PROJECT PROSPECTUS

Part 1 — Project Request (Page 1 of 2)

								Key Number:		Jurisdiction:	
Section:	Johnson Creek (Portland) Bridge 11086							Region: 1	Area:	District: 2B	
State Highway No.: NA	Highway Name: SE Foster Rd						Mile Point From: NA	To: NA		Length: (mi) 0.019 mi	(km)
☑ Urban ☐ Rural	City: Portland	MPO: Y	Within UGB	☑ Yes ☐ No	County: Multnomah		Road/Street Name: SE Foster Rd				
Route No.: NA	NHS ☐ YES ☑ NO	HPMS:		FC:	Applicant (if other than State): City of Portland, Office of Transportation						
US Congressional District: 3			State Senate District: 22				State Representative District: 44				

Cost Estimates (x $ 1,000)			Project Components		Right Of Way	
Preliminary Engineering		$222	Grading	X	Files (#)	2
Right Of Way		$0	Paving	X	Hectares (#)	
Utility Reimbursement			Structures	X	Relocations (#)	0
			Signing	X	Acquisitions (#)	
Roadway	$32		Signals		Easements (#)	
Structures	$551		Illumination	X	Work By: State / Consultant / Applicant	
Signals	$0				Preliminary Engineering (S,C,A)	A
Illumination	$200				Construction Engineering (S,C,A)	A
Temp. Protection	$50				Right of Way Descriptions (S,C,A)	A
Const. Contingencies	$171				Right Of Way Acquisitions (S,C,A)	A
Const. Engineering	$171		Project Categories		Constructed By	
Remove Exist Bridge	$22		Environmental Class (1, 2, 3, PCE)	2	☑ Contract ☐ County Force	
Other	$0		Design Category (1-7)	7	☐ State Force ☐ Other	
Total CE and Construction:		$1,198	Work Type Code (1-13)	5	☐ City Force	
Total Estimate:		$ 1,421	Primary STIP Work Type:			
Recommended Let Date By Federal Fiscal Year (Quarter-Year):						

PE Fund:	R/W Fund:	UR Fund:	CE-CN Fund:
PE EA:	R/W EA:	UR EA:	CE-CN EA:

Item	Existing	Proposed
Travel Lanes (#)	1	1
Structures (#)	1	1
Signals (#)	0	0
Bike Way (#)	Y	Y
Average Daily Traffic	8300	15200
Year of ADT	2000	2020
Throughway Y/N	N	N

Define The Problem:

This is a reinforced concrete rigid frame structure over Johnson Creek that was built in 1915 and is nearing the end of its useful life. Current load reating requires posting of the structure which is a problem for a rapidly growing area of Portland because frquent detours for legal loads are necessary. The width of the current structure is narrowerer than whist is required for a travel lane, bike land and shoulders. The channel for Johnson Creek must narrow and bend in order to pass under this structure and the headroom is not sufficient for large flow events.

Describe Proposed Solution: - Attach Sketch Map

City proposes to remove the existing structure and replace it with a new bridge that will be wider and have a higher load carrying capacity. The new structure will have a longer span on a skew that will allow widening and realigning the channel of the creek.

Prepared By:	Date:	OTC Approval Date:	Program Year:	Funding Amount:
X Calvin H. Lee, P.E.	10/12/03			

PROJECT PROSPECTUS

Part 1 Project Request (Page 2 of 2)

Key Number:	Jurisdiction:

Section:	Region:	Area:	District:
Johnson Creek (Portland) Bridge 11086	1	0	2B

Project Justification

This is a reinforced concrete rigid frame structure over Johnson Creek that was built in 1915 and is nearing the end of its useful life. Current load reating requires posting of the structure which is a problem for a rapidly growing area of Portland because frquent detours for legal loads are necessary. The width of the current structure is narrowerer than whist is required for a travel lane, bike land and shoulders. The channel for Johnson Creek must narrow and bend in order to pass under this structure and the headroom is not sufficient for large flow events. City proposes to remove the existing structure and replace it with a new bridge that will be wider and have a higher load carrying capacity. The new structure will have a longer span on a skew that will allow widening and realigning the channel of the creek.

