

**BENCHMARK POSITION DESCRIPTION – BM #35  
MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE**

<b>1. POSITION TITLE</b> Senior Traffic Operations Engineer	<b>2. CLASSIFICATION LEVEL</b> LSO 4
<b>3. DIVISION</b> Highways	<b>4. BRANCH</b> South Coast Region
<b>5. IMMEDIATE SUPERVISOR</b> Manager, Traffic Engineering	<b>6. LOCATION</b> Burnaby

<b>Program Function</b>	Describe the purpose of the program and organization in which the position operates.
-------------------------	--

The South Coast Regional Traffic Engineering group is accountable for the development of a Regional Traffic Management Plan and for the delivery of specialized traffic safety design services. The group also provides support to District traffic operations, traffic incident response and traffic management needs.

<b>Purpose of Position and Summary of its Functions</b>	This may be used for POSTING purposes.
---	--

The primary function of this position is to direct the activities of the Regional Traffic Operations Engineering group. The position is responsible for managing the provision of analysis and design of traffic engineering solutions in respect of the improvement of traffic operational issues, signage, pavement markings, traffic control systems, traffic planning, traffic impact analysis, traffic safety, and highway rehabilitation improvement. The position also manages the preparation of contract tenders for professional consultant services. The position also provides senior traffic engineering advice and expertise and directs a team of traffic engineers and technical support staff in support of the day to day operation of highway districts in the South Coast Region.

<b>Organizational Structure and Working Environment</b>	
---	--

The Ministry is made up of three Regions and 11 Districts. The South Coast Region has two Districts: Lower Mainland and Vancouver Island. The South Coast Region has 21 municipalities just in the metro Vancouver area and approximately two million people. The Senior Traffic Operations Engineer operates in an environment of political sensitivity, balancing the safety of the travelling public with the needs of the municipalities, MLAs and other stakeholders. The Senior Traffic Operations Engineer reports directly to the Manager, Traffic Engineering. The Manager reports directly to the Regional Manager of Engineering who in turn reports to the Regional Director.

<b>Position's Specific Functions and How They Are Performed</b>	
---	--

- 1. 20% Directs the activities of the Regional Traffic Operations Engineering group, sets program goals and objectives, and assesses service and program effectiveness by:**
- Establishing operational and safety recommendations on long term Traffic Management Plans and Strategies for highway projects throughout the Region
  - Identifying, analyzing and recommending viable work programs or comprehensive technical solutions to resolve operational deficiencies
  - Evaluating proposed solutions taking into consideration political implications, cost/benefit, public, environmental concerns and police enforcement requirements
  - Monitoring the effectiveness of, and making improvements to traffic management planning, traffic monitoring and traffic engineering services
  - Setting individual performance plans and establishing work objectives and goals
  - Assessing employee training requirements, arranging training, mentoring, etc.
  - Monitoring and appraising employee performance against agreed upon plans

**BENCHMARK POSITION DESCRIPTION – BM #35**  
**MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE**

**2. 25% Manages the provision of analysis and design of traffic engineering solutions by:**

- Identifying traffic safety problems, specific problem locations and other related operational deficiencies problems
- Ensuring field inspections and evaluations are carried out
- Determining traffic data requirements and ensuring all appropriate data base inventories are maintained
- Planning and arranging for the acquisition of traffic and road infrastructure information
- Ensuring the effectiveness of High Occupancy Vehicle lanes, transit queue-jump lanes and other special facilities
- Providing traffic operations and traffic safety advice and expertise, and expert professional litigation advice and support, to Regional and District management and staff
- Reviewing and recommending geometric, pavement marking and signing designs
- Performing and/or ensuring that traffic safety reviews or traffic safety audits are carried out
- Participating in joint traffic safety initiatives with ICBC, municipalities, and other agencies
- Attending public meetings in support of traffic engineering initiatives and to respond to public enquiries

