXPLAIN)

MATERIALS DELIVERED FOR PROJECT

TYPE OF MATERIAL: Stone Embankment			DATE DELIVERED: 6-13-03
SOURCE OF MATERIAL (MANUFACTURER OR FABRICATOR): 01-067-5 Lay Quarry		DELIVERED TO (NAME OF CONTRACTOR / SUB CONTRACTOR): Wildish	
QUANTITY DELIVERED: 18	UNIT: M3	QUANTITY ACCEPTED: 18 M3	QUANTITY REJECTED (EXPLAIN): 0
TOTAL ACCEPTED TO DATE: 18.00	ESTIMATED TOTAL REQUIRED: 18.00	SAMPLE DATA SHEET NO. FOR SAMPLE SENT TO MATERIALS LAB FOR TESTS	

SUPPORTING DATA

- [ ] MATERIALS INSPECTION I- _____ TEST _____ LABORATORY _____
- [ ] MATERIALS LABORATORY INSPECTION LABEL OR MARK.
- [ ] TEST RESULTS CERTIFICATE
- [ ] QUALITY COMPLIANCE CERTIFICATE
- [ ] CONFORMANCE TO EQUIPMENT LIST AND DRAWINGS (EXPLAIN)
- [ ] CERTIFICATE OF MATERIALS ORIGIN FOR PERMANENTLY INCORPORATED IRON OR STEEL MATERIALS AND THEIR COATINGS ON FEDERAL AID PROJECTS
- [✓] FIELD TESTS OR OBSERVATIONS (EXPLAIN)

REMARKS AND EXPLANATIONS, MATERIALS DESCRIPTIONS, DATES OF MANUFACTURE, HEAT AND LOT NOS. DAMAGED OR SUBSTANDARD MATERIALS, REASONS FOR REJECTION AND DISPOSITION OF REJECTED MATERIALS.

Stone Embankment delivered and placed on the project meets all requirements defined in Section 00330.16 of the Standard Specifications. Materials appeared to be hard, durable and visibly well graded based on the control sample furnished prior to placement of the material.

WHERE INSPECTED	DATE	INSPECTED AND PREPARED BY
JOBSITE	6-13-03	Phil Dirt

734-3469 (8-00)

OREGON DEPARTMENT OF TRANSPORTATION
MATERIALS LABORATORY
800 AIRPORT RD. SE SALEM, OR 97301-4798
(503)986-3100
FAX(503)986-3096

Contract No.: C12770 **EA No.:** CON00915 **Lab No.:** 03-002401

Project: SNAKE RIVER (NYSSA) BRIDGE SECTION
Highway:
Contractor: WILDISH
Project Manager: RIC YOUNG Org Unit:
Submitted By: Org Unit:
Material Source: SPEC INDUSTRIES
DATE-Sampled: NA Received: 03/ 5/27 Tested: 03/ 5/31
Type of Test: CERTIFICATION OF SHIPMENT Use: PRECAST PCC ITEMS

Data Sheet No.: NONE
FA No.: X-BRF-STP-S272(17)
Bid Item No.:
Field Insp. No.:
Qty Represented: NA
Reported:

JUN 0 2 2003

PCC PIPE REPORT

Product : Bell & Spigot Pipe
Class : V
Manufacturer : SPEC INDUSTRIES
Invoice No. : 40390
Dated Shipped : 03/ 5/23
Location Tested : SPEC PIPE - EUGENE
Diameter (inches) : 24.0
Length (feet) : 7.5
Shell Thickness (inches) : 3.000
AASHTO Specification : AASHTO M170

Date Made	Date Tested	Number & Type of Pieces	Test No.
5/14	03/ 5/20	15 - 600mm X 2.29m PIPE	1-S-03
5/16	03/ 5/20	16 - 600mm X 2.29m PIPE	1-S-03

Total Quantity This Shipment : 31.0 Total Meters Shipped : 70.9

n authorized company representative has certified that all material indicated above has been ested and found to meet specified requirements.
ll steel or iron that went into the fabrication of these items was produced from domestic rigin. CMO's are on file at the Salem Materials Lab.

29BV @$ 0.

TOTAL CHARGES: $ 0.00

REMARKS:
Material indicated above **DOES** comply with specifications.

*

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF THIS LABORATORY.

