I-70 Mountain Corridor PEIS Cost Estimating Technical Report August 2010 Reissued March 2011 Cost Estimating Technical Report

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Section 1. Introduction

This Estimating Methodology Report was developed by the J.F. Sato & Associates team, the project consultant, as a guide for preparing capital cost estimates for the I-70 Mountain Corridor project during the development of the I-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS) prepared in 2004. This has become a working document as the project progressed from the Draft PEIS to the Final PEIS being published in 2010. The document has been modified to account for: 1) modifications in the project alternatives and 2) changes in escalation and other unit price considerations between 2004 and 2010.

1.1 Future Costs are Uncertain

The analysis assumes a 2010 capital cost for the Preferred Alternative Maximum Program of Improvements at \$11.2 million, which is considered the best-case estimate. The ultimate cost of the alternative will be a function of the year of construction and the actual extent and effects of numerous project risks. Project risks run the gamut of political, managerial, engineering, and environmental issues. These risks as well as increases in inflation can potentially result in a doubling of project costs at implementation. For example, escalation alone (assuming an increase of 4% per year) would result in an 80% increase in costs after 15 years, or a 2025 date of delivery. Examples of possible risks are given in **Table 1** below:

Category	Generic Examples of Project Risk
Political Risk	Loss of corridor governance
	 Loss of community support for the Programmatic Agreement
	Change in administration(s)
	Perception of inequity of service or impacts
	 Inability to gain support for increases in local taxes or user fees
Managerial Risk	Procurement risks
	Availability of funding
	Uncertainities of funding
	Project delay
	Inability to raise a local match
Engineering Risk	Increase in materials cost
	Acquisition of technology
	Unknown conditions
	Lack of design information at planning
	Under-estimated quantities
Environmental Risk	Delay in receiving a Record of Decision
	Changes in regulations
	Increase in mitigation costs

Table 1. Categories and Examples of Project Risk

On large complicated construction projects, it is common to perform quantitative risk assessment studies to evaluate the probabilistic cost at the predicted year of expenditure (YOE) (YOE is typically measured at the mid-point of construction). These studies work by having a team of experts look at the best case versus worst case of each line item cost in the estimate. Similar best case – worst case estimates are prepared for each line item duration (measured in number of days) in the project schedule. These range estimates are then placed in a Monte Carlo model to develop a series of probable outcomes, or levels of confidence. The higher the level of confidence (LOC) the better the change that the budget (or the

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schedule) will not be over-run. However, with the higher LOC, the budgets get higher and the schedules longer.

A Colorado Department of Transportation (CDOT) sponsored *Cost Validation and Risk Assessment* (*CVRA*) – *I-70 Mountain Corridor Mileposts 116 to 260* (CDOT, February, 2007) suggests on page 5 that the Highway and Advanced Guideway System elements would, assuming an 80 % level of confidence, range from \$7 to \$9 billion and \$18 to \$20 billion in YOE dollars, respectively (this document is a draft report that was never finalized based on the most recent Federal Highway Administration guidance that does not require quantitative risk based cost estimate for a Tier 1 project). This results in a cost for the Preferred Alternative from \$25 to \$29 billion in YOE dollars, which according to the CVRA, is 2032 for the highway element and 2037 for the Advanced Guideway System element. The study cites that these estimates are considered to be in the most "most likely range". An 80% level of confidence means that there is a 20% chance that the predicted cost would be exceeded, but an 80% chance that cost would be lower for the Preferred Alternative.

There is also a measure called the "mid-80% confidence interval" which is defined by a reasonable lower bound (the 10th percentile) and a reasonable upper bound (the 90th percentile). Thus, there is only a 20% chance that the total cost will fall outside this range. Using this assumption, the CVRA states that the total cost of the highway element will be between \$5.4 and \$12.0 billion in YOE dollars. The respective numbers for the Advanced Guideway System alternative would be between \$13.8 and \$30.7 billion. Because the spread in values is so great using this measure, the "most likely range" defined above is considered more reasonable.

Any of the alternatives evaluated in the PEIS would be subject to uncertainty and escalation. All of the Action Alternatives would be Mega-Projects if implemented at one time, involving complicated environmental, procurement, and constructability challenges. At the PEIS level of analysis, engineering, schedule, and market conditions are not well defined. Cost risk and escalation for the highway element of the Preferred Alternative was estimated at 191% at a 90% level of confidence; the respective values for the Advanced Guideway System element were 246%, meaning that it likely that any of the Action Alternatives evaluated in the PEIS would be about twice the 2010 cost. Assuming just escalation project costs can be expected to double every 18 years assuming an inflation rate of 4%.

It is also probable that government revenues will track fairly close to increases in the consumer price index (CPI), somewhat mitigating the effects of construction cost escalation. Historically, construction inflation has been slightly higher than increases in the CPI.

1.2 Requirements for Financing

Assuming the lower \$11.2 billion estimate in (2010 dollars) annual capital commitments would range from \$571.4 million to \$687.6 million per year assuming a cost of money of 3.0 to 4.5% per year and a 30 year bond, should CDOT finance the project. Statewide, CDOT's current budget for all programs is approximately \$1 billion, with much of funds committed to maintaining system quality and the safety of the traveling public. Looking into the future, CDOT has about 50% of the funds required to fulfill the requirements of the *2035 Statewide Transportation Plan* (Plan). The CVRA predicts that the highway and Advanced Guideway System elements would be constructed in 2032 and 2037, respectively – thus the impact of escalation is predicted to have the greatest affect to cost increases.

Section 2. Estimating Methodology

2.1 Level of Accuracy

Table 2 presents the definition and accuracy of project cost estimates at different points in the project cycle. For Alternatives Analysis and National Environmental Policy Act (NEPA) documents, the engineering team used what the American Association of Cost Engineers (AACE) define as a Class 4, or Conceptual Estimate. A Conceptual Estimate is used when the project definitions of the alternatives are incomplete due to a lack of engineering design. For a Conceptual Estimate, Engineering is assumed to be from 1% to 15% complete. For the I-70 Mountain Corridor the engineering differed geographically depending on the availability of data. In general, the level of engineering was assumed to be 5% to 10% complete. However, a Conceptual Estimate is appropriate for the screening of project alternatives in a NEPA application. Because the estimates, can be anywhere from a -30% to a +50% level of accuracy, AACE cautions that it is inappropriate to use the Conceptual Estimate for budgetary purposes.

	Primary Characteristic		Secondary C	haracteristic	
ESTIMATE CLASS	LEVEL OF PROJECT DEFINITION Expressed as % of complete definition	END USAGE Typical purpose of estimate	METHODOLOGY Typical estimating method	EXPECTED ACCURACY RANGE Typical variation in low and high ranges [a]	PREPARATION EFFORT Typical degree of effort relative to least cost index of 1 [b]
Class 5	0% to 2%	Concept Screening	Capacity Factored, Parametric Models, Judgment, or Analogy	L: -20% to -50% H: +30% to +100%	1
Class 4	1% to 15%	Study or Feasibility	Equipment Factored or Parametric Models	L: -15% to -30% H: +20% to +50%	2 to 4
Class 3	10% to 40%	Budget, Authorization, or Control	Semi-Detailed Unit Costs with Assembly Level Line Items	L: -10% to -20% H: +10% to +30%	3 to 10
Class 2	30% to 70%	Control or Bid/ Tender	Detailed Unit Cost with Forced Detailed Take-Off	L: -5% to -15% H: +5% to +20%	4 to 20
Class 1	50% to 100%	Check Estimate or Bid/Tender	Detailed Unit Cost with Detailed Take- Off	L: -3% to -10% H: +3% to +15%	5 to 100

Table 2. Classifications of Cost Estimates

2.2 **Project Contingency**

Project contingencies are used to help mitigate against uncertainty at difference phases of project estimating. There is a general agreement that project contingencies should be from 30 to 40% at Conceptual Estimate, 30% at Preliminary Engineering (30% design), 20% at Final Design (90% design), and 10% at the time the project is bid for construction. For the purposes of the I-70 Mountain Corridor, a contingency of 30% has been assumed based on industry standards for a conceptual estimate.

2.3 Approach to Estimating

The construction cost for the alternatives and their sub-parts are tabulated on excels spreadsheets. There are six main items that were determined through the use of AutoCAD and Eaglepoint (a roadway modeling software):

- Structures (paid for in units of square feet)
- Walls (paid for in units of square feet)
- Earthwork (paid for in units of cubic yards)
- Pavement (paid for in units of Tons)
- Base Course (paid for in units of cubic yards)
- Barrier (paid for in units of lineal feet)
- Special Structures (namely the structured lanes in Idaho Springs) (paid for in units of square feet)

Earthwork quantities (cuts and fills) are obtained by running a template (typical section) through the existing topography along the I-70 Mountain Corridor. Pavement and Base Course quantities are calculated through the topographic model using their assumed length and width. A model run through the project topography using typical cross-section determines the barrier length. This process was used only for the portions of alternatives that are within Clear Creek County and Summit County east of Copper Mountain. For areas within Jefferson County and West of Copper Mountain (since accurate topography is not available) a rough estimate, along with knowledge of the I-70 Mountain Corridor and engineering judgments were made to determine the quantities.

Approximate quantities were then placed into CDOT-Department of Transportation Development's standard construction cost estimate spreadsheets to calculate for the total estimated construction cost for the studied alternatives. This standard spreadsheet has the following "add-ons" or "mark-ups":

- Contingencies on project construction bid items (30%)
- Intelligent Transportation System (6-10%)
- Drainage/Utilities (3-10%)
- Signing and Striping (1-5%)
- Construction Signing & Traffic Control (5-25%)
- Mobilization (4-10%)
- Force Account Utilities (1-2%)
- Force Account Misc. (10-15%)
- Total Preliminary Engineering (17%)
- Total Construction Engineering (15%)
- Right-of-way (2%)

2.4 Unit Costs

2.4.1 Sources of Unit Costs

Through an expert panel comprised of CDOT Program Engineer, Project Manager, Project Engineer, and consultants' Project Manager and senior engineers, it was determined that the factors for each studied alternatives shown in **Table 3** were to be used for the construction cost estimate calculations.

Yeh & Associates, in consultation with an expert panel recommended by CDOT project management, provided tunnel construction cost estimates. These costs per linear foot shown in the spreadsheets were all-inclusive, which included the cost of all action items for planning, designing, and construction management along with the construction of the tunnel. Therefore, the above-mentioned add-on factors were not applied to the tunnel unit cost.

The unit costs were developed from the CDOT 2003 cost data book. However, a constructability meeting was held to determine the appropriate units cost that should be used for the PEIS. The meeting attendees included a panel of experts from CDOT with specific experience in construction cost estimating and the understanding of the potential challenges existed in the I-70 Mountain Corridor. In many cases, the panel raised the unit costs from 2003 CDOT cost data book as follows:

Transportation Element	Unit	2003 unit cost (CDOT cost data book)	Adjusted unit cost
Highway			
Structures	Square feet	\$120.00	\$150.00
Walls	Square feet	\$45.00+	\$90.00
Earthwork	Cubic yard	\$4.00-\$8.00	\$20.00
Pavement (HBP SX)	Ton	\$25.00-\$40.00	\$70.00
Base course (class 6)	Cubic yard	\$6.00-\$17.00	\$40.00
Barrier (Type 7 CA)	Linear feet	\$27.00-\$60.00	\$60.00
Special structures	Square feet	Not Applicable	\$200.00

Table 3. Expert Panel Unit Cost Recommendations

2.4.2 Unit Costs

The unit costs assumed for the I-70 Mountain Corridor are presented in **Table 4**. These costs are in 2003 dollars and have not been escalated. Updating the 2003 costs to 2010 was achieved as a single line item for escalation at the bottom of the estimate as shown in **Appendix A** (that is, the entire project cost was escalated instead of escalating each unit cost).

Element	Unit	Unit Cost	Reference or Comment
Earthwork			Using CDOT 2003 Cost Data and adjusted I
Earthwork	СҮ	\$ 20) Expert Panel
Structures			
			FTA's Colorado Maglev Project using T.Y.
AGS-Maglev Structure	LF	\$ 2,376	5 Lin's cost estimate
AGS-Maglev Guideway	LF	\$ 500) FTA's Colorado Maglev Project
Rail Track Structures	SF	\$ 150	Cost developed by Transystem
Special Structures	SF	\$ 200) By Expert Panel
Heavy Rail Structure	SF	\$ 200) Cost developed by Transystem
Bus-Guideway Structure	LF	,	Cost developed by Transystem
Bus-Guided Busway Track	LF	\$ 315	6 Cost developed by Transystem
Bus-Ramps for Busses	LS	\$ 2,000,000	Cost developed by Transystem
Highway Structure	SF	\$ 150	Using CDOT 2003 Cost Data and adjusted Expert Panel
Interchanges (EACH)	LS	Varies	Seem to vary from \$6 to \$20 M
Pavement			
Pavement	Ton	\$ 70	Using CDOT 2003 Cost Data and adjusted Expert Panel
	Ton	<i>y n</i>	Using CDOT 2003 Cost Data and adjusted
Base Course	CY	\$ 40	Expert Panel
Walls			
			Using CDOT 2003 Cost Data and adjusted
All Retaining Walls	SF	\$ 90) Expert Panel
	LF	¢	Using CDOT 2003 Cost Data and adjusted Expert Panel
Barrier (Type 7)	LF	\$ 60	
Tunneling			
			Cost developed by Yeh and adjusted by
Rail Tunnel (Twin Tunnels)	LF	\$ 15,000	Expert Panel
			Cost developed by Yeh and adjusted by
Rail Tunnel (North Bore EJMT Tunnels)	LF	\$ 20,500	
ACC Tunnel (Twin Tunnels)		ć 15.000	Cost developed by Yeh and adjusted by Expert Panel
AGS Tunnel (Twin Tunnels)	LF	\$ 15,000	Cost developed by Yeh and adjusted by
AGS Tunnel (North Bore EJMT Tunnels)	LF	\$ 20,000	Expert Panel
			Cost developed by Yeh and adjusted by
DMB/DB Tunnel (Twin Tunnel)	LF	\$ 15,000	Expert Panel
			Cost developed by Yeh and adjusted by
DMB/DB Tunnel (North Bore EJMT)	LF	\$ 33,000	
			Cost developed by Yeh and adjusted by
DMB/DB Tunnel (North Bore EJMT) Highway Tunnel (Twin Tunnel)	LF LF	\$ 33,000 \$ 15,000	Cost developed by Yeh and adjusted by
			Cost developed by Yeh and adjusted byExpert PanelCost developed by Yeh and adjusted by
Highway Tunnel (Twin Tunnel)	LF	\$ 15,000 \$ 33,000	Cost developed by Yeh and adjusted byExpert PanelCost developed by Yeh and adjusted by
Highway Tunnel (Twin Tunnel)	LF	\$ 15,000	Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Expert Panel
Highway Tunnel (Twin Tunnel) Highway Tunnel (North Bore EJMT) Highway Tunnel (S-Curve Hidden Valley)	LF LF LF	\$ 15,000 \$ 33,000 \$ 18,000	Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by
Highway Tunnel (Twin Tunnel) Highway Tunnel (North Bore EJMT)	LF LF	\$ 15,000 \$ 33,000	Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel
Highway Tunnel (Twin Tunnel) Highway Tunnel (North Bore EJMT) Highway Tunnel (S-Curve Hidden Valley) Highway Tunnel (Floyd Hill)	LF LF LF LF	\$ 15,000 \$ 33,000 \$ 18,000 \$ 17,000	Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Cost developed by Yeh and adjusted by
Highway Tunnel (Twin Tunnel) Highway Tunnel (North Bore EJMT) Highway Tunnel (S-Curve Hidden Valley) Highway Tunnel (Floyd Hill)	LF LF LF	\$ 15,000 \$ 33,000 \$ 18,000	Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Cost developed by Yeh and adjusted by
Highway Tunnel (Twin Tunnel) Highway Tunnel (North Bore EJMT) Highway Tunnel (S-Curve Hidden Valley)	LF LF LF LF	\$ 15,000 \$ 33,000 \$ 18,000 \$ 17,000	Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by Expert Panel Cost developed by Yeh and adjusted by
Highway Tunnel (Twin Tunnel) Highway Tunnel (North Bore EJMT) Highway Tunnel (S-Curve Hidden Valley) Highway Tunnel (Floyd Hill) Highway and AGS/Rail Tunnel (North Bore EJMT)	LF LF LF LF	\$ 15,000 \$ 33,000 \$ 18,000 \$ 17,000 \$ 48,000	Cost developed by Yeh and adjusted by Expert PanelCost developed by Yeh and adjusted by Cost developed by Yeh and adjusted byCost developed by Yeh and adjusted by Expert PanelCost developed by Yeh and adjusted byCost developed by Yeh and adjusted by
Highway Tunnel (Twin Tunnel) Highway Tunnel (North Bore EJMT) Highway Tunnel (S-Curve Hidden Valley) Highway Tunnel (Floyd Hill) Highway and AGS/Rail Tunnel (North Bore EJMT)	LF LF LF LF	\$ 15,000 \$ 33,000 \$ 18,000 \$ 17,000 \$ 48,000	Cost developed by Yeh and adjusted byExpert PanelCost developed by Yeh and adjusted byCost developed by Yeh and adjusted byExpert PanelCost developed by Yeh and adjusted by

Table 4. I-70 Mountain Corridor Unit Costs

Element	Unit	Unit Cost	Reference or Comment
Track Work			
Rail - Heavy Rail Trackwork	LF	\$ 15	Cost developed by Transystem
Rail - Interlockings	Ea.	\$ 1,000,00	Cost developed by Transystem
Maglev Guideaway	LF	\$ 50	Cost developed by Transystem
Rail Interlocking	Ea.	\$ 1,000,00	Cost developed by Transystem
DB/DMB Guideway	LF	\$ 31	5 Cost developed by Transystem
Stations			
AGS-Stations/Parking (Large)	Ea.	\$ 10,000,00	Cost developed by Transystem
AGS-Stations/Parking (Medium)	Ea.	\$ 6,000,00	Cost developed by Transystem
AGS-Station/Parking (Small)	Ea.	\$ 3,000,00	Cost developed by Transystem
Bus-Stations/Parking (Large)	Ea.	\$ 10,000,00	Cost developed by Transystem
Bus-Stations/Parking (Medium)	Ea.	\$ 6,000,00	Cost developed by Transystem
Bus-Station (Small)	Ea.	\$ 3,000,00	Cost developed by Transystem
Rail - Stations/Parking (Large)	Ea.	\$ 10,000,00) Cost developed by Transystem
Rail - Stations/Parking (Medium)	Ea.	\$ 6,000,00	Cost developed by Transystem
Rail - Stations/Parking (Small)	Ea.	\$ 3,000,00) Cost developed by Transystem
Rolling Stock			
			For the portion on IMC. Cost developed by
IMC - Passenger Rolling Stock	LS	\$ 24,000,00) Transystem
AGS Passenger Rolling Stock	Ea.	\$ 16,000,00	Cost developed by Transystem
Rail Passenger Rolling Stock	Ea.	\$ 2,600,00	Cost developed by Transystem
Dual Mode Bus	Ea.	\$ 900,00	Cost developed by Transystem
Diesel Bus	Ea.	\$ 325,00	Cost developed by Transystem
Systems			
Rail Fare Collection	Ea.	\$ 38,00	Cost developed by Transystem
AGS/DMB/DB Fare Collection	Ea.	\$ 37,00	O Cost developed by Transystem
Rail Electrification	LS	\$ 255,000,00	Cost developed by Transystem
AGS Electrification	LS	\$ 309,000,00	Cost developed by Transystem
DMB Electrification	LS	\$ 144,968,18	2 Cost developed by Transystem
Rail Signals and Controls	LS	\$ 96,000,00	Cost developed by Transystem
AGS Signals and Controls	LS	\$ 111,600,00	Cost developed by Transystem
DB Automated Vehicle Location System	LS	\$ 3,048,00	O Cost developed by Transystem
DMB Automated Vehicle Location System	LS	\$ 2,928,00	Cost developed by Transystem
Maintenance Facilities			
Rail Maintenance Facilities	LS	Variab	le Cost developed by Transystem
AGS Maintenance Facilities	LS	Variab	le Cost developed by Transystem
DMB Maintenance Facilities	LS	Variab	le Cost developed by Transystem
DB Maintenance Facilities	LS	Variab	e Cost developed by Transystem
Rail Mobile Maintenance Equipment	LS	9,264,00	0 Cost developed by Transystem
AGS Mobile Maintenance Equipment	LS	\$ 11,100,00	Cost developed by Transystem
DMB/DB Mobile Maintenance Equipment	LS	\$ 2,000,00	Cost developed by Transystem

Table 5. I-70 Mountain Corridor Unit Costs (conintued)

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2.4.3 Project Markups

Table 6 presents the markups used to address the following:

- Contingencies
- Drainage and Utilities
- Signing and Striping
- Traffic Control
- Mobilization
- Force Account
- Construction Engineering
- Preliminary Engineering
- Right-of-Way

Mark-ups such as those listed above cannot be quantified until at least Preliminary Engineering. Therefore, for Conceptual Estimate it is common practice to use factors for each item based on past history with similar projects.

Alternatives	Contingencies	Drainage and Utilities	Signing and Striping	Construction Signing & Traffic Control	Mobilization	Force Account- Utility	Force Account- Misc.	Construction Engineering	Preliminary Engineering	Right-of- Way
Rail with IMC	30%	4%	1%	7%	7%	2%	6%	7%	10%	2%
AGS Only	30%	4%	1%	5%	7%	2%	6%	7%	10%	2%
Dual Mode Bus	30%	6%	5%	15%	7%	2%	6%	12%	10%	2%
Diesel Bus	30%	6%	5%	15%	7%	2%	6%	12%	10%	2%
6-Lane 55 mph	30%	6%	5%	15%	7%	2%	6%	12%	10%	2%
6-Lane 65 mph	30%	6%	5%	15%	7%	2%	6%	12%	10%	2%
Reversible Lane	30%	6%	5%	15%	7%	2%	6%	12%	10%	2%
6-Lane/Rail IMC	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
Rail/6-Lane Preservation	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
6-Lane/Rail Preservation	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
6-Lane/AGS	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
AGS/6-Lane Preservation	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
6-Lane/AGS Preservation	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
6-Lane/Dual Mode Bus	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
Dual Mode Bus/6-Lane Preservation	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
6-Lane/Dual Mode Bus Preservation	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
6-Lane/Diesel Bus	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
Diesel Bus/6-Lane Preservation	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%
6-Lane/Diesel Bus Preservation	30%	5%	4%	10%	7%	2%	6%	10%	10%	2%

Table 6. Project Markups

2.4.4 Inflation

The inflation used to update the construction cost estimate from 2003 to 2010 was a total increase of 28%, which is equivalent to an annual inflation rate of 3.5-4%. This annual inflation is consistent with the federal standard. For calculating the YOE estimates, 4% was used. The YOE was assumed to be 2025, which is the mid-point of the planning period. As discussed above, the CVRA study was more conservative, assuming that the Highway and Advanced Guideway System elements of the Preferred Alternative would be completed in 2032 and 2037, respectively.

2.5 Results of Conceptual Estimating

Table 7 presents the results of Conceptual Estimating. To demonstrate the predicted affect of escalation, both 2010 and 2025 YOE cost estimates are included. In current day dollars, the project cost ranges from approximately \$1.3 billion to \$11.2 billion for the Preferred Alternative Maximum Program of Improvements. The per mile estimates are included to show the possible effect of truncating the alternative. For example, if a Minimum Operable Segment (MOS) of 25 miles was implemented as a first phase of the Advanced Guideway System, the cost could be expected to be about \$1.7 billion in 2010 dollars.

		-	Length	\$/Mile	
No.	ALTERNATIVE DESCRIPTION	2010	(Miles)	(2010)	YOE - 2025
<i>NO.</i>	ALTERNATIVE DESCRIPTION	2010	(IVIIICS)	(2010)	101 - 2025
1	Minimal Action	\$1,308,000,000	NA		\$1,949,000,000
1	Minimal Action	\$1,308,000,000	INA		\$1,949,000,000
2		¢c 202 000 000	07	ć72 222 000	644 225 000 000
2	Rail with IMC	\$6,292,000,000	87	\$72,322,000	\$11,325,000,000
3	Advanced Guideway System	\$7,871,000,000	118	\$66,703,000	\$14,168,000,000
4	Dual -Mode Bus in Guideway	\$5,853,000,000	118	\$49,602,000	\$10,543,000,000
5	Diesel Bus in Guideway	\$5,929,000,000	118	\$50,246,000	\$10,673,000,000
6	6-Lane - 55 mph	\$3,209,000,000	38	\$85,573,000	\$5,777,000,000
7	6-Lane - 65 mph	\$3,520,000,000	38	\$92,632,000	\$6,336,000,000
	·	.,,,,		. , ,	.,,,,
8	Reversible Lanes / HOV/HOT	\$3,356,000,000	38	\$88,316,000	\$6,041,000,000
		<i><i><i>ϕϕϕϕϕϕϕϕϕϕϕϕϕ</i></i></i>		<i><i><i>ϕ𝔅𝔅𝔅𝔅𝔅𝔅𝔅𝔅𝔅𝔅</i></i></i>	<i><i>ϕϕϕϕϕϕϕϕϕϕϕϕϕ</i></i>
9	6-Lane with Rail & IMC	\$8,505,000,000	118	\$72,076,000	\$15,310,000,000
5		<i>90,303,000,000</i>	110	\$72,070,000	\$15,510,000,000
0.5	Dail with C Lana press ration	¢8.040.000.000	110	¢68 126 000	¢14 472 000 000
9a	Rail with 6-Lane preservation	\$8,040,000,000	118	\$68,136,000	\$14,472,000,000
-				40.000.000	+=
9b	6-Lane with Rail preservation	\$4,059,000,000	118	\$34,398,000	\$7,306,000,000
10	PA Maximum Program of Improvements	\$11,202,000,000	118	\$94,932,000	\$20,163,000,000
	PA Minimum Program of Improvements	\$9,179,000,000	118	\$77,788,000	\$16,117,000,000
10a	AGS with 6-Lane preservation	\$10,771,000,000	118	\$91,280,000	\$19,388,000,000
10b	6-Lane with AGS preservation	\$3,805,000,000	118	\$32,246,000	\$6,849,000,000
11	6-Lane with Dual-Mode Bus in Guideway	\$7,448,000,000	122	\$61,049,000	\$13,406,000,000
11a	Dual -Mode Bus with 6-Lane preservation	\$6,968,000,000	122	\$57,115,000	\$12,542,000,000
		,			, -
11b	6-Lane with Dual-Mode Bus preservation	\$3,855,000,000	122	\$31,598,000	\$6,938,000,000
		20,000,000		<i>202,000,000</i>	<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>
12	6-Lane with Diesel Bus in Guideway	\$7,087,000,000	122	\$58,090,000	\$12,757,000,000
12	o Lane with Dieser Dus in Guideway	<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>	166	<i>230,030,000</i>	çız,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
122	Diocol Rus with 6 Lana preservation	\$6 607 000 000	177	\$54 1E6 000	
12a	Diesel Bus with 6-Lane preservation	\$6,607,000,000	122	\$54,156,000	\$11,893,000,000
4.21		62.055.000.000	100	624 500 000	¢c 020 020 020
12b	6-Lane with Diesel Bus preservation	\$3,855,000,000	122	\$31,598,000	\$6,938,000,000

Table 7. Results of Conceptual Estimating

Appendix A. Cost Estimate Summary This page intentionally left blank.

ALTERNATIVE NUMBER	ALTERNATIVE DESCRIPTION	TOTAL COST (2010)	Length	\$/ Mile (2010)	YOE (Mid-Point of Construction	YOE Cost	YOE \$/mile
1	Minimal Action	\$1,308,000,000			2020	\$1,948,920,000	NA
2	Rail with IMC	\$6,291,593,329	87	\$72.3	2025	\$11,324,867,992	\$130,170,896
3	Advanced Guideway System	\$7,871,323,625	118	\$66.7	2025	\$14,168,382,525	\$120,071,038
4	Dual -Mode Bus in Guideway	\$5,852,563,052	118	\$49.6	2025	\$10,534,613,494	\$89,276,386
5	Diesel Bus in Guideway	\$5,929,218,158	118	\$50.3	2025	\$10,672,592,684	\$90,445,701
6	6-Lane - 55 mph	\$3,209,250,592	38	\$85.6	2025	\$5,776,651,065	\$154,044,028
7	6-Lane - 65 mph	\$3,520,028,275	38	\$112.0	2025	\$6,336,050,896	\$166,738,181
8	Reversible Lanes / HOV/HOT	\$3,355,881,760	38	\$89.5	2025	\$6,040,587,169	\$158,962,820
9	6-Lane with Rail & IMC	\$8,505,300,464	118	\$72.0	2025	\$15,309,540,836	\$129,741,871
9a	Rail with 6-Lane preservation	\$8,040,366,457	118	\$68.1	2025	\$14,472,659,622	\$122,649,658
9b	6-Lane with Rail preservation	\$4,058,707,792	118	\$69.1	2025	\$7,305,674,026	\$61,912,492
10	Preferred Alternative with Maximum Improvements	\$ 11,201,731,195	118	\$ 95	2025	\$20,163,116,152	\$170,873,866
	Preferred Alternative with Minimum Improvements	\$ 9,179,323,625	118	\$ 78	2025	\$16,522,782,525	\$140,023,581
10a	AGS with 6-Lane preservation	\$10,771,163,696	118	\$96.0	2025	\$19,388,094,652	\$164,305,887
10b	6-Lane with AGS preservation	\$3,805,044,049	118	\$97.0	2025	\$6,849,079,288	\$58,043,045
11	6-Lane with Dual-Mode Bus in Guideway	\$7,447,860,764	122	\$98.0	2025	\$13,406,149,376	\$109,886,470
11a	Dual -Mode Bus with 6-Lane preservation	\$6,967,788,304	122	\$99.0	2025	\$12,542,018,947	\$102,803,434
11b	6-Lane with Dual-Mode Bus preservation	\$3,854,549,010	122	\$100.0	2025	\$6,938,188,217	\$56,870,395
12	6-Lane with Diesel Bus in Guideway	\$7,087,031,092	122	\$101.0	2025	\$12,756,655,965	\$104,562,754
12a	Diesel Bus with 6-Lane preservation	\$6,606,958,631	122	\$102.0	2025	\$11,892,525,536	\$97,479,718
12b	6-Lane with Diesel Bus preservation	\$3,854,549,010	122	\$103.0	2025	\$6,938,188,217	\$56,870,395

TIER 1 - PEIS COST ESTIMATE SUMMARY¹

'YOE Cost = J.F. Sato and Associates cost x inflation at 4 percent escalated to a mid-point of construction of 2020 for the Minimal Action; all other alternatives assume midpoint of construction at 2025.

TIER 1 - PEIS COST ESTIMATE 2 - RAIL w/IMC

BID ITEMS COST PER UNIT QUANTITY COST BID ITEMS COST PER UNIT QUANTITY COST Image: Cost PER UNIT QUANTITY COST Structures (SF) 150.00 1,089,042.00 163,356,300.00 Image: Cost PER UNIT QUANTITY COST Walls (SF) 90.00 1,242,679.00 111,841,110.00 Image: Cost PER UNIT QUANTITY COST Base Course (CY) 40.00 116,342.00 4.653,680.00 Image: Cost PER UNIT QUANTITY COST Base Course (CY) 40.00 116,342.00 16.630,080.00 Image: Cost PER UNIT QUANTITY COST Image: Cost PER UNIT QUANTITY Cost PER UNIT QUANTITY	
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IMC - Maintenance Facility 1.00 8,000,000.00 8,000,000.00	
Total 1,432,923,420.00	
Total 1,432,923,420.00	
% Range % Used Cost	
% Range % Used Cost	
Project Construction Bid Items Project Dependent N/A \$1,432,923,420.00	(A)
Contingencies* (Mitigation - 5%) (15% - 30%) of (A) 30.00% \$429,877,026.00	(B)
ITS (6-10%) of (A+B) 0.00% \$0.00	(C)
Default = 6%	
Drainage/Utilities (3-10%) of (A+B) 4.00% \$74,512,017.84	(D)
Default = 6%	
Signing and Striping (1-5%) of (A+B+C+D) 1.00% \$19.373.124.64	(E)
	(E)
Default = 5%	
Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E) 7.00% \$136,967,991.19	(F)
Construction Organized Traine Control 5 to 2016 (TETETETETETETETETETETETETETETETETETETE	(1)
Mobilization (4 to 10%) of (A+B+C+D+E+F) 7.00% \$146,555,750.58	(G)
Default = 7%	(-)
Total of Construction Bid Items (A+B+C+D+E+F+G) \$2,240,209,330.25	(H)
Force Account - Utilities (1 to 2%) of (H) 2.00% \$44,804,186.60	(I)
Default = 2%	
	<i>(</i>)
Force Account - Misc. (10 to 15%) of (H) 6.00% \$134,412,559.81	(J)
Default = 12%	
Subtotal of Construction Cost (H+I+J) \$2,419,426,076.67	(K)
	(K)
Total Construction Engineering 17% of (K) 7.00% \$169,359,825.37	(L)
	(=)
Total Preliminary Engineering** 15% of (K) 10.00% \$241,942,607.67	(M)
Right of Way Project Dependent 2.00% \$44,804,186.60	(N)
	(2)
Utilities Project Dependent N/A \$0.00	(O)
COST QUANTITY	
CUST GUANITY Turinei (Twin Tunneis) (LF) 15,000.00 741.00 11,115,000.00	a contra
Tunnel (North Bore EUMT) (LP) 20,500.00 16,675.00 341,837,500.00	1.1
Electrification	
Mabile Mantenance Equipment 9,264,000.00 1.00 9,264,000.00	1 1
Påssenger Rolling Stock 2,600,000 285.00 741,000,000 741,000,000	
Fare Collection 38,000.00 188.00 77;144,000.00	
Stgnals and Controls	
Minimal Action 532,000,000 00	
Interchanges (EACH)	
	0000
Inflation to 2010 dollars (assuming 4% per year) \$1,376,286,040.73	
Total Project Cost \$6,291,593,329.03	(P)
	(1)
Base cost of Alternative in Millions \$5,760	
Base cost of Alternative in Millions \$5,760 Contingencies includes environmental mitigation costs **Total Preliminary Engineering includes cost of developing NEPA documents	

TIER 1 - PEIS COST ESTIMATE 3 - AGS

8/17/2010 14:29 BID ITEMS	COST PER UNIT	QUANTITY	COST			
AGS-Maglev Stucture (LF) AGS-Maglev Guideway	2,376.00 500.00	<u>466,910.40</u> 455,304.00				
AGS-Maintenance Facilities	variable					
AGS-Stations/Parking (Large)	3					
AGS-Stations/Parking (Medium) AGS-Station/Parking (Small)	3					
AGS-Extension - Vail to Eagle Airport	30	17,254,955.29				
T-4-1			\$0.040.000.700.40			
Total			\$2,018,829,769.10			
			-			
	% Range		% Used	Cost		
	70 Kange			COSI		
						-
Project Construction Bid Items	Project Dependent		N/A	\$2,018,829,769.10	(A)	
				φ2,010,029,709.10	(~)	
Contingencies* (Mitigation - 3%)	(15% - 30%) of (A)		30.00%	\$605,648,930.73	(B)	
			-			
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)	
	Default = 6%		-			
Drainage/Utilities	(3-10%)of (A+B)		4.00%	\$104,979,147.99	(D)	
Brandgo/Otintio	Default = 6%		1.0070	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	(2)	
Cisning and Atrining	(1 E0() of (A + D + C +	D)	4.000/	¢07 004 570 40		
Signing and Striping	(1-5%) of (A+B+C+ Default = 5%		1.00%	\$27,294,578.48	(E)	
Construction Signing & Traffic Control	5 to 25% of (A+B+0	C+D+E)	5.00%	\$137,837,621.32	(F)	
	Default = 20%		-			
Mobilization	(4 to 10%) of (A+B-	+C+D+E+F)	7.00%	\$202,621,303.33	(G)	
	Default = 7%		-			
			-			
Total of Construction Bid Items	(A+B+C+D+E+F+G	i)		\$3,097,211,350.95	(H)	
			-			
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$61,944,227.02	(I)	
	Default = 2%					
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$185,832,681.06	(J)	
Force Account Mise.	Default = 12%		0.0070	φ105,002,001.00	(0)	
			-	<u> </u>	(10)	
Subtotal of Construction Cost	(H+I+J)		-	\$3,344,988,259.03	(K)	
Total Construction Engineering	17% of (K)		7.00%	\$234,149,178.13	(L)	-
			-			
Total Preliminary Engineering**	15% of (K)		10.00%	\$334,498,825.90	(M)	
					· · ·	
Right of Way	Project Dependent		2.00%	\$61,944,227.02	(N)	
Utilities	Project Dependent		N/A	\$0.00	(O)	
	COST	QUANTITY				
. Tunnel (Twin Tunnels) (LF) Tunnel (North Bore EJMT):(LF)	15,000.00 20,000.00			11,115,000.00		
Electrification	20,000.00	309,000,000.00		333,500,000.00 309,000,000.00		2618644.1
Mohile Maintenance Equipment	· · · · variable	1.00		11,100,000.00		
Passenger Rolling Stock Fare Collection Signals and Controls Minimal Action	16,000,000.00	52.00 230.00		832,000,000.00 8,510,000.00		
Signals and Controls	111,600,000.00	111,600,000.00	+PE & CE	130,572,000.00		
Minimal Action	variable	1.00		532,000,000.00		
Inflation to 2010 dollars (assuming	1.00 4% per vear)	6,094,092.00	reistelstelstelstelstel	6,094,092.00 \$1,721,852,042.98		
	, o por your			ψ1,121,002,0 1 2.90		<u> </u>
Total Project Cost				\$7,871,323,625.06	(P)	
		Ba	se cost of Alternative in Millions	\$7,339		
*Contingencies includes environmental mitigati			· · ·			
**Total Preliminary Engineering includes cost o	r aeveloping NEPA do	cuments	1			

TIER 1 - PEIS COST ESTIMATE 4 - DUAL MODE BUS IN GUIDEWAY

Structures (SF) Walls (SF) Earthwork (CY) Pavement (TON) Base Course (CY) Barrier (Type 7)(LF) Special Structures (SF) Bus-Walls Bus-Eathwork Bus-Guideway Structure (LF) Bus-Guided Busway Track Bus-Guideway Structure (LF) Bus-Guided Busway Track Bus-Stations/Parking (Large) Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Extension-Guided Busway Track Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking(Large) Bus-Extensi	3,000,000.00 % Range Project Dependent	QUANTITY 345,492.00 1,021,582.00 386,227.00 386,227.00 169,244.00 113,969.00 329,696.00 9558,487.00 267,168.00 267,168.00 3.00 12.00 3.00 12.00 3.00 12.00 3.00 12.00 3.00 12.00 3.00 12.00 3.00 12.00 3.00 12.00 3.00 12.00 3.00 10.00 9.00 322,640.00 3.00 1.00 9.00 3.00 1.00 9.00	91,942,380.00 7,724,540.00 11,847,080.00 4,558,760.00 19,781,760.00			
Structures (SF) Walls (SF) Earthwork (CY) Pavement (TON) Bare Course (CY) Barrier (Type 7)(LF) Special Structures (SF) Bus-Walls Bus-Earthwork Bus-Guideway Structure (LF) Bus-Guideway Structure (LF) Bus-Guided Busway Track Bus-Ramps for Busses Bus-Stations/Parking (Large) Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Guideway Structure (LF) Bus-Extension-Guideway Structure (LF) Bus-Extension-Guideway Structure (LF) Bus-Extension-Maintenance Facilities Bus-Extension-Maintenance Facilities Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium)	150.00 90.00 20.00 70.00 40.00 20.00 20.00 20.00 3.200.00 3.200.00 3.200.00 3.200.00 0.00,000.00 0.00,000.00 3.000,000.00 3.200.0	345,492.00 1,021,582.00 386,227.00 169,244.00 113,969.00 955,487.00 203,036.00 71,000.00 267,168.00 3.00 267,168.00 3.00 1.00 9.00 554,524.00 232,569.00 73,920.00 332,640.00 3.00 14.00 3.0	51,823,800,00 51,942,380,00 7,724,540,00 1,947,080,00 4,558,760,00 19,781,760,00 19,1697,400,00 4,060,720,00 4,060,720,00 24,000,000,00 24,000,000,00 24,000,000,00 24,000,000,00 24,000,000,00 236,544,000,000 236,544,000,00 236,544,000,00 236,544,000,00 236,544,000,00 236,544,000,00 236,544,000,00 236,544,000,00 236,540,000,00 24,000,000,00 27,000,000,00 5,000,000,00 1,481,248,220,00 1,481,248,220,00	Cost		
Walls (SF) Earthwork (CY) Pavement (TON) Base Course (CY) Barrier (Type 7)(LF) Special Structures (SF) Bus-Walls Bus-Earthwork Bus-Guide Busway Track Bus-Guide Busway Track Bus-Guide Busway Track Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Extension-Saiton (Small) Extension-Guide Busway Structure (LF) Bus-Stations/Parking (Medium) Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Stations/Parking Medium) Bus-Extension-Faurhwork Bus-Extension-Guide Busway Track Bus-Extension-Guide Busway Track Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Stations/Parking (Large)	90.00 20.00 770.00 40.00 200.00 200.00 3,200.00 3,200.00 3,200.00 10,000,000.00 3,200.00 3,000,000.00 3,000,000.00 3,000,000.00 3,000,000.00 3,000,000.00 3,000,000.00 3,000,000.00 4,000,000.00 5,000,000.00 4,000,000.00 5,000,000,00 5,000,000,000,00 5,000,000,000,00 5,000,000,000,000,00 5,000,000,000,000,000,000,000,000,000,0	1.021,582.00 386,227.00 386,227.00 169,244.00 328,969.00 328,969.00 9358,487.00 484,108.00 203,036.00 71,000.00 267,168.00 3.00 1.00 9.00 554,524.00 232,569.00 73,920.00 332,640.00 3.00 14.00 3.00 14.00	91,942,380,00 7,724,540,00 11,847,080,00 4,558,760,00 19,781,760,00 19,781,760,00 227,200,000,00 227,200,000,00 24,000,000,00 24,000,000,00 24,000,000,00 27,000,000,00 49,907,160,00 49,907,160,00 49,907,160,00 104,781,600,00 104,781,600,00 104,781,600,00 104,781,600,00 104,781,600,00 230,000,000,00 27,000,000,00 27,000,000,00 1,481,248,220,00			
Earthwork (CY) Pavement (TON) Base Course (CY) Barrier (Type 7)(LF) Special Structures (SF) Bus-Walls Bus-Earthwork Bus-Guideway Structure (LF) Bus-Guided Busway Track Bus-Maintenance Facilities Bus-Ramps for Busses Bus-Stations/Parking (Medium) Bus-Station (Small) Extension-Guideway Structure (LF) Bus-Extension-Earthwork Bus-Extension-Guideway Structure (LF) Bus-Extension-Guideway Structure (LF) Bus-Extension-Guideway Structure (LF) Bus-Extension-Guideway Structure (LF) Bus-Extension-Malls Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium)	20.00 70.00 40.00 60.00 200.00 30.00 315.00 Variable 2.000,000.00 6,000,000.00 3.200.00 3.200.00 3.200.00 3.200.00 3.300,000.00 3.300,000.00 3.300,000.00 3.300,000.00 90.00 3.300,000.00 90.00 20.00 3.300,000.00 90.00	386,227.00 169,244.00 113,969.00 329,696.00 958,487.00 203,036.00 71,000.00 267,168.00 3.00 12.00 3.00 554,524.00 232,569.00 73,920.00 332,640.00 332,640.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.00 14.00 3.	7,724,540,00 11,847,060,00 19,781,760,00 19,781,760,00 191,697,400,00 43,569,720,00 227,200,000,00 84,157,920,00 24,000,000,00 24,000,000,00 27,000,000,00 236,544,000,00 49,907,160,00 49,907,160,00 49,907,160,00 236,544,000,00 00,000,00 236,544,000,00 104,781,860,00 104,781,860,00 30,000,000,00 27,000,000,00 27,000,000,00 27,000,000,00 1,481,248,220,00 1,481,248,240,00 1,481,448,480,480,480 1,481,448,480,480,480 1,481,448,480,480 1,481,448,480,480 1,481,448,480,48	Cost		
Pavement (TON) Base Course (CY) Barrier (Type 7)(LF) Special Structures (SF) Bus-Walls Bus-Earthwork Bus-Cauided Busway Track Bus-Guided Busway Track Bus-Maintenance Facilities Bus-Maintenance Facilities Bus-Stations/Parking (Medium) Bus-Stations/Parking (Medium) Bus-Station - Saliverth. to Eagle Airport Bus-Statension-Walls Bus-Extension-Walls Bus-Extension-Walls Bus-Extension-Guideway Track Bus-Extension-Maintenance Facilities Bus-Extension-Maintenance Facilities Bus-Extension-Maintenance Facilities Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Large)	70.00 40.00 60.00 90.00 3.200.00 3.200.00 0.315.00 Variable 2.000.000.00 6.000,000.00 3.000,000.00 3.000,000.00 3.000,000.00 315.00 Variable 2.000.000.00 315.00 Variable 2.000.000.00 3.315.00 Variable 2.000.000.00 9.00 Variable 2.000.000.00 9.00 Variable 2.000.000.00 9.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable 2.000.000.00 Variable Variable 2.000.000.00 Variable V	169,244.00 113,969.00 329,696.00 958,487.00 203,036.00 71,000.00 267,168.00 3.00 12.00 554,524.00 232,659.00 73,920.00 332,640.00 332,040.00 330,00 14,00 14,00 14	11,847,080,00 4,558,760,00 19,781,760,00 19,781,760,00 11,697,400,00 43,569,720,00 227,200,000,00 24,000,000,00 24,000,000,00 27,000,000,00 236,544,000,00 236,544,000,00 104,781,600,00 236,540,000,00 24,500,000,00 1,481,248,220,00 1,481,248,248,248,248,248,248,248,248,248,248	Cost		
Base Course (CY) Barrier (Type 7)(LF) Special Structures (SF) Bus-Earthwork Bus-Cuideway Structure (LF) Bus-Guide Busway Track Bus-Guide Busway Track Bus-Stations/Parking (Large) Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Guide Busway Track Bus-Extension-Guide Busway Track Bus-Extension-Guide Busway Track Bus-Extension-Guide Busway Track Bus-Extension-Guide Busway Track Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Stations(Small)	40.00 60.00 200.00 30.00 3.200.00 3.200.00 3.200.00 0.315.00 Variable 2.000,000.00 6.000,000.00 3.000,000.00 3.200.00 3.200.00 3.200.00 3.200.00 3.200.00 3.200.00 3.200.00 3.200.00 3.200.00 0.00	329,696.00 956,487.00 203,036.00 71,000.00 267,168.00 3.00 12.00 3.00 554,524.00 232,569.00 73,920.00 332,640.00 330,00 14,000 330,00 330,00 332,640.00 330,00 330,00 330,00 330,00 332,640.00 330,00 330,00 330,00 330,00 332,640.00 330,00 330,00 330,00 330,00 332,640.00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 332,640.00 330,00 300,000 300,0000 300,000 300,0000 300,0000 3	4,558,760,00 19,781,760,00 191,697,400,00 43,569,720,00 4,060,720,00 227,200,000,00 84,157,920,00 24,000,000,00 24,000,000,00 27,000,000,00 27,000,000,00 49,907,160,00 49,907,160,00 104,781,800,00 104,781,800,00 84,500,000,00 28,000,000,00 27,000,000,00 1,481,248,220,00 1,481,248,220,00	Cost		
Special Structures (SF) Bus-Walls Bus-Earthwork Bus-Guidee Maya Structure (LF) Bus-Guidee Mayaway Track Bus-Maintenance Facilities Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Walls Bus-Extension-Walls Bus-Extension-Guidee Mayay Track Bus-Extension-Guidee Mayay Track Bus-Extension-Guidee Mayay Track Bus-Extension-Guidee Mayay Track Bus-Extension-Maintenance Facilities Bus-Extension-Maintenance Facilities Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Stations/Parking (Medium)	200.00 90.00 3.200.00 0.315.00 Variable 2.000.000.00 10.000.000.00 6.000.000.00 3.000.000.00 0.000.00 0.000.00	958.487.00 484,108.00 203.036.00 71,000.00 267,168.00 12.00 3.00 554,524.00 232,569.00 73,920.00 332,640.00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 332,640.00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 330,00 30,000 30,0000 30,0000 30,0000 30,00000000	191,697,400.00 43,569,720.00 4,060,720.00 227,200,000.00 24,157,220.00 24,000,000.00 24,000,000.00 27,000,000.00 27,000,000.00 28,543,000 28,543,000.00 104,781,600.00 28,500,000.00 28,500,000.00 1,481,248,220.00 1,481,248,220.00	Cost		
Bus-Walls Bus-Earthwork Bus-Guideway Structure (LF) Bus-Guideway Structure (LF) Bus-Guided Busway Track Bus-Stations/Parking (Large) Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Farthwork Bus-Extension-Guideway Structure (LF) Bus-Extension-Guideway Structure (LF) Bus-Extension-Guide Busway Track Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Station/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Station (Small)	90.00 20.00 3,200.00 315.00 Variable 2,000,000.00 6,000,000.00 3,000,000.00 3,000,000.00 3,000,000.00 3,200.00 3,200.00 3,200.00 3,200.00 0,000,000.00 6,000,000.00 6,000,000.00 5,000,000.00 7,000,000.00 8,000,000.00 7,000,000.00 7,000,000.00 7,000,000,00 7,000,000,00 7,000,000,0	484,108.00 203,036.00 71,000.00 267,168.00 3.00 12.00 3.00 1.00 9.00 554,524.00 232,569.00 73,920.00 332,640.00 332,640.00 332,640.00 3.00 14.00 1.00	43,569,720.00 4,060,720.00 227,200,000.00 84,157,920.00 84,500,000.00 24,000,000.00 27,000,000.00 27,000,000.00 236,544,000.00 49,907,160.00 49,907,160.00 49,907,160.00 104,781,800.00 104,781,800.00 30,000.00 30,000.00 1,481,248,220.00 1,481,248,248,220.00 1,481,448,248,248,248,248,248,248,248,248,248	Cost		
Bus-Earthwork Bus-Guideway Structure (LF) Bus-Guided Busway Track Bus-Maintenance Facilities Bus-Ramps for Busses Bus-Stations/Parking (Medium) Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Walls Bus-Extension-Walls Bus-Extension-Walls Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Stations/Parking (Medium)	20.00 3.200.00 3.15.00 Variable 2.000,000.00 10,000.00 0,	203,036.00 71,000.00 267,168.00 3.00 12.00 3.00 9.00 554,524.00 232,569.00 73,920.00 332,640.00 332,640.00 332,640.00 332,640.00 332,632,00 332,640.00 330,00 332,640.00 330,00 30,000 30,0000 30,000 30,0000 30,0000 30,00000000	4,060,720.00 227,200,000.00 84,157,920.00 84,157,920.00 24,000,000.00 24,000,000.00 27,000,000.00 27,000,000.00 27,000,000.00 4,651,380.00 24,654,000.00 104,781,600.00 84,500,000.00 30,000,000.00 1,481,248,220.00 1,481,248,220.00	Cost		
Bus-Guideway Structure (LF) Bus-Guide Busway Track Bus-Maintenance Facilities Bus-Ramps for Busses Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Stations/Parking (Medium) Bus-Extension-Walls Bus-Extension-Walls Bus-Extension-Walls Bus-Extension-Walls Bus-Extension-Guide Busway Track Bus-Extension-Guide Busway Track Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Medium Bus-Extension-Stations/Parking (Medium Bus-Extension-Station (Small)	3,200.00 315.00 Variable 2,000,000.00 10,000,000.00 3,000,000.00 3,000,000.00 3,000,000.00 3,200.00 315.00 Variable 2,000,000.00 10,000,000.00 6,000,000.00 3,000,000.00 9,000,000.00 10,000,000.00 9,000,000.00 10,000,000.00 10,000,000.00 10,000,000.00 10,000,000.00 10,000,000.00 10,000,000.00 10,000,000.00 10,000,000.00 10,000,000.00 10,000,000.00 10,000,000,000,00 10,000,000,000,00 10,000,000,000,00 10,000,000,000,000,00 10,000,000,000,000,00 10,000,000,000,000,000,000,000,000,000,	71,000.00 267,168.00 3.00 12.00 3.00 9.00 554,524.00 232,569.00 73,920.00 332,640.00 330,00 30,000 30,00 30,00 30,0000 30,0000 30,0000 30,00000000	227,200,000,00 84,157,220,000 44,500,000,00 24,000,000,00 27,000,000,00 27,000,000,00 49,907,160,00 49,907,160,00 46,51,380,00 236,544,000,00 104,781,600,00 84,500,000,00 6,000,000,00 1,481,248,220,00 1,481,248,220,00	Cost		
Bus-Guided Busway Track Bus-Maintenance Facilities Bus-Ramps for Busses Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Walls Bus-Extension-Farthwork Bus-Extension-Guideway Structure (LF) Bus-Extension-Guide Busway Track Bus-Extension-Maintenance Facilities Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Medium) Bus-Extension-Stations/Parking (Medium)	315.00 Variable 2,000,000.00 10,000,000.00 6,000,000.00 20,000 3,200.00 3,200.00 Variable 2,000,000.00 10,000,000.00 6,000,000.00 3,000,000.00 % Range	267,168.00 3.00 12.00 9.00 554,524.00 232,569.00 73,920.00 332,640.00 332,640.00 332,640.00 332,040.00 3.00 14.00 1.00	84,157,920,00 84,500,000,00 24,000,000,00 30,000,000,00 27,000,000,00 27,000,000,00 236,544,000,00 236,544,000,00 104,781,600,00 84,500,000,00 30,000,000,00 27,000,000,00 27,000,000,00 1,481,248,220,00 1,481,248,220,00	Cost		
Bus-Ramps for Busses Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium) Bus-Station (Small) Extension - Suiverth. to Eagle Airport Bus-Extension-Valls Bus-Extension-Calideway Structure (LF) Bus-Extension-Guide Busway Track Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Ramps for Busses Bus-Extension-Station/Parking (Large) Bus-Extension-Stations/Parking (Medium Bus-Extension-Station (Small)	2,000,000.00 10,000,000.00 6,000,000.00 3,000,000.00 20,00 3,200.00 3,200.00 3,200.00 3,200.00 0 10,000,000.00 10,000,000.00 6,000,000.00 3,000,000.00 9 % Range	12.00 3.00 1.00 232,569.00 73,920.00 332,640.00 332,640.00 14.00 3.00 14.00 1.00	24,000,000,00 30,000,000,00 6,000,000,00 27,000,000,00 49,907,160,00 49,907,160,00 3236,544,000,00 104,781,600,00 104,781,600,00 84,500,000,00 30,000,000,00 27,000,000,00 1,481,248,220,00	Cost		
Bus-Stations/Parking (Large) Bus-Station (Small) Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Walls Bus-Extension-Guideway Structure (LF) Bus-Extension-Guideway Structure (LF) Bus-Extension-Maintenance Facilities Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Station (Small)	10,000,000,00 6,000,000,00 3,000,000,00 20,00 3,200,00 Variable 2,000,000,000 6,000,000,00 3,000,000,00 6,000,000,00 7,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,000,00 9,000,00 9,000,000,00 9,000,000,00 9,000,00 9,000,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,00 9,000,000,000,00 9,000,000,000,00 9,000,000,000,000,00 9,000,000,000,000,000,000,000,000,000,0	3.00 1.00 9.00 232,569.00 73,920.00 332,640.00 332,640.00 3.00 14.00 1.00	30,000,000,00 6,000,000,00 27,000,000,00 49,307,160,00 46,51,380,00 236,544,000,00 236,544,000,00 24,000,000,00 28,000,000,00 27,000,000,00 27,000,000,00 1,481,248,220,00	Cost		
Bus-Stations/Parking (Medium) Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Walls Bus-Extension-Calideway Structure (LF) Bus-Extension-Guided Busway Track Bus-Extension-Guided Busway Track Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Station (Small)	6,000,000.00 3,000,000.00 90.00 3,200.00 3,200.00 10,000,000.00 6,000,000.00 3,000,000.00 9% Range	1.00 9.00 554,524.00 232,569.00 73,920.00 332,640.00 330,00 14.00 1.00 1.00	6,000,000,00 27,000,000,00 49,907,160,00 4,651,380,00 236,544,000,00 104,781,600,00 84,500,000,00 84,500,000,00 6,000,000,00 1,481,248,220,00	Cost		
Bus-Station (Small) Extension - Silverth. to Eagle Airport Bus-Extension-Walls Bus-Extension-Walls Bus-Extension-Guideway Structure (LF) Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Medium Bus-Extension-Station (Small)	3,000,000.00 90.00 20.00 3,200.00 315.00 Variable 2,000,000.00 10,000,000.00 6,000,000.00 3,000,000.00 % Range	9.00 554,524.00 232,569.00 73,920.00 332,640.00 14.00 14.00 1.00 1.00	27,000,000.00 49,907,160.00 236,544,000.00 104,781,800.00 84,500,000.00 30,000.00 30,000.00 6,000.00 27,000,000.00 1,481,248,220.00	Cost		
Extension - Silverth. to Eagle Airport Bus-Extension-Walls Bus-Extension-Guideway Structure (LF) Bus-Extension-Guideway Structure (LF) Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Medium) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Station (Small)	90.00 20.00 3,200.00 315.00 Variable 2,000,000.00 10,000,000.00 3,000,000.00 3,000,000.00 3,000,000.00 9% Range	554,524.00 232,569.00 73,920.00 332,640.00 3.00 14.00 3.00 14.00 1.00	49,907,160.00 4,651.380.00 236,544,000.00 104,781,600.00 28,000.000 28,000.000 28,000.000 27,000.000 27,000.000 1,481,248,220.00	Cost		
Bus-Extension-Earthwork Bus-Extension-Guideway Structure (LF) Bus-Extension-Guided Busway Track Bus-Extension-Maintenance Facilities Bus-Extension-Ratmps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium Bus-Extension-Station (Small)	20.00 3,200.00 315.00 Variable 2,000,000.00 10,000,000.00 3,000,000.00 % Range	232,569.00 73,920.00 332,640.00 14.00 3.00 14.00 1.00	4,651,380,00 236,544,000,00 104,781,600,00 84,500,000,00 28,000,000,00 30,000,000,00 30,000,000,00 27,000,000,00 1,481,248,220,00	Cost		
Bus-Extension-Guideway Structure (LF) Bus-Extension-Maintenance Facilities Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Medium) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Station (Small)	3,200.00 315.00 Variable 2,000,000.00 10,000,000.00 3,000,000.00 3,000,000.00 % Range	73,920.00 332,640.00 3.00 14.00 3.00 1.00	236,544,000.00 104,781,600.00 84,500,000.00 28,000,000.00 6,000,000.00 27,000,000.00 1,481,248,220.00	Cost		
Bus-Extension-Guided Busway Track Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Station (Small)	315.00 Variable 2,000,000.00 10,000,000.00 6,000,000.00 3,000,000.00 % Range	332,640.00 3.00 14.00 3.00 1.00	104,781,600.00 84,500,000.00 28,000,000.00 30,000,000.00 27,000,000.00 1,481,248,220.00	Cost		
Bus-Extension-Maintenance Facilities Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium Bus-Extension-Station (Small)	Variable 2,000,000.00 10,000,000.00 6,000,000.00 3,000,000.00 % Range Project Dependent	3.00 14.00 3.00 1.00	84,500,000.00 28,000,000.00 30,000,000.00 6,000,000.00 27,000,000.00 1,481,248,220.00	Cost		
Bus-Extension-Ramps for Busses Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Station (Small)	2,000,000.00 10,000,000,00 6,000,000.00 3,000,000.00 % Range	14.00 3.00 1.00	28,000,000.00 30,000,000.00 6,000,000.00 27,000,000.00 1,481,248,220.00	Cost		
Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium) Bus-Extension-Station (Small)	10,000,000.00 6,000,000.00 3,000,000.00 % Range Project Dependent	3.00 1.00	30,000,000.00 6,000,000.00 27,000,000.00 1,481,248,220.00	Cost		
Bus-Extension-Station (Small)	3,000,000.00 % Range Project Dependent		27,000,000.00	Cost		
	% Range	9.00	1,481,248,220.00	Cost	· · · · · · · · · · · · · · · · · · ·	
Total	Project Dependent			Cost	 	
	Project Dependent			Cost		
	Project Dependent		% Used	Cost		
	Project Dependent		% Used	Cost		
	Project Dependent		% USea	COST		<u> </u>
						<u> </u>
		1				
Project Construction Bid Items	(450) 0000 1		N/A	\$1,481,248,220.00	(A)	
				A		
Contingencies* (Mitigation - 7%)	(15% - 30%) of (A)		30.00%	\$444,374,466.00	(B)	
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)	
	Default = 6%					
		-				
Drainage/Utilities	(3-10%)of (A+B)		6.00%	\$115,537,361.16	(D)	
	Default = 6%					
Signing and Striping	(1-5%) of (A+B+C+	D)	5.00%	\$102,058,002.36	(E)	
	Default = 5%	_,			(=)	
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	15.00%	\$321,482,707.43	(F)	
	Default = 20%					
Mobilization	(4 to 10%) of (A+B-	L +C+D+E+F)	7.00%	\$172,529,052.99	(G)	
	Default = 7%			···-,,	(-)	
		\		<u> </u>		
Total of Construction Bid Items	(A+B+C+D+E+F+G)		\$2,637,229,809.93	(H)	
			•			
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$52,744,596.20	(I)	
	Default = 2%				, C	
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$158,233,788.60	(J)	
	Default = 12%					<u> </u>
Subtotal of Construction Cost	(H+I+J)			\$2,848,208,194.73	(K)	<u> </u>
					()	
Total Construction Engineering	17% of (K)		12.00%	\$341,784,983.37	(L)	
Total Draliminany Englished in a sta	150/ of (1/)		10.00%	£204 000 040 17		
Total Preliminary Engineering**	15% of (K)		10.00%	\$284,820,819.47	(M)	<u> </u>
	1					<u> </u>
Right of Way	Project Dependent		2.00%	\$52,744,596.20	(N)	
L tilition	Project Dependent		NI/A	¢0.00		
Utilities	Project Dependent		N/A	\$0.00	(O)	<u> </u>
Tunnel (Twin Tunnels) (LF) Tunnel (North Bbre/E.(MT) (LF) Electrification Mobile-Mainteganze Equipment Pessenger-Rolling Stock Automatic-Vehicle/Location System Fare-Collection Minimal Action Interchanges (EACH) Inflation to 2010 dollars (assuming	COST 16,000,00 33,000,00 	13,726,00 144,968,182.00 45.00 244.00 100 403.00 1.00		11,115,600,00 462,925,000,00 144,968,182,00 2,060,000,00 2,926,000,00 2,926,000,00 14,917,600,00 552,000,000,00 552,000,000,00 552,000,48,167,63		44444.444
				<u>, , , , , , , , , , , , , , , , , , , </u>		
Total Project Cost	·			\$5,852,563,052.03	(P)	
	1	D	t of Alternotics in Mar			
*Contingencies includes environmental mitigati	on costs	Base cos	t of Alternative in Million	s \$5,321		+
**Total Preliminary Engineering includes cost of		cuments				

