



Washington State
Department of Transportation

PROJECT MANAGEMENT PLAN UPDATE

SR-522

*Snohomish River Bridge to US 2 Vic.
Widening*

MP 20.41 to MP 24.68

PIN# 152234A



Project Engineer: Mark Allison
Lead Project Manager: Jim Larson
Project Manager: Andrea Burgess
Project Manager: Vanessa Ness
July 2009

Project Team Endorsement

The Project Team Members are requested to respond by email with their endorsement of the Project Management Plan Update to the Lead Project Manager.

Work Plan Endorsement Statement

By committing to this updated Work Plan, the **Project Team Members and Specialty Groups** agree to undertake the duties, responsibilities and directives per **Executive Order E 1032.01** dated **July 1, 2008**.

“We endorse this updated Work Plan and are committed to actively supporting it. We accept responsibility for fulfilling any aspect of the plan that applies to us, including providing resources, actively participating, and effectively communicating. We know what to do and are prepared to act. Our endorsement is an active and positive statement that we are committed to fulfilling the responsibilities designated in this plan.”

Team Member Name	Endorsement <i>Email Received</i>	Role
Mark Allison	<u>8/12/09</u>	Design Project Engineer
Tim Nau	<u>9/4/09</u>	Assistant Design Project Engineer
Jim Larson	<u>8/12/09</u>	Project Manager
Andrea Burgess	<u>9/4/09</u>	Project Manager
Vanessa Ness	<u>8/12/09</u>	Project Manager
Dave Hilderbrandt	<u>8/20/09</u>	Parametrix Project Manager
Rich Zeldenrust	<u>9/4/09</u>	HQ Bridge and Structures Office
Todd Mooney	<u>7/23/09</u>	HQ Geotechnical Office
Dave Lindberg/Steve Strand	<u>9/4/09</u>	Construction Project Engineer
Juan Reyes	<u>9/4/09</u>	Construction Traffic Office
Kerry Ruth	<u>9/4/09</u>	Environmental Services Manager
Steve Shipe	<u>8/27/09</u>	Environmental Services Business Manager
Chris Johnson/Nabil Dbaibo	<u>9/4/09</u>	Region Materials Office

David Peterson/Tina Vincent	<u>7/30/09</u>	Landscape Architect Office
Ron Morton/Steve Russell	<u>8/25/09</u>	Area 3 (Everett) Maintenance Area
Duke Do/Russell Day	<u>8/19/09</u>	Traffic Signing Design
Duke Do/Al Mostowfy	<u>8/19/09</u>	Traffic Electrical Design
Duke Do/Mosen Janka	<u>9/4/09</u>	Traffic ITS Design
Heba Awad	<u>9/4/09</u>	Utilities Coordination
Lorraine Sagdahl	<u>9/4/09</u>	Region Plan Review
Joe Simek	<u>9/4/09</u>	Survey
Paul Kinderman	<u>8/19/09</u>	HQ Bridge and Structures Architect
Maggie Brown	<u>9/4/09</u>	City of Monroe

Management Endorsement

Work Plan Endorsement Statement

By endorsing this Work Plan, the **Executives** and **Senior Managers** agree to undertake the duties, responsibilities and directives per **Executive Order E 1032.01** dated **July 1, 2008**.

“We endorse this Work Plan and are committed to actively supporting it. We accept responsibility for fulfilling any aspect of the plan that applies to us, including providing resources, actively participating, and effectively communicating. We know what to do and are prepared to act. Our endorsement is an active and positive statement that we are committed to fulfilling the responsibilities designated in this plan.”

Name:	Initials	Role
Randy Simonsen	_____	Area Engineering Manager, Sno-King

TABLE OF CONTENTS

Project Team Endorsement	2
Management Endorsement	4
Initiate and Align	3
Project Purpose:	3
Project Description:	3
Team Vision:	3
Team Mission/Assignment:	3
Team Identification/Roles and Responsibilities – See Appendix B	3
Major Milestones	3
Measures of Success	3
Project Boundaries	4
Project Operating Guidelines	4
Within Meetings:	4
During Project Development:	5
Lessons Learned from SR-522 Stage 4 Project	5
Baseline Schedule and Budget	6
Plan for managing the schedule	6
Budget Management	7
Communication Plan	8
Internal Communication	8
Public Communication and/or Involvement	9
Key audiences	10
Key Messages	10
Quality Assurance & Quality Control Plan	10
Change Management Plan	11
Transition & Closure Plan	12

- Appendix A: Project Risk Management Plan Matrix
- Appendix B: Team Identification - Roles & Responsibilities
- Appendix C: Schedule/Major Milestones (also see on-line PMRS Primavera Schedule)

Initiate and Align

Project Purpose:

The purpose of the project is to develop a safe, usable, financially responsible, and buildable highway widening on SR 522 from the Snohomish River Bridge to the vicinity of US 2. WSDOT and the consultant shall work together to accomplish this effort in a timely manner.

Project Description:

This safety improvement and congestion relief project includes the Snohomish River Bridge crossing and three other bridges, modifying the existing 164th Street interchange in Monroe including building a roundabout at the westbound ramps, walls, signals, illumination, wildlife crossing determination, drainage, and wetland and stream mitigation. The project is scheduled for construction starting in 2011.

Team Vision:

Our vision is a widened divided approximately 4.5-mile long freeway that includes two lanes in each direction, four bridges, and one interchange that:

- Is advertised on December 2010.
- Is open to the public in November 2014.
- Is compatible with adjoining SR 522 mainline improvements.
- Meets the safety and mobility needs of the traveling public and adjacent community.
- Is environmentally responsible.

Team Mission/Assignment:

The project team will work collaboratively to develop a preliminary design and environmental documentation laying the groundwork for future permitting, Right of Way Acquisition, and PS&E that is accurate, buildable, and clear. Each of these products will be delivered on time and within budget. The team will ensure coordination with other SR 522 projects. The team will identify opportunities to combine efforts within the project team and with other project partners.

Team Identification/Roles and Responsibilities – See Appendix B

Schedule/Major Milestones – See Appendix C

The project will track the schedule and major milestones in the on-line PMRS Primavera schedule, which will provide an overview and status to the WSDOT Management, Project Team, Legislature, and the public. The schedule will be resource loaded with budget information at the activity task level, and will be updated for changes to logic, budget, and actual start/finish dates twice a month. One of the updates will always coincide with the Legislative deadline for Earned Value reporting with a “Data Date” of the 1st of every month. The major milestones in Appendix C apply to this project and are committed to the Legislature.

Measures of Success

What the team must accomplish for this project to be successful:

- Project Management Plan, schedule, and workforce estimate updates endorsed by the team.
- All team members are committed to the successful completion of the project.