FILES ; PROJ MGR: JOE THOMAS ; REG 3 Q.A.C. ; HOLM II INC

ELD USE ONLY
eld # : 1 Bid Item # : 290 Quantity Accepted : 70.9m Total to Date : 70.9m Quantity Rejected : 0
te erified by : _Class X Date Made _AASHTO Spec _Mfg Mark Inspected By : Phil Dirt Date : 6-13-03

Kenneth L Stoneman
STATE CONSTRUCTION AND MATERIALS ENGINEER

** COPY ** OREGON DEPARTMENT OF TRANSPORTATION ** COPY **

MATERIALS LABORATORY
800 AIRPORT RD. SE SALEM, OR 97301-4798
(503)986-3100
FAX(503)986-3096

Contract No.: C12770 EA No.: CON01511 Lab No.: 03-001053
Project: SNAKE RIVER (NYSSA) BRIDGE SECTION
Highway: County: 1
Contractor: WILDISH
Project Manager: RIC YOUNG Org Unit: 5801
Submitted By: JARED SENN Org Unit: JCC
Material Source: 01-001-5 PLEASANT VALLEY QUARRY
Sampled At: QUARRY Sampled By:
DATE-Sampled: 03/ 3/29 Received: 03/ 3/29 Tested: 03/ 4/13
Class/Type: COMPLIANCE

Data Sheet No.: F2120 501
FA No.: X-IM-S006(16)
Bid Item No.: 250, 260
Sample No.: C-2
Qty Represented: ANNUAL COMPLIANCE
Witnessed By:
Date Reported:
Use: CLASS 50 RIPRAP AGGR

Q or G: QUARRY

AGGREGATE LABORATORY REPORT - RRAPAG

Size: CHUNKS

Test	Field	Lab
TM 101 S.E.		
TM 102 L.L.		
TM 103 P.I.		
TM 213 Ttl Frac.		
TM 226 Dust/Clay		
TM 227 Cleanness		
TM 229 Elong pcs		
324 Incin/Ga A/C		
Total A/C		
Retention		
TM 311 Moisture		
TM 204/205		
Sieve	Passing	Passing
63 mm		
50		
37.5		
25.0		
19.0		
12.5		
9.5		
6.3		
4.75		
2.36		
2.00		
1.18		
600 µm		
425		
300		
150		
75		

TM 202 F. Grav.
Bulk:
S.S.D.:
Appar.:
Absorp.:

TM 203 C. Grav.
Bulk: 2.898
S.S.D.: 2.912
Appar.: 2.939
Absorp.: 0.48 %

TM 206 Soundness
RipRap Avg.: 0.8 %
63-37.5: 0.3 %
37.5-19.0: 1.2 %

TM 208 Degrade
Crse Ht: 6 mm
P20: 9.8 %
Fine Ht:
P20:

TM 211 Abrasion

TM 212 Impurity
Plate #:

TM 213 Fracture
19.0:
12.5:
9.5:
6.3:
4.75-2.00:

TM 221 Friables
Wt'd Avg :
37.5-19.0:
19.0-9.5 :
9.5-4.75:
4.75-1.18:

TM 222 Lightweight
Coarse:
Fine:

TM 225 Woodwaste
Lab:
Field:

AASHTO T 288/289
Resist: Ω
pH:

AASHTO T 267
Organic:

ASTM D 512
Chloride:

ASTM D 516
Sulfate:

1 203a,b $
2 206
1 208a

NSM = Not Sufficient Material

TOTAL CHARGES: $ 0.00

REMARKS:
Material represented by sample DOES comply with specifications.

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF THIS LABORATORY.

: FILES ; PROJ MGR: JAY ROUNDTREE ; J.C. COMPTON ; REG 5 Q.A.C.