**3. 15% Provides traffic impact analysis and design review for land development proposals and highway access application, including cost-shared projects for District staff by:**

- Determining the need for and reviewing land development applications which require traffic impact studies or have significant traffic movement issues affecting access to provincial highways
- Analyzing applicant's traffic impact studies prepared by their consultant engineers, identifying and recommending changes required and meeting with the applicant to clarify and/or discuss transportation improvements
- Providing technical recommendations to District staff on the feasibility of subdivision, zoning, access management, parking, trip generation and capacity impacts as a result of proposed developments
- Reviewing Official Community Plans for impacts on proposed transportation infrastructure improvements
- Reviewing concepts and designs of Municipal projects which impact provincial facilities to provide traffic operational comments and recommendations, and/or to negotiate cost-sharing where warranted
- Meeting with elected officials and Municipal staff to explain technical recommendations

**4. 15% Manages the planning, design and implementation of traffic signal control systems, including signal coordination for road corridors and networks, and signal schemes for signalized intersections requiring special operational consideration by:**

- Evaluating signal warrants, updating the intersection count program and ranking the evaluated intersections by priority
- Ensuring the provision of input into electrical designs including the provision of timing plans for special pre-emption for transit, emergency vehicles etc.
- Ensuring the preparation of signal phase sequences and signal timing plans and the coordination of same for road corridors and networks
- Ensuring the analysis of intersections for warrants for new signals
- Overseeing and/or conducting the evaluation and selection of signal hardware and software
- Ensuring the optimization and coordination of implemented signalization control schemes, including field inspection assurance and verification of implemented schemes
- Liaising between Headquarters and Electrical Maintenance District

**BENCHMARK POSITION DESCRIPTION – BM #35**  
**MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE**

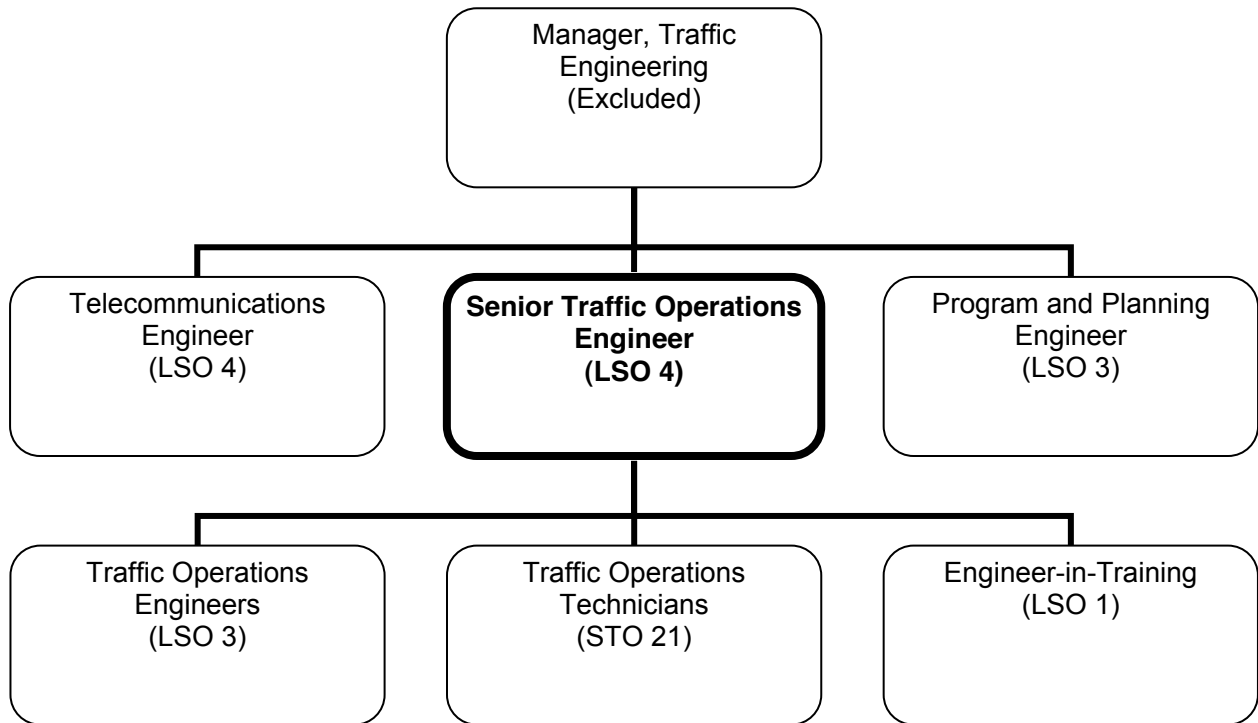
**5. 10% Manages the preparation of contract tenders for consultant services, administers the contracts and reviews the technical content and quality of the work by:**