TIER 1 - PEIS COST ESTIMATE 5 - DIESEL BUS IN GUIDEWAY

0/47/0040 44/00		i	· · · · ·		
8/17/2010 14:29 BID ITEMS	COST PER UNIT	QUANTITY	COST		
	SOUTHER UNIT	NOTATITI			
Structures (SF)	150.00	345,492.00	51,823,800.00		
Walls (SF)	90.00	1,021,582.00	91,942,380.00		
Earthwork (CY)	20.00				
		386,227.00	7,724,540.00		
Pavement (TON)	70.00	169,244.00	11,847,080.00		
Base Course (CY)	40.00	113,969.00	4,558,760.00		
Barrier (Type 7)(LF)	60.00	329,696.00	19,781,760.00		
Special Structures (SF)	200.00	958,487.00	191,697,400.00		
Bus-Walls	90.00	484,108.00	43,569,720.00		
Bus-Earthwork	20.00	203,036.00	4,060,720.00		
Bus-Guideway Structure (LF)	3,200.00	71,000.00	227,200,000.00		
Bus-Guided Busway Track	315.00	267,168.00	84,157,920.00		
Bus-Maintenance Facilities	Variable	3.00	84,500,000.00		
Bus-Ramps for Busses	2,000,000.00	12.00	24,000,000.00		
Bus-Stations/Parking (Large)	10,000,000.00	3.00	30,000,000.00		
Bus-Stations/Parking (Medium)	6,000,000.00	1.00	6,000,000.00		
Bus-Station (Small)	3,000,000.00	9.00	27,000,000.00		
Extension - Silverth. to Eagle Airport					
Bus-Extension-Walls	90.00	554,524.00	49,907,160.00		
Bus-Extension-Earthwork	20.00	232,569.00	4,651,380.00		
Bus-Extension-Guideway Structure (LF)	3,200.00	73,920.00	236,544,000.00		
Bus-Extension-Guided Busway Track	315.00	332,640.00	104,781,600.00		
Bus-Extension-Maintenance Facilities	Variable	3.00	84,500,000.00		
Bus-Extension-Ramps for Busses	2,000,000.00	14.00	28,000,000.00		
Bus-Extension-Stations/Parking (Large)	10,000,000.00	3.00	30,000,000.00		
Bus-Extension-Stations/Parking (Medium)	6,000,000.00	1.00	6,000,000.00		
Bus-Extension-Stationart arking (Medium)	3,000,000.00	9.00	27,000,000.00		
Dus-LAGISION-StatiON (SINAII)	3,000,000.00	9.00	∠1,000,000.00		
Total			1,481,248,220.00		
			1,701,270,220.00		
	1				_
	% Range		% Used	Cost	
Project Construction Bid Items	Project Dependent		N/A	£1 491 349 330 00	(4)
Project Construction Bid Items	Project Dependent		N/A	\$1,481,248,220.00	(A)
Contingencies* (Mitigation - 7%)	(15% - 30%) of (A)		30.00%	\$444,374,466.00	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
110			0.0078		(0)
	Default = 6%		-		
Drainage/Utilities	(3-10%)of (A+B)		6.00%	\$115,537,361.16	(D)
	Default = 6%				
Signing and Striping	(1-5%) of (A+B+C+	D)	5.00%	\$102,058,002.36	(E)
Signing and Stiping	Default = 5%	6)	5.0078		(Ľ)
	Delault = 5 %		•		
Construction Signing & Traffic Control	5 to 25% of (A+B+0	C+D+E)	15.00%	\$321,482,707.43	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B-	+C+D+E+F)	7.00%	\$172,529,052.99	(G)
	Default = 7%				(-)
	Delault = 1 /0				
			-		
Total of Construction Bid Items	(A+B+C+D+E+F+G	6)		\$2,637,229,809.93	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$52,744,596.20	(I)
	Default = 2%				(1)
	Dorault = 2 /0				
	(40) 4500 450		0.000/	A450 000	(
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$158,233,788.60	(J)
	Default = 12%				
Subtotal of Construction Cost	(H+I+J)			\$2,848,208,194.73	(K)
Total Construction Engineering	17% of (K)		12.00%	\$341,784,983.37	(L)
				φοιι,	(-)
	150/ / 00		10.000/	<u> </u>	
Total Preliminary Engineering**	15% of (K)		10.00%	\$284,820,819.47	(M)
Right of Way	Project Dependent		2.00%	\$52,744,596.20	(N)
	, .,				. /
Utilities	Project Dependent		N/A	\$0.00	(O)
0				ψ0.00	(0)
	0007	OUANTITY			
la server en	COST	QUANTITY		All the second sec	
Tunnel (Twin Tunnels) (LF)	15,000.00	741.00 13,725.00		11,115,000.00	10 A.
Tunnel (North Bore EJMT) (LF)	33,000.00	13,725.00		452,925,000.00	1
Mobile Maintenance Equipment	variable		191919191919191919	2,000,000.00	1
Passenger Rolling Stock	325,000.00			82,550,000.00	1.1.1.1
					1. 1.
Automatic Vehicle Location System	3,048,000.00			3,048,000.00	1.0
Fare Collection	37,000.00	403.00		14,911,000.00	
Minimal Action	variable	1.00		532,000,000.00	Sec. 16.
Interchanges (EACH)	1.00	6,094,092.00		6,094,092.00	
Inflation to 2010 dollars (assuming 4	1% per vear)	2,201,002.00		\$1,297,016,472.01	1.
initiation to zo to donaro (doodning	,	1		\$1,207,010,472.01	
Total Project Cost		I		\$5,929,218,157.78	(P)
rotar Project COSt				93,329,210,157.78	(٣)
		Boo	e cost of Alternative in Millions	\$5,397	
			a saar or mismative in wiiillons	40,001	
*Contingencies includes environmental miti-att	in costs				
*Contingencies includes environmental mitigatio					
*Contingencies includes environmental mitigation **Total Preliminary Engineering includes cost of					

TIER 1 - PEIS COST ESTIMATE 6 - 6-LANE 55mph

8/17/2010 14:29 BID ITEMS	COST PER UNIT	QUANTITY	COST		
	450.00	000,400,00			
Structures (SF) Walls (SF)	150.00 90.00	203,163.00 576,152.00	30,474,450.00 51,853,680.00		
Earthwork (CY)	20.00	1,847,235.00	36,944,700.00		
Pavement (TON)	70.00	635,092.00	44,456,440.00		
Base Course (CY)	40.00	427,672.00	17,106,880.00		
Barrier (Type 7)(LF)	60.00	292,657.00	17,559,420.00		
Special Structures (SF)	200.00	958,487.00	191,697,400.00		
Total			390,092,970.00		
			000,002,010,000		
	% Range		% Used	Cost	
Project Construction Bid Items	Project Dependent		N/A	\$390,092,970.00	(A)
				<u> </u>	(,,,
Contingencies* (Mitigation - 10%)	(15% - 30%) of (A)		30.00%	\$117,027,891.00	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				
Drainage/Utilities	(3-10%)of (A+B)		6.00%	\$30,427,251.66	(D)
Drainage/Ounties	Default = 6%		0.00 /8	\$30,427,231.00	(D)
	Doldan = 070				
Signing and Striping	(1-5%) of (A+B+C+	D)	5.00%	\$26,877,405.63	(E)
	Default = 5%				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	15.00%	\$84,663,827.74	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B+	-C+D+F+F)	7.00%	\$45,436,254.22	(G)
	Default = 7%	0.0.2.1		\$ 10, 100,20 HEE	(0)
Total of Construction Bid Items	(A+B+C+D+E+F+G)		\$694,525,600.26	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$13,890,512.01	(I)
Torce Account - Otimies	Default = 2%		2.0070	ψ13,030,312.01	(1)
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$41,671,536.02	(J)
	Default = 12%				
	41.1.5			* 750 007 040 00	(10)
Subtotal of Construction Cost	(H+I+J)			\$750,087,648.28	(K)
Total Construction Engineering	17% of (K)		12.00%	\$90,010,517.79	(L)
	1770 OI (IX)		12.00 /0	\$90,010,317.79	(Ľ)
Total Preliminary Engineering**	15% of (K)		10.00%	\$75,008,764.83	(M)
Dight of Wov	Droiget Dependent		2.00%	¢12 000 512 01	(NI)
Right of Way	Project Dependent		2.00%	\$13,890,512.01	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
					(- <i>)</i>
	COST	QUANTITY			
Tunnel (Twin Tunnels) (LF)	15,000.00			11,115,000.00	
Tunnel (North Bore EJMT) (LF)	33,000.00			452,925,000.00	
Silver Plume ramps.	variable variable	1.00		4,427,794.49	
SH 103 reconfigure Dowd alt, 1 - no Rail	variable variable			52,118,056.79 372,474,210.66	1.15
Minimal Action	variable		the second s	678,000,000.00	
Interchanges (EACH)	1.00	7,169,520.00	and the second	7,169,520.00	
Inflation to 2010 dollars (assuming		.,		\$702,023,566.96	
Total Project Cost				\$3,209,250,591.81	(P)
		Rase on	st of Alternative in Millions	\$2 531	
*Contingencies includes environmental mitigati	on costs	Base co	st of Alternative in Millions	\$2,531	

TIER 1 - PEIS COST ESTIMATE 7 - 6-LANE 65 mph

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
6-lane - 55 mph	1.00	3,209,250,591.81	3,209,250,591.81		
55mph Floyd Hill	-1.00		-96,381,491.79		
55mph Fall River Rd.	-1.00				
55mph S curves at TT Hidden Valley	-1.00	61,732,034.79	-61,732,034.79		
Dowd Alt. 1 - no FGT	-1.00		-372,474,210.66		
65mph Floyd Hill	1.00	244,057,094.59	244,057,094.59		
65mph Fall River Rd.	1.00		42,221,080.31		
65mph S curves at TT Hidden Valley	1.00		109,533,097.09		
Dowd Alt. 2a - no FGT	1.00	465,458,510.93	465,458,510.93		
Total			3,520,028,275.43		
	% Range		% Used	Cost	
Project Construction Bid Items	Project Dependent		N/A	\$3,520,028,275.43	(A)
Contingencies* (Mitigation - 10%)	(15% - 30%) of (A)		30.00%	\$0.00	(B)
ITS	(6-10%) of (A+B) Default = 6%		0.00%	\$0.00	(C)
Drainage/Utilities	(3-10%)of (A+B) Default = 6%		10.00%	\$0.00	(D)
Signing and Striping	(1-5%) of (A+B+C+ Default = 5%	D)	3.00%	\$0.00	(E)
Construction Signing & Traffic Control	5 to 25% of (A+B+C Default = 20%	C+D+E)	15.00%	\$0.00	(F)
Mobilization	(4 to 10%) of (A+B- Default = 7%	+C+D+E+F)	7.00%	\$0.00	(G)
Total of Construction Bid Items	(A+B+C+D+E+F+G)		\$0.00	(H)
Force Account - Utilities	(1 to 2%) of (H) Default = 2%		2.00%	\$0.00	(I)
Force Account - Misc.	(10 to 15%) of (H) Default = 12%		12.00%	\$0.00	(J)
Subtotal of Construction Cost	(H+I+J)			\$0.00	(K)
Total Construction Engineering	17% of (K)		17.00%	\$0.00	(L)
Total Preliminary Engineering**	15% of (K)		15.00%	\$0.00	(M)
Right of Way	Project Dependent		2.00%	\$0.00	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST 0.00 0.00 0.00	0.D0 0.D0		0.00 0.00 0.00	
	0.00 0.00			0.00 0.00	9101010
Total Project Cost		Race	cost of Alternative in Millions	\$3,520,028,275.43 \$3,520	(P)
*Contingencies includes environmental mitigati				ψ0,020	
**Total Preliminary Engineering includes cost of	f developing NEPA do	cuments			

TIER 1 - PEIS COST ESTIMATE 8 - REVERSIBLE LANES

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	224,464.00	33,669,600.00		
Walls (SF)	90.00	933,039.00	83,973,510.00		
Earthwork (CY)	20.00	4,221,304.00	84,426,080.00		
Pavement (TON)	70.00	688,329.00	48,183,030.00		
Base Course (CY)	40.00	463,521.00	18,540,840.00		
Barrier (Type 7)(LF) Special Structures (SF)	60.00 200.00	<u>331,274.00</u> 718,865.00	19,876,440.00 143,773,000.00		
	200.00	710,005.00	143,773,000.00		
Total			432,442,500.00		
	% Range		% Used	Cost	
	/o nungo				
Project Construction Bid Items	Project Dependent		N/A	\$432,442,500.00	(A)
Contingencies* (Mitigation - 10%)	(15% - 30%) of (A)		30.00%	\$129,732,750.00	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				(0)
Drainage/Utilities	(3-10%)of (A+B)		6.00%	\$33,730,515.00	(D)
	Default = 6%				
Oinnin a nad Otninin a	(4.5%) = (4.5)	D)	F 0004	¢00 705 000 05	
Signing and Striping	(1-5%) of (A+B+C+ Default = 5%	D)	5.00%	\$29,795,288.25	(E)
	Delault = 5 %				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	15.00%	\$93,855,157.99	(F)
	Default = 20%	•			· · ·
Mobilization	(4 to 10%) of (A+B+	·C+D+E+F)	7.00%	\$50,368,934.79	(G)
	Default = 7%				
Total of Construction Bid Items	(A+B+C+D+E+F+G)		\$769,925,146.02	(H)
		/		· · · · · · · · · · · ·	· · ·
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$15,398,502.92	(I)
	Default = 2%				
Fores Assount Miss	(10 to 15%) of (H)		C 000/	¢40 405 500 70	(1)
Force Account - Misc.	Default = 12%		6.00%	\$46,195,508.76	(J)
Subtotal of Construction Cost	(H+I+J)			\$831,519,157.71	(K)
Total Construction Engineering	17% of (K)		12.00%	\$99,782,298.92	(L)
Total Preliminary Engineering**	15% of (K)		10.00%	\$83,151,915.77	(M)
			10.0070	ψυσ, το τ, 910.77	(IVI)
Right of Way	Project Dependent		2.00%	\$15,398,502.92	(N)
1 141141	Duraita at D		N1/A		
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			
Tunnel (Twin Tunnels) (LF)	15,000.00	741.00	10100100000000	11,115,000.00	1.1
Tunnel (North Bore EJMT) (LF)	33,000.00			452,925,000.00	
Silver Plume ramps	variable	1.00		4,427,794.49	
SH 103 reconfigure	variable			52,118,056.79	
Dowd alt: 1 - no Rail	variable			372,474,210.66	
MinImal Action	variable			678,000,000.00	
Interchanges (EACH)	1.00	20,870,688.00		20,870,688.00	
Inflation to 2010 dollars (assuming	+∞ per year)			\$734,099,135.07	5. SE S
Total Project Cost				\$3,355,881,760.34	(P)
					(.)
		Base co	est of Alternative in Millions	\$2,678	
*Contingencies includes environmental mitigatio **Total Preliminary Engineering includes cost of		rumente		I	
Total Preliminary Engineering Includes Cost 0	ueveloping NEPA do	Juments		1	

TIER 1 - PEIS COST ESTIMATE 9 - 6-LANE w/RAIL IMC

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	267,796.00	40,169,400.00		
Walls (SF)	90.00	1,349,782.00	121,480,380.00		
Earthwork (CY)	20.00	3,195,854.00	63,917,080.00		
Pavement (TON)	70.00	594,691.00	41,628,370.00		
Base Course (CY)	40.00	536,821.00	21,472,840.00		
Barrier (Type 7)(LF)	60.00	326,315.00	19,578,900.00		
Special Structures (SF)	200.00	960,082.00	192,016,400.00		
Rail - Walls (SF) Rail - Earthwork (CY)	90.00 20.00	1,387,297.00	124,856,730.00 14,502,320.00		
Rail - Base Course (CY)	40.00	725,116.00 309,417.00	12,376,680.00		
Rail - Heavy Rail Structure (SF)	200.00	3,235,560.00	647,112,000.00		
Rail - Heavy Rail Trackwork (TF)	150.00	769,696.00	115,454,400.00		
Rail - Maintenance Facilities	3.00	Variable	74,600,000.00		
Rail - Interlockings	1,000,000.00	16.00	16,000,000.00		
Rail - Stations/Parking (Large)	10,000,000.00	2.00	20,000,000.00		
Rail - Stations/Parking (Medium)	6,000,000.00	4.00	24,000,000.00		
Rail - Stations/Parking (Small)	3,000,000.00	4.00	12,000,000.00		
Total			1,561,165,500.00		
	N/ Damas		9/ Heed	Cast	
	% Range		% Used	Cost	
Project Construction Bid Items	Project Dependent		N/A	\$1,561,165,500.00	(A)
Contingencies* (Mitigation - 14%)	(15% - 30%) of (A)		30.00%	\$468,349,650.00	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	(6-10%) 01 (A+B) Default = 6%		0.00 %	φυ.00	
	Deladit = 070				
Drainage/Utilities	(3-10%)of (A+B)		5.00%	\$101,475,757.50	(D)
	Default = 6%				, í
Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$85,239,636.30	(E)
	Default = 5%				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	, TDTE)	10.00%	\$221,623,054.38	(F)
Construction Signing & Trailic Control	Default = 20%		10.00 %	9221,023,034.30	(1)
	Deladit = 2070				
Mobilization	(4 to 10%) of (A+B+	+C+D+E+F)	7.00%	\$170,649,751.87	(G)
	Default = 7%				
Total of Construction Bid Home	(4.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0			¢0,000,500,050,05	(11)
Total of Construction Bid Items	(A+B+C+D+E+F+G) 		\$2,608,503,350.05	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$52,170,067.00	(1)
	Default = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$156,510,201.00	(J)
	Default = 12%				
Subtotal of Construction Cost	(H+I+J)			\$2.817.183.618.06	
Subtotal of Construction Cost	(n+i+j)			- φ2,017,103,010.00	(K)
Total Construction Engineering	17% of (K)		10.00%	\$281,718,361.81	(L)
				+,, io,oo.ioi	()
Total Preliminary Engineering**	15% of (K)		10.00%	\$281,718,361.81	(M)
Right of Way	Project Dependent		2.00%	\$52,170,067.00	(N)
				<u>402,110,001.00</u>	
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			
Tunnel (Twin Tunnels) (LF).	1.5,000.00.			11,115,000.00	1.1
Tunnel (North Bore EJMT) (LF)	48,000,00			658,800,000.00	1.11
Tunnel (North Bore extended EJMT) (LF) Electrification	20,500.00			87,166,000.00 255,000,000.00	
Mobile Maintenance Equipment	9,264,000.00			9,264,000.00	
Passenger Rolling Stock	2,600,000.00			741,000,000.00	
IMC	variable	1.D0		184,839,130.16	
Fare Collection	38,000:00			7,144,000.00	
Signals and Controls	96,000,000:00 variable			115,200,000.00 4,427,794.49	1.11
				4,427,794.49 52,118,056.79	1.11
Silver Plume ramps	wariahle			385,987,375.23	1.11
Silver Plume ramps SH 103 reconfigure	variable variable	1 00			
Silver Plume ramps	variable variable variable			678,000,000.00	
Silver Plume;ramps SH 103 reconfigure Dowd all. 1w Rail Minimal Action Interchanges (EACH);	variable variable 1.00	1.00			
Silver Plume ramps SH 103 reconfigure Dowd alt. 1w Rail Minimal Action	variable variable 1.00	1.00		678,000,000.00	
Silver Plume;ramps SH 103 reconfigure Dowd alt, 11-w Rait Minimal Action Interchanges (EACH) Inflation to 2010 dollars (assuming 4	variable variable 1.00	1.00		678,000,000.00 21,914,222.40 \$1,860,534,476.57	
Silver Plume;ramps SH 103 reconfigure Dowd all. 1w Rail Minimal Action Interchanges (EACH);	variable variable 1.00	1.00		678,000,000.00 21,914,222.40	(P)
Silver Plume;ramps SH 103 reconfigure Dowd alt, 11-w Rait Minimal Action Interchanges (EACH) Inflation to 2010 dollars (assuming 4	variable variable 1.00	1.00 21.914,222.40	ost of Alternative in Millic	678.000,000.00 21.914,222.40 \$1,860,534,476.57 \$8,505,300,464.30	(P)
Silver Plume;ramps SH 103 reconfigure Dowd alt, 11-w Rait Minimal Action Interchanges (EACH) Inflation to 2010 dollars (assuming 4	variable variable 1:00 4% per year) on costs	1.00 21,914,222.40	ost of Alternative in Millic	678.000,000.00 21.914,222.40 \$1,860,534,476.57 \$8,505,300,464.30	(P)

TIER 1 - PEIS COST ESTIMATE 9b - 6-LANE w/RAIL PRESERVATION

Bit Infess COST PER LINIT GUANTIY COST Image: Cost Per Linit Structures (SF) 1500 967 756.00 91497 726.00 91490.000 1 Batter (Type 7) 1200 5159 554.00 5172.800.00 1 1 Baster (Type 7)(LF) 60.00 365 821.00 172.840.00 1 1 Special Structures (SF) 200.00 960.020.01 10.772.840.00 1 1 Towal 900.263.01 10.772.840.00 900.263.01 10.772.840.00 1 1 Towal 900.263.01 10.772.840.00 900.263.01 10.772.840.00 1 1 Towal 900.263.01 10.772.840.00 900.263.370.00 1	8/17/2010 14:29					
Walk (SP) 90.00 1,349,782.00 12,480,380.00 Image: Construction of Construction of Construction Signal of Constructi		COST PER UNIT	QUANTITY	COST		
Walk (SF) 90.00 1,349,782.00 12,480,380.00 Image: 1,480,380.00 Barber (Type 7)(LF) 00.00 554,240.00 4,698,270.00 Image: 1,497,820.00 Barber (Type 7)(LF) 00.00 355,321.00 11,974,800.00 Image: 1,974,800.00 Special Structures (SF) 20.00 960,062.00 190,074,800.00 Image: 1,974,800.00 Total 900,062.00 190,074,800.00 Image: 1,974,800.00 Image: 1,974,800.00 Total 900,062.00 190,074,800.00 Image: 1,974,800.00 Image: 1,974,800.00 Total 900,062.00 190,074,800.00 Image: 1,974,800.00 Image: 1,974,800.00 Total 900,062.00 190,072.011.00 Image: 1,974,900.00 Image: 1,974,900.00 Image: 1,974,900.00 Construction Bid Items 1,976,900 (A+B) 0,000% \$20,070.011.00 Image: 1,974,900.00 \$27,371.119.05 Drainage: Utilities G-1.0%,900 (A+B) 0,000% \$22,377.119.05 \$22,377.119.05 \$22,377.119.05 \$22,377.119.05 \$22,371.119.05 \$22,371.119.05 \$22,371.119.05 \$22,37.119.05 \$22,371.119.05		150.00	207 700 00	40,400,400,00		
Entimode (CY) 20.00 3.198,84.00 6.317,80.00 4 Bare Course (CY) 40.00 556,821.00 21.472,84.00 4 Bare Course (CY) 40.00 556,821.00 21.472,84.00 4 Special Structures (SF) 200.00 960,082.00 160,788.00.00 4 Tail 501,853.370.00 5 5 5 5 Tail 501,853.370.00 5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Pavement (TON) 70.00 594 (81).00 41.823.70.00 Image: Arr 244.00 Barrier (Type 7)(LP) 60.00 326 315.00 13.77.84.00.0 Image: Arr 244.00 Image: Arr 244.00 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Base Course (CY) 40.00 \$58,821.00 21.472.84.00 1 1 Special Structures (SF) 200.00 960,082.00 192.016.00.00 1 1 1 Total 200.00 960,082.00 192.016.00.00 1			, ,			
Bartier (Type T/UE) 60.00 326.315.00 19.278.00.00 Special Structures (SF) 200.00 960.08.200 19.218.40.00 1 Total S00.263.370.30 S00.263.370.30 S00.263.370.30 S00.263.370.30 Total S00.263.370.30 S00.063.070.30 S00.063.070.30 S00.076 Project Construction Bid Items Project Dependent N/A \$550.078.070.01 Contingencies* (Miligation - 14%) (15% - 30%) of (A) 30.00% \$150.079.011.00 Organizage/Utilities (21.0%) of (A+B) 0.00% \$322.517.119.07 Default = 6% S0.00% \$27.314.380.00 \$27.314.380.00 Default = 6% S0.00% \$27.314.380.00 \$27.314.380.00 Default = 5% Default = 5% S0.00% \$27.314.380.00 Default = 5% Default = 5% \$27.314.380.00 \$27.314.380.00 Obstaut = 5% Default = 5% \$27.314.380.00 \$27.314.380.00 Default = 5% Default = 2% \$30.00% \$30.52.714.238.01 Obstaut = 5% Default = 2% \$30.00% \$30.52.			,			
Special Structures (SF) 200.00 960,082.00 182.016.400.00 Image: Control of			,			
Total 900.283.370.00 South Project Dependent N/A South Project Dependent N/A Project Construction Bid Items Project Dependent N/A Stab.079.011.00 Stab.079.011.00 Contingencies* (Mitgation - 14%) (15% - 30%) of (A+B) 0.00% Stab.079.011.00 Tris (6-10%) of (A+B) 0.00% Stab.079.011.00 Stab.079.011.00 Default = 6% 0.00% Stab.079.011.00 Stab.079.011.00 Stab.079.011.00 Optimize Stab.010 0.00% Stab.011.00 Stab.011.00 Stab.011.00 Stab.011.00 Default = 6% 0.00% Stab.011.00 Stab.011.00 Stab.011.00 Stab.011.00 Mobilization (A tab C+0 +E +E) 10.00% Stab.012.00 Stab.012.00 Stab.012.2479.41 Force Acco			/			
Project Construction Bid Items Project Dependent N/A S500.263.370.00 Contingencies* (Mitigation - 14%) (15% - 30%) of (A) 30.00% \$150.079.011.00 (TS (6-10%) of (A+B) 0.00% \$20.00 Drainage/Utilities (3-10%) of (A+B) 0.00% \$20.00 Signing and Stripping (1-5%) of (A+B) 0.00% \$22.73.14.380.00 Default = 6%	Special Structures (SF)	200.00	300,002.00	192,010,400.00		
Project Construction Bid Items Project Dependent N/A \$500,263,370,00 Contingencies* (Mitigation - 14%) (15% - 30%) of (A) 90,00% \$150,079,011,00 TTS (6-10%) of (A+B) 0,00% \$2150,079,011,00 Drainage/Utilities (3-10%) of (A+B) 5,00% \$322,517,119,05 Drainage/Utilities (3-10%) of (A+B) 5,00% \$322,517,119,05 Signing and Striping (1-5%) of (A+B+C+D) 4,00% \$27,314,380,00 Default = 5% 0 50,07% \$322,517,119,085 Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E) 10,00% \$571,017,388,01 Obfault = 2% 0 500% \$40,683,388,76 544,683,388,76 Mobilization (4 to 10%) of (A+B+C+D+E+F) 7,00% \$451,671,493,14 Force Account - Utilities (1 to 2%) of (H) 6,00% \$50,152,473,41 Force Account - Utilities (1 to 2%) of (H) 6,00% \$90,274,462,94 Total of Construction Cost (H+H+J) 10,00% \$90,274,462,94 Total Construction Engineering 17% of (K) 10,00% <td>Total</td> <td></td> <td></td> <td>500,263,370.00</td> <td></td> <td></td>	Total			500,263,370.00		
Project Construction Bid Items Project Dependent N/A \$500,263,370,00 Contingencies* (Mitigation - 14%) (15% - 30%) of (A) 90,00% \$150,079,011,00 TTS (6-10%) of (A+B) 0,00% \$0,000 \$0,000 Drainage/Utilities (3-10%) of (A+B) 0,00% \$32,517,119,05 \$0,00% Signing and Striping (1-5%) of (A+B+C+D) 4,00% \$27,314,380,00 \$71,017,388,01 Default = 5% 0 50,07% \$52,517,101,73,380,01 \$64,068,388,76 Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E+F) 10,00% \$71,017,388,01 Mobilization (4 to 10%) of (A+B+C+D+E+F) 700% \$46,683,388,76 Default = 7% 70% \$54,683,388,76 Force Account - Utilities (110,2%) of (H) 6,00% \$50,152,473,41 Valuet = 2% 0 9 \$90,274,462,93 \$90,274,462,94 Subtotal of Construction Cost (H+1+J) 10,00% \$90,274,462,94 \$90,274,462,94 Total Preliminary Engineering 17% of (K) 10,00% \$90,274,462,94 \$90,000						
Project Construction Bid Items Project Dependent N/A \$500,263,370,00 Contingencies* (Mitigation - 14%) (15% - 30%) of (A) 90,00% \$150,079,011,00 TTS (6-10%) of (A+B) 0,00% \$0,000 \$0,000 Drainage/Utilities (3-10%) of (A+B) 0,00% \$32,517,119,05 \$0,00% Signing and Striping (1-5%) of (A+B+C+D) 4,00% \$27,314,380,00 \$71,017,388,01 Default = 5% 0 50,07% \$52,517,101,73,380,01 \$64,068,388,76 Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E+F) 10,00% \$71,017,388,01 Mobilization (4 to 10%) of (A+B+C+D+E+F) 700% \$46,683,388,76 Default = 7% 70% \$54,683,388,76 Force Account - Utilities (110,2%) of (H) 6,00% \$50,152,473,41 Valuet = 2% 0 9 \$90,274,462,93 \$90,274,462,94 Subtotal of Construction Cost (H+1+J) 10,00% \$90,274,462,94 \$90,274,462,94 Total Preliminary Engineering 17% of (K) 10,00% \$90,274,462,94 \$90,000						
Project Construction Bid Items Project Dependent N/A \$500,263,370,00 Contingencies* (Mitigation - 14%) (15% - 30%) of (A) 90,00% \$150,079,011,00 TTS (6-10%) of (A+B) 0,00% \$0,000 \$0,000 Drainage/Utilities (3-10%) of (A+B) 0,00% \$32,517,119,05 \$0,00% Signing and Striping (1-5%) of (A+B+C+D) 4,00% \$27,314,380,00 \$71,017,388,01 Default = 5% 0 50,07% \$52,517,101,73,380,01 \$64,068,388,76 Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E+F) 10,00% \$71,017,388,01 Mobilization (4 to 10%) of (A+B+C+D+E+F) 700% \$46,683,388,76 Default = 7% 70% \$54,683,388,76 Force Account - Utilities (110,2%) of (H) 6,00% \$50,152,473,41 Valuet = 2% 0 9 \$90,274,462,93 \$90,274,462,94 Subtotal of Construction Cost (H+1+J) 10,00% \$90,274,462,94 \$90,274,462,94 Total Preliminary Engineering 17% of (K) 10,00% \$90,274,462,94 \$90,000						
Contingencies* (Mitigation - 14%) (15% - 30%) of (A 30.00% \$150,079,011.00 TTS (6-10%) of (A+B) 0.00% \$0.00 Default = 6% 0.00% \$32,517,119.05 Drainage/Utilities (3-10%) of (A+B) 5.00% \$32,517,119.05 Signing and Striping (1-5%) of (A+B+C+D) 4.00% \$27,314,380.00 Default = 6% 0 0.00% \$71,017,388.01 Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E) 10.00% \$71,017,388.01 Mobilization (4 to 10%) of (A+B+C+D+E) 7.00% \$54,683,388.76 Total of Construction Bid Items (A+B+C+D+E+F+G) \$835,874,656.82 Force Account - Utilities (1 to 2%) of (H) 6.00% \$50,152,479.41 Default = 2% 5902,744,629.37 \$902,744,629.37 \$902,744,629.42 Subtotal of Construction Cost (H+x) \$902,744,629.42 \$902,744,629.43 Total Preliminary Engineering ** 15% of (K) 10.00% \$90,274,462.94 Total Or Struction Engineering ** 15% of (K) 10.00% \$90,274,462.94		% Range		% Used	Cost	
Contingencies* (Mitigation - 14%) (15% - 30%) of (A 30.00% \$150,079,011.00 TTS (6-10%) of (A+B) 0.00% \$0.00 Default = 6% 0.00% \$32,517,119.05 Drainage/Utilities (3-10%) of (A+B) 5.00% \$32,517,119.05 Signing and Striping (1-5%) of (A+B+C+D) 4.00% \$27,314,380.00 Default = 6% 0 0.00% \$71,017,388.01 Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E) 10.00% \$71,017,388.01 Mobilization (4 to 10%) of (A+B+C+D+E) 7.00% \$54,683,388.76 Total of Construction Bid Items (A+B+C+D+E+F+G) \$835,874,656.82 Force Account - Utilities (1 to 2%) of (H) 6.00% \$50,152,479.41 Default = 2% 5902,744,629.37 \$902,744,629.37 \$902,744,629.42 Subtotal of Construction Cost (H+x) \$902,744,629.42 \$902,744,629.43 Total Preliminary Engineering ** 15% of (K) 10.00% \$90,274,462.94 Total Or Struction Engineering ** 15% of (K) 10.00% \$90,274,462.94						
Contingencies* (Mitigation - 14%) (15% - 30%) of (A 30.00% \$150,079,011.00 TTS (6-10%) of (A+B) 0.00% \$0.00 Default = 6% 0.00% \$32,517,119.05 Drainage/Utilities (3-10%) of (A+B) 5.00% \$32,517,119.05 Signing and Striping (1-5%) of (A+B+C+D) 4.00% \$27,314,380.00 Default = 6% 0 0.00% \$71,017,388.01 Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E) 10.00% \$71,017,388.01 Mobilization (4 to 10%) of (A+B+C+D+E) 7.00% \$54,683,388.76 Total of Construction Bid Items (A+B+C+D+E+F+G) \$835,874,656.82 Force Account - Utilities (1 to 2%) of (H) 6.00% \$50,152,479.41 Default = 2% 5902,744,629.37 \$902,744,629.37 \$902,744,629.42 Subtotal of Construction Cost (H+x) \$902,744,629.42 \$902,744,629.43 Total Preliminary Engineering ** 15% of (K) 10.00% \$90,274,462.94 Total Or Struction Engineering ** 15% of (K) 10.00% \$90,274,462.94						
Contingencies* (Mitigation - 14%) (15% - 30%) of (A 30.00% \$150,079,011.00 TTS (6-10%) of (A+B) 0.00% \$0.00 Default = 6% 0.00% \$32,517,119.05 Drainage/Utilities (3-10%) of (A+B) 5.00% \$32,517,119.05 Signing and Striping (1-5%) of (A+B+C+D) 4.00% \$27,314,380.00 Default = 6% 0 0.00% \$71,017,388.01 Construction Signing & Traffic Control 5 to 25% of (A+B+C+D+E) 10.00% \$71,017,388.01 Mobilization (4 to 10%) of (A+B+C+D+E) 7.00% \$54,683,388.76 Total of Construction Bid Items (A+B+C+D+E+F+G) \$835,874,656.82 Force Account - Utilities (1 to 2%) of (H) 6.00% \$50,152,479.41 Default = 2% 5902,744,629.37 \$902,744,629.37 \$902,744,629.42 Subtotal of Construction Cost (H+x) \$902,744,629.42 \$902,744,629.43 Total Preliminary Engineering ** 15% of (K) 10.00% \$90,274,462.94 Total Or Struction Engineering ** 15% of (K) 10.00% \$90,274,462.94						
ITS (-10%) of (A+B) 0.00% \$30.00 Drainage/Utilities (3-10%) of (A+B) 5.00% \$32.517, 119.06 Signing and Striping (1-5%) of (A+B-C+D) 4.00% \$27.314,380.00 Construction Signing & Traffic Control 5 to 25% of (A+B-C+D+E+F) 10.00% \$71.017,388.01 Construction Signing & Traffic Control 5 to 25% of (A+B-C+D+E+F) 7.00% \$54.683,388.76 Mobilization (4 to 10%) of (A+B-C+D+E+F) 7.00% \$54.683,388.76 Force Account - Utilities (1 to 2%) of (H) 2.00% \$16.717,493.14 Force Account - Utilities (1 to 2%) of (H) 6.00% \$90.274.4629.37 Total Of Construction Engineering 17% of (K) 10.00% \$90.274.4629.37 Total Construction Engineering 17% of (K) 10.00% \$90.274.462.94 Visities Project Dependent NA \$0.000 Total Construction Engineering 17% of (K) 10.00% \$90.274.462.94 Utilities Project Dependent NA \$0.00 Total Construction Engineering** 15% of (K) 10.00% \$90.274.462.94 Utintes Project Dependent	Project Construction Bid Items	Project Dependent		N/A	\$500,263,370.00	(A)
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Total Construction Engineering 17% of (K) 10.00% \$90,274,462.94 Total Preliminary Engineering** 15% of (K) 10.00% \$90,274,462.94 Right of Way Project Dependent 2.00% \$16,717,493.14 Utilities Project Dependent N/A \$0.00 Tunnel (Twin Tunnels) (LF) 15,000.00 7/41.00 11,115,000.00 Tunnel (North Bore EJMT) (LP) 48,000.00 13,725.00 658,800.000.00 Tunnel (North Bore EJMT) (LP) 20,300.00 4,262.00 87.166,000.00 IMC variable 1.00 372,474,210.66 184,839,130.16 Silver Plumeramips variable 1.00 372,474,210.66 678,300,000.00 Silver Plumeramips variable 1.00 372,474,210.66 678,300,000.00 Silver Plumeramips variable 1.00 372,474,210.66 52,118,056,79 Dowd alt: 1 - No Rail variable 1.00 372,474,210.66 587,194,222,40 Inflation to 2010 dollars (assuming 4% per year) Total Project Cost \$84,058,707,792,49 \$887,842,329,61 \$887,842,329,61	Subtotal of Construction Cost	(H+1+1)			\$002 744 620 37	(K)
Total Preliminary Engineering** 15% of (K) 10.00% \$90,274,462.94 Right of Way Project Dependent 2.00% \$16,717,493.14 Utilities Project Dependent N/A \$0.00 Tunnel (North Bore EJMT) (LF) 15,000.00 741.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 15,000.00 741.00 688,800.000.00 Tunnel (North Bore EJMT) (LF) 20,800.00 4252.00 688,800.000.00 IMC variable 1.00 44,27,794.49 87166.00.00 Silver Plumeramps variable 1.00 658,800.000.00 87166.00.00 Silver Plumeramps variable 1.00 688,800.000.00 87166.717.493.14 Silver Plumeramps variable 1.00 6716.00.00 8716.717.493.14 Silver Plumeramps variable 1.00 4277.794.49 8716.717.493.14 Silver Plumeramps variable 1.00 688.800.000.00 8716.60.00.00 Inflation to 2010 dollars (assuming 4% per year) 8887.842.322.40 8887.842.322.40 8887.842.322.40 8887.842.322.40		(11+1+3)			↓302,7 44 ,023.37	
Total Preliminary Engineering** 15% of (K) 10.00% \$90,274,462.94 Right of Way Project Dependent 2.00% \$16,717,493.14 Utilities Project Dependent N/A \$0.00 Tunnel (North Bore EJMT) (LF) 15,000.00 741.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 15,000.00 741.00 688,800.000.00 Tunnel (North Bore EJMT) (LF) 20,800.00 4252.00 688,800.000.00 IMC variable 1.00 44,27,794.49 87166.00.00 Silver Plumeramps variable 1.00 658,800.000.00 87166.00.00 Silver Plumeramps variable 1.00 688,800.000.00 87166.717.493.14 Silver Plumeramps variable 1.00 6716.00.00 8716.717.493.14 Silver Plumeramps variable 1.00 4277.794.49 8716.717.493.14 Silver Plumeramps variable 1.00 688.800.000.00 8716.60.00.00 Inflation to 2010 dollars (assuming 4% per year) 8887.842.322.40 8887.842.322.40 8887.842.322.40 8887.842.322.40	Total Construction Engineering	17% of (K)		10.00%	\$00 274 462 04	(L)
Right of Way Project Dependent 2.00% \$16,717,493.14 Utilities Project Dependent N/A \$0.00 Utilities Project Dependent N/A \$0.00 Tunnel (North Bore EJMT) (LF) 15,000.00 7/41.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore Extended EJMT) (LF) 20,800.00 4.252.00 87,166,000.00 IMC variable 1.00 184,839,130.16 4.427,794.49 SH 103 reconfigure variable 1.00 52,118,056.79 21,914,222.40 522,148,056.79 Minimal Action variable 1.00 678,000,000.00 13,725.40 53,734,42,22.40 Inflation to 2010 dollars (assuming 4% per year) 1.00 21,914,222.40 52,118,056,707,792.49 Total Project Cost *Contingencies includes environmental mitigation costs				10.0070	ψ30,214,402.94	(Ľ)
Right of Way Project Dependent 2.00% \$16,717,493.14 Utilities Project Dependent N/A \$0.00 Utilities Project Dependent N/A \$0.00 Tunnel (North Bore EJMT) (LF) 15,000.00 7/41.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore Extended EJMT) (LF) 20,800.00 4.252.00 87,166,000.00 IMC variable 1.00 184,839,130.16 4.427,794.49 SH 103 reconfigure variable 1.00 52,118,056.79 21,914,222.40 522,148,056.79 Minimal Action variable 1.00 678,000,000.00 13,725.40 53,734,42,22.40 Inflation to 2010 dollars (assuming 4% per year) 1.00 21,914,222.40 52,118,056,707,792.49 Total Project Cost *Contingencies includes environmental mitigation costs						
Right of Way Project Dependent 2.00% \$16,717,493.14 Utilities Project Dependent N/A \$0.00 Utilities Project Dependent N/A \$0.00 Tunnel (North Bore EJMT) (LF) 15,000.00 7/41.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore Extended EJMT) (LF) 20,800.00 4.252.00 87,166,000.00 IMC variable 1.00 184,839,130.16 4.427,794.49 SH 103 reconfigure variable 1.00 52,118,056.79 21,914,222.40 522,148,056.79 Minimal Action variable 1.00 678,000,000.00 13,725.40 53,734,42,22.40 Inflation to 2010 dollars (assuming 4% per year) 1.00 21,914,222.40 52,118,056,707,792.49 Total Project Cost *Contingencies includes environmental mitigation costs	Total Preliminary Engineering**	15% of (K)		10.00%	\$90 274 462 04	(M)
Utilities Project Dependent N/A \$0.00 Tunnel (Twin Tunnels) (LF) 15,000.00 :741.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore EJMT) (LF) 20,500.00 4,252.00 87,166,000.00 IMC variable 1,00 14,427,794.49 Silver Plume:ramps variable 1,00 4,427,794.49 SH 103:reconfigure variable 1,00 372,474,210;66 Minimal Action variable 1,00 372,474,210;66 Minimal Action variable 1,00 372,474,210;66 Minimal Action variable 1,00 21,914,222;40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 \$3,381 *Contingencies includes environmental mitigation costs Base cost of Alternative in Millions \$3,381	rotari romininary Engliteeting			10.0070	ψ00,21 4 ,402.34	
Utilities Project Dependent N/A \$0.00 Tunnel (Twin Tunnels) (LF) 15,000.00 :741.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore EJMT) (LF) 20,500.00 4,252.00 87,166,000.00 IMC variable 1,00 14,427,794.49 Silver Plume:ramps variable 1,00 4,427,794.49 SH 103:reconfigure variable 1,00 372,474,210;66 Minimal Action variable 1,00 372,474,210;66 Minimal Action variable 1,00 372,474,210;66 Minimal Action variable 1,00 21,914,222;40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 \$3,381 *Contingencies includes environmental mitigation costs Base cost of Alternative in Millions \$3,381						
Utilities Project Dependent N/A \$0.00 Tunnel (Twin Tunnels) (LF) 15,000.00 :741.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore EJMT) (LF) 20,500.00 4,252.00 87,166,000.00 IMC variable 1,00 14,427,794.49 Silver Plume:ramps variable 1,00 4,427,794.49 SH 103:reconfigure variable 1,00 372,474,210;66 Minimal Action variable 1,00 372,474,210;66 Minimal Action variable 1,00 372,474,210;66 Minimal Action variable 1,00 21,914,222;40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 \$3,381 *Contingencies includes environmental mitigation costs Base cost of Alternative in Millions \$3,381						
Utilities Project Dependent N/A \$0.00 Tunnel (Twin Tunnels) (LF) 15,000.00 :741.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 Tunnel (North Bore EJMT) (LF) 20,500.00 4,252.00 87,166,000.00 IMC variable 1,00 14,427,794.49 Silver Plume:ramps variable 1,00 4,427,794.49 SH 103:reconfigure variable 1,00 372,474,210;66 Minimal Action variable 1,00 372,474,210;66 Minimal Action variable 1,00 372,474,210;66 Minimal Action variable 1,00 21,914,222;40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 \$3,381 *Contingencies includes environmental mitigation costs Base cost of Alternative in Millions \$3,381	Right of Way	Project Dependent		2.00%	\$16,717 493 14	(N)
COST QUANTITY Tunnel (Twin Tunnels) (LF) 15,000,00 .741.00 11,115,000,00 Tunnel (North Bore EJMT) (LF) 48,000,00 13,725,00 658,800,000,00 Tunnel (North Bore EXIMT) (LF) 20,500,00 42,52,00 87,166,000,00 IMC variable 1,00 184,839,130,16 42,52,00 Silver Plumetramps variable 1,00 184,839,130,16 Silver Plumetramps variable 1,00 52,118,056,79 Dowd att 1 + no Rait variable 1,00 372,474,210,66 Minimal Action variable 1,00 678,000,000,000 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost State cost of Alternative in Millions S3,381		openaom			<u> </u>	
COST QUANTITY Tunnel (Twin Tunnels) (LF) 15,000,00 .741.00 11,115,000,00 Tunnel (North Bore EJMT) (LF) 48,000,00 13,725,00 658,800,000,00 Tunnel (North Bore EXIMT) (LF) 20,500,00 42,52,00 87,166,000,00 IMC variable 1,00 184,839,130,16 42,52,00 Silver Plumetramps variable 1,00 184,839,130,16 Silver Plumetramps variable 1,00 52,118,056,79 Dowd att 1 + no Rait variable 1,00 372,474,210,66 Minimal Action variable 1,00 678,000,000,000 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost State cost of Alternative in Millions S3,381	Utilities	Project Dependent		N/A	\$0.00	(O)
Tunnel (Twin Tunneis) (LF) 15,000.00 .741.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800.000.00 Tunnel (North Bore EJMT) (LF) 20,500.00 4,252.00 87,166,000.00 Tunnel (North Bore EJMT) (LF) 20,500.00 4,252.00 87,166,000.00 IMC variable 1.00 14,27,794.49 SH 103 reconfigure variable 1.00 4,427,794.49 Dowd alt. 1 - no Rail variable 1.00 372,474,210.66 Minimal Action variable 1.00 678,000,000.00 Interchanges (EACH) 1.00 24,914,222.40 24,914,222.40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 \$3,381 *Contingencies includes environmental mitigation costs Base cost of Alternative in Millions \$3,381					\$0.00	
Tunnel (Twin Tunneis) (LF) 15,000.00 .741.00 11,115,000.00 Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800.000.00 Tunnel (North Bore EJMT) (LF) 20,500.00 4,252.00 87,166,000.00 Tunnel (North Bore EJMT) (LF) 20,500.00 4,252.00 87,166,000.00 IMC variable 1.00 14,27,794.49 SH 103 reconfigure variable 1.00 4,427,794.49 Dowd alt. 1 - no Rail variable 1.00 372,474,210.66 Minimal Action variable 1.00 678,000,000.00 Interchanges (EACH) 1.00 24,914,222.40 24,914,222.40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 \$3,381 *Contingencies includes environmental mitigation costs Base cost of Alternative in Millions \$3,381		COST	QUANTITY			
Tunnel (North Bore EJMT) (LF) 48,000.00 13,725.00 658,800,000.00 "Tunnel (North Bore Extended EJMT) (LF) 20,800.00 4,252.00 87,166,000.00 IMC variable 1.00 14,427,794.49 Silver Plume:ramps variable 1.00 52,118,056,79 Dowd alt. 1 - no Raji variable 1.00 372,474,210,66 Minimal Action variable 1.00 678,000,000,00 Inflation to 2010 dollars (assuming 4% per year) 21,914,222.40 21,914,222.40 Total Project Cost \$4,058,707,792.49 "Contingencies includes environmental mitigation costs Base cost of Alternative in Millions \$3,381	Tunnel (Twin Tunnels) (LF)				11,115.000.00	10 A 10 A
Tunnel (North Bore extended EJMT) (LF) 20,500.00 4,252.00 87;166,000.00 IMC variable 1.00 184,839.130.16 Silver Plume ramps variable 1.00 4,427,794.49 SH 103 reconfigure variable 1.00 52;118,056,79 Dowd alt. 1 - no Raji variable 1.00 52;118,056,79 Minimal Action variable 1.00 678,000,000 Jinterchanges (EACH) i.00 24,914,222,40 21,914,222,40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost Base cost of Alternative in Millions \$3,381 *Contingencies includes environmental mitigation costs						12 12
IMC variable 1.00 184,839,130,16 Silvet Plume ramps variable 1.00 4.427,794,49 SH 103 reconfigure variable 1.00 52,118,056,79 Dowd alt, 1 - no Rail variable 1.00 52,118,056,79 Minimal Action variable 1.00 372,474,210,66 Minimal Action variable 1.00 678,000,000,00 Jatterchanges (EACH) 1.00 21,914,222,40 21,914,222,40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329,61 \$887,842,329,61 Total Project Cost \$4,058,707,792,49 \$3,381 *Contingencies includes environmental mitigation costs 53,381 53,381						1 A A
Silver Plume:ramps variable 1.00 4.427,794.49 SH 103:reconfigure variable 1.00 52.118,056.79 Dowd alt. 1 - no Rail variable 1.00 372.474,210.66 Minimal Action variable 1.00 372.474,210.66 Minimal Action variable 1.00 372.474,210.66 Interchanges (EACH) 1.00 21.914,222.40 21.914,222.40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 \$3.381 Base cost of Alternative in Millions \$3.381						1 (A
SH 103 reconfigure variable 1.00 52,118,056.79 Dowd alt.1 - no Raji variable 1.00 372,474,210.66 Minimal Action variable 1.00 678,000,000,000 Interchanges (EACH) 1.00 21,914,222.40 21,914,222.40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$4,058,707,792.49 Total Project Cost \$4,058,707,792.49 \$3,381 *Contingencies includes environmental mitigation costs						1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Dowd alt. 1 - no Raji variable 1.00 372 474,210;66 Minimal Action variable 1.00 678,000,000,00 Jnterchanges (EACH) 1.00 21,914,222:40 21,914,222:40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 *Contingencies includes environmental mitigation costs \$3,381						
Minimal Action Variable 1.00 678,000,000,00 Interchanges (EACH) 1.00 21,914,222.40 21,914,222.40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 Base cost of Alternative in Millions \$3,381 *Contingencies includes environmental mitigation costs						
Interchanges (EACH) 1.00 21,914,222.40 21,914,222.40 Inflation to 2010 dollars (assuming 4% per year) \$887,842,329.61 \$887,842,329.61 Total Project Cost \$4,058,707,792.49 Base cost of Alternative in Millions \$3,381 *Contingencies includes environmental mitigation costs						1. 1.
Inflation to 2010 dollars (assuming 4% per year) Total Project Cost \$4,058,707,792.49 Base cost of Alternative in Millions \$3,381 *Contingencies includes environmental mitigation costs						1
Total Project Cost \$4,058,707,792.49 Base cost of Alternative in Millions \$3,381 *Contingencies includes environmental mitigation costs				er en de la secter de la compañía de la secter		1
Base cost of Alternative in Millions \$3,381 Contingencies includes environmental mitigation costs		· · · · · · · · · · · · · · · · · · ·			,	
Base cost of Alternative in Millions \$3,381 Contingencies includes environmental mitigation costs	Total Project Cost		·		\$4,058,707,792,49	(P)
*Contingencies includes environmental mitigation costs						
			Base co	st of Alternative in Millions	\$3,381	
** I otal Preliminary Engineering includes cost of developing NEPA documents				,		
	**Total Preliminary Engineering includes cost of	developing NEPA do	cuments			