Oregon Department of Transportation

FIELD INSPECTION REPORT

REPORT NO.	FOR BID ITEM NO.
1	280

PROJECT NAME (SECTION) SNAKE RIVER (NYSSA) BRIDGE	CONTRACT NO. 12770
HIGHWAY CENTRAL OREGON	F.A. PROJECT NO. X-BHF-STP-S007(32)
PROJECT MANAGER RIC YOUNG	

REASON FOR THIS REPORT

- [x] INSPECTION OF MATERIAL
- [ ] MATERIALS ON HAND
- [ ] OTHER (EXPLAIN)

MATERIALS DELIVERED FOR PROJECT

TYPE OF MATERIAL			DATE DELIVERED
RIP RAP			6-24-03
SOURCE OF MATERIAL (MANUFACTURER OR FABRICATOR)		DELIVERED TO (NAME OF CONTRACTOR / SUB CONTRACTOR)	
01-001-5			
QUANTITY DELIVERED	UNIT	QUANTITY ACCEPTED	QUANTITY REJECTED (EXPLAIN)
8	M3	8	NONE
TOTAL ACCEPTED TO DATE	ESTIMATED TOTAL REQUIRED	SAMPLE DATA SHEET NO. FOR SAMPLE SENT TO MATERIALS LAB FOR TESTS	

SUPPORTING DATA

- [ ] MATERIALS INSPECTION I- _____ TEST _____ LABORATORY _____
- [ ] MATERIALS LABORATORY INSPECTION LABEL OR MARK.
- [ ] TEST RESULTS CERTIFICATE
- [ ] QUALITY COMPLIANCE CERTIFICATE
- [ ] CONFORMANCE TO EQUIPMENT LIST AND DRAWINGS (EXPLAIN)
- [ ] CERTIFICATE OF MATERIALS ORIGIN FOR PERMANENTLY INCORPORATED IRON OR STEEL MATERIALS AND THEIR COATINGS ON FEDERAL AID PROJECTS
- [x] FIELD TESTS OR OBSERVATIONS (EXPLAIN)

REMARKS AND EXPLANATIONS, MATERIALS DESCRIPTIONS, DATES OF MANUFACTURE, HEAT AND LOT NOS. DAMAGED OR SUBSTANDARD MATERIALS, REASONS FOR REJECTION AND DISPOSITION OF REJECTED MATERIALS.

Materials meets the requirements of Sec. 02330.10. Visually inspected and appears hard, durable and suitable for intended use .

WHERE INSPECTED	DATE	INSPECTED AND PREPARED BY
JOBSITE	6-24-03	Phil Dirt

734-3469 (8-00)

ODOT CONSTRUCTION/MATERIALS SECTION
QUALIFIED PRODUCTS LIST
APPROVED LIST - NO SAMPLES OR TESTS REQUIRED*
QUALIFIED LIST - ADDITIONAL REQUIREMENTS**
JANUARY 2003

STANDARD SPEC NO.	CATEGORY	PRODUCT NAME	LOCAL REPRESENTATIVE AND/OR MANUFACTURER	EFFECTIVE DATE	PRODUCT NUMBER	LIST	REMARKS
02410.20	CONCRETE PIPE-REINFORCED	AMCOR CONCRETE PIPE	AMCOR (OLDCASTLE) 208/465-0176	08/08/02	2631	A	PLANT IS IN NAMPA IDAHO.
02410.60	POLYETHYLENE PIPE NON WATER-TIGHT	ADS SERIES 85-IB N-12 PIPE WITH INTEGRAL BELLS	ADVANCED DRAINAGE SYSTEMS, INC MIKE WHALEY 415/935-7340 JEFF BECK 425/392-5757 SCOTT GORDANIER 800/733-8523	08/13/98	469	A	APPROVED FOR NON WATER-TIGHT APPLICATIONS. 300 TO 1200 MM DIAMETERS. FILLS OF 300 TO 4500 MM TO TOP OF SUBGRADE.
02410.60	POLYETHYLENE PIPE NON WATER-TIGHT	HANCOR SURELOK F-477	HANCOR, 888/367-7473 JIM WILEY 253/926-3041 SUSAN MCCULLOUGH 360/210-5340	01/25/99	1890	A	APPROVED FOR NON WATER-TIGHT APPLICATIONS. 300 TO 1200 MM DIAMETERS. FILLS OF 300 TO 4500 MM TO TOP OF SUBGRADE.
02410.60	POLYETHYLENE PIPE WATER-TIGHT	ADS PRO-LINK ULTRA WT IB N-12 PIPE. SERIES 65 IB	ADVANCED DRAINAGE SYSTEMS, INC MIKE WHALEY 415/935-7340 JEFF BECK 425/392-5757 SCOTT GORDANIER 800/733-8523	08/08/02	2482	A	DOUBLE WALL, CORRUGATIONS. APPROVED FOR WATER-TIGHT APPS. 12"-48" (300 TO 1200 MM) DIA. HAS REINFORCED BELL.
			ADVANCED DRAINAGE SYSTEMS, INC MIKE WHALEY 415/935-7340 JEFF BECK 425/392-5757 SCOTT GORDANIER 800/733-8523	08/13/98	469	A	DOUBLE WALL, CORRUGATIONS. APPROVED FOR WATER-TIGHT APPS. 300 TO 1200 MM DIAMETERS. 300 TO 4500 MM FILL HEIGHTS.
			HANCOR, 888/367-7473 JIM WILEY 253/926-3041 SUSAN MCCULLOUGH 360/210-5340	01/25/99	1891	A	APPROVED FOR WATER-TIGHT APPS. 100 TO 200 MM DIAMETERS. 300 MM TO 4500 MM TO TOP OF SUBGRADE.
			HANCOR, 888/367-7473 JIM WILEY 253/926-3041 SUSAN MCCULLOUGH 360/210-5340	04/13/01	1891	A	LOOK FOR BLUE WRAP ON SEAL FOR WATERTIGHT VERSIONS. 300 MM TO 4500 MM TO TOP OF SUBGRADE.
			IPEX, INC. 800/663-5864 CHRIS HIEBERT	04/09/98	1508	A	STORM SEWER AND CULVERTS. 200-600MM DIA, 600-4500MM FILL NON INTERSTATE, WATER TIGHT ONLY.
			OWENS CORNING REP:DENNIS ROGERS 310/435-7978 PACIFIC CORRUGATED PIPE CO. REP:LARRY WOOD 503/461-0990	04/11/96	1443	A	COATING FOR CMP. NEEDS TO COAT 100% OF THE INTERIOR AND EXTERIOR.