Additional Information For Project Requested By Local Jurisdictions

Responsible Local Office To Be Contacted For The Following Activities:

1. Public Hearing / Citizen Involvement _____ (Office) _____ (Phone)
2. Environmental / Planning _____ (Office) _____ (Phone)
3. Pre-Engineering _____ (Office) _____ (Phone)

This Official Request is From:

City of: Portland and/or _____ County

By: Calvin H. Lee, P.E. By: _____

By: _____ By: _____

By: _____

Applicable Intergovernmental Agreements:

IGA Number:	Jurisdiction Name:	Agreement Date:

Administrative Recommendation

Bridge Prospectus Cost Estimate

		NBIS Bridge No.		
Applicant:	City of Portland, Office of Trans	11086		
Project / Section	Johnson Creek (Portland) Bridge 11086	Region: 1	Area: 0	District: 2B

New Bridge / Roadway Configuration:			Existing Bridge:		
Left Side Rail	1.25	feet	Bridge Length	40	feet
Left Sidewalk		feet	Bridge Width	22	feet
Shoulder	4	feet	Area	880	square ft.
Lane 2		feet			
Lane 1	12	feet	New AC Top Width	24	feet
---CL---		feet	New AC Depth	8	inches
Lane 1		feet	New Base Depth	12	inches
Lane 2		feet	Project Length	165	feet
Shoulder	6	feet	Net Road Work Length	65	feet
Right Sidewalk	7	feet	X-S Side Slope		
Right Side Rail	1.25	feet	AC Avg Width		feet
			Base Avg Width	27	feet
Bridge Length	100	feet	Asphalt Density	140	pounds/ cu ft
Bridge Width	31.5	feet	Base Density	125	pounds/ cu ft
New Area	3150	square ft.	New AC Received	73	tons
			New Base Required	109	tons

COST ESTIMATE:	Quantity	Unit	Price per unit	Cost ($x1000s)
Right-of-Way		Acre		$0
	==Roadway==			
Clear & Grub	$ 10,000	lump sum		$10
General Excavation		cubic yards		$0
Embankment in Place		cubic yards		$0
Pavement Removal	4,800	square feet	$ 2.50	$12
Aggregate Base	109	tons	$ 32.50	$4
Asphalt Concrete	73	tons	$ 56.25	$4
Riprap		cubic yards		$0
Guardrail, Type 2A		feet		$0
Guardrail, Type 3	50	feet	$ 50.00	$3
Guardrail Trans		feet		$0
Flared Terminals		each		$0
			Subtotal Roadway	$32
Structures	3,150	square feet	$ 175.00	$551
Signals		lump sum		$0
Illumination	$ 200,000	lump sum		$200
Temporary Protection	$ 50,000	lump sum		$50
Remove Existing Bridge	$ 893	square feet	25	$22
Other		lump sum		$0
Other		lump sum		$0
			Subtotal Structures	$824
			Subtotal Construction	$856
	==Engineering==			
Construction Engineering	20	percent of construction		$171
Contingency	20	percent of construction		$171
			Subtotal Const. Eng.	$342
Preliminary Engineering				
Consultant	25	percent of construction		$214
State	1	percent of construction		$9
County		percent of construction		$0
			Subtotal PE	$222
			Total Estimate	$1,421

Bridge Project Prospectus
Additional Bridge Information

Applicant: City of Portland, Office of Transportation		NBIS Bridge Number: 11086
Project Name / Section: Johnson Creek (Portland) Bridge 11086	Region: 1	Area: 0 / District: 2B

Funding

Preferred Source:
- [x] OTIA III
- [ ] Federal HBRR

Acceptable Source:
- [x] OTIA III
- [x] Federal HBRR

Heavy Vehicle Usage

	Existing	Proposed
Truck AADT:	4/5 107900	7/20 197600

Fire Truck Usage:
- [ ] YES, at least 25% of trips use bridge.
- [x] No. Less than 25% of trips