TIER 1 - PEIS COST ESTIMATE 9a - RAIL w/6-LANE PRESERVATION

8/17/2010 14:29		-			
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	267,796.00	40,169,400.00		
Walls (SF)	90.00	1,349,782.00			
Earthwork (CY)	20.00	3,195,854.00			
Special Structures (SF)	200.00	960,082.00	- ,,		
Rail - Walls (SF)	90.00	1,387,297.00			
Rail - Earthwork (CY) Rail - Base Course (CY)	20.00 40.00	<u>725,116.00</u> 309,417.00			
Rail - Heavy Rail Structure (SF)	200.00	3,235,560.00			
Rail - Heavy Rail Trackwork (TF)	150.00	769,696.00			
Rail - Maintenance Facilities	3	Variable	74,600,000.00		
Rail - Interlockings	1,000,000.00	16.00			
Rail - Stations/Parking (Large)	10,000,000.00	2.00	20,000,000.00		
Rail - Stations/Parking (Medium)	6,000,000.00	4.00	24,000,000.00		
Rail - Stations/Parking (Small)	3,000,000.00	4.00	12,000,000.00		
Total			1,478,485,390.00		
10101			1,470,400,000.00		
	% Range		% Used	Cost	
Project Construction Rid Itoms	Broiget Dependent		NI/A	£1 479 495 200 00	(A)
Project Construction Bid Items	Project Dependent		N/A	\$1,478,485,390.00	(A)
Contingencies* (Mitigation - 14%)	(15% - 30%) of (A)		30.00%	\$443.545.617.00	(B)
	(.070 0070) UI (A)			ψ0,0 0,017.00	
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
-	Default = 6%				(-)
Drainage/Utilities	(3-10%)of (A+B)		5.00%	\$96,101,550.35	(D)
	Default = 6%				
	(1 E0() (1 E O	5)	4.0004	A00 705 000 00	
Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$80,725,302.29	(E)
	Default = 5%				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	, TDTE)	10.00%	\$209,885,785.96	(F)
construction organing & manie control	Default = 20%	J+D+L)	10.00%	ψ <u>2</u> 03,003,703.30	(1)
	2010011 - 2070				
Mobilization	(4 to 10%) of (A+B+	-C+D+E+F)	7.00%	\$161,612,055.19	(G)
	Default = 7%	·			
Total of Construction Bid Items	(A+B+C+D+E+F+G)		\$2,470,355,700.80	(H)
	(4.100() -(.(1))		0.000/	\$40.407.444.00	(1)
Force Account - Utilities	(1 to 2%) of (H) Default = 2%		2.00%	\$49,407,114.02	(I)
	Delault = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$148,221,342.05	(J)
Torce Account - Milac.	Default = 12%		0.00%	ψ140,221,042.00	(0)
	2010011 - 1270				
Subtotal of Construction Cost	(H+I+J)			\$2,667,984,156.87	(K)
	```				, í
Total Construction Engineering	17% of (K)		10.00%	\$266,798,415.69	(L)
Total Preliminary Engineering**	15% of (K)		10.00%	\$266,798,415.69	(M)
Right of Way	Project Dependent		2.00%	\$49,407,114.02	(N)
Ngn U Way	r roject Dependent		2.0070	v+⊽,+∪ <i>1</i> ,114.UZ	(14)
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			
Tunnel (Twin Tunnels) (LF)	15,000,00	741.00		11,115,000.00	1.1.1
Tunnel (North Bore EJMT) (LF)	48,000:00	13,725.00		658,800,000.00	
Tunnel (North Bore extended EJMT) (LF) Electrification	20,500:00	4,252.00		87,166,000.00	:
Mobile Maintenance Equipment	9,264,000,00	205,000,000.00		9,264,000.00	1.11
Passenger Rolling Stock	2,600,000.00	285.00		741.000.000.00	: ·: ·
Fare Collection	38,000.00	188.00		7,144,000.00	1.1
Signals and Controls	96,000,000.00	96,000,000.00		115,200,000.00	
	variable	1.00		184,839,130.16	
Silver Plume ramps	variable	1.0D		4,427,794.49	
SH 103 reconfigure	variable	1.00		52,118,056.79	
Dowd alt. 1 - no Rail	variable	1.00		372,474,210.66	1 ( I )
Ninimal Action	variable			532,000,000.00	
Inflation to 2010 dollars (assuming				\$1,758,830,162.42	
-					
Total Project Cost				\$8,040,366,456.78	(P)
			at af Altanaativa in Milliana	¢7 coo	
		Hase co			
*Contingencies includes environmental mitigat	ion costs	Base co	st of Alternative in Millions	\$7,508	

#### TIER 1 - PEIS COST ESTIMATE 10 - 6-LANE w/AGS

Bit mess         COST FREMUNT         COST         COST <thcost< th="">         COST         COST</thcost<>	8/17/2010 14:29				,	
Wells (CF)         90.00         1349782 (D)         11.445.80.00         I           Parameti (CO)         2000         3159846 (D)         10.553.00         I         I         I           Bartier (Up F)(LF)         60.00         3169263 (D)         10.553.00         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I <t< td=""><td>BID ITEMS</td><td>COST PER UNIT</td><td>QUANTITY</td><td>COST</td><td></td><td></td></t<>	BID ITEMS	COST PER UNIT	QUANTITY	COST		
Wells (CF)         90.00         1349782 (D)         11.445.80.00         I           Parameti (CO)         2000         3159846 (D)         10.553.00         I         I         I           Bartier (Up F)(LF)         60.00         3169263 (D)         10.553.00         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I <t< td=""><td></td><td></td><td></td><td></td><td>1</td><td></td></t<>					1	
Wells (CF)         90.00         1349782 (D)         11.445.80.00         I           Parameti (CO)         2000         3159846 (D)         100.53.00         I         I         I           Bartier (Up F)(LF)         60.00         3169262 (D)         100.53.00         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I <t< td=""><td>Structures (SF)</td><td>150.00</td><td>267796.00</td><td>40.169.400.00</td><td></td><td></td></t<>	Structures (SF)	150.00	267796.00	40.169.400.00		
Earthwork (CV)         20.00         319554.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00.00         58.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.00         69.27.						
Parement (TON)         70.00         654691 10         1 = 0.8.37.0.0           Base Course (Y)         40.00         4005300         1 = 0.8.37.0.00         1           AGS Magie Clastway         500.00         455304 00         2 776.0.00.00         1           AGS Magie Clastway         500.00         455304 00         2 776.0.00.00         1         1           AGS Magie Clastway         500.00         455304 00         2 776.0.00.00         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         <				, ,		
Base Course (CV)         40.00         400633 (0)         10025000         10025000           Septial Structures (SP)         200.00         4006200         18.005.0000         1           AGS Matter Sing         200.00         4005200         12.015.0000         1         1           AGS Matter Sing         30.00         10.000000         10.000000         1         1         1           AGS Matter Sing         30.00         10.000000         10.000000         10.000000         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Berner (Type 7), (LP)         00.00         310623.00         180:130.00         180:130.00           AGS Malpher Stachard, (LP)         2270:00         4402010.40         1100:270:10.00         1           AGS Malpher Stachard, (LP)         2270:00         4402010.40         1100:270:10.00         1           AGS Malpher Stachard, (LT)         3.00         100:000000         150:000000         1           AGS Station/Parking, (Medium)         3         0         100:00000         150:000000         1           AGS Station/Parking, (Medium)         3         0         100:00000         150:000000         1         1         1           AGS Station/Parking, (Medium)         3         0         100:00000         150:000000         1         1         1           AGS Station/Parking, (Medium)         3         0         176:46:000         1         0         0         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1					1	
Special Structures (SP)         200.00         900082.00         12.016.4000         14.014.4000           AGS MagleV Guidowa         600.00         455241.00         12.016.4000         14.014.4000           AGS MagleV Guidowa         600.00         455241.00         12.016.4000         14.014.4000           AGS StationsParking (Medum)         3         0000000         15.000.0000         14.000000           AGS StationsParking (Medum)         3         0000000         14.0000000         14.0000000           AGS StationsParking (Medum)         30         177244652.91         14.014         14.014           AGS StationsParking (Medum)         30         177244652.91         14.014         14.014           AGS StationsParking (Medum)         16.0100.01 (At 40)         0000%         \$753.068.501.73         (B)           Project Construction Bid hems         (Fifty 2.025).01 (At 8)         0000%         \$753.068.501.73         (B)           Tisk         (G) 1000.01 (At 8)         0000%         \$163.346.622.04         (D)           Drainage/Uillites         (G) 1000.01 (At 8)         500%         \$163.346.622.04         (D)           Drainage/Uillites         (G) 1000.01 (At 8)         500%         \$163.346.622.04         (D)           Drainage/Uillites						
AGS Magler Stucture (LF)         2276.00         468010.40         1.08.373.110.40           AGS Magler Gadeway         500.00         4553400         2275.000         14.150.00.00         1           AGS Magler Gadeway         500.00         45.953400         2275.000         14.150.00.00         1           AGS Magler Gadeway         3         6000000         14.050.00.00         1         1           AGS Magler Gadeway         3         6000000         12.00.00.00         1         1           AGS Magler Gadeway         3         6000000         12.00.00.00         1         1           AGS Magler Gadeway         3         6000000         12.00.00.00         1         1         1           AGS Magler Gadeway         1         3         6000000         12.00.00.00         1         1         1         1           AGS Magler Gadeway         1         3         0         1         2         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
AGS-Matgev Gudeway         500.00         4553A4.00. 277.65.000         1           AGS-Matgev Gudeway         3.00         10000000.00         300.000.00         1           AGS-Matgev Gudeway         3.00         10000000.00         300.000.00         1           AGS-StationsParking (Smull)         4         2000000         120.000.000         1           AGS-StationsParking (Smull)         4         201.0000.000         1         1           AGS-StationsParking (Smull)         4         201.0000.000         1         1           AGS-StationsParking (Smull)         4         201.0000.000         1         1           AGS-StationsParking (Smull)         4         201.0000.0000         1         1         1           AGS-Matgev Gudeway         Frage         V         Velsed         Cost         1         1           AGS-Matgev Gudeway         Frage         V         Velsed         Cost         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1				192,016,400.00		
AGS Manterance Fading Length         variable         3.00         104.150.0000         Interance Fading Length         Interance Fad	AGS-Maglev Stucture (LF)	2376.00	466910.40	1,109,379,110.40		
AGS Manterance Fading Length         variable         3.00         104.150.0000         Interance Fading Length         Interance Fad	AGS-Magley Guideway	500.00	455304.00	227.652.000.00		
AGS-StationsPerkerg (large)         3.00         10000000 (source source						
AGS Stations/Parking (Medium)         3         6000000         18.000.0000         18.000.0000         18.000.0000         18.000.0000         19.000000         19.000000         19.0000000         19.0000000         19.0000000         19.00000000         19.000000000000000000000000000000000000						
AGS Station/Pranting (Small)         4         3000000         12.0000000         12.0000000           AGS Extension - Valito Eagle Airport         30         1728408520         5714488.870						
AGS-Extension - Vall 10 Engle Airport         30         17254955.20         077464585.70         I           Total         2513.008.300 10         2513.008.300 10         2011           Project Construction Bid Items         Project Dependent         NA         South         S2513.028.330 10         (A)           Contingencies*         (Migatton - 12%)         (15% - 30%) of (A)         30.00%         \$753.995.501.73         (B)           TIS         (G-10%) of (A+B)         0.00%         \$0.00%         \$153.346.842.04         (D)           Default = 0%         0.00%         \$153.246.842.04         (D)         (C)         (C)           Default = 0%         0.00%         \$153.246.842.04         (D)					-	
Internation         Image						
Project Construction Bid Items         Project Dependent         NA         S2,513,028,339,10         (A)           Contingencies*         (Magaton - 12%)         (5%, 30%) of (A)         30,00%         \$753,300,501,73         (B)           TS         6-10%) of (A+B)         0.00%         \$153,346,842,04         (D)           Default = 6%         0.00%         \$153,346,842,04         (D)           Default = 6%         0.00%         \$153,346,842,04         (D)           Default = 6%         0.00%         \$157,211,347,31         (E)           Optiming and Striping         (1.5%) of (A+B+C+D)         4.00%         \$137,211,347,31         (E)           Default = 5%         0.00%         \$137,211,347,31         (E)         (D)         (D)         (D)           Default = 5%         0.00%         \$355,749,503,302         (P)         (P)         (P)         (P)           Mebilization         (4.15,0%) of (A+B+C+D)         10.00%         \$355,749,503,302         (P)           Force Account - Misc.         (1.0.5%) of (P)         2.00%         \$274,897,117,322         (P)           Subtol of Construction Cost         (H+H-1)         2.00%         \$453,485,698,267         (P)           Subtol of Construction Cost         (H+H-1)         <	AGS-Extension - Vail to Eagle Airport	30	17254955.29	517,648,658.70		
Project Construction Bid Items         Project Dependent         NA         S2,513,028,339,10         (A)           Contingencies*         (Magaton - 12%)         (5%, 30%) of (A)         30,00%         \$753,300,501,73         (B)           TS         6-10%) of (A+B)         0.00%         \$153,346,842,04         (D)           Default = 6%         0.00%         \$153,346,842,04         (D)           Default = 6%         0.00%         \$153,346,842,04         (D)           Default = 6%         0.00%         \$157,211,347,31         (E)           Optiming and Striping         (1.5%) of (A+B+C+D)         4.00%         \$137,211,347,31         (E)           Default = 5%         0.00%         \$137,211,347,31         (E)         (D)         (D)         (D)           Default = 5%         0.00%         \$355,749,503,302         (P)         (P)         (P)         (P)           Mebilization         (4.15,0%) of (A+B+C+D)         10.00%         \$355,749,503,302         (P)           Force Account - Misc.         (1.0.5%) of (P)         2.00%         \$274,897,117,322         (P)           Subtol of Construction Cost         (H+H-1)         2.00%         \$453,485,698,267         (P)           Subtol of Construction Cost         (H+H-1)         <						
Project Construction Bid Items         Project Dependent         NA         \$2,513,022,339,10         (A)           Contingencies* (Mitigation - 12%)         (15% - 30%) of (A)         30,00%         \$753,086,501.73         (B)           TIS         (E-10%) of (A+B)         0.00%         \$753,086,501.73         (B)           Orainage/Utilities         (C-10%) of (A+B)         6,00%         \$163,346,842.04         (C)           Signing and Striping         (C-5%) of (A+B+C+D)         4,00%         \$153,7211,347.31         (E)           Signing and Striping         Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E+F)         10,00%         \$356,748,503.02         (P)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7,00%         \$274,697,117.32         (E)           Total of Construction Bid Items         (A+B+C+D+E+F+O)         54,199,941,650.53         (P)           Force Account - Utilities         (1 to 2%) of (P)         2,00%         \$353,078,833.01         (P)           Subtoti of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Lines         10 2% of (P)         2,00%	Total			2,513,028,339.10		
Project Construction Bid Items         Project Dependent         NA         \$2,513,022,339,10         (A)           Contingencies* (Mitigation - 12%)         (15% - 30%) of (A)         30,00%         \$753,086,501.73         (B)           TIS         (E-10%) of (A+B)         0.00%         \$753,086,501.73         (B)           Orainage/Utilities         (C-10%) of (A+B)         6,00%         \$163,346,842.04         (C)           Signing and Striping         (C-5%) of (A+B+C+D)         4,00%         \$153,7211,347.31         (E)           Signing and Striping         Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E+F)         10,00%         \$356,748,503.02         (P)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7,00%         \$274,697,117.32         (E)           Total of Construction Bid Items         (A+B+C+D+E+F+O)         54,199,941,650.53         (P)           Force Account - Utilities         (1 to 2%) of (P)         2,00%         \$353,078,833.01         (P)           Subtoti of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Lines         10 2% of (P)         2,00%						
Project Construction Bid Items         Project Dependent         NA         \$2,513,022,339,10         (A)           Contingencies* (Mitigation - 12%)         (15% - 30%) of (A)         30,00%         \$753,086,501.73         (B)           TIS         (E-10%) of (A+B)         0.00%         \$753,086,501.73         (B)           Orainage/Utilities         (C-10%) of (A+B)         6,00%         \$163,346,842.04         (C)           Signing and Striping         (C-5%) of (A+B+C+D)         4,00%         \$153,7211,347.31         (E)           Signing and Striping         Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E+F)         10,00%         \$356,748,503.02         (P)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7,00%         \$274,697,117.32         (E)           Total of Construction Bid Items         (A+B+C+D+E+F+O)         54,199,941,650.53         (P)           Force Account - Utilities         (1 to 2%) of (P)         2,00%         \$353,078,833.01         (P)           Subtoti of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Lines         10 2% of (P)         2,00%						
Project Construction Bid Items         Project Dependent         NA         \$2,513,022,339,10         (A)           Contingencies* (Mitigation - 12%)         (15% - 30%) of (A)         30,00%         \$753,086,501.73         (B)           TIS         (E-10%) of (A+B)         0.00%         \$753,086,501.73         (B)           Orainage/Utilities         (C-10%) of (A+B)         6,00%         \$163,346,842.04         (C)           Signing and Striping         (C-5%) of (A+B+C+D)         4,00%         \$153,7211,347.31         (E)           Signing and Striping         Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E+F)         10,00%         \$356,748,503.02         (P)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7,00%         \$274,697,117.32         (E)           Total of Construction Bid Items         (A+B+C+D+E+F+O)         54,199,941,650.53         (P)           Force Account - Utilities         (1 to 2%) of (P)         2,00%         \$353,078,833.01         (P)           Subtoti of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Lines         10 2% of (P)         2,00%						
Project Construction Bid Items         Project Dependent         NA         \$2,513,022,339,10         (A)           Contingencies* (Mitigation - 12%)         (15% - 30%) of (A)         30,00%         \$753,086,501.73         (B)           TIS         (E-10%) of (A+B)         0.00%         \$753,086,501.73         (B)           Orainage/Utilities         (C-10%) of (A+B)         6,00%         \$163,346,842.04         (C)           Signing and Striping         (C-5%) of (A+B+C+D)         4,00%         \$153,7211,347.31         (E)           Signing and Striping         Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E+F)         10,00%         \$356,748,503.02         (P)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7,00%         \$274,697,117.32         (E)           Total of Construction Bid Items         (A+B+C+D+E+F+O)         54,199,941,650.53         (P)           Force Account - Utilities         (1 to 2%) of (P)         2,00%         \$353,078,833.01         (P)           Subtoti of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Construction Engineering         17% of (A         10,00%         \$453,485,698.26         (P)           Total of Lines         10 2% of (P)         2,00%		% Range		% llead	Cost	
Contingencies*         (Mitgation - 12%)         (15% - 30%) of (A)         30.00%         \$753,306,501.73         (B)           TTS         (6-10%) of (A+B)         0.00%         \$5000         (C)           Drainage/Utilities         0-10%) of (A+B)         5.00%         \$163,346,842.04         (D)           Drainage/Utilities         0-10%) of (A+B)         5.00%         \$163,346,842.04         (D)           Signing and Striping         (1-5%) of (A+B-C+D)         4.00%         \$355,749,503.02         (F)           Oranización         Default = 5%         0.00%         \$355,749,503.02         (F)           Oranización         Default = 7%         0.00%         \$355,749,503.03         (H)           Oranización         10 forth = 7%         7.00%         \$224,687,117.32         (G)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$53,978,833.01         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$453,485,698.26         (U)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (U)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (U)           Total Preliminary		/o ixalige		// 0360	0031	
Contingencies*         (Mitgation - 12%)         (15% - 30%) of (A)         30.00%         \$753,306,501.73         (B)           TTS         (6-10%) of (A+B)         0.00%         \$5000         (C)           Drainage/Utilities         0-10%) of (A+B)         5.00%         \$163,346,842.04         (D)           Drainage/Utilities         0-10%) of (A+B)         5.00%         \$163,346,842.04         (D)           Signing and Striping         (1-5%) of (A+B-C+D)         4.00%         \$355,749,503.02         (F)           Oranización         Default = 5%         0.00%         \$355,749,503.02         (F)           Oranización         Default = 7%         0.00%         \$355,749,503.03         (H)           Oranización         10 forth = 7%         7.00%         \$224,687,117.32         (G)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$53,978,833.01         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$453,485,698.26         (U)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (U)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (U)           Total Preliminary						
Contingencies*         (Mitgation - 12%)         (15% - 30%) of (A)         30.00%         \$753,306,501.73         (B)           TTS         (6-10%) of (A+B)         0.00%         \$5000         (C)           Drainage/Utilities         0-10%) of (A+B)         5.00%         \$163,346,842.04         (D)           Drainage/Utilities         0-10%) of (A+B)         5.00%         \$163,346,842.04         (D)           Signing and Striping         (1-5%) of (A+B-C+D)         4.00%         \$355,749,503.02         (F)           Oranización         Default = 5%         0.00%         \$355,749,503.02         (F)           Oranización         Default = 7%         0.00%         \$355,749,503.03         (H)           Oranización         10 forth = 7%         7.00%         \$224,687,117.32         (G)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$53,978,833.01         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$453,485,698.26         (U)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (U)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (U)           Total Preliminary						
Contingencies*         (Mitgation - 12%)         (15% - 30%) of (A)         30.00%         \$753,306,501.73         (B)           TTS         (6-10%) of (A+B)         0.00%         \$5000         (C)           Drainage/Utilities         0-10%) of (A+B)         5.00%         \$163,346,842.04         (D)           Drainage/Utilities         0-10%) of (A+B)         5.00%         \$163,346,842.04         (D)           Signing and Striping         (1-5%) of (A+B-C+D)         4.00%         \$355,749,503.02         (F)           Oranización         Default = 5%         0.00%         \$355,749,503.02         (F)           Oranización         Default = 7%         0.00%         \$355,749,503.03         (H)           Oranización         10 forth = 7%         7.00%         \$224,687,117.32         (G)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$53,978,833.01         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$453,485,698.26         (U)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (U)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (U)           Total Preliminary						
Contingencies*         (Mitigation - 12%)         (15% - 30%)         0 (A)         30.00%         \$753,908,501.73         (B)           TTS         (E+10%) of (A+B)         0.00%         \$0.00%         \$0.00         (C)           Drainage/Utilities         (D) 10% jof (A+B)         5.00%         \$163,346,842.04         (D)           Signing and Striping         (1-5%) of (A+B)         5.00%         \$153,346,842.04         (D)           Signing and Striping         (1-5%) of (A+B-C+D)         4.00%         \$153,7211,347.31         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$356,748,503.02         (P)           Mobilization         (4 to 10%) of (A+B+C+D+E)         10.00%         \$356,748,503.01         (P)           Force Account - Utilities         (1 to 2%) of (P)         2.00%         \$\$33,978,833.01         (P)           Force Account - Utilities         (1 to 2%) of (P)         2.00%         \$\$453,485,698.26         (L)           Stabtotal of Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total of Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total of Construction Engineering         17% of (K)	Project Construction Bid Items	Project Dependent		N/A	\$2,513,028,339.10	(A)
ITS         Information         Information <thinformation< th=""> <thinf< td=""><td></td><td></td><td></td><td></td><td></td><td></td></thinf<></thinformation<>						
ITS         Information         Information <thinformation< th=""> <thinf< td=""><td>Contingencies* (Mitigation - 12%)</td><td>(15% - 30%) of (A)</td><td></td><td>30.00%</td><td>\$753 908 501 73</td><td>(B)</td></thinf<></thinformation<>	Contingencies* (Mitigation - 12%)	(15% - 30%) of (A)		30.00%	\$753 908 501 73	(B)
Default = 6%         Construction         Site3.346,842.04         (D)           Drainage/Utilities         (310%, bf (A+B)         5.00%         \$163.346,842.04         (D)           Signing and Strping         (1-5%) of (A+B+C+D)         4.00%         \$137,211,347.31         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$356,749,503.02         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         7.00%         \$274,697,117.32         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$24,198,941,650.53         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,976,833.01         (D)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$251,336,498.03         (J)           Default = 2%            (J)         (J)           Subtotal of Construction Cost         (H++J)          54,348,5698.26         (J)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (J)           Total Construction Cost         (H++J)          2.00%         \$833,978,833.01         (M)           Total	Contangonolog (magdalon - 1270)	(.370 3370) OI (A)		00.0070	φ100,000,001.73	
Default = 6%         Construction         Site3.346,842.04         (D)           Drainage/Utilities         (310%, bf (A+B)         5.00%         \$163.346,842.04         (D)           Signing and Strping         (1-5%) of (A+B+C+D)         4.00%         \$137,211,347.31         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$356,749,503.02         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         7.00%         \$274,697,117.32         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$24,198,941,650.53         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,976,833.01         (D)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$251,336,498.03         (J)           Default = 2%            (J)         (J)           Subtotal of Construction Cost         (H++J)          54,348,5698.26         (J)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (J)           Total Construction Cost         (H++J)          2.00%         \$833,978,833.01         (M)           Total						
Default = 6%         Construction         Site3.346,842.04         (D)           Drainage/Utilities         (310%, bf (A+B)         5.00%         \$163.346,842.04         (D)           Signing and Strping         (1-5%) of (A+B+C+D)         4.00%         \$137,211,347.31         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$356,749,503.02         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         7.00%         \$274,697,117.32         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$24,198,941,650.53         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,976,833.01         (D)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$251,336,498.03         (J)           Default = 2%            (J)         (J)           Subtotal of Construction Cost         (H++J)          54,348,5698.26         (J)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (J)           Total Construction Cost         (H++J)          2.00%         \$833,978,833.01         (M)           Total			L			
Drainage/Utilities         G-10% (of (A+B) Default = 6%         5.00%         \$163,346,842.04         (D)           Signing and Striping         (1-5%) of (A+B) (	ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
Drainage/Utilities         G-10% (of (A+B) Default = 6%         5.00%         \$163,346,842.04         (D)           Signing and Striping         (1-5%) of (A+B) (		Default = 6%				
Default = 6%						
Default = 6%	Drainage/Litilities	(3-10% )of (A+B)		5.00%	\$163 346 842 04	(D)
Signing and Striping         (1-5%) of (A+B+C+D)         4.00%         \$137,211,347,31         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$356,749,503.02         (F)           Mobilization         (H to 10%) of (A+B+C+D+E+F)         7.00%         \$274,697,117.32         (G)           Total of Construction Bid Items         (A+B+C+D+E+F)         7.00%         \$274,697,117.32         (G)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Utilities         (1 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         54,534,866,982.57         (K)           Total Preliminary Engineering***         15% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering***         15% of (K)         10.00%         \$453,485,698.26         (L)           Utilities         Project Dependent         2.00%         \$83,978,833.01         (N)           Total Preliminary Engineering***         15% of (K)         10.00%         \$453,485,698.26         (M)	Drainage/Otilities			5.00 %	\$105,540,842.04	(D)
Default = 5%         Image: Construction Signing & Traffic Control		Default = 6%				
Default = 5%         Image: Construction Signing & Traffic Control						
Construction Signing & Traffic Control         5.0 25% of (A+B-C+D-FE) Default = 20%         10.00%         \$3356,749,503.02         (F)           Mobilization         (4 to 10%) of (A+B+C+D-FE)         7.00%         \$274,697,117.32         (G)           Total of Construction Bid Items         (A+B+C+D)E+F+G         7.00%         \$4,198,941,650.53         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$453,485,698.257         (K)           Subtotal of Construction Cost         (H++)         0.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         N/A         \$0.00         \$453,978,833.01         (M)           Utilities         Project Dependent         N/A         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         N/A         \$0.00         \$757,96           Total Preliminary Engineering**         15% 00 (K)         N/A         \$853,978	Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$137,211,347.31	(E)
Construction Signing & Traffic Control         5.0 25% of (A+B-C+D-FE) Default = 20%         10.00%         \$3356,749,503.02         (F)           Mobilization         (4 to 10%) of (A+B+C+D-FE)         7.00%         \$274,697,117.32         (G)           Total of Construction Bid Items         (A+B+C+D)E+F+G         7.00%         \$4,198,941,650.53         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$453,485,698.257         (K)           Subtotal of Construction Cost         (H++)         0.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         N/A         \$0.00         \$453,978,833.01         (M)           Utilities         Project Dependent         N/A         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         N/A         \$0.00         \$757,96           Total Preliminary Engineering**         15% 00 (K)         N/A         \$853,978		Default = 5%	, ·			
Default = 20%         7.00%         \$274,697,117.32         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$274,697,117.32         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$4,198,941,650.53         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$4,534,856,982.26         (J)           Subtotal of Construction Cost         (H++J)         6.00%         \$453,4856,982.26         (J)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (J)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         N/A         \$0.00         \$354,3978,833.01         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (L)           Total Pro		Boldan = 070		•		·
Default = 20%         7.00%         \$274,697,117.32         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$274,697,117.32         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$4,198,941,650.53         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$4,534,856,982.26         (J)           Subtotal of Construction Cost         (H++J)         6.00%         \$453,4856,982.26         (J)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (J)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         N/A         \$0.00         \$354,3978,833.01         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (L)           Total Pro	Construction Cinning & Troffic Control			40.000/	\$250 740 502 02	
Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$274,697,117.32         (G)           Default = 7%	Construction Signing & Traffic Control		-+D+E)	10.00%	\$356,749,503.02	(⊢)
Default = 7%         Image: Construction Bid Items         (A+B+C+D+E+F+G)         Image: Construction Bid Items         (A+B, PC+D+E+F+G)         Image: Construction Bid Items         (A+B, PC+D+E+F+G)         Image: Construction Bid Items         (I)           Force Account - Utilities         (I to 2%) of (H)         2.00%         \$83,978,83.01         (I)           Force Account - Misc.         (I to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (I +I+J)         6.00%         \$453,485,698.267         (K)           Subtotal of Construction Cost         (I+I+J)         10.00%         \$453,485,698.267         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         2.00%         \$83,978,83.01         (N)           Utilities         Project Dependent         N/A         \$0.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000		Default = 20%				
Default = 7%         Image: Construction Bid Items         (A+B+C+D+E+F+G)         Image: Construction Bid Items         (A+B, PC+D+E+F+G)         Image: Construction Bid Items         (A+B, PC+D+E+F+G)         Image: Construction Bid Items         (I)           Force Account - Utilities         (I to 2%) of (H)         2.00%         \$83,978,83.01         (I)           Force Account - Misc.         (I to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (I +I+J)         6.00%         \$453,485,698.267         (K)           Subtotal of Construction Cost         (I+I+J)         10.00%         \$453,485,698.267         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         2.00%         \$83,978,83.01         (N)           Utilities         Project Dependent         N/A         \$0.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000						
Default = 7%         Image: Construction Bid Items         (A+B+C+D+E+F+G)         Image: Construction Bid Items         (A+B, PC+D+E+F+G)         Image: Construction Bid Items         (A+B, PC+D+E+F+G)         Image: Construction Bid Items         (I)           Force Account - Utilities         (I to 2%) of (H)         2.00%         \$83,978,83.01         (I)           Force Account - Misc.         (I to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (I +I+J)         6.00%         \$453,485,698.267         (K)           Subtotal of Construction Cost         (I+I+J)         10.00%         \$453,485,698.267         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         2.00%         \$83,978,83.01         (N)           Utilities         Project Dependent         N/A         \$0.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,80,000.00         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000         \$68,90,000	Mobilization	(4 to 10%) of (A+B+	+C+D+E+F)	7.00%	\$274.697.117.32	(G)
Total of Construction Bid Items         (A+B+C+D+E+F+G)         S4,198,941,650.53         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         54,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         NA         \$0.00         (O)           'Totarie/(Noith Bore EMIT) (LF)         '1,5,00,00         '241,00         31,225,00         B8,960,000 D)         B8,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978,983,978			r í			
Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Berner Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         \$4,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           'tyrinel (Twpin Turinelts) (LE)'         COST         OUANTITY         'tyrinel (Twpin Turinelts)'(LE)'         COST         OUANTITY           'tyrinel (Twpin Turinelts) (LE)'         COST         OUANTITY         'tyrinel (Twpin Turinelts)'(LE)'         Cost         S453,000.000         S453,000.000         S458,000.000         S458,000.000         S458,000.000         S		Boldan = 170				
Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Berner Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         \$4,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           'tyrinel (Twpin Turinelts) (LE)'         COST         OUANTITY         'tyrinel (Twpin Turinelts)'(LE)'         COST         OUANTITY           'tyrinel (Twpin Turinelts) (LE)'         COST         OUANTITY         'tyrinel (Twpin Turinelts)'(LE)'         Cost         S453,000.000         S453,000.000         S458,000.000         S458,000.000         S458,000.000         S						
Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$83,978,833.01         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Berner Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         \$4,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Utilities         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           'tyrinel (Twijn Turinelts) (LE)'         COST         OUANTITY         'tyrinel (Twijn Turinelts)'(LE)'         COST         OUANTITY           'tyrinel (Twijn Turinelts) (LE)'         COST         OUANTITY         'tyrinel (Twijn Turinelts)'(LE)'         Cost         S453,000,000         S453,000,000         S458,000,000         S458,000,000         S458,000,000         S						
Default = 2%         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         \$4,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Construction Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of 0.00         13,725,00         (B)         (B)           Itil Preliminary Engineerin	Total of Construction Bid Items	(A+B+C+D+E+F+G	i)		\$4,198,941,650.53	(H)
Default = 2%         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         \$4,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Construction Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of 0.00         13,725,00         (B)         (B)           Itil Preliminary Engineerin						
Default = 2%         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         \$4,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Construction Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of 0.00         13,725,00         (B)         (B)           Itil Preliminary Engineerin						
Default = 2%         6.00%         \$251,936,499.03         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$251,936,499.03         (J)           Subtotal of Construction Cost         (H+I+J)         \$4,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Construction Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Itil Preliminary Engineering**         15% of 0.00         13,725,00         (B)         (B)           Itil Preliminary Engineerin	Force Account - Utilities	(1 to 2%) of (H)		2 0.0%	\$83 978 833 01	(I)
Force Account - Misc.         (10 to 15%) of (H) Default = 12%         6.00%         \$251,936,499.03 \$251,936,499.03         (J) \$251,936,499.03         (J) \$453,4856,982.57         (K) \$453,4856,982.67         (K) \$453,4856,982.67         (K) \$453,4856,982.66         (L) \$453,4856,982.66         (M) \$453,4856,982.66         (M) \$4543,4856,982.66         (M) \$4542,714,714,714,714,714,714,714,714,714,714	Torce Account - Otimies			2.0078	400,970,000.01	
Default = 12%         Subtotal of Construction Cost         (H+I+J)         Subtotal of Construction Engineering         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (Twin Tunnels):(LF):         13,000,00         744,00         11,115,000,00         (O)           Tunnel North Bore EJMT1 (LF):         48,000,00         13,725,00         658,800,000,00         (S34,000,000,00)		Delault = 2%				
Default = 12%         Subtotal of Construction Cost         (H+I+J)         Subtotal of Construction Engineering         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (Twin Tunnels):(LF):         13,000,00         744,00         11,115,000,00         (O)           Tunnel North Bore EJMT1 (LF):         48,000,00         13,725,00         658,800,000,00         (S34,000,000,00)						
Subtotal of Construction Cost         (H+1+J)         S4,534,856,982.57         (K)           Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnet (North Boie £:MT) (LF)         : 45,000,00         : 741,00         : 141,415,000,00         : 588,800,000,00           Tunnet (North Boie £:MT) (LF)         : 45,000,00         : 372,52,00         : 588,800,000,00         : 588,200,000,00         : 354,000,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,600,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,415,000,00         : 141,4	Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$251,936,499.03	(J)
Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           Tunnel (Twin Tuonejs):(LF):         15,000,00         744,00         583,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           Tunnel (Twin Tuonejs):(LF):         15,000,00         744,00         583,900,000,00         583,800,000,000           Tunnei (North Bore:extended EJMT) (LF):         20,500,000         13,222,000         857,166,000,000,00         354,000,000,00         11,000,000,00         11,000,000,00         13,3420,000,000         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,3		Default = 12%				
Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           Tunnel (Twin Tuonejs):(LF):         15,000,00         744,00         583,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           Tunnel (Twin Tuonejs):(LF):         15,000,00         744,00         583,900,000,00         583,800,000,000           Tunnei (North Bore:extended EJMT) (LF):         20,500,000         13,222,000         857,166,000,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00						
Total Construction Engineering         17% of (K)         10.00%         \$453,485,698.26         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           Tunnel (Twin Tuonejs):(LF):         15,000,00         744,00         583,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           Tunnel (Twin Tuonejs):(LF):         15,000,00         744,00         583,900,000,00         583,800,000,000           Tunnei (North Bore:extended EJMT) (LF):         20,500,000         13,222,000         857,166,000,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,100,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00         13,322,000,000,00	Subtotal of Construction Cost	(H+1+1)		•	\$4 534 856 982 57	(K)
Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnet (fwin Tuonets); (LF)         15,500,00         13,725,00         658,800,000,00         741,00           Tunnet (North Bore extended EJMT) (LF)         48,000,00         13,725,00         658,800,000,00         87,166,000,00           Electrification         10.00%         \$24,000,000         13,725,00         658,800,000,000         11,100,000,00           Passenger Rolling:Stock         16,000,000,00         10,00         11,100,000,00         11,100,000,00           Passenger Rolling:Stock         16,000,000,00         11,100,000,00         133,200,000,00         133,200,000,00           Passenger Rolling:Stock         16,000,000,00         11,600,000,00         133,200,000,00         133,200,000,00           Stifuer (Plume ramps         Variable         1.00         52,118,056,79         52,114,056,79           Stifuer Plume ramps         Variable         1.00         52,140,056,79		(			ψτ,00τ,000,002.07	(1)
Total Preliminary Engineering**         15% of (K)         10.00%         \$453,485,698.26         (M)           Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnet (fwin Tuonets); (LF)         15,500,00         13,725,00         658,800,000,00         741,00           Tunnet (North Bore extended EJMT) (LF)         48,000,00         13,725,00         658,800,000,00         87,166,000,00           Electrification         10.00%         \$24,000,000         13,725,00         658,800,000,000         11,100,000,00           Passenger Rolling:Stock         16,000,000,00         10,00         11,100,000,00         11,100,000,00           Passenger Rolling:Stock         16,000,000,00         11,100,000,00         133,200,000,00         133,200,000,00           Passenger Rolling:Stock         16,000,000,00         11,600,000,00         133,200,000,00         133,200,000,00           Stifuer (Plume ramps         Variable         1.00         52,118,056,79         52,114,056,79           Stifuer Plume ramps         Variable         1.00         52,140,056,79	Total Construction Francisco di s	470/ = 6 (1/)		40.000/	\$450 405 000 CC	(1)
Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (Twin Tunnels):(LF):         15,000,00         741,00         141,415,000,00         (O)           Tunnel (North Bore ExIMT) (LF):         14,000,00         558,800,000,00         (O)         14,252,00         857,166,000,00           Tunnel (North Bore Extended EJMT) (LF):         20,500,00         4,252,00         87,166,000,00         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,500,00         4,252,00         87,166,000,00         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,000,00         1,100,000,00         (D)         (D)         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,000,00         4,252,00         87,166,000,00         (D)           Mobile Maintenarce Equipment:         11,400,000,00         52,00         832,000,000,00         (D)	I OTAL CONSTRUCTION Engineering	1/% OT (K)		10.00%	\$453,485,698.26	(L)
Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (Twin Tunnels):(LF):         15,000,00         741,00         141,415,000,00         (O)           Tunnel (North Bore ExIMT) (LF):         14,000,00         558,800,000,00         (O)         14,252,00         857,166,000,00           Tunnel (North Bore Extended EJMT) (LF):         20,500,00         4,252,00         87,166,000,00         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,500,00         4,252,00         87,166,000,00         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,000,00         1,100,000,00         (D)         (D)         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,000,00         4,252,00         87,166,000,00         (D)           Mobile Maintenarce Equipment:         11,400,000,00         52,00         832,000,000,00         (D)						
Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (Twin Tunnels):(LF):         15,000,00         741,00         141,415,000,00         (O)           Tunnel (North Bore ExIMT) (LF):         14,000,00         558,800,000,00         (O)         14,252,00         857,166,000,00           Tunnel (North Bore Extended EJMT) (LF):         20,500,00         4,252,00         87,166,000,00         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,500,00         4,252,00         87,166,000,00         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,000,00         1,100,000,00         (D)         (D)         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,000,00         4,252,00         87,166,000,00         (D)           Mobile Maintenarce Equipment:         11,400,000,00         52,00         832,000,000,00         (D)						
Right of Way         Project Dependent         2.00%         \$83,978,833.01         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (Twin Tunnels):(LF):         15,000,00         741,00         141,415,000,00         (O)           Tunnel (North Bore ExIMT) (LF):         14,000,00         558,800,000,00         (O)         14,252,00         857,166,000,00           Tunnel (North Bore Extended EJMT) (LF):         20,500,00         4,252,00         87,166,000,00         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,500,00         4,252,00         87,166,000,00         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,000,00         1,100,000,00         (D)         (D)         (D)           Tunnel (North Bore Extended EJMT) (LF):         20,000,00         4,252,00         87,166,000,00         (D)           Mobile Maintenarce Equipment:         11,400,000,00         52,00         832,000,000,00         (D)	Total Preliminary Engineering**	15% of (K)		10.00%	\$453,485.698.26	(M)
Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Tunniel (Twin Tunnels) (LF):         15,000.00         741.00         11,115,000.00         11           Trunniel (Noith Boie EJMT) (LF):         14,000.00         13,725.00         658,800.000,000         11           Tunniel (Noith Bore Equipment:         11,300,000.00         14,252.00         87,166,000.00         11           Tunniel (Noith Bore Equipment:         11,300,000.00         14,252.00         82,400.000.00         11,100,000.00           Tunniel (Noith Bore Equipment:         11,300,000.00         10,0354,000.000.00         354,000.000.00         354,000.000.00         11,100,000,000           Mobile Maintenance Equipment:         31,300,000.00         52.00         832,000,000.00         11,100,000,000         11,100,000,000         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.4					,	(,
Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Tunniel (Twin Tunnels) (LF):         15,000.00         741.00         11,115,000.00         11           Trunniel (Noith Boie EJMT) (LF):         14,000.00         13,725.00         658,800.000,000         11           Tunniel (Noith Bore Equipment:         11,300,000.00         14,252.00         87,166,000.00         11           Tunniel (Noith Bore Equipment:         11,300,000.00         14,252.00         82,400.000.00         11,100,000.00           Tunniel (Noith Bore Equipment:         11,300,000.00         10,0354,000.000.00         354,000.000.00         354,000.000.00         11,100,000,000           Mobile Maintenance Equipment:         31,300,000.00         52.00         832,000,000.00         11,100,000,000         11,100,000,000         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.4						
Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Tunniel (Twin Tunnels) (LF):         15,000.00         741.00         11,115,000.00         11           Trunniel (Noith Boie EJMT) (LF):         14,000.00         13,725.00         658,800.000,000         11           Tunniel (Noith Bore Equipment:         11,300,000.00         14,252.00         87,166,000.00         11           Tunniel (Noith Bore Equipment:         11,300,000.00         14,252.00         82,400.000.00         11,100,000.00           Tunniel (Noith Bore Equipment:         11,300,000.00         10,0354,000.000.00         354,000.000.00         354,000.000.00         11,100,000,000           Mobile Maintenance Equipment:         31,300,000.00         52.00         832,000,000.00         11,100,000,000         11,100,000,000         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.4						
Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Tunniel (Twin Tunnels) (LF):         15,000.00         741.00         11,115,000.00         11           Trunniel (Noith Boie EJMT) (LF):         14,000.00         13,725.00         658,800.000,000         11           Tunniel (Noith Bore Equipment:         11,300,000.00         14,252.00         87,166,000.00         11           Tunniel (Noith Bore Equipment:         11,300,000.00         14,252.00         82,400.000.00         11,100,000.00           Tunniel (Noith Bore Equipment:         11,300,000.00         10,0354,000,000.00         354,000,000.00         354,000,000.00         11,100,000,000           Mobile Maintenance Equipment:         31,300,000.00         52.00         832,000,000.00         11,100,000,000         11,100,000,000         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         13,322,000,000.00         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.48         14,427,794.4				0.000/	Ann	()
COST         QUANTITY          Tunnel (Twin Tunnels):(LE):         15,000,00         13,725,00         658,800,000,00           Trunnel (North Bore Extended EJMT) (LE)         20,500,00         4,252,00         87,166,000,00           Tunnel (North Bore: extended EJMT) (LE):         20,500,00         4,252,00         87,166,000,00           Mobile Maintenance: Equipment:         11,100,000,00         10,00         354,000,000,00         354,000,000,00           Mobile Maintenance: Equipment:         11,100,000,00         1,00         354,000,000,00         354,000,000,00           Passenger: Rolling:Stock         16,000,000,00         230,00         882,000,000,00         133,920,000,00           Silver Plinme:ramps:         variable         111,600,000,00         113,000,000,00         133,920,000,00           Silver Plinme:ramps:         variable         100         52,114,056,78         133,920,000,00           Silver Altime:ramps:         variable         1.00         372,474,210,66         100         52,148,056,78           Dowdrait: 1: no Rall         variable         1.00         572,191,4056,78         10,372,474,210,66         10,000,000         10,372,474,210,66         10,372,474,210,66         100,000,000         10,14,222,40         10,14,222,40         10,14,222,40         10,14,222,40         <	Right of Way	Project Dependent		2.00%	\$83,978,833.01	(N)