- Determining when contracted consulting services are required and using current procedures for acquiring services
- Preparing technical terms of reference and reviewing and technically evaluating consultant proposals
- Negotiating the traffic engineering component and negotiating and preparing contract documentation
- Monitoring and evaluating the work, taking actions necessary to ensure compliance and authorizing payments
- Arranging for modifications to contract documents
- Preparing final reports and evaluation at the completion of the consultant's assignment

**6. 5% Performs other related duties**

**BENCHMARK POSITION DESCRIPTION – BM #35  
MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE**

**ORGANIZATION CHART – SENIOR TRAFFIC OPERATIONS ENGINEER**



**BENCHMARK CLASSIFICATION RATIONALE – BM #35  
MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE**

**TITLE: Sr. Traffic Operations Engineer**

**LEVEL: LSO 4**

**DIVISION/BRANCH: Highway/South Coast Region**

FACTOR	POINTS
<p><b><u>PURPOSE OF POSITION</u></b> The primary focus of this position is to provide specialized expertise, advice and support to regional and district staff. The position also exercises technical supervision to a team of traffic engineers and technicians engaged in the provision of a variety of traffic engineering solutions for the Region. The position will also provide expert traffic engineering advice to regional and district staff.</p> <p><b><u>KNOWLEDGE</u></b> The work requires a deep knowledge of highway design with emphasis on traffic engineering to resolve complex traffic engineering issues. The responsibility to review and develop operational recommendations on long term traffic management plans in a large, high density multi-model setting covering several municipalities and cities is considered to be highly interpretive and highly analytical work requiring many judgements based on extensive experience in traffic engineering.</p> <p>Requires registration as a Professional Engineer.</p>	<p>E(1)b 130</p> <p>Or</p> <p>E(2)</p>
<p><b><u>JUDGEMENT</u></b> <u>Originality and Complexity:</u> The position directs the work of ministry licensed professionals and/or assigns and reviews and accepts the work of consultant licensed professionals. As the Region's expert in traffic engineering the position will be called upon to analyze and review complex data and recommendations from subordinate professionals and/or consultant licensed professionals which may involve developing or endorsing proposed major adaptations to previously established traffic engineering solutions.</p> <p><u>Technical Supervision Received:</u> While the position's recommendations on traffic management plans would be reviewed, much of the position's work output, when providing specialized advice and ensuring the provision of traffic engineering services, goes directly to clients and receives only a general review.</p>	<p>C3 99</p>
<p><b><u>ORGANIZATION AND PROGRAM ROLE</u></b> The position exercises technical supervision over ministry licensed professional staff and/or consultant licensed professionals.</p>	<p>III(b) 50</p>
<p><b><u>ADMINISTRATIVE SUPERVISORY RESPONSIBILITY</u></b> The position supervises 10 staff.</p>	<p>10 + 8</p>

TOTAL POINTS 287

LEVEL	POINT RANGE
1	168 – 203
2	204 – 237
3	238 – 267
<b>4</b>	<b>268 – 295</b>
5	296 – 365