Oregon Department of Transportation

FIELD INSPECTION

	CONTRACT NO. C12770	REPORT NO. 2 FOR BID ITEM NO 0290
QUANTITY DELIVERED 25.m	QUANTITY ACCEPTED 25 m	QUANTITY REJECTED EXPLAIN 0
VERIFIED ON MATERIALS	☐ HEAT, LOT OR BATCH NO. ☐ AASHTO / ASTM SPEC. NO. ☐ OSHD LABEL OR MARK ☑ OTHER (EXPLAIN)	
SUPPORT DATA *	☐ TEST RESULT CERTIFICATE ☐ QUALITY COMPL. CERTIFICATE ☐ EQUIP. LIST & DRAWINGS ☑ OTHER (EXPLAIN)	
INSPECTED BY Robert Dulka	DATE 9/24/03	

REMARKS
Material Complies with Jan 2003 QPL Sec. 2410.60. Sticker on Pipe Matches APL material description

734-2207 (3-90) * ATTACH TO PROJECT MANAGER'S & REGION'S COPY

*LIST 'A' = APPROVED. MAY BE USED WITHOUT SAM
**LIST 'Q' = QUALIFIED. USE WITH SAMPLING, TE
LIST PUBLISHED BY: ODOT MATERIALS LAB; 800 AI

ECK SPECS.
RODUCTS.

ADS ADVANCED DRAINAGE SYSTEMS, INC.

[redacted]

Contractor is responsible for proper joint assembly before beginning assembly. Contractor should read and familiarize itself with installation procedures as outlined in ADS Product Note 3.115

Step 1: Remove Stretch Film from Gasket Step 2: Check to see that Gasket is Properly Seated
Step 3: Thoroughly clean bell socket and then liberally apply lube to entire bell interior and gasket
Step 4: Align the pipe and push it together on grade, taking care not to allow foreign objects into the joint

[redacted]

CONTACT ADS AT 1-800-821-6710 FOR ANY QUESTIONS REGARDING ASSEMBLY

National Waterworks

OF OREGON

JOBBERS AND MANUFACTURERS AGENTS REPRESENTING LEADING MANUFACTURERS
OF WATER WORKS, SANITARY, PROCESS AND INDUSTRIAL EQUIPMENT

6720 S.W. McEwan Road, Lake Oswego, Oregon 97035
(503) 620-9123

CERTIFICATE OF CONFORMANCE

THIS IS TO CERTIFY THE MATERIALS LISTED BELOW CONFORM TO/AND ARE MANUFACTURED IN ACCORDANCE WITH THE SPECIFIC REQUIREMENTS OF THE APPROPRIATE SPECIFICATIONS FOR THE PRODUCTS SUPPLIED ON OUR SALES ORDER # 9085608 AND YOUR JOB # 03404.