COST         QUANTITY          Tunnel (Twin Tunnels):(LE):         15,000,00         13,725,00         658,800,000,00           Trunnel (North Bore Extended EJMT) (LE)         20,500,00         4,252,00         87,166,000,00           Tunnel (North Bore: extended EJMT) (LE):         20,500,00         4,252,00         87,166,000,00           Mobile Maintenance: Equipment:         11,100,000,00         10,00         354,000,000,00         354,000,000,00           Mobile Maintenance: Equipment:         11,100,000,00         1,00         354,000,000,00         354,000,000,00           Passenger: Rolling:Stock         16,000,000,00         230,00         882,000,000,00         133,920,000,00           Silver Plinme:ramps:         variable         111,600,000,00         113,000,000,00         133,920,000,00           Silver Plinme:ramps:         variable         100         52,114,056,78         133,920,000,00           Silver Altime:ramps:         variable         1.00         372,474,210,66         100         52,148,056,78           Dowdrait: 1: no Rall         variable         1.00         572,191,4056,78         10,372,474,210,66         10,000,000         10,372,474,210,66         10,372,474,210,66         100,000,000         10,14,222,40         10,14,222,40         10,14,222,40         10,14,222,40         <						
COST         QUANTITY          Tunnel (Twin Tunnels):(LE):         15,000,00         13,725,00         658,800,000,00           Trunnel (North Bore Extended EJMT) (LE)         20,500,00         4,252,00         87,166,000,00           Tunnel (North Bore: extended EJMT) (LE):         20,500,00         4,252,00         87,166,000,00           Mobile Maintenance: Equipment:         11,100,000,00         10,00         354,000,000,00         354,000,000,00           Mobile Maintenance: Equipment:         11,100,000,00         1,00         354,000,000,00         354,000,000,00           Passenger: Rolling:Stock         16,000,000,00         230,00         882,000,000,00         133,920,000,00           Silver Plinme:ramps:         variable         111,600,000,00         113,000,000,00         133,920,000,00           Silver Plinme:ramps:         variable         100         52,114,056,78         133,920,000,00           Silver Altime:ramps:         variable         1.00         372,474,210,66         100         52,148,056,78           Dowdrait: 1: no Rall         variable         1.00         572,191,4056,78         10,372,474,210,66         10,000,000         10,372,474,210,66         10,372,474,210,66         100,000,000         10,14,222,40         10,14,222,40         10,14,222,40         10,14,222,40         <	Utilities	Project Dependent		N/A	\$0.00	(O)
Tunnel (Twin Tunnels):(LF):       15,000,00       741,00       11,115,000,00         Tunnel (North Bore EMT): (LF):       48,000,00       13,725,00       658,800,000,00         Tunnel (North Bore EMT): (LF):       20,500,00       4,252,00       87,166,000,000         Tunnel (North Bore extended EUMT): (LF):       20,500,00       4,252,00       87,166,000,000         Hight Bore extended EUMT): (LF):       20,500,00       4,252,00       87,166,000,000         Mobile Maintenance: Equipment:       11,100,000,00       354,000,000,00       354,000,000,00         Mobile Maintenance: Equipment:       11,100,000,00       230,00       882,000,000,00         Passenger: Rolling:Stock:       16,000,000,00       230,00       882,000,000,00         Silgeralisand Controls:       111,600,000,00       133,920,000,00       133,920,000,00         Silgeralisand Controls:       111,600,000,00       133,920,000,00       133,920,000,00         Silgeralisand Controls:       111,600,000,00       14,427,794,49       52,148,056,70       24,949,93         Silgeralisand Action:       variable       1,00       372,474,210,66       372,474,210,66       372,474,210,66         Minimal Action:       variable       1,00       21,914,222,40       \$2,450,378,699,00       \$24,914,222,40       \$2,450,378,699,00						
Tunnel (Twin Tunnels):(LF):       15,000,00       741,00       11,115,000,00         Tunnel (North Bore EMT): (LF):       48,000,00       13,725,00       658,800,000,00         Tunnel (North Bore EMT): (LF):       20,500,00       4,252,00       87,166,000,000         Tunnel (North Bore extended EUMT): (LF):       20,500,00       4,252,00       87,166,000,000         Hight Bore extended EUMT): (LF):       20,500,00       4,252,00       87,166,000,000         Mobile Maintenance: Equipment:       11,100,000,00       354,000,000,00       354,000,000,00         Mobile Maintenance: Equipment:       11,100,000,00       230,00       882,000,000,00         Passenger: Rolling:Stock:       16,000,000,00       230,00       882,000,000,00         Silgeralisand Controls:       111,600,000,00       133,920,000,00       133,920,000,00         Silgeralisand Controls:       111,600,000,00       133,920,000,00       133,920,000,00         Silgeralisand Controls:       111,600,000,00       14,427,794,49       52,148,056,70       24,949,93         Silgeralisand Action:       variable       1,00       372,474,210,66       372,474,210,66       372,474,210,66         Minimal Action:       variable       1,00       21,914,222,40       \$2,450,378,699,00       \$24,914,222,40       \$2,450,378,699,00		COST	QUANTITY			
Trunnet (Noith Boie EJMT) (LF)       48,000.00       13,725.00       658,800.000.00         Trunnet (Noith Boie EJMT) (LF)       20,500.00       4,252.00       87,166,000.00         Electrification       1.00       354,000.000.00       354,000.000.00         Mobile Maintenance Equipment       11,100,000.00       1.00       354,000.000.00         Passenger Rolling Stock       16,000,000.00       52.00       862,000.000.00         Fare Callection       37,000.00       230.00       852,000.000.00         Signals and Controls       111,600,000.00       116,600.000.00       133,920,000.00         Silver Plume ramps       variable       1.00       4,427,794,49         Silver Plume ramps       variable       1.00       372,474,210,66         Dowd alt:       1.00       21,914,222,40       21,914,222,40         Inflation to 2010 dollars (assuming 4% per year)       21,914,222,40       21,914,222,40         Total Project Cost       \$11,201,731,195,44       (P)         *Contingencies includes environmental mitigation costs       Base cost of Alternative in Millions       \$10,524	Tunnel (Twin Tunnels) (LE)			2121212121212121	· · · 11 115 000 00	2.2.2
Tunnel (North Borelextended EUNT) (LF):     20,500.00     4.252.00     87.166.000.00       Iblectification     1.00     354.000,000.00     354.000,000.00       Mobile Maintenance Equipment     11.100,000.00     1.00     354.000,000.00       Passenger Rolling: Stock     16.000,000.00     52.00     882.000,000.00       Passenger Rolling: Stock     16.000,000.00     52.00     882.000,000.00       Stilser, Plinmerämps     variable     1.00     133.920,000.00       Stilser, Plinmerämps     variable     1.00     52.148.056.79       Dowdrait, 1. no Rail     variable     1.00     372.474.210.66       Minimal Action     variable     1.00     372.474.210.66       Inferior to 2010 dollars (assuming 4% per year)     \$11,201.731.195.44     (P)						
Electrification       1.00       354,000,000,00       354,000,000,00         Mobile Maintenance Equipment       11,100,000,00       1.00       11,100,000,00         Passenger Rolling.Stock       16,000,000,00       52,00       832,000,000,00         Fare/Cdllection       37,000,00       230,00       8,510,000,00         Stgnals and Controls       111,600,000,00       111,600,000,00       133,920,000,00         Stlenals and Controls       111,600,000,00       133,920,000,00       133,920,000,00         Stlenals and Controls       111,600,000,00       100       4,427,794,49         SH 103 technfigure       variable       1.00       372,474,210,66         Dowdalt, 1: no Rall       variable       1.00       372,474,210,66         Minimal Action       variable       1.00       378,000,000,00         Inflation to 2010 dollars (assuming 4% per year)       \$21,914,222,40       \$2,450,378,699,00         Total Project Cost       \$11,201,731,195,44       (P)         *Contingencies includes environmental mitigation costs       \$10,524						
Mobile Maintenance: Equipment:       11,100,000,00         Passenger Rolling: Stock       16,000,000,00         Passenger Rolling: Stock       16,000,000,00         Start: Glick Controls       111,600,000,00         Stipnals and Controls       111,600,000,00         Stifuer Plume-ramps       variable         Stifuer Plume-ramps       variable         Dowdrait; 1 - no Rail       variable         Dowdrait; 1 - no Rail       variable         Dowdrait; 1 - no Rail       variable         Stifuer Plume-ramps       variable         Loo       42,427,794,449         Stifuer Stifuer Plume-ramps       variable         Loo       52,148,056,76         Dowdrait; 1 - no Rail       variable         Total Project Cost       \$11,201,731,195,44         Contingencies includes environmental mitigation costs						
Passenger Rolling Stock       16,000,000,00       52,00       862,000,000,00         Fare Callection       37,000,00       2330,00       8,510,000,00         Signals and Controts       111,600,000,00       111,600,000,00       133,920,000,00         Silver Plume ramps       variable       1.00       4,427,794,49         Silver Plume ramps       variable       1.00       52,148,056,78         Dowd ait, 1 - no Rail       variable       1.00       372,474,210,66         Minima Action       variable       1.00       52,194,056,78         Inflation to 2010 dollars (assuming 4% per year)       21,914,222,40       21,914,222,40         Total Project Cost       \$11,201,731,195,44       (P)         *Contingencies includes environmental mitigation costs       Base cost of Alternative in Millions       \$10,524						
Passenger Rolling Stock       16,000,000,00       52,00       862,000,000,00         Fare Callection       37,000,00       2330,00       8,510,000,00         Signals and Controts       111,600,000,00       111,600,000,00       133,920,000,00         Silver Plume ramps       variable       1.00       4,427,794,49         Silver Plume ramps       variable       1.00       52,148,056,78         Dowd ait, 1 - no Rail       variable       1.00       372,474,210,66         Minima Action       variable       1.00       52,194,056,78         Inflation to 2010 dollars (assuming 4% per year)       21,914,222,40       21,914,222,40         Total Project Cost       \$11,201,731,195,44       (P)         *Contingencies includes environmental mitigation costs       Base cost of Alternative in Millions       \$10,524	Mobile Maintenance Equipment	11,100,000.00	1.00			
Fare Cqllection     37,000,00     230,00     18,610,000,00       Signals and Controls     111,600,000,00     111,600,000,00     133,920,000,00       Silver, Plimeramps     variable     1.00     4,427,794,49       SH 103 technfigure     variable     1.00     372,474,210,66       Dowdait, 1 no Rail     variable     1.00     372,474,210,66       Minimal Action     variable     1.00     372,474,210,66       Inferchanges (EAGH)     1.00     21,914,222,40     21,914,222,40       Inflation to 2010 dollars (assuming 4% per year)     \$11,201,731,195,44     (P)	Passenger Rolling Stock	16,000,000,00				
Stgnals and Controls         111,600,000.00         111,600,000.00         133,920,000.00           Silver, Plumeramps         variable         1.00         4,427,794.49           SH 103 teconfigure         Variable         1.00         52,148,056.79           Dowdrait         1 no         372,474,210,66         372,474,210,66           Minimal Action         variable         1.00         678,000,000,00           Inflation to 2010 dollars (assuming 4% per year)         21,914,222.40         21,914,222.40           Total Project Cost         \$11,201,731,195.44         (P)           *Contingencies includes environmental mitigation costs         Base cost of Alternative in Millions         \$10,524						
Silver, Plumèrramps         Variablé         1.00         4,427,794,49           Silver, Plumèrramps         Variablé         1.00         52,148,056,79           Dowdrait, 1 - no Raal         Variablé         1.00         52,148,056,79           Minimal Action         variable         1.00         572,474,210,66           Minimal Action         variable         1.00         578,000,000,00           Inflation to 2010 dollars (assuming 4% per year)         21,914,222.40         21,914,222.40           Total Project Cost         \$11,201,731,195.44         (P)           *Contingencies includes environmental mitigation costs						
SH 103 tecpnfigure       variable       1.00       52,148,056.79         Dowd alt, 1 no Rail       variable       1.00       337,474,210,66         Minimal Action       variable       1.00       372,474,210,66         Inferchanges (EAGH)       1.00       21,914,222.40       21,914,222.40         Inflation to 2010 dollars (assuming 4% per year)       \$1,00       \$11,201,731,195.44       (P)         Total Project Cost         *Contingencies includes environmental mitigation costs						
Dowdrait, 1 - no Rait         variable         1,00         372,474,210,66           Minimal Action         variable         1,00         878,000,000,00           Inflation to 2010 dollars (assuming 4% per year)         21,914,222,40         21,914,222,40           Total Project Cost         \$11,201,731,195.44         (P)           *Contingencies includes environmental mitigation costs						
Minimal Action         variable         1.00         678,000,000.00           Inferchanges [EACH)         1.00         21,914,222.40         21,914,222.40           Inflation to 2010 dollars (assuming 4% per year)         \$2,450,378,699.00         \$2,450,378,699.00           Total Project Cost         \$11,201,731,195.44         (P)           Base cost of Alternative in Millions         \$10,524						
Interchanges (EACH)       1.00       21,914,222.40       1.12         Inflation to 2010 dollars (assuming 4% per year)       \$21,914,222.40       \$2,450,378,699.00         Total Project Cost       \$11,201,731,195.44       (P)         *Contingencies includes environmental mitigation costs       \$10,524       \$10,524	Dowd alt. 1 - no Rail				372,474,210.66	
Interchanges (EACH)       1.00       21,914,222.40       1.12         Inflation to 2010 dollars (assuming 4% per year)       \$21,914,222.40       \$2,450,378,699.00         Total Project Cost       \$11,201,731,195.44       (P)         *Contingencies includes environmental mitigation costs       \$10,524       \$10,524	Minimal Action	variable	1.00		678,000,000.00	
Inflation to 2010 dollars (assuming 4% per year)       \$2,450,378,699.00         Total Project Cost       \$11,201,731,195.44       (P)         *Contingencies includes environmental mitigation costs       \$10,524						
Total Project Cost       \$11,201,731,195.44       (P)         Base cost of Alternative in Millions       \$10,524         *Contingencies includes environmental mitigation costs						
Base cost of Alternative in Millions \$10,524 *Contingencies includes environmental mitigation costs			l		Ψ <u>2</u> ,-100,010,033.00	
Base cost of Alternative in Millions \$10,524 *Contingencies includes environmental mitigation costs			· · · · · · · · · · · · · · · · · · ·		@44.004.704.405.01	
*Contingencies includes environmental mitigation costs	Total Drainet Cont				all 201 731 195 44	(P)
*Contingencies includes environmental mitigation costs	Total Project Cost				¢,201,101,100.11	· · ·
	Total Project Cost		Post	st of Alternative in Millicas		. ,
I Otal Preliminary Engineering includes cost of developing NEPA documents		ion costs	Base co	st of Alternative in Millions		
	*Contingencies includes environmental mitigat			st of Alternative in Millions		

BID ITEMS	COST PER UNIT	QUANTITY	COST
AGS-Maglev Stucture (LF)	2,376.00	466,910.40	\$1,109,379,110.40
AGS-Maglev Guideway	500.00	455,304.00	\$227,652,000.00
AGS-Maintenance Facilities	variable	3.00	\$104,150,000.00
AGS-Stations/Parking (Large)	3	10,000,000.00	\$30,000,000.00
AGS-Stations/Parking (Medium)	3	6,000,000.00	\$18,000,000.00
AGS-Station/Parking (Small)	4	3,000,000.00	\$12,000,000.00
AGS-Extension - Vail to Eagle Airport	30	17,254,955.29	\$517,648,658.70

Total

\$2,018,829,769.10

	% Range	% Used	Cost		
Project Construction Bid Items	Project Dependent	N/A	\$2,018,829,769.10	(A)	
Contingencies* (Mitigation - 3%)	(15% - 30%) of (A)	30.00%	\$605,648,930.73	(B)	
ITS	(6-10%) of (A+B) Default = 6%	0.00%	\$0.00	(C)	
Drainage/Utilities	(3-10% )of (A+B) Default = 6%	4.00%	\$104,979,147.99	(D)	
Signing and Striping	(1-5%) of (A+B+C+D) Default = 5%	1.00%	\$27,294,578.48	(E)	
Construction Signing & Traffic Control	5 to 25% of (A+B+C+D+E) Default = 20%	5.00%	\$137,837,621.32	(F)	
Mobilization	(4 to 10%) of (A+B+C+D+E+F) Default = 7%	7.00%	\$202,621,303.33	(G)	
Total of Construction Bid Items	(A+B+C+D+E+F+G)		\$3,097,211,350.95	(H)	
Force Account - Utilities	(1 to 2%) of (H) Default = 2%	2.00%	\$61,944,227.02	(I)	
Force Account - Misc.	(10 to 15%) of (H) Default = 12%	6.00%	\$185,832,681.06	(J)	
Subtotal of Construction Cost	(H+I+J)		\$3,344,988,259.03	(K)	
Total Construction Engineering	17% of (K)	7.00%	\$234,149,178.13	(L)	
Total Preliminary Engineering**	15% of (K)	10.00%	\$334,498,825.90	(M)	
Right of Way	Project Dependent	2.00%	\$61,944,227.02	(N)	
Utilities	Project Dependent	N/A	\$0.00	(O)	
Tunnel (Twin Tunnels) (LF) Turnel (North Bore EJMT) (LF) Electrification Mobile Maintenance Equipment Passenger Rolling Stock Fare Collection Signals and Controls Minimal Action Interchanges (EACH) Inflation to 2010 dollars (assuming	16;000,000;00 52.00 37,000;00 230,00 141,600,000;00 4;14;600,000,00 variable 1,00 1,00 6,094,092,00	+PE & CE	11,115,000,00 333,500,000,00 309,000,000,00 11,100,000,00 832,000,000,00 130,572,000,00 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000 532,000,000,000 532,000,000,000,000,000 532,000,000,000,000,000,000,000,000,000,0		2618644.1
AGS Add Minimum Improvements			\$7,871,323,625.06 \$1,308,000,000.00	(P)	
Total Project Cost *Contingencies includes environmental mitiga	tion costs	Base	\$9,179,323,625.06		

*Contingencies includes environmental mitigation costs **Total Preliminary Engineering includes cost of developing NEPA documents

#### TIER 1 - PEIS COST ESTIMATE 10a - AGS w/6-LANE PRESERVATION

8/17/2010 14:29			· · · · ·	1	
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	267,796.00	40,169,400.00		
Walls (SF)	90.00		121,480,380.00		
Earthwork (CY)	20.00		63,917,080.00		
Special Structures (SF)	200.00		192,016,400.00		
AGS-Maglev Stucture (LF)	2,376.00	466,910.40			
AGS-Maglev Guideway	500.00	455,304.00	\$227,652,000.00		
AGS-Maintenance Facilities	variable	3.00	\$104,150,000.00		
AGS-Stations/Parking (Large)	3	10,000,000.00	\$30,000,000.00		
AGS-Stations/Parking (Medium)	3		\$18,000,000.00		
AGS-Station/Parking (Small)	4		\$12,000,000.00		
AGS-Extension - Vail to Eagle Airport	30	17,254,955.29	\$517,648,658.70		
Tetel			2,436,413,029.10		
Total			2,436,413,029.10		
	% Range		% Used	Cost	
			<b>N</b> 1/A	<b>*</b> 0.400.440.000.40	( )
Project Construction Bid Items	Project Dependent		N/A	\$2,436,413,029.10	(A)
Contingencies* (Mitigation - 12%)	(15% - 30%) of (A)		30.00%	\$730,923,908.73	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
10			0.0078	φ0:00	(0)
	Default = 6%				
Drainage/Utilities	(3-10% )of (A+B)		5.00%	\$158,366,846.89	(D)
	Default = 6%				
Signing and Striping	(1-5%) of (A+B+C+	וח	4.00%	\$133,028,151.39	(E)
olgrinig and oniping	Default = 5%			\$100;0±0;101100	(-)
	Default = 5 %				
					( <b>-</b> )
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	10.00%	\$345,873,193.61	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B+	+C+D+E+F)	7.00%	\$266,322,359.08	(G)
	Default = 7%			· · · · · · · · · · · · · · · · · · ·	(-)
	Derault = 770				
Total of Construction Bid Items	(A+B+C+D+E+F+G	i)		\$4,070,927,488.80	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$81,418,549.78	(I)
	Default = 2%		2.0070		(.)
	Default = 270				
Farra Assaunt Miss	(40 + 450) = 4(11)		0.000/	\$044.055.040.00	<b>Z</b> D
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$244,255,649.33	(J)
	Default = 12%				
Subtotal of Construction Cost	(H+I+J)			\$4,396,601,687.91	(K)
	, ,				
Total Construction Engineering	17% of (K)		10.00%	\$439,660,168.79	(L)
				ψ100,000,100.79	(=)
	4504 4.00		40.000/	<b>0</b> 400 000 ·····	
Total Preliminary Engineering**	15% of (K)		10.00%	\$439,660,168.79	(M)
Right of Way	Project Dependent		2.00%	\$81,418,549.78	(N)
				, , , , , , ,,,,,,,,,,,,,,,,,,,,,,,,,,,	()
Utilities	Project Dependent		N/A	\$0.00	(O)
Cuindoo					$(\mathbf{O})$
	0007	QUANTITY			
	COST				
Tunnel (Twin Tunnels) (LF)	15,000.00			11,115,000.00	
Tunnel (North Bore EJMT) (LP)	48,000.00			658,800,000.00	
Tunnel (North Bore extended EJMT) (LF)	20,500.00	4,252.00		87,166,000.00	1 A A
Electrification	1.00			354,000,000.00	1.1
Mobile Maintenance Equipment	11,100,000.00			11.100.000.00	
Passenger Rolling Stock	16,000,000.00			832.000.000.00	
Fasenuel Collinu Slock					1.1
	· · · · · · · · · · · · · · · · · · ·	230.00		8,510,000.00	
Fare Collection	37,000.00			4,427,794.49	
Fare Collection Silver Plume ramps	variable	1.00			
Fare Collection		1.00		52,118,056.79	
Farê Collêction Silver Plûmê râmps SH 103 reconfigure	variable variable	1.00 1.00	1919191919191919		
Faré Colléction, Silver Plumé rámps SH 103 reconfigure Dowd alt. 1 - nó Rail	variable variable variable	1.00 1.00 1.00	1919191919191919	372,474,210.66	
Faré Colléction Silver Plumé rámbs SH:103 reconfigure Dowd alt. 1 - nó Rail Sigrials and Controls	variable variable variable 111,600,000,00	1.00 1.00 1.00 1.00 1.111,600,000.00		372,474,210.66 133,920,000.00	
Faré Colléction Silver Plumé rámps SH,103 reconfigure Dowd alt. 1 = nó Rail Sigriais and Controls Minimal-Action	variable variable variable 111,600,000,000 variable	1.00 1.00 1.00 1.00 1.111,600,000.00		372,474,210.66 133,920,000.00 532,000,000.00	
Faré Colléction Silver Plumé rámbs SH:103 reconfigure Dowd alt. 1 - nó Rail Sigrials and Controls	variable variable variable 111,600,000,000 variable	1.00 1.00 1.00 1.00 1.111,600,000.00		372,474,210.66 133,920,000.00	
Faré Colléction Silver Plumé rámps SH 103 reconfigure Dowd at. 1 : nó Ráil Signals and Controis Minimál-Action Inflation to 2010 dollars (assuming	variable variable variable 111,600,000,000 variable	1.00 1.00 1.00 1.00 1.111,600,000.00		372,474,210.66 133,920,000.00 532,000,000.00 \$2,356,192,058.42	
Faré Colléction Silver Plumé rámps SH,103 reconfigure Dowd alt. 1 = nó Rail Sigriais and Controls Minimal-Action	variable variable variable 111,600,000,000 variable	1.00 1.00 1.00 1.00 1.111,600,000.00		372,474,210.66 133,920,000.00 532,000,000.00	(P)
Faré Colléction Silver Plumé rámps SH 103 reconfigure Dowd at. 1 : nó Ráil Signals and Controis Minimál-Action Inflation to 2010 dollars (assuming	variable variable variable 111,600,000,000 variable	1.0D 1.0D 1.0D 1.0D 1.0D 1.0D 1.0D		372,474,210.66 133,920,000,00 532,000,000,00 \$2,356,192,058.42 \$10,771,163,695.62	(P)
Faré Colléction Silver Plumé ramps SH 103 reconfigure Dowd at. 1 : no Rail Signals and Controls Minimal-Action Inflation to 2010 dollars (assuming <b>Total Project Cost</b>	variable; variable; variable; i 11,600,000,000 variable; 4% per year)	1.0D 1.0D 1.0D 1.0D 1.0D 1.0D 1.0D		372,474,210.66 133,920,000,00 532,000,000,00 \$2,356,192,058.42 \$10,771,163,695.62	(P)
Faré Colléction Silver Plume ramps SH'103 reconfigure Dowd att. 1 : no Rail Signals and Controls Minimal-Aotion Inflation to 2010 dollars (assuming <b>Total Project Cost</b> *Contingencies includes environmental mitiga	variable variable variable i 1 1,600,000 00 variable variable variable ion costs	1.0D 1.0D 1.0D 1.0D 111,600,000.0D 1.0D		372,474,210.66 133,920,000,00 532,000,000,00 \$2,356,192,058.42 \$10,771,163,695.62	(P)
Farê Collêction Silver Plume ramps SH 103 reconfigure Dowd att. 1 : no Rail Signals and Controls Minimal-Action Inflation to 2010 dollars (assuming <b>Total Project Cost</b>	variable variable variable i 1 1,600,000 00 variable variable variable ion costs	1.0D 1.0D 1.0D 1.0D 111,600,000.0D 1.0D		372,474,210.66 133,920,000,00 532,000,000,00 \$2,356,192,058.42 \$10,771,163,695.62	(P)

### TIER 1 - PEIS COST ESTIMATE 10b - 6-LANE w/AGS PRESERVATION

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	267,796.00	40,169,400.00		
Walls (SF)	90.00	1,349,782.00	121,480,380.00		
Earthwork (CY)	20.00	3,195,854.00	63,917,080.00		
Pavement (TON)	70.00	594,691.00	41,628,370.00		
Base Course (CY)	40.00	400,639.00	16,025,560.00		
Barrier (Type 7)(LF)	60.00	316,023.00	18,961,380.00		
Special Structures (SF)	200.00	960,082.00	192,016,400.00		
Total			494,198,570.00		
			434,130,370.00		
	% Range		% Used	Cost	
				A	<i>(</i> <b>1</b> )
Project Construction Bid Items	Project Dependent		N/A	\$494,198,570.00	(A)
	(150( 000() (())				
Contingencies* (Mitigation - 12%)	(15% - 30%) of (A)		30.00%	\$148,259,571.00	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = $6\%$		0.0070	ψ0.00	
	- 5.00.0 - 070				
Drainage/Utilities	(3-10% )of (A+B)		5.00%	\$32,122,907.05	(D)
	Default = 6%			· · · · ·	· · ·
Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$26,983,241.92	(E)
	Default = 5%				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	10.00%	\$70,156,429.00	(F)
	Default = 20%				
Mahilizatian	(4 to 100() of (A + D +		7.000/	<b>¢</b> E4 020 4E0 22	$(\mathbf{C})$
Mobilization	(4 to 10%) of (A+B+ Default = 7%	-C+D+E+F)	7.00%	\$54,020,450.33	(G)
	Delault = 7 /0				
Total of Construction Bid Items	(A+B+C+D+E+F+G	)		\$825,741,169.30	(H)
	· · · ·	,		<u> </u>	
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$16,514,823.39	(I)
	Default = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$49,544,470.16	(J)
	Default = 12%				
Subtatal of Construction Cost	(11.1.1)			¢004 000 462 04	
Subtotal of Construction Cost	(H+I+J)			\$891,800,462.84	(K)
Total Construction Engineering	170/ of (K)		10.00%	¢90 190 046 29	(1)
Total Construction Engineering	17% of (K)		10.00%	\$89,180,046.28	(L)
Total Preliminary Engineering**	15% of (K)		10.00%	\$89,180,046.28	(M)
					· · ·
Right of Way	Project Dependent		2.00%	\$16,514,823.39	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
	C007	OLIANITITY			
Tunnel (Twin Tunnels) (LF)	соsт 15000.00	QUANTITY 741.00	energe energe	11,115,000.00	Sec. 2
Tunnel (North Bore EJMT) (LF)	48000.00			658,800,000.00	
Tunnel (North Bore extended EJMT) (LF)	20500.00			87,166,000.00	1.15
Silver Plume ramps	variable	1.00		4,427,794.49	
SH 103 reconfigure	variable			52,118,056.79	
Dowd alt. 1 - no Rail	variable			372,474,210.66	
Minimat Action	variable			678,000,000.00	
: : : : Interchanges (EACH) : : : : :	1.00			21,914,222.40	
Inflation to 2010 dollars (assuming	4% per year)			\$832,353,385.68	
Total Project Cost				\$3,805,044,048.82	(P)
		Base co	st of Alternative in Millions	\$3,127	
*Contingencies includes environmental mitigation	on costs	2036 00		ψ0,121	
**Total Preliminary Engineering includes cost of		cuments			

#### TIER 1 - PEIS COST ESTIMATE 11 - 6-LANE w/DUAL MODE BUS IN GUIDEWAY

Bit Product         COST PRUM         GUARTY         COST         COST <thcost< th="">         COST         COST<th>0.4.7.00.0.1.00</th><th></th><th></th><th>· · · · · ·</th><th>1</th><th></th></thcost<>	0.4.7.00.0.1.00			· · · · · ·	1	
Weak SF)         9000         13:89.7200         17:00.8000         1           Settor CAP (CY)         0.00         13:89.7200         1         1           Base Cacres (CY)         0.00         19:22400         1         1           Base Cacres (CY)         0.00         19:22400         1         1           Base Cacres (CY)         0.00         19:22400         1         1           Base Cacres (CY)         0.00         22:0000         1         1         1           Base Catres (CY)         0.00         22:0000         1         1         1           Base Catres (CY)         0.00         22:0000         1         1         1         1           Base Catres (CY)         0.00         1:0:0:0:0         1:0:0:0:0         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1<	8/17/2010 14:29 BID ITEMS	COST PER UNIT	QUANTITY	COST		
Weak SF)         9000         13:89.7200         17:00.8000         1           Settor CAP (CY)         0.00         13:89.7200         1         1           Base Cacres (CY)         0.00         19:22400         1         1           Base Cacres (CY)         0.00         19:22400         1         1           Base Cacres (CY)         0.00         19:22400         1         1           Base Cacres (CY)         0.00         22:0000         1         1         1           Base Catres (CY)         0.00         22:0000         1         1         1           Base Catres (CY)         0.00         22:0000         1         1         1         1           Base Catres (CY)         0.00         1:0:0:0:0         1:0:0:0:0         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1<						
Entrack. (C)         20.00         31.55.854.00         69.17.200.01           Bestrer (Tob)         70.00         59.17.200.01         59.17.200.01           Stead Structure (SP)         20.00         98.02.200.01         18.27.800.01         19.20.800           Back Vials         90.00         48.100.00         44.100.01         44.000.01         19.20.800         1           Back Vials         90.00         96.00.200.00         12.200.000.00         1         1           Back Vials         90.00         90.00.200.00         1.200.000.00         1         1.400.000.00           Back Statese Planting (Logs)         1000000         3         30.000.000.01         1.400.000.00         1           Back Statese Planting (Logs)         1000000         3         30.000.000.01         1.400.000.00         1           Back Statese Planting (Logs)         100.0000.00         1.00.100.000.00         1.00.100.000.00         1.00.100.000.00         1.00.100.000.00         1.00.100.000.00         1.00.100.000.00         1.00.100.000.00         1.00.100.000.00.00         1.00.100.000.00.00         1.00.100.000.00.00         1.00.100.000.00.00         1.00.100.000.00.00         1.00.100.000.00.00         1.00.100.000.00.00         1.00.100.000.00.00         1.00.100.000.00.00         1.00.000.00.00         1.00.0						
Partner (TON)         70.00         77.785.00         9.31.72.00         9.31.72.00           Back Lambord, NULL         20.00         980.042.00         1.41.45.00.00         1.41.45.00.00           Back Lambord, NULL         20.00         980.042.00         1.45.45.00.00         1.41.45.00.00           Back Lambord, NULL         20.00         980.042.00         1.45.45.00.00         1.45.75.00         1.45.75.00           Back Lambord, NULL         20.00         92.01.45.00         1.41.75.200         1.45.75.00         1.45.75.00           Back Lambord, NULL         20.00         0.00         1.45.600.00         1.45.75.00         1.45.75.00           Back Lambord, Null, NULL         20.00         0.00         2.45.000.00         1.45.600.00         1.45.75.00           Back Lambord, Null, NULL         20.00         2.45.95.00         4.45.13.00         1.45.95.00         1.45.95.00           Back Lambord, Null, NULL         20.00         3.00.00         3.00.00         2.45.95.00         1.45.95.00         1.45.95.00           Back Lambord, Null,						
Bess Corres (CY)         40.00         963.433.00         Best Table (C)         A           Bar Mathem (C)         0.00         444.108.00         1.494.200.00         -         -           But Mathem (C)         0.00         27.054.000         -         -         -           But Andrew Shartsm (L)         0.00         27.054.000         -         -         -           But Andrew Shartsm (L)         0.000         27.054.000         -         -         -           But Andrew Shartsm (L)         0.000         1.490.000         -         -         -           But Andrew Shartsm (L)         0.000         1.490.000         -         -         -           But Andrew Shartsm (L)         0.000         0.149.0000         -         -         -           But Andrew Shartsm (L)         0.000         0.280.0000         -         -         -           But Andrew Shartsm (L)         0.000         0.0000.000         2.844.000         -         -           But Andrew Shartsm (L)         0.000         0.0000.000         2.844.000         -         -           But Andrew Mathem Andrew Shartsm (L)         0.000         0.0000.000         2.844.000         -         -         -         -<						
Better         Org         000         362,254.00         20,20,00         4           Better         000         980,052.00         102,000.00         -         -           Better         000         70,000.00         2220,000.00         -         -           Bunc Science Structure (17, 100,000         310,000.00         2220,000.00         -         -           Bunc Science Structure (17, 100,000         30,000.00         -         -         -           Bunc Science Market (100,000         30,000.00         -         -         -         -           Bunc Science Market (100,000         30,000.00         -         -         -         -         -           Bunc Science Market (100,000         30,000.00         30,000.00         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -						
Secial Structures (P)         20.00         960.082.00         19.14.00.00         19.14.00.00           Back-Math         0.00         14.00.00         22.00.00.01         1         1           Back-Math         0.00         10.00.00         22.00.00.01         1         1           Back-Math         0.00         10.00.00         1.00.00.00         1         1         1           Back-Math         0.00         0.00         1.00.00.00         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1<						
Bac Valle         9.00         444.05.00         450.7200         4           Bac States from A.         30.00         220.55.00         4007.000         4           Bac States from A.         30.00         220.55.00         4450.0000         4         5           Bac Manna for Backer         200000         1         2000000         1         5         5           Bac Manna for Backer         200000         1         5         500.0000         1         5           Bac Manna for Backer         2000.000         1         5         500.0000         1         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5						
Bue Entranset         20.00         200.000.00         4000.000         4000.000         4000.000           Bue Mainerscor Facilies         Vielable         22700.000.00         3         2400.000.00         1           Bue Mainerscor Facilies         Vielable         2000.000         3         2400.000.00         1           Bue Samper Samper Mainer         1000.000         3         2400.000.00         1         1           Bue Samper Samper Mainer         0.00         565.424.00         4807.400.00         1         1           Bue Samper Mainer         0.00         565.424.00         4807.400.00         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1						
But-Addred Basesy Track         315.00         227.08.00         44.57.220.01         1           But-Addred Factbeller         Variable Variab		20.00				
But Admittance Facilitie         Variable         3.00         4.4000000         Image Admittance Facilities           But Admittance Facilities         2000000         1         24000000         Image Admittance Facilities           But Admittance Facilities         3000000         1         20000000         Image Admittance Facilities         Image Admitance Facilities         Image Admitance Facilit	Bus-Guideway Structure (LF)	3200.00	71,000.00	227,200,000.00		
Bus.Rampe for Buses         200000         12         24000000         1         1           Bus.Station (Smith)         000000         1         0000000         1         1         1           Bus.Station (Smith)         000000         1         0000000         1         1         1         1           Bus.Station (Smith)         0000         054.62400         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 <td>Bus-Guided Busway Track</td> <td></td> <td>267,168.00</td> <td>84,157,920.00</td> <td></td> <td></td>	Bus-Guided Busway Track		267,168.00	84,157,920.00		
Bus:Staturn Parking (Lange)         1000000         3         no.noncono 0         1           Bus:Staturn Parking (Lange)         000000         1         no.noncono 0         1           Data         Staturn 10         Staturn 20         1         no.noncono 0         1           Bus:Staturn 10         Staturn 20         000         554.4520         987.11000         1           Bus:Staturn 20         300000         754.5200         264.5400         987.11000         1           Bus:Staturn 20         300000         1000000         264.5400         987.11000         1           Bus:Staturn 20         3000000         1000         2000000         1         1         1           Bus:Staturn 20         3000000         300         30000000         1         1         1           Bus:Staturn 20         1000000         300         30000000         1         1         1           Bus:Staturn 20         1000000         300         30000000         1         1         1           Bus:Staturn 20         1000000         300         30000000         1         1         1         1         1         1         1         1         1         1         1						
Bus_SelectorsParking (Medium)         6000000         1         6000000         1         1           Extension: SelectorsParking (Medium)         900         554.52400         4902/3000         1         1           Bus_Edension: Calibation (Small)         900         5254.52400         4902/3000         1         1         1           Bus_Edension: Calibation: Calibat						
Bas-Station (Small)         300000         9         27 0000000         1           Bus-Entration-Winth & Eagle Approx         90.01         99.07.05.00         1           Bus-Entration-Winth & Eagle Approx         30.00         254.524.00         140.71.0000         1           Bus-Entration-Guided Burway Track         310.00         312.640.00         14.00.00000         1         1           Bus-Entration-Farms for Reases         2.000.000.00         14.00         80.000.000         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1						
Extension - Silver h, to Equip Arport Bub & Extension - Mark 1         90.00         554.024.00         90.00         654.024.00         90.00         654.024.00         90.00         654.024.00         90.00         654.024.00         90.00         654.024.00         90.00         654.024.00         90.00         654.024.00         90.00         654.024.00         90.00         654.020.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00         90.00 </td <td></td> <td></td> <td></td> <td>6,000,000.00</td> <td></td> <td></td>				6,000,000.00		
Bue Extension Yank         90.00         555.52.400         9.00.00         1           Bue Extension Faithwork         200.00         73.620.00         46.83.600.00         1           Bue Extension Faithworker Full         3.200.00         73.620.00         46.85.644.000.00         1           Bue Extension Faithworker Full         100.000.000         100         50.000.000         1         1           Bue Extension Faithworker Full         0.000.000.00         100         60.000.000         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1		300000	9	27,000,000.00		
Bue Extension-Earthwork         20.00         Z22.658.00         4.65.280.00         1           Bue Extension-Catched Burway Trad.         315.00         732.440.00         14.73.400.00         1           Bue Extension-Stations/Burling (Large)         10.000.000.00         3.00         200.000.000         1         1           Bue Extension-Stations/Burling (Large)         10.000.000.00         3.00         200.000.00         1         1           Bue Extension-Stations/Burling (Large)         1.000.000.00         9.00         27.000.000         1         1           Bue Extension-Stations/Burling (Large)         1.000.000.00         9.00         27.000.000         1         1           Burl Extension-Station Shatting (Large)         1.61.35.860.490.00         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1		00.00	EE4 E24 00	40.007.460.00		
Bue Estension-Guideway Struture (L-)         3.200.00         73.200.00         29.54.400.00           Bue Estension-Maintenance Facilitie         Vaniable         8.00         84.200.000.00         44.200.000.00           Bue Estension-Maintenance Facilitie         Vaniable         8.00         84.200.000.00         44.200.000.00           Bue Estension-Station (Small)         0.000.000.00         10.00         6.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         7.000.000.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         10.00         1						
Bue Extension-Guided Buwwy Track         315.00         332.240.00         10-73.40000           Bue Extension-Rampa for Boates         2.000.000.00         16.00         2300.000.00         1           Bue Extension-Rampa for Boates         2.000.000.00         16.00         2300.000.00         1           Bue Extension-Staten (Small)         3.000.000.00         9.00         27.000.000.00         1           Bue Extension-Staten (Small)         1.000.000.00         9.00         27.000.000.00         1           Base Extension-Staten (Small)         1.000.000.00         9.00         27.000.000.00         1           Contraction (Small)         1.000.000.00         9.00         27.000.000.00         1         1           Contraction (Small)         1.000.000.00         9.00         27.000.000.00         1         1           Contraction (Small)         1.000.01         1.000.01         3.000.00         1         0         0           Contraction (Smill)         1.000.01 (A+B)         0.00%         \$10.4.897.902.00         0         0           Traction (Smill)         1.01% of (A+B)         0.00%         \$10.4.897.902.00         0         0           Smill (Smill)         0.000%         \$10.4.897.902.00         0         0						
Bue Extension Rampe for Bases         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         14.00         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000         2.000.000 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Bue-Extension-Stations/Parking (Margin)         10.000.000         3.00         3.000.0000         9.000.0000           Bue-Extension-Station (Small)         3.000.0000         9.00         27.000.0000         27.000.0000           Bue-Extension-Station (Small)         3.000.0000         9.00         27.000.0000         27.000.0000         27.000.0000           Bue-Extension-Station (Small)         3.000.0000         9.00         27.000.0000         27.000.0000         27.000.0000           Station (Small)         3.000.0000         9.00         7.000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000.0000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000         27.000000 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Bue:Extension:Station(SParing (Medium)         5.000.000         1.00         5.000.000         9.00         20.00000         1.00         5.000.000         1.00         5.000.000         1.00         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.0000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         7.000         <	Bus-Extension-Ramps for Busses					
Base Extension (Small)         3,000,000,00         9,00         27000,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         101113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         10113680,000,00         101113680,000,00         101113680,000,00 </td <td>Bus-Extension-Stations/Parking (Large)</td> <td>10,000,000.00</td> <td>3.00</td> <td>30,000,000.00</td> <td></td> <td></td>	Bus-Extension-Stations/Parking (Large)	10,000,000.00	3.00	30,000,000.00		
Total         Initiate         Initiate <thinitiate< th="">         Initiate         <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td></th<></thinitiate<>						
Image:         No.         No.         Cost           Project Construction Bid Items         Project Dependent         N/A         \$16.13.660.040.00         (A)           Contingencies* (Mingation - 15%)         (15% - 30%) of (A)         30.00%         \$484.098.012.00         (B)           TIS         6-10%) of (A+B)         000%         \$484.098.012.00         (B)           Default = 6%         000%         \$100.058.01         \$40.056.01         (C)           Signing and Striping         0140.14-80         600%         \$100.058.01         (C)           Construction Signing & Traffic Control         5 025% of (A+B)         000%         \$220.075.179.28         (C)           Default = 5%         0         0         5220.075.179.28         (C)         (C)           Construction Signing & Traffic Control         5 025% of (A+B+C+D+E)         0.00%         \$220.075.179.28         (C)           Mebilization         (4 to 10%) of (A+B+C+D+E)         0.00%         \$220.075.179.28         (C)           Force Account - Mise.         (100.15%) of (H)         0.00%         \$23.991.912.04.89         (C)           Default = 2%         0         0.00%         \$291.912.04.89         (C)           Total of Construction Cost         (H++1.)         0.00% <td>Bus-Extension-Station (Small)</td> <td>3,000,000.00</td> <td>9.00</td> <td>27,000,000.00</td> <td></td> <td></td>	Bus-Extension-Station (Small)	3,000,000.00	9.00	27,000,000.00		
Image:         No.         No.         Cost           Project Construction Bid Items         Project Dependent         N/A         \$16.13.660.040.00         (A)           Contingencies* (Mingation - 15%)         (15% - 30%) of (A)         30.00%         \$484.098.012.00         (B)           TIS         6-10%) of (A+B)         000%         \$484.098.012.00         (B)           Default = 6%         000%         \$100.058.01         \$40.056.01         (C)           Signing and Striping         0140.14-80         600%         \$100.058.01         (C)           Construction Signing & Traffic Control         5 025% of (A+B)         000%         \$220.075.179.28         (C)           Default = 5%         0         0         5220.075.179.28         (C)         (C)           Construction Signing & Traffic Control         5 025% of (A+B+C+D+E)         0.00%         \$220.075.179.28         (C)           Mebilization         (4 to 10%) of (A+B+C+D+E)         0.00%         \$220.075.179.28         (C)           Force Account - Mise.         (100.15%) of (H)         0.00%         \$23.991.912.04.89         (C)           Default = 2%         0         0.00%         \$291.912.04.89         (C)           Total of Construction Cost         (H++1.)         0.00% <td>Total</td> <td></td> <td></td> <td>1 613 660 040 00</td> <td></td> <td></td>	Total			1 613 660 040 00		
Project Construction Bid Items         Project Dependent         NA         \$1613.660.040.00         (A)           Contingencies* (Mitigation - 15%)         (15% - 30%) of (A)         30.00%         \$484.088.012.00         (B)           TIS         (6-10%) of (A+B)         0.00%         \$484.088.012.00         (C)           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$104.887.902.60         (D)           Signing and Striping         (1-5%) of (A+B)         0.00%         \$104.887.902.60         (D)           Signing and Striping         (1-5%) of (A+B)         0.00%         \$104.887.902.60         (D)           Mobilization         (1-5%) of (A+B)         0.00%         \$229.075.172.28         (P)           Mobilization         (4-10%) of (A+B)         0.00%         \$22.90.75.172.28         (P)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$176.387.888.04         (G)           Force Account - Utilities         (1-02%) of (H)         2.00%         \$53.924.297.20         (P)           Subtotal of Construction Engineering         17% of (K)         0.00%         \$181.772.891.61         (J)           Subtotal of Construction Engineering         17% of (K)         0.00%         \$291.191.204.89         (K)				1,013,000,040.00		
Project Construction Bid Items         Project Dependent         NA         \$1613.660.040.00         (A)           Contingencies* (Mitigation - 15%)         (15% - 30%) of (A)         30.00%         \$484.088.012.00         (B)           TIS         (6-10%) of (A+B)         0.00%         \$484.088.012.00         (C)           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$104.887.902.60         (D)           Signing and Striping         (1-5%) of (A+B)         0.00%         \$104.887.902.60         (D)           Signing and Striping         (1-5%) of (A+B)         0.00%         \$104.887.902.60         (D)           Mobilization         (1-5%) of (A+B)         0.00%         \$229.075.172.28         (P)           Mobilization         (4-10%) of (A+B)         0.00%         \$22.90.75.172.28         (P)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$176.387.888.04         (G)           Force Account - Utilities         (1-02%) of (H)         2.00%         \$53.924.297.20         (P)           Subtotal of Construction Engineering         17% of (K)         0.00%         \$181.772.891.61         (J)           Subtotal of Construction Engineering         17% of (K)         0.00%         \$291.191.204.89         (K)				· · · · · · · · · · · · · · · · · · ·		
Project Construction Bid Items         Project Dependent         NA         \$1613.660.040.00         (A)           Contingencies* (Mitigation - 15%)         (15% - 30%) of (A)         30.00%         \$484.088.012.00         (B)           TIS         (6-10%) of (A+B)         0.00%         \$484.088.012.00         (C)           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$104.887.902.60         (D)           Signing and Striping         (1-5%) of (A+B)         0.00%         \$104.887.902.60         (D)           Signing and Striping         (1-5%) of (A+B)         0.00%         \$104.887.902.60         (D)           Mobilization         (1-5%) of (A+B)         0.00%         \$229.075.172.28         (P)           Mobilization         (4-10%) of (A+B)         0.00%         \$22.90.75.172.28         (P)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$176.387.888.04         (G)           Force Account - Utilities         (1-02%) of (H)         2.00%         \$53.924.297.20         (P)           Subtotal of Construction Engineering         17% of (K)         0.00%         \$181.772.891.61         (J)           Subtotal of Construction Engineering         17% of (K)         0.00%         \$291.191.204.89         (K)						
Project Construction Bid Items         Project Dependent         NA         \$1613.660.040.00         (A)           Contingencies* (Mitigation - 15%)         (15% - 30%) of (A)         30.00%         \$484.088.012.00         (B)           TIS         (6-10%) of (A+B)         0.00%         \$484.088.012.00         (C)           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$104.887.902.60         (D)           Signing and Striping         (1-5%) of (A+B)         0.00%         \$104.887.902.60         (D)           Signing and Striping         (1-5%) of (A+B)         0.00%         \$104.887.902.60         (D)           Mobilization         (1-5%) of (A+B)         0.00%         \$229.075.172.28         (P)           Mobilization         (4-10%) of (A+B)         0.00%         \$22.90.75.172.28         (P)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$176.387.888.04         (G)           Force Account - Utilities         (1-02%) of (H)         2.00%         \$53.924.297.20         (P)           Subtotal of Construction Engineering         17% of (K)         0.00%         \$181.772.891.61         (J)           Subtotal of Construction Engineering         17% of (K)         0.00%         \$291.191.204.89         (K)		% Range	1	% Used	Cost	
Contingencies*         (Mitigation - 15%)         (15% - 30%) of (A)         30.00%         \$484.098.012.00         (B)           TS         (E-10%) of (A+B)         0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$229.075.170.22         (F)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00% </td <td></td> <td>, • · · · · · · · · · · · · · · · · · ·</td> <td></td> <td></td> <td></td> <td>•</td>		, • · · · · · · · · · · · · · · · · · ·				•
Contingencies*         (Mitigation - 15%)         (15% - 30%) of (A)         30.00%         \$484.098.012.00         (B)           TS         (E-10%) of (A+B)         0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$229.075.170.22         (F)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00% </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Contingencies*         (Mitigation - 15%)         (15% - 30%) of (A)         30.00%         \$484.098.012.00         (B)           TS         (E-10%) of (A+B)         0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$229.075.170.22         (F)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$22.095.214.980.01         (H)         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00%         \$0.00% </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
ITS         IC	Project Construction Bid Items	Project Dependent		N/A	\$1,613,660,040.00	(A)
ITS         IC						
Default = 6%	Contingencies* (Mitigation - 15%)	(15% - 30%) of (A)		30.00%	\$484,098,012.00	(B)
Default = 6%						
Default = 6%	170	(0.400() (4.5)		0.000/	<b>A</b> 0.00	
Drainage/Utilities         (3-10%, bf (A+B) Default = 6%         5.00%         \$104,887,902,60         (D)           Signing and Striping         (1-5%) of (A+BC+0)         4.00%         \$88,105,838,18         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B-C+0-E)         10.00%         \$229,075,179,28         (F)           Mobilization         (4 to 10%) of (A+B+C+D-E)         7.00%         \$176,387,888,04         (G)           Total of Construction Bid Items         (A+B+C+D+E+F)         7.00%         \$52,996,214,880,11         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$53,924,297,20         (I)           Force Account - Mise.         (1 to 10%) of (A+D)         6.00%         \$161,772,891,61         (J)           Subtotal of Construction Cost         (H+L-J)         52,911,912,048.92         (K)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,91,912,048.92         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89<	ITS			0.00%	\$0.00	(C)