Detour

Detour Route:
Length: 4.8 mi
Map: (Please attach map)

Regional Freight Corridor Analysis:

The City of Portland's Transportation System Plan (TSP) identifies this segment of SE Foster Road as a Minor Truck Street, intended to distribute truck traffic from the main freight routes to local destinations. This structure also lies on a designatated City of Portland preferred Truck route has been posted (see attached COVP Truck Map)

Special Consideration:

This structures lies on a City of Portland Designated Emergenty Route map utilized by the Portland Fire Bureau. (see attached Emergency Route Map)

Bridge Project Prospectus

Requested Changes to National Bridge Inventory System (NBIS) Data

(Form Optional)

Applicant: City of Portland, Office of Transportation	Bridge Number: 11086		
Project Name / Section: Johnson Creek (Portland) Bridge 11086	Region: 1	Area: 0	District: 2B

This form must be completed if an agency is proposing a change to the data in the existing National Bridge Inventory System data. The information must be in conformance with the Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges, Report No. FHWA-PD-96-001, December 1995.

Changes proposed to the Detour Length, Average Daily Traffic and Truck Average Daily Traffic will be acquired from other parts of this application and used to compute updated Federal Sufficiency Ratings and in the calculation of the Technical Ranking Score.

The data listed below are used in the calculations of the Technical Ranking Score and proposed changes will be considered. For any changes proposed, attach backup data as to the reason for the change.

Item 26	Functional Classification	
Item 28	A Lanes on Structure	
Item 32	Approach Roadway Width	
Item 43	Structure Type, Main	
Item 51	Bridge Roadway Width	
Item 53	Vertical Clearance over Deck	
Item 54	Underclearance	
Item 55	Minimum Left	
Item 56	Minimum Right	
Item 100	Defense Highway Designation	

Items 58, 59, 60, 62, 67, 68, 69, 71 and 72 are used in the calculation of the Federal Sufficiency Rating. These data elements are supplied by ODOT and are not subject to corrections at this time.

The Inventory Rating (Item 66) must be provided by a Licensed Professional Engineer, based on calculations following ODOT's Load Rating Guidelines. The engineer's calculations must be included.

Item 66	Inventory Rating	

Bridge Project Prospectus

Required Data For Bridges Not Listed in the National Bridge Inventory System (NBIS)

(Form Optional)

Applicant:	City of Portland, Office of Transportation	Bridge Number: 11086		
Project Name / Section:	Johnson Creek (Portland) Bridge 11086	Region: 1	Area: 0	District: 2B

This form must be completed for all bridges submitted that are not on the current National Bridge Inventory System (NBIS). The information must be in conformance with the Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges, Report No. FHWA-PD-96-001, December 1995.