- Manage change effectively.
- Maintain an open, effective and timely communication within the team, with sponsors, other agencies, stakeholders, and the public.
- Understand all stakeholders' needs and concerns, mediating issues to an acceptable conclusion.
- The project is completed on time and within the approved budget. See **Project Budget**
- Project commitment file is clear and complete.
- Project documentation is clear and complete.
- Project PS&E is clear and complete
- Project minimizes and mitigates environmental and social impacts
- Project mitigates current congestion
- Design Risk is evaluated with the appropriate contingency applied
- Design deliverables are check for quality
- Issues that impact the design deliverables are identified, communicated and addressed promptly.
- 95% of all review comments turned in by the established review date
- Confidence Report updated the first day of every month.

Project Boundaries

Boundaries define the limit of the team's decision-making authority and are useful for identifying potential risks or change.

- Project limits MP 20.41 to MP 24.68
- Scope limits, per Final Project Definition and Project Control Report Forms (PCRF) *"Fixed Scope, Budget, and Schedule"*
- Design consistent with WSDOT design standards and policies
- This is a Nickel Project (limited amount of State funds)
- Minimize and mitigate social and environmental impacts
- Project is Permittable & Constructible
- It has a fixed Scope, Budget, and Schedule
- No HOV Lanes/Ramp meters
- Maximize use of existing right of way
- Prior commitments
- Maintain traffic flow during construction
- Design Year 2030
- Endorsed schedule and workforce estimate
- Ad Delivery is December 6, 2010.

Project Operating Guidelines

Within Meetings:

- Begin and end meeting on time
- Respect the agenda
- Listen actively and get involved
- Manage air time constructively
- Be open to new ideas, concepts, and thoughts
- Be willing to reach consensus
- Each member assumes responsibility for the group's progress

- Leave the meeting with a clear plan of the next steps -- who will do what by when

During Project Development:

- Design Office Conduit for communication
 - Request for action thru design office
- Direct contact between Parametrix and WSDOT support groups
 - Establish confidence level then communicate directly updating design office
- Record communication – email, meeting notes, etc.
- Consolidate/Pre-screen information prior to sending to customer to avoid conflicts
- Develop process for major decision
 - Speak with one voice thru design office
 - Bring right people together
 - Contact P.E. for decisions and project focus
- Early notification of changes (No Surprises)
- The Project Engineer will set goals for the project.
- The Design Office will be the lead on the project
- All WSDOT standards and procedures will be respected.
- Deadlines for deliverables will be respected.
- All parties will make clear and timely communication a priority.
- The needs and concerns of all parties will be considered.
- Issues will be documented, assessed, and collaboratively resolved. Project Sponsors will be notified of unresolved issues affecting schedule deliverables, budget, and scope.
- The functional managers will communicate with the Project Manager on issues of significance involving schedule impacts, design standards and deviations, staffing, overtime and project expectations.
- The team leaders will communicate with the Project Manager regarding general project delivery issues.
- All lead role members will communicate constantly to assure that deliverables are compatible with the rest of the project.
- Support groups will provide expertise and deliverables as specified under **Roles and Responsibilities**

Lessons Learned from SR-522 Stage 4 Project

- Outside Agency Coordination
 - Outline WSDOT process/Expectations
 - Pursue establishing written commitment from Agencies with regulatory jurisdiction
 - Emphasize -early regulatory agency input directly guides the design
- Possible MAP team use
- Major scope change impacts all project design aspects
 - Funding changes are a heavy influence
- Positive team chemistry
- Communication
 - Constant/Open/Helpful
 - Early and complete feedback needed from support groups to aid design
- Schedule
 - Reviews need more time to react to late changes
- Early field review with key WSDOT groups

- Specific Construction input is helpful
- Improve coordination
 - Parametrix and WSDOT environmental
 - Define roles of support vs. lead design status
- Computer file sharing
 - Establish filing process and work within protocol
- Obtain permits prior to AD
 - Obtain prior to Region Plan Review milestone
 - Need management support
 - Endorse in writing
- Plans must show all permit issues
- Permits conditions were a moving target/often changed – required re-work
- Bring contractors into design process to aid in problem solving
- Keep Real Estate and Environmental offices updated on design changes

Baseline Schedule and Budget

The schedule and budget are defined in the on-line PMRS Primavera schedule. Team members will provide a scope and budget, identify deliverables and resources using the task planning worksheet, and identify all risks associated with each deliverable.

Plan for managing the schedule

- The schedule will be progressed to the “Data Date”. The “Data Date” is the 1st of every month. It will also be updated at mid month.
- Project Milestone and Deliverables will be reviewed twice a month by the Task Leads and progress/status reports will be communicated to the Design Project Office prior to the “data date” for confidence reporting.
- PMRS 30-day lookahead report will be distributed to the team leaders and/or leads at the weekly team meetings.
- The Design Office will manage the schedule.

Plan for resolving schedule conflict

- The Design Office will be the lead for all civil design elements, constructability reviews, Design Documentation Package, TESC Report, and WZTC.
- The Environmental group will provide duration for all environmental tasks.
- The Construction Office will review and provide concurrence on the construction schedule and the number of working days.
- The Plans Review Office will provide the schedule for PS&E Review, Proof Copy, and Contract Ad and Award.
- Traffic Design will provide the scope, schedule and budget for all traffic design elements.
- HQ Geotech and Region Materials offices will provide the scope, schedule and budget for their items of work.
- HQ Bridge office will provide the scope, schedule and budget for their items of work.

Budget Management

This project is fully funded for Design and Construction. This project is fully funded by the Nickel Funding Package. The following numbers include finds budgeted for floodplain and wetland mitigation banking credits but do not include the roadside restoration phase.

Phase	
PE	\$ 16,868,000
ROW	\$ 5,647,000
CN	\$ 115,774,960
Total	\$ 138,289,960

Construction Budget

- A CRA was performed in June 2006 and the project cost estimate was updated. The construction estimate will be reviewed and updated at the 60%, 90% and 100% design level. A Design Estimate Documentation Package will also be prepared at the 60%, 90%, and 100% milestones for management review.
- The construction cost estimate will be developed in accordance with the November 2007 Cost Estimating Guidance for WSDOT Projects.
- Informal meetings will be held, as necessary, to resolve difference in opinion on the cost estimate. If resolution of an issue cannot be reached, the issue will be escalated to the Project Manager. If needed, further escalation will continue to the Project Management Team.