Default = 6%         Image: Construction Signing at Traffic Control         Sto 25% of (A+B+C+D+E)         4.00%         St88.105.838.18         (E)           Construction Signing at Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         S229.075.179.28         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         S176.387.888.04         (G)           Total of Construction Bid tems         (A+B+C+D+E+F+G)         7.00%         S176.387.888.04         (I)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         S53.924.297.20         (I)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         S161.772.891.61         (J)           Perault = 2%          S2.911.912.048.92         (K)           Subtotal of Construction Cost         (1H+3)          S2.911.912.048.92         (K)           Total Construction Engineering "         15% of (K)          S2.911.912.048.92         (K)           Total Preliminary Engineering "         15% of (K)		Default = 6%				
Default = 6%         Image: Construction Signing at Traffic Control         Sto 25% of (A+B+C+D+E)         4.00%         St88.105.838.18         (E)           Construction Signing at Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         S229.075.179.28         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         S176.387.888.04         (G)           Total of Construction Bid tems         (A+B+C+D+E+F+G)         7.00%         S176.387.888.04         (I)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         S53.924.297.20         (I)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         S161.772.891.61         (J)           Perault = 2%          S2.911.912.048.92         (K)           Subtotal of Construction Cost         (1H+3)          S2.911.912.048.92         (K)           Total Construction Engineering "         15% of (K)          S2.911.912.048.92         (K)           Total Preliminary Engineering "         15% of (K)	Drainage/Litilities	(3-10%) of (A+B)		5.00%	\$104 887 002 60	(D)
Signing and Striping         (1-5%) of (A+B+C+D+E)         400%         \$38,105,838,18         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10,00%         \$229,075,179,28         (F)           Mobilization         (I to 10%) of (A+B+C+D+E)         7,00%         \$176,337,888,04         (G)           Total of Construction Bid Items         (A+B+C+D+E+F)         7,00%         \$176,337,888,04         (G)           Force Account - Utilities         (I to 2%) of (H)         2,00%         \$53,324,297,20         (I)           Force Account - Utilities         (I to 2%) of (H)         6,00%         \$161,772,891,61         (J)           Subtotal of Construction Cost         (H+I+J)         6,00%         \$161,772,891,61         (J)           Total Preliminary Engineering**         15% of (K)         10,00%         \$291,191,204.89         (K)           Total Preliminary Engineering**         15% of (K)         10,00%         \$291,191,204.89         (M)           Utilities         Project Dependent         2,00%         \$53,324,297,20         (N)           Total Preliminary Engineering**         15% of (K)         10,00%         \$291,191,204.89         (M)           Utilities         Project Dependent         V/A         \$200,00         \$27,00	Drainage/Onities			0.00%	\$104,007,902.00	(D)
Default         5%         0.00%         \$229.075.179.28         (F)           Construction Signing & Traffic Control         Sto 25% of (A+B+C+D+E+F)         7.00%         \$176.387.88.04         (G)           Mobilization         (d to 10%) of (A+B+C+D+E+F)         7.00%         \$176.387.88.04         (G)           Total of Construction Bid Items         (A+B+C+D+E+F)         7.00%         \$22.90%, 214.860.11         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$53.924.297.20         (I)           Force Account - Misc.         (1 to 2%) of (H)         6.00%         \$161.772.891.61         (J)           Subtotal of Construction Cost         (H+I+J)         10.00%         \$291.191.204.89         (L)           Total Preliminary Engineering         17% of (K)         10.00%         \$291.191.204.89         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291.191.204.89         (M)           Gigt of Way         Project Dependent         2.00%         \$53.924.297.20         (M)           Utilities         Project Dependent         2.00%         \$53.924.297.20         (M)           Utilities         Project Dependent         2.00%         \$53.924.297.20         (M)           Total Prel		Deladit = 070				
Default         5%         0.00%         \$229.075.179.28         (F)           Construction Signing & Traffic Control         Sto 25% of (A+B+C+D+E+F)         7.00%         \$176.387.88.04         (G)           Mobilization         (d to 10%) of (A+B+C+D+E+F)         7.00%         \$176.387.88.04         (G)           Total of Construction Bid Items         (A+B+C+D+E+F)         7.00%         \$22.90%, 214.860.11         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$53.924.297.20         (I)           Force Account - Misc.         (1 to 2%) of (H)         6.00%         \$161.772.891.61         (J)           Subtotal of Construction Cost         (H+I+J)         10.00%         \$291.191.204.89         (L)           Total Preliminary Engineering         17% of (K)         10.00%         \$291.191.204.89         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291.191.204.89         (M)           Gigt of Way         Project Dependent         2.00%         \$53.924.297.20         (M)           Utilities         Project Dependent         2.00%         \$53.924.297.20         (M)           Utilities         Project Dependent         2.00%         \$53.924.297.20         (M)           Total Prel	Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$88.105.838.18	(E)
Default = 20%         Control         Auto 10% jot (A+B+C+D+E+F)         7.00%         \$176,387,888.04         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$176,387,888.04         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         200%         \$2,996,214,860.11         (H)           Force Account - Utilities         (1 to 2%) of (H)         200%         \$53,924,297.20         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$161,772,891.61         (J)           Subtotal of Construction Cost         (H++J)         6.00%         \$2191,191,2048.92         (K)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Total Vreliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Utilities         Project Dependent         NA         \$0.00         (O)           Turnel Twin Tymely (L/F)         15% of (K)         10.00%         \$291,191,204.89         (M)           Utilities         Project Dependent         NA         \$0.00         (O)         \$291,091,000,00         \$291,091,000,00         \$291,091,000,00         \$291,091,000,00         \$291,091,000,00         \$291,091,000,			_ /			. (=/
Default = 20%         Control         Auto 10% jot (A+B+C+D+E+F)         7.00%         \$176,387,888.04         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$176,387,888.04         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         200%         \$2,996,214,860.11         (H)           Force Account - Utilities         (1 to 2%) of (H)         200%         \$53,924,297.20         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$161,772,891.61         (J)           Subtotal of Construction Cost         (H++J)         6.00%         \$2191,191,2048.92         (K)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Total Vreliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Utilities         Project Dependent         NA         \$0.00         (O)           Turnel Twin Tymely (L/F)         15% of (K)         10.00%         \$291,191,204.89         (M)           Utilities         Project Dependent         NA         \$0.00         (O)         \$291,091,000,00         \$291,091,000,00         \$291,091,000,00         \$291,091,000,00         \$291,091,000,00         \$291,091,000,						•
Mobilization         (4 to 10%) of (AB+C+D+E+F)         7.0%         S176,387,888.04         (G)           Default = 7%	Construction Signing & Traffic Control	5 to 25% of (A+B+0	C+D+E)	10.00%	\$229,075,179.28	(F)
Default = 7%		Default = 20%				
Default = 7%						
Total of Construction Bid Items         (A+B+C+D+E+F+G)         S2,696,214,860.11         (H)           Force Account - Utilities         (1 to 2%) of (H)         2,00%         \$53,924,297.20         (I)           Force Account - Misc.         (10 to 15%) of (H)         6,00%         \$161,772,891.61         (J)           Subtotal of Construction Cost         (H+I+J)         6,00%         \$291,191,2048.92         (K)           Total Construction Engineering         17% of (K)         10,00%         \$291,191,2048.92         (M)           Total Preliminary Engineering**         15% of (K)         10,00%         \$291,191,2048.92         (M)           Utilities         Project Dependent         2,00%         \$53,324,297.20         (M)           Utilities         Project Dependent         2,00%         \$53,324,297.20         (M)           Utilities         Project Dependent         2,00%         \$53,324,297.20         (M)           Utilities         Project Dependent         2,00%         \$53,924,297.20         (M)           Utilities         Project Dependent         2,00%         \$53,924,297.20         (M)           Utilities         Project Dependent         2,00%         \$53,924,297.20         (M)           Utilities         Project Dependent         2	Mobilization		+C+D+E+F)	7.00%	\$176,387,888.04	(G)
Force Account - Utilities         (1 to 2%) of (H)         200%         \$53,924,297,20         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$161,772,891.61         (J)           Subtotal of Construction Cost         (H+H-J)         6.00%         \$291,191,2048.92         (K)           Total Construction Engineering         17% of (K)         10.00%         \$291,191,2048.92         (K)           Total Construction Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Utilities         Project Dependent         2.00%         \$53,924,297.20         (N)           Utilities		Default = 7%				
Force Account - Utilities         (1 to 2%) of (H)         200%         \$53,924,297,20         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$161,772,891.61         (J)           Subtotal of Construction Cost         (H+H-J)         6.00%         \$291,191,2048.92         (K)           Total Construction Engineering         17% of (K)         10.00%         \$291,191,2048.92         (K)           Total Construction Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Utilities         Project Dependent         2.00%         \$53,924,297.20         (N)           Utilities						
Force Account - Utilities         (1 to 2%) of (H)         200%         \$53,924,297,20         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$161,772,891.61         (J)           Subtotal of Construction Cost         (H+H-J)         6.00%         \$291,191,2048.92         (K)           Total Construction Engineering         17% of (K)         10.00%         \$291,191,2048.92         (K)           Total Construction Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,2048.92         (M)           Utilities         Project Dependent         2.00%         \$53,924,297.20         (N)           Utilities	Total of Construction Bid Itoms		2)		\$2,606,214,960,11	(LI)
Default = 2%         Construction         Constructin         Construction         Construction </td <td>Total of Construction Did Items</td> <td></td> <td>,,  </td> <td></td> <td>ψ2,030,214,000.11</td> <td>. (1)</td>	Total of Construction Did Items		,, 		ψ2,030,214,000.11	. (1)
Default = 2%         Construction         Constructin         Construction         Construction </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Default = 2%         Construction         Constructin         Construction         Construction </td <td>Force Account - Utilities</td> <td>(1 to 2%) of (H)</td> <td></td> <td>2.00%</td> <td>\$53 924 297 20</td> <td>(1)</td>	Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$53 924 297 20	(1)
Force Account - Misc.         (10 to 15%) of (H)         600%         \$161,772,891,61         (J)           Subtotal of Construction Cost         (H+I+J)	l brob / bbbdurk - btimbbb			2.0070	\$00,02 1,207.20	
Default = 12%         Construction Cost         (H+I+J)         Subtotal of Construction Engineering         17% of (K)         10.00%         \$2,911,912,048.92         (K)           Total Construction Engineering         17% of (K)         10.00%         \$291,191,204.89         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89         (M)           Right of Way         Project Dependent         2.00%         \$53,924,297.20         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (North Bore-EJMT) (LFI)         15,000,00         12,470,00         11,115,000,00         (C)           Tunnel North Bore-EJMT) (LFI)         14,000,00         13,725,00         656;900,000,00         (C)           Tunnel North Bore-EJMT) (LFI)         14,000,00         12,426,00         24,960,00         24,960,00         (C)           Mobile Weinterdame Engineerin Size         900(00,00         12,426,00         24,960,00         (2,226,00,00         (2,960,00,00         (2,960,00,00,00,00         (2,960,00,00,00,00,00,00,00,00,00,00,00,00,0						
Default = 12%         Image: Construction Cost         (H+I+J)         Image: Cost Cost Cost Cost Cost Cost Cost Cost	Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$161,772,891.61	(J)
Total Construction Engineering         17% of (K)         10.00%         \$291,191,204.89         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89         (M)           Right of Way         Project Dependent         2.00%         \$53,924,297.20         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel Twin Turnets).(LF):         15,000,00         124100         11,115,000,00         (S8,800,000,00)           Tunnet (Noth Bore-REMT) (LF1:         46,000,00         13,725,00         658,800,000,00         (S7,600,00,00)         (S8,800,000,00)						
Total Construction Engineering         17% of (K)         10.00%         \$291,191,204.89         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$291,191,204.89         (M)           Right of Way         Project Dependent         2.00%         \$53,924,297.20         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel Twin Turnets).(LF):         15,000,00         124100         11,115,000,00         (S8,800,000,00)           Tunnet (Noth Bore-REMT) (LF1:         46,000,00         13,725,000         658,800,000,00         (S7,600,00,00)         (S7,600,00,00,00)         (S7,600,00,00,00,00)         (S7,600,00,00,00,00,00,00)         (S7,600,00,00,00,00,00,00,00,00,00,00,00,00						
Image: Control of the second of the	Subtotal of Construction Cost	(H+I+J)			\$2,911,912,048.92	(K)
Image: Control of the second of the						
Image: Note of the second of the se	Total Construction Engineering	17% of (K)		10.00%	\$291,191,204.89	(L)
Image: Note of the second of the se						
Image: Note of the second of the se	Total Preliminary Engineering**	15% of (K)		10.00%	\$201 101 204 00	(1.4)
Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         COST         QUANTITY         11,115,00,00         (0)           Tunnfel (North Bode-EJMT) (LF)         14,600,00         13,72500         6688,900,000,00         (11,115,00,00)           Tunnfel (North Bode-EJMT) (LF)         22,050,00         42,422,00         87,166,004,00         (20,00,00,00)           Electrification         1,00         144,968,152,00         22,928,000,00         (20,00,00,00)         (20,00,00,00)         (20,00,00,00)         (20,00,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,02,24,00)         (21,94,02,24,00)         (21,94,02,24,00)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)	rotal Freiminary Engineering."	1370 UI (K)		10.00 %	φ∠ອ1,191,204.89	(111)
Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         COST         QUANTITY         11,115,00,00         (0)           Tunnfel (North Bode-EJMT) (LF)         14,600,00         13,72500         6688,900,000,00         (11,115,00,00)           Tunnfel (North Bode-EJMT) (LF)         22,050,00         42,422,00         87,166,004,00         (20,00,00,00)           Electrification         1,00         144,968,152,00         22,928,000,00         (20,00,00,00)         (20,00,00,00)         (20,00,00,00)         (20,00,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,02,24,00)         (21,94,02,24,00)         (21,94,02,24,00)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)				•		
Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         COST         QUANTITY         11,115,00,00         (0)           Tunnfel (North Bode-EJMT) (LF)         14,600,00         13,72500         6688,900,000,00         (11,115,00,00)           Tunnfel (North Bode-EJMT) (LF)         22,050,00         42,422,00         87,166,004,00         (20,00,00,00)           Electrification         1,00         144,968,152,00         22,928,000,00         (20,00,00,00)         (20,00,00,00)         (20,00,00,00)         (20,00,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,00,00)         (21,94,02,24,00)         (21,94,02,24,00)         (21,94,02,24,00)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)         (21,94,222,40)						
Utilities         Project Dependent         NA         S0.00         (0)           Utilities         Project Dependent         NA         \$0.00         (0)           Utilities         COST         QUANTITY         11,115,00,00         (0)           United [North Bode-EJMT) (LF)         15,000,00         13,726,00         668,800,000,00         (0)           United North Bode-EJMT) (LF)         24,000,00         14,262,00         668,800,000,00         (11,115,00,00,00)           United North Bode-EJMT) (LF)         24,000,00         144,968,182,00         144,968,182,00         (14,498,182,00,00)         (20,000,00,00)         (14,498,182,00,00)         (14,910,000,00)         (14,910,000,00)         (14,910,000,00)         (14,910,000,00)         (14,910,000,00)         (14,910,000,00)         (14,911,000,00,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,000,00)         (14,911,910,61,00,00)         (14,911,910,61,01,00)<	Right of Way	Project Dependent		2.00%	\$53,924,297.20	(N)
COST         QUANTITY           Tunnel Twin Turnels).(LF):         15,000,00         241,00         11,115,000,00           Tunnel (North Bore-ELMT) (LF):         15,000,00         37,225,00         663,800,000,00           Tunnel (North Bore-ELMT) (LF):         14,000,00         13,725,00         663,800,000,00           Tunnel (North Bore-ELMT) (LF):         100         144,968,182,00         144,968,182,00           Mobile (Meinteganze Equipment):         100         144,968,182,00         144,968,182,00           Mobile (Meinteganze Equipment):         2,928,000,00         219,600,00,00         229,800,00,00           Passenger Kolling Stock         900(00,00)         229,800,00,00         229,800,00,00           Aptomated Verifield Location System         2,928,000,00         229,800,00,00         229,800,00,00           SH'103 stepartifigore         37,600,00         43,911,000,00         22,928,000,00         23,928,000,00           SH'103 stepartifigore         37,600,00         43,911,000,00         37,227,784,44         32,711,8058,73           SH'103 stepartifigore         100         44,427,784,44         33,724,712,80,66         37,224,721,91,66           SH'103 stepartifigore         100         21,914,222,40         21,914,222,40         21,914,222,40         21,914,222,40         21,914,						
Tunhel Twin Tunhels): (LF):         15,000,00         Z41,00         11,115,000,00           Tunhel (Noth Bore-ELMT) (LF):         140,000         13,725,00         658,800,000,00           Tunnel (Noth Bore-ELMT) (LF):         240,000         142,252,00         658,800,000,00           Innel (Noth Bore-ELMT) (LF):         22,000         144,968,182,00         144,968,182,00           Mobile (Mainted+ELMT) (LF):         22,000,000         22,000,000,00         22,000,000,00           Passenger Rolling Sock         900 (000,00)         244,400         22,928,000,00         22,928,000,00           Automated Verticle Location System         2,928,000,00         149,98,182,00         22,928,000,00         22,928,000,00           Shiver Plume tamps         Variable         1,00         444,97,794,44         34,427,794,44           SH 103 reporting ore         variable         1,00         24,427,794,44         34,427,794,44           SH 103 reporting ore         variable         1,00         372,474,210,66         374,2794,210,66           SH 103 reporting ore         variable         1,00         21,914,222,40         21,914,222,40         21,914,222,40           Inflation to 2010 ollars (assuming 4% per year)         100         21,914,222,40         21,914,222,40         21,914,222,40         21,914,222,40	Utilities	Project Dependent		N/A	\$0.00	(O)
Tunhel Twin Tunhels): (LF):         15,000,00         Z41,00         11,115,000,00           Tunhel (Noth Bore-ELMT) (LF):         140,000         13,725,00         658,800,000,00           Tunnel (Noth Bore-ELMT) (LF):         240,000         142,252,00         658,800,000,00           Innel (Noth Bore-ELMT) (LF):         22,000         144,968,182,00         144,968,182,00           Mobile (Mainted+ELMT) (LF):         22,000,000         22,000,000,00         22,000,000,00           Passenger Rolling Sock         900 (000,00)         244,400         22,928,000,00         22,928,000,00           Automated Verticle Location System         2,928,000,00         149,98,182,00         22,928,000,00         22,928,000,00           Shiver Plume tamps         Variable         1,00         444,97,794,44         34,427,794,44           SH 103 reporting ore         variable         1,00         24,427,794,44         34,427,794,44           SH 103 reporting ore         variable         1,00         372,474,210,66         374,2794,210,66           SH 103 reporting ore         variable         1,00         21,914,222,40         21,914,222,40         21,914,222,40           Inflation to 2010 ollars (assuming 4% per year)         100         21,914,222,40         21,914,222,40         21,914,222,40         21,914,222,40						
Tundel (Nofth Boré-EJMT) (J-F1     48,000.00     13,725.00     688,800.000.00      Tunnel (Nofth Boré-EJMT) (J-F1     240,000     47,766.00     687,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,766.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     697,776.00     69						
rumoel North Boizerektendedr EJM/T) (J.FI       22 (500 00)       : 42 (520)       : 47 (56 06 00)			741.00			1 1
<ul> <li>Electrification:</li> <li>I.100</li> <li>144.968.182.00</li> <li>I44.968.182.00</li> <li>I44.968.182.</li></ul>						
Mobile Maintedanbe Equipment       ::::::::::::::::::::::::::::::::::::	Flectriffcation					1.11
Passenger-Kolling Stock :       990(000.00.       244:00.       219:600.00.00         Aptomated Vehide Locaton System :       2.928;000.00.       1.00.       2.928;000.00.         Farle-Collection System :       2.928;000.00.       1.00.       2.928;000.00.         Sitve Plume tamps :       Variable :       1.00.       44:27.794.43         SHT 103 rebording reconstrained and in the second seco	Mobile Maintenance Fourinment	variable				
Aptiomated Verified Location System       2.928,000,00       100       2.928,000,00         Ferde-Colléction       37,000,00       403,00       44,911,000,00         Silvar Plume imps       variable       1:00       44,247,794,44         Silvar Plume imps       variable       1:00       44,247,794,44         Silvar Plume imps       variable       1:00       42,477,794,44         Silvar Plume ind Rafil       variable       1:00       372,247,210,66         Indextratinges (EACH)       1:00       21,914,222,40       21,914,222,40         Inflation to 2010 dollars (assuming 4% per year)       \$16,29,219,542,23       \$15,29,219,542,23						2. 12
Fefe         Collection         37,000,00         403,00         14911,000,00           Silvar Plume ramps         variable         1,00         44,27,794,44           Silvar Plume ramps         variable         1,00         44,27,794,44           Silvar Plume ramps         variable         1,00         44,27,794,44           Silvar Plume ramps         variable         1,00         62,718,058,79           Dowc alt, 1 ; nd Rajil         variable         1,00         342,474,210,66           Minimal Action         variable         1,00         62,714,222,40           Inflation to 2010 dollars (assuming 4% per year)         \$1,629,219,542,23         \$1,629,219,542,23           Total Project Cost         \$7,447,860,764,47         (P)           Base cost of Atemative in Millions           \$6,770         *	Automated Vehicle Location System		1.00			1.00
SH103 reconfigure       92,118,056,79         Dg/wd alt, i a R Rall       100         Minimal Action       372,474,210,66         Minimal Action       100         Interchanges (EACH)       100         Inflation to 2010 dollars (assuming 4% per year)       \$1,692,219,542,22,40         Total Project Cost       \$7,447,860,764.47         Contingencies includes environmental mitigation costs       \$6,770	Fare Collection	37,000.00	403.00			1
SH103 reconfigure       92,118,056,79         Dg/wd alt, i a R Rall       100         Minimal Action       372,474,210,66         Minimal Action       100         Interchanges (EACH)       100         Inflation to 2010 dollars (assuming 4% per year)       \$1,692,219,542,22,40         Total Project Cost       \$7,447,860,764.47         Contingencies includes environmental mitigation costs       \$6,770	Silver Plume ramps	variable	1.00		4,427,794.49	
	SH 103 reconfigure	variable	1.00		52,118,056.79	1.11
Inflation to 2010 dollars (assuming 4% per year)     Inflation to 2010 dollars (assuming 4% per year)     State Project Cost     State Project Cost     Base cost of Alternative in Millions     S6,770     Contingencies includes environmental mitigation costs	Dowd alt, 1 - no Rail		1.00		372,474,210.66	1 1
Inflation to 2010 dollars (assuming 4% per year) <u>\$1,629,219,542.23</u> Total Project Cost \$7,447,860,764.47 (P) Base cost of Alternative in Millions \$6,770 Contingencies includes environmental mitigation costs	Minimal Action	variable	1.00			1
Base cost of Alternative in Millions         \$6,770           *Contingencies includes environmental mitigation costs			21,914,222.40	and the second second		
Base cost of Alternative in Millions \$6,770      Contingencies includes environmental mitigation costs	Inflation to 2010 dollars (assuming	4∞ per year) I	1		\$1,629,219,542.23	
Base cost of Alternative in Millions \$6,770      Contingencies includes environmental mitigation costs	Total Project Cost		I		\$7,447 860 764 47	(P)
*Contingencies includes environmental mitigation costs						
			Base co	ost of Alternative in Millions	\$6,770	
Total Preliminary Engineering includes cost of developing NEPA documents				,		
	I otal Preliminary Engineering includes cost of	aeveloping NEPA doc	uments			

#### TIER 1 - PEIS COST ESTIMATE 11a - DUAL MODE w/6-LANE PRESERVATION

8/17/2010 14:29 BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	267,796.00	40,169,400.00		
Walls (SF) Earthwork (CY)	20.00	1,349,782.00 3,195,854.00	121,480,380.00 63,917,080.00		
Pavement (TON)	70.00	747,596.00	0.00		
Base Course (CY)	40.00	503,433.00	0.00		
Barrier (Type 7)(LF)	60.00	362,254.00	0.00		
Special Structures (SF)	200.00	960,082.00	192,016,400.00		
Bus-Walls	90.00	484,108.00	43,569,720.00		
Bus-Earthwork Bus-Guideway Structure (LF)	20.00	203,036.00 71,000.00	4,060,720.00 227,200,000.00		
Bus-Guideway Structure (LF) Bus-Guided Busway Track	3,200.00	267,168.00	84,157,920.00		
Bus-Maintenance Facilities	Variable	3	84,500,000.00		
Bus-Ramps for Busses	2,000,000.00		24,000,000.00		
Bus-Stations/Parking (Large)	10,000,000.00	3	30,000,000.00		
Bus-Stations/Parking (Medium)	6000000		6,000,000.00		
Bus-Station (Small)	300000	9	27,000,000.00		
Extension - Silverth. to Eagle Airport					
Bus-Extension-Walls Bus-Extension-Earthwork	90.00 20.00	554,524.00 232,569.00	49,907,160.00		
Bus-Extension-Earthwork Bus-Extension-Guideway Structure (LF)	3,200.00	73,920.00	4,651,380.00 236,544,000.00		
Bus-Extension-Guided Busway Track	315.00	332,640.00	104,781,600.00		
Bus-Extension-Maintenance Facilities	Variable	3.00	84,500,000.00		
Bus-Extension-Ramps for Busses	2,000,000.00	14.00	28,000,000.00		
Bus-Extension-Stations/Parking (Large)	10,000,000.00	3.00	30,000,000.00		
Bus-Extension-Stations/Parking (Medium)	6,000,000.00	1.00	6,000,000.00		
Bus-Extension-Station (Small)	3,000,000.00	9.00	27,000,000.00		
Total			1,519,455,760.00		
	<u> </u>		1,313,433,700.00		
	% Range		% Used	Cost	
Decident Construction Did Items	Droiget Dependent		N1/A	\$1 E10 4EE 700 00	(0)
Project Construction Bid Items	Project Dependent		N/A	\$1,519,455,760.00	(A)
Contingencies* (Mitigation - 15%)	(15% - 30%) of (A)		30.00%	\$455,836,728.00	(B)
Contingencies (Mitigation - 1378)	(1378-3078) OI (A)		50.0078	\$433,030,720.00	(0)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				
Drainage/Utilities	(3-10% )of (A+B)		5.00%	\$98,764,624.40	(D)
	Default = 6%				
Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$92 062 294 E0	(E)
Signing and Striping	Default = 5%		4.00%	\$82,962,284.50	(=)
	Delault = 378				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	10.00%	\$215,701,939.69	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B+	+C+D+E+F)	7.00%	\$166,090,493.56	(G)
	Default = 7%				
Total of Construction Bid Items	(A+B+C+D+E+F+G			\$2,538,811,830.15	(H)
		,) 		ψ2,000,011,000.10	(1)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$50,776,236.60	(I)
	Default = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$152,328,709.81	(J)
	Default = 12%				
Subtatal of Canatau-Alam Cant	(11.1.1)			£0.744.040.770.50	(10)
Subtotal of Construction Cost	(H+I+J)			\$2,741,916,776.56	(K)
Total Construction Engineering	17% of (K)		10.00%	\$274,191,677.66	(L)
				ψ∠17,131,011.00	(=)
Total Preliminary Engineering**	15% of (K)		10.00%	\$274,191,677.66	(M)
Diskt of Max	Device t D		0.000/	AFA 770 000	(1)
Right of Way	Project Dependent		2.00%	\$50,776,236.60	(N)
Utilities	Project Dopondont		N/A	¢0.00	
Ounces	Project Dependent		IN/A	\$0.00	(O)
	COST	QUANTITY			
Tunnel (Twin Tunnels) (LF)	15,000.00		h i she i she i she	11,115,000.00	2000
Tunnel (North Bore EJMT) (LF)	48,000.00			658,800,000.00	1.00
Tunnel (North Bore extended EJMT) (LF)	20,500.00	4,252.00		87,166,000.00	1.1.1
Electrification	1.00	144,900,102.00		144,968,182.00	
Mobile Maintenance Equipment	variable	45.00		2,000,000.00	
Passenger Rolling Stock	900,000.00			219,600,000.00	1
Automated Vehicle Location System Fare Collection	2,928,000.00 37,000.00	403.00		2,928,000.00 14,911,000.00	1. 1.
Fare Collection Silver Plume ramps				4,427,794.49	1.11
SH 103 reconfigure	variable	1.00		52,118,056.79	
SH 103 reconfigure Dowo alt, 1 no Rail Minimal Action	variable	1.00		372,474,210.66	
Minimal Action	variable	1:0D 1:00 1:00 1:00		532,000,000.00	
Inflation to 2010 dollars (assuming	4% per year)	I.		\$1,524,203,691.48	
Total Busilest Cost				A0 007 700 000	
Total Project Cost				\$6,967,788,303.89	(P)
		Base co	st of Alternative in Millions	\$6,436	
*Contingencies includes environmental mitigatio					
**Total Preliminary Engineering includes cost of	developing NEPA doc	uments			

### TIER 1 - PEIS COST ESTIMATE 11b - 6-LANE w/DUAL MODE PRESERVATION

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	267,796.00	40,169,400.00		
Walls (SF)	90.00				
Earthwork (CY)	20.00	, ,			
Pavement (TON)	70.00	747,596.00	52,331,720.00		
Base Course (CY)	40.00	503,433.00	20,137,320.00		
Barrier (Type 7)(LF)	60.00	,			
Special Structures (SF)	200.00	960,082.00	192,016,400.00		
Total			511,787,540.00		
Iotai			511,767,540.00		
	% Range		% Used	Cost	
			N1/A	<b>A</b> 544 707 540 00	
Project Construction Bid Items	Project Dependent		N/A	\$511,787,540.00	(A)
Contingencies* (Mitigation - 15%)	(15% - 30%) of (A)		30.00%	\$153,536,262.00	(B)
Contingencies (Mitigation - 13%)	(13/8 - 30 /8) UI (A)		30.00 %	\$133,330,202.00	(D)
			•		
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				, í
Drainage/Utilities	(3-10% )of (A+B)		5.00%	\$33,266,190.10	(D)
	Default = 6%				
0		<b>D</b>	4.000/	<b>007 0 40 500 00</b>	
Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$27,943,599.68	(E)
	Default = 5%		-		
Construction Signing & Traffic Control	5 to 25% of (A+B+0		10.00%	\$72,653,359.18	(F)
	Default = $20\%$		10.00%	ψ12,000,009.10	(')
	2070				
Mobilization	(4 to 10%) of (A+B-	+C+D+E+F)	7.00%	\$55,943,086.57	(G)
	Default = 7%				
Total of Construction Bid Items	(A+B+C+D+E+F+G	5)		\$855,130,037.53	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	¢47,400,600,75	(1)
Force Account - Otimiles	Default = 2%		2.00%	\$17,102,600.75	(I)
	Delaun = 270		•		
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$51,307,802.25	(J)
	Default = 12%			· · /·· /·· ·	(-)
Subtotal of Construction Cost	(H+I+J)			\$923,540,440.53	(K)
Total Construction Engineering	17% of (K)		10.00%	\$92,354,044.05	(L)
Total Draliminan ( Enginearing**	150( of (K)		10.000/	¢00.054.044.05	
Total Preliminary Engineering**	15% of (K)		10.00%	\$92,354,044.05	(M)
Right of Way	Project Dependent		2.00%	\$17,102,600.75	(N)
					, í
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			
Tunnel (Twin Tunnels) (LF)	15,000.00			11,115,000.00	
: Tunnel (North Bore EJMT) (LF) : . Tunnel (North Bore extended EJMT) (LF)	48,000.00 20,500.00			658,800,000.00 87,166,000.00	
Silver Plume ramps	variable			4,427,794.49	
Silver Pittine ramps SH 103 reconfigure	variable			4,427,794.49 52,118,056.79	
Dowd alt. 1 - no Rail	variable			372,474,210.66	
Interchanges (EACH)	1.00			21,914,222.40	
Minimal Action	variable			678,000,000.00	
Inflation to 2010 dollars (assuming				\$843,182,595.84	
Total Project Cost				\$3,854,549,009.58	(P)
		Page of	ost of Alternative in Millions	\$3,177	
*Contingencies includes environmental mitigation	n costs	Base CC		ψυ,177	
**Total Preliminary Engineering includes cost of		cuments			
			·		

#### TIER 1 - PEIS COST ESTIMATE 12 - 6-LANE w/DIESEL BUS IN GUIDEWAY

8/17/2010 14:29 BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF) Walls (SF)	150.00 90.00	267,796.00 1,349,782.00	40,169,400.00 121,480,380.00		
Earthwork (CY)	20.00	3,195,854.00	63,917,080.00		
Pavement (TON) Base Course (CY)	70.00 40.00	747,596.00 503,433.00	52,331,720.00 20,137,320.00		
Barrier (Type 7)(LF)	60.00	362,254.00	21,735,240.00		
Special Structures (SF) Bus-Walls	200.00 90.00	960,082.00 484,108.00	192,016,400.00 43,569,720.00		
Bus-Earthwork	20.00	203,036.00	43,569,720.00		
Bus-Guideway Structure (LF)	3,200.00	71,000.00	227,200,000.00		
Bus-Guided Busway Track Bus-Maintenance Facilities	315.00 Variable	267,168.00 3.00	84,157,920.00 84,500,000.00		
Bus-Ramps for Busses	2,000,000.00	12.00	24,000,000.00		
Bus-Stations/Parking (Large) Bus-Stations/Parking (Medium)	10,000,000.00 6,000,000.00	3.00	30,000,000.00 6,000,000.00		
Bus-Station (Small)	3,000,000.00	9.00	27,000,000.00		
Extension - Silverth. to Eagle Airport Bus-Extension-Walls	90.00	554,524.00	49,907,160.00		
Bus-Extension-Earthwork	20.00	232,569.00	4,651,380.00		
Bus-Extension-Guideway Structure (LF) Bus-Extension-Guided Busway Track	3,200.00 315.00	73,920.00 332,640.00	236,544,000.00		
Bus-Extension-Maintenance Facilities	Variable	3.00	104,781,600.00 84,500,000.00		
Bus-Extension-Ramps for Busses	2,000,000.00	14.00	28,000,000.00		
Bus-Extension-Stations/Parking (Large) Bus-Extension-Stations/Parking (Medium)	10,000,000.00 6,000,000.00	3.00	30,000,000.00 6,000,000.00		
Bus-Extension-Station (Small)	3,000,000.00	9.00	27,000,000.00		
Total			1,613,660,040.00		
9	% Range		% Used	Cost	
Project Construction Bid Items F	Project Dependent		N/A	\$1,613,660,040.00	(A)
Contingencies* (Mitigation - 15%)	15% - 30%) of (A)		30.00%	\$484,098,012.00	(B)
ITS ((	6-10%) of (A+B)		0.00%	\$0.00	(C)
C	Default = 6%				
Drainage/Utilities (;	3-10% )of (A+B)		5.00%	\$104,887,902.60	(D)
	Default = 6%				
Signing and Striping (1	1-5%) of (A+B+C+	D)	4.00%	\$88,105,838.18	(E)
	Default = 5%	57		\$66,106,000.10	(=)
Construction Signing & Traffic Control 5	5 to 25% of (A+B+C	(+D+F)	10.00%	\$229,075,179.28	(F)
	Default = 20%		10.0070	φ223,013,113.20	
Mobilization (4	4 to 10%) of (A+B+		7.00%	\$176,387,888.04	(G)
	Default = 7%		1.0070	\$170,007,000.04	(0)
Total of Construction Bid Items (A	A+B+C+D+E+F+G	i)		\$2,696,214,860.11	(H)
Force Account - Utilities (1	1 to 2%) of (H)		2.00%	\$53,924,297.20	(I)
	Default = 2%				
Force Account - Misc. (1	10 to 15%) of (H)		6.00%	\$161,772,891.61	(J)
	Default = 12%				(-)
Subtotal of Construction Cost (1	H+I+J)			\$2,911,912,048.92	(K)
				φ2,311,312,040.32	(IV)
Total Construction Engineering 1	17% of (K)		10.00%	\$291,191,204.89	(L)
Total Preliminary Engineering** 1	15% of (K)		10.00%	\$291,191,204.89	(M)
Disht of Way	Desired Descendent		0.00%	<b>#</b> 50.004.007.00	(11)
Right of Way F	Project Dependent		2.00%	\$53,924,297.20	(N)
Utilities F	Project Dependent		N/A	\$0.00	(O)
<b>├</b> ────┤	COST	QUANTITY			
Tunnel (Twin Tunnels) (LF)	15,000.00	741.00		11,115,000.00	2.52
Tunnel (North Bore EJMT) (LF) Tunnel (North Bore extended EJMT) (LF)	48,000.00 20,500.00	13,725.00		658,800,000.00 87,166,000.00	
Mobile Maintenance Equipment	variable	45.00		2,000,000.00	1 (L)
Passenger Rolling Stock Automated Vehicle Location System	325,000.00 3,048,000.00			82,550,000.00 3,048,000.00	
Fare Collection	37,000.00	403.00		3,048,000.00 14,911,000.00	1.11
Silver Plume ramps SH 103 reconfigure	variable			4,427,794.49 52,118,056.79	
ori ius recontigure				- JZ. 1.16.056./9	
Dowd alt. 1 - no Rail	variable variable	1.00		372,474,210.66	1. 1.
	variable variable	1.00 1,00		372,474,210.66 678,000,000.00	
	variable variable variable 1.00	1.00 1.00		372,474,210.66 678,000,000.00 21,914,222.40	
Miņimal Action Interchanges (EACH) Inflation to 2010 dollars (assuming 49	variable variable variable 1.00	1.00 1,00		372,474,210,66 678,000,000,00 21,914,222,40 \$1,550,288,051.27	
Minimal Action Interchanges (EACH)	variable variable variable 1.00	1,00 1,00 21,914,222:4D		\$72,474,210,66 678,000,000,00 21;914,222,40 \$1,550,288,051.27 \$7,087,031,091.51	(P)
Miņimal Action Interchanges (EACH) Inflation to 2010 dollars (assuming 49	Variable variable variable 1.00 % per year)	1,00 1,00 21,914,222:4D	ist of Alternative in Millions	\$72,474,210,66 678,000,000,00 21;914,222,40 \$1,550,288,051.27 \$7,087,031,091.51	(P)

### TIER 1 - PEIS COST ESTIMATE 12a - DIESEL BUS w/6-LANE PRESERVATION

Biol Train         OPET Plus /// 1900         OPET // 1			1			
Structure (Sr)         1900         227,76.0         4,190,00         190,190,190,190,190,190,190,190,190,190,	8/17/2010 14:29 BID ITEMS	COST PER LINIT	OUANTITY	COST		
Walls (SP)         99.00         1.348/72.00         12.01         12.11           Batter Carrier (CY)         40.00         559.453.00         0.01         1.11           Batter Carrier (CY)         40.00         559.453.00         0.021         1.11           Batter Carrier (CY)         40.00         559.453.00         0.021         1.11           Batter Charler (CH)         20.000         589.452.00         0.021         1.11           Bute Carler (CY)         40.00         250.453.00         0.000.100.00         1.00         1.00           Bute Carler (CH)         20.000.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         <		COST PER UNIT	QUANTIT	0031		
Walls (SP)         99.00         1.348/72.00         12.01         12.11           Batter Carrier (CY)         40.00         559.453.00         0.01         1.11           Batter Carrier (CY)         40.00         559.453.00         0.021         1.11           Batter Carrier (CY)         40.00         559.453.00         0.021         1.11           Batter Charler (CH)         20.000         589.452.00         0.021         1.11           Bute Carler (CY)         40.00         250.453.00         0.000.100.00         1.00         1.00           Bute Carler (CH)         20.000.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         <	Structures (SE)	150.00	267 796 00	40 169 400 00		
Earthwork (CY)         20.001         3198,854.00         98.97.8000           Barrier (Top 7/L)         00.00         982,254.00         0.00           Special Structures (SP)         20.00         980,022.00         1162,400.00           Barrier (Top 7/L)         00.00         980,022.00         00.00         1162,400.00           Barrier (Top 7/L)         03.00         00.00         022,200.00         1162,400.00           Barrier (Top 7/L)         03.00         00.00         022,200.00         1162,400.00           Barrier (Top 7/L)         03.00         00.00         122,000.00         122,000.00         122,000.00           Barrier (Top 7/L)         03.00         00.00         120,00         120,00         120,00           Barrier (Top 7/L)         03.00         00.00         120,00         120,00         120,00           Barrier (Top 7/L)         03.00         00.00         120,00         120,00         120,00           Barrier (Top 7/L)         03.00         00.00         120,00         120,00         120,00         120,00           Barrier (Top 7/L)         00.00         120,00         120,00         120,00         120,00         120,00           Barrier (Top 7/L)         00.00         12						
Percent (TOM)         77.00         747.598.00         0.00         0.00           Bene Conserve (Y)         42.00         59.69.20         19.414.80.00         4.90.10           Bue Carthout         20.00         49.00.20         4.96.72.00         4.90.10           Bue Carthout         20.00         49.00.20         4.96.72.00         4.90.72.00           Bue Carthout         20.00         0.00         4.90.72.00         4.90.72.00           Bue Carthout         20.00         0.00         4.90.20.00         4.90.72.00           Bue Carthout         20.00         0.00         4.90.20.00         4.90.72.00           Bue Carthout Field         20.00         0.00         4.90.20.00         4.90.72.00           Bue Carthout Field         20.00         0.00         4.90.20.00         4.90.72.00           Bue Carthout Field         20.00         3.00         2.90.00         4.90.90.00         4.90.90.00           Bue Carthout Field         3.000.00.00         3.00         2.80.60.00         4.90.90.00         4.90.90.00           Bue Carthout Field         3.000.00.00         3.00         8.90.00.00.00         4.90.90.00.00.00         4.90.90.00.00.00         4.90.90.00.00.00           Bue Carthout Field         3.90.00						
Basic Contre (C')         40.00         502.433.00         500         500           Basic Contre (C')         40.00         502.433.00         500         400           Bue Contre (C')         50.00         440.100.00         400.770.00         400.770.00           Bue Contre (C')         50.00         70.00.00         200.000.00         400.770.00         400.770.00           Bue Contre (C')         50.00         70.00.00         200.000.00         400.770.00.00         400.770.00.00         400.770.00.00           Bue Statemen Facilies         200.000.00         10.00         400.000.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00         400.770.00.00						
Bartler (Type 7)[L/7]         60.00         3802,224.00         0.00         0.00           Special Distribution (SP)         20.00         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200         90.00,200						
Special Structures (SP)         200.00         960.062.00         102.44.000         102.4000           Bue-Address Structure (F)         3.200.00         71.000.00         220.000.00         1           Bue-Address Structure (F)         3.200.00         71.000.00         220.000.00         1           Bue-Address Structure (F)         3.200.00         71.000.00         200.000.00         1           Bue-States Phase Structure (F)         3.200.00         1.00         4.000.000         1           Bue-States Phase Structure (F)         3.000.00.00         1.00         4.000.000         1           Bue-States Phase Structure (F)         3.000.000         1.00         4.000.000         1         1           Bue-States Phase Structure (F)         3.000.000.00         1.00         3.000.000.00         1         1         1           Bue-States Phase Structure (F)         3.000.000.00         1.00         3.000.000.00         1         1						
Back Walls         90.00         444.108.00         1.398.70.00         Image: Control of the second sec						
Bue-Extrement         20.00         200.300.00         1.400.700.00           Bue-Scherter Structure (LT)         3.000.00         77.000.00         227.000.00         1           Bue-Scherter Structure (LT)         3.000.000.00         3.00         3.000.000.00         1         1           Bue-Structure (LT)         3.000.000.00         3.00         3.000.000.00         3.00         3.000.000.00         1         1           Bue-Structure (LT)         3.000.000.00         3.00         3.000.000.00         1         1         1           Bue-Structure (LT)         3.000.000.00         3.00         3.000.000.00         1         1         1           Bue-Structure (LT)         3.000.000.00         3.00         3.000.000.00         2.000.000         1         1           Bue-Structure (LT)         3.000.000.00         3.00         3.000.000.00         2.000.000.00         2.000.000         1         1         1           Bue-Structure (LT)         3.000.000.00         3.00         3.000.000.00         3.00         3.000.000.00         2.000.000.00         2.000.000.00         2.000.000.00         2.000.000.00         2.000.000.00         2.000.000.00         2.000.000.00         2.000.000.00         2.000.000.00         2.000.000.00         2.000.						
BuscGuideway Structure (LF)         3.200.00         71.000.01         27.200.00         Image: Construction (LF)         Market (LF)           BuscBurge (LF) Bases         2.000.00.00         12.00         14.000.00         1.00         1.00           BuscBurge (LF) Bases         2.000.00.00         13.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00				43,569,720.00		
Busc-Subsidie Buseway Track         315.00         287.168.00         14.157.00.00           Bus-Shattoms/Fahring Laboration         10.000.00.00         1.00         10.000.00.00           Bus-Shattom/Fahring Laboration         0.000.00.00         1.00         1.000.00.00           Bus-Shattom/Fahring Laboration         0.000.00.00         7.300.00.00         1.00         1.000.00.00           Bus-Entension-Calleder Buseway Track         3.15.00         3.32.400.00         1.000.00.00         1.00           Bus-Entension-Calleder Buseway Track         3.15.00         3.20.00.00.00         1.00         1.000.00.00           Bus-Entension-Calleder Buseway Track         2.000.00.00         1.00         1.000.00.00         1.00           Bus-Entension-Shatton (Bahram         0.000.00.00         1.00         1.000.00.00         1.00         1.000.00.00           Buse-Entension-Shatton (Bahram         0.000.00.00         1.00         1.000.00.00         1.00         1.000.00.00           Buse-Entension-Shatton (Bahram	Bus-Earthwork	20.00	203,036.00	4,060,720.00		
Busk-Retriet name Facilities         Variable         3.00         14.900,000         Image: Construction of the set	Bus-Guideway Structure (LF)	3,200.00	71,000.00	227,200,000.00		
Busk-Retriet name Facilities         Variable         3.00         14.900,000         Image: Construction of the set	Bus-Guided Busway Track	315.00	267,168.00	84,157,920.00		
Bus-Rampa for Bases         2.000.000         12.00         14.000.000         Image: Construction of the second of the secon						
Bus-Status Parking Life (Large)         10.000.000.00         3.00         3.000.000.00         10.000.000.00           Bus-Status (Small)         4.000.000.00         4.00         2.000.000.00         10.00           Bus-Status (Small)         4.000.000.00         4.00         2.000.000.00         10.00           Bus-Status (Small)         4.000.000.00         4.00.00         2.000.000.00         10.00           Bus-Status (Small)         4.000.000.00         7.300.000.00         2.000.000.00         2.000.000.00         2.000.000.00         10.00         2.000.000.00         10.00         2.000.000.00         10.00         2.000.000.00         10.00         2.000.000.00         10.00         2.000.000.00         10.00         2.000.000.00         10.00         2.000.000.00         10.00         10.00         10.00         10.00         10.00         10.000.000.00         10.00         10.000.000.00         10.00         10.000.00.00         10.00         10.000.00.00         10.00         10.000.000.00         10.00         10.000.000.00         10.000.00.00         10.000.00.00.00         10.000.00.00.00         10.000.00.00.00         10.000.00.00.00         10.000.00.00.00         10.000.00.00.00         10.000.00.00.00.00.00.00.00.00.00.00.00.						
Buse:Selectors:Parking (Medium)         0.000000         1.00         5.000000         1           Buse:Selectors:Parking (Medium)         0.000000         9.00         756.0000         1         1           Buse:Selectors:Parking (Medium)         0.000000         73.0000         1         1         1         1           Buse:Selectors:Parking (Medium)         0.000000         73.0000         14.00         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1						
But-Station (Small)         3.000,000 00         9.00         27,00.00.00         4.00           But-Station (Vision)         0.00         5564,224,000         4.007,100.00         4.007,100.00           But-Statison-Quided Busines         7.000,000         7.000,000         4.007,100.00         4.007,100.00           But-Statison-Quided Busines         7.000,000         143,023,000,000         4.007,100.00         4.007,100.000           But-Statison-Riamps (Markinesines Facility (Markinesinesinesinesinesinesinesinesinesines						
Extension - Silverth, to Eagle Airport Bus Extension-Mails Bus Extension-Mails Bus Extension-Earlines Bus Extension-Earlines Bus Extension-Earlines Bus Extension-Maintenance Facilities Bus Extension-Maintenance Facilities Bus Extension-Maintenance Facilities 2000 0000 1 400 2000000 Bus Extension-Silverand Maintenance Bus Extension-Silverenance Bus Extension-Silverand Maintenance Bus Extension-Silvera						
Bus-Extension-Walls         90.00         555.4524.00         49.07.100.00           Bus-Extension-Automa LM         3.200.00         73.202.00         290.440.003.00         10.00           Bus-Extension-Mainemano Facilities         3.200.00         34.00         290.440.003.00         10.00           Bus-Extension-Mainemano Facilities         Variable         30.00         40.00         20.00.000.00         10.00           Bus-Extension-Mainemano Facilities         Variable         30.00         0.00         20.00.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         6.000.000.00         10.00         10.000         10.00         10.00		3,000,000.00	9.00	27,000,000.00		
Bits - Stanson         Call Stanson         Call Stanson         Call Stanson         Call Stanson           But - Extension-Guided Burwy Track         315.00         73.22.000         73.42.400.00         10.471 100.00         10.10           But - Extension-Stationers/Parking (Mergin)         10.000.000         10.01         30.000.000         10.01         10.01         10.000.000         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01         10.01<						
Bue-Estimolor-Gudeway, Structure (LP)         3.200.00         73.202.00         285.44.000.00           Bue-Estimolor-Gudeway, Structure (LP)         3.200.00         73.202.00         285.44.000.00           Bue-Estimolor-Gude Buway, Trans.         31.00         33.00         41.00.000.00         41.00           Bue-Estimolor-Gudemay, Structure (LP)         0.000.000.00         1.00         41.000.000.00         41.00           Bue-Estimolor-Gudenkay, Structure (LP)         0.000.000.00         1.00         4.000.000.00         41.00           Bue-Estimolor-Gudenkay, Structure (LP)         0.000.000.00         9.00         7.000         4.000           Bue-Estimolor-Gudenkay, Structure (LP)         0.000.000.00         9.00         7.000         7.000         4.000           Bue-Estimolor-Gudenkay, Structure (LP)         1.599.455.790.00         (A)         50.00%         \$1.519.455.790.00         (A)           Toal         Incompare (Mitigation - 15%)         1.5% - 39%.01 (A)         30.00%         \$455.585.720.00         (B)           TrS         G-10%.01 (A+B)         0.00%         \$200.700.00         (C)         1.000%         \$28.2.662.244.00         (C)           Drainage/Unities         O-10%.01 (A+B)         0.00%         \$20.700.280.00         (C)         1.000%         \$21.57.071						
Bus-Extension-Guided Buskewy Track         315.00         332.240.00         194.781.00.00           Bus-Extension-Guided Buske         2.000.000.00         14.00         20.000.000         14.00           Bus-Extension-Standon (Small)         3.000.000.00         9.00         27.000.000.00         1.01           Bus-Extension-Standon (Small)         3.000.000.00         9.00         27.000.000.00         1.01           Bus-Extension-Standon (Small)         3.000.000.00         9.00         27.000.000.00         1.01           Total         1.519.455.780.00         (A)         0.00%         5.057.5700.00         (A)           Contingencies' (Mitgation - 15%)         (15% - 30%) of (A = 0.00%         9.000         5.00%         5.000.00         (C)           Contingencies' (Mitgation - 15%)         (15% - 30%) of (A = 0.00%         5.00%         \$9.80.00         (C)           Datamager Utilities         (15%) of (A+B)         0.00%         \$9.200.00         (C)           Standard Straping         (15%) of (A+B)         0.00%         \$9.200.00         (C)           Standard Straping         (15%) of (A+B)         0.00%         \$9.200.00         (C)           Standard Straping         (15%) of (A+B)         0.00%         \$9.208.764.624.40         (D)				4,651,380.00		
Bus-Extension-Maintenance Facilities         Variable         3.00         44.00.00.00         1           Bus-Extension-Mainer (Marchang Lurge)         10.000.000         3.00         3.00         1         1           Bus-Extension-Stations/Paring (Marchang Lurge)         10.000.000         3.00         3.000.000.00         1         1           Bus-Extension-Stations/Paring (Marchang Lurge)         10.000.000         9.00         27.00.000.00         1         1           Total         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	Bus-Extension-Guideway Structure (LF)	3,200.00	73,920.00	236,544,000.00		