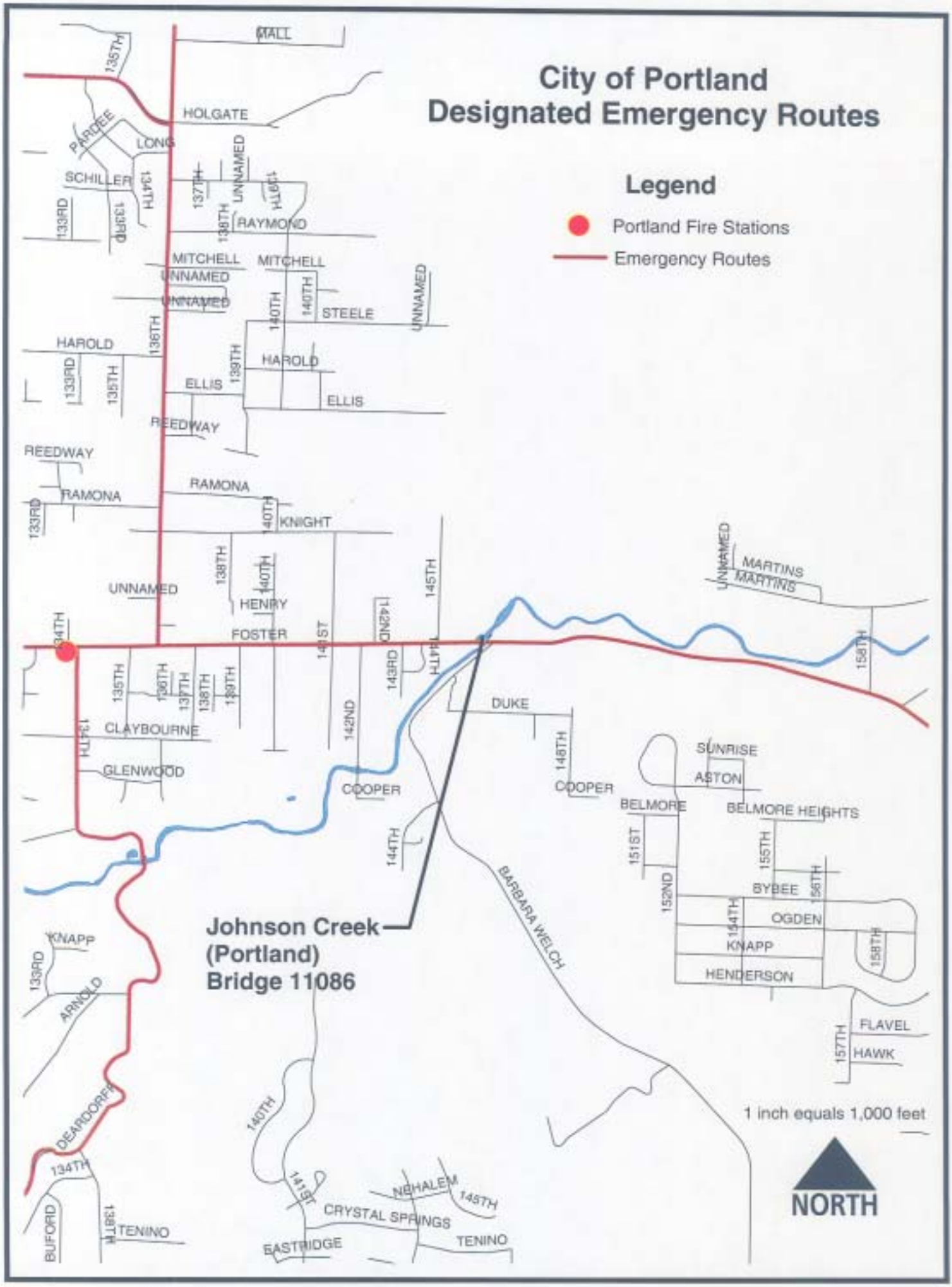
Item 19	Detour Length	
Item 26	Functional Classification	
Item 28	A Lanes on Structure	
Item 32	Approach Roadway Width	
Item 36	Traffic Safety Features	
Item 43	Structure Type, Main	
Item 51	Bridge Roadway Width	
Item 53	Vertical Clearance over Deck	
Item 54	Underclearance	
Item 55	Minimum Left	
Item 56	Minimum Right	
Item 100	Defense Highway Designation	

Items 58, 59, 60, 62, 67, 68, 69, 71 and 72 must be provided by a Certified Bridge Inspector, or a Licensed Professional Engineer. The inspector's evaluation must be included.

Item 58	Deck Condition	
Item 59	Superstructure Rating	
Item 60	Substructure Rating	
Item 62	Culverts	
Item 67	Structural Evaluation	
Item 68	Deck Geometry	
Item 69	Under-Clearance	
Item 71	Waterway Adequacy	
Item 72	Approach Road Alignment	

The Inventory Rating (Item 66) must be provided by a Licensed Professional Engineer, based on calculations following ODOT's Load Rating Guidelines. The engineer's calculations must be included.