Preliminary Engineering Budget

- Refer to “Plan for developing the schedule” regarding resource loaded schedule process and baseline.
- Assure potential cost overruns do not exceed authorized funding.
- Managing changes when they occur and ensuring changes are agreed upon.
- Charges from all groups will reflect the correct Work Op Codes
- Overtime charges will need approval by the Project Manager prior to any work
- Project cost to complete should be consistent with the cost shown in PMRS resource loading
- If any change requires additional funds, the change will require approval from Program Management.
- Actual costs of the work performed will be imported into the PMRS schedule monthly from TRAINS, and compared to the budgeted costs.

Communication Plan

Internal Communication

The communication plan for the SR 522 Snohomish River Bridge to US 2 Vic. project establishes standard procedures for the project team to:

- Communicate effectively internally and with sub-consultants, outside agencies, jurisdictions and the public and
- Provide documentation for the decision making on the project.

A diverse array of teams and skills are needed for completion of this project. Team members must clearly understand their roles and responsibilities for communications and documentation as they deliver products and interact with other team members.

Communication Methods and Tools

PMRS/Confidence Report Updates

- All Specialty Group PMRS Confidence Reports will be updated monthly by the 1st day of each month.
- The Design Office will update the Confidence Report and schedule by the 1st day of each month.

Project Team Meetings

Meeting	Who	Frequency	Date/Time	Place
Support Groups Project Status updates	Design Office, PMX, NW Region Support Groups	Monthly	To be determined	TBD
Bridge Design and Geotech status	Design Office, HQ Bridge & Geotech Offices	Bi-weekly	Bi-weekly, 12:30- 2:30 pm	Video Conference – Dayton Room 3B, Bridge Office/Bridge Office
General Project Status	Project Managers	Weekly	10:30-11:30 am	Dayton Room 5B

Agendas and meetings summaries shall be completed for all team meetings. Each summary shall include the time and location of the meeting, the attendees, the conclusions of the meeting and any action items. The summaries shall be distributed to all attendees and the WSDOT and Parametrix project managers if they are not in attendance.

Email

E-mail provides a valuable communication tool but must be used appropriately. The volume of e-mail generated by a project of this size will be substantial. In order to help the team manage the project e-mail, the following points are requested:

- Always include the project name “SR522 Snohomish River Bridge to US2” in the subject line

- Include the appropriate project manager and task manager in the CC: line in instances when the project or task manager is not directly involved in the subject
- Avoid repeated versions of attachments with the same file name
- Transfer large files by using the WSDOT or Parametrix FTP site

Telephone

Team members are requested to take notes of telephone conversations that cover important project matters. The records shall include the parties in the phone conversation, date, time and points of discussion.

Written Correspondences

All outgoing written correspondences; including letters and memos shall be signed by the project manager. Copies of all transmitted materials shall be filed in the office day file and also in the project files.

Public Communication and/or Involvement

Significant public relations risks and opportunities

In this section, describe the risks and opportunities that are most likely to grab public attention. While it's not necessary to list every possible risk, list those that are most likely and would most affect drivers, neighbors and taxpayers. These are the risks that you want to watch most closely during your project. For more details, please refer to the separate communication plan.

Potential issues of significant public relations risks and opportunities for planning and design projects include:

- Landowners that don't want to give up all or some of their land for the project
- Businesses worried about our construction's affect on customer access
- Environmental damage; Snohomish River, wetlands, streams, NGPA, wildlife crossing, county park property...
- Noise, desire for noise walls or quiet pavement, etc.
- Lengthy project schedule or frustration with delays getting the project started
- Discovery of significant cultural resources at the Snohomish River
- Environmental Assessment public meeting
- Residents asking how this project will mesh with the future Monroe Bypass.
- Residents wanting funding for this project shifted to build a Monroe Bypass or improve another section of SR 522.
- Public frustration with the hourglass design between Paradise Lake Road and the Snohomish River Bridge.

Potential issues of significant public relations risks or opportunities for construction projects include:

- Workday traffic disruptions
- Night noise
- Overnight traffic delays
- Traffic delays during special events (Monroe Fair) or holiday seasons
- Major milestones – Snohomish River Bridge, 164th Street interchange & roundabout
- Environmental damage
- Work zone safety concerns or incidents

- We surprise internal and external audiences with: unexpected or delayed milestones, construction mishaps/problems, and budget issues.

Key audiences

- Commuters
- Stevens Pass travelers, Monroe Fair visitors, truck drivers, local shoppers
- City of Monroe
- Snohomish County
- Local media
- Local officials and state legislators
- Local businesses

Key Messages

- We are widening SR 522 to four lanes between the Snohomish River and US 2 in order to increase mobility and safety along this route. We will also build a new two-lane bridge over the Snohomish River immediately downstream of the existing bridge, and add divided median between the Snohomish River and US 2
- We will also add a roundabout at the 164th Street interchange, make culverts fish passable where designated in the plans, and build a wildlife crossing
- This is part of a larger project to improve the entire SR 522 Corridor, from I-5 in Seattle to US 2 in Monroe. WSDOT is committed to making the corridor safer for drivers and to keeping freight and passenger vehicles moving along this busy route.

Project improvements include:

- Widening of SR522 highway from two-lanes to four-lanes
- Four bridges including the new Snohomish River Crossing
- Improvements to existing 164th Street interchange in Monroe including a roundabout at the westbound ramp
- New signals & lighting
- Wildlife Crossing
- New stormwater treatment facilities
- Wetland, Floodplain and Stream mitigation

Quality Assurance & Quality Control Plan

Project WBS work elements were reviewed and the following ones were identified for applicable standards for each product, process, service, and deliverable.

Quality Assurance Control Plan Items

- Reviewers to be identified and assigned.
- The project to be executed in accordance with applicable WSDOT Manuals.
- Communication with team members (may lead to decision documents).
- As much as possible, team members will review and check each other's work
- As much as possible, the Team Supervisors will review and check all work
- As much as possible, the Project Managers will check selected items of work

- Reviews to be scheduled:
 - Plans will be reviewed to establish consistency in the documentation prior to Ad.
 - Scope, Schedule, and Budget will be reviewed periodically for progress.
 - Peer review process at the 60%, and 90% submittals
 - Review by Independent reviewer throughout all phases

Change Management Plan

Change may be encountered during the life of this project. The purpose of the Change Management Plan (CMP) is to establish some basic guidelines for how changes are identified and the appropriate procedures for documenting and managing the changes.

Changes which affect the scope, schedule, or budget of the project will be considered Documentation Level Changes and will be documented on the Project Control Report Form (PCRF). In addition, the team may designate other changes as being documentation level changes which will be documented on the *Change Management Form* kept in the project office.

Change Management Documentation Process

1. Identify Change Issues

- Determine the category or type of change.
- Establish a formal change description.
- Determine the potential impact of the change.
- Document the origin of the change (who initiated it, what precipitated it).
- Identify who may potentially be affected.
- Identify who is responsible for the managing the change.