Bus-Extension-Rampe for Busses         2.000.000         14.00         2.000.000.00           Bus-Extension-Station (Brain)         10.000.000         3.00         20.000.000         10.00           Bus-Extension-Station (Brain)         3.000.000.00         10.00         4.000         2.000.000.00         10.00           Bus-Extension-Station (Brain)         3.000.000.00         9.00         2.000.000.00         10.00         4.000           Total         1.159.455.700.00         (A)         0.000         10.00         4.000           Foreign (Strain)         Y         Range         Y         1.000         4.000           Project Construction Bid Items         Project Dependent         N/A         \$1.519.455.850.00         (A)           Contingencies* (Mitigation - 15%)         115%. 30% of (A+B)         0.00%         \$455.857.728.00         (B)           TS         G-10% of (A+B)         0.00%         \$455.857.728.00         (C)           Drainage/Ullittes         (J.10% of (A+B)         0.00%         \$455.857.728.00         (C)           Straining and Straing         (D-10% of (A+B)         0.00%         \$2.002.00         (C)           Drainage/Ullittes         (J.10% of (A+B)         0.00%         \$2.157.01.398.80         (F)	Bus-Extension-Guided Busway Track	315.00	332,640.00	104,781,600.00		
Bus-Extension-Rampe for Busses         2.000.000         14.00         2.000.000.00           Bus-Extension-Station (Brain)         10.000.000         3.00         20.000.000         10.00           Bus-Extension-Station (Brain)         3.000.000.00         10.00         4.000         2.000.000.00         10.00           Bus-Extension-Station (Brain)         3.000.000.00         9.00         2.000.000.00         10.00         4.000           Total         1.159.455.700.00         (A)         0.000         10.00         4.000           Foreign (Strain)         Y         Range         Y         1.000         4.000           Project Construction Bid Items         Project Dependent         N/A         \$1.519.455.850.00         (A)           Contingencies* (Mitigation - 15%)         115%. 30% of (A+B)         0.00%         \$455.857.728.00         (B)           TS         G-10% of (A+B)         0.00%         \$455.857.728.00         (C)           Drainage/Ullittes         (J.10% of (A+B)         0.00%         \$455.857.728.00         (C)           Straining and Straing         (D-10% of (A+B)         0.00%         \$2.002.00         (C)           Drainage/Ullittes         (J.10% of (A+B)         0.00%         \$2.157.01.398.80         (F)						
Bus-Extension-Stations/Parking (Large)         10,000,000         3.00         3.000,000         Image (Line)           Bus-Extension-Station (Small)         3.000,000,00         9.00         27,000,000,00         Image (Line)         I						
Bue-Extension-Stations/Faring (Medium)         6.000,000,00         1.00         6.000,000,00           Bue-Extension-Stations/Station (Small)         3.000,000,00         9.00         2200,000,00         1.518,455,700,00         1.518,455,700,00         (A)           Total         1.518,455,700,00         1.518,455,700,00         (A)         (A)         (A)         (A)           Project Construction Bid Items         Project Dependent         N/A         51,519,455,760,00         (A)           Contingencies*         (Migation - 15%)         (15% - 30%) of (A)         00,00%         \$455,836,728,00         (B)           TrS         0-10%) of (A+B)         0.00%         \$20,00         (C)           Dranage Utilities         (3 10%) of (A+B)         6.00%         \$98,784,622,40         (D)           Orderul = 6%         400%         \$82,982,284,50         (E)         (E)           Orderul = 6%         400%         \$82,982,284,50         (E)         (C)           Orderul = 2%						
Bute Extension: Station (Small)         3.000.000         9.00         27.000.000         Image (Small)           Total         1519.456.760.00         Amage (Small)         1519.456.760.00         Amage (Small)           Project Construction Bid Items         Project Dependent         NA         \$1.519.455.760.00         (A)           Contingencies* (Mitigation - 15%)         (15% - 37%) of (A)         30.00%         \$455.836.728.00         (B)           TTS         (G+0%) of (A+B)         0.00%         \$0.00         (C)           Drinnage(Utilities         (G+0%) of (A+B)         5.00%         \$82.982.284.60         (F)           Drinnage(Utilities         (G+0%) of (A+B+C+D)         4.00%         \$22.982.284.60         (F)           Drinnage(Utilities         (G+0%) of (A+B+C+D)         4.00%         \$22.982.284.60         (F)           Default = 0%         Default = 0%         10.00%         \$21.57.01.938.60         (F)           Default = 0%         Default = 0%         10.00%         \$21.57.01.938.60         (F)           Force Account - Utilities         (1 + 0%) of (H)         2.00%         \$27.41.91.677.656         (G)           Subtotal of Construction Cost         (H+1)         10.00%         \$27.41.91.677.668         (M)           Total Prelimeary						
Teal         Interface         Int						
Project Construction Bid Items         Project Dependent         NA         \$1,519,455,769,000         (A)           Contingencies*         (Migation - 15%)         (15% - 30%) of (A)         30,00%         \$455,838,728,000         (B)           TTS         (6-10%) of (A+B)         0,00%         \$000%         \$000         (C)           Drainage/Utilities         0,10%) of (A+B)         0,00%         \$00%         \$98,764,624,401         (D)           Signing and Striping         (1-5%) of (A+B-C+D)         4,00%         \$82,296,224,50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B-C+D)         4,00%         \$82,596,276,624,401         (D)           Medilization         (d+10 10%) of (A+B-C+D)         4,00%         \$82,596,276,624,601         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B-C+D+E+F)         7,00%         \$166,090,493,566         (G)           Force Account - Utilities         (1 to 25%) of (H)         2,00%         \$50,776,236,601         (I)           Force Account - Utilities         (1 to 25%) of (H)         2,00%         \$152,328,709,811         (I)           Total of Construction Gost         (H+1,3)         10,00%         \$27,41,91,677,666         (I)           Total of Construction Cost         (	DUS-EXTENSION-STATION (SMAII)	3,000,000.00	9.00	27,000,000.00		
Project Construction Bid Items         Project Dependent         NA         \$1,519,455,769,000         (A)           Contingencies*         (Migation - 15%)         (15% - 30%) of (A)         30,00%         \$455,838,728,000         (B)           TTS         (6-10%) of (A+B)         0,00%         \$000%         \$000         (C)           Drainage/Utilities         0,10%) of (A+B)         0,00%         \$00%         \$98,764,624,401         (D)           Signing and Striping         (1-5%) of (A+B-C+D)         4,00%         \$82,296,224,50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B-C+D)         4,00%         \$82,596,276,624,401         (D)           Medilization         (d+10 10%) of (A+B-C+D)         4,00%         \$82,596,276,624,601         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B-C+D+E+F)         7,00%         \$166,090,493,566         (G)           Force Account - Utilities         (1 to 25%) of (H)         2,00%         \$50,776,236,601         (I)           Force Account - Utilities         (1 to 25%) of (H)         2,00%         \$152,328,709,811         (I)           Total of Construction Gost         (H+1,3)         10,00%         \$27,41,91,677,666         (I)           Total of Construction Cost         (	Total	-		1 519 455 760 00		
Project Construction Bid Items         Project Dependent         NA         \$1,519,455,760,00         (A)           Contingencies* (Mitigation - 15%)         (15% - 30%) of (A)         30,00%         \$455,836,728,00         (B)           ITS         (E-10%) of (A+B)         0.00%         \$50,000         (C)           Drainager/Utilities         (3-10%) of (A+B)         5.00%         \$585,764,624.40         (D)           Signing and Striping         (E-5%) of (A+B+C+D+E)         10.00%         \$22,962,284.50         (E)           Construction Signing & Traffic Control         510,22% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Force Account - Mise:         (1 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (G)           Force Account - Mise:         (1 to 10%) of (A)         2.00%         \$50,776,286,60         (I)           Force Account - Mise:         (1 to 15%) of (M)         2.00%         \$27,41,91,67,776,56         (K)           Total of Construction Cost         (H+L).)         10.00%         \$27,41,91,67,776,56         (K)           Total of Construction Cost         (H+L).)         10.00%         \$27,41,91,67,776,56				.,		
Project Construction Bid Items         Project Dependent         NA         \$1,519,455,760,00         (A)           Contingencies* (Mitigation - 15%)         (15% - 30%) of (A)         30,00%         \$455,836,728,00         (B)           ITS         (E-10%) of (A+B)         0.00%         \$50,000         (C)           Drainager/Utilities         (3-10%) of (A+B)         5.00%         \$585,764,624.40         (D)           Signing and Striping         (E-5%) of (A+B+C+D+E)         10.00%         \$22,962,284.50         (E)           Construction Signing & Traffic Control         510,22% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Force Account - Mise:         (1 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (G)           Force Account - Mise:         (1 to 10%) of (A)         2.00%         \$50,776,286,60         (I)           Force Account - Mise:         (1 to 15%) of (M)         2.00%         \$27,41,91,67,776,56         (K)           Total of Construction Cost         (H+L).)         10.00%         \$27,41,91,67,776,56         (K)           Total of Construction Cost         (H+L).)         10.00%         \$27,41,91,67,776,56		i	1			
Project Construction Bid Items         Project Dependent         NA         \$1,519,455,760,00         (A)           Contingencies* (Mitigation - 15%)         (15% - 30%) of (A)         30,00%         \$455,836,728,00         (B)           ITS         (E-10%) of (A+B)         0.00%         \$50,000         (C)           Drainager/Utilities         (3-10%) of (A+B)         5.00%         \$585,764,624.40         (D)           Signing and Striping         (E-5%) of (A+B+C+D+E)         10.00%         \$22,962,284.50         (E)           Construction Signing & Traffic Control         510,22% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Force Account - Mise:         (1 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (G)           Force Account - Mise:         (1 to 10%) of (A)         2.00%         \$50,776,286,60         (I)           Force Account - Mise:         (1 to 15%) of (M)         2.00%         \$27,41,91,67,776,56         (K)           Total of Construction Cost         (H+L).)         10.00%         \$27,41,91,67,776,56         (K)           Total of Construction Cost         (H+L).)         10.00%         \$27,41,91,67,776,56						
Project Construction Bid Items         Project Dependent         NA         \$1,519,455,760,00         (A)           Contingencies* (Mitigation - 15%)         (15% - 30%) of (A)         30,00%         \$455,836,728,00         (B)           ITS         (E-10%) of (A+B)         0.00%         \$50,000         (C)           Drainager/Utilities         (3-10%) of (A+B)         5.00%         \$585,764,624.40         (D)           Signing and Striping         (E-5%) of (A+B+C+D+E)         10.00%         \$22,962,284.50         (E)           Construction Signing & Traffic Control         510,22% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Force Account - Mise:         (1 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (G)           Force Account - Mise:         (1 to 10%) of (A)         2.00%         \$50,776,286,60         (I)           Force Account - Mise:         (1 to 15%) of (M)         2.00%         \$27,41,91,67,776,56         (K)           Total of Construction Cost         (H+L).)         10.00%         \$27,41,91,67,776,56         (K)           Total of Construction Cost         (H+L).)         10.00%         \$27,41,91,67,776,56				A/ 11		
Contingencies" (Mitigation - 15%)         (15% - 30%)         of (A)         30.00%         \$455,836,728.00         (R)           TTS         (6 - 10%) of (A+B)         0.00%         \$000         (C)           Default = 6%         0         0.00%         \$99,764,624.40         (D)           Signing and Striping         (15%) of (A+B)         0.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$166,090,493,56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,286,60         (I)           Force Account - Utilities         (1 to 2%) of (H)         8.00%         \$152,328,709,81         (J)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Utilities         Orgiert Dependent         2.00%         \$50,776,286,00 <td< td=""><td></td><td>% Range</td><td></td><td>% Used</td><td>Cost</td><td></td></td<>		% Range		% Used	Cost	
Contingencies" (Mitigation - 15%)         (15% - 30%)         of (A)         30.00%         \$455,836,728.00         (R)           TTS         (6 - 10%) of (A+B)         0.00%         \$000         (C)           Default = 6%         0         0.00%         \$99,764,624.40         (D)           Signing and Striping         (15%) of (A+B)         0.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$166,090,493,56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,286,60         (I)           Force Account - Utilities         (1 to 2%) of (H)         8.00%         \$152,328,709,81         (J)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Utilities         Orgiert Dependent         2.00%         \$50,776,286,00 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
Contingencies" (Mitigation - 15%)         (15% - 30%)         of (A)         30.00%         \$455,836,728.00         (R)           TTS         (6 - 10%) of (A+B)         0.00%         \$000         (C)           Default = 6%         0         0.00%         \$99,764,624.40         (D)           Signing and Striping         (15%) of (A+B)         0.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$166,090,493,56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,286,60         (I)           Force Account - Utilities         (1 to 2%) of (H)         8.00%         \$152,328,709,81         (J)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Utilities         Orgiert Dependent         2.00%         \$50,776,286,00 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
Contingencies" (Mitigation - 15%)         (15% - 30%)         of (A)         30.00%         \$455,836,728.00         (R)           TTS         (6 - 10%) of (A+B)         0.00%         \$000         (C)           Default = 6%         0         0.00%         \$99,764,624.40         (D)           Signing and Striping         (15%) of (A+B)         0.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$166,090,493,56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,286,60         (I)           Force Account - Utilities         (1 to 2%) of (H)         8.00%         \$152,328,709,81         (J)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Utilities         Orgiert Dependent         2.00%         \$50,776,286,00 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
Contingencies" (Mitigation - 15%)         (15% - 30%)         of (A)         30.00%         \$455,836,728.00         (R)           TTS         (6 - 10%) of (A+B)         0.00%         \$000         (C)           Default = 6%         0         0.00%         \$99,764,624.40         (D)           Signing and Striping         (15%) of (A+B)         0.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$166,090,493,56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,286,60         (I)           Force Account - Utilities         (1 to 2%) of (H)         8.00%         \$152,328,708,81         (I)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677,66         (K)           Utilities         Orgiert Dependent         2.00%         \$50,776,286,00 <td< td=""><td>Project Construction Bid Items</td><td>Project Dependent</td><td></td><td>N/A</td><td>\$1 519 455 760 00</td><td>(Δ)</td></td<>	Project Construction Bid Items	Project Dependent		N/A	\$1 519 455 760 00	(Δ)
ITS         (6-10%) of (A+B)         0.00%         \$0.00         (C)           Drainage/Utilities         (2-10%) of (A+B)         0.00%         \$99,764,624.40         (D)           Drainage/Utilities         (2-10%) of (A+B+C)         4.00%         \$92,962,284.50         (E)           Signing and Striping         (1-5%) of (A+B+C+D)         4.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         51 25%, of (A+B+C+D+E+F)         7.00%         \$166,090,493.56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493.56         (I)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$27,41,916,77.66         (K)           Total Construction Engineering         17% of (K)         10.00%         \$27,41,916,77.66         (N)           Utilities         Project Dependent         N/A         \$0.00         \$25,076,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         \$27,41,916,77.66 <t< td=""><td></td><td>r roject Dependent</td><td></td><td>1.077</td><td>φ1,010,400,700.00</td><td>(79</td></t<>		r roject Dependent		1.077	φ1,010,400,700.00	(79
ITS         (6-10%) of (A+B)         0.00%         \$0.00         (C)           Drainage/Utilities         (2-10%) of (A+B)         0.00%         \$99,764,624.40         (D)           Drainage/Utilities         (2-10%) of (A+B+C)         4.00%         \$92,962,284.50         (E)           Signing and Striping         (1-5%) of (A+B+C+D)         4.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         51 25%, of (A+B+C+D+E+F)         7.00%         \$166,090,493.56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493.56         (I)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Engineering         17% of (K)         10.00%         \$27,41,916,77.66         (K)           Total Construction Engineering         17% of (K)         10.00%         \$27,41,916,77.66         (N)           Utilities         Project Dependent         N/A         \$0.00         \$25,076,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         \$27,41,916,77.66 <t< td=""><td>Contingonaioa* (Mitigation 15%)</td><td>(150/ 200/) of (A)</td><td></td><td>20.00%</td><td>\$455 926 729 00</td><td>(P)</td></t<>	Contingonaioa* (Mitigation 15%)	(150/ 200/) of (A)		20.00%	\$455 926 729 00	(P)
Default = 6%         Default = 6%           Drainaga/Utilities         G-10% (of (A+B)         5.00%         \$38,764,624.40         (D)           Signing and Stripping         (1-5%) of (A+B+C+D)         4.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Mobilization         (d to 10%) of (A+B+C+D+E)         7.00%         \$166,090,493.56         (G)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Force Account - Utilities         (1 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         \$2,741,191,677.6.6         (K)           Total Project Dependent         2.00%         \$50,776,236.60         (N)           Total Project Dependent         2.00%         \$50,776,236.60         (N)           Total Project Dependent         2.00%         \$50,776,236.60         (N)           Total Project Dependent         0.00%         \$274,191,677.66         (N)           Utilities <td>Contingencies (Witigation - 15%)</td> <td>(15% - 30%) OI (A</td> <td>)</td> <td>30.00%</td> <td>\$433,636,726.00</td> <td>(D)</td>	Contingencies (Witigation - 15%)	(15% - 30%) OI (A	)	30.00%	\$433,636,726.00	(D)
Default = 6%         Default = 6%           Drainaga/Utilities         G-10% (of (A+B)         5.00%         \$38,764,624.40         (D)           Signing and Stripping         (1-5%) of (A+B+C+D)         4.00%         \$82,962,284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Mobilization         (d to 10%) of (A+B+C+D+E)         7.00%         \$166,090,493.56         (G)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Force Account - Utilities         (1 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         \$2,741,191,677.6.6         (K)           Total Project Dependent         2.00%         \$50,776,236.60         (N)           Total Project Dependent         2.00%         \$50,776,236.60         (N)           Total Project Dependent         2.00%         \$50,776,236.60         (N)           Total Project Dependent         0.00%         \$274,191,677.66         (N)           Utilities <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Default = 9%         Default = 9%           Drainagar(Utilities         G - 10% (of (A+B)         5.00%         \$38,764,624.40         (D)           Signing and Stripping         (1-5%) of (A+B+C+D)         4.00%         \$32,862,284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Mobilization         (d to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493.56         (G)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         \$2,741,916,776.56         (K)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (K)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (K)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Total Preliminary Engineering**         1						
Drainage/Utilities         G-10% jof (A+B) Default = 6%         5.00%         \$98.764.624.40         (D)           Signing and Striping         (1-5%) of (A+B-C+D)         4.00%         \$92.962.284.50         (E)           Construction Signing & Traffic Control         5 to 25% of (A+B-C+D+E)         10.00%         \$215.701.939.69         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         7.00%         \$166.090.493.56         (G)           Total of Construction Bid Items         (A+B+C+D+E+F)         7.00%         \$25.38.811.830.15         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50.776.236.60         (I)           Force Account - Misc.         (D) to 15%         (H+L)         \$2.741.916.776.56         (K)           Subtotal of Construction Cost         (H+L)         \$2.741.916.776.56         (K)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274.191.677.66         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274.191.677.66         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274.191.677.66         (N)           Total Project Dependent         N/A         \$0.00         (O)         \$258.776.236.60	ITS			0.00%	\$0.00	(C)
Default = 6%		Default = 6%				
Default = 6%						
Default = 6%	Drainage/Utilities	(3-10% )of (A+B)		5.00%	\$98,764,624,40	(D)
Signing and Striping         (1-5%) of (A+B-C-D)         4.00%         \$82,962,284.50         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         10.00%         \$215,701,939,69         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E)         7.00%         \$166,090,493,56         (G)           Total of Construction Bid Items         (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236,60         (I)           Force Account - Misc.         (1 to 2%) of (H)         6.00%         \$152,328,708,811,830,15         (H)           Subtotal of Construction Cost         (H+1-J)         6.00%         \$152,328,708,81         (J)           Total Construction Cost         (H+1-J)         52,741,916,776,56         (K)           Total Preliminary Engineering         15% of (K)         10.00%         \$274,191,677,66         (L)           Utilities         Project Dependent         7.40%         \$60,076, 256,076,236,60         (N)           Utilities         Project Dependent         N/A         \$00,000         (S)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677,66         (N)	Brainage/eanaee			0.0070	\$00,101,021110	(2)
Default = 5%         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$166,090,493,56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (H)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         52,538,811,830,15         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236,60         (I)           Force Account - Misc.         (1 to 15%) of (H)         6.00%         \$152,328,709,81         (J)           Default = 12%         0         6.00%         \$152,328,709,81         (J)           Subtotal of Construction Cost         (H+I+J)         10.00%         \$22,741,91,677,66         (K)           Total Preliminary Engineering*         15% of (K)         10.00%         \$22,74,191,677,68         (M)           Utilities         Project Dependent         7,241,00         550,776,236,60         (N)           Utilities         Project Dependent         N/A         \$0.00         (D)           Utilities         Project Dependent         N/A         \$20,00         (E)           Utilities         Project Dependent         N/A         \$20,0		Default = 070				
Default = 5%         10.00%         \$215,701,939,69         (F)           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$166,090,493,56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (H)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         52,538,811,830,15         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236,60         (I)           Force Account - Misc.         (1 to 15%) of (H)         6.00%         \$152,328,709,81         (J)           Default = 12%         0         6.00%         \$152,328,709,81         (J)           Subtotal of Construction Cost         (H+I+J)         10.00%         \$22,741,91,677,66         (K)           Total Preliminary Engineering*         15% of (K)         10.00%         \$22,74,191,677,68         (M)           Utilities         Project Dependent         7,241,00         550,776,236,60         (N)           Utilities         Project Dependent         N/A         \$0.00         (D)           Utilities         Project Dependent         N/A         \$20,00         (E)           Utilities         Project Dependent         N/A         \$20,0	Oingian and Otsigian	(4 E0() - 6 (A . D . O .	<b>D</b> )	4.000/	\$00.000.004.F0	
Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         0.00%         \$215,701,939,69         (F)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (6)           Total of Construction Bid Items         (A+B+C+D+E+F)         7.00%         \$166,090,493,56         (F)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236,60         (I)           Force Account - Utilities         (1 to 15%) of (H)         6.00%         \$152,328,709,81         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$152,328,709,81         (J)           Total Of Construction Cost         (H+I+J)         10.00%         \$274,191,677,65         (K)           Total Construction Cost         (H+I+J)         10.00%         \$274,191,677,66         (J)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677,66         (J)           Utilities         Project Dependent         2.00%         \$50,776,236,60         (N)           ************************************	Signing and Striping		·D)	4.00%	\$82,962,284.50	(E)
Default = 20%         7.00%         \$166,090,493.56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493.56         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$2,538,811,830.15         (H)           Force Account - Utilities         (1 to 2%) of (H)         \$2,00%         \$50,776,236.60         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         6.00%         \$2,741,916,776.56         (K)           Total Preliminary Engineering         17% of (K)         10.00%         \$274,191,677.66         (I)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent </td <td></td> <td>Default = 5%</td> <td></td> <td></td> <td></td> <td></td>		Default = 5%				
Default = 20%         7.00%         \$166,090,493.56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493.56         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$2,538,811,830.15         (H)           Force Account - Utilities         (1 to 2%) of (H)         \$2,00%         \$50,776,236.60         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         6.00%         \$2,741,916,776.56         (K)           Total Preliminary Engineering         17% of (K)         10.00%         \$274,191,677.66         (I)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Default = 20%         7.00%         \$166,090,493.56         (G)           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$166,090,493.56         (G)           Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$2,538,811,830.15         (H)           Force Account - Utilities         (1 to 2%) of (H)         \$2,00%         \$50,776,236.60         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         6.00%         \$2,741,916,776.56         (K)           Total Preliminary Engineering         17% of (K)         10.00%         \$274,191,677.66         (I)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (I)           Utilities         Project Dependent </td <td>Construction Signing &amp; Traffic Control</td> <td>5 to 25% of (A+B+</td> <td>C+D+E)</td> <td>10.00%</td> <td>\$215,701,939.69</td> <td>(F)</td>	Construction Signing & Traffic Control	5 to 25% of (A+B+	C+D+E)	10.00%	\$215,701,939.69	(F)
Mobilization         (4 to 10%) of (A+B-C+D+E+F)         7.0%         \$166,090,493.56         (6)           Default = 7%						
Default = 7%						
Default = 7%	Mobilization	(4 to 10%) of (A+B	+C+D+E+E)	7.00%	\$166,090,493,56	(G)
Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$2,538,811,830.15         (H)           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Default = 2%         6.00%         \$152,328,709.81         (J)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         \$2,741,916,776.56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (M)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (M)           Utilities         Project Dependent         NA         \$0.00         (D)           Tunbel (North Bore EJNT)(LE):         15,000,00         14,25,000,00         \$53,890,900,00         \$25,890,900,00         \$25,890,900,00         \$25,890,900,00         \$25,890,900,00         \$25,890,900,00         \$25,890,900,00         \$25,890,900,00         \$25,890,900,00         \$25,890,900,00         \$25,890,900,00	Mobilization			1.0070	\$100,000,400.00	(0)
Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         \$2,741,916,776.56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$		Default = 170				
Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         \$2,741,916,776.56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$				•		
Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$50,776,236.60         (I)           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+I+J)         6.00%         \$152,328,709.81         (J)           Total Construction Cost         (H+I+J)         \$2,741,916,776.56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Littles         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Turnel (/Twin Tounels) fulp:         15,000,00         14,275,00 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Default = 2%         Construction Cost         Constructin Cost         Constructin Cost <thc< td=""><td>Total of Construction Bid Items</td><td>(A+B+C+D+E+F+G</td><td>i)</td><td></td><td>\$2,538,811,830.15</td><td>(H)</td></thc<>	Total of Construction Bid Items	(A+B+C+D+E+F+G	i)		\$2,538,811,830.15	(H)
Default = 2%         Image: Construction Cost         Constructin Cost         Construction Cost						
Default = 2%         Image: Construction Cost         Constructin Cost         Construction Cost						
Default = 2%         Construction         Subtotal of Construction Cost         (H+H+J)         6.00%         \$152,328,709,81         (J)           Subtotal of Construction Cost         (H+H+J)         \$2,741,916,776,56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677,656         (L)           Total Construction Engineering**         15% of (K)         10.00%         \$274,191,677,656         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677,656         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236,60         (N)           Utilities         Project Dependent         2.00%         \$50,776,236,60         (N)           Tunnée! (Nym, Function Engineering**         15,006,06         741,700         141,415,000,00         150,000,00           ''' Tunnée! (Nym, Function Engineering**         15,006,06         741,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000         141,415,000,000<	Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$50,776,236.60	(1)
Force Account - Misc.         (10 to 15%) of (H) Default = 12%         6.00%         \$152,328,709.81         (J)           Subtotal of Construction Cost         (H+H-J)         \$2,741,916,776.56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.000         (G)           Tunnet (Nqrh, Bore EJNTF)(LF):         ::::15,000,00         ::::15,000,00         ::::::::::::::::::::::::::::::::::::						
Default = 12%         Subtotal of Construction Cost         (H+I+J)         \$2,741,916,776.56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (Twin Tunnels) 1LF)         15,000,00         141,415,000,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$57,96,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59						
Default = 12%         Subtotal of Construction Cost         (H+I+J)         \$2,741,916,776.56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)           Tunnel (Twin Tunnels) 1LF)         15,000,00         141,415,000,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$58,800,00,00         \$57,96,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59,860,00,00         \$59	Force Account - Misc	(10 to 15%) of (H)		6.00%	\$152 328 709 81	(1)
Subtotal of Construction Cost         (H+I+J)         \$2,741,916,776.56         (K)           Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)	i si se Aboount Mido.			0.0070	ψ102,020,103.01	(0)
Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)		Derauit = 12%				
Total Construction Engineering         17% of (K)         10.00%         \$274,191,677.66         (L)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Total Preliminary Engineering**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)	Subtatal of Comptantian Cont	/II.I.P			PO 744 040 770 55	10
Image: Contingence ing**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         0.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           Image: Control of the set of	Subtotal of Construction Cost	(r1+I+J)			¢∠,/41,910,//6.56	(K)
Image: Contingence ing**         15% of (K)         10.00%         \$274,191,677.66         (M)           Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         0.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.000         (O)           Image: Control of the set of					A	
Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Image: Cost         OUANTITY         Image: Cost         Image:	I otal Construction Engineering	17% of (K)		10.00%	\$274,191,677.66	(L)
Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Utilities         Project Dependent         N/A         \$0.00         (0)           Image: Cost         OUANTITY         Image: Cost         Image:						
Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)						
Right of Way         Project Dependent         2.00%         \$50,776,236.60         (N)           Utilities         Project Dependent         N/A         \$0.00         (O)	Total Preliminary Engineering**	15% of (K)		10.00%	\$274,191,677.66	(M)
Utilities         Project Dependent         NA         \$0.00         (0)           Lilities         Project Dependent         NA         \$0.00         (0)           Lilities         COST         QUANTITY         141,415,000,00         (0)          Tunbel (Ndrh:Bare £JMT) (LF)						
Utilities         Project Dependent         NA         \$0.00         (0)           Lilities         Project Dependent         NA         \$0.00         (0)           Lilities         COST         QUANTITY         141,415,000,00         (0)          Tunbel (Ndrh:Bare £JMT) (LF)						
Utilities         Project Dependent         NA         \$0.00         (0)           Lilities         Project Dependent         NA         \$0.00         (0)           Lilities         COST         QUANTITY         141,415,000,00         (0)          Tunbel (Ndrh:Bare £JMT) (LF)						
Utilities         Project Dependent         NA         \$0.00         (0)           Lilities         Project Dependent         NA         \$0.00         (0)           Lilities         COST         QUANTITY         141,415,000,00         (0)          Tunbel (Ndrh:Bare £JMT) (LF)	Right of Way	Project Dependent	1	2.00%	\$50 776 236 60	(NI)
COST         QUANTITY          Tunnel/(Twin Tunnels) (LF)         15,009,09         741,00         11,115,000,00          Tunnel/(Twin Tunnels) (LF)         15,009,09         741,00         658,804,000,00          Tunnel/(North,Bore ENVET)(LF)         48,000,00         14,725,00         658,804,000,00          Tunnel/(North,Bore ENVET)(LF)         20,500,00         42,825,00         93,168,000,00          Mobile/Maintenance-Equipmpient         variable         45,00         2,000,000,00          Mobile/Maintenance-Equipmpient         variable         45,00         2,000,000,00          Mobile/Maintenance-Equipmpient         variable         45,00         2,000,000,00          Mobile/Maintenance-Equipmpient         variable         45,00         2,000,000,00          Mobile/Maintenance-Equipmpient         variable         1,00         52,556,000,00	ragin of they	open Dependent		2.0070	ψου, 110,200.00	(14)
COST         QUANTITY          Tunnel/(Twin Tunnels) (LF)         15,009,09         741,00         11,115,000,00          Tunnel/(Twin Tunnels) (LF)         15,009,09         741,00         658,804,000,00          Tunnel/(North,Bore ENVET)(LF)         48,000,00         14,725,00         658,804,000,00          Tunnel/(North,Bore ENVET)(LF)         20,500,00         42,825,00         93,168,000,00          Mobile/Maintenance-Equipmpient         variable         45,00         2,000,000,00          Mobile/Maintenance-Equipmpient         variable         45,00         2,000,000,00          Mobile/Maintenance-Equipmpient         variable         45,00         2,000,000,00          Mobile/Maintenance-Equipmpient         variable         45,00         2,000,000,00          Mobile/Maintenance-Equipmpient         variable         1,00         52,556,000,00	Litilities	Project Dopondant		NI/A	¢0.00	( <b>0</b> )
Tunhel (Twin Tunnels) (LP)       15 000.06       7.41;00       11.415.000;00         Tunhel (North Bore externised EMT) (LF)       48.000.00       13.725.00       658.804.000.00         Tunnel (North Bore externised EMT) (LF)       20.500,00       42.52.00       97.166,000,00         Mobile Maintendrace Equipment       Variable       42.52.00       97.166,000,00         Mobile Maintendrace Equipment       Variable       42.52.00       97.166,000,00         Automated Vehicle Leaditon System       37.448,000,00       11.00       3.948,000,00         Silver Plume rämps       Variable       11.00       4.941,000,000         Silver Plume rämps       Variable       11.00       52.44.00         Silver Plume rämps       Variable       11.00       52.118,066,79         Dewid ät. 3 - no Ral       Variable       11.00       372.2474,210,66         Minimat Action       Variable       11.00       532.000,000,00         Inflation to 2010 dollars (assuming 4% per year)       \$1.445,272,200,52       \$6,606,958,630.93       (P)         Base cost of Alternative in Millions       \$6,075         Contingencies includes environmental mitigation costs	oundes	r roject Dependent		19/7	<del>ე</del> ე.ეტ	(0)
Tunhel (Twin Tunnels) (LP)       15 000.06       7.41;00       11.415.000;00         Tunhel (North Bore externised EMT) (LF)       48.000.00       13.725.00       658.804.000.00         Tunnel (North Bore externised EMT) (LF)       20.500,00       42.52.00       97.166,000,00         Mobile Maintendrace Equipment       Variable       42.52.00       97.166,000,00         Mobile Maintendrace Equipment       Variable       42.52.00       97.166,000,00         Automated Vehicle Leaditon System       37.448,000,00       11.00       3.948,000,00         Silver Plume rämps       Variable       11.00       4.941,000,000         Silver Plume rämps       Variable       11.00       52.44.00         Silver Plume rämps       Variable       11.00       52.118,066,79         Dewid ät. 3 - no Ral       Variable       11.00       372.2474,210,66         Minimat Action       Variable       11.00       532.000,000,00         Inflation to 2010 dollars (assuming 4% per year)       \$1.445,272,200,52       \$6,606,958,630.93       (P)         Base cost of Alternative in Millions       \$6,075         Contingencies includes environmental mitigation costs						
Tunhei [Ndrth]Bore EMBT]/(EF):       ::::::::::::::::::::::::::::::::::::	والمتحد والمتح			the second second second		
Tunhei [Ndrth]Bore EMBT]/(EF):       ::::::::::::::::::::::::::::::::::::			741.00			
Modbild Main(engline) Equipment     1 variabile     45,001     2,000,000,001       Passenger, Rolling Stock     325,000,000     264:001     32,560,600,000       Autionated Visit(e) Equipment     37,000,000     11,001     3,048,000,000       Faret Collection     37,000,000     403:001     44,911,000,000       Silver Plume rämpis     variabile     11,000     4,427,794,49       Silver Plume rämpis     variabile     1000     52,206,67,9       Dewid Att 3 - no Ral     variabile     1000     372,247,210,06,6       Inflation to 2010 dollars (assuming 4% per year)     \$1,445,272,200,52     \$1,445,272,200,52   Total Project Cost       Contingencies includes environmental mitigation costs     Base cost of Alternative in Millions     \$6,075						
Modbild Maintendroch Equipment       1 vorträtzle       45,00       2,000,000,00         Passenger, Rölling Stock       325,000,00       264,00       82,550,000,00         Automated Vehicle Lequipn System       3,748,000,00       1,00       3,948,000,00         - Faret Collection       37,000,00       403,00       44,911,000,00         - Silver Plume rämpis       - variable       1,00       52,118,056,79         - SH r03 reconfigure       - variable       1,00       327,247,42,10,66         - Minimat Action       - variable       1,00       372,247,42,10,66         - Minimat Action       - variable       1,00       372,247,42,10,66         - Minimat Action       - variable       1,00       372,247,20,052         Total Project Cost       S6,606,958,630.93       (P)         "Contingencies includes environmental mitigation costs       Base cost of Alternative in Millions       \$6,075			4,252.00	1.4		
Passenger Rolling Stock       125.00.00       254.60         Automated Visitolis Lecation System       3.048.000.00       1.00         Automated Visitolis Lecation System       3.048.000.00       1.00         - Fare Collection       3.7040.00       4.911.000.00         Silver Plume ramps       - variable       1.00       4.911.000.00         Silver Plume ramps       - variable       1.00       5.2.18.066,79         Dewid alt. 1 - no Rail       - variable       1.00       372.474.210.66         Minimar Action       - variable       1.00       372.474.210.66         - Inflation to 2010 dollars (assuming 4% per year)       \$1.445.272.200.52       \$6,606.958,630.93       (P)         Total Project Cost       - Base cost of Alternative in Millions       \$6,075       \$6,075	Mobile Maintenance Equipment		45.00			
Automated Visitiçie Lecation System         3;048:000.00         11:00         3;048:000.00           Fare Collection         37:000.00         403:00         44:91:000:00           Silver Plume ramps         variable         1:00         52,118:056:79           SH-103 reconfigure         variable         1:00         372,2474:240;66           Niminal Action         variable         1:00         372,2474:240;66           Inflation to 2010 dollars (assuming 4% per year)         51,445,272,200.52         \$1,445,272,200.52           Total Project Cost         \$6,606,958,630.93         (P)           "Contingencies includes environmental mitigation costs         86,075         \$6,075						
<ul> <li>Fare Collection</li> <li>Silver Plume rämps</li> <li>variablé</li> <li>1,000</li> <li>4,911,000,000</li> <li>4,227,794,49</li> <li>4,227,794,49</li> <li>5,110,005,79</li> <li>0,00</li> <li>5,2118,005,79</li> <li>0,01</li> <li>5,2118,005,79</li> <li>1,00</li> <li>5,2118,005,79</li> <li>1,00</li> <li>5,2118,005,79</li> <li>1,00</li> <li>5,2118,005,79</li> <li>1,00</li> <li>5,218,005,000,00</li> <li>1,00</li> <li>5,218,005,000,00</li> <li>1,00</li> <li>5,32,000,000,00</li> <li>1,100</li> <li>5,32,000,000,00</li> <li>1,1445,272,200,52</li> </ul> Total Project Cost       \$6,606,958,630,93         Contingencies includes environmental mitigation costs						
Silver Plume ramps         variable         1:00         4,427,794;49           SH, r03 reconfigure         variable         1:00         52,18,96,79           Dowid alt 3 - no Ral         variable         1:00         572,742,409           Inflation to 2010 dollars (assuming 4% per year)         1:00         532,000,000;00         532,000,000;00           Total Project Cost         \$6,606,958,630.93         (P)           *Contingencies includes environmental mitigation costs         86,075         \$6,075				the state of the state of		
SH-103 reconfigure         variable         1,00         52,118,056,79           Dewid At, 1 - ho Ral         variable         1,00         372,474,240,66,           Minimal Action         variable         1,00         372,474,240,66,           Inflation to 2010 dollars (assuming 4% per year)         51,445,272,200,52         \$6,606,958,630,93         (P)           Total Project Cost         \$6,606,958,630,93         (P)           *Contingencies includes environmental mitigation costs         \$6,075         \$6,075						
Dowid âlt 3 - no Real       variable       1,00       372,474,210,66         Minimal Action       variable       1,00       532,004,000;00         Inflation to 2010 dollars (assuming 4% per year)       11;00       \$1,445,272,200.52         Total Project Cost       \$6,606,958,630.93       (P)         "Contingencies includes environmental mitigation costs       Base cost of Alternative in Millions       \$6,075						
Inflation to 2010 dollars (assuming 4% per year)       \$1,445,272,200.52         Total Project Cost       \$6,606,958,630.93       (P)         *Contingencies includes environmental mitigation costs       \$6,075       \$						
Inflation to 2010 dollars (assuming 4% per year)           S1,445,272,200.52           Total Project Cost         \$6,606,958,630.93         (P)           *Contingencies includes environmental mitigation costs         Base cost of Alternative in Millions         \$6,075						
Total Project Cost       \$6,606,958,630.93       (P)         Base cost of Alternative in Millions       \$6,075         *Contingencies includes environmental miligation costs			1.00			1.1
Total Project Cost       \$6,606,958,630.93       (P)         Base cost of Alternative in Millions       \$6,075         *Contingencies includes environmental miligation costs	Inflation to 2010 dollars (assuming	4% per year)			\$1,445,272,200.52	
Contingencies includes environmental mitigation costs	· • •					
Contingencies includes environmental mitigation costs	Total Project Cost		·		\$6,606,958.630.93	(P)
*Contingencies includes environmental mitigation costs					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(. /
*Contingencies includes environmental mitigation costs			Base cos	t of Alternative in Millions	\$6,075	
	*Contingoncios includos onvironmontal mitigat	on costs				
	Contingencies includes environmental milidat					

#### TIER 1 - PEIS COST ESTIMATE 12b - 6-LANE w/DIESEL BUS PRESERVATION

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	267,796.00	40,169,400.00		
Walls (SF)	90.00				
Earthwork (CY)	20.00				
Pavement (TON) Base Course (CY)	70.00 40.00		52,331,720.00 20,137,320.00		
Base Course (CT) Barrier (Type 7)(LF)	60.00	362,254.00	21,735,240.00		
Special Structures (SF)	200.00	960,082.00	192,016,400.00		
Bus-Walls	90.00	484,108.00	0.00		
Bus-Earthwork	20.00	203,036.00	0.00		
Bus-Guideway Structure (LF)	3,200.00	71,000.00	0.00		
Bus-Guided Busway Track Bus-Maintenance Facilities	315.00 Variable	<u>267,168.00</u> 3.00	0.00		
Bus-Ramps for Busses	2,000,000.00	12.00	0.00		
Bus-Stations/Parking (Large)	10,000,000.00	3.00	0.00		
Bus-Stations/Parking (Medium)	6,000,000.00	1.00	0.00		
Bus-Station (Small)	3,000,000.00	9.00	0.00		
Total			511,787,540.00		
	0/ Dames		0/ 111	0 a a t	
	% Range		% Used	Cost	
Project Construction Bid Items	Project Dependent		N/A	\$511,787,540.00	(A)
Contingencies* (Mitigation - 15%)	(15% - 30%) of (A)		30.00%	\$153,536,262.00	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = $6\%$		0.0070	φ0.00	(0)
Drainage/Utilities	(3-10% )of (A+B)		5.00%	\$33,266,190.10	(D)
	Default = 6%				
Cinging and Objeins	(4.50() - 6 (A + D + O +	D)	4.000/	¢07.040.500.00	
Signing and Striping	(1-5%) of (A+B+C+ Default = 5%	D)	4.00%	\$27,943,599.68	(E)
	Delault = 5%				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	10.00%	\$72,653,359.18	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B+	+C+D+E+F)	7.00%	\$55,943,086.57	(G)
	Default = 7%				
Total of Construction Bid Items	(A+B+C+D+E+F+G	5)		\$855,130,037.53	(H)
	`	ĺ			, í
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$17,102,600.75	(I)
	Default = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$51,307,802.25	(J)
	Default = $12\%$		0.0070	φ01,007,002.20	(0)
Subtotal of Construction Cost	(H+I+J)			\$923,540,440.53	(K)
Total Construction Engineering	17% of (K)		10.00%	\$92,354,044.05	(L)
Total Preliminary Engineering**	15% of (K)		10.00%	\$92,354,044.05	(M)
Diable of Way	Desired D 1		0.000/	MAT 100	
Right of Way	Project Dependent		2.00%	\$17,102,600.75	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
				φ0.00	(3)
	COST	QUANTITY			
Tunnel (Twin Tunnels) (LF)	15,000.00			11,115,000.00	10.00
Tunnel (North Bore EJMT) (LF)	48,000.00			658,800,000.00	
Tunnel (North Bore extended EJMT) (LF) Silver Plume ramps	20,500.00 variable			87,166,000.00 4,427,794,49	
SH 103 teconfigure	variable			4,427,794,49	
Dowd alt, 1 - no Rail	variable			372,474,210,66	1.1
Minimal Action	variable			678,000,000,00	
Interchanges (EACH)	1.00			21,914,222,40	
Inflation to 2010 dollars (assuming				\$843,182,595.84	
Total Drainat Cont	I			00 054 540 000 50	
Total Project Cost				\$3,854,549,009.58	(P)
		Base cos	at of Alternative in Millions	\$3,177	
*O anti- and a last of a sector sector sector set at a state of	tion costs				
*Contingencies includes environmental mitiga **Total Preliminary Engineering includes cost					

#### TIER 1 - PEIS COST ESTIMATE 13 - CONSENSUS RECOMMENDATION 55 MPH

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	74349.00	11,152,350.00		
Walls (SF)	90.00	523831.00	47,144,790.00		
Earthwork (CY)	20.00	1816218.00	36,324,360.00		
Pavement (TON)	70.00	96728.00	6,770,960.00		
Base Course (CY)	40.00	65137.00	2,605,480.00		
Barrier (Type 7)(LF)	60.00	105522.00	6,331,320.00		
Special Structures (SF)	200.00	0.00	0.00		
AGS-Maglev Stucture (LF)	2376.00	466910.40	1,109,379,110.40		
AGS-Maglev Guideway	500.00	455304.00	227,652,000.00		
AGS-Maintenance Facilities	variable	3.00	104,150,000.00		
AGS-Stations/Parking (Large)	3.00	1000000.00	30,000,000.00		
AGS-Stations/Parking (Medium)	3	600000	18,000,000.00		
AGS-Station/Parking (Small)	4	300000	12,000,000.00		
AGS-Extension - Vail to Eagle Airport	30	17254955.29	517,648,658.70	\$2,018,829,769.10	
Total			2,129,159,029.10		
			, .,,		
	% Range		% Used	Cost	
Project Construction Bid Items	Project Dependent		N/A	\$2,129,159,029.10	(A)
	(450( 000() ( ())			<b>6</b> 000 <b>7</b> (7 700 70	
Contingencies* (Mitigation - 12%)	(15% - 30%) of (A)		30.00%	\$638,747,708.73	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	
113	Default = 6%		0.00%		(C)
	Delault = 070				
Drainage/Utilities	(3-10% )of (A+B)		5.00%	\$138,395,336.89	(D)
Brainage, etimes	Default = $6\%$		0.0070	φ100,000,000.00	(0)
	Dordan = 070				
Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$116,252,082.99	(E)
	Default = 5%	, ·			
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	10.00%	\$302,255,415.77	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B+	+C+D+E+F)	7.00%	\$232,736,670.14	(G)
	Default = 7%				
Total of Construction Bid Items	(A+B+C+D+E+F+G			\$3,557,546,243.63	
Total of Construction Bid Items	(A+D+C+D+E+F+G	') 		\$3,337,340,243.03	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$71,150,924.87	(I)
Torce Account - Otimites	Default = 2%		2.0070	ψ/1,100,324.07	(1)
	Boldan = 270				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$213,452,774.62	(J)
	Default = 12%				
Subtotal of Construction Cost	(H+I+J)			\$3,842,149,943.12	(K)
Total Construction Engineering	17% of (K)		10.00%	\$384,214,994.31	(L)
	1504 4.45		10.000	6004533773	
Total Preliminary Engineering**	15% of (K)		10.00%	\$384,214,994.31	(M)
Right of Way	Project Dependent		2.00%	\$71,150,924.87	(N)
night of Way			2.0070	ψι 1,130,32 <del>4</del> .0/	(14)
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			
: Tunnel (Twin Tunnels) (LF)	15,000.00	741.00		11,115,000.00	
Tunnel (North Bore EJMT) (LF)	48,000.00	13,725.00		658,800,000.00	
Tunnel (North Bore extended EJMT) (LF)				87,166,000.00	
Electrification	1.00			354,000,000.00	
Mobile Maintenance Equipment	11,100,000.00			11,100,000.00	
Passenger Rolling Stock	16,000,000.00			832,000,000.00	
Fare Collection Signals and Controls	37,000.00			8,510,000.00	
	111,600,000.00			133,920,000.00	
	variable variable				
	variable			372,474,210.66	
Dowdtalt. 1 - no Rail Minimal Action	variable			782,000,000.00	
Interchanges (EACH)	1.00			21,914,222.40	
Inflation to 2010 dollars (assuming		+ + + + + + + + + + + + + + + + + + +	e de la carca da carda	\$2,227,324,481.11	
				Ψε,εει,θετ,τυι.ΙΙ	
Total Project Cost				\$10,182,054,770.78	(P)
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	( )
*Oentienen eine kude		Base co	st of Alternative in Millions	\$9,400	
*Contingencies includes environmental mitiga **Total Preliminary Engineering includes cost			st of Alternative in Millions	\$9,400	

### TIER 1 - PEIS COST ESTIMATE INTERMOUNTAIN CONNECTION

Track Improvements         1.00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00         7,300,000,00 <th></th> <th></th> <th>COST</th> <th>QUANTITY</th> <th>COST PER UNIT</th> <th>8/17/2010 14:29 BID ITEMS</th>			COST	QUANTITY	COST PER UNIT	8/17/2010 14:29 BID ITEMS
New Tack         1.00         27,500,000.00         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000         37,000,000 </td <td></td> <td></td> <td>COST</td> <td>QUANTITY</td> <td>COST PER UNIT</td> <td>BIDITEMS</td>			COST	QUANTITY	COST PER UNIT	BIDITEMS