Item 66	Inventory Rating	

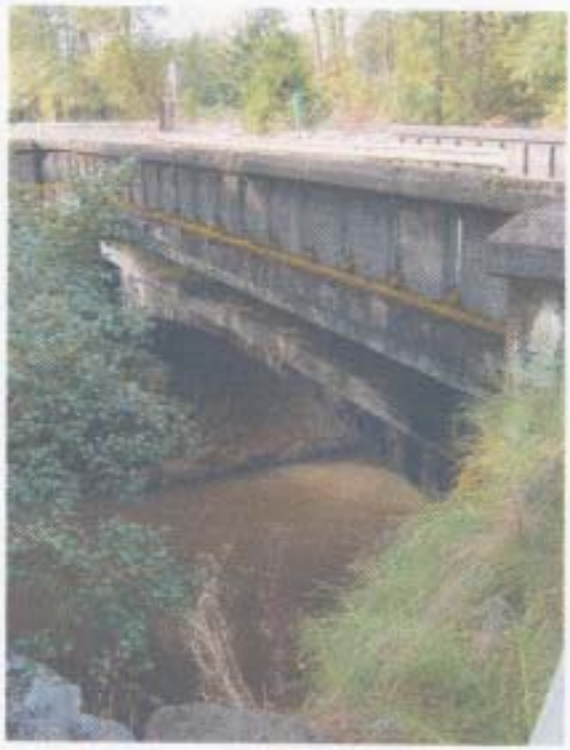

City of Portland
Designated Emergency Routes
Legend
Portland Fire Stations
Emergency Routes
Johnson Creek
(Portland)
Bridge 11086
1 inch equals 1,000 feet
NORTH
MALL
HOLGATE
PARDEE
LONG
SCHILLER
UNNAMED
RAYMOND
MITCHELL
STEELE
HAROLD
ELLIS
REEDWAY
RAMONA
KNIGHT
HENRY
FOSTER
CLAYBOURNE
GLENWOOD
COOPER
DUKE
BARBARA WELCH
SUNRISE
ASTON
BELMORE
BELMORE HEIGHTS
BYBEE
OGDEN
KNAPP
HENDERSON
MARTINS
FLAVEL
HAWK
ARNOLD
DEARDORFF
BUFORD
TENINO
EASTRIDGE
CRYSTAL SPRINGS
NEHALEM