2. Verify and Analyze the Change

- Evaluate and quantify the impact to the project performance baseline (scope, schedule, and/or budget).
- Does it introduce additional risks to the project?
- Evaluate the effects on other project tasks or deliverables.
- Identify and coordinate with affected specialty groups, consultants, etc.
- Brainstorm, analyze, and prioritize strategies for change management.
- When necessary, consult with subject matter experts.

3. Develop a Mitigation/Recovery Strategy

- What needs to be done, who will do it, and by when?
- Formally establish the scope of the change and direction for incorporating the changed work or conditions.
- Formally establish required adjustments to the project performance baseline.
- Identify level of authority for endorsement.
- Provide appropriate notifications to team members affected by the change.

4. Gain endorsement for the change

- Notify and consult with Region Management, Region Program Management, and Project Control and Reporting regarding the change and its impacts.

- Obtain endorsement from the appropriate level of authority.
- 5. Update the Project Performance Baseline and monitor the effects of change**
- Update the Project Management Plan and Project Performance Baseline to document the change.
 - Identify responsibilities and timelines for carrying out.
 - Monitor and evaluate implementation.
- 6. Communicate changes per this Change Management Plan**
- Notify appropriate team members, management, consultants, stakeholders, and customers as identified in the **Communication Plan** and **Change Management Plan**.

Develop and Apply a Change Management Record

Document Steps 1 to 6 above and retain in project files.

Transition & Closure Plan

Optimal success for this project – realization of the project purpose - requires delivery of a quality product resulting in satisfied customers and conducting a deliberate closure – including an effective “hand-off” to a subsequent phase and team. Elements of a transition or closure plan are identified below.

- This project will be transferred to the Project Construction Office at the award of the contract. The major milestones that will be accomplished are Environmental Permits received, Right of Way certification, and Advertisement (Ad Date).
- Formal review of the project commitment file will occur prior to the Pre-Construction Meeting.
- Design - assist in clarification and making changes to design related issues.
- Environmental - assist in coordinating permit and environmental issues.
- Management - assist in change order review and approval.
- Public Affairs - assist in public coordination efforts.
- Lessons learned will be identified, compiled, documented, and reported for specific project team activities and responsibilities throughout the life of the project.
- All electronic documents will be saved on the Design Office T Drive.
- All hardcopy files will be filed at the Design Office. Filing will be in accordance to the Filing System Manual.
- All CADD/In-Roads files will be archived in accordance with the CAE Archival Process.

Project Title	Snohomish River to 179th (no deferred work) using 50% quantities with unit rates as of July 2009				Value	Variability	Risk Markups	WSDOT Escalation tables built-in.	%	Total Cost CY [\$M]	Total Cost YOY [\$M]	Ad Date	Ⓜ	End Construction date	WSDOT Ovidiu Cretu 360-705-7599
Estimate Date	07/06/09	Target AD date		12/06/10	5%	Mob	10.0%	A/B/A Duration	4Mo	50	155.74	162.75	December 6, 2010	50%	February 16, 2015
Project PIN #	152234E	Estimated CN Duration		42.0Mo	5%	Tax	8.5%	on-WSDOT rat	YOY	60	156.88	163.91	December 9, 2010	60%	March 20, 2015
Last Review Date	08/24/09	Estimated PE Cost		16.87 \$M	5%	CE	10.0%	PE		17.1\$M	70	158.16	December 11, 2010	70%	April 22, 2015
Project Manager	Mark Allison	Estimated ROW Cost		5.65 \$M	5%	PE	13.1%	ROW		5.9\$M	80	159.82	December 15, 2010	80%	May 24, 2015
		Estimated CN Cost		128.86 \$M	5%	C.O.C	4.0%	CN		134.4\$M	90	162.02	December 19, 2010	90%	June 25, 2015

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Risk Identification						Quantitative Analysis					Qualitative Display of the Best Guess Impact				Risk Response Plan			Monitoring and Control		Critical Issue
Risk #	Status	Dependency	Project Phase	Summary Description Threat and/or Opportunity	Detailed Description of Risk Event (Specific, Measurable, Attributable, Relevant, Timebound) [SMART]	Risk Trigger	Type	Probability/Correlation	Risk Impact (\$M or Mo)	Expected Impact (\$M)	Probability (%)	Impact	Risk Matrix (Probability of Occurrence by Expected Impact)	Strategy	ACTION TO BE TAKEN Response Actions including advantages and disadvantages include date	Risk Owner	Risk Review Dates	Date, Status and Review Comments (Do not delete prior comments, therefore providing a history)	Is Risk on Critical Path?	
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	[10a]	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1	Active		Construction	Threat Uncertain construction market conditions	Issue related to size, type of work and competition in the contracting market at time of bid.	High bids on similar projects	Cost	5%	MIN 0.50\$M MAX 6.00\$M Most Likely 1.00\$M	0.09\$M	Very Low	Very Low	Probability VH H M L VL \$	Acceptance	The project cost estimate will reflect current market conditions that will be monitored and based on the bid opening results of other similar large transportation projects.	Design PE	monthly	As of Feb 26, 2009, several large transportation projects have received bids at 10% to 20% below the Engineer's Estimate.	NO	
2	Active		Construction	Threat Indirect costs associated with schedule delays for Snohomish River Bridge Construction (preconstruction and construction)	Minor delays for the Snohomish River Bridge work could cause a one year or more delay to the project schedule. The in-water bridge pier work must be completed within the fish window from July to September. Final design may require additional shafts for Snohomish River Bridge.	Delays during PS&E or acquiring permits; inwater bridge pier construction delays	Cost	25%	MIN 0.00\$M MAX 4.00\$M Most Likely 2.00\$M	0.50\$M	Low	Low	Probability VH H M L VL Mo \$	Avoidance	Geotechnical drilling has been completed early to determine ground conditions. To avoid this risk, the project team has met with the major prime contractors and drilling contractors to review the planned construction strategy. We are implementing the recommendations received into the contract documents.	Design/Const PEs	monthly	The current proposed April 4, 2010 ad date will make it very difficult to complete the inwater work for the Snohomish River Bridge during the first construction season. Minor delays in the construction schedule could extend the overall schedule by a year or more.	YES	
3	Active		Construction	Threat Additional Rehab of Eastbound Pavement	The eastbound pavement has been in need of an overlay for several years but has been delayed due to budget reasons.	Additional failing pavement may be discovered during construction.	Cost	25%	MIN 0.20\$M MAX 2.00\$M Most Likely 1.40\$M	0.33\$M	Low	Low	Probability VH H M L VL \$	Acceptance	The pavement will be monitored by the Construction Project Engineer to determine to additional pavement rehab is required.	Construction PE	Yearly	The pavement will be re-evaluated during the next regularly scheduled Region wide pavement review.	YES	
4	Dormant		Construction	Threat Additional noise walls required	Additional noise walls may be required in the Monroe area where houses have been built adjacent to the highway.	Elected representatives could direct WSDOT to include additional noise walls in the project.	Cost	5%	MIN 0.25\$M MAX 3.50\$M Most Likely 1.20\$M	0.07\$M	Very Low	Low	Probability VH H M L VL \$	Acceptance	The Environmental document has been completed for the project and a FONSI was issued. A noise report was been completed which does not identify any additional areas meeting the Federal requirements for a noise wall.	Design PE	As Necessary	This item is currently dormant.	NO	