Crossing Protection         1.00         3.700.000.00         3.700.000.00           Maintenance Facility         1.00         8.000.000.00         3.500.000.00           Total         6.000.000.00         6.000.000.00         6.000.000.00           Total         6.000.000.00         6.000.000.00         6.000.000.00           Total         9% Range         6.000.000.00         6.000.000.00           Project Construction Bid Items         Project Dependent         N/A         \$60.000.000.00           Contingencies*         (F5% - 30%) of (A)         30.00%         \$18.000.000.00           Contingencies*         (F5% - 30%) of (A)         0.00%         \$3.120.000.00           Contingencies*         (F5% - 30%) of (A)         0.00%         \$3.120.000.00           Drainage/Utilities         (A10%) of (A+B)         4.00%         \$3.120.000.00           Default = 6%         100%         \$3.120.000.00         55.735.184.00           Default = 6%         100%         \$3.120.000.00         55.735.184.00           Default = 6%         100%         \$5.735.184.00         55.735.184.00           Default = 7%         100%         \$5.735.184.00         55.735.184.00           Default = 2%         100%         \$5.625.00.00         56.056 </td <td></td> <td></td> <td>7,300,000.00</td> <td>7,300,000.00</td> <td>1.00</td> <td>Track Improvements</td>			7,300,000.00	7,300,000.00	1.00	Track Improvements
Stations         1.00         13,500,000.00         3,500,000.00         3,500,000.00           Total         1.00         3,000,000.00         3,000,000.00         3,000,000.00         3,000,000.00           Total         1.00         3,000,000.00         5,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00           Total         Y         Range         Y         Used         Second 1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,000,000.00         1,00						
Maintenance Facility     1.00     8.000,000,00     8.000,000,00       Total     600,000,000,00     600,000,000,00       Total     % Range     600,000,000,00       % Used     % Used     Cost       Project Construction Bid Items     Project Dependent     N/A       Contingendes*     (15% - 30%) of (A)     30,00%     \$18,000,000,00       TS     (6-10%) of (A+B)     0.00%     \$18,000,000,00       Drainage/Utilities     (3-10%) of (A+B)     0.00%     \$3,120,000,00       Drainage/Utilities     (3-10%) of (A+B)     0.00%     \$3,120,000,00       Signing and Striping     (1-5%) of (A+B+C+D)     1.00%     \$3,120,000,00       Default = 5%     7.00%     \$5,735, 184,00       Default = 5%     7.00%     \$5,735, 184,00       Default = 7%     7.00%     \$6,136,646,88       Default = 7%     7.00%     \$6,136,646,88       Default = 7%     7.00%     \$6,136,646,88       Default = 7%     6.00%     \$1,876,060,62       Force Account - Utilities     (10 to 15%) of (H)     6.00%     \$1,876,060,62       Subtolal of Construction Cost     (10 to 15%) of (H)     6.00%     \$1,876,060,62       Total Construction Engineering*     15% of (K)     7.00%     \$1,01,307,273,73       Total Construction Engineeri						
Total         65.000.000.00         65.000.000.00           % Range         % Used         Cost           % Range         % Used         Cost           Project Construction Bid Items         Project Dependent         N/A         \$60.000.000.00           Contingencies*         (15% - 30%) of (A)         30.00%         \$18,000.000.00           TS         (6-10%) of (A+B)         0.00%         \$18,000.000.00           Default = 6%         0         \$30.00%         \$18,000.000.00           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$31,20.000.00           Default = 6%         0         \$31,20.000.00         \$31,20.000.00           Default = 6%         0         \$31,20.000.00         \$31,20.000.00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$31,20.000.00           Default = 5%         0         7.00%         \$5,735,184.00           Mobilization         (4 to 10%) of (A+B+C+D+E)         7.00%         \$6,136,646.88           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876.060.62           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876.060.62           Subtotal of Construction Cost         (H+H+J)         <						
Image: Construction Bid Items         Project Dependent         N/A         Second Construction Bid Items           Project Construction Bid Items         Project Dependent         N/A         Second Construction Bid Items           TS         (6-10%) of (A+B) Default = 6%         0.00%         S18,000,000.00           TS         (6-10%) of (A+B) Default = 6%         0.00%         S18,000,000.00           Signing and Striping         (1-5%) of (A+B) Default = 6%         0.00%         S3,120,000.00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         S8,735,184.00           Default = 6%         7.00%         S5,735,184.00         S5,735,184.00           Default = 2%         7.00%         S5,623,181.80         S5,735,184.00           Default = 2%			8,000,000.00	8,000,000.00	1.00	Maintenance Facility
Image: Construction Bid Items         Project Dependent         N/A         Second Construction Bid Items           Project Construction Bid Items         Project Dependent         N/A         Second Construction Bid Items           TS         (6-10%) of (A+B) Default = 6%         0.00%         S18,000,000.00           TS         (6-10%) of (A+B) Default = 6%         0.00%         S18,000,000.00           Signing and Striping         (1-5%) of (A+B) Default = 6%         0.00%         S3,120,000.00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         S8,735,184.00           Default = 6%         7.00%         S5,735,184.00         S5,735,184.00           Default = 2%         7.00%         S5,623,181.80         S5,735,184.00           Default = 2%			60.000.000.00			Total
Project Construction Bid Items       Project Dependent       N/A       \$60,000,000.00         Contingencies*       (15% - 30%) of (A)       30.00%       \$18,000,000.00         TTS       (6-10%) of (A+B)       0.00%       \$0.00         Default = 6%       0.00%       \$3,120,000.00         Drainage/Utilities       (3-10%) of (A+B)       0.00%       \$3,120,000.00         Signing and Striping       (1-5%) of (A+B-C+D)       1.00%       \$811,200.00         Default = 6%       100%       \$5,735,184.00       Default = 5%         Construction Signing & Traffic Control       5 to 25% of (A+B+C+D+E)       7.00%       \$5,735,184.00         Default = 7%       100% of (A+B+C+D+E+F)       7.00%       \$6,136,646.88         Mobilization       (4 to 10%) of (H+B+C+D+E+F)       7.00%       \$1,876,060.62         Force Account - Utilities       (1 to 2%) of (H)       2.00%       \$1,876,060.62         Force Account - Misc.       (10 to 15%) of (H)       6.00%       \$5,628,181.85         Default = 2%       1000%       \$10,1307,273.35       \$101,307,273.35         Total Construction Cost       (H+I+J)       10.00%       \$10,1307,273.45         Total Construction Cost       (H+I+J)       2.00%       \$1,876,060.62       \$1,876,060.62			00,000,000.00			
Project Construction Bid Items       Project Dependent       N/A       \$60,000,000.00         Contingencies*       (15% - 30%) of (A)       30.00%       \$18,000,000.00         TTS       (6-10%) of (A+B)       0.00%       \$0.00         Default = 6%       0.00%       \$3,120,000.00         Drainage/Utilities       (3-10%) of (A+B)       0.00%       \$3,120,000.00         Signing and Striping       (1-5%) of (A+B-C+D)       1.00%       \$811,200.00         Default = 6%       100%       \$5,735,184.00       Default = 5%         Construction Signing & Traffic Control       5 to 25% of (A+B+C+D+E)       7.00%       \$5,735,184.00         Default = 7%       100% of (A+B+C+D+E+F)       7.00%       \$6,136,646.88         Mobilization       (4 to 10%) of (H+B+C+D+E+F)       7.00%       \$1,876,060.62         Force Account - Utilities       (1 to 2%) of (H)       2.00%       \$1,876,060.62         Force Account - Misc.       (10 to 15%) of (H)       6.00%       \$5,628,181.85         Default = 2%       1000%       \$10,1307,273.35       \$101,307,273.35         Total Construction Cost       (H+I+J)       10.00%       \$10,1307,273.45         Total Construction Cost       (H+I+J)       2.00%       \$1,876,060.62       \$1,876,060.62						
Project Construction Bid Items       Project Dependent       N/A       \$60,000,000.00         Contingencies*       (15% - 30%) of (A)       30.00%       \$18,000,000.00         TTS       (6-10%) of (A+B)       0.00%       \$0.00         Default = 6%       0.00%       \$3,120,000.00         Drainage/Utilities       (3-10%) of (A+B)       0.00%       \$3,120,000.00         Signing and Striping       (1-5%) of (A+B-C+D)       1.00%       \$811,200.00         Default = 6%       100%       \$5,735,184.00       Default = 5%         Construction Signing & Traffic Control       5 to 25% of (A+B+C+D+E)       7.00%       \$5,735,184.00         Default = 7%       100% of (A+B+C+D+E+F)       7.00%       \$6,136,646.88         Mobilization       (4 to 10%) of (H+B+C+D+E+F)       7.00%       \$1,876,060.62         Force Account - Utilities       (1 to 2%) of (H)       2.00%       \$1,876,060.62         Force Account - Misc.       (10 to 15%) of (H)       6.00%       \$5,628,181.85         Default = 2%       1000%       \$10,1307,273.35       \$101,307,273.35         Total Construction Cost       (H+I+J)       10.00%       \$10,1307,273.45         Total Construction Cost       (H+I+J)       2.00%       \$1,876,060.62       \$1,876,060.62						
Contingencies*         (15% - 30%) of (A)         30.00%         \$18,000,000.00           ITS         (6-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Display = 6%         100%         \$3,120,000.00         \$3,120,000.00           Display = 6%         100%         \$3,120,000.00         \$3,120,000.00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200.00           Construction Signing & Traffic Control         \$10 25% of (A+B+C+D+E)         7.00%         \$5,735,184.00           Default = 5%         7.00%         \$6,136,646.88         Default = 20%         \$3,803,030.88           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$1,876,060.62           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$5,628,181.85           Default = 12%         5         \$101,307,273.35         \$101,307,273.35           Subtotal of Construction Cost         (H+I+I+J)         10.00%         \$10,130,727.34           Tota		Cost	% Used		% Range	
Contingencies*         (15% - 30%) of (A)         30.00%         \$18,000,000.00           ITS         (6-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200.00           Construction Signing & Traffic Control         \$10 28% of (A+B+C+D+E)         7.00%         \$8,136,646.88           Default = 5%         7.00%         \$8,136,646.88         \$93,803,030.88           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$1,876,060.62           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$5,628,181.85           Default = 2%         5         \$10,1307,273.35         \$101,307,273.35           Subtotal of Construction Cost         (H+I+J)         6.00%         \$101,307,273.35           Total Preliminary Engineering         17% of (K)         10.00%         \$10,1307,273.35           Total Pre						
Contingencies*         (15% - 30%) of (A)         30.00%         \$18,000,000.00           ITS         (6-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200.00           Construction Signing & Traffic Control         \$10 28% of (A+B+C+D+E)         7.00%         \$8,136,646.88           Default = 5%         7.00%         \$8,136,646.88         \$93,803,030.88           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$1,876,060.62           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$5,628,181.85           Default = 2%         5         \$10,1307,273.35         \$101,307,273.35           Subtotal of Construction Cost         (H+I+J)         6.00%         \$101,307,273.35           Total Preliminary Engineering         17% of (K)         10.00%         \$10,1307,273.35           Total Pre						
Contingencies*         (15% - 30%) of (A)         30.00%         \$18,000,000.00           ITS         (6-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Display = 6%         100%         \$3,120,000.00         \$3,120,000.00           Display = 6%         100%         \$3,120,000.00         \$3,120,000.00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200.00           Construction Signing & Traffic Control         \$10 25% of (A+B+C+D+E)         7.00%         \$5,735,184.00           Default = 5%         7.00%         \$6,136,646.88         Default = 20%         \$3,803,030.88           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$1,876,060.62           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Force Account - Utilities         (1 to 2%) of (H)         6.00%         \$5,628,181.85           Default = 12%         5         \$101,307,273.35         \$101,307,273.35           Subtotal of Construction Cost         (H+I+I+J)         10.00%         \$10,130,727.34           Tota	(A)	\$60.000.000.00	N/A		Project Dependent	Project Construction Bid Items
ITS         (6-10%) of (A+B)         0.00%         \$0.00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Default = 6%         Image/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Signing and Striping         (1-5%) of (A+BC-CD)         1.00%         \$811,200.00           Default = 6%         Image/Utilities         7.00%         \$5,735,184.00           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$6,136,646.88           Mobilization         (4 to 10%) of (A+B-C+D+E+F)         7.00%         \$6,136,646.88           Default = 7%         Image/Utilities         \$93,803,030.88           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Default = 2%         Image/Utilities         \$10,1307,273.35         \$10,1307,273.35           Total Of Construction Engineering         17% of (K)         10.00%         \$1,876,060.62           Default = 12%         Image/Utilities         \$10,1307,273.35         \$10,1307,273.35           Total Construction Engineering         17% of (K)         10.00%         \$1,876,060.62           Image/Utilities         Project Dependent         2.00%         \$1,876,060.62 <t< td=""><td></td><td>+ / /</td><td></td><td></td><td></td><td></td></t<>		+ / /				
Default = 6%         4.00%         \$3,120,000,00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000,00           Default = 6%         100%         \$811,200,00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200,00           Default = 5%         100%         \$811,200,00         \$811,200,00           Default = 5%         100%         \$811,200,00         \$811,200,00           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D)         7.00%         \$5,735,184,00           Default = 20%         7.00%         \$6,136,646,88         \$93,803,030,88           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$93,803,030,88           Force Account - Utilities         (1 to 2%) of (H)         \$93,803,030,88         \$93,803,030,88           Force Account - Utilities         (1 to 2%) of (H)         \$1,876,060,62         \$1,876,060,62           Subtotal of Construction Cost         (H+I+J)         \$101,307,27,34         \$101,307,27,34           Total Or Construction Engineering **         15% of (K)         10,00%         \$10,130,727,34           Total Preliminary Engineering**         15% of (K)         10,00%         \$1,876,060,62           Utilities         Project Depe	(B)	\$18,000,000.00	30.00%		(15% - 30%) of (A)	Contingencies*
Default = 6%         4.00%         \$3,120,000,00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000,00           Default = 6%         100%         \$811,200,00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200,00           Default = 5%         100%         \$811,200,00         \$811,200,00           Default = 5%         100%         \$811,200,00         \$811,200,00           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D)         7.00%         \$5,735,184,00           Default = 20%         7.00%         \$6,136,646,88         \$93,803,030,88           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$93,803,030,88           Force Account - Utilities         (1 to 2%) of (H)         \$93,803,030,88         \$93,803,030,88           Force Account - Utilities         (1 to 2%) of (H)         \$1,876,060,62         \$1,876,060,62           Subtotal of Construction Cost         (H+I+J)         \$101,307,27,34         \$101,307,27,34           Total Or Construction Engineering **         15% of (K)         10,00%         \$10,130,727,34           Total Preliminary Engineering**         15% of (K)         10,00%         \$1,876,060,62           Utilities         Project Depe						
Default = 6%         4.00%         \$3,120,000,00           Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000,00           Default = 6%         100%         \$811,200,00           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200,00           Default = 5%         100%         \$811,200,00         \$811,200,00           Default = 5%         100%         \$811,200,00         \$811,200,00           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D)         7.00%         \$5,735,184,00           Default = 20%         7.00%         \$6,136,646,88         \$93,803,030,88           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$93,803,030,88           Force Account - Utilities         (1 to 2%) of (H)         \$93,803,030,88         \$93,803,030,88           Force Account - Utilities         (1 to 2%) of (H)         \$1,876,060,62         \$1,876,060,62           Subtotal of Construction Cost         (H+I+J)         \$101,307,27,34         \$101,307,27,34           Total Or Construction Engineering **         15% of (K)         10,00%         \$10,130,727,34           Total Preliminary Engineering**         15% of (K)         10,00%         \$1,876,060,62           Utilities         Project Depe			0.00%		(6.10%) of (A+D)	271
Drainage/Utilities         (3-10%) of (A+B)         4.00%         \$3,120,000.00           Default = 6%	(C)	<u> </u>	0.00%			
Default = 6%           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200.00           Default = 5%         7.00%         \$5,735,184.00           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$5,735,184.00           Default = 20%         7.00%         \$5,136,646.88         7.00%         \$5,136,646.88           Default = 7%         7.00%         \$6,136,646.88         7.00%         \$5,136,646.88           Default = 7%         7.00%         \$5,628,138,646.88         7.00%         \$5,628,138,646.88           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Default = 2%         5         5         5,628,181.85           Subtotal of Construction Cost         (H+I+J)         \$101,307,273.35           Total Construction Engineering         17% of (K)         7.00%         \$7,091,509.13           Total Preliminary Engineering**         15% of (K)         10.00%         \$10,130,727.34           Right of Way         Project Dependent         2.00%         \$1,876,060.62           Utilities         Project Dependent         N/A         \$0.00           Cost         CuantTrY         \$24,000,000.00         \$24,000,000.00         \$24,0433					Delault = 078	
Default = 6%           Signing and Striping         (1-5%) of (A+B+C+D)         1.00%         \$811,200.00           Default = 5%         7.00%         \$5,735,184.00           Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$5,735,184.00           Default = 20%         7.00%         \$5,136,646.88         7.00%         \$5,136,646.88           Default = 7%         7.00%         \$6,136,646.88         7.00%         \$5,136,646.88           Default = 7%         7.00%         \$5,628,138,646.88         7.00%         \$5,628,138,646.88           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Default = 2%         5         5         5,628,181.85           Subtotal of Construction Cost         (H+I+J)         \$101,307,273.35           Total Construction Engineering         17% of (K)         7.00%         \$7,091,509.13           Total Preliminary Engineering**         15% of (K)         10.00%         \$10,130,727.34           Right of Way         Project Dependent         2.00%         \$1,876,060.62           Utilities         Project Dependent         N/A         \$0.00           Cost         CuantTrY         \$24,000,000.00         \$24,000,000.00         \$24,0433	(D)	\$3.120.000.00	4.00%		(3-10% )of (A+B)	Drainage/Utilities
Default = 5%		·····				
Default = 5%						
Construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$5,735,184.00           Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$6,136,646.88           Default = 7%         7.00%         \$8,136,646.88           Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$93,803,030.88           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Default = 2%         6.00%         \$5,628,181.85         0           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$5,628,181.85           Default = 12%         5101,307,273.35         5101,307,273.35         5101,307,273.35           Total Of Construction Cost         (H+I+J)         7.00%         \$7,091,509.13           Total Preliminary Engineering         17% of (K)         7.00%         \$1,876,060.62           Total Preliminary Engineering**         15% of (K)         10.00%         \$1,876,060.62           Utilities         Project Dependent         N/A         \$0.00           Cost         QUANTITY         \$40,433,559.72         \$40,433,559.72	(E)	\$811,200.00	1.00%	D)		Signing and Striping
Default = 20%					Default = 5%	
Default = 20%		<b>#5 705 404 00</b>	7.000/			Organization Obraine & Teeffic Organization
Mobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$6,136,646.88           Default = 7%	(F)	\$5,735,184.00	7.00%	+D+E)		Construction Signing & Traffic Control
Default = 7%         Subscription           Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$93,803,030.88           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Default = 2%              Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$5,628,181.85           Default = 12%              Subtotal of Construction Cost         (H+I+J)         \$101,307,273.35            Total Construction Engineering         17% of (K)         7.00%         \$10,130,727.34           Total Preliminary Engineering**         15% of (K)         10.00%         \$11,876,060.62           Right of Way         Project Dependent         2.00%         \$1,876,060.62           Utilities         Project Dependent         X/A         \$0.00           Inflation to 2010 dollars (assuming 4% per year)					Delault = 20%	
Default = 7%         Subscription           Total of Construction Bid Items         (A+B+C+D+E+F+G)         \$93,803,030.88           Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Default = 2%              Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$5,628,181.85           Default = 12%              Subtotal of Construction Cost         (H+I+J)         \$101,307,273.35            Total Construction Engineering         17% of (K)         7.00%         \$10,130,727.34           Total Preliminary Engineering**         15% of (K)         10.00%         \$11,876,060.62           Right of Way         Project Dependent         2.00%         \$1,876,060.62           Utilities         Project Dependent         X/A         \$0.00           Inflation to 2010 dollars (assuming 4% per year)	(G)	\$6,136,646,88	7.00%	C+D+E+F)	(4 to 10%) of (A+B+	Mobilization
Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Default = 2%	(0)	<u> </u>		0.5.2,		
Force Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,876,060.62           Default = 2%						
Image: Construction Engineering         Image: Constru						
Default = 2%         6.00%         \$5,628,181.85           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$5,628,181.85           Default = 12%	(H)	\$93,803,030.88		)	(A+B+C+D+E+F+G	Total of Construction Bid Items
Default = 2%         6.00%         \$5,628,181.85           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$5,628,181.85           Default = 12%						
Default = 2%         6.00%         \$5,628,181.85           Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$5,628,181.85           Default = 12%	(1)	\$1,876,060,62	2 00%		(1 to 2%) of (H)	Force Account - Utilities
Force Account - Misc.         (10 to 15%) of (H)         6.00%         \$5,628,181.85           Default = 12%	(1)	<u>ψ1,070,000.02</u>	2.0070			Torce Account - Otinites
Default = 12%						
Subtotal of Construction Cost       (H+I+J)       \$101,307,273.35         Total Construction Engineering       17% of (K)       7.00%       \$7,091,509.13         Total Preliminary Engineering**       15% of (K)       10.00%       \$10,130,727.34         Right of Way       Project Dependent       2.00%       \$1,876,060.62         Utilities       Project Dependent       N/A       \$0.00         Inflation to 2010 dollars (assuming 4% per year)       Ye year)       \$1.01,00,000,000	(J)	\$5,628,181.85	6.00%			Force Account - Misc.
Total Construction Engineering       17% of (K)       7.00%       \$7,091,509.13         Total Preliminary Engineering**       15% of (K)       10.00%       \$10,130,727.34         Right of Way       Project Dependent       2.00%       \$1,876,060.62         Utilities       Project Dependent       N/A       \$0.00         COST       QUANTITY       \$1.24,000,000,000       \$1.24,000,000,000         Inflation to 2010 dollars (assuming 4% per year)       \$40,433,559.72       \$40,433,559.72					Default = 12%	
Total Construction Engineering       17% of (K)       7.00%       \$7,091,509.13         Total Preliminary Engineering**       15% of (K)       10.00%       \$10,130,727.34         Right of Way       Project Dependent       2.00%       \$1,876,060.62         Utilities       Project Dependent       N/A       \$0.00         COST       QUANTITY       \$1.24,000,000,000       \$1.24,000,000,000         Inflation to 2010 dollars (assuming 4% per year)       \$40,433,559.72       \$40,433,559.72		<b>.</b>			41.1.5	
Image: Construction of the second	(K)	\$101,307,273.35			(H+I+J)	Subtotal of Construction Cost
Image: Construction of the second	(L)	\$7 091 509 13	7 00%		17% of (K)	Total Construction Engineering
Right of Way         Project Dependent         2.00%         \$1,876,060.62           Utilities         Project Dependent         N/A         \$0.00           COST         QUANTITY         ::::::::::::::::::::::::::::::::::::	(⊑)	φ1,031,003.10	1.0070			
Right of Way         Project Dependent         2.00%         \$1,876,060.62           Utilities         Project Dependent         N/A         \$0.00           COST         QUANTITY         ::::::::::::::::::::::::::::::::::::						
Utilities       Project Dependent       N/A       \$0.00         Utilities       Project Dependent       \$0.00       \$0.00         COST       QUANTITY       \$1.00       \$1.11       \$1.00       \$1.11       \$1.10       \$1.11       \$1.10       \$1.11       \$1.10       \$1.11       \$1.11       \$1.10       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11	(M)	\$10,130,727.34	10.00%		15% of (K)	Total Preliminary Engineering**
Utilities       Project Dependent       N/A       \$0.00         Utilities       Project Dependent       \$0.00       \$0.00         COST       QUANTITY       \$1.00       \$1.11       \$1.00       \$1.11       \$1.10       \$1.11       \$1.10       \$1.11       \$1.10       \$1.11       \$1.11       \$1.10       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11						
Utilities       Project Dependent       N/A       \$0.00         Utilities       Project Dependent       \$0.00       \$0.00         COST       QUANTITY       \$1.00       \$1.11       \$1.00       \$1.11       \$1.10       \$1.11       \$1.10       \$1.11       \$1.10       \$1.11       \$1.11       \$1.10       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11       \$1.11						
Cost         QUANTITY           Utilition to 2010 dollars (assuming 4% per year)         VIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		\$1,976,060,62	2 0.0%		Project Dependent	Pight of Way
COST         QUANTITY           Inflation to 2010 dollars (assuming 4% per year)         \$40,433,559.72	(N)	φ1,070,000.02	2.00%			
COST         QUANTITY           ::::::::::::::::::::::::::::::::::::	(O)	\$0.00	N/A		Project Dependent	Utilities
Inflation to 2010 dollars (assuming 4% per year)						
Inflation to 2010 dollars (assuming 4% per year) \$40,433,559.72						
Inflation to 2010 dollars (assuming 4% per year) \$40,433,559.72		24,000,000.00			24,000,000.00	Rolling Stock
Total Project Cost		\$40,433,559.72			4% per year)	Inflation to 2010 dollars (assuming
\$184,839,130.16	(P)	\$184,839,130.16				Total Project Cost
*Contingencies includes environmental mitigation costs		μΙ_	I		ation costs	*Contingencies includes environmental mitiga
**Total Preliminary Engineering includes cost of developing NEPA documents				ocuments		

### TIER 1 - PEIS COST ESTIMATE SILVER PLUME RAMPS

8/17/2010 14:29	1				
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00		0.00		
Walls (SF)	90.00				
Earthwork (CY)	20.00		274,780.00		
Pavement (TON)	70.00		313,250.00		
Base Course (CY)	40.00		120,520.00		
Barrier (Type 7)(LF)	60.00	3,325.00	199,500.00		
Total			1,452,550.00		
			-		
	% Range		% Used	Cost	
			_		
			-		
Project Construction Bid Items	Project Dependent		N/A	\$1,452,550.00	(A)
Contingencies*	(15% - 30%) of (A)		30.00%	\$435,765.00	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				
Drainage/Utilities	(3-10% )of (A+B)		6.00%	\$113,298.90	(D)
	Default = 6%				· · ·
Signing and Striping	(1-5%) of (A+B+C+	D)	5.00%	\$100,080.70	(E)
	Default = 5%			••••••••••••••••••••••••••••••••••••••	(-)
Construction Signing & Traffic Control	5 to 25% of (A+B+0	2+D+E)	15.00%	\$315,254.19	(F)
eened deden eighnig a traine eender	Default = $20\%$			\$0.10,201110	(. )
	Dolaan - 2070		•		
Mobilization	(4 to 10%) of (A+B-	+C+D+E+E)	7.00%	\$169,186.41	(G)
Mobilization	Default = $7\%$		1.0070	\$100,100.41	(0)
	Delaur = 170				
Total of Construction Bid Items	(A+B+C+D+E+F+G	2)		\$2,586,135.20	(H)
		»)	-	φ2,300,133.20	(11)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$51,722.70	
Force Account - Otimiles	Default = 2%		2.00%	\$31,722.70	(I)
	Default = 2%				
Fares Assessed Miss	(40 + 450) + (11)		C 000/	<u>Ф455 400 44</u>	(1)
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$155,168.11	(J)
	Default = 12%		-		
	(11.1.1)			<b>#0 700 000 00</b>	(17)
Subtotal of Construction Cost	(H+I+J)		-	\$2,793,026.02	(K)
	1				
Total Construction Engineering	17% of (K)		12.00%	\$335,163.12	(L)
	4504 440		10.000/	Ac=	()
Total Preliminary Engineering**	15% of (K)		10.00%	\$279,302.60	(M)
				<b>A</b> - 1	
Right of Way	Project Dependent		2.00%	\$51,722.70	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			the second second
	0.00	0.00		0.00	
	0.00			0.00	
	0.00			.0.00	11 11
	0.00			0.00	1 1
	0.00	0.00		0.00	1. 11
Inflation to 2010 dollars (assuming	4% per year)			\$968,580.04	
Total Project Cost				\$4,427,794.49	(P)
10					
*Contingencies includes environmental mitigat			1	1	
**Total Preliminary Engineering includes cost	or developing NEPA d	ocuments			

### TIER 1 - PEIS COST ESTIMATE SH 103 RECONFIGURE

8/17/2010 14:29	[				
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00				
Walls (SF)	90.00				
Earthwork (CY)	20.00				
Pavement (TON)	70.00				
Base Course (CY)	40.00				
Barrier (Type 7)(LF)	60.00	11,066.00	663,960.00		
T-1-1			47.007.470.00		
Total			17,097,470.00		
			-		
	% Range		% Used	Cost	
	/o ixange		70 <b>U</b> 3eu	0031	
			-		
Project Construction Bid Items	Project Dependent		N/A	\$17,097,470.00	(A)
				φπ,σοι,πο.σο	(7.9
Contingencies*	(15% - 30%) of (A)		30.00%	\$5,129,241.00	(B)
Contailgenoies			00.0070	ψ0,120,241.00	(0)
			•		
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%			φ0.00	(3)
	_ 0.00 = 0.0				
Drainage/Utilities	(3-10% )of (A+B)		6.00%	\$1,333,602.66	(D)
Brainage, e anae	Default = $6\%$		_0.0070		(=)
Signing and Striping	(1-5%) of (A+B+C+	D)	5.00%	\$1,178,015.68	(E)
	Default = 5%			······································	(-)
			-		
Construction Signing & Traffic Control	5 to 25% of (A+B+0	C+D+E)	15.00%	\$3,710,749.40	(F)
	Default = $20\%$				(- /
			-		
Mobilization	(4 to 10%) of (A+B-	+C+D+E+F)	7.00%	\$1,991,435.51	(G)
	Default = 7%	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · ·	(-)
Total of Construction Bid Items	(A+B+C+D+E+F+G			\$30,440,514.26	(H)
	`				
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$608,810.29	(I)
	Default = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$1,826,430.86	(J)
	Default = 12%				
Subtotal of Construction Cost	(H+I+J)			\$32,875,755.40	(K)
Total Construction Engineering	17% of (K)		12.00%	\$3,945,090.65	(L)
Total Preliminary Engineering**	15% of (K)		10.00%	\$3,287,575.54	(M)
Right of Way	Project Dependent		2.00%	\$608,810.29	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
<pre>collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.colle collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.collected.colle</pre>	COST	QUANTITY		negetetetetetetetetetetetetetetetetetete	
	0.00	0.00		0.00	
	0.00			0.00	11 11
	0.00			0.00	
	0.00			0.00	
	0.00	0.00		0.00	20.045
Inflation to 2010 dollars (assuming	4% per year)	I		\$11,400,824.92	
Total Project Cost				\$52,118,056.79	(P)
*Contingencies includes environmental mitigat	l tion costs	1	l l		
**Total Preliminary Engineering includes cost of		ocuments			
rotari romininary Engineering includes cost t	a actioning NLI A u	ooumonito	I I		

### TIER 1 - PEIS COST ESTIMATE DOWD ALT. 1 - w RAIL

		OLIANTITY	T300	I I	
BID ITEMS Embankment (CIP)	COST PER UNIT	QUANTITY 249,865	COST 1,998,920.00		
HBP	65				
Retaining Wall	90		21,190,545.00		
Roadway Bridge	150		55,687,813.50		
FGT Bridge	225	46,073			
FGT Track & Ballast	240				
Concrete Bikeway (6 INCH)	35		178,115.00		
Guardrail Type 7	80				
Sound Walls	30	86,400	2,592,000.00	•	
				\$107,162,647.07	
	% Range		% Used	Cost	
Project Construction Bid Items	Project Dependent		N/A	\$107,162,647.07	(A)
Contingencies*	(450( 200() of (A)		20.00%	<b>\$20.440.704.40</b>	
Contingencies*	(15% - 30%) of (A)		30.00%	\$32,148,794.12	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				
Duraina ara // Milikir -	(0.400()-f (A. D)		F 000/	\$0.005 570.00	
Drainage/Utilities	(3-10% )of (A+B) Default = 6%		5.00%	\$6,965,572.06	(D)
Signing and Striping	(1-5%) of (A+B+C+	D)	4.00%	\$5,851,080.53	(E)
	Default = 5%				
				<u> </u>	
Construction Signing & Traffic Control	5 to 25% of (A+B+C Default = 20%	C+D+E)	10.00%	\$11,997,929.97	(F)
	Doldan - 2070				
Mobilization	(4 to 10%) of (A+B-	+C+D+F+F)	7.00%	\$9,238,406.07	(G)
	Default = $7\%$		1.0070		(0)
Total of Construction Bid Items	(A+B+C+D+E+F+G	i)		\$173,364,429.83	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$3,467,288.60	(I)
	Default = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$10,401,865.79	(J)
	Default = 12%				
	(11.1.1)			\$407.000 F04.04	(10)
Subtotal of Construction Cost	(H+I+J)			\$187,233,584.21	(K)
Total Construction Engineering	17% of (K)		10.00%	\$18,723,358.42	(L)
V					
Total Preliminary Engineering**	15% of (K)		9.00%	\$16,851,022.58	(M)
			-		
Right of Way	Project Dependent		2.00%	\$3,744,671.68	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			
					• • •
Geohazard Mitigation (LS) + 30% cont. Inflation to 2010 dollars (assuming	75,000,000.00	· · · · · · · ·		\$75,000,000.00 \$84,434,738.33	• • • •
	,,,,				
Total Project Cost				\$385,987,375.23	(P)
*Contingencies includes environmental mitig	ation costs	1	<u> </u>	1	
**Total Preliminary Engineering includes cost		locuments			
rotari romminary Engineening moludes cos			I I	1	

Date Prepared: 1/5/05

### TIER 1 - PEIS COST ESTIMATE DOWD ALT. 1 - NO RAIL

			COST		
BID ITEMS Embankment (CIP)	COST PER UNIT	QUANTITY 249,865			
HBP	65				
Retaining Wall	90				
Roadway Bridge	150	,	55,687,813.50		
FGT Bridge	225	0			
FGT Track & Ballast	240	0	0.00		
Concrete Bikeway (6 INCH)	35	5,089			
Guardrail Type 7	80	,			
Sound Walls	30	86,400	2,592,000.00		
Total			94,250,378.57		
			-		
	% Range		% Used	Cost	
Project Construction Bid Items	Project Dependent		N/A	\$94,250,378.57	(A)
Contingencies*	(15% - 30%) of (A)		30.00%	\$28,275,113.57	(B)
ITS	(6-10%) of (A+B) Default = 6%		0.00%	\$0.00	(C)
Drainage/Utilities	(3-10% )of (A+B) Default = 6%		6.00%	\$7,351,529.53	(D)
Signing and Striping	(1-5%) of (A+B+C+ Default = 5%	D)	5.00%	\$6,493,851.08	(E)
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	15.00%	\$16,214,363.88	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B- Default = 7%	+C+D+E+F)	7.00%	\$8,701,708.61	(G)
Total of Construction Bid Items	(A+B+C+D+E+F+G	) 		\$161,286,945.25	(H)
Force Account - Utilities	(1 to 2%) of (H) Default = 2%		2.00%	\$3,225,738.91	(I)
Force Account - Misc.	(10 to 15%) of (H) Default = 12%		6.00%	\$9,677,216.72	(J)
Subtotal of Construction Cost	(H+I+J)			\$174,189,900.87	(K)
Total Construction Engineering	17% of (K)		12.00%	\$20,902,788.10	(L)
Total Preliminary Engineering**	15% of (K)		10.00%	\$17,418,990.09	(M)
Right of Way	Project Dependent		2.00%	\$3,483,798.02	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			
Geohazard Mitigation (LS) + 30% cont Inflation to 2010 dollars (assuming				\$75,000,000.00 \$81,478,733.58	
Total Project Cost	1			\$372,474,210.66	(P)
*Contingencies includes environmental mitiga	tion costs				
**Total Preliminary Engineering includes cost		locumente			
rotar remninary Engineening includes cost	or developing NEFA (		1	1	

Date Prepared: 1/5/05

#### TIER 1 - PEIS COST ESTIMATE DOWD ALT. 1 w/AGS

BID ITEMS	COST PER UNIT	QUANTITY	COST		
Embankment (CIP)	8				
HBP	65	117,255	7,621,545.07		
Retaining Wall	90	235,451	21,190,545.00		
Roadway Bridge	150		55,687,813.50		
FGT Bridge	225				
FGT related	1	204,210,196.45	204,210,196.45		
Concrete Bikeway (6 INCH)	35				
Guardrail Type 7	80				
Sound Walls	30	86,400	2,592,000.00		
				\$298,460,575.02	
	% Dense		0/ Heed	Cast	
	% Range		% Used	Cost	
			-		
Project Construction Bid Items	Project Dependent		N/A	\$298,460,575.02	(A)
Contingencies*	(15% - 30%) of (A)		30.00%	\$89,538,172.51	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				
				<b>*</b> • • • • • • • • • • • • • • • • • • •	
Drainage/Utilities	(3-10% )of (A+B)		5.00%	\$19,399,937.38	(D)
	Default = 6%		-		-
Signing and Striping	(1-5%) of (A+B+C+	ח) (ח	4.00%	\$16,295,947.40	(E)
	Default = $5\%$		4.00%	\$10,295,947.40	(⊏)
	Default = 576		-		
Construction Signing & Traffic Control	5 to 25% of (A+B+0	( )+D+F)	10.00%	\$33,415,645.98	(F)
	Default = $20\%$		10.0070	φου,+10,0+0.00	(')
	2010011 2070		-		
Mobilization	(4 to 10%) of (A+B-	+C+D+E+F)	7.00%	\$25,730,047.40	(G)
	Default = 7%				
Total of Construction Bid Items	(A+B+C+D+E+F+G	<u>6)</u>		\$482,840,325.69	(H)
			_		
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$9,656,806.51	(I)
	Default = 2%		-		
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$28,970,419.54	(J)
	Default = 12%		-		
Subtotal of Construction Cost			-	¢E01 467 EE1 74	
SUDICIAL OF CONSTRUCTION COST	(H+I+J)			\$521,467,551.74	(K)
Total Construction Engineering	17% of (K)		10.00%	\$52,146,755.17	(L)
			10.00 %	ψυΖ, 140,700.17	(Ľ)
Total Preliminary Engineering**	15% of (K)		10.00%	\$52,146,755.17	(M)
				<b>.</b>	
Right of Way	Project Dependent		2.00%	\$10,429,351.03	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
	COST	QUANTITY			
Geohazard Mitigation (LS) + 30% cont.	75,000,000.00	· · · · · · · ·		\$75,000,000.00	
			[		
Total Project Cost	·	·	· · ·	\$711,190,413.13	(P)
Contingencies includes environmental mitiga			1	1	
**Total Preliminary Engineering includes cost	of developing NEPA of	documents			L

#### DOWD ALT 2A - no Rail.xls

BID ITEMS	COST PER UNIT	QUANTITY	COST		
Unclassified Excavation (CIP)	8	383,226	3,065,808.00		
HBP	65	53,814	3,497,923.00		
Retaining Wall	90	259,637	23,367,330.00		
Roadway Bridge	150	243,637	36,545,550.00		
Guardrail Type 7	80	48,062	3,844,960.00		
Sound Walls	30	69,600	2,088,000.00		
			72,409,571.00		
			72,403,571.00		
	% Range		% Used	Cost	
			_		
Project Construction Bid Items	Project Dependent		N/A	\$72,409,571.00	(A)
Contingencies*	(15% - 30%) of (A)		30.00%	\$21,722,871.30	(B)
			-		
170			0.000/		
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				
	(2.400() of (A + D)		C 000/		
Drainage/Utilities	(3-10% )of (A+B) Default = 6%		6.00%	\$5,647,946.54	(D)
	Delault = 0%		-		
Signing and Striping	(1-5%) of (A+B+C+	(ח	5.00%	\$4,989,019.44	(E)
	Default = 5%		0.00 %	ψ+,909,019.44	(∟)
	Delault = 576		-		
Construction Signing & Traffic Control	5 to 25% of (A+B+0	() (+D+E)	15.00%	\$12,456,980.55	(F)
Sonstruction organing & Traine Control	Default = 20%		10.0070	ψτ2,+00,000.00	(1)
	Doladit - 2070				
Mobilization	(4 to 10%) of (A+B-	+C+D+E+F)	7.00%	\$6,685,246.23	(G)
	Default = 7%			+ = , = = = ; = : = : = :	(-)
Total of Construction Bid Items	(A+B+C+D+E+F+G			\$123,911,635.05	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$2,478,232.70	(I)
	Default = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$7,434,698.10	(J)
	Default = 12%		-		
			-	<b>*</b> 400 00 4 505 00	(10)
Subtotal of Construction Cost	(H+I+J)			\$133,824,565.86	(K)
	170/ of (1/)		12 00%	¢16.050.047.00	
Total Construction Engineering	17% of (K)		12.00%	\$16,058,947.90	(L)
Total Preliminary Engineering**	15% of (K)		10.00%	\$13,382,456.59	(M)
Total Freilminary Engineering	15% UI (K)		10.00%	φ13,302,400.09	(101)
Right of Way	Project Dependent		2.00%	\$2,676,491.32	(N)
	. cjest 2 opondorit			,c. c, ioi.oz	()
Utilities		1	N/A	\$0.00	(O)
	Project Dependent				
Gunuos	Project Dependent			Ţ	
· · · · · · · · · · · · · · · · · · ·	Project Dependent	QUANTITY.			
		QUANTITY.		\$10,000,000.00	
GeoHazard Mitigation (LS) + 30% Cont. Tunnel (LF) including 30% contingency	<b>COST</b> 10,000,000.00	QUANTITY 1. 11,041.00.			
GeoHazard Mitigation (LS) + 30% Cont. Tunnel (LF) including 30% contingency.	<b>.COST</b> 10,000,000,00 17,000,00			\$10,000,000.00	
GeoHazard Mitigation (LS) + 30% Cont.	<b>.COST</b> 10,000,000,00 17,000,00			\$10,000,000.00	
GeoHazard Mitigation (LS) + 30% Cont. Tunnel (LF) including 30% contingency Inflation to 2010 dollars (assuming	<b>.COST</b> 10,000,000,00 17,000,00			\$10,000,000.00 \$187,697,000.00 \$101,819,049.27	
GeoHazard Mitigation (LS) + 30% Cont. Tunnel (LF) including 30% contingency.	<b>.COST</b> 10,000,000,00 17,000,00			\$10,000;000.00 \$187,697;000.00	(P)
GeoHazard Mitigation (LS) + 30% Cont. Tunnel (LF) including 30% contingency Inflation to 2010 dollars (assuming	<b>.COST</b> 10,000,000,00 17,000,00			\$10,000,000.00 \$187,697,000.00 \$101,819,049.27	
GeoHazard Mitigation (LS) + 30% Cont. Tunnel (LF) including 30% contingency Inflation to 2010 dollars (assuming	<b>COST</b> 10,000,000.00 17,000.00 4% per year)			\$10,000,000.00 \$187,697,000.00 \$101,819,049.27	

#### Minimal Action Components Associated with each Build Alternative - Page 1 of 2

Imp 1 and mp 4 a						Transit A	Iternatives		High	way Alterna	tives
Image: section of the secti				1	2	3	4	5	6	7	8
Product State         Product									Ť		
Image: constraint of the second sec						Guideway	Bus in		Highway	Highway	Reversible/ HOV/HOT Lanes
Image: space				mp 116 to 260	mp 142 to 260	mp 142 to 260	mp 142 to 260	mp 142 to 260			mp 169 to 173 mp 213.5 to 247
Image: state				Glenwood Springs	Eagle Airport to	Eagle Airport to	Eagle Airport to	Eagle Airport to	Dowd Canyon	Dowd Canyon	Dowd Canyon EJMT to Floyd Hill
Location         NA Control           Oblemost Spring (rop 10)         513           Light & Spring Net (rop 110)         514           Light & Spring Net (rop 110)         514           Light & Spring Net (rop 110)         514           Light & Spring Net (rop 110)         515           Light & Spring Net (rop 110)         514           Light & Spring Net (rop 110)         515           Light & Spring Net (rop 110)         515           Light & Spring Net (rop 110)         516           Light & Spring Net (rop 110)         517           Light & Spring Net (rop 110)         518           Light & Spring Net (rop 20)         513           Light & Spring Net (rop 20)         514           Light & Spring Net (rop 20)         513           Light & Spring Net (rop 20)         514           Light & Spring Net (rop 20)         514           Light & Spring Net (rop 20)         514           Light & Spring Net (rop 20)         513           Light & Spring Net (rop 20)         514      <		Ras	e Cost (Billions)								\$2,678
Enderson Spring, Program         State         State         State           Image: Spring Program         State         State         State         State         State           Image: Spring Program         State         State <td< th=""><th></th><th></th><th>MA Cost*</th><th></th><th>\$2,000</th><th><i>(1,00)</i></th><th><i><b>QQQZ</b></i></th><th>¢C,C277</th><th><i><b>v2</b>,001</i></th><th>\$0,0<b>1</b>0</th><th><i>\$</i><b>1</b>,070</th></td<>			MA Cost*		\$2,000	<i>(1,00)</i>	<i><b>QQQZ</b></i>	¢C,C277	<i><b>v2</b>,001</i>	\$0,0 <b>1</b> 0	<i>\$</i> <b>1</b> ,070
End         Egyme (m) 1-0)         S2         Image:	Gler	enwood Springs (mp 116)									
Prove the set of the set	Gyp	ypsum (mp 140)	\$2								
Net or photo         Add or photo<	Eag	gle & Spur Road (mp 147)	\$10								
Nerror         Main ring 17.0         515         Image: Sign 12.0											
Valid Vect (up 17) Simba Rum         55         Image: Constraint of the second											
Vertex         Copyer Mountain (mp 105)         52         Image: Copyer Mountain (mp 105)         52           Image: Copyer Mountain (mp 105)         510         Image: Copyer Mountain (mp 105)         510         Image: Copyer Mountain (mp 105)         100         Image: Copyer Mountain (mp 105)         Image: Copyer M	Min	inturn (mp.171) ail West (mp.173) / Simba Run									
Image: Value of Value (Value (Value Value V	Con	opper Mountain (mp 195)									
New Part of Vision (mg 20)         Silo         Non International (Mg 20)         Silo         Non International (Mg 20)         Silo         Non International (Mg 20)         Non Internaternational (Mg 20)         Non Internationa				And the second second							
Under the state of th	Fris		\$10								
Under the state of th	Silv										
under the state of th	Lov										
Emplete time 2202         S1         Image: S1         <	Silv										
Non-wide         Downicitie (org 234)         52         Image: Signed	Geo	ppire (mp 222)									
Note of the second se											
Note of the section of the sectin of the section of the section of the section of the se											
Note         Name         Name <th< td=""><td>Idah</td><td>aho Springs West (mp 239)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Idah	aho Springs West (mp 239)									
Note of Post Hill (US 6 (mp 24)-4)         510         Image: Single of Post Hill (US 6 (mp 24)-4)         Single of Post Hill (US 6 (mp 24)-4) <th< td=""><td>Idah</td><td>aho Springs / SH 103 (mp 240)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Idah	aho Springs / SH 103 (mp 240)									
Hour Hills / Baser Brook (mp 247/ mp 248)         S2         Image: S2	Idah	aho Springs East (mp 240)									
Average         Average         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3         3.3 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
Avoin to Yosh, Optimit (DS) (mp 107 - 108)         3.3											
Avoin to Yosh, Optimit (DS) (mp 107 - 108)         3.3											
Avoin to Yosk, Cynnin (EB) (mp 107 - 188)         33											
Avoin to Yosh, Optimit (DS) (mp 107 - 108)         3.3	Wes	est of Wolcott (mp 155 - 156)	\$18								
Avoin to Yosh, Optimit (DS) (mp 107 - 108)         3.3	Dov Dov	owd Canyon (mp 170 - 173)	\$245							ale ale ale	
Avoin to Yosh, Optimit (DS) (mp 107 - 108)         3.3	S Fall										
Avoin to Yosk, Cynnin (EB) (mp 107 - 188)         33	East	ist of Twin Tunnels (mp 242 - 245)	\$137								
Avoin to Yosh, Optimit (DS) (mp 107 - 108)         3.3			<b>*</b> 2								
Vest side of Vail Pass. Uphill (EB) (mp 185 - 190)         \$135         Image: Control of C											
Frise to Silverthome (EB) (mp 202205.) ************************************	Wes	est side of Vail Pass. Unbill (EB) (mp 185 - 190)									
EMT to Herman Gulch, Downhill (EB) (mp 215 - 218) ****         S5         Image: Control of the state of th	Fris										
Operation         Operation         Solution	EJN	MT to Herman Gulch, Downhill (EB) (mp 215 - 218) *****	\$5								
Empire To Downieville, Downieville											
Empire To Downieville, Downieville	Geo	eorgetown to Silver Plume, Uphill (WB) (mp 226 - 228) ****									
Empire To Downieville, Downieville	Silv	Iver Plume to Georgetown, Downhill (EB) (mp 226 - 228) ****									
Black Hawk Tunnel Off-ramp to Hidden Valley Off-ramp, Uphill         \$20         Image: S20	Dov										
(WB) (mp 243 - 244)         32.0         Image: Constraint of the set											
Morrison to Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)         \$100         Image: Chief Hosa, Uphill (WB) (mp 253 - 259)			\$20								
Other items in the Corridor         S64         Image: Constant of the Constant			\$100								
bit     Idaho Springs East to Hidden Valley (improve existing frontage road)     S4     Ican     Ican     Ican     Ican     Ican     Ican     Ican       Buses in Nixed Traffic Corridor Wide Sediment Control     \$100     Ican	Trar	ansportation Management	\$104								
bit     Idaho Springs East to Hidden Valley (improve existing frontage road)     S4     Ical     Ical </td <td>04</td> <td>har items in the Corridor</td> <td>864</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	04	har items in the Corridor	864								
Year         Stat         Condition         Stat         Condition         Conditin Condition         Cond	Idah		\$04								
Dataset market ratio         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100         3100<	road		\$4								
Corridor Wide Sediment Control         \$20         Corridor Wide Sediment Control         S20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$20         \$	Bus			1							
			\$20								
	Tot	otal cost of Minimal Action Components (Billions)		\$1.313	\$0.532	\$0.532	\$0.532	\$0.532	\$0.678	\$0.678	\$0.678
Total cost of Alternative with Minimal Action Components (Billions) \$1.313 \$6,292 \$7,871 \$5,853 \$5,929 \$3,209 \$4,198	Tot	otal cost of Alternative with Minimal Action Components (Billio	ons)	\$1.313	\$6,292	\$7,871	\$5,853	\$5,929	\$3,209	\$4,198	\$3,356

*Minimal Action Components were estimated as a package. Costs may vary if Minimal Action components were estimated to be constructed on

Alternative includes this Minimal Action Component

a stand alone basis.

Alternative includes this Minimal Action Component as part of the Base Cost

Tunnel at Dowd Canyon Achieves Minimal Action component of curve safety modification

Alternative doesn't include this Minimal Action Component

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#### Minimal Action Components Associated with each Build Alternative - Page 2 of 2

							Co	mbination	Transit/	Highway	Alternativ	ves					nsensus
					9			10		11		12			Recommendation 13		
				6-Lane Hi	ighway with IMC	n Rail and	6-Lane	Highway w	ith AGS	6-Lane Hig Bu		Dual-Mode /av	6-Lane Hig				onsensus
				9 - Combination Built Simultaneously	9a - Transit with Highway Preservation	9b - Highway with Transit Preservation	10 - Combination Built Simultaneously	10a - Transit with Highway Preservation	10b - Highway with Transit Preservation	11 - Combination Built Simultaneously	11a - Transit with Highway Preservation	11b - Highway with Transit Preservation	12 - Combination Built Simultaneously	12a - Transit with Highway Preservation	12b - Highway with Transit Preservation	Recommen Preferre	ndation 55 mph - ed Alternative - nort Term
				mp 142 to 260			mp 142 to 260			mp 169 to 173 mp 142 to 260	)		mp 169 to 17 mp 142 to 26	)		mp x to x mp x to x	
					le Airport to C			Eagle Airport to C-470 Dowd Canyon Eagle Airport to C-470			Dowd Canyon Eagle Airport to C-470			Eagle Airport to C-470			
		Bas	e Cost (Billions)	\$7,827	\$7,508	\$3,381	\$10,524	\$10,239	\$3,127	\$6,770	\$6,436	\$3,177	\$6,409	\$6,075	\$3,177	\$9,400	
		Location	MA Cost* (Millions)														
		Glenwood Springs (mp 116)	\$15														
		Gypsum (mp 140)	\$2														
		Eagle & Spur Road (mp 147)	\$10														<u> </u>
		Edwards & Spur Road (mp 163)	\$14														
		Avon (mp 167)	\$4														
		Minturn (mp 171) Viil Wast (mp 172) (Simba Burg	\$15														<u> </u>
	- E	Vail West (mp 173) / Simba Run Copper Mountain (mp 195)	\$5 \$2														
		Frisco / Main St. (mp 201)	\$2														<u> </u>
	- H	Frisco / SH 9 (mp 203)	\$10														
1		Silverthorne (mp 205)	\$15														
1		Loveland Pass (mp 216)	\$2														
1	5 1	Silver Plume (mp 226)	\$4			-											
- total		Georgetown (mp 228)	\$8													1	
1 -	- 1	Empire (mp 232)	\$1														
	1	Downieville (mp 234)	\$2														
	1	Fall River Road (mp 238)	\$4													1	
	- [	Idaho Springs West (mp 239)	\$4														
	- 1	Idaho Springs / SH 103 (mp 240)	\$6														
		Idaho Springs East (mp 240)	\$5														
ts		Base of Floyd Hill / US 6 (mp 244)	\$10													<b></b>	
E I		Hyland Hills / Beaver Brook (mp 247 / mp 248)	\$2			-											
Minimal Action Components Curve		Lookout Mountain (mp 256) Morrison (mp 259)	\$10 \$1														
<u>ه</u> ا		Morrison (nip 239)	31														
° ⊢	1	West of Wolcott (mp 155 - 156)	\$18														
e lo	≥		\$245														
Curve	afe	Dowd Canyon (mp 170 - 173)															L
C a	ŵ.	Fall River Road (mp 237 - 238) East of Twin Tunnels (mp 242 - 245)	\$10 \$137														
	_	Last of 1 will Tunnels (inp 242 - 243)	\$137														
		Avon to Post, Uphill (EB) (mp 167 - 168)	\$3					-									
		West side of Vail Pass, Downhill (WB) (mp 185 - 190)	\$135														
	- I	West side of Vail Pass, Downnill (WB) (mp 185 - 190) West side of Vail Pass, Uphill (EB) (mp 185 - 190)	\$135														
	_ I	Frisco to Silverthorne (EB) (mp 202.7-205.1) **/***	\$155														
	Lane	EJMT to Herman Gulch, Downhill (EB) (mp 215 - 218) ****	\$5														
		Bakerville to EJMT, Uphill (WB) (mp 215 - 221) ****	\$9														
	Ê [	Georgetown to Silver Plume, Uphill (WB) (mp 226 - 228) ****	\$6														
	Į [	Silver Plume to Georgetown, Downhill (EB) (mp 226 - 228) ****	\$6														
	2	Downieville to Empire, Uphill (WB) (mp 232 - 234)	\$17														
		Empire To Downieville, Downhill (EB) (mp 232 - 234)	\$17									1					
		Black Hawk Tunnel Off-ramp to Hidden Valley Off-ramp, Uphill	\$20													i l	1
