STATE OF CALIFORNIA
CALIFORNIA DEPARTMENT OF TECHNOLOGY
DUTY STATEMENT

TECH 052 (REV. 02/2018)

PROPOSED

RPA NUMBER (HR USE ONLY)

21-277

ALERT: This form is mandatory for all Requests for Personnel Action (RPA). INSTRUCTIONS: Before completing this form, read the instructions located on last page.				
Section A: Position Profile				
A. DATE 3/9/22	B. APPOINTMENT EFFECTIVE DATE	C. INCUMBENT NAME Vacant		
D. CIVIL SERVICE CLASSIFICATION Senior Telecommunications Engineer		E. POSITION WORKING TITLE Chief Engineer		
F. CURRENT POSITION NUMBER		G. PROPOSED POSITION NUMBER (Last three (3) digits assigned by HR) 695-950-3637-001		
H. OFFICE / SECTION / UNIT / PHYSICAL LOCATION OF POSITION Broadband & Digital Literacy/Middle-Mile Broadband Initiative/Technical & Engineering J. WORK DAYS / WORK HOURS / WORK SHIFT (DAY, SWING, GRAVE)		I. SUPERVISOR NAME AND CLASSIFICATION Mark Monroe, Deputy Director (Exempt)		
MONDAY – FRIDAY / 8:00 A.M. – 5:00 P.M.		REQUIRES: DRIVING AN AUTOMOBILE YES NO NO		
Section B: Position Functions and Duties Identify the major functions and associated duties, and the percentage of time spent annually on each (list higher percentages first).				
	☐ Business Technology Management ☐ Information Security Engineering	S (Select all domains applicable to the incumbent's duties/tasks.) ☐ IT Project Management ☐ Client Services ☐ Software Engineering ☐ System Engineering		
	Organizational Setting and Major Functions The California Department of Technology (CDT) is responsible for overseeing the planning, construction, and operation of the State of California's Middle Mile Broadband Initiative (MMBI) and overseeing the critical efforts lead by key stakeholders including the Department of Transportation (Caltrans) and the Third-Party Administrator (TPA). Under the general direction of the Deputy Director, Broadband Middle-Mile Initiative, the Senior Telecommunications Engineer (Sr. Telecom Engr) will provide engineering and leadership functions to lead the design and implementation of the statewide middle mile network. The Sr. Telecom Engr will perform high level planning and design functions, and oversee Caltrans and other stakeholders performing project management, engineering, design, system planning, specification, diagramming, mapping, and construction of the network. The Sr. Telecom Engr will select the lead technical staff at the state and district level and will oversee planning of the network design based on industry best practices. The Sr. Telecom Engr will identify the technical components and technical services that require procurement. The Sr. Telecom Engr will work with staff and contractors to provide the engineering input for contracts needed for system-level engineering, detailed design, material supply, construction, quality assurance, maintenance, and upgrades. The Sr. Telecom Engr will lead the engineering oversight of these functions. The Sr. Telecom Engr will draw on experience from similar roles in engineering of telecommunications and broadband networks of similar or larger scale.			
25%	Essential Functions (Percentages short) Project Management of Middle Mile	all be in increments of 5, and should be no less than 5%.)		
	 of California, the TPA, and contra Supervises and participates in en diagramming, mapping, construct Keeps abreast of latest developm 	olders, including CDT, Caltrans other departments in the State cted support. gineering, design, system planning, specification, ion administration and inspection. ents and industry standards in telecommunications industries. consible for supporting ongoing operation and maintenance of		

20%

System Design Planning, Forecasting, & Review

- Assures design plans include adequate system reliability and demand criteria.
- Oversees and participates in the analysis of the existing network system and projection of future needs
- Leads and participates in design, specifications, bid packages, and the evaluation of bids, inspection of work in progress.
- Reviews all construction plans, schedules, and contractor bids, as well as ensure creation, implementation, and monitoring of adequate work approval procedures within stakeholder organizations.

20%

Procedural & Process Management

- Review provision procedures for all customer and end user orders, new or changed, service upgrades or downgrades, and connects or disconnects.
- Oversee establishment of work procedures, construction standards and ensures staff, stakeholder, and contractor compliance.
- Ensures establishment of adequate mechanisms for job scheduling, coordination, and service order billing reconciliation.
- Ensures proper procedures are established to maintain adequate inventory of supplies and materials, including review of on-hand, stored, inventoried, issued, and replacement processes.