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Risk Identification																					Quantitative Analysis					Qualitative Display of the Best Guess Impact					Risk Response Plan				Monitoring and Control		Critical Issue
Risk #	Status	Dependency	Project Phase	Summary Description Threat and/or Opportunity	Detailed Description of Risk Event (Specific, Measurable, Attributable, Relevant, Timebound) [SMART]	Risk Trigger	Type	Probability/Correlation	Risk Impact (\$M or Mo)		Expected Impact (\$M)	Probability (%)	Impact	Risk Matrix (Probability of Occurrence by Expected Impact)		Strategy	ACTION TO BE TAKEN Response Actions including advantages and disadvantages include date		Risk Owner	Risk Review Dates	Date, Status and Review Comments (Do not delete prior comments, therefore providing a history)	Is Risk on Critical Path?															
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	[10a]	(11)	(12)	(13)	(14)	(15)		(16)	(17)		(18)	(19)	(20)	(21)															
5	Active		Construction	Threat Indirect costs associated with delays in completing rock cut area	The rock cut area east of the Snohomish River Bridge has short work windows due to the presence of bald eagle nesting areas nearby. The large amount of rock cut and the short closure hours available to close SR 522 for blasting may cause delays to the project schedule. Rock blasting must be done during daylight hours.	Delays during removal of rock cut material from highway.	Cost	50%	MIN 0.20\$M MAX 1.00\$M Most Likely 0.50\$M	0.27\$M	Moderate	Very Low	Probability VH H M L VL	\$,Mo 	Avoidance	Rock blasting will be completed just prior to sunset during the lowest day time traffic volume time period. Public involvement plans will be required prior to the work commencing to minimize the traffic impacts. Nearby residences will be given the opportunity to relocate to area hotels during the blasting.		Construction PE	As necessary	Construction strategy coordinated with Construction PE, Construction Traffic and PAO during Constructability review December 2008.	YES																
6	Active		Construction	Threat Materials cost escalation; steel, concrete, asphalt	The unit cost prices in the current estimate reflect the lower prices of steel, concrete and asphalt from the last 6 months. These prices may go higher prior to the ad date.	A sharp spike in the bid prices for steel, concrete and asphalt.	Cost	25%	MIN 0.50\$M MAX 2.00\$M Most Likely 1.50\$M	0.35\$M	Low	Low	Probability VH H M L VL	\$ 	Acceptance	The construction cost estimate will be adjusted to account for changes in unit prices.		Design PE	monthly	Bid prices from similar projects will be reviewed on a regular basis.	NO																
7	Dormant		Construction	Threat Geotechnical and soft soils	Soft soils have been identified near the Snohomish River Bridge abutments. Stone column soil improvements will be required.	Additional stone columns may be required to stabilize the abutments and retaining walls.	Cost	75%	MIN 0.20\$M MAX 0.80\$M Most Likely 0.50\$M	0.38\$M	High	Very Low	Probability VH H M L VL	\$ 	Acceptance	Additional stone columns will be required if the soil conditions differ from the Geotechnical borings.		Const PE	quarterly	This risk will be revisited after the Geotechnical Report is completed. The CN estimate has \$4M included for ground improvements	YES																
8	Dormant		Construction	Threat Mitigation Credits for Wetland and Floodplain impacts are not accepted by the regulatory agencies	Wetland and floodplain impacts are planned to be mitigated for by purchasing credits at the wetland mitigation banks.	Bank credits not approved for use by regulatory agencies.	Cost	25%	MIN 0.00\$M MAX 1.00\$M Most Likely 0.30\$M	0.09\$M	Low	Very Low	Probability VH H M L VL	\$ 		The wetland bank site was purchased for \$674k but the site is presently not cleared for use by WDFW due to site issues that have not been addressed by the owner. The CN estimate (the base estimate) has \$900k in it for the floodplain credits					YES																
9	Active		Pre-construction	Threat Two columns at each pier may be needed to resist lateral earthquake loading Risk is to Ad scheule and Engineer's CN estimate	HQ Bridge has identified a risk that due to width of proposed bridge being greater than 40 feet, and increased seismic loading that results, two columns instead of one may be needed to prevent tipping HQ Bridge will not know if one or two columns are needed until February 2010. If two columns are needed, this will extend the timeline needed for permit aquirement (at the minimum as ESA re-initiation will be needed which takes 6 months to acquire). Also the Bridge scour and River hydraulics report will need to be revised to reflect the two columns per pier design. There is some risk the Sonohomish River to US2 Interchange portion of the project will not make December 2010 Ad. Possibly delaying the start of in-water work from Spring 2011 to Spring 2012 instead. Cost risk is to the Engineer's estimate of the contract, basically equal to the inflation value for the length of delay to project during construction phase (assume one year due to missing in-water work window) applied to contract \$\$ cost size for the Snohomish River to US2 portion (approx. 5% to 10% of \$120M).	This risk was re-emphasized during the recent Design Kickoff held July 22nd, 2009.	Cost	25%	MIN 4.75\$M MAX 9.50\$M Most Likely 6.00\$M	1.59\$M	Moderate	Moderate	Probability VH H M L VL	\$,Mo 		Will know in February if two columns are needed or not. Need to find out if building two columns side-by-side in the same HPA window is feasible from the same temporary work trestle that was envisioned in the EA. If not may need to permit for an extra construction season. Had meeting with Environmental on August 10th, we determined NEPA re-evaluation is needed and so is ESA re-initiation and need to revise the mitigation report and JARPA package to reflect added impacts to wetlands and River for two shafts per pier instead of one. This provides the worst case scenario for review by Environmental agencies, if HQ Bridge & Structures decides in February they only need on e shaft/column per pier the Environmental agencies view this as less impact than shown in Environmental documnts which will be acceptable.		Design PE Mark Allison		Decision was made on August 10th, 2009 to revise Environmental documents to show two columns per pier.	YES																