PVC PIPE & FITTINGS

- [ ] SDR 35/ASTM D3034/PS46 ASTM F794
- [x] IPS ASTM D2241
- [ ] CI OD AWWA C900
- [ ] FITTINGS-ASTM D1784-81/D2122-81/D2152-80/D2444-80/ D2564-80/D3212-81/F477-76/ASTM D-3034-85A

DUCTILE IRON PIPE & FITTINGS

- [x] TYTON JOINT PIPE-CEM LINED-ANSI SPEC A21.51 & A21.4
- [ ] FITTINGS-ANSI/AWWA C110/A21.10/A21.11 (AWWA C111) - ANSI/AWWA C153/A21.53-84

- 126.20 on Quantity

SINCERELY,

JOE BIRCH
BRANCH MANAGER

Oregon Department of Transportation	FIELD INSPECTION	
	CONTRACT NO. C12770	REPORT NO. 3 FOR BID ITEM NO 0290
MANUFACTURER OR SUPPLIER NATIONAL WATERWORKS		BID ITEM NAME 600mm SS PIPE
QUANTITY DELIVERED 67 m	QUANTITY ACCEPTED 67 m	QUANTITY REJECTED 0 EXPLAIN
VERIFIED ON MATERIALS	☐ HEAT, LOT OR BATCH NO. ☑ AASHTO / ASTM SPEC. NO. ☐ OSHD LABEL OR MARK ☐ OTHER (EXPLAIN)	
SUPPORT DATA	☐ TEST RESULT CERTIFICATE ☑ QUALITY COMPL. CERTIFICATE ☐ EQUIP. LIST & DRAWINGS ☐ OTHER (EXPLAIN)	
INSPECTED BY James Timothy		DATE 6/18/03
REMARKS		

All agreements and quotations are contingent upon strikes, accidents, or other delays un
Prices subject to change and revision without notice to prices in effect at time of shipm

SEATTLE

OREGON DEPARTMENT OF TRANSPORTATION

CERTIFICATE OF MATERIALS ORIGIN

PROJECT NAME (SECTION)	CONTRACT NO.
Snake RIver (Nyssa) Bridge Section	C12770

BID ITEM NO.	BID ITEM NAME
0290	600 mm Storm Sewer Pipe

DOMESTIC MATERIALS SOURCE (NAME AND ADDRESS)

National Waterworks of Oregon
6720 SW McEwan Rd
Lake Oswego, OR 97035

DOMESTIC MATERIALS DESCRIPTION

Ductile Iron Pipe & Fittings
IPS ASTM D2241
Tyton Joint Pipe Cem Lined - ANSI SPEC A21.51 & A21.4

FOREIGN MATERIALS SOURCE INCLUDING MATERIAL OF UNKNOWN ORIGIN (NAME AND ADDRESS)

FOREIGN MATERIALS (OR OF UNKNOWN ORIGIN) DESCRIPTION AND VALUE OF IRON OR STEEL PRODUCT AS IT IS DELIVERED TO THE PROJECT

This certification is made for the purpose of establishing materials acceptance under the Contract Special Provisions titled 00160.20(a) Buy America. All iron or steel manufacturing processes, including protective coatings, for the domestic materials described above occurred within the United States of America.

Manufacturers' certificates verifying the origin of the above described domestic materials will be kept on file for three years following final payment. Copies will be furnished to the Engineer upon request.

I declare under penalty of perjury under Oregon and Federal laws that the foregoing is true and correct.

AUTHORIZED REPRESENTATIVE*

NAME: Randy Gardiner

TITLE: Project Manager

SIGNATURE: Randy Gardiner

DATE: 6/18/03

COMPANY* NAME AND ADDRESS –

Benge Construction
Tualatin Oregon

Submit a new certificate for subsequent shipments if any of the above information changes.

*May be contractor, sub-contractor or supplier

734-2126 (2-96) ORIGINAL TO PROJECT MANAGER