		(WB) (mp 243 - 244) Morrison to Chief Hosa, Uphill (WB) (mp 253 - 259)	\$100														
$\vdash$		promison to Cinel Hosa, Upnin (WB) (mp 253 - 259)	\$100														
$\vdash$	1	Transportation Management	\$104													<u> </u>	
	Į.	Other items in the Corridor	\$64														
	- t	Idaho Springs East to Hidden Valley (improve existing frontage															
Mieo	ž I	road)	\$4														
	- [	Buses in Mixed Traffic	\$100														
· · ·	- 6	Corridor Wide Sediment Control	\$20														
	_																
Γ.		Total cost of Minimal Action Components (Billions)		\$0.678	\$0.532	\$0.678	\$0.678	\$0.532	\$0.678	\$0.678	\$0.532	\$0.678	\$0.678	\$0.532	\$0.678	\$0.782	

*Minimal Action Components were estimated as a package. Costs may vary if Minimal Action components were estimated to be constructed on a stand alone basis. Alternative includes this Minimal Action Component

Tunnel at Dowd Canyon Achieves Minimal Action component of curve safety modification

Alternative includes this Minimal Action Component as part of the Base Cost

Alternative doesn't include this Minimal Action Component

# 2003 CDOT - 55 mph Floyd Hill.xls

ID ITEMS         COST PER UNIT         QUANTITY         COST         Image: Cost Per UNIT         QUANTITY         QUANTI	8/17/2010 14:29					
Wells (SP)         90.00         171.484.00         15.484.00         15.484.00           Bath Course (CY)         20.00         180.050.00         3.272.400.00         3.272.400.00           Base Course (CY)         40.00         2.14.872.00         1.241.820.00         1.241.820.00           Base Course (CY)         40.00         2.1.877.00         1.312.820.00         1.312.820.00           Base Course (CY)         40.00         2.1.877.00         1.312.820.00         1.312.820.00           Base Course (CY)         40.00         2.1.877.00         1.312.820.00         1.312.820.00           Intermed Course (CY)         5.00         2.1.877.00         1.312.820.00         (A)           Intermed Course (CY)         5.00%         S0.00%         S0.00         (C)           Intermed Course (CY)         5.00%         S0.00%         S0.00         (C)           Intranage/Utilities         C1.0% (Jr (A+B)         0.00%         S0.00%         S0.00         (C)           Intranage/Utilities         C1.0% (Jr (A+B+C+D)         5.00%         S2.466.220.30         (P)           Intranage/Utilities         S5.0% (Jr (A+B+C+D+E)         15.00%         S6.862.256.21         (F)           Intranage/Utilities         S5.0 (Jr (A+B+C+D+E)         5.	BID ITEMS	COST PER UNIT	QUANTITY	COST		
Wells (SP)         90.00         171.484.00         15.484.00         15.484.00           Bath Course (CY)         20.00         180.050.00         3.272.400.00         3.272.400.00           Base Course (CY)         40.00         2.14.872.00         1.241.820.00         1.241.820.00           Base Course (CY)         40.00         2.1.877.00         1.312.820.00         1.312.820.00           Base Course (CY)         40.00         2.1.877.00         1.312.820.00         1.312.820.00           Base Course (CY)         40.00         2.1.877.00         1.312.820.00         1.312.820.00           Intermed Course (CY)         5.00         2.1.877.00         1.312.820.00         (A)           Intermed Course (CY)         5.00%         S0.00%         S0.00         (C)           Intermed Course (CY)         5.00%         S0.00%         S0.00         (C)           Intranage/Utilities         C1.0% (Jr (A+B)         0.00%         S0.00%         S0.00         (C)           Intranage/Utilities         C1.0% (Jr (A+B+C+D)         5.00%         S2.466.220.30         (P)           Intranage/Utilities         S5.0% (Jr (A+B+C+D+E)         15.00%         S6.862.256.21         (F)           Intranage/Utilities         S5.0 (Jr (A+B+C+D+E)         5.						
Earthwork (CY)         20.03         180.080.00         3.812 (100.0)           Pavement (TON)         70.03         46.106.00         3.227.430.00         1.241.800.00           Base Course (CY)         40.00         31.048.00         1.241.800.00         1.241.800.00           Base Course (CY)         60.00         21.877.00         1.312.682.00         1.241.800.00           cal         1.312.682.00         1.312.682.00         1.241.800.00         1.241.800.00           calid         1.312.682.00         1.312.682.00         1.241.800.00         1.241.800.00           canaditation indication indic						
Pavement (TON)         70.00         46,106.00         3.27,20.00           Base Course (CY)         40.03         31,048.00         1.241.920.00           Barrier (Type 7)(LF)         60.00         21,877.00         1.312.820.00           call         71,815.210.00         1.312.820.00         1.312.820.00           call         71,815.210.00         1.312.820.00         1.312.820.00           roject Construction Bid Items         Project Dependent         NIA         \$31,615.210.00         (A)           carringendes*         (15%,-30%), of (A)         30.00%         \$9,485,463.00         (B)           carringendus*         (15%,-30%), of (A)         30.00%         \$9,485,463.00         (B)           carringendus*         (15%,-30%), of (A)         30.00%         \$9,485,463.00         (B)           rtranspedutities         (2,10%, ) of (A+B)         6.00%         \$2,178,494.67         (E)           carringendus         (A+B+C+D)         50.00%         \$2,178,494.67         (E)           carringendus         (A+B+C+D+E+F+D)         50.60%         \$2,178,494.67         (E)           carringendus         (A+B+C+D+E+F+D)         50.682,275.21         (F)           carringendus         (A+B+C+D+E+F+D)         50.696,226.20         <						
Base Course (CY)         40.00         31.048.00         124.132.00.00           Barrier (Type 7)(LF)         60.00         21.877.00         1.312.620.00           atal         31.618.210.00         31.618.210.00         (A)           status         31.618.210.00         (A)         (A)           reget Construction Bid Items         Project Dependent         NA         \$31,618.210.00         (A)           contingencies*         (15% - 30%) of (A)         30.00%         \$9,465,463.00         (B)           rainage/Uilities         (3-10%) of (A+B)         0.00%         \$2,466,220.39         (C)           rainage/Uilities         (3-10%) of (A+B)         6.00%         \$2,466,220.39         (D)           rainage/Uilities         (3-10%) of (A+B)         6.00%         \$2,466,220.39         (D)           construction Signing & Treffic Control         5 to 25%, of (A+B-C-D-E)         15.00%         \$6,862,258.21         (F)           construction Signing & Treffic Control         5 to 25%, of (A+B-C-D-E)         15.00%         \$5,6,283,391.49         (H)           construction Bid Items         (A+B+C+D+E)         15.00%         \$5,6,283,391.49         (H)           construction Bid Items         (A+B+C+D+E)         15.00%         \$5,6,283,391.49         (H)						
Barrier (Type 7)(LF)         60.00         21.877.00         1.312.828.00           cell         31.618.210.00         31.618.210.00         ()           statistic         31.618.210.00         ()         ()           roject Construction Bid Items         Project Dependent         N/A         \$31.618.210.00         (A)           contingencies*         (15% - 30%) of (A)         30.00%         \$9.485.463.00         (B)           roject Construction Bid Items         (15% - 30%) of (A)         30.00%         \$20.00%         \$0.000           rs         (6-10%) of (A+B)         0.00%         \$2.466.20.38         (D)           perfault = 6%         Default = 6%         50.00%         \$2.178.494.67         (E)           igning and Striping         (1-5%) of (A+B-C+D+E)         15.00%         \$2.682.258.21         (F)           construction Signing & Traffic Control         51.02% of (A+B-C+D+E)         15.00%         \$3.682.745.24         (G)           off-ault = 7%         Default = 7%         2.00%         \$3.682.745.24         (G)           orce Account - Utilities         (14.92%) of (H)         2.00%         \$3.682.745.24         (G)           orce Account - Utilities         (10.01%) of (A/B+C+D+E+F+G)         \$36.692.765.82.81         (K)						
bail         31.618.210.00         Image: Construction Bid Items         Project Dependent         N/A         S31.618.210.00         (A)           roject Construction Bid Items         Project Dependent         N/A         S31.618.210.00         (A)           contingencies*         (15% - 30%) of (A)         30.00%         S0.485.463.00         (B)           rs         (6-10%) of (A+B)         0.00%         S2.465.200.30         (C)           rainage/Utilities         (3-10%) of (A+B)         0.00%         S2.465.220.30         (D)           rainage/Utilities         (3-10%) of (A+B+C+D)         6.00%         S2.465.220.30         (D)           cistanction Signing & Traffic Control         5 to 25% of (A+B)         0.00%         S2.465.220.31         (P)           cistanction Signing & Traffic Control         5 to 25% of (A+B)         6.00%         S2.465.220.32         (P)           cistanction Signing & Traffic Control         5 to 25% of (A+B)         6.00%         S3.682.745.24         (S)           construction Bid Items         (A+B+C+D+E+F+E)         7.00%         S56.293.391.49         (H)           otel of Construction Bid Items         (A+B+C+D+E+F+G)         2.00%         S1.125.867.83         (H)           otel af Construction Engineering         17% of (K)         12.00%						
Vic Range         Vic Used         Cost           roject Construction Bid Items         Project Dependent         N/A         \$31.618.210.00         (A)           contingencies*         (15% - 30%) of (A)         30.00%         \$9.485.463.00         (B)           roject Construction Bid Items         Project Dependent         N/A         \$30.00%         \$9.485.463.00         (C)           roject Construction Bid Items         (15% - 30%) of (A)         0.00%         \$2.466.220.38         (D)           roject Construction Signing & Traffic Control         5 to 25% of (A)=B+C+D)         5.00%         \$2.178.494.67         (E)           construction Signing & Traffic Control         5 to 25% of (A)=B+C+D+E+F)         7.00%         \$36.862.258.21         (P)           dobalit = 0%         Default = 0%               dobalit = 0%	Barrier (Type 7)(LF)	60.00	21,877.00	1,312,620.00		
Vic Range         Vic Used         Cost           roject Construction Bid Items         Project Dependent         N/A         \$31.618.210.00         (A)           contingencies*         (15% - 30%) of (A)         30.00%         \$9.485.463.00         (B)           roject Construction Bid Items         Project Dependent         N/A         \$30.00%         \$9.485.463.00         (C)           roject Construction Bid Items         (15% - 30%) of (A)         0.00%         \$2.466.220.38         (D)           roject Construction Signing & Traffic Control         5 to 25% of (A)=B+C+D)         5.00%         \$2.178.494.67         (E)           construction Signing & Traffic Control         5 to 25% of (A)=B+C+D+E+F)         7.00%         \$36.862.258.21         (P)           dobalit = 0%         Default = 0%               dobalit = 0%	Total			31.618.210.00		
roject Construction Bid Items         Project Dependent         N/A         \$31,618,210.00         (A)           contingencies*         (15% - 30%) of (A)         30.00%         \$9,485,463.00         (B)           iS         (6-10%) of (A+B)         0.00%         \$0.000         (C)           perturbes         (210%) of (A+B)         0.00%         \$2,466,220.38         (D)           irging and Striping         (1-5%) of (A+B-C+D)         5.00%         \$2,178,494.67         (E)           construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$3,892,745.24         (G)           pertault = 7%         Default = 7%         0         \$56,293,391.49         (H)           orce Account - Utilities         (110.25%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10.01.5%) of (K)         12.00%         \$7,295,682.54         (L)           otal of Construction Cost         (H+I+J)         600%         \$3,377,603.49         (J)           otal of Construction Cost         (H+I+J)         \$20%         \$1,125,867.83         (N)           ubtotal of Construction Eng						
roject Construction Bid Items         Project Dependent         N/A         \$31,618,210.00         (A)           contingencies*         (15% - 30%) of (A)         30.00%         \$9,485,463.00         (B)           iS         (6-10%) of (A+B)         0.00%         \$0.000         (C)           perturbes         (210%) of (A+B)         0.00%         \$2,466,220.38         (D)           irging and Striping         (1-5%) of (A+B-C+D)         5.00%         \$2,178,494.67         (E)           construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$3,892,745.24         (G)           pertault = 7%         Default = 7%         0         \$56,293,391.49         (H)           orce Account - Utilities         (110.25%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10.01.5%) of (K)         12.00%         \$7,295,682.54         (L)           otal of Construction Cost         (H+I+J)         600%         \$3,377,603.49         (J)           otal of Construction Cost         (H+I+J)         \$20%         \$1,125,867.83         (N)           ubtotal of Construction Eng						
roject Construction Bid Items         Project Dependent         N/A         \$31,618,210.00         (A)           contingencies*         (15% - 30%) of (A)         30.00%         \$9,485,463.00         (B)           iS         (6-10%) of (A+B)         0.00%         \$0.000         (C)           perturbes         (210%) of (A+B)         0.00%         \$2,466,220.38         (D)           irging and Striping         (1-5%) of (A+B-C+D)         5.00%         \$2,178,494.67         (E)           construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           construction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         7.00%         \$3,892,745.24         (G)           pertault = 7%         Default = 7%         0         \$56,293,391.49         (H)           orce Account - Utilities         (110.25%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10.01.5%) of (K)         12.00%         \$7,295,682.54         (L)           otal of Construction Cost         (H+I+J)         600%         \$3,377,603.49         (J)           otal of Construction Cost         (H+I+J)         \$20%         \$1,125,867.83         (N)           ubtotal of Construction Eng						
constingencies*         (15% - 30%) of (A)         30.00%         \$9,455,463.00         (B)           TS         (6-10%) of (A+B)         0.00%         \$0.00         (C)           Default = 6%         0         00%         \$2,466,220.38         (D)           irrainage/Utilities         (3-10%) of (A+B)         6.00%         \$2,466,220.38         (D)           irging and Striping         (1-5%) of (A+B+C+D)         5.00%         \$2,178,494.67         (E)           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 5%         0         0         0         0         0         0           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 20%         0         0         0         0         0         0           otal of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$1,125,867.83         (I)           orce Account - Misc.         10 to 15%) of (H)         0         6.00%         \$3,377,603.49         (J)           otal of Construction Engineering         17% of (K)         12.00%         \$1,125,867.83         (N)		% Range		% Used	Cost	
constingencies*         (15% - 30%) of (A)         30.00%         \$9,455,463.00         (B)           TS         (6-10%) of (A+B)         0.00%         \$0.00         (C)           Default = 6%         0         00%         \$2,466,220.38         (D)           irrainage/Utilities         (3-10%) of (A+B)         6.00%         \$2,466,220.38         (D)           irging and Striping         (1-5%) of (A+B+C+D)         5.00%         \$2,178,494.67         (E)           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 5%         0         0         0         0         0         0           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 20%         0         0         0         0         0         0           otal of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$1,125,867.83         (I)           orce Account - Misc.         10 to 15%) of (H)         0         6.00%         \$3,377,603.49         (J)           otal of Construction Engineering         17% of (K)         12.00%         \$1,125,867.83         (N)						
constingencies*         (15% - 30%) of (A)         30.00%         \$9,455,463.00         (B)           TS         (6-10%) of (A+B)         0.00%         \$0.00         (C)           Default = 6%         0         00%         \$2,466,220.38         (D)           irrainage/Utilities         (3-10%) of (A+B)         6.00%         \$2,466,220.38         (D)           irging and Striping         (1-5%) of (A+B+C+D)         5.00%         \$2,178,494.67         (E)           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 5%         0         0         0         0         0         0           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 20%         0         0         0         0         0         0           otal of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$1,125,867.83         (I)           orce Account - Misc.         10 to 15%) of (H)         0         6.00%         \$3,377,603.49         (J)           otal of Construction Engineering         17% of (K)         12.00%         \$1,125,867.83         (N)						
constingencies*         (15% - 30%) of (A)         30.00%         \$9,455,463.00         (B)           TS         (6-10%) of (A+B)         0.00%         \$0.00         (C)           Default = 6%         0         00%         \$2,466,220.38         (D)           irrainage/Utilities         (3-10%) of (A+B)         6.00%         \$2,466,220.38         (D)           irging and Striping         (1-5%) of (A+B+C+D)         5.00%         \$2,178,494.67         (E)           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 5%         0         0         0         0         0         0           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 20%         0         0         0         0         0         0           otal of Construction Bid Items         (A+B+C+D+E+F+G)         7.00%         \$1,125,867.83         (I)           orce Account - Misc.         10 to 15%) of (H)         0         6.00%         \$3,377,603.49         (J)           otal of Construction Engineering         17% of (K)         12.00%         \$1,125,867.83         (N)						
If S       (6-10%) of (A+B)       0.00%       \$0.00       \$0.00         Itrainage/Utilities       (3-10%) of (A+B)       6.00%       \$2,466,220.38       (D)         itgning and Striping       (1-5%) of (A+B+C+D)       5.00%       \$2,178,494.67       (E)         itgning and Striping       (1-5%) of (A+B+C+D)       5.00%       \$2,178,494.67       (E)         itgning and Striping       (1-5%) of (A+B+C+D+E)       15.00%       \$6,862,258.21       (F)         Default = 20%       15.00%       \$6,862,258.21       (F)       (G)         Itobilization       (4 to 10%) of (A+B+C+D+E+F)       7.00%       \$3,682,745.24       (G)         otal of Construction Bid Items       (A+B+C+D+E+F+C)       7.00%       \$3,125,867.83       (I)         orce Account - Misc.       (1 to 2%) of (H)       2.00%       \$1,125,867.83       (I)         orce Account - Misc.       (1 to 15%) of (H)       6.00%       \$3,377,603.49       (J)         otal of Construction Cost       (H+I+J)       10.00%       \$6,079,6862.81       (K)         otal Construction Cost       (H+I+J)       10.00%       \$6,079,6862.81       (K)         otal Preliminary Engineering       17% of (K)       10.00%       \$6,079,6862.81       (K)         tight	Project Construction Bid Items	Project Dependent		N/A	\$31,618,210.00	(A)
If S       (6-10%) of (A+B)       0.00%       \$0.00       \$0.00         Itrainage/Utilities       (3-10%) of (A+B)       6.00%       \$2,466,220.38       (D)         itgning and Striping       (1-5%) of (A+B+C+D)       5.00%       \$2,178,494.67       (E)         itgning and Striping       (1-5%) of (A+B+C+D)       5.00%       \$2,178,494.67       (E)         itgning and Striping       (1-5%) of (A+B+C+D+E)       15.00%       \$6,862,258.21       (F)         Default = 20%       15.00%       \$6,862,258.21       (F)       (G)         Itobilization       (4 to 10%) of (A+B+C+D+E+F)       7.00%       \$3,682,745.24       (G)         otal of Construction Bid Items       (A+B+C+D+E+F+C)       7.00%       \$3,125,867.83       (I)         orce Account - Misc.       (1 to 2%) of (H)       2.00%       \$1,125,867.83       (I)         orce Account - Misc.       (1 to 15%) of (H)       6.00%       \$3,377,603.49       (J)         otal of Construction Cost       (H+I+J)       10.00%       \$6,079,6862.81       (K)         otal Construction Cost       (H+I+J)       10.00%       \$6,079,6862.81       (K)         otal Preliminary Engineering       17% of (K)       10.00%       \$6,079,6862.81       (K)         tight						
Default         Efault	Contingencies*	(15% - 30%) of (A)		30.00%	\$9,485,463.00	(B)
Default         Efault						
Default         Efault				0.000/	<b>\$</b> 0.00	(0)
irrainage/Utilities       3.10% jof (A+B)       6.00%       \$2,466,220.38       (D)         igning and Striping       (1.5%) of (A+B-C+D)       5.00%       \$2,178,494.67       (E)         ionstruction Signing & Traffic Control       5 to 25% of (A+B-C+D+E)       15.00%       \$3,682,745.24       (G)         ionstruction Signing & Traffic Control       5 to 25% of (A+B-C+D+E+F)       7.00%       \$3,682,745.24       (G)         iobilization       (4 to 10%) of (A+B-C+D+E+F)       7.00%       \$3,682,745.24       (G)         otal of Construction Bid Items       (A+B+C+D+E+F+G)       7.00%       \$3,1125,867.83       (I)         orce Account - Utilities       (1 to 2%) of (H)       2.00%       \$1,125,867.83       (I)         orce Account - Misc.       (10 to 15%) of (H)       6.00%       \$3,377,603.49       (J)         ubtotal of Construction Cost       (H+I+J)       6.00%       \$3,377,603.49       (J)         otal Preliminary Engineering**       15% of (K)       12.00%       \$6,079,686.281       (K)         otal Project Dependent       2.00%       \$1,125,867.83       (N)         tight of Way       Project Dependent       N/A       \$0.00       (D)         Turine!/(S+sins Floydy (LEF)       17/000,00       0.00       \$21,023,451.33	lis			0.00%	\$0.00	(C)
Default = 6%         5.00%         \$2,178,494.67         (E)           igning and Striping         (1.5%) of (A+B+C+D)         5.00%         \$2,178,494.67         (E)           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 20%		Default = 6%				
Default = 6%         5.00%         \$2,178,494.67         (E)           igning and Striping         (1.5%) of (A+B+C+D)         5.00%         \$2,178,494.67         (E)           ionstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Default = 20%		(2.400() of (A + D)		C 000/	¢0,400,000,00	
igning and Striping (1-5%) of (A+B+C+D) Default = 5% tonstruction Signing & Traffic Control 5 to 25% of (A+B+C+D+E) 15.00% \$2,178,494.67 (E) Sc.862,258.21 (F) Default = 20% tobilization (4 to 10%) of (A+B+C+D+E) Default = 20% tobilization (4 to 10%) of (A+B+C+D+E+F) Default = 7% Sc.862,238,2149 (H) orce Account - Utilities (1 to 2%) of (H) Default = 2% orce Account - Utilities (1 to 2%) of (H) Default = 2% Sc.90% \$1,125,867.83 (I) Default = 2% orce Account - Misc. (10 to 15%) of (H) Default = 12% iubtotal of Construction Cost (H+I+J) otal Construction Engineering 17% of (K) total Construction Engineering 17% of (K) Sc.90% \$1,125,867.83 (N) thilties Project Dependent 2,00% \$1,125,867.83 (N) Tunnel*(S-Fanel Floydy) (LF) 17700 D0 N/A \$0.00 (O) Tunnel*(S-Fanel Floydy) (LF) 17700 D0 Contingencies includes environmental miligation costs	Drainage/Utilities			0.00%	\$2,400,220.38	. (D)
Default = 5%         Is.00%         \$6.862.258.21         (F)           bonstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6.862.258.21         (F)           bobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$3.682.745.24         (G)           otal of Construction Bid Items         (A+B+C+D+E+F+G)         \$56.293.391.49         (H)           orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$1.125.867.83         (I)           orce Account - Utilities         (1 to 15%) of (H)         6.00%         \$3.377.603.49         (J)           otal of Construction Cost         (H+I+J)         6.00%         \$3.377.603.49         (J)           ubtotal of Construction Cost         (H+I+J)         \$60.796.862.81         (K)           otal Preliminary Engineering         17% of (K)         12.00%         \$7.295.623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$6.079.686.28         (M)           ight of Way         Project Dependent         2.00%         \$1.125.867.83         (N)           inflation to 2010 dollars (assuming 4% per year)         \$21.083.451.33         \$21.083.451.33         (P)           traintel: (S-fand Floyd) (LEF)         17.000 D0		Delault = 6%				
Default = 5%         Is.00%         \$6.862.258.21         (F)           bonstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6.862.258.21         (F)           bobilization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$3.682.745.24         (G)           otal of Construction Bid Items         (A+B+C+D+E+F+G)         \$56.293.391.49         (H)           orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$1.125.867.83         (I)           orce Account - Utilities         (1 to 15%) of (H)         6.00%         \$3.377.603.49         (J)           otal of Construction Cost         (H+I+J)         6.00%         \$3.377.603.49         (J)           ubtotal of Construction Cost         (H+I+J)         \$60.796.862.81         (K)           otal Preliminary Engineering         17% of (K)         12.00%         \$7.295.623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$6.079.686.28         (M)           ight of Way         Project Dependent         2.00%         \$1.125.867.83         (N)           inflation to 2010 dollars (assuming 4% per year)         \$21.083.451.33         \$21.083.451.33         (P)           traintel: (S-fand Floyd) (LEF)         17.000 D0	Signing and Striping	(1.5%) of (A, P, C)	D)	F 0.0%	¢2 179 404 67	· (E)
Sonstruction Signing & Traffic Control         5 to 25% of (A+B+C+D+E)         15.00%         \$6,862,258.21         (F)           Iobalization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$3,682,745.24         (G)           Iobalization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$3,682,745.24         (G)           Iobalization         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$56,293,391.49         (H)           Iotal of Construction Bid Items         (A+B+C+D+E+F+G)         2.00%         \$1,125,867.83         (I)           orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$3,377,603.49         (J)           Default = 2%				5.00%	φ2,170,494.07	(⊑)
Default = 20%         (4         Default = 20%         (3,682,745.24)         (6)           Indefizition         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$3,682,745.24)         (6)           Indefault = 7%         Indefault = 12%         Indefault = 12% <td></td> <td>Delault = 5%</td> <td></td> <td></td> <td></td> <td></td>		Delault = 5%				
Default = 20%         (4         Default = 20%         (3,682,745.24)         (6)           Indefizition         (4 to 10%) of (A+B+C+D+E+F)         7.00%         \$3,682,745.24)         (6)           Indefault = 7%         Indefault = 12%         Indefault = 12% <td>Construction Signing &amp; Traffic Control</td> <td>5 to 25% of (A+B+C</td> <td>(</td> <td>15.00%</td> <td>\$6 862 258 21</td> <td>(F)</td>	Construction Signing & Traffic Control	5 to 25% of (A+B+C	(	15.00%	\$6 862 258 21	(F)
Itabilization       (4 to 10%) of (A+B+C+D+E+F)       7.00%       \$3,682,745.24       (6)         Itabilization       (4 to 10%) of (A+B+C+D+E+F)       7.00%       \$3,682,745.24       (10)         Itabilization       (A+B+C+D+E+F+G)       \$56,293,391.49       (H)         Itabilization       (A+B+C+D+E+F+G)       \$56,293,391.49       (H)         Itabilization       (I to 2%) of (H)       2.00%       \$1,125,867.83       (I)         Itabilization       (I to 15%) of (H)       6.00%       \$3,377,603.49       (J)         Itabilization       (I to 15%) of (H)       6.00%       \$3,377,603.49       (J)         Itabilization       Default = 12%       \$60,796,862.81       (K)         Itabilization Engineering       17% of (K)       10.00%       \$7,295,623.54       (L)         Itage of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         Itage of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         Itage of Way       Project Dependent       N/A       \$0.00       (O)         Itage of Way       Project Dependent       N/A       \$21,083,451.33       (P)         Itage of Way       Project Dependent       N/A       \$21,083,451.33       (P)	Construction Signing & Traine Control			10.0070	ψ0,002,200.21	( ⁽ )
Default = 7%         S56,293,391.49         (H)           ordal of Construction Bid Items         (A+B+C+D+E+F+G)         \$56,293,391.49         (H)           orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,125,867.83         (I)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (H+I+J)         6.00%         \$3,377,603.49         (J)           otal Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Preliminary Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$6,079,686.28         (M)           tight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           filities         Project Dependent         N/A         \$0.00         (O)           findiation to 2010 dollars (assuming 4% per year)         \$21,083,451.33         \$21,083,451.33         (P)           contingencies includes environmental mitigation costs         Sec.20         Sec.20         (P)		Delault = 2070		•		
Default = 7%         S56,293,391.49         (H)           ordal of Construction Bid Items         (A+B+C+D+E+F+G)         \$56,293,391.49         (H)           orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,125,867.83         (I)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (H+I+J)         6.00%         \$3,377,603.49         (J)           otal Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Preliminary Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$6,079,686.28         (M)           tight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           filities         Project Dependent         N/A         \$0.00         (O)           findiation to 2010 dollars (assuming 4% per year)         \$21,083,451.33         \$21,083,451.33         (P)           contingencies includes environmental mitigation costs         Sec.20         Sec.20         (P)	Mobilization	(4 to 10%) of (A+B+		7.00%	\$3 682 745 24	(G)
otal of Construction Bid Items         (A+B+C+D+E+F+G)         \$56,293,391.49         (H)           orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,125,867.83         (I)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           otal Of Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Construction Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$60,079,686.28         (M)           tight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           tilities         Project Dependent         N/A         \$0.00         (O)           tilities         Project Dependent         \$2,00%         \$1,125,867.83         (N)           tilities         Project Dependent         N/A         \$0.00         (O)           tilities         Project Dependent         \$2,00%         \$1,125,867.83         (N)           tilities         Project Dependent         N/A         \$0.00         (O) <td></td> <td></td> <td></td> <td>1.0070</td> <td>φ0,002,1 10.2 1</td> <td>. (0)</td>				1.0070	φ0,002,1 10.2 1	. (0)
orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,125,867.83         (I)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           outbotal of Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Construction Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$6,079,686.28         (M)           tight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           tight of Way         Project Dependent         N/A         \$0.00         (O)           Turinel: (& fand Floyd) {UFJ         17,000 DC         0.00         \$\$0,00         \$\$0,00         (P)           Inflation to 2010 dollars (assuming 4% per year)         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33		Donadii = 170				
orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,125,867.83         (I)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           outbotal of Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Construction Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$6,079,686.28         (M)           tight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           tight of Way         Project Dependent         N/A         \$0.00         (O)           Turinel: (& fand Floyd) {UFJ         17,000 DC         0.00         \$\$0,00         \$\$0,00         (P)           Inflation to 2010 dollars (assuming 4% per year)         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33						
orce Account - Utilities         (1 to 2%) of (H)         2.00%         \$1,125,867.83         (I)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (10 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           oubtotal of Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Construction Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$6,079,686.28         (M)           tight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           tight of Way         Project Dependent         N/A         \$0.00         (O)           Trunriel:(3-fand Floyd) (LEFI         17:000 DC         0.000         \$21,083,451.33         \$21,083,451.33           otal Project Cost         \$96,381,491.79         (P)         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33         \$21,083,451.33	Total of Construction Bid Items	(A+B+C+D+E+F+G	i)		\$56,293,391.49	(H)
Default = 2%         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (I) to 15%) of (H)         6.00%         \$3,377,603.49         (J)           outotal of Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Construction Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$60,079,686.28         (M)           itight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           Itilities         Project Dependent         0.000         \$21,083,451.33         (P)           Inflation to 2010 dollars (assuming 4% per year)         \$96,381,491.79         (P)         (P)           Contingencies includes environmental mitigation costs         \$96,381,491.79         (P)			Í			
Default = 2%         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         (I) to 15%) of (H)         6.00%         \$3,377,603.49         (J)           outotal of Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Construction Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$60,079,686.28         (M)           itight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           Itilities         Project Dependent         0.000         \$21,083,451.33         (P)           Inflation to 2010 dollars (assuming 4% per year)         \$96,381,491.79         (P)         (P)           Contingencies includes environmental mitigation costs         \$96,381,491.79         (P)						
Default = 2%         6.00%         \$3,377,603.49         (J)           orce Account - Misc.         0 to 15%) of (H)         6.00%         \$3,377,603.49         (J)           outotal of Construction Cost         (H+I+J)         \$60,796,862.81         (K)           otal Construction Engineering         17% of (K)         12.00%         \$7,295,623.54         (L)           otal Preliminary Engineering**         15% of (K)         10.00%         \$60,079,686.28         (M)           tight of Way         Project Dependent         2.00%         \$1,125,867.83         (N)           tight of Way         Project Dependent         X/A         \$0.000         (O)           Timfel: (3: Faine Floyd) (LF)         117,000 D0         (1,00)         \$21,083,451.33         \$21,083,451.33           otal Project Cost         \$96,381,491.79         (P)         \$20,081,491.79         (P)	Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$1,125,867.83	(I)
Default = 12%         Second Project Dependent         Second Project Dependent         Second Project Dependent         N/A         Second Project Dependent         N/A         Second Project Dependent         Second Project Dependent         Second Project Dependent         Second Project Dependent         N/A         Second Project Dependent         Second Project Project Dependent         Second Project Projec		Default = 2%				
Default = 12%         Second Project Dependent         Second Project Dependent         Second Project Dependent         N/A         Second Project Dependent         N/A         Second Project Dependent         Second Project Dependent         Second Project Dependent         Second Project Dependent         N/A         Second Project Dependent         Second Project Project Dependent         Second Project Projec						
iubtotal of Construction Cost       (H+I+J)       \$60,796,862.81       (K)         otal Construction Engineering       17% of (K)       12.00%       \$7,295,623.54       (L)         otal Preliminary Engineering**       15% of (K)       10.00%       \$6,079,686.28       (M)         tight of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         tight of Way       Project Dependent       N/A       \$0.00       (O)         Trume!.(3-fane Floyd) (LF)       117,000,00       0.60       \$21,083,451.33       (P)         total Project Cost       \$96,381,491.79       (P)         Contingencies includes environmental mitigation costs       \$0       \$0       \$0	Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$3,377,603.49	(J)
iotal Construction Engineering       17% of (K)       12.00%       \$7,295,623.54       (L)         iotal Preliminary Engineering**       15% of (K)       10.00%       \$6,079,686.28       (M)         tight of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         tight of Way       Project Dependent       N/A       \$0.00       (O)         tillities       Project Dependent       \$\$0.00       (O)         Inflation to 2010 dollars (assuming 4% per year)       \$\$21,083,451.33       \$\$21,083,451.33         iotal Project Cost       \$\$96,381,491.79       (P)		Default = 12%				
iotal Construction Engineering       17% of (K)       12.00%       \$7,295,623.54       (L)         iotal Preliminary Engineering**       15% of (K)       10.00%       \$6,079,686.28       (M)         tight of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         tight of Way       Project Dependent       N/A       \$0.00       (O)         tillities       Project Dependent       \$\$0.00       (O)         Inflation to 2010 dollars (assuming 4% per year)       \$\$21,083,451.33       \$\$21,083,451.33         iotal Project Cost       \$\$96,381,491.79       (P)						
iotal Preliminary Engineering**       15% of (K)       10.00%       \$6,079,686.28       (M)         iotal Preliminary Engineering**       15% of (K)       10.00%       \$6,079,686.28       (M)         itight of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$21,083,451.33       (O)         Inflation to 2010 dollars (assuming 4% per year)       \$21,083,451.33       \$21,083,451.33       (P)         Contingencies includes environmental mitigation costs	Subtotal of Construction Cost	(H+I+J)			\$60,796,862.81	(K)
iotal Preliminary Engineering**       15% of (K)       10.00%       \$6,079,686.28       (M)         iotal Preliminary Engineering**       15% of (K)       10.00%       \$6,079,686.28       (M)         itight of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$21,083,451.33       (O)         Inflation to 2010 dollars (assuming 4% per year)       \$21,083,451.33       \$21,083,451.33       (P)         Contingencies includes environmental mitigation costs						
Light of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$21,083,451.33       (O)         Inflation to 2010 dollars (assuming 4% per year)       \$21,083,451.33       \$21,083,451.33       (P)         Contingencies includes environmental mitigation costs       Contingencies includes environmental mitigation costs       Second Cost       Second Cost	Total Construction Engineering	17% of (K)		12.00%	\$7,295,623.54	(L)
Light of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$21,083,451.33       (O)         Inflation to 2010 dollars (assuming 4% per year)       \$21,083,451.33       \$21,083,451.33       (P)         Contingencies includes environmental mitigation costs       Contingencies includes environmental mitigation costs       Second Cost       Second Cost						
Light of Way       Project Dependent       2.00%       \$1,125,867.83       (N)         Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$21,083,451.33       (O)         Inflation to 2010 dollars (assuming 4% per year)       \$21,083,451.33       \$21,083,451.33       (P)         Contingencies includes environmental mitigation costs       Contingencies includes environmental mitigation costs       Second Cost       Second Cost		4504 440		40.000/	<b>A</b> A <b>AA AA A A A A A </b>	()
Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00	I otal Preliminary Engineering**	15% of (K)		10.00%	\$6,079,686.28	(M)
Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00						
Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00						
Itilities       Project Dependent       N/A       \$0.00       (O)         Itilities       Project Dependent       0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00       \$0.00	Pight of Way	Project Dependent		2.00%	¢1 405 067 00	
Tumiel'(3-lane Floyd) (LF) 17;000,00 00 00 00 00 00 00 00 00 00 00 00				2.00%	\$1,1∠5,807.83	(N)
Tumiel'(3-lane Floyd) (LF) 17;000,00 00 00 00 00 00 00 00 00 00 00 00	l Itilitios	Project Dependent		NI/A	ድስ ስስ	( <b>0</b> )
Inflation to 2010 dollars (assuming 4% per year)       \$21,083,451.33         iotal Project Cost       \$96,381,491.79         Contingencies includes environmental mitigation costs	O unues			11/71	φυ.00	
Inflation to 2010 dollars (assuming 4% per year)       \$21,083,451.33         iotal Project Cost       \$96,381,491.79         Contingencies includes environmental mitigation costs	Tunnel (3-lane Floyd) (1 F)	17 000 00	1 		ፍብ በ <b>ጋ</b>	a states
iotal Project Cost     \$96,381,491.79     (P)       Contingencies includes environmental mitigation costs		17,000.00	0.00		φ0.00	
iotal Project Cost     \$96,381,491.79     (P)       Contingencies includes environmental mitigation costs	Inflation to 2010 dollars (assuming	4% per vear)	ara-per-per-per-per-per-per-		\$21 083 451 33	
Contingencies includes environmental mitigation costs					φ21,000,401.00	
Contingencies includes environmental mitigation costs	Total Project Cost	1	I		\$96.381 491 79	(P)
Contingencies includes environmental mitigation costs Total Preliminary Engineering includes cost of developing NEPA documents					<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>	(* )
Contingencies includes environmental mitigation costs Total Preliminary Engineering includes cost of developing NEPA documents						
Total Preliminary Engineering includes cost of developing NEPA documents	*Contingencies includes environmental mitig	ation costs	-	<u>г</u>	I	
	**Total Preliminary Engineering includes cos	t of developing NEPA o	locuments			

### 2003 CDOT - 55 mph Fall River Rd.xls

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
	450.00	0.00			
<u>Structures (SF)</u> Walls (SF)	150.00 90.00	0.00 36,940.00	0.00 3,324,600.00		
Earthwork (CY)	20.00	31,392.00	627,840.00		
Pavement (TON)	70.00	22,440.00	1,570,800.00		
Base Course (CY)	40.00	15,111.00	604,440.00		
Barrier (Type 7)(LF)	60.00	6,700.00	402,000.00		
		-,			
Total			6,529,680.00		
	% Range		% Used	Cost	
	/o Kaliye		/o OSeu	COSL	
Project Construction Bid Items	Project Dependent		N/A	\$6,529,680.00	(A)
Contingencies*	(15% - 30%) of (A)		30.00%	\$1,958,904.00	(B)
170			0.000/	<b>*</b> 0.00	
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				
Drainage/Utilities	(3-10% )of (A+B)		6.00%	\$509,315.04	(D)
Drainage/Ounties	Default = 6%		0.00%	\$JU9,513.04	(D)
	Deladit = 070				
Signing and Striping	(1-5%) of (A+B+C+E	))	5.00%	\$449,894.95	(E)
	Default = 5%	-		<i></i>	(-)
Construction Signing & Traffic Control	5 to 25% of (A+B+C	+D+E)	15.00%	\$1,417,169.10	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B+	C+D+E+F)	7.00%	\$760,547.42	(G)
	Default = 7%				
				<b>0</b> 11 005 510 51	(1.1)
Total of Construction Bid Items	(A+B+C+D+E+F+G)			\$11,625,510.51	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$232,510.21	(1)
Torce Account - Otimiles	Default = 2%		2.00%	φ232,310.21	(1)
	Deladit = 276				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$697,530.63	(J)
	Default = 12%			· · · · · · · · · · · · · · · · · · ·	(-)
Subtotal of Construction Cost	(H+I+J)			\$12,555,551.35	(K)
Total Construction Engineering	17% of (K)		12.00%	\$1,506,666.16	(L)
	450/ -6 (10)		40.000/	#4 OFF 1-	(1.1)
Total Preliminary Engineering**	15% of (K)		10.00%	\$1,255,555.13	(M)
Right of Way	Project Dependent		2.00%	\$232,510.21	(N)
				<i>φ</i> 202,010.21	()
Utilities	Project Dependent		N/A	\$0.00	(O)
Inflation to 2010 dollars (assuming	4% per year)			\$4,354,079.20	
Total Project Cost				\$19,904,362.05	(P)
				1	
*Contingencies includes environmental mitiga	tion costs				
**Total Preliminary Engineering includes cost	of developing NEPA d	ocuments			
Engineering moludes 60st					

# 2003 CDOT - 55 mph S Curves at TT Hidden Valley.xls

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	2,006.00	300,900.00		
Walls (SF)	90.00	93,569.00	8,421,210.00		
Earthwork (CY)	20.00	188,301.00	3,766,020.00		
Pavement (TON)	70.00	26,102.00	1,827,140.00		
Base Course (CY)	40.00	17,577.00	703,080.00		
Barrier (Type 7)(LF)	60.00	9,429.00	565,740.00		
Total			15,584,090.00		
	% Range		% Used	Cost	
				<b>.</b>	
Project Construction Bid Items	Project Dependent		N/A	\$15,584,090.00	(A)
	(1=0) 000() (1)			<b>*</b> · • • • • • • • • •	
Contingencies*	(15% - 30%) of (A)		30.00%	\$4,675,227.00	(B)
ITS	(6-10%) of (A+B)		0.00%	\$0.00	$(\mathbf{C})$
115	Default = $6\%$		0.00%	\$0.00	(C)
	Default = 6%		-		
Drainage/Utilities	(3-10% )of (A+B)		6.00%	\$1,215,559.02	(D)
Drainage/Ounties	Default = $6\%$		0.00%	φ1,213,33 <del>3</del> .02	(D)
	Delault = 076				
Signing and Striping	(1-5%) of (A+B+C+	D)	5.00%	\$1,073,743.80	(E)
	Default = 5%		0.0070	φ1,010,110.00	(=)
	Doldali = 070				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	15.00%	\$3,382,292.97	(F)
	Default = 20%			ţ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(- )
Mobilization	(4 to 10%) of (A+B+	-C+D+E+F)	7.00%	\$1,815,163.90	(G)
	Default = 7%				
Total of Construction Bid Items	(A+B+C+D+E+F+G	)		\$27,746,076.69	(H)
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$554,921.53	(I)
	Default = 2%				
France Assessment Mine	(40 += 450() =6 (11)		0.000/	¢4 004 704 00	(1)
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$1,664,764.60	(J)
	Default = 12%				
Subtotal of Construction Cost	(H+I+J)		•	\$29.965.762.82	(K)
				\$29,900,702.02	(r)
Total Construction Engineering	17% of (K)		12.00%	\$3,595,891.54	(L)
			12.0070	ψ0,000,001.0 <del>4</del>	(Ľ)
			-		
Total Preliminary Engineering**	15% of (K)		10.00%	\$2,996,576.28	(M)
			10.0070	φ <u>2</u> ,000,010.20	()
Right of Way	Project Dependent		2.00%	\$554,921.53	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
	]				
Tunnel (S at TT) (LF)	741.00	15,000.00		\$11,115,000.00	88 8 8 8 8
Inflation to 2010 dollars (assuming	4% per year)	1		\$13,503,882.61	
				<b>#01 700 001 7</b>	
Total Project Cost				\$61,732,034.79	(P)
*Contingencies includes environmental mitig	ation costs	L	I	1	
**Total Preliminary Engineering includes cos		locuments			

# 2003 CDOT - 65 mph Floyd Hill.xls

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	151,674.00	22,751,100.00		
Walls (SF) Earthwork (CY)	90.00				
Pavement (TON)	20.00	<u>192,933.00</u> 29,510.00	3,858,660.00		
Base Course (CY)	40.00		2,065,700.00 794,880.00		
Base Course (CT) Barrier (Type 7)(LF)	60.00		887,280.00		
Barner (Type 7)(Er)	00.00	14,700.00	007,200.00		
Total			40,409,630.00		
	% Range		% Used	Cost	
			-		
Project Construction Bid Items	Project Dependent		N/A	\$40,409,630.00	(A)
Froject Construction Bid Items				φ40,409,030.00	(A)
Contingencies*	(15% - 30%) of (A)		30.00%	\$12,122,889.00	(B)
Contingencies			50.0070	ψ12,122,003.00	(D)
			-		
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				(-)
			-		
Drainage/Utilities	(3-10% )of (A+B)		6.00%	\$3,151,951.14	(D)
	Default = 6%				
Signing and Striping	(1-5%) of (A+B+C+	D)	5.00%	\$2,784,223.51	(E)
	Default = 5%				
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	15.00%	\$8,770,304.05	(F)
	Default = 20%				
N. A. 1. 111			7 000/	<b># 1 700 700 01</b>	
Mobilization	(4 to 10%) of (A+B+	+C+D+E+F)	7.00%	\$4,706,729.84	(G)
	Default = 7%				
			-		
Total of Construction Bid Items	(A+B+C+D+E+F+G	<u> </u>		\$71,945,727.53	(H)
		) 		ψ/1, <del>34</del> 3,721.33	(1)
			•		
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$1,438,914.55	(I)
	Default = 2%				(-)
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$4,316,743.65	(J)
	Default = 12%				
Subtotal of Construction Cost	(H+I+J)			\$77,701,385.74	(K)
Total Construction Engineering	17% of (K)		12.00%	\$9,324,166.29	(L)
Tatal Dualingia and Englished at 1	450( of (14)		40.000/		
Total Preliminary Engineering**	15% of (K)		10.00%	\$7,770,138.57	(M)
Right of Way	Project Dependent		2.00%	\$1,438,914.55	(N)
<u> </u>				,	()
Utilities	Project Dependent		N/A	\$0.00	(O)
Tunnel (3-lane Floyd) (LF)	17,000.00	5,555.00		\$94,435,000.00	
Inflation to 2010 dollars (assuming	4% per year)			\$53,387,489.44	
Total Project Cost				\$244,057,094.59	(P)
*Contingencies includes environmental mitiga	l ation costs	1	I		
**Total Preliminary Engineering includes cost		locuments			
Total Fromminary Engineering monutes cost			I	1	

### 2003 CDOT - 65 mph Fall River Rd.xls

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	63319.00	9,497,850.00		
Walls (SF)	90.00		1,022,580.00		
Earthwork (CY) Pavement (TON)	20.00		771,740.00		
Base Course (CY)	70.00		1,526,070.00		
Base Course (CT) Barrier (Type 7)(LF)	60.00		587,240.00 445,260.00		
Special Structures (SF)	200.00		0.00		
Tunnel (Twin Tunnels) (LF)	2000.00		0.00		
Tunnel (South Bore EJMT) (LF)	30000.00		0.00		
Interchanges (EACH)	1.00	0.00	0.00		
Total			13,850,740.00		
	% Range		% Used	Cost	
	70 Range		70 0360	0031	
			-		
Project Construction Bid Items	Project Dependent		N/A	\$13,850,740.00	(A)
				<b>.</b>	(- )
Contingencies*	(15% - 30%) of (A)		30.00%	\$4,155,222.00	(B)
				,,	
ITS	(6-10%) of (A+B)		0.00%	\$0.00	(C)
	Default = 6%				
Drainage/Utilities	(3-10% )of (A+B)		6.00%	\$1,080,357.72	(D)
	Default = 6%				
Signing and Striping	(1-5%) of (A+B+C+	D)	5.00%	\$954,315.99	(E)
	Default = 5%		-		
			45.000/	<u> </u>	
Construction Signing & Traffic Control	5 to 25% of (A+B+C	(+D+E)	15.00%	\$3,006,095.36	(F)
	Default = 20%				
Mobilization	(4 to 10%) of (A+B+		7.00%	\$1,613,271.17	(G)
	Default = $7\%$		7.00%	\$1,013,271.17	(0)
	Delault = 770		•		
Total of Construction Bid Items	(A+B+C+D+E+F+G	i)		\$24,660,002.24	(H)
		Í			
Force Account - Utilities	(1 to 2%) of (H)		2.00%	\$493,200.04	(I)
	Default = 2%				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$1,479,600.13	(J)
	Default = 12%				
				<b>*</b> ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~	
Subtotal of Construction Cost	(H+I+J)			\$26,632,802.42	(K)
Total Construction Engineering	17% of (K)		12.00%	\$3,195,936.29	(L)
			12.0070	φ3, 193,930.29	
Total Preliminary Engineering**	15% of (K)		10.00%	\$2,663,280.24	(M)
	), í				
Right of Way	Project Dependent		2.00%	\$493,200.04	(N)
Utilities	Project Dependent		N/A	\$0.00	(O)
				¢0.005.004.00	
Inflation to 2010 dollars (assuming	J 4% per year) ∣	1		\$9,235,861.32	
Total Project Cost		l		\$42,221,080.31	(P)
				Ψ ^{-τ} 2,221,000.31	( )
*Contingencies includes environmental mitig					
**Total Preliminary Engineering includes cos	at of developing NEPA c	locuments			

#### 65 mph S curves at TT Hidden Va

8/17/2010 14:29					
BID ITEMS	COST PER UNIT	QUANTITY	COST		
Structures (SF)	150.00	78,082.00	11,712,300.00		
Earthwork (CY)	20.00	23,967.00	479,340.00		
Pavement (TON)	70.00	15,207.00	1,064,490.00		
Base Course (CY)	40.00	10,240.00	409,600.00		
Barrier (Type 7)(LF)	60.00	3,500.00	210,000.00		
Total			13,875,730.00		
			,		
	0/ Dense		0/ Llood	Coat	
	% Range		% Used	Cost	
			-		
Project Construction Bid Items	Project Dependent		N/A	\$13,875,730.00	(A)
<b>-</b> · · · ·					
Contingencies*	(15% - 30%) of (A)		30.00%	\$4,162,719.00	(B)
		8/17/2010 14:29	-		
ITS	(6-10%) of (A+B)	0/11/2010 14:23	0.00%	\$0.00	(C)
	Default = 6%				
Drainage/Utilities	(3-10% )of (A+B)		6.00%	\$1,082,306.94	(D)
	Default = 6%		-		
Signing and Striping	(1-5%) of (A+B+C+		5.00%	\$956,037.80	(E)
	Default = 5%		0.0078	\$350,037.00	(⊑)
Construction Signing & Traffic Control	5 to 25% of (A+B+C	C+D+E)	15.00%	\$3,011,519.06	(F)
	Default = 20%				
NA-1-111	(4.1- 400() -6 (4.10)		7.000/	¢4,040,404,00	
Mobilization	(4 to 10%) of (A+B+ Default = 7%		7.00%	\$1,616,181.90	(G)
	Delault = 7 %		-		
Total of Construction Bid Items	(A+B+C+D+E+F+G	· · · · · · · · · · · · · · · · · · ·		\$24,704,494.69	(H)
	(4 + 00() ( (1))		0.000/	<b>*</b> 40.4 000 00	
Force Account - Utilities	(1 to 2%) of (H) Default = 2%		2.00%	\$494,089.89	(I)
	Delault = 276				
Force Account - Misc.	(10 to 15%) of (H)		6.00%	\$1,482,269.68	(J)
	Default = 12%				
Subtotal of Construction Cost	(H+I+J)		-	\$26,680,854.27	(K)
Total Construction Engineering	17% of (K)		12.00%	\$3,201,702.51	(L)
			12.00 /8	ψ3,201,702.31	(Ľ)
			-		
Total Preliminary Engineering**	15% of (K)		10.00%	\$2,668,085.43	(M)
			-		
Right of Way	Project Dependent		2.00%	\$494,089.89	(N)
				ψ+υ+,υυθ.υθ	
Utilities	Project Dependent		N/A	\$0.00	(O)
والمترافع والمترا فالمترا والمراجع والمراجع والمراجع والمراجع					
Tunnel (S at TT) (LF)	16000.00	3283.00	and a state of the	\$52,528,000.00	i de de de
Inflation to 2010 dollars (assuming	 4% per veer)	l		¢33 0E0 3E1 00	
Inflation to 2010 dollars (assuming	4 % per year)			\$23,960,364.99	
Total Project Cost	1. 	I	ı	\$109,533,097.09	(P)
*Contingencies includes environmental mitiga	tion costs				
**Total Preliminary Engineering includes cost		locuments			
			· ·		