The yellow highlighted cells have to be filled in order for macro to run correctly. The light green highlighted cells may be filled if you know what you are doing. !!!!!!! Existing (Pre-Mitigated) Design!!!!!!Created and Maintained by WSDOT, contact Ovidiu Cretu 360-705-7599, cretu@wsdot.wa.gov																					
Risk Identification							Quantitative Analysis					Qualitative Display of the Best Guess Impact				Risk Response Plan			Monitoring and Control		Critical Issue
Risk #	Status	Dependency	Project Phase	Summary Description Threat and/or Opportunity	Detailed Description of Risk Event (Specific, Measurable, Attributable, Relevant, Timebound) [SMART]	Risk Trigger	Type	Probability/Correlation	Risk Impact (\$M or Mo)		Expected Impact (\$M)	Probability (%)	Impact	Risk Matrix (Probability of Occurrence by Expected Impact)	Strategy	ACTION TO BE TAKEN Response Actions including advantages and disadvantages include date	Risk Owner	Risk Review Dates	Date, Status and Review Comments (Do not delete prior comments, therefore providing a history)	Is Risk on Critical Path?	
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	[10a]	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
10	Active		Construction	Threat Two columns at each pier may be needed to address lateral seismic loading concern. May result in two seasons to build the in-water piers.	Risk to construction schedule and cost due to possible need for two columns at each pier of the Snohomish River Bridge to prevent tipping during seismic loading event. If this is the case this will affect buildability during the fixed HPA timeframe window. Two columns to be built off the same work platform will require the platform to be wide enough to accommodate two drill rigs or to extend the HPA work window, or to complete the work in the following year's HPA work window. The AGC team stated work by the same drill rig with multiple crew shifts not likely to be efficient and is not practical to consider. Cost risk is basically inflation rate for project cost for one year. Cost is captured in risk #9 above thus no risk dollars show here for risk #10.	Risk was re-emphasized during the recent Design kickoff held July 22nd, 2009.	Cost	25%	MIN 0.00\$M MAX 0.00\$M Most Likely 0.00\$M	0.00\$M	0.00\$M	Low	NO RISK	Probability VH H M L VL VL L M H VH Mo Impact		Design PE Mark Allison		Decision to revise the Environmental documents to show two columns/shafts per pier was made August 10th, 2009. Plan to submit for JARPA and Shoreline Permits in February 2010, will seek extension of HPA work window to accommodate second shaft for pier #3.	YES		
11	Active		Construction	Threat movement of Snohomish River bank now means the plan location of pier 2 is in-water work. Threat to PE Ad schedule.	The west bank of the Snohomish River has moved approx. 15 feet in last winter storms. This results in the pier 2 plan location now being in-water work which previously was not identified as in-water work in Environmental documentation.	The project team had pier 2 location staked July 16th and went out to look at its proximity to the River on July 22nd.	Cost		MIN MAX Most Likely	0.00\$M	0.00\$M	NO RISK	NO RISK	Probability VH H M L VL VL L M H VH Impact	Movement of plan location is limited to only 10 feet, which doesn't help us. Any more would result in drastic superstructure design change. The drastic change would mean the girders would no longer be prismatic shape and thus could not be launched, would have to be set on top of temporary support structures instead which would require additional temporary pile work that would have to be placed in the water, meaning the girder placement could only happen during the HPA work window of July and August. This would severely impact CN schedule and cost. Better strategy is to keep pier location where it is and revise the Environmental documents to reflect the in-water work for pier #2. The cost is not reflected here in risk #11 because it is captured by similar risk detailed in risks #9 & #10 above.		Decision to revise Environmental documents to show pier #2 as in-water work was made August 10th, 2009... coincides with similar issue of potential for two columns per pier for the same bridge (risks #9 and #10). If HQ Bridge & Structures design results due in February show one column will work, the Environmental documents do not need to be changed to reflect one shaft/column per pier (will simply be viewed by Environmental agencies as less impact than shown in documents).	YES			
12	Retired		Pre-construction	Threat Right of Way Acquisition	Acquiring r/w for one stormwater pond by relocating a Carwash business and impacting access to remaining businesses, and displacing the fairground parking to make room for another pond	Carwash business would need to be relocated for one pond site. The acquisition from this parcel will also impact access to remaining businesses the 2nd pond will displace about one-third of the fairground parking that has been leasing the state r/w. These ponds need to be	Cost	95%	MIN 0.30\$M MAX 1.00\$M Most Likely 0.50\$M	0.00\$M	0.00\$M	NO RISK	NO RISK	Probability VH H M L VL VL L M H VH Impact	Real Estate Services will be pursuing P&U from carwash property. Project team, RES, Management, and traffic operations will be coordinating with fairground operator to inform them with the project impacts.	Shirif Shaklawun/John Jensen		Setup an internal meeting to plan on how to approach the fairground operator.	YES		

Appendix B
SR 522 Snohomish River Bridge to US 2 Vicinity Widening
Updated Team Identification – Roles & Responsibilities

Roles and Responsibilities/ Work Breakdown

These are the specific roles and responsibilities of the team as a whole; each party’s purpose, key responsibilities, and specific role in lead design status and review design status.

Work Breakdown Item	WSDOT Lead	PMX Lead & WSDOT Review
Project Management (Overall)	✓	
Survey & Basemap	✓	
Design Documentation - PDA	✓	
Environmental Documentation		
• Biology Report		✓
• Mitigation Bank		✓
• Permit Documentation Prep.		✓
• Permit Application	✓	
Drainage		
• Stormwater Report		✓
• River Scour Analysis		✓
• Pre Hydraulic Analysis		✓
• Stream riparian design- landscape	✓	
• Stream design - engineering		✓
• Drainage PS&E	✓	
Utilities Coordination	✓	
HQ Geotech/Region Materials		
• Surfacing Report	✓	
• Updated Geotechnical Report	✓	
• Ponds (Geotech. Investigations)	✓	
• Soils investigations	✓	
• Foundations	✓	
Bridge & Minor Structures	✓	
• Wall design and PS&E		✓
• Bridge PS&E	✓	
Traffic Design		
• Electrical Design and PS&E	✓	
• ITS Design and PS&E	✓	
• Signing Design and PS&E	✓	
Roadway Design		
• Independent Alternative Analysis		✓
• Cost Estimate	✓	
• Roadway/Civil PS&E	✓	
• Landscape Design and PS&E	✓	

Right of Way		
• Right of Way Plans		✓
• Real Estate Services	✓	

The following is a list of the participants and their roles and responsibilities for the above items.

Regional Administrator:

Lorena Eng

- Project Sponsor
- Communicate project progress to stakeholders and WSDOT Headquarters.