20%

Operational & Construction Oversight

- Ensures administration of quality control measures for contractor work.
- Ensures work of technicians maintaining outside plant fiber and equipment, through splicing and testing, relocating fiber and facilities, repairing cuts, and responding to unplanned outages are adequate and appropriate.
- Monitor system operation and effectiveness of customer-facing technical staff.
- Oversees preparation of specifications and bid packages, evaluation of bids, and inspection of work sites.

10%

Marginal Functions (Percentages shall be in increments of 5, and should be no more than 5%.)

- Other related duties as required
- Maintain professional skills, and knowledge of industry trends in Project management, Engineering, Telecommunications, and emerging technology trends.

Work Environment Requirements

- May be required to work outside of normal business hours and is required to carry a mobile device.
- Must travel to meetings or customer department sites within the greater Sacramento area.
- May be assigned to work at the CDT headquarters site, within the greater Sacramento area.
- Must maintain excellent attendance to perform these functions.

Allocation Factors (Complete each of the following factors.)

Supervision Received:

- The Sr. Telecom Engr will receive general direction from the Deputy Director, Middle-Mile Broadband Initiative
- The Sr. Telecom Engr will lead teams of staff from various other departments within and external to CDT.
- The Sr. Telecom Engr will also work in an independent manner and will also report to project sponsor(s), sponsor steering committee(s) and the executive team of the sponsoring entity(ies) of the project(s) that the Sr. Telecom Engr will be managing.

Actions and Consequences:

The Sr. Telecom Engr is responsible for carrying out the policies, processes, and procedures that are used throughout State government and are implemented statewide. It is critical that the Chief Engineer be able to maintain a prominent level of professionalism, diplomacy, and tact as this position must be able to successfully communicate with individuals from the assessed entity as well as the Governor's Office, Legislature, State Agencies, public, and the private sector. Failure to perform could result in the operations of the assessed entity and/or CDT being disrupted. Consequently, political sensitivity, accuracy and attention to detail are of paramount importance.

Personal Contacts:

The Sr. Telecom Engr will have contact with the Department Director, Broadband Deputy Directors, CDT executive staff, Public Utilities Commission (PUC), Department of Transportation (Caltrans), Third Party Administrator, Legislature, Broadband Advisory Committee, and Department of Finance (DOF) and other MMBI Project Managers.

Administrative and Supervisory Responsibilities Indicate "None" if this is a non-supervisory position.) The Sr. Telecom Engr will have full responsibility for internal CDT staff responsible for supporting ongoing operation and maintenance of the system and for the Technical and Engineering aspects of the MMBI project(s).

Supervision Exercised:

The Sr. Telecom Engr will have direct supervision of CDT staff responsible for supporting the MMBI. The Sr. Telecom Engr will also be required to provide oversight, leadership, and direction to support staff and project team members.

Other Information

Desirable Qualifications: (List in order of importance.)

- Baccalaureate degree in Electrical Engineering and substantial working experience leading telecommunications and broadband construction projects of similar scale
- Professional engineering license in the State of California
- Thorough knowledge of technology and standard industry practices of telecommunications businesses using fiber optic technologies in middle mile and last mile environments
- Thorough knowledge of layout, locations, and equipment characteristics of fiber communications systems
- Thorough knowledge of the principles and practices of network engineering
- Thorough knowledge of fiber optic construction, facility design, and transmission electronics
- Experience in large scale project management
- Ability to perform cost estimates and forecast project timelines
- Ability to analyze and project growth and need for additional capacity of the system
- Ability to form and maintain effective working relationships with other State staff, customers, elected officials, external and contracted entities, as well as the public
- Ability to communicate clearly, verbally or in writing
- Ability to perform accurate computations and projections under stressful or hurried conditions

INCUMBENT STATEMENT: I have discussed the duties of this position with my supervisor and have received a copy of the duty statement.				
INCUMBENT NAME (PRINT)	INCUMBENT SIGNATURE	DATE		
SUPERVISOR STATEMENT: I have discussed the duties of this position with the incumbent.				
SUPERVISOR NAME (PRINT)	SUPERVISOR SIGNATURE	DATE		