SE Foster Rd over Johnson Creek – Bridge 11086

Looking East

Looking West

SE Foster Rd over Johnson Creek – Bridge 11086



South Side

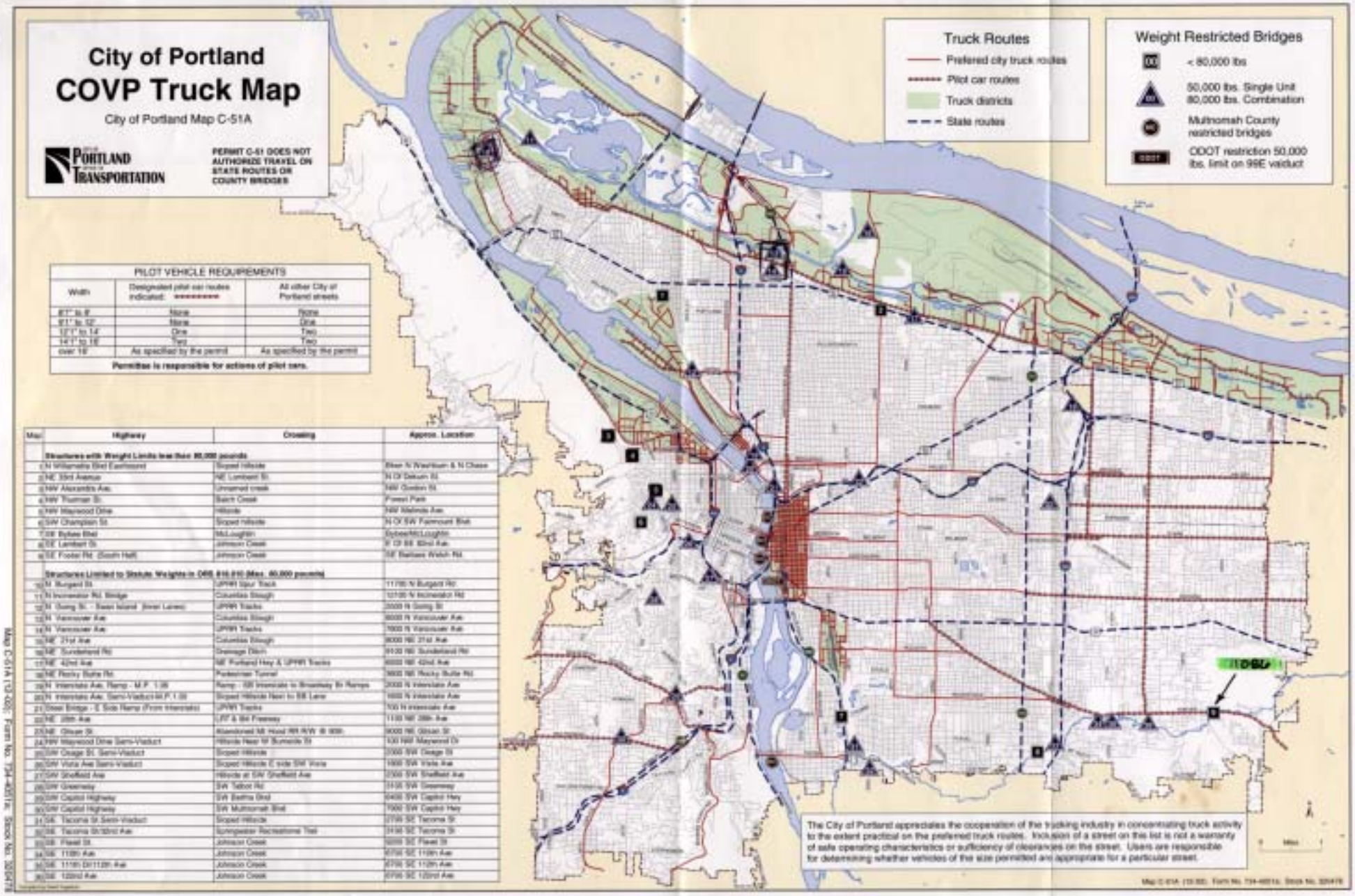
North Side

City of Portland
COVP Truck Map

City of Portland Map C-51A

CITY OF PORTLAND BUREAU OF TRANSPORTATION

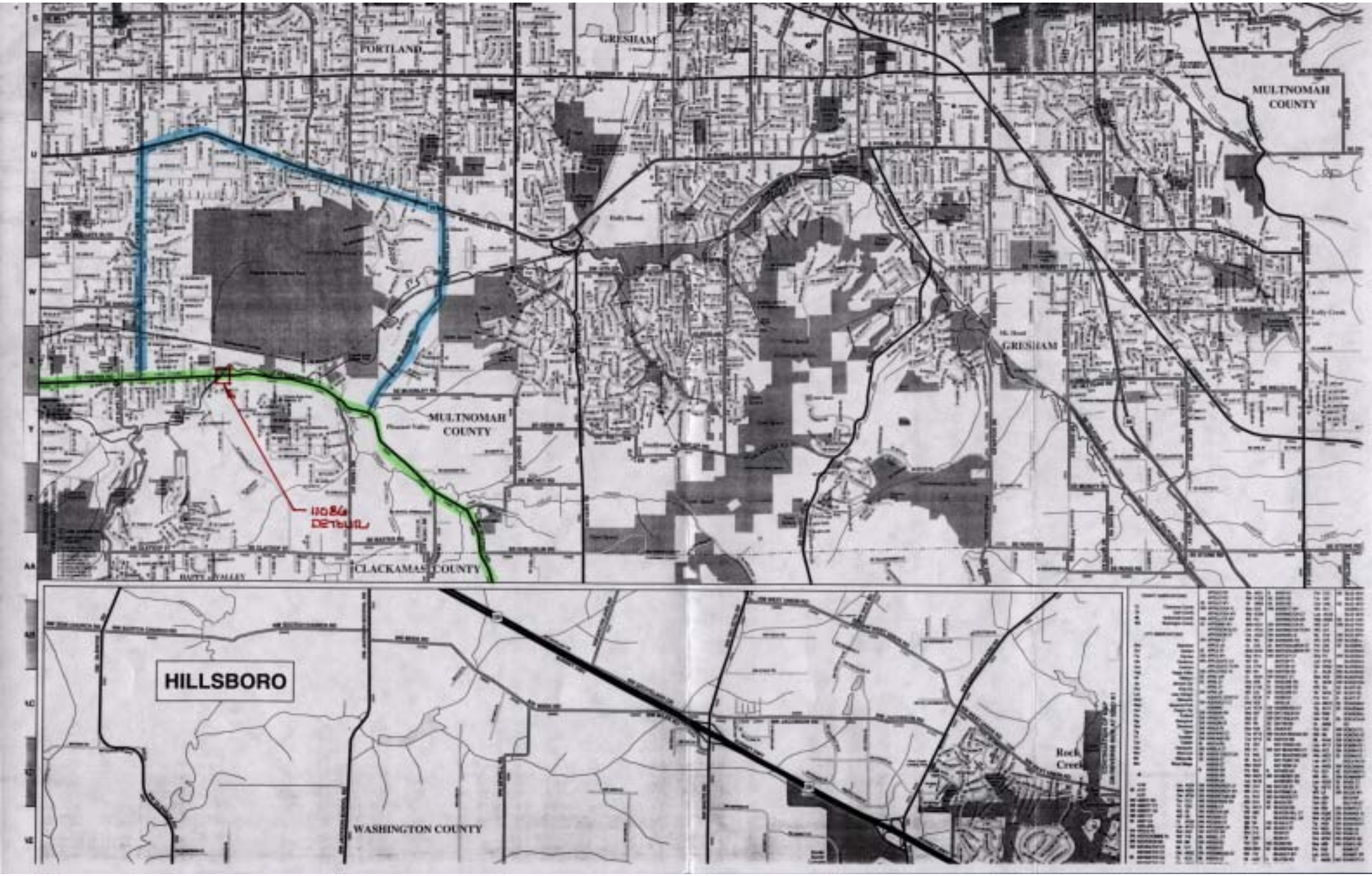
PERMIT C-51 DOES NOT AUTHORIZE TRAVEL ON STATE ROUTES OR COUNTY BRIDGES



PILOT VEHICLE REQUIREMENTS		
Width	Designated pilot car routes indicated: ▪▪▪▪▪▪▪▪	All other City of Portland streets
8'1" to 8'	None	None
8'1" to 12'	None	One
12'1" to 14'	One	Two
14'1" to 16'	Two	Two
over 16'	As specified by the permit	As specified by the permit
Permittee is responsible for actions of pilot cars.		

Map	Highway	Crossing	Approx. Location
	Structures with Weight Limits less than 80,000 pounds		
1	N Willamette Blvd Eastbound	Sloped Hillside	Btwn N Wantham & N Chase
2	NE 33rd Avenue	NE Lombard St	N Of Dekum St
3	NW Alexandra Ave.	Unnamed creek	NW Gordon St
4	NW Thurman St.	Balch Creek	Forest Park
5	NW Maywood Drive	Hillside	NW Melinda Ave.
6	SW Champion St	Sloped hillside	N Of SW Fairmount Blvd.
7	SE Bybee Blvd	McLoughlin	Bybee/McLoughlin
8	SE Lambert St	Johnson Creek	E Of SE 82nd Ave.
9	SE Foster Rd. (South Half)	Johnson Creek	SE Barbara Welch Rd.
	Structures Limited to Statute Weights in ORS 810.010 (Max. 80,000 pounds)		
10	N. Burgard St.	UPRR Spur Track	11700 N Burgard Rd
11	N Incinerator Rd. Bridge	Columbia Slough	10700 N Incinerator Rd
12	N. Going St. - Swan Island (Inner Lanes)	UPRR Tracks	2000 N Going St
13	N. Vancouver Ave	Columbia Slough	8000 N Vancouver Ave
14	N. Vancouver Ave	UPRR Tracks	7600 N Vancouver Ave
15	NE 21st Ave	Columbia Slough	8000 NE 21st Ave
16	NE Sunderland Rd	Drainage Ditch	9100 NE Sunderland Rd
17	NE 42nd Ave	NE Portland Hwy & UPRR Tracks	6000 NE 42nd Ave
18	NE Rocky Butte Rd.	Pedestrian Tunnel	3600 NE Rocky Butte Rd.
19	N. Interstate Ave. Ramp - M.P. 1.06	Ramp - I-5N Interstate to Broadway Br Ramps	2000 N Interstate Ave
20	N. Interstate Ave. Semi-Viaduct-M.P.1.09	Sloped Hillside Next to EB Lane	1600 N Interstate Ave
21	Steel Bridge - E Side Ramp (From Interstate)	UPRR Tracks	700 N Interstate Ave
22	NE 28th Ave	I-5/I & I84 Freeway	1130 NE 28th Ave
23	NE Glisan St	Abandoned Mt Hood RR R/W @ 90th	9000 NE Glisan St
24	NW Maywood Drive Semi-Viaduct	Hillside Near W Burnside St	630 NW Maywood Dr
25	SW Osage St. Semi-Viaduct	Sloped Hillside	2300 SW Osage St
26	SW Vista Ave Semi-Viaduct	Sloped Hillside E side SW Vista	1600 SW Vista Ave
27	SW Sheffield Ave	Hillside at SW Sheffield Ave	2330 SW Sheffield Ave
28	SW Greenway	SW Talbot Rd	3130 SW Greenway
29	SW Capitol Highway	SW Bertha Blvd	6400 SW Capitol Hwy
30	SW Capitol Highway	SW Multnomah Blvd	7000 SW Capitol Hwy
31	SE Tacoma St Semi-Viaduct	Sloped Hillside	2700 SE Tacoma St
32	SE Tacoma St/32nd Ave	Springwater Recreational Trail	3100 SE Tacoma St
33	SE Flavel St	Johnson Creek	9200 SE Flavel St
34	SE 116th Ave	Johnson Creek	8700 SE 116th Ave
35	SE 116th Dr/122th Ave	Johnson Creek	8700 SE 112th Ave
36	SE 122nd Ave	Johnson Creek	8700 SE 122nd Ave

Map C-51A (12-2007) Form No. 734-4051a Stock No. 329478


PORTLAND
GRESHAM
MULTNOMAH COUNTY
GRESHAM
MULTNOMAH COUNTY
CLACKAMAS COUNTY
HILLSBORO
WASHINGTON COUNTY

CITY OF
PORTLAND
OFFICE OF
TRANSPORTATION

Jim Francesconi, Commissioner
1120 S.W. 5th Avenue, Suite 800
Portland, Oregon 97204-1914
(503) 823-5185
FAX (503) 823-7576 or 823-7371
TDD 823-6868

Brant Williams
Director

Eileen Argentina
System Management

Don Gardner
Engineering & Development

Jeanne Nyquist
Maintenance

Richard Steinbrugge
Finance

Laurel Wentworth
Planning

October 14, 2003

Robert Thompson, P.E.
Oregon Department of Transportation
355 Capitol St NE
Salem, OR 97301-3871

Re: "The Oregon Transportation Investment Act" (OTIA III) Bridge Project Applications

Dear Mr. Thompson,

In response to the Oregon Department of Transportation's solicitation for OTIA III bridge projects, the City of Portland would like to submit the following five (5) applications for consideration:

- SE Foster Rd (South Half) over Johnson Creek (#11086)
- NE 33rd Ave over Columbia Slough Replacement (West Half) (#25T12A) **
- NE 21st Ave over Columbia Slough (#25T08)
- N Burgard St (#08686) **
- N Vancouver Ave (#01696)

All application material required may be found enclosed. We ask that those projects marked with ** be set aside for special consideration. If you have any questions, please contact me at (503) 823-7063.

Sincerely,

Calvin H. Lee, P.E.
Supervising Engineer
Bridges and Structures Section
Bureau of Transportation Engineering and Development

c: L. David Hill, Acting City Engineer - no attachments