Area Engineering Managers (EM):

Design EM/Construction EM

Randy Simonsen/Messay Shiferaw

- Project sponsor
- Provide guidance on policy issues
- Provide oversight of the PMP, scope, schedule, and budget
- Review and approve the design documentation package
- Work with stakeholders to resolve any issues or roadblocks
- Review and approve project specific Special Provisions.

City of Monroe:

Managing Engineer

Maggie Brown

- Review and provide comments on elements of the project within City limits
- Issue any necessary permits.

Bridge and Structures Office:

Design Manager

Rich Zeldenrust

Architect

Paul Kinderman

- Provide PS&E for bridges
- Review and approve architectural treatments for Bridges and Walls in consultation with NWR Landscape Architect
- Provide schedule and cost estimate for bridge office design work.

HQ Geotech/Region Materials Office:

Region Materials Engineer

Chris Johnson

Asst. Region Materials Engineer

Nabil Dbaibo

HQ Materials Office

Todd Mooney

- Region and HQ drill crews will complete all remaining borings for bridges, walls, luminaires, signals, and drainage ponds
- Review and approve updated soils information required to complete the design as needed
- Monitor geotechnical instrumentation, including slope indicators and piezometers as needed
- Provide an approved and stamped Geotechnical Report
- Conduct pavement investigation to support the design of the project
- Provide approved and stamped Surfacing Report
- Coordinate with the Geotechnical Branch and Pavement Design Branch of the HQ's Material Lab
- Provide EEP Materials Lab Concurrence
- Provide recommendation for wall foundation (retaining, noise)

- Provide Summary of Geotechnical Recommendations for inclusion in the 100% Special Provisions
- HQ and Region Materials offices will provide to the Design office a scope of work, schedule and cost estimate for completing their items of work.

Communications:

Manager *Jamie Holter*
Public Information Officer *Mike Murphy*

- Respond to inquiries from the public via e-mail and telephone
- Coordinate with Design Office to create and implement project webpage, fliers, and Communication Plan – External Communication
- Create and maintain website
- Manage media relations
- Create and distribute flyers, video, folios, and news releases, as necessary
- Manage & coordinate public meetings/hearings.

Construction Office:

Project Engineer *Dave Lindberg*

- Construction Engineer for this project during construction
- Participate in brainstorming ideas for construction access and traffic control
- Provide guidance and advice during the design phase to the Project Delivery Team on constructability issues
- Review and comment on Contract PS&E submittals
- Provide review and/or concurrence of estimate at 60%, 90%, and PS&E Review and provide written comments and explanations for estimate items not agreed with
- Review and approve project specific special provisions
- Review Environmental Compliance Notes
- Review Traffic Control estimate and provide checklist
- Review and comment on the construction schedule and the number of working days
- Review and comment on items in the Quality Assurance Control Matrix.

Construction Traffic:

Manager *Bonnie Nau*
CTCO Engineer *Juan Reyes*

- Provide guidance and approval of the Work Zone Traffic Control Strategy
- Provide information for and review of the traffic control plans
- Assist in identifying traffic control related concerns/issues
- Assist/facilitate coordination of projects within the area
- Provide allowable closures hours
- Review and comment on PS&E submittals.

Design Project Office:

Project Engineer *Mark Allison*
Assistant Project Engineer *Tim Nau*
Project Managers *Jim Larson/Andrea Burgess/Vanessa Ness*

- Design oversight of the project
- Project Engineer will stamp the design office portion of the contract plans
- Manage and update the Project Management Plan and update the risk matrix on a monthly basis

- Communicate project progress and risks to executive management
- Maintain the direction of Purpose and Mission
- Sets goals and provide guidance and advice
- Work with local agencies to resolve any issues or roadblocks
- Maintain/monitor the schedule and budget and update/present monthly Region confidence reports
- Respond to public and business inquiries regarding the project, including making presentations to stakeholders in public settings
- Manage and administer the consultant design contract
- Liaison between the Project Delivery Team and the Management Team.
- Provide quarterly project updates for the Gray Notebook and the on-line Quarterly Project Report (QPR).

Design Team:

WSDOT Design Project Manager

Jim Larson

Consultant Project Manager

Dave Hilderbrandt “PMX”

- Coordinate design team operations and incorporate products from specialty groups to the project management plan, design file, PS&E, and technical reports as needed.
- Design oversight: including meeting requirements of the design manual, other manuals, and the team mission.
- Provide technical advice regarding individual design elements and maintain project base map
- Develop and provide project information as needed by specialty groups
- Bring concerns from the design team to the management team
- Update the design team on decisions/recommendations of management
- Update the Design documentation, Base Maps, Utility Coordination, construction schedule, basemap, hydraulic report updates, and PS&E
- Coordinate with Environmental office regarding environmental and permitting issues
- Coordinate with Local Agencies for early project input and concerns
- Coordinate constructability review meetings
- Prepare displays for public meetings
- Provide a design & PS&E deliverable, including non-standard retaining walls, which is within scope, schedule, and budget.

Environmental Services:

Manager

Kerry Ruth

Environmental Permits:

Permit Lead

John Maas

Environmental Coordinator

Linda Cooley

Environmental Technical Advisor

John Bennett

- Provide guidance and review of consultant JARPA drawings, mitigation memo, biology report and inclusion in JARPA application
- Provide guidance and recommendation to team on environmental regulatory issues and mitigations ratios
- Negotiate and obtain updated/additional environmental permits, except noise variances, as needed
- Provide environmental documentation and applicable permits in time for project AD

- Communicate with the appropriate State, Local, and Federal Agencies to obtain the appropriate permits required
- Coordination with FHWA, HQ Environmental, Resource Agencies, Tribes, and Design Office
- Inform the design team in a timely manner what information will be needed at what times to ensure that permits are received on schedule
- Provide guidance and review of Environmental Compliance Notes
- Provide Environmental Compliance Notebook to Construction.

Environmental Air/Acoustics/Energy Program:

Manager

Jim Laughlin

- Obtain Noise Variance for night work from City of Monroe and Snohomish County
- Provide Noise Variance special provision for PS&E
- Be the primary contact with local jurisdictions granting noise variances/exemptions
- Participations in public meetings and provide response to public inquiries
- Provide QA/QC on any proposed noise when design is finalized.

Environmental Biology Program:

Manager

Brian Bigler

Biologist

Rob Thomas

- PMX will provide wetland biology report with WSDOT review
- Coordinate use of Snohomish Basin Mitigation Bank for wetland mitigation
- PMX will develop Wetland Mitigation Report with review by WSDOT
- PMX will develop Stream Mitigation Report with review by WSDOT
- Advise the Design Team regarding biology issues
- PMX will complete Talent ditch determination/memo with review by WSDOT
- Provide RFQQ package for public bid for wetland, floodplain and stream buffer mitigation bank credits.

Environmental Hydraulics Program:

Manager

Erik Hansen

Hydraulic Engineers

Nick Abedin/Yared Bereded-Samuel

- Provide guidance to Design Team regarding highway drainage and Stormwater runoff issues
- Review and approve Hydraulic Report Type A
- Liaison between Design Office and HQ Hydraulics
- Review and comment on PS&E submittals
- Attend meetings (constructability/consultation, field visits).

Landscape Architect

Manager

David Peterson

Project Lead

Tina Vincent

- Provide guidance on architectural issues for walls, etc.
- Provide an Architectural Guidelines Report
- Update permit drawing packages as needed
- Provide stamped PS&E deliverables which are within scope, schedule and budget for temporary impacts, 5 ponds and 2 infiltration trenches
- Provide stream mitigation plans and specifications for the project as needed.

Maintenance Office Area

Superintendent

Ron Morton

Assistant

Steve Russell

- Provide guidance and advice during the design phase to the Project Delivery Team on maintainability issues
- Review and comment on 60%, 90%, and 100% submittals
- Provide assistance on the identification of existing facilities
- Provide assurance that the concepts of “on time and on budget” and “constructed with regard to the best interests of the public” are not mutually exclusive.

Planning, Design and Operations:

Manager

Ramin Pazooki

Design Documentation

Leslie Barben-Price

Agreement Writer

Kathy Eldred

- Obtain necessary construction permits and/or detour agreements and/or general agreements from Snohomish County and Cities within project limits as needed
- Communicate to the project office new developments that will change the roadway geometrics on this stretch of roadway
- Review, process, and record the Project Development Approval phase of the Design Documentation Package
- Coordinate with the Area Engineering Manager, Assistant Regional Administrator, and Assistant State Design Engineer regarding design issues.

PS&E Review Office:

PS&E Review Office Manager

Jack Schindler

Reviewer

Lorraine Sagdahl

- Review of Plans, Specifications, and Estimates (PS&E) at 60%, 90%, and 100%
- Preparation and advertisement for PS&E packages, including bid opening, award and contract execution
- Review and preparation of addenda
- Guide design team in developing special provisions & E-Base cost estimate
- Provide project status report.

Program Management:

Program Delivery Manager

Pani Saleh

Nickel Program Manager

Lam Nguyen

- Provide oversight of the schedule and budget for program delivery
- Participate in securing necessary funds
- Approve Project Control Report Forms (PCRF) as needed.

Real Estate Services

Manager

John Jensen

- Provide input and data (title information, permits, etc.) to the Design team, Environmental team, Utilities team, and others
- Appraise property and/or property rights
- Acquire the necessary property and/or property rights (including access)
- Communicate and coordinate with other teams to clear right of way
- Provide R/W Certification prior to Ad.

Right of Way Plans:

Manager

Mary French

- Review all aspects of Right of Way, Sundry Site, Access Hearing, and other plans associated with the acquisition of property.
- Organize completed ROW Plans review package and submit to HQ for final review and approval.

Right of Way Update and Land Survey Office:

Manager

Joe Simek

Office Engineer

Mark McDonald

- Provide general pick-up and spot survey of missing elements for the Design office as requested
- Assist in preparation of Right of Way, Sundry Site, Access Hearing, and other plans associated with the acquisition of property
- Guidance in Survey property corners & monument recording.

Traffic Design Office:

Design & Construction Traffic Engineer

Brian Dobbins

Asst. Traffic Design Engineer

Duke Do

- Is responsible for PS&E development of signing, illumination, signals, and ITS PS&E elements of the subject project
- Interprets and applies State/WSDOT/Region policy, standards and practices regarding signing, illumination, signals, and ITS PS&E elements
- Provides Professional Engineer stamp on work produced by the Traffic Design Office
- Attends Area Confidence Report Meetings
- Maintain the project scope, schedule, and budget
- Will provide a scope, schedule and budget to the Project Design Office for all elements of work planned to be completed by the Traffic Design Office.

Sign Design Team Leader

Russell Day

- Supervises the preparation of PS&E for sign design deliverables on WSDOT projects
- Schedules, assigns, and tracks design work for the design team
- Supervises the review or reviews work produced by design team
- Supervises the review or reviews PS&E for sign design deliverables
- Communicate design process status (obstacles encountered and data required) to Design Office.

Sign Designer

John Holdren

- Prepares plans, specifications, and estimates (PS&E) for Traffic sign design deliverables for WSDOT projects within scope, schedule, and budget
- Reviews PS&E signing and/or design compatibility with these items for compliance with current State and Region design standards and practices
- Completes research work to obtain “as-built” information and conducts field review to verify site conditions, as-built information and base map plans.

Electrical Design Team Leader

Al Mostowfy

- Supervises the preparation of PS&E for electrical design deliverables on WSDOT projects
- Schedules, assigns, and tracks design work for the design team
- Supervises the review or reviews work produced by design team

- Supervises the review or reviews PS&E for sign design deliverables
- Communicate design process status (obstacles encountered and data required) to Design Office.

Electrical Designers

Soth Kov/Ahmad Schafi

- Prepares plans, specifications, and estimates (PS&E) for Traffic electrical (illumination and signals) design deliverables for WSDOT projects within scope, schedule, and budget
- Reviews PS&E signing and/or design compatibility with these items for compliance with current State and Region design standards and practices
- Completes research work to obtain “as-built” information and conducts field review to verify site conditions, as-built information and base map plans.

ITS Team Leader

Mosen Janka

- Supervises the preparation of PS&E for ITS design deliverables on WSDOT projects
- Schedules, assigns, and tracks design work for the design team
- Supervises the review or reviews work produced by design team
- Supervises the review or reviews PS&E for sign design deliverables
- Communicate design process status (obstacles encountered and data required) to Design Office.

ITS Designer

Phuc Tran

- Prepares plans, specifications, and estimates (PS&E) for Traffic ITS design deliverables for WSDOT projects within scope, schedule, and budget
- Reviews PS&E signing and/or design compatibility with these items for compliance with current State and Region design standards and practices
- Completes research work to obtain “as-built” information and conducts field review to verify site conditions, as-built information and base map plans.

Utilities Office:

Utility Engineer

Don Wills

Project Utility Engineer

Heba Awad

- Coordinate utility locates and utility plan survey requirements with the design office and utilities as necessary to accurately identify potential utility impacts
- The Utility Accommodation Team evaluates and authorizes the installation of utilities and other facilities or activities within the state highway right of way.
- The Project Utility Team coordinates the project needs with the utility companies. Areas of responsibility include utility locates, utility relocation, subsurface utility engineering, utility agreements, control zone guidelines compliance, and utility service agreements.
- Update design office with utility as-builts as needed
- Coordinates all utility agreements